



**Bank of Tanzania**

## **Working Paper Series**

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*The Interaction between  
Finance, Financial Stability and  
Economic Growth*

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# **The Interaction between Finance, Financial Stability and Economic Growth**

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## Table of Contents

Disclaimer .....	i
Abstract.....	ii
1.0 Introduction .....	1
2.0 Finance and Economic Growth .....	2
2.1 The Role of Financial Sector to Economic Growth.....	2
2.2 Economic Development and Financial Sector Indicators .....	4
3.0 Financial Stability and Economic Growth .....	7
3.1 Financial Stability is Prerequisite for Sustainable Growth .....	7
3.2 Increasing Global Interdependence Has Made Financial Crises More Costly .....	8
4.0 Financial Sector Development and Financial Stability in Africa .....	12
4.1 Measures to Promote Financial Sector Development .....	13
4.2 Measure to Prevent Crises From Occurring .....	15
4.3 Measures to Strengthen Resilience Against Financial Crises.....	16
5.0 Conclusion .....	17
Appendices .....	19
References .....	21

## **Abstract**

Experiences of financial repression in most developing countries in the 1970s and 80s and the studies that followed have brought both policy-makers and academicians to a general consensus that finance plays a key role in growth and development. These conclusions were behind the financial reforms that were adopted in most developing countries in the 1990s, which have been credited for the positive economic growth observed in many African countries in the last decade. These developments highlight the importance of furthering the financial sector reforms as one of the key pillars of sustainable growth and poverty reduction in Africa.

History has taught us that financial systems are inherently unstable and that whenever financial instability occurs, growth is likely to suffer. Recent financial crises have also shown us that, with the increase in interdependence of economies across the world, financial crises have become more costly because countries are more exposed to shocks occurring elsewhere in the world. With development of the financial sector, a number of channels through which a country can be impacted by shocks occurring in other countries also increase.

Through a desk review, this paper assesses the interaction between finance, financial stability and economic growth. The findings suggest that finance and financial stability are highly correlated to economic development across the world. It is therefore argued that financial reforms must go hand-in-hand with measures to strengthen prevention of financial crises, through enhancement of prudential supervision and devising means of coping with innovations. Focus needs to be put on system-wide risks which threaten the soundness and safety of the financial system as a whole. Maintenance of stable macroeconomic policies and deepening of regional integration is also crucial in enhancing the resilience of African economies to adverse consequences of financial instabilities. In addition, countries need to build additional buffers in terms of fiscal space and international reserves at times of financial stability. Collective self-insurance through pooling of reserves, as was adopted by Asian countries after the 1997 crisis, is worth considering as means of broadening options available for African countries in times of stress.

## **1.0 Introduction**

The interaction between finance and economic growth is one of the most researched topics in economics since early 1960s. Studies have attempted to investigate the finance and economic growth relationship, the direction of causality and channels of transmission between finance and growth. There is strong evidence so far suggesting that financial development is crucial for both growth and development. Countries with better developed financial systems experience faster economic growth, as financial intermediaries mobilize resources and direct them to their most efficient uses by evaluating alternative investments and monitoring the activities of borrowers. It is hard to find instances where the transformation from a predominantly agriculture economy to a more diversified one has taken place without a well-functioning financial system. There is also a consensus that financial repression policies of the 1970s and 80s presented one of the key impediments to strong and sustained growth in developing countries.

These conclusions contributed to the shift in financial policies in developing countries during the early 1990s. Most of these countries introduced financial reforms aimed at developing the financial sector, particularly, through liberalization policies, which in some countries played a key role in increasing the level of integration to the international financial markets. At the same time, during 1990s, financial innovation was gaining momentum in advanced economies, boosted by rapid development of derivative markets. These financial reforms and innovations are credited to have produced positive influence on economic growth in many countries. For example, it has been argued that the strong economic growth observed in many African countries particularly from the mid-1990s to the period prior to the 2007-2008 global financial crisis was partly due to financial sector development and efficiency, following the reforms of the 1990s.

However, there is no doubt that the financial crises of the last decade have highlighted the importance of financial sector stability for attaining high and sustained economic growth. During the 2007-2008 financial crisis for instance, growth in both advanced and developing economies slumped, with serious repercussions on employment and household incomes. The important lesson learned from this crisis is that financial development is a necessary but not sufficient condition for economic growth and development. Looking at the crisis, it is clear that flawed strategies and inadequate risk management were at the heart of the financial turmoil. Both regulation and supervision were inadequate to prevent institutions from putting themselves at excessive risk. Yet when they failed, the consequences were not limited to themselves, but were quickly propagated to other countries, largely because of the global interconnectedness. The important policy question facing policy makers is what measures need to be put in place to avoid



future crises or to reduce their impact on the economy when they occur. Is there a need to initiate fundamental reforms to financial regulation or simply do much better job of executing current regulations? Is more international coordination necessary? Should reliance on global integration be reduced to avoid the impact of crises originating elsewhere, even though this integration has been credited with enhancing growth in recent years? Answers to these questions can be quite diverse, but these are important policy questions that need to be addressed. This paper highlights the linkages between financial sector development, financial stability and economic growth, mainly through a desk review.

The paper is structured as follows: Section 2 summarizes the theoretical literature on the contribution of financial sector to economic growth and provides some evidence on the importance of finance to growth, based on traditional measures of financial development from advanced and developing countries. Section 3 presents the link between financial sector stability and economic growth. Section 4 discusses a set of potential measures that could help promote financial sector development and ensure stability of financial sectors, either by avoiding future crises or reducing the impact of crises when they occur. Section 5 provides conclusion to the issues discussed.

## **2.0 Finance and Economic Growth**

### **2.1 The Role of Financial Sector to Economic Growth**

Before the second half of the 19<sup>th</sup> century the role of financial systems in promoting economic growth was to a large extent overlooked. For example, the Solow's growth model and all the work that followed in its wake did not contain any financial variables. Consensus views at that time were that economic growth is purely determined by real variables, particularly domestic savings and investment. The role of financial systems in promoting economic growth was first introduced by McKinnon (1973) and Shaw (1973) who pointed out that misguided financial sector policies had damaged the economies of many developing countries by reducing savings and encouraging investment in inefficient and unproductive activities. In particular, McKinnon and Shaw argue that an administratively fixed nominal interest rate that holds the real rate below its equilibrium level depresses returns to savers, and so discourages savings. Also interest rate ceilings discourage financial institutions from charging risk premiums, which may ration out a large number of potential borrowers with high-return projects. Furthermore, they argue that selective or directed credit associated with financial repression results to higher loan defaults, and increases the fragility of the banking system.

Many countries learned these lessons the hard way, particularly through the repressed financial systems in the 1970s and 80s, which produced distortions in savings and investment decisions, resulting to slow economic growth. By the early 1990s, the consensus among both policy-makers and academicians had shifted to become much more positive about the potentially growth-supportive role of a modern financial system in the process of economic growth and development. Following such consensus, many developing countries introduced reforms aimed at liberalizing and promoting the development of their financial sectors.

Several studies have identified a number of specific functions through which the financial sector influences economic growth<sup>1</sup>. On the basis of an extensive survey of literature, Levine (2005) identified five basic functions that affect savings and allocation decisions, and how these functions influence economic growth through two channels, namely capital accumulation and capital productivity. The functions include:

First, the most obvious and important function of the financial sector is mobilization of savings. The provision of savings facilities enables households to store their money in a secure place, and allows this money to be utilized productively by lending it to individuals or enterprises to finance investments, thus encouraging capital accumulation and promoting private sector development. Without the pooling of individual savings through financial intermediaries, the scale of investment projects is more likely to be constrained below what might be efficient. Investments and thus capital accumulation depend on mobilised savings, which increase with the level of development of the financial sector. Thus, a more developed financial sector will relax credit constraints in an economy, which may improve the investment rate and accelerate economic growth.

Second, as noted by Andersen (2003), the basis for accelerating economic growth is the allocation of resources to new and higher return projects. Individual savers are unlikely to have the time or capacity to collect, process, and compare information on many different enterprises, managers and market conditions before choosing where to invest. In addition, they will be less keen to invest in activities about which they have little information. Thus, high information costs may prevent capital from flowing to its highest value use. Financial intermediaries that specialise in acquiring and evaluating information on potential investment projects enable small investors to locate higher return investments. The improved allocation of savings among investment projects would then enhance growth prospects.

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<sup>1</sup> For a comprehensive survey of theoretical literature on finance-growth link, see Gertler (1988) and Thakor (1996). Also see Levine (1997) for a comprehensive overview of theoretical and empirical studies.

Third, financial institutions exert corporate control by monitoring the performance of their borrowers in order to reduce the risk of resource mismanagement. The ability of banks to monitor the performance of enterprises on behalf of many investors, who would not otherwise have the resources to do so individually, and to exercise corporate control helps to ensure that investors receive returns that properly reflect enterprise performance and creates the right incentives for the managers of the borrowing enterprises to perform well.

Fourth, financial institutions help mitigate risks associated with different maturity preferences between lenders and borrowers. Many projects or enterprises require a medium to long-term commitment of capital, whereas most savers prefer to have the option to draw on their savings, or move them into another investment opportunity should the need arise. Banks accept funds from investors who desire to lend for short-term and in turn lend to borrowers who desire long-term maturities. Thus borrowers and lenders with different preferred maturities are not compelled to agree on a common maturity. This is possible because banks combine many household savings and, usually, all savers are not expected to withdraw their money at the same time. Also, banks bear the risk of borrowing at volatile, short-term interest rates and lending at stable long-term interest rates. By doing so, they help to ensure that capital is allocated to the best projects, even if they require a long-term financial commitment.

Fifth, financial institutions lower the cost of doing business by providing mechanisms to make and receive payments, which in turn, facilitate exchange of goods and services. Through these five functions, financial sector development facilitates economic growth by increasing the supply (volume) of credit in the economy and enhancing the efficiency (productivity) of capital<sup>2</sup>.

## **2.2 Economic Development and Financial Sector Indicators**

From the above discussion, it is expected that countries with more developed financial sectors to sustain high levels of economic development, measured for example by gross domestic product (GDP) per capita. To be able to gauge this relationship, one would need indicators of how well financial sectors across countries fulfil the five aforementioned basic functions that affect savings and allocation decisions. Unfortunately, such measures are not readily available for all the variables

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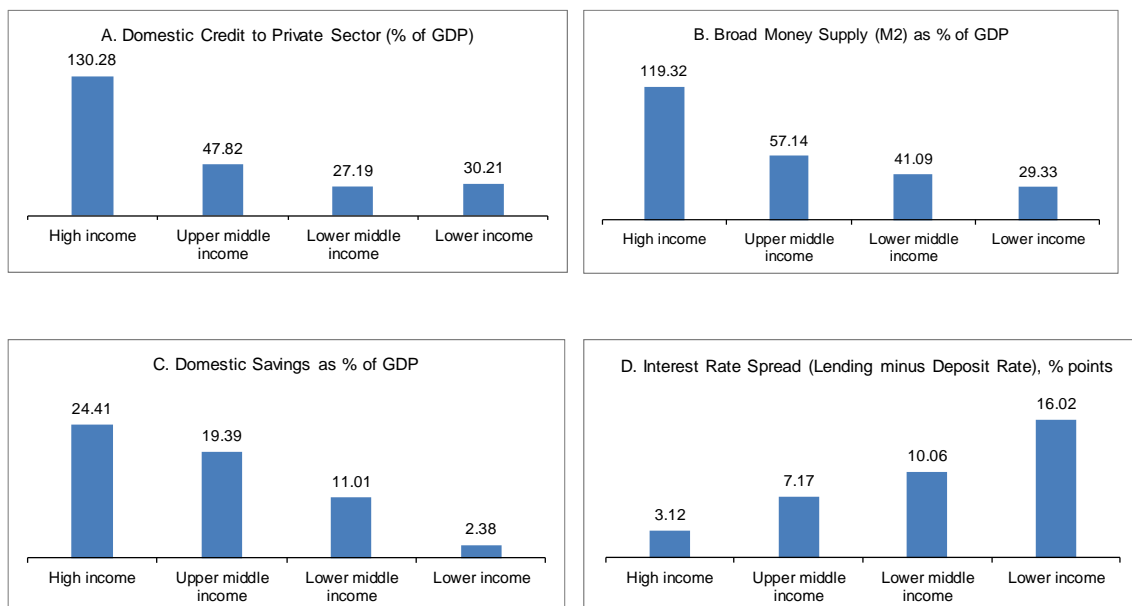
<sup>2</sup> Finance-growth literature identifies two possible directions of causality between financial development and economic growth. First is the supply leading hypothesis due to McKinnon (1973) which posits a causal relationship from financial development to economic growth. According to this hypothesis, a deliberate creation of financial institutions and markets increases supply of financial services and thus leads to real economic growth. The second is demand-following hypothesis due to Patrick (1966) which postulates a causal relationship from economic growth to financial development. Here, an increasing demand for financial services induces an expansion in the financial sector as the real economy grows. While the debate regarding causality relationship is far from being conclusive, the bulk of empirical evidence on finance and economic growth suggest that countries with better functioning financial systems grow faster than countries with poor financial systems.

and across countries. Traditional measures of financial sector development are used to link economic development to the functioning of financial sectors across countries.

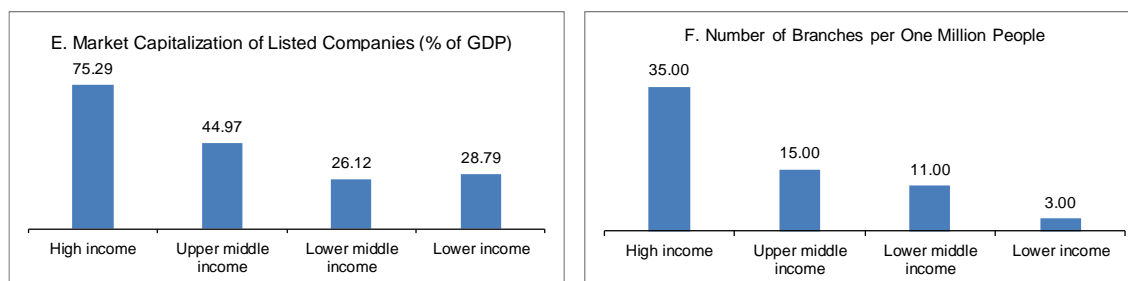
**Figure 1** presents summary statistics of various measures of financial sector development by income groups<sup>3</sup>. These are domestic credit to private sector, broad money supply, domestic savings, and market capitalization all measured as shares of GDP; and interest rate spread and number of bank branches per million people. Evidence from **Figure 1** indicates that income per capita increases with the level of financial sector development, suggesting that financial systems in advanced countries have contributed positively to the prosperity of those economies. Detailed discussions on the key financial indicators across selected per capita income groupings are provided hereunder.

As indicated in **Figure 1A**, credit allocated to the private sector as measured by the ratio of private sector credit to GDP, has positive relationship with economic development. For example, while private credit in the high income group is over 100 percent of GDP, on average, low income countries have a value of 30 percent. As noted by Levine (1997), financial systems that allocate more credit to private firms are more engaged in research, exerting corporate control, providing risk management services, mobilizing savings and facilitating transactions than financial systems that simply channel credit to the government or state-owned enterprises.

**Figure 1: Financial Indicators by Income Group (Mean)**



<sup>3</sup> Also see **Appendix 1** for more information.



Source: World Bank – World Development Indicators Database

Also in terms of the ratio of broad money supply to GDP (M2/GDP), low income countries have the lowest averages. The M2/GDP ratio of about 29 percent for low income countries for the period from 2000 to 2011 is considerably lower than 57 percent for upper middle income group and 119 percent for high income group (**Figure 1B**). These comparisons are also reflected in the domestic savings averages for the same period, whereby low income countries scored 2.4 percent against 11.0 percent for lower middle income, 19.4 percent for upper middle income and 24.4 percent for high income group (**Figure 1C**).

Interest rate spread is frequently used to measure financial sector efficiency. The more efficient financial systems are the more growth they are able to foster. Information in **Figure 1D** suggest that financial sectors in low income countries are more inefficient than in the other income groups as indicated by the interest rate spread between the lending and deposit rates, that is, widest at 16 percentage points compared to 3 percentage points for the high income countries. High interest rate spreads are symptoms of low financial intermediation efficiency, meaning that borrowers have to pay higher price to borrow and savers do not earn as much as they would in an efficient financial system. This inefficiency adversely affects economic growth by diminishing incentives to save and thus decreasing the resources that banks can pool together to lend. Also, high lending rates discourage borrowers to take credit and thus keep investment below its potential level.

With respect to stock market capitalization<sup>4</sup>, on average, high income countries' stock markets capitalization is 75 percent while that of low income countries is about 27 percent (**Figure 1E**). The depth of capital market has important implications for real economic activity. Stock markets provide financial leverage and ensure efficient allocation of resources. Also, well-developed stock markets compel banks to pay more attention to small firms and households. Low capitalization of stock markets implies limited role of financial sector in facilitating long-term investment for economic growth.

<sup>4</sup> Stock market capitalization measured as value of listed shares as percentage of GDP is widely used to measure the ability of an economy to mobilize savings and diversify risks.

Furthermore, the financial sectors in developing economies are characterized by low access to financial services by majority of the people. Only a disproportionately small fraction of the population in low income countries is served by formal financial institutions (**Figure 1F**). Increasing access to financial services is paramount as can be an engine of economic growth and development, as it allows businesses especially small and medium enterprises to capitalize on their growth potential and turn initiatives and ideas into employment opportunities. Without finance, small and medium-size firms will have to rely on their limited internal resources to run their businesses, which can act as a brake to growth and development.

### **3.0 Financial Stability and Economic Growth**

#### **3.1 Financial Stability is Prerequisite for Sustainable Growth**

The role of finance on economic growth described in the preceding section works in the context of financial stability and indeed, quoting William Dudley (2011) “a stable financial system is a prerequisite for sustainable economic growth”. History has taught us over and over again that financial systems are inherently unstable – boom and bursts have occurred in the past and will recur in the future. In the discussion about the importance of financial stability to growth it is important to note the fact that measuring the impact of financial stability on growth is less clear than measuring the negative effects of financial instability. Given the difficulty of measuring the impact of financial stability on growth and given the fact that the incidences of instability cannot be avoided, the study takes the approach of trying to understand financial instability and its implications to growth.

Literature abounds in definitions of financial instability but they all put emphasis on the impact of shocks to the financial system that causes a set of financial asset prices to diverge sharply from the fundamentals with consequences of impairing the ability of the system to channel financial resources to productive investments or to smoothly facilitate payment with eventual adverse consequences on the real economy. In short, financial instability keeps the market from pricing and allocating resources and risks efficiently and thus drives economy away from optimal utilization of resources, causing growth to be below its potential level.

A typical cycle of financial instability begins with distortions in the financial market that drives asset prices up above what would be permissible given the fundamentals. The optimism that follows the gains made on capital and the failure of the market to provide prudent information drive the asset prices up even further creating a bubble which bursts when real developments in the market contradict expectations. In the 2007-2008 crisis for instance, the housing bubble that had been characterized by almost a decade of annual double digit increase in housing prices in the US, came

to bursting stage in the mid-2007, when defaults on mortgages increased substantially, transmitting losses to a whole set of securitized financial products, as it became evident that they were riskier than they were rated.

The economic costs of instability that comes with bursting of a bubble can be enormous. The bursting of the bubble brings uncertainties that heighten risk aversion, increasing the cost of borrowing and thus reducing financial resources available for investment and consumption. The impact on activity is compounded by weak demand that is transmitted to even more reduction in demand as unemployment increases and consumer confidence weakens. Weak cash flows and reduced asset value put firms and households in harder position to access credit. While the boom side of financial instability cycle may put growth above its long-term path, it is the costs to the society, caused by the unwinding of the boom that brings concerns to policy-makers.

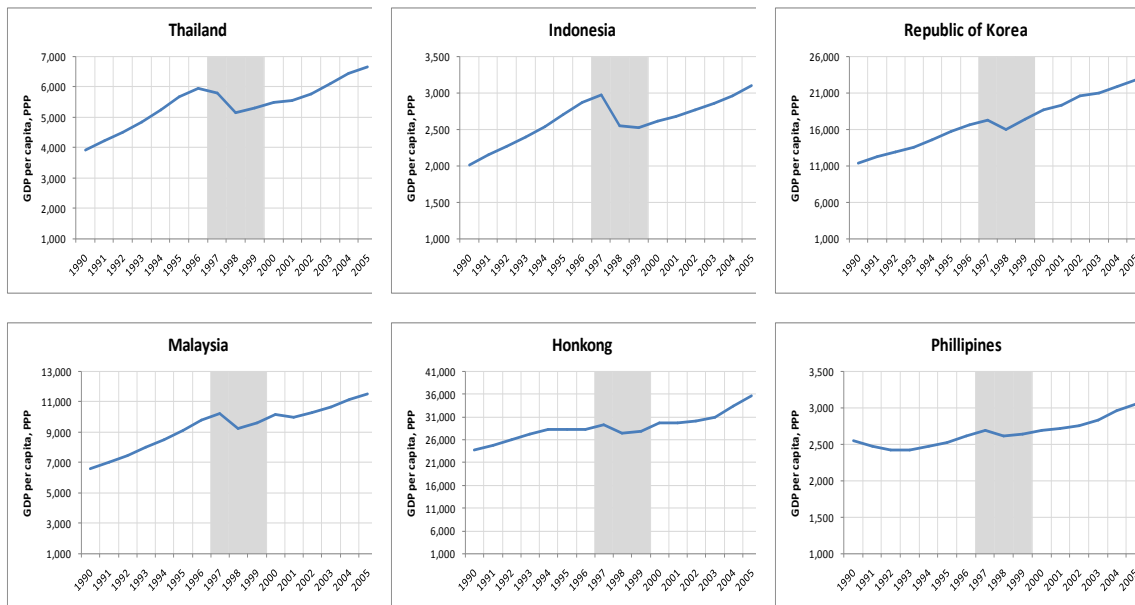
### **3.2 Increasing Global Interdependence Has Made Financial Crises More Costly**

Without global linkages, the consequences of financial instability would be to a large extent confined to the country where it originates and the impact on other countries would be minimal, dominated for instance by the trade channel, where the country facing instability has trade significance. With globalization though, markets have become strongly interlinked across the world and, as a result, the world has seen shocks to the financial system occurring in one country spreading to other countries across the world rapidly. Also, innovations have provided means of transmitting shocks from one segment of financial sector to other segments. The sub-prime mortgage crisis, for instance, begun in the housing market but through the mortgage backed securities that were sold worldwide, the shock was transmitted to the entire financial sector and across countries, turning the crisis into full-fledged financial crisis and giving it a global dimension. With increase in incidences of contagion, matters of financial instability have become a concern of not only individual countries but the entire global community.

The extent of inter-linkages and the channels through which the economies are interlinked vary and therefore, the speed with which the shocks spread and the extent of damage caused differ from country to country. The financial crises of the last decade have also revealed the significance of the location of the epicentre of the financial sector shock. If located in a large and significant economy in trade and finance terms, the impact will spread fast and far than if the economy where it originates is small and less significant. The spread of the impact of the 1996–1998 East Asian crisis was far more limited than the 2007–2008 the US sub-prime mortgage crisis. In the case of East Asia, the financial crisis began with the collapse of Thai baht, in July 1997 but spread quickly to other countries in the region and affected financial markets across the world. The consequences of the crisis on consumer confidence, demand and employment led to loss of growth in most

countries in the region. As indicated in **Figure 2**, per capita income declined not only in Thailand, but also in Indonesia where it also caused political unrest, South Korea, Malaysia, Hon Kong and Philippines.

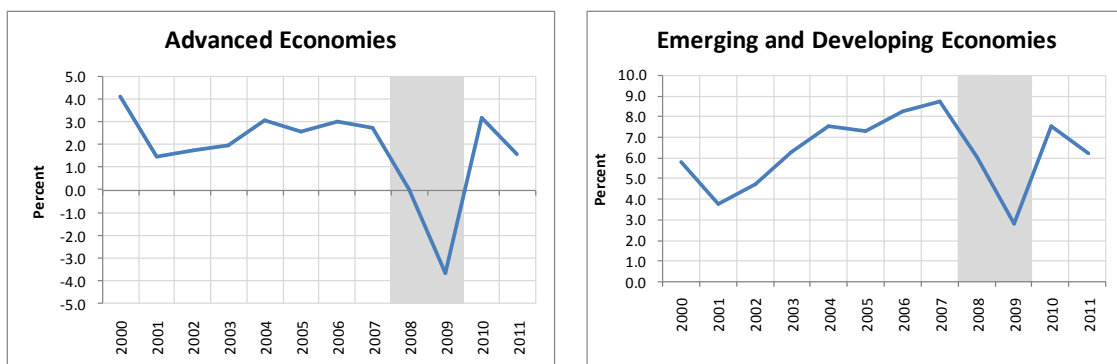
**Figure 2: Per Capita Income (Constant 2005 International \$)**



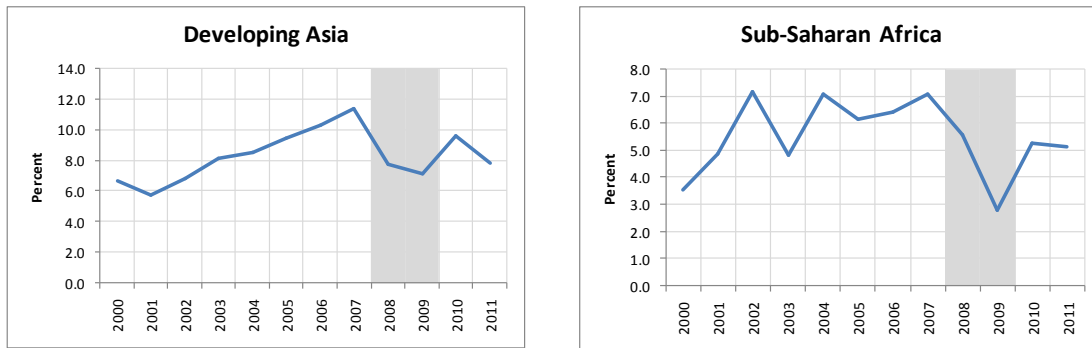
Source: World Bank Database

The impact of the sub-prime mortgage crisis spread more, partly because it had its origin in a much bigger economy with stronger linkages in the advanced economies. **Figure 3** shows loss of growth momentum happened in all regions of the world with that of advanced and emerging market economies coming earlier and more intensely.

**Figure 3: Financial Instability Causes Loss in Economic Growth**







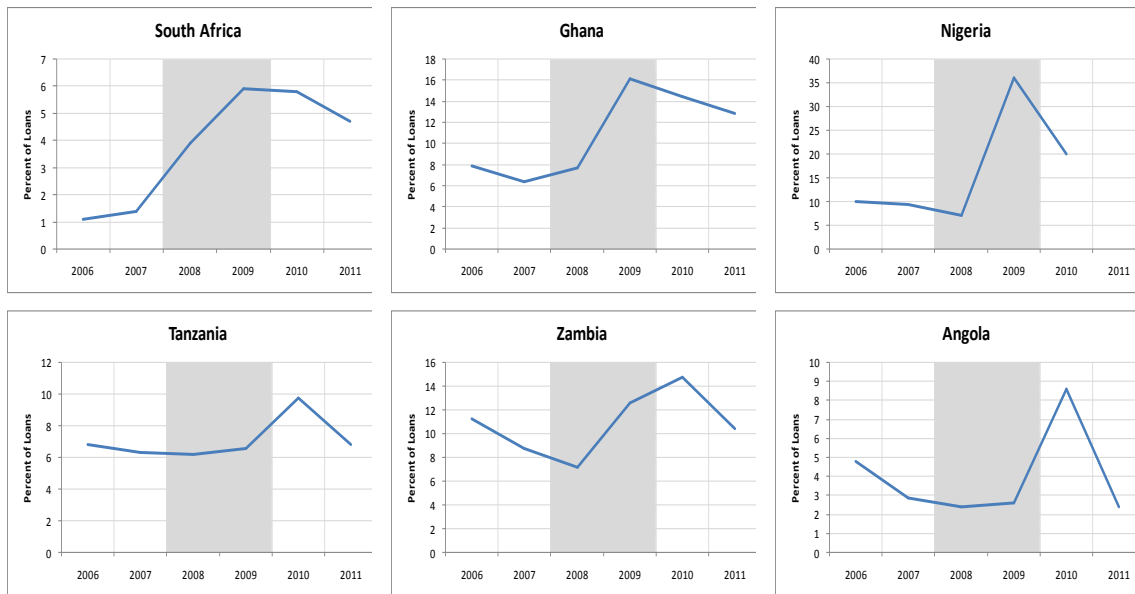
**Source:** Data from the Regional Economic Outlook, Sub-Sahara Africa, April 2012

The fact that financial shocks begin in the financial sector means that countries with developed financial sector and significant reliance on global financial markets for foreign resources get impacted more quickly and more intensely by shocks coming from outside, than countries with less developed and less dependence on global financial markets. In the sub-prime mortgage crisis, the advanced economies whose banks were exposed to what turned out to be toxic assets had their banks hit by the systemic crisis swiftly. For emerging market economies with well-developed capital flows, stock market investment and exchange rates were important transmission channels.

In Africa, for example, South Africa was most affected by the turmoil because its equity market and deep, liquid bond market attract sizable amount of foreign portfolio investment and carry trade. In addition to South Africa, some other financially more advanced sub-Saharan Africa markets experienced portfolio capital outflows in late 2008 that eventually reverted to inflows in 2009. Nigeria and Ghana were affected first through their financial links with other regions of the world and this was manifested in a number of financial sector soundness indicators (**Figures 4 and Figure 5**)<sup>5</sup>. Although the effect on stock prices and exchange rates was contained, the flight from risky asset did indirectly affect some of the sub-Saharan African frontier markets. Zambia for instance saw a sharp reduction in foreign investors' demand for Zambian bonds that led to a credit crunch when the banking system took over as the primary source of government financing. Foreign direct investment also declined, but remained positive, while foreign exchange reserves fell more markedly in countries with fixed exchange rate regimes (REO, April 2012).

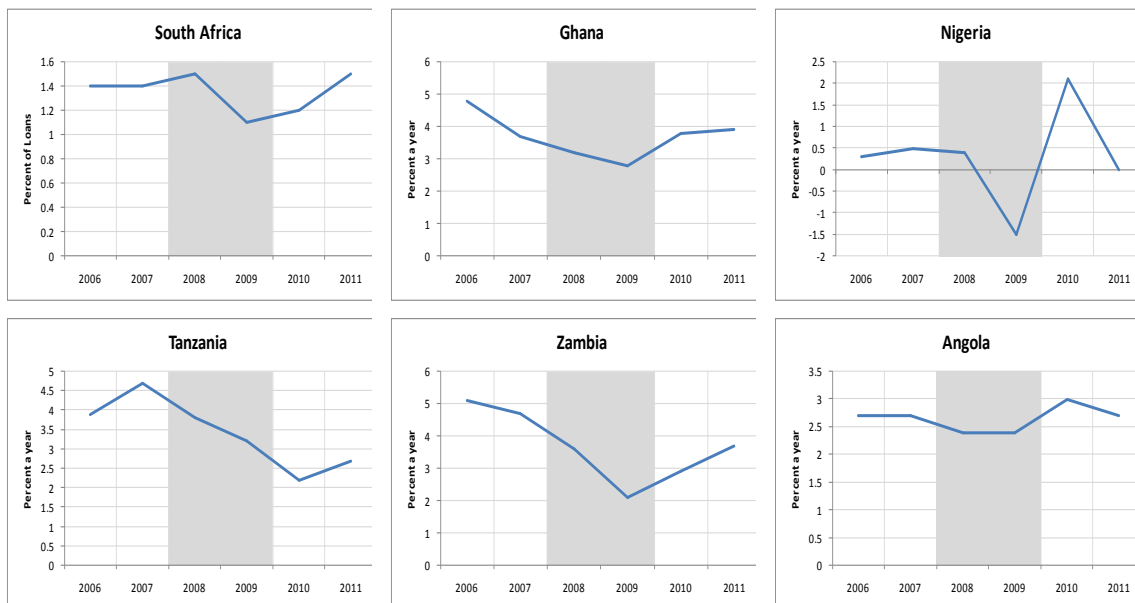
<sup>5</sup> See **Appendix 2** for actual data on the soundness indicators of the selected African countries.

**Figure 4: Developments in Banks' Non-Performing Loans**



Source: *Regional Economic Outlook, Sub-Saharan Africa*, April 2012

**Figure 5: Developments in Banks' Return on Asset**

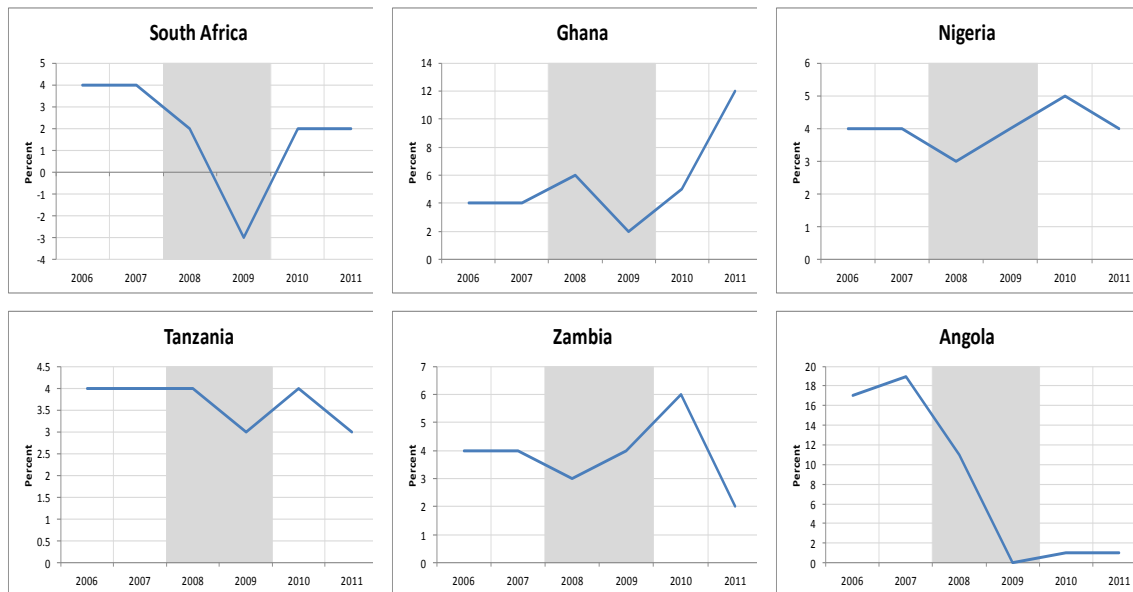


Source: REO, April 2012

The collapse of demand in America and other advanced economies pushed commodity prices down leading to reduction of export earnings as well as government revenues for most of African countries. Sub-Saharan Africa financial sector, that had initially been spared from the direct impact because of its limited integration with the global financial markets got most of its impact through weakening client incomes that led to difficulties in servicing their loans. While the impact on Africa's

growth as a whole was modest, countries that are more dependent on commodity exports were hit harder. Angola, for instance, whose economy depends largely on oil exports, lost more pace in growth of per capita income compared to countries like Tanzania and Ghana that are less dependent on commodity exports (**Figure 6**). This underscores the importance of diversifying the destination of African commodities by increasing the share of exports that goes to regional markets.

**Figure 6: Growth in Per Capita Income**



Source: World Bank Database

From the discussion it is clear that, while financial development is key to high and sustainable economic growth, financial instability impairs growth irrespective of whether it originates from within the country or from outside. It is imperative, therefore, that in order to preserve the growth gains, there is a need to develop the financial sector and take measures to address risks to growth originating from financial instability. This would require putting in place a framework for preventing financial instabilities and mitigating their impact when they occur, which is the subject of the next sections.

#### 4.0 Financial Sector Development and Financial Stability in Africa

This section offers a set of recommendations that could help promote financial sector development and ensure its stability, either by avoiding future crises or reducing their impact in the economy when they occur.

## **4.1 Measures to Promote Financial Sector Development**

### **(i) Maintaining Conducive Macroeconomic Environment**

Well-functioning financial systems require fiscal discipline and stable macroeconomic environment. As noted by Aslı Demirgüç-Kunt, (2006), monetary and fiscal policies affect the taxation of financial intermediaries and provision of financial services. Large financing requirements of governments crowd out private investment by increasing returns on government securities, thus absorbing the bulk of savings mobilized by the financial system. Bank profitability may not necessarily suffer, given the high yields on these securities, but the ability of the financial system to allocate resources efficiently is severely affected. Improved macroeconomic stability has been important in promoting strong and stable financial systems in Africa in the past two decades before the recent global financial crisis. It is therefore important that African countries maintain sound macroeconomic policies so that such gains are not reversed.

### **(ii) Further Financial Sector Reforms in Some Countries**

As noted in section two, during the early 1990s many developing countries introduced financial sector reforms aimed at liberalizing and promoting development of their financial systems. While these reforms have had some positive impacts in these countries, it is evident that opening the banking sectors to foreigners and privatizing state-owned banks do not necessarily lead to efficient banking systems. Much more reform measures are needed along with liberalization and privatization in order to achieve the desired efficiency in the financial sectors. Such reforms may include, improving the legal frameworks and enabling information sharing among financial institutions on creditworthiness of borrowers as well as increasing the availability of long-term loanable resources through stock markets, pension funds and insurance companies. These measures would help reduce operating costs and also encourage competition in the banking sectors.

### **(iii) Facilitating Access to Finance**

Governments in developing countries have an important role to play in expanding the availability of the range of financial services to a broader set of households, firms and sectors in the economy. One way of improving access to finance, particularly by the poor, is by promoting use of technology in the financial sector and growth of specialized microfinance institutions.

## **Promoting Use of Technology in the Financial Sector**

Technological innovation has a potential transformative role in extending affordable financial services, particularly to the rural population. Technology offers financial institutions the means to reduce transaction and operational costs, allowing financial services to be delivered more rapidly and more conveniently to broad sections of the population. For example, the introduction of Automated Teller Machines (ATMs) in urban centers across many Sub-Saharan African countries in recent years, has allowed financial institutions to provide services at all times, seven days a week. At the same time, the sharp increase in the number of cell-phone providers and subscribers in Africa, has supported expansion in outreach by providing the previously unbanked customers with a range of cash transfer and bill payment services.

It should be noted however, that in most cases, these innovations have come as a result of voluntary decisions by private firms acting in their own interests—mostly for profit motives. But there is no doubt that sizeable initial startup costs are involved in establishing these schemes and their payoff takes many years to realize. Governments can encourage more technology-driven innovations by putting in place policies that effectively protect property rights so that firms can incur the fixed start-up costs with confidence that they and not others will capture the return to the investment. Also, policy makers can play a key role in underpinning public's confidence in the uptake of new technology driven financial products and services. This is important because, unlike many markets in goods and services, financial markets are trust-based market—in which case, the role of regulators and supervisors in building public's trust in new innovative financial products is vital.

Equally important, is being aware of the challenges that technological advancement can pose. One such challenges relates to the supervisory and regulatory capacity. For example, mobile phone banking cuts across various regulatory domains including banking, telecommunications and payments systems. The challenge here is to put in place a consolidated regulatory framework that allows the regulators to adequately monitor the risk involved in the provision of such services.

## **Encouraging Microfinance Institutions**

Another measure that would help to push the frontiers of financial access is by promoting growth of specialized microfinance institutions. Mainstream banks tend not to serve the poor as well as Small and Medium Enterprises (SMEs) because of the perceived high risks and high costs involved in small transactions and inability by the poor to provide collateral. Microfinance institutions have potential of bridging this gap by providing more adapted financial services to this segment of

population. Experience from many countries shows that these institutions have used various innovative mechanisms such as group lending and other techniques to overcome the obstacles involved in delivering services to the poor and small firms. By financing income-generating activities among the poor, microfinance institutions certainly offer a promise to economic growth and poverty alleviation.

## **4.2 Measure to Prevent Crises From Occurring**

Weaknesses in financial regulation and supervision have been fundamental causes of financial instability in the past. Therefore, the first line of defence in preventing financial crises is better regulations and supervision of financial systems. Prudential supervision plays a role in reducing failures of financial institutions and avoiding financial sector crises. The concern after the 2007-2008 financial crisis has been for countries to undertake comprehensive review of their regulatory and supervisory regimes with the view of identifying areas for further improvement. The traditional approach to regulation and supervision leaves other financial activity such as derivatives unregulated. This approach is vulnerable to regulatory arbitrage and in need of adjustment. Thus, regulation must be comprehensive, with boundaries determined by the economic functions of financial institutions, not by where they are located.

One of the lessons learnt from the crisis is that risk management and supervisory practices lagged behind financial innovations and emerging new business models. This lesson underscores the need for regulation staying ahead of the curve, and for continually upgrading the skills and instruments for financial regulation and supervision. However, there is need for a note of caution here. Financial crises and their impact can be suppressed completely only through severe financial sector repression and autarky policies – and at a clear cost to economic growth and development. There is a distinct risk that in trying to stay ahead of innovation, regulation may get so stringent that it stifles innovation. This is a risk Africa must guard against.

Since there is no guarantee that all practices that expose the financial sector to excessive risk taking can be properly monitored and regulated, regulation will have to put special emphasis on setting right incentives to discourage moral hazards—the idea that people behave recklessly if they do not have to deal with the consequences of their actions. One way of doing this is to force creditors to bear the consequences of their past bad lending.

Although there is still a divergence of opinion, there is no doubt that the machinery of global economic governance barely exists. The current global institutions such as the IMF, the World Bank and the Bank of International Settlement are not adequately positioned to police the global financial system in a way that will absolutely prevent the excessive risk-taking by profit driven financial

institutions. This calls for the need to rethink about which global institutions should take up the new global regulatory responsibility. Gordon Brown argued, in January 2007, that global regulation was urgently in need of modernization and reform. Such a new global architecture would enforce rules that ensure lessons are learnt, and that, the actions which brought free markets to the brink of collapse are not repeated.

Past experience has shown that when a systemically important bank fails, it risks failure of the entire financial system. Similarly, when a financial system of systemically important country fails, the global financial system is put at risk. There is therefore, a need to put in place institutional arrangements aimed at minimizing systemic risks arising from financial institutions and their interactions, bilaterally and through markets. More focus needs to be put on system-wide risks which threaten the soundness and safety of the financial system as a whole. The IMF needs to strengthen its surveillance activities, paying particular attention to systemically important countries and enhanced disclosure of information from surveillance reports. This needs to include not only establishing an Early Warning System (EWS) for global crises but also ensuring even-handedness in dealing with its membership and developing instruments and policies that are capable of addressing the changing global environment. The agreement by the G20 to exchange and assess information about their respective macroeconomic and structural policies in order to avoid future crises and strengthen future global growth is a welcome move.

Another important lesson that was learnt from the 2007-2008 financial crisis was the need to require banks to pay for the cost of the externalities they potentially cause. During the financial crisis, it became evident that most banks' capital holdings were not sufficient to absorb massive losses that had befallen them. In jurisdictions where banks had adequate capital buffers, failures were few. This experience justifies a need for imposing higher capital requirements and compelling banks to calculate a stressed value-at-risk. The aim is to increase their ability to withstand stressful situations. This way, banks will essentially bail-in themselves to avoid or minimize the need to be bailed out during stressful conditions.

### **4.3 Measures to Strengthen Resilience Against Financial Crises**

Reoccurrence of financial crises in the world has generated a deep sense that not only fundamental reforms are required to prevent financial crises from occurring, but also measures should be put in place both at national and international levels, to manage them and reduce their impact when they occur. Strengthening resilience of African economies against the impact of external economic shocks associated with financial crises originating outside the continent could be achieved through a number of measures.

First, as learned from the recent global financial crisis, resilience to shocks can be supported by stable macroeconomic policies. African countries that entered the crisis with high level of macroeconomic stability were able to weather the storm with less economic damage. Stable macroeconomics allowed for smooth adjustment to the crisis as Governments were able to respond with discretion. To a large extent, these favourable conditions reflect heavy investment in policies of restraint on the macro front, such as cash budget and prudent monetary policy. African countries should therefore continue to promote macroeconomic stability, with special attention on creating as much additional fiscal space and foreign reserve buffers as possible to re-instate the pre-crisis levels.

Second, fostering intra-African trade through regional integration is useful to reducing the vulnerability of African countries' trade from global market shocks. In the face of falling demand in the world market, large economies like US, China and India resorted to stimulating domestic demand taking advantage of their large domestic markets. The small African countries can try to do the same but the smallness of their market will impose limits. This situation suggests the need for exploiting and developing larger regional markets through regional integration and cooperation. In addition, regional efforts to augment liquidity cooperation arrangements can be effective. Collective self-insurance initiative such as adopted by the Asian countries after the 1997 financial crisis is worth considering by African countries. Regionally pooled reserves will increase the options available to African countries at times of stress and enable expeditious resolution of crisis.

## **5.0 Conclusion**

Through a desk review, this paper examines the linkages between financial sector development, financial stability and economic growth primarily. The findings suggest that finance and financial stability are highly correlated to economic development across the world. It is thus argued that finance makes important contribution to economic growth. As the African financial sector develops, the benefits to its economies will not come only from the improvement in the efficiency of domestic resource mobilization and allocation, but also from the increase in access to global financial resources. African countries, therefore, need to take measures that will develop their financial sectors further, including maintenance of macroeconomic stability; improvement of legal frameworks; facilitation of information sharing among financial institutions; and enhancement of access to financial services, particularly by promoting use of technology in the financial sector and growth of specialized microfinance institutions.

As Africa pursues further development of its financial sector, it is important to be mindful of the fact that financial systems are inherently unstable, and therefore the damaging effect of the more



developed financial sector instability will also be greater for two reasons. First, as the financial sector develops, its significance relative to the size of the economy increases implying that a shock to the sector will affect larger portion of the economy and be multiplied through larger number of units in the economy. Second, development of a financial sector entails more integration into the global financial system, which opens more channels for contagion from instabilities occurring elsewhere in the world. African countries, therefore, need to invest in improving the financial sector regulatory and supervisory practices including making them more comprehensive to avoid the arbitrage that led most of the crises to happen, and keeping them abreast with the rapidly advancing innovations.

Setting right incentives to discourage moral hazards, say by forcing creditors to bear the consequences of their bad practices, will be crucial in protecting the sector from risky behavior that may be out of regulators' view. In addition, there is a need to put in place institutional arrangements aimed at minimizing systemic risks arising from financial institutions and their interactions, bilaterally and through markets. Special focus needs to be put on system-wide risks, which threaten the soundness and safety of the financial system as a whole both within countries and across the world. This brings in the need for the IMF to increase disclosure of information from surveillance reports, establishing an Early Warning System and ensuring even-handedness in dealing with its membership.

To mitigate the severity of instability when it occurs, African countries need to build additional fiscal space and foreign exchange reserve buffers at times of financial stability, and foster diversification through intra-African trade to reduce vulnerability to shocks happening elsewhere in the world.

## Appendices

### Appendix 1: Summary Statistics of Financial Indicators by Income Group

<b>High income countries</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>
Domestic credit to private sector (% of GDP)	130.28	60.63	44.49	312.72
Broad money (M2) as % of GDP	119.32	98.15	39.47	565.53
Interest rate spread (lending rate minus deposit rate, % point)	3.12	7.40	0.32	6.04
Market capitalization of listed companies (% of GDP)	75.29	53.44	6.15	247.21
Domestic savings as % of GDP	24.41	7.40	11.13	47.54
<b>Upper middle income countries</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>
Domestic credit to private sector (% of GDP)	47.815	33.579	6.804	140.419
Broad money (M2) as % of GDP	57.137	40.176	15.928	208.912
Interest rate spread (lending rate minus deposit rate, % point)	7.165	10.720	-4.703	25.875
Market capitalization of listed companies (% of GDP)	44.972	49.249	0.901	217.003
Domestic savings as % of GDP	19.393	10.720	-7.713	51.589
<b>Lower middle income countries</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>
Domestic credit to private sector (% of GDP)	27.19	16.64	3.62	77.85
Broad money (M2) as % of GDP	41.09	20.58	15.69	96.84
Interest rate spread (lending rate minus deposit rate, % point)	10.06	10.72	1.53	26.17
Market capitalization of listed companies (% of GDP)	26.12	24.82	0.59	98.06
Domestic savings as % of GDP	11.01	10.72	-40.43	34.82
<b>Low income countries</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>
Domestic credit to private sector (% of GDP)	30.205	37.255	2.053	173.294
Broad money (M2) as % of GDP	29.325	23.250	8.196	129.151
Interest rate spread (lending rate minus deposit rate, % point)	16.024	9.483	3.783	83.201
Market capitalization of listed companies (% of GDP)	28.788	45.470	1.225	128.519
Domestic savings as % of GDP	2.384	9.483	-49.521	25.873

**Source:** World Bank – World Development Indicators Database

**Appendix 2: Banking System Soundness Indicators for Selected African Countries**

	2006	2007	2008	2009	2010	2011
<b>Capital adequacy ratio (% of risk weighed assets)</b>						
South Africa	12.3	12.8	13.0	14.1	14.9	14.9
Angola	18.5	21.9	19.5	19.5	18.6	14.8
Nigeria	40.9	23.4	22.6	20.9	7.0	...
Ghana	15.8	14.8	13.8	18.2	19.1	17.4
Kenya	17.0	18.0	18.9	19.5	20.8	19.4
Tanzania	16.3	16.2	17.0	18.3	18.5	17.8
Zambia	20.4	18.6	18.6	22.3	22.1	19.2
<b>Non-performing loans (% of loans)</b>						
South Africa	1.1	1.4	3.9	5.9	5.8	4.7
Angola	4.8	2.9	2.4	2.6	8.6	2.4
Nigeria	10.0	9.5	7.2	36.1	20.1	...
Ghana	7.9	6.4	7.7	16.2	14.5	12.9
Kenya	20.2	10.6	9.0	7.9	6.2	4.4
Tanzania	6.8	6.3	6.2	6.6	9.8	6.8
Zambia	11.3	8.8	7.2	12.6	14.8	10.4
<b>Return on asset (% a year)</b>						
South Africa	1.4	1.4	1.5	1.1	1.2	1.5
Angola	2.7	2.7	2.4	2.4	3.0	2.7
Nigeria	0.3	0.5	0.4	-1.5	2.1	...
Ghana	4.8	3.7	3.2	2.8	3.8	3.9
Kenya	2.7	3.0	2.8	2.9	3.7	3.3
Tanzania	3.9	4.7	3.8	3.2	2.2	2.7
Zambia	5.1	4.7	3.6	2.1	2.9	3.7
<b>Return on equity (% a year)</b>						
South Africa	18.3	18.1	26.9	18.0	18.3	21.0
Angola	28.8	23.6	26.5	36.5	32.1	27.2
Nigeria	1.9	3.0	1.9	-9.6	65.4	...
Ghana	39.6	35.8	30.1	23.6	28.6	27.2
Kenya	27.2	28.3	25.2	24.8	30.7	32.2
Tanzania	26.7	29.0	23.2	18.4	12.1	15.1
Zambia	30.6	35.1	20.8	9.4	12.1	25.5

**Source:** Regional Economic Outlook, Sub-Saharan Africa, April 2012

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