Financial Sector Policy Reforms in the Post-Financial Crisis Era: Africa Focus
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Office of the Chief Economist
Abstract

Lemma W. Senbet, University of Maryland

This policy-oriented paper presents and rationalizes short-term policy responses to current crisis and long-term regulatory and financial reforms for post-crisis Africa. The analysis is conducted in the following sequence. It presents reversals of gains in economic and financial sector performance that are bound to occur as a result of the damage stemming from the global crisis. For the short term, it discusses the role of African global partners in coping with the impact of the crisis, and Africa’s positioning in the moving-forward of global financial reforms. It then keys on Africa’s own responsibilities and catalogues a series of long-term reforms to mitigate the severity and frequency of future crises in Africa and/or the impact of crises coming from outside Africa. It concludes with a call for continuing engagement with market-oriented reforms and globalization, and resistance to the temptation for policy reversals, while adopting the long-term policy reforms catalogued in the paper.

Keywords: Financial crisis, reforms, globalisation

JEL classification: G2, G20, G28
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I. Introduction

Africa is being collaterally damaged by the financial crisis that began in the US and spread all over the world. While the USA is the epicenter, the financial crisis has resulted in a global economic crisis. Even the countries not integrated into the global financial economy (e.g., Ethiopia) are hurt. This current global crisis is unprecedented since the Great Depression. Resources to the tune of trillions of US dollars have been expended by the more advanced economies in the form of fiscal stimulus to jump start their economies, and in the form of bailout packages to rescue failing financial institutions and to stabilize the financial system.

While the advanced countries have committed exorbitant sums of money, developing countries, particularly Sub-Saharan Africa, lack commensurate resources for fiscal stimulus and bailout packages. Yet, without their own fault and despite the many years of extensive reforms, Africa and the other low-income countries are being devastated by the adverse consequences of the global financial crisis which has been transmitted both through the financial and real sectors. Commodity prices, as well as exports, have plunged due to the slump in global demand. Foreign direct investments and portfolio flows are drying up. Moreover, the global crisis of confidence is leading to a rise in costs of borrowing in the credit markets, and, more disturbingly, emerging and pre-emerging economies are being rationed out of the credit markets altogether.

The African situation is particularly worrisome, since in addition to the decline in the traditional flows of trade and investment, the global crisis is having a devastating effect on remittances. Further, given that the donor countries are now committing unprecedented quantities of resources to cope with their own crisis, the aid flows are likely to shrink. There is very little that is counter-cyclical in this picture to mitigate the devastating impact of the global Tsunami on Africa and other low-income countries.

No one is spared in this environment. Advanced economies, emerging economies, pre-emerging and low income countries are all hit badly. Eastern and Central European countries, such as Hungary, the Czech Republic, and Poland, are experiencing severe damage both in the real and financial sectors. Exports from these countries to Western Europe have diminished. They are also caught up in the misfortunes of major European banks which have experienced huge losses resulting from their exposures to the US mortgage-backed securities. East Asian countries are also hurt from the global slump in demand and plunging global trade. So are Latin American countries.
The impact of the global crisis on the private capital flows to emerging markets is particularly stunning. These flows dropped almost 50%, from $928 billion in 2007 to $466 billion in 2008\(^{(2)}\). It is now being projected that private flows will dwindle to $165 billion this year. What is also interesting is that foreign holdings of US T-bills rose by $456 billion in 2008 – almost to the tune of the decline in private capital flows to emerging economies. Ironically the US Treasury securities have actually benefitted from the USA being the epicenter of the global financial crisis, a point that I wish to return to later.

How does all this aggregate globally? The global trade is falling rapidly, and commodity prices are plunging. The bottom line projections for the performance of the global economy are very unfavorable. Both the IMF and the World Bank estimates, more or less, agree on this. According to the IMF, we are headed for the worst economic performance of generations this year, with the global growth expected to move into a negative territory. This is consistent with the prediction of the newly released World Bank report that the global economy would shrink in 2009\(^{(3)}\). This is the first time experience in more than half a century.

The global crisis has revealed serious oversight gaps in systemically critical institutions, such as AIG in the USA, which can engender global interconnectedness by taking advantage of the boom in an undisciplined and unregulated environment. With the system of distorted incentives for exorbitant rewards in the boom period, excessively high risks, yet non-transparent (e.g., credit default swaps), were undertaken. Bank-like institutions, which are outside the banking regulatory scheme, were allowed to grow to a point where their failure would bring down other institutions, with damage to the entire globe. However, there are no global systems in place for the accountability of the countries that source crises of epic proportions and impose enormous collateral damage on other countries, particularly fragile and low-income countries.

No doubt, the world is facing “Great Recession” that can devolve into the “Great Depression” if bold actions are not taken. Given that this is a global crisis, these actions must be globally coordinated. Although the burning issue now is economic recovery, it is also vital that we use this opportunity to carry out long-term reforms for the mitigation of such crises in

the future. The purpose of this paper is to present and rationalize some long-term regulatory and financial reforms with a focus on Africa. The crisis makes it clear that what goes on in other countries matters, and the reform package implemented abroad are relevant to Africa. Concerning the long-term reforms, attention should be paid to both the home-grown reforms and those from abroad. The voice of Africa and low-income countries should be heard while their participation should be effective in the reform of the global financial system and the regulatory structure.

Following the introduction, section II of this paper provides a brief on the root causes of the crisis. Understanding the causes help us understand the long-term reforms toward the prevention of crises and mitigation of the potential associated costs. Section III overviews the recent economic and financial sector reforms that have contributed to real economic gains in Africa. It then analyses the reversals in economic and financial sector performance that are bound to occur as a result of the damage stemming from the global crisis. Section IV discusses the role of African global partners in coping with the impact of the crisis and Africa’s positioning in global financial reforms moving-forward. Section V keys on Africa’s own responsibilities and catalogues a series of long-term reforms to mitigate the severity and frequency of future crises in Africa and/or the impact of crises originating from outside Africa. Section VI is the concluding note.

2. Essential Factors to be Considered in the Propagation of Crisis

Many have written about the root causes of the financial crisis that began in the USA and spread around the globe and got transformed into a generalized economic crisis. It is important to briefly identify the critical factors that are relevant to the study of the impact of crisis on Africa.

2.1. Bubble and Bust

The last decade has witnessed two landmark events. The burst of the information technology boom and the associated massive corporate scandals triggered a collapse of highly reputed and large companies such as Enron, WorldCom, Tyco, Adelphia, Global Crossing, etc. This resulted in massive destruction of shareholder wealth and damage to other stakeholders, including employees who lost retirement savings.

The second landmark event is the burst of the housing bubble and the subprime crisis, and it has lead to a shutdown of the credit market. This too resulted in massi-
ve destruction of equity and real estate wealth. However, the burst of the technology bubble and the corporate crisis was largely limited to a single industry sector and a single country (USA), whereas the current crisis, which is rooted in the housing bubble, has spread around the world. Moreover, the damage has been phenomenal and it is unlike anything we have seen over generations. The crisis erupted with the dramatic failures of the venerable financial institutions, such as Lehman Brothers, Merrill Lynch, American International Group (AIG), Fannie Mae, etc. and spread around the globe with the collateral damage being imposed on low-income countries, which are not even that integrated into the global financial economy.

However, there is a commonality characterizing the two landmark episodes of the decade. At the center of these episodes are lack of accountability, poor disclosure, distorted incentives, and severe regulatory gaps. This commonality has a universal ear to it, and hence very relevant to Africa. This is a point I wish to return to when I discuss incentive-based reforms for the banking and overall financial sector in Africa (see Section 4).

2.2. **Critical Factors**

For sure, housing boom and credit boom are at the center of the crisis. A housing bubble created overinvesting in homes, along with overbuilding. Thus, ex ante, banks and other financial institutions, including government-sponsored agencies (GSEs) and those on Wall Street, bet big on home prices – one that didn’t work out ex-post. However, this is not the full picture of what propagated the crisis, and other factors also played a critical role.

*First*, banks and other financial institutions were excessively levered. Excessive leverage creates incentives for excessive risk-taking by the owners of these institutions. The existence of explicit or implicit insurance can add to this “moral hazard”. Banks have explicit deposit insurance. However, other institutions (e.g., Wall Street firms) deemed too big to fail to have implicit guarantees of a bailout. These features increase incentives to take excessively risky assets relative to what is socially optimal. Weak corporate governance and ill-designed executive compensation contracts can further lead to distorted incentives, allowing executives to be amply rewarded on the upside but escaping the downside.

*Second*, this was an era of grade inflation by rating agencies. Money funds were required, and others chose (e.g., insurance companies) to hold only securities with high ratings (e.g., “AAA.”). As it turned out, the “AAA” seal didn’t have normal
relation to defaults for mortgage-backed securities. Inflated ratings led debt investors to buy securities at inflated prices. One might ask: why grade inflation? One explanation has to do with the incentive structure facing rating agencies. The raters were being compensated by the rated! The other explanation is that securitization and financial innovation produced complex securities which were hard to rate (see below).

Third, complex securitization and trancheing produced considerable opacity in the system. The underlying risks associated with these complex securities were not transparent and very few recognized the gathering storm leading to the “Tsunami” (See Figure 1).

Figure 1: Complex and Opaque Securitization
Under mortgage securitization, banks package individual mortgages into pools. The pools are then sold to special purpose vehicles (SPVs) that passively hold the pools. SPVs finance themselves through complex securities involving multiple tranches. The cash flow to each tranche depends in complicated ways on the principal and interest repayments, prepayments, and defaults. With few disclosure requirements, many types of tranche instruments, and a large number of SPVs with varied investors, tranches became opaque and illiquid. When the crisis surfaced, nobody was sure what the securities were really worth.

There are other controversial factors contributing to the global crisis, including Greenspan’s easy-money policy. The post-dotcom period was a long period of easy money. The Federal Reserve Board did not pay much attention to the housing bubble and kept short-term interest rates too low. It is said that this was fueled by global macroeconomic imbalances in trade and capital flows, and huge savings from export-led Asian economies were being channeled to the USA that helped sustain low interest rates.

3. Africa On the Move, But Damage from Global Crisis

Over the last two decades, most African countries have undergone extensive financial sector and economic reforms, including large scale privatization programs as well as the introduction of measures to empower private initiative. The payoffs to these reforms have been substantial and have accelerated over the more recent years. Now Africa’s gains both in the real and financial sectors are being derailed by the global crisis.

3.1. Real sector payoffs to reforms, but now deceleration

In the aggregate, Africa began rising in the wake of the 21st century and had, in fact, experienced what amounted to growth renaissance before it got caught up in the global crisis. The GDP growth for the five year period (2002-2007) prior to the crisis averaged over 5.2 (see Table 1), outpacing population growth and hence experiencing a significant increase in GDP per capita. Inflation was brought under control, and there was an improvement in fiscal discipline. Moreover, the region experienced declining debt burden and increasing capacity for debt service. This was accompanied by increasing foreign investment and remittance flows.

What is less noticed, though, but remarkable is that African stock markets registered impressive performance, relative to other emerging markets, even on a risk-adjusted basis. For sure, many challenges remain, and there have been
home-grown reversals, such as in Zimbabwe. Now Africa’s gains are threatened by external forces.

Of course, Africa is not just one country, but a continent of 53 countries. There is large variation among these countries, and among regions, both in terms of policy reforms, as well as economic performance. The 2007 GDP growth, for instance, varied from 3.5% (West Africa) to 8.0% in East Africa (see Table 1)(4).

Table 1: Africa: Selected Macroeconomic Indicators, 2003-2007

<table>
<thead>
<tr>
<th>Selected Indicators</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP Growth Rate</td>
<td>4.9</td>
<td>5.6</td>
<td>5.7</td>
<td>5.9</td>
<td>5.7</td>
</tr>
<tr>
<td>Per Capita Income ($)</td>
<td>783</td>
<td>909</td>
<td>1,042</td>
<td>1,161</td>
<td>1,291</td>
</tr>
<tr>
<td>Domestic Investment Ratio (%)</td>
<td>20.4</td>
<td>21.4</td>
<td>21.1</td>
<td>21.8</td>
<td>23.1</td>
</tr>
<tr>
<td>Fiscal Balance (% of GDP)</td>
<td>-2.0</td>
<td>-0.1</td>
<td>2.8</td>
<td>4.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Foreign Direct Investment flows ($B)</td>
<td>18.7</td>
<td>18.0</td>
<td>29.6</td>
<td>35.5</td>
<td>N/A</td>
</tr>
<tr>
<td>Export Growth, volume (%)</td>
<td>8.2</td>
<td>7.8</td>
<td>5.9</td>
<td>2.8</td>
<td>7.5</td>
</tr>
<tr>
<td>Terms of Trade (%)</td>
<td>2.8</td>
<td>6.1</td>
<td>14.8</td>
<td>8.6</td>
<td>-1.7</td>
</tr>
<tr>
<td>Trade Balance ($ billion)</td>
<td>2.7</td>
<td>4.0</td>
<td>7.0</td>
<td>7.8</td>
<td>6.3</td>
</tr>
<tr>
<td>Net Total ODA flows ($B)</td>
<td>25.1</td>
<td>27.5</td>
<td>33.7</td>
<td>41.3</td>
<td>N/A</td>
</tr>
<tr>
<td>Total External Debt (% of GDP)</td>
<td>50.9</td>
<td>45.1</td>
<td>34.9</td>
<td>26.2</td>
<td>22.7</td>
</tr>
<tr>
<td>Debt Service (% of Exports)</td>
<td>13.0</td>
<td>11.2</td>
<td>10.3</td>
<td>9.9</td>
<td>6.3</td>
</tr>
</tbody>
</table>

Sub-Regional GDP Growth and Per Capita Income: 2007

<table>
<thead>
<tr>
<th>Region</th>
<th>GDP Growth (%)</th>
<th>Per Capita Income ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Africa</td>
<td>8.0</td>
<td>494</td>
</tr>
<tr>
<td>North Africa</td>
<td>5.3</td>
<td>2,433</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>7.0</td>
<td>2,574</td>
</tr>
<tr>
<td>West Africa</td>
<td>3.5</td>
<td>727</td>
</tr>
<tr>
<td>Central Africa</td>
<td>4.1</td>
<td>605</td>
</tr>
<tr>
<td>Africa</td>
<td>5.7</td>
<td>1,291</td>
</tr>
</tbody>
</table>

Source: African Development Bank statistics

(4) According the latest AfDB report, Africa is now expected to grow at only 2.8% in 2009 – a reversal of 3% as a result of the global financial crisis.
There was sharp decline in global trade in the fourth quarter of 2008 and into 2009, with devastating impact on African commodity exports, particularly oil and mineral exports. Almost all the commodity exporters unfortunately rely on very few commodities for their exports. This lack of economic diversification is endemic to Africa, making it quite vulnerable to sudden internal and external shocks. Examples of countries dependent on oil exports include Nigeria, Angola, and Congo Brazzaville, and those dependent on mineral exports include Zambia, South Africa, and Botswana. The decline in the commodity exports is attributable to both quantity (sharp decline in global demand) and price (sharp decline in commodity prices).

The other channels of crisis transmission have been through the capital account and the financial sector which is discussed in the next subsection. There has already been a sharp decline in private capital flows in response to the negative economic prospects of the region, as well as increased uncertainty and risk premia in the debt markets. In fact, according to the World Bank, net capital inflows shrank to about $36 billion in 2008, from $55 billion in 2007\footnote{Global Development Fund Report, 2009, Table A. 16.}. The other channel for crisis transmission has been the decline or deceleration of remittances from North America, Europe, and regionally from South Africa, with rising unemployment in the source countries. The World Bank projects over that remittances will decline over 4% in 2009. This is very worrisome given that these remittances have been of similar proportions as the volume of aid flows and of foreign direct investments.

Thus, the collateral damage to Africa, particularly Sub-Saharan Africa, has been enormous, and it is exacerbated by weakening tourism revenues, possibly decelerating, or even shrinking aid flows, as the budgets of the main donor countries continue to be under tremendous pressure due to the continuing global recession. The adverse consequences of the global crisis on Africa through the shrinkage of trade flows, capital flows, remittances, aid flows, and the declining access to international real and financial markets, etc., have a bottom-line consequence on the aggregate economic performance. The recent IMF report on SSA projects only 1.5% growth in 2009, which is also consistent with the World Bank’s projection (see f.4.). These projections are not far off from those estimated by institu-
tions in Africa, including AfDB, UNECA, etc. At a disaggregate level, some economies, such as that of South Africa, are expected to contract.

3.2. Financial sector payoffs, but now reversing

The recently impressive economic performance and in the results of the stock markets are not accidental. These are payoffs to extensive economic and financial sector reforms that have taken place over the last two decades. Financial sector reforms have been particularly impressive. They included reform packages spanning a variety of measures, such as interest rate liberalizations, removal of credit ceilings, restructuring and privatization of state-owned banks, along with supervisory and banking regulatory schemes, promotion and development of stock markets. The financial sector reforms are also fueled by rapid improvements in global conditions and advancing technology connecting Africa with the rest of the world. In particular, the development of the equity market sector reinforces Africa’s growing commitment to the financial sector policy reform.

There are still many challenges, though. First, the African financial development gap remains enormous relative to other developing countries (see Table 2). Based on the indicators of financial development, it appears that the financial sectors of most African countries remain quite underdeveloped even by the standards of other developing countries. In 2007, the liquid liabilities of financial sectors averaged about 30 percent of GDP for Sub-Saharan Africa (see Table 2). Looking at the other regions, none of them had a figure less than 40 percent. In fact, the financial development indicator approached or exceeded 50 percent in East Asia, Latin America, South Asia, and the Middle East and North Africa.

The other indicator of financial development is the extent to which credit is being channeled to the private sector. On that score, the financial development for Sub-Saharan Africa is even more discouraging. The average level of credit extended to the private sector was 16.6 percent of GDP in 2007, whereas for the other developing countries, the financial development indicator ranged from 32.5 to 43.9 percent. Moreover, we will see later that financial development indicators based on the depth and liquidity of African stock markets are also low for Africa.\(^{(6)}\)

\(^{(6)}\)Allen, Carletti, Cull, Qian, and Senbet (2009) are currently engaged in a research program on the African financial development gap. They examine the factors that are associated with financial development in Africa.
Second, from a functional perspective the financial systems remain inefficient. Financial systems provide functions beyond just savings/capital mobilization. For instance, the mere existence of banks is of little value if their primary activity is to merely purchase government securities and shun the provision of private credit. If so, banks no longer serve as informed agents or intermediaries on behalf of the society and build vital information capital that is crucial for an efficient allocation of resources. In fact, such banks are engaged in dysfunctional financial intermediation, and this is in part reflected in high interest spreads prevalent in Africa.

In the same light, the stock markets should also foster liquidity provision and relative ease for exit. Unfortunately, even by the standards of other developing countries, they remain thin and illiquid in Africa. Except for the South African stock market, pre-emerging stock markets in Africa are by far the smallest of any regions, both in terms of the number of listed companies and market capitalization (Senbet and Otchere, 2008). The mean market capitalization, as a percentage of GDP, was 32.72% (20.56%, excluding South Africa) for the period 2000-2006, and it was much lower than, for instance, that of Malaysia (147.5%), but fared well in comparison to Mexico (25.50%).

### Table 2: Positioning of Sub-Saharan Africa in World Financial Development

#### Panel A: Liquid Liabilities/GDP

<table>
<thead>
<tr>
<th>Year</th>
<th>East Asia &amp; Pacific</th>
<th>Europe &amp; Central Asia</th>
<th>Latin America &amp; Caribbean</th>
<th>Middle East &amp; North Africa</th>
<th>South Asia</th>
<th>Sub-Saharan Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>34.5%</td>
<td>28.4%</td>
<td>40.1%</td>
<td>56.7%</td>
<td>36.3%</td>
<td>24.4%</td>
</tr>
<tr>
<td>1996</td>
<td>34.2%</td>
<td>26.9%</td>
<td>41.7%</td>
<td>54.3%</td>
<td>35.9%</td>
<td>23.9%</td>
</tr>
<tr>
<td>1997</td>
<td>35.7%</td>
<td>27.8%</td>
<td>44.2%</td>
<td>55.3%</td>
<td>37.6%</td>
<td>24.3%</td>
</tr>
<tr>
<td>1998</td>
<td>37.0%</td>
<td>28.4%</td>
<td>46.6%</td>
<td>54.9%</td>
<td>38.8%</td>
<td>24.7%</td>
</tr>
<tr>
<td>1999</td>
<td>37.6%</td>
<td>29.3%</td>
<td>48.4%</td>
<td>58.8%</td>
<td>40.6%</td>
<td>26.5%</td>
</tr>
<tr>
<td>2000</td>
<td>37.9%</td>
<td>30.5%</td>
<td>47.0%</td>
<td>59.1%</td>
<td>42.4%</td>
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<tr>
<td>2001</td>
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<tr>
<td>2002</td>
<td>41.5%</td>
<td>35.5%</td>
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<td>64.3%</td>
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<tr>
<td>2003</td>
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<td>49.4%</td>
<td>64.7%</td>
<td>49.9%</td>
<td>30.9%</td>
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<tr>
<td>2004</td>
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<td>48.7%</td>
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<tr>
<td>2005</td>
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<td>49.2%</td>
<td>70.3%</td>
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<td>29.7%</td>
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<td>2006</td>
<td>46.8%</td>
<td>43.6%</td>
<td>55.3%</td>
<td>62.3%</td>
<td>55.1%</td>
<td></td>
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<tr>
<td>2007</td>
<td>46.8%</td>
<td>42.8%</td>
<td>54.1%</td>
<td>71.5%</td>
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#### Panel B: Private Credit/GDP

<table>
<thead>
<tr>
<th>Year</th>
<th>East Asia &amp; Pacific</th>
<th>Europe &amp; Central Asia</th>
<th>Latin America &amp; Caribbean</th>
<th>Middle East &amp; North Africa</th>
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<th>Sub-Saharan Africa</th>
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<tbody>
<tr>
<td>1995</td>
<td>22.3%</td>
<td>19.6%</td>
<td>29.9%</td>
<td>56.7%</td>
<td>36.3%</td>
<td>24.4%</td>
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<tr>
<td>1996</td>
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<tr>
<td>1998</td>
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<td>25.6%</td>
</tr>
<tr>
<td>2000</td>
<td>25.6%</td>
<td>25.6%</td>
<td>47.0%</td>
<td>59.1%</td>
<td>40.6%</td>
<td>26.5%</td>
</tr>
<tr>
<td>2001</td>
<td>25.7%</td>
<td>25.7%</td>
<td>49.5%</td>
<td>63.4%</td>
<td>42.4%</td>
<td>27.6%</td>
</tr>
<tr>
<td>2002</td>
<td>25.4%</td>
<td>25.7%</td>
<td>51.5%</td>
<td>64.3%</td>
<td>45.8%</td>
<td>28.5%</td>
</tr>
<tr>
<td>2003</td>
<td>27.5%</td>
<td>25.7%</td>
<td>49.4%</td>
<td>64.7%</td>
<td>47.7%</td>
<td>29.2%</td>
</tr>
<tr>
<td>2004</td>
<td>30.4%</td>
<td>25.7%</td>
<td>48.7%</td>
<td>64.3%</td>
<td>49.9%</td>
<td>30.9%</td>
</tr>
<tr>
<td>2005</td>
<td>32.5%</td>
<td>27.5%</td>
<td>49.2%</td>
<td>70.3%</td>
<td>51.7%</td>
<td>32.5%</td>
</tr>
<tr>
<td>2006</td>
<td>42.5%</td>
<td>27.8%</td>
<td>55.3%</td>
<td>62.3%</td>
<td>53.8%</td>
<td>29.7%</td>
</tr>
<tr>
<td>2007</td>
<td>37.0%</td>
<td>34.0%</td>
<td>54.1%</td>
<td>71.5%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from Allen, Carletti, Cull, Qian, Senbet (2009).
More seriously, African stock markets are characterized by a low provision of liquidity based on standard indicators of trading activity: the ratio of total value of shares traded to GDP and the ratio of total value of shares traded to the total capitalization of the market. Table 3 presents data for the financial development indicators, including those for stock markets for the period 1995-2007. For Africa, the average stock market capitalization as a percentage of GDP, and the turnover ratios are 25.6% and 6.5%, respectively, whereas the corresponding figures for the rest of the world are 52.1% and 34.1%. Thus, the average liquidity of African stock markets, measured in terms of the turnover ratio, is roughly 5 times below the average for the rest of the world.

The discouraging stories on market capitalization and liquidity do not quite capture important new developments under way in the African stock market scene. Sub-Saharan Africa has seen rapid growth in the number of stock exchanges. Two decades ago, there were only 5 stock exchanges in sub-Saharan Africa and 3 in North Africa. There are now around 20 stock exchanges operating in Africa. Market capitalizations grew at a double digit rate over the period 1991-2006, reflecting new listings and market performance improvements (Senbet and Otchere, 2008). While liquidity still remains low, it has gradually improved over the last decade. In fact, there has been improvements in the indicators of all financial development, both the banking and the equity market sector (see Table 3).

Table 3: Financial Development and Selected Determinants Africa versus the Rest of the World, 1995-2007

<table>
<thead>
<tr>
<th>Variable</th>
<th>World (Mean)</th>
<th>Africa (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid liabilities / GDP</td>
<td>64.2%</td>
<td>27.5%</td>
</tr>
<tr>
<td>Private credit / GDP</td>
<td>57.7%</td>
<td>17.6%</td>
</tr>
<tr>
<td>Stock Market Capitalization / GDP</td>
<td>52.1%</td>
<td>25.6%</td>
</tr>
<tr>
<td>Stock Market Value Traded / GDP</td>
<td>34.1%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Ln(Population density)</td>
<td>0.44</td>
<td>0.09</td>
</tr>
<tr>
<td>Natural resources</td>
<td>0.5</td>
<td>0.15</td>
</tr>
<tr>
<td>Real GDP growth rate</td>
<td>4.1%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>5.2%</td>
<td>9.3%</td>
</tr>
<tr>
<td>Current Account balance / GDP</td>
<td>0.2%</td>
<td>-3.8%</td>
</tr>
<tr>
<td>KKM index</td>
<td>0.33</td>
<td>-0.54</td>
</tr>
<tr>
<td>Bank concentration</td>
<td>0.65</td>
<td>0.81</td>
</tr>
<tr>
<td>Foreign ownership share</td>
<td>27.1%</td>
<td>44.4%</td>
</tr>
<tr>
<td>State ownership share</td>
<td>15.9%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Secondary/Primary school enrollment</td>
<td>0.81%</td>
<td>0.33</td>
</tr>
<tr>
<td>Roads / Area</td>
<td>1.07</td>
<td>0.21</td>
</tr>
<tr>
<td>Urban population</td>
<td>63.6%</td>
<td>36.2%</td>
</tr>
<tr>
<td>Geographic branch penetration</td>
<td>29.76</td>
<td>7.97</td>
</tr>
<tr>
<td>Demographic branch penetration</td>
<td>16.51</td>
<td>2.86</td>
</tr>
</tbody>
</table>

Source: Allen, Carletti, Cull, Qian, and Senbet (2009).
Pre-crisis performance

The natural question is: are there gains to those countries introducing the stock markets? What has been the performance track record of African stock markets? Looking at the pre-crisis data, despite the challenges they have faced in terms of low capitalization and liquidity, African markets have performed surprisingly well in terms of both absolute stock return and on a risk-adjusted basis (Senbet and Otchere, 2008). The risk adjustment is done through the standard Sharpe ratio, which scales an average excess stock return (in excess of a risk-free return) by the standard deviation. For the period 1990-2006 (pre-crisis era), the average annual return was 38.5% in terms of local currency. The corresponding Sharpe ratio was 0.54. How do they compare with the other emerging markets? Again using Malaysia and Mexico as a benchmark (one country from Asia and one from Latin America), the absolute returns in Africa compare favorably with these two countries: Malaysia (9.32 %) and Mexico (31.5%), respectively.

The stock market performance remains impressive even when converted into dollar returns, with an average annual return of 21.8% and the Sharpe ratio of 0.10. The dollar returns compare favorably with those of Malaysia (22.97%) and Mexico (24.85%). However, the risk-adjusted measure declines sharply from 0.54 to 0.10. This issue motivates a policy reform discussed in the next section regarding the risk stemming from currency fluctuations in Africa. African currencies are rarely hedged and there is a dearth of hedging mechanisms.

African stock markets hit by the global crisis

The performance track record of African stock markets has been impressive and these markets represent largely unexploited opportunities for global investors. How do these markets fare in this global economic crisis? Well, there has been a meltdown of major stock markets globally (see Figure 2). The decline in equity wealth around the world is staggering, and in trillions of dollars just in the USA alone. The stock markets declines in 2008 were 37% in the US, 38% in Latin America, 43% in Japan, and 51% in China. European stocks declined 38.5%.

It is now logical to look at the extent to which African stock markets have performed even in face of the global crisis. Initially the US market got hit severely by the crisis, but it spread around the globe, with massive stock sell-offs. African stock markets were not immune, and they experienced sharp decline in the face of the global crisis. In particular, those markets which were relatively more integrated into the global financial economy got hit first, including South Africa, Egypt, Mauritius, Ghana, Nigeria, and Kenya. As shown in Figure 2, the corresponding 2008 market declines for selected markets were as fol-
The crisis has significantly impacted the performance of African stock markets. Figures 2 and 3 illustrate the market meltdown around the globe, showing the performance of various countries during the crisis period. Table 4 presents the crisis performance for selected African countries (2008).

For selected African countries (2008):
- Nigeria: -0.59
- Egypt: -0.55
- Mauritius: -0.49
- South Africa: -0.33
- Kenya: -0.31

Highs: Nigeria 59%, Egypt 55%, Mauritius 49%, South Africa 33%, and Kenya 31%.

Has the crisis changed the positioning of African stock market performance relative to other emerging economies? Without the benefit of looking at the full sample of emerging economies, using Mexico and Malaysia as a benchmark, Table 4 shows that African stock market returns, both in absolute and on a risk-adjusted basis, fare better relative to these two countries in the crisis period. While the markets experienced negative returns in 2008,
they were however generally less negative than those of Mexico and Malaysia. A similar pattern is observed when the performance is measured in terms of average monthly returns and the corresponding Sharpe indices. The Sharpe ratios were less negative or comparable to the two emerging countries. However, it is hard to generalize, given the small sample and just one year of crisis data.

Table 4: **African stock markets performance in crisis**

Panel A: Buy and hold returns

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>109</td>
<td>0.62</td>
<td>-0.55</td>
</tr>
<tr>
<td>Ghana</td>
<td>16</td>
<td>0.23</td>
<td>-0.13</td>
</tr>
<tr>
<td>Kenya</td>
<td>45</td>
<td>0.04</td>
<td>-0.31</td>
</tr>
<tr>
<td>Mauritius</td>
<td>89</td>
<td>1.00</td>
<td>-0.49</td>
</tr>
<tr>
<td>Morocco</td>
<td>103</td>
<td>0.34</td>
<td>-0.24</td>
</tr>
<tr>
<td>Namibia</td>
<td>10</td>
<td>0.41</td>
<td>-0.04</td>
</tr>
<tr>
<td>Nigeria</td>
<td>52</td>
<td>0.63</td>
<td>-0.59</td>
</tr>
<tr>
<td>South Africa</td>
<td>300</td>
<td>0.09</td>
<td>-0.33</td>
</tr>
<tr>
<td>Tunisia</td>
<td>15</td>
<td>0.09</td>
<td>-0.03</td>
</tr>
<tr>
<td>Malaysia</td>
<td>180</td>
<td>0.27</td>
<td>-0.43</td>
</tr>
<tr>
<td>Mexico</td>
<td>45</td>
<td>0.08</td>
<td>-0.39</td>
</tr>
</tbody>
</table>

Panel B: Mean monthly returns and Sharp ratio during the financial crisis period**

<table>
<thead>
<tr>
<th>Country</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Monthly Returns</td>
<td>Sharp Ratio</td>
</tr>
<tr>
<td>Egypt</td>
<td>0.05</td>
<td>0.62</td>
</tr>
<tr>
<td>Ghana</td>
<td>0.02</td>
<td>0.20</td>
</tr>
<tr>
<td>Kenya</td>
<td>0.00</td>
<td>0.07</td>
</tr>
<tr>
<td>Namibia</td>
<td>0.03</td>
<td>0.38</td>
</tr>
<tr>
<td>Nigeria</td>
<td>0.05</td>
<td>0.68</td>
</tr>
<tr>
<td>South Africa</td>
<td>0.01</td>
<td>0.10</td>
</tr>
<tr>
<td>Malaysia</td>
<td>0.02</td>
<td>0.32</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.01</td>
<td>0.25</td>
</tr>
</tbody>
</table>

*Figures for 2008 are not available **The measures are calculated for countries for which data are available. Source: Senbet and Otchere (2009).
It is also interesting to visualize the impact of the global crisis on the market volatility in Africa. Figure 3 shows that volatilities measured from monthly returns show a decline over the last decade prior to the onset of the global crisis. However, as expected they spiked during the crisis period.

Again, this is one more indication that during the pre-crisis era the African financial sector, at least in the form of the equity sector, had been performing well with increasing stability. Again, these payoffs have been due to the extensive reforms that have been undertaken, but now the gains are threatened by the current global crisis.

Figure 3: Volatility Spikes for Selected African Countries

Cumulative monthly return Volatility

Cumulative Monthly Return Volatility

0
0
0,05
0,1
0,15
0,2

Return Volatility

Year

1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008

Egypt
Ghana
Ivory Coast
Kenya

South Africa
Tunisia
Zambia
Mauritius
In the following sections, we will discuss the longer term policy responses and reforms. We will begin with the role of African global partners in coping with the impact of the crisis and Africa’s positioning in global financial reforms moving forward. We will then discuss Africa’s own responsibilities and catalogue a series of long-term reforms that may mitigate the severity and frequency of future crises in Africa and/or the impact of crises originating from outside Africa.

4. Africa and Global Responsibility

When the financial crisis began, there was a sentiment that Africa will be spared, since most African countries are not integrated into the global financial economy. This sentiment was short lived. So long as African countries have real sector linkages with those countries which are integrated into the global financial economy, the crisis gets transmitted through the real sector. That is exactly what happened to Africa and low income countries. As mentioned earlier, there has been a sharp contraction in trade flows, investment flows, remittances, with the resultant negative impact on the economic performance, and the threatening of the impressive gains that Africa has achieved from two decades of genuine reforms.

Thus, Africa is caught up in the globalization of damage from the crisis. What is disturbing is that there is no commensurate globalization of resources to repair this damage and avoid further decline. In fact, enormous resources to the tune of trillions of US dollars have been committed as bailout and rescue packages by the advanced countries. Africa and the other low-income countries lack such resources. Is there an economically sound rationale for globalizing resources when dealing with this global crisis? In particular, what shape should this take in the case of Africa? How do we promote the voice of Africa in the evolving process of global financial reforms?

4.1. Short-term mitigation of collateral damage to Africa

As discussed in the earlier section, the collateral damage stemming from the global crisis has been devastating to Africa. Sadly, this came about at a time when many African countries have embarked into a growth path close to the rate experienced by the Asian tigers. Not accidentally, these gains were achieved as a consequence of extensive economic and financial sector reforms that have been undertaken. The global crisis is on the verge of derailing all these gains and preventing Africa from its rapidly rising contribution to an engine of growth for the entire globe. Consequently, there is a global
responsibility for helping mitigate the collateral damage so as to restore, or even accelerate, Africa’s growth momentum prior to the advent of the crisis. This is, in fact, mutually beneficial.

Should Africa participate in the global stimulus plan?

By the end of November 2008, globally about $2.6 trillion dollars were used to bail out banks and other financial institutions, and to stimulate growth. In addition, there were $2.7 trillion loan guarantees(7). More recently, the USA has committed an additional stimulus package of about $800 billion and is very likely to commit more resources to clean up the toxic assets and to restructure banks.

So far the bailout and stimulus resources have been committed only on a national basis. The global crisis itself makes it clear that countries should not be parochial and just nationally-focused. For good or bad, things that happen elsewhere matter. There should be a coordinated global stimulus to spur global growth, and Africa should be part of that stimulus plan. In fact, this is now an opportune time for African countries to invest in infrastructure, health, education, energy so as to stimulate the economy toward recovery and investment, the aim being to enable Africa to get back to its growth path in the future. It will then benefit the global economy as a vibrant new source of engine of growth. Thus, Africa matters from a global macroeconomic point of view, and the role of the global partners in helping resolve Africa’s current crisis is not a moral one. It is a mutually beneficial economic opportunity(8).

The international institutions, particularly the World Bank and the IMF, should play a vital role in coordinating such a global stimulus plan and communicating credibly and forcefully the beneficial consequences of rehabilitating African countries. As the Africa growth dividend to the global economy can be beneficial, the adverse consequences of global neglect would go beyond Africa’s misfortunes. The collapse of Africa and other low-income countries can impose serious counter-collateral damage on the globe in the form of civil unrest and even wars, as now millions get thrown back into absolute poverty; moreover, as more states fail,

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(7)BW (12-1-08).
(8)Some may argue that Africa matters little to the global economy, because its current contribution to the global GDP is low. This thinking is static and ignores the dynamic nature of the globe as we move forward. As the growth of advanced economies and emerging economies slows, there is a sleeping giant in Africa that would accelerate into a material contribution to the engine of growth of the globe, should the pace of the more recent growth performance continue. Unfortunately, this momentum is being derailed by the current crisis.
they become hotbeds for terrorist activities which are global.

The cost to the advanced economies of Africa’s share of global stimulus is rather miniscule and it should only be a tiny fraction of the trillions of dollars that are now committed around the world. In that respect, the proposal from the World Bank President, Robert Zoellick, to set up a “vulnerability Fund” funded by a tiny fraction of the global stimulus funds is a good idea and should be welcome as a mutually beneficial arrangement. Under the proposed fund, rich countries set stimulus financing for their own countries, they would set aside an additional 0.7 percent to help stabilize poorer countries. The resources will be channeled through the World Bank, the IMF, or the UN.

Finally, it is worth noting that Africa is positioned better to cope with the crisis than any other time in the past due to the extensive reforms of the past two decades. However, it is dangerous to be complacent, since there are many unknowns moving forward, including the extent to which the current round of global stimuli yield positive results, the uncertainty about international investor confidence, and the crowding out of the debt markets by the other advanced and emerging countries, which are themselves in acute need of capital. Thus, a fiscal stimulus, while it may have drawbacks from a macroeconomic stability standpoint, in the short term, can help boost domestic demand and safeguard growth in view of a drastically weak external demand.

**Building capacity for the lender of last resort and “investor of last resort”**

The participation of Africa in the global stimulus plan is important for stimulating African economic growth. This will be a positive news for the real sector. On the other hand, the issue of financial sector stability cannot just be addressed through a fiscal stimulus alone. Looming ahead are shrinkage in capital flows to Africa due to increased risks premia, a narrowed access to foreign debt markets and the increased cost of capital. In addition, the continuing economic crisis weakens domestic banks and financial institutions, including those “too big to fail”, relative to the size of the economy, with the definite prospect of systemic failure. However, Sub-Saharan Africa lacks the resource capacity to bailout out such institutions and stabilize the banking/financial system. In other words, it lacks capacity to serve as “the lender of the last resort”, and more importantly, as “the investor of the last resort”.

High-income country participation would be needed to build such capacity. For instance, an African country may wish to
inject capital into a viable but undercapitalized bank in exchange for “equity” or other instruments, partially nationalizing the bank. This is in accord with what is going on in other advanced countries; but the lack of resources would make it difficult for the government to participate in the financial sector so as to restore confidence and unfreeze the credit market. However, global participation in the rescue plan through some kind of government facility, or even sovereign funds, can enhance the African country’s capacity to serve as an “investor of last resort”. An equity participation through partial foreign ownership of the banking system may be controversial, but it is a short-term undertaking. As the economy recovers and the system stabilizes, both foreign and government interests would be let to unwind. Alternatively, the resource support for loan guarantees can be structured as a guarantee scheme whereby the repayment is conditioned on future recovery.

Thus, global intervention on behalf of Africa is mutually beneficial and should be thought of in the same manner as bailing out the large financial institutions globally. The benefits to the globe arise from the potential benefits of global diversification afforded to international investors (see, for instance, the positioning of African stock markets in the global risk-reward ratios) and the positive spillover of Africa’s economic growth to the rest of the world.

No one knows how severe the recession is going to be in the advanced economies, and even the extent to which the massive government interventions yield the desired outcome. This is an uncharted territory since at least the Great Depression. The magnitude of the collateral damage to Africa is still unfolding and yet unknown, but let us be clear that it would be enormously costly unless there is a coordinated global intervention.

**Aid flows and concessional financing**

With a rapidly expanding country client basis stemming from the global financial crisis, the IMF is upsizing. It was downsizing only a few years ago as its client base dwindled. Its fortunes seem counter-cyclical. In fact, in an unprecedented way, the crisis has given rise to the introduction of a new facility with presumable minimal conditions for countries with sound economic structure. Ironically, these are the same countries that had disdained the IMF conditionalities on fiscal spending and economic policies and opted out of IMF lending. On the other hand, countries such as Hungary, Iceland, Ukraine, Belarus, Pakistan have been accessing the rational IMF facility to cope with the crisis.
It is now clear that the IMF resource base will be enhanced. The question is by how much.

The enhanced resource base should be beneficial for Africa, particularly if Africa and low-income countries have a say in this newly emerging global financial order. Africans and friends of Africa should struggle to make sure the Fund has a well-articulated objective that is consistent with the maximization of the global social welfare, as opposed to “being captured” by the few powerful countries.

The increase in the IMF resource base should not work against the aid flow commitments from G7 and OECD countries. These commitments should be honored, and even enhanced. Again, at the risk of repeating, the aid flows should not just be viewed as “handouts”, but rather as investments in the region to get back into a grow path and shelter from despair, poverty, civil unrest, and hence collateral damage to the rest of the globe. This is also one area that Africa-based multilateral institutions such as UN ECA and AfDB should play a role in coordinating regional efforts for Africa to cope with the crisis.

4.2. New global financial order: Africa has a stake in what the rest of the world does

The current financial crisis and policy responses bring home the fact that the society as a whole has a stake in what private institutions/firms do. It also shows that Africa has a stake in what the rest of the world does. There is now a growing recognition for policy reforms to be globalized or globally coordinated, and African countries should be allowed to actively participate in the design of these reforms. In particular, they should have a seat at the table of the evolving new global financial order(9).

The IMF is likely to emerge as a central player both in policy responses to crises and financial system reforms moving-forward. For sure, as witnessed in the most recent G20 London summit, the more powerful emerging economies such as China, India, Brazil, and South Africa will be gaining more say in any redesign of the governance of the IMF, but the low-income countries should not be left out. Otherwise, they will continue to be bystanders victims of the excesses caused by institutions in the more powerful countries,

(9) Some radical proposals are currently floating around, including a proposal in favor of the establishment of a World Finance Organization (WFO), along the lines of WTO. There is a call for a global financial regulator, and a reevaluation of the Basel II Accord and the risk models that are used by banks and rating agencies. There is a reevaluation of the existing international institutional arrangements.
as clearly demonstrated by the current global crisis. In addition, in moving forward, African countries should be full participants in the design of oversight and regulation mechanisms of globally systemic financial institutions.

One of the most glaring regulatory gaps has been the lack of oversight of systemically critical institutions and companies, as amply evidenced by AIG in the USA, a gigantic insurance company, and shadow banks such as Fannie Mae, which have been outside the conventional banking regulatory schemes. In the face of weak, or even non-existent, regulation and oversight, such companies undertook exorbitant and complex risks which were non-transparent. Their failure brought down the entire global economy. These issues are now at the heart of the G-20 agenda. Thus, government/regulatory failure in one large country or one region can adversely affect other countries and other regions, including Africa. Why shouldn’t then Africa have a stake and a say in the redesign of the global financial order and regulatory regimes? Moreover, Africa and other LICs have a stake in the policy reforms that are being implemented in the advanced countries, since ill-designed reforms and oversight mechanisms lead to a genesis of unrestrained large and globally interconnected institutions.

5. Africa and Its Own Responsibilities: Getting House in Order

While it is desirable, even necessary, for the rest of the global village to help address the severe challenges facing the low-income African countries, this is no substitute for Africa’s own responsibilities. Africa also needs to get its house in order to move forward.

The banking system in Sub-Saharan Africa is sound by the standard measures of leverage, and it is not currently in a systemic crisis. The African banks have not been exposed to the US housing market through mortgage-backed securities that are at the root of the global crisis. However, the continent’s banking system, and the entire financial system, faces serious vulnerabilities, as the global crisis is likely to get prolonged. Many banks are foreign-owned and hence exposed to the continuing financial trouble of parent institutions. Moreover, the economic crisis reduces the debt servicing capacity of bank borrowers, with an increasing risk of banks going under. Therefore, the prospect of a crisis hitting the Africa’s banking and financial system is real. In fact, as discussed earlier, the African stock markets are already hit severely. This is particularly costly for countries with larger stock exchanges, such as South Africa.
Thus, while going forward, African countries should have a system of mechanisms for crisis resolution (e.g., recapitalizations of banks) and policy/regulatory reforms to help prevent future crises. The crisis resolution mechanisms can actually be applied preemptively to the banks which are identified as vulnerable through a stress test. This will help mitigate the cost of responding to the crisis, and contribute to the stabilization of the banking and financial system.

Below is a catalogue of policy reforms.

5.1. Building infrastructure for crisis resolution

Policy responses and reforms triggered by a financial crisis should have two pillars: crisis resolution mechanisms and mechanisms for the prevention/mitigation of future crises. While the banking system in Africa is not currently in crisis, it has significant vulnerabilities as the global crisis gets prolonged. The system has significant exposures to global banks, which are now in trouble and are facing the adverse consequences of the rapidly weakening domestic economic performance, leading to the impairment of debt servicing capacity of borrowers\(^{(10)}\).

So it is high time African countries put in place efficient response mechanisms to rehabilitate the banking/financial system. The process of rehabilitation should also take a longer view so that the appropriate responses to the current crisis may be used for, or adapted to, future shocks.

Below we look at a variety of mechanisms, including an outright market solution, bailouts targeted toward institutions (banks), those targeted toward instruments (hard to price assets held by institutions) and those targeted toward consumers (e.g., household mortgage borrowers). Some of these mechanisms are costly and may even be viewed “too advanced” for Africa, but again this view ignores the dynamism of the region as it walks through the increasingly globalized 21\(^{st}\) century. Africa should avail itself of best practices in financial regulation and governance. Moreover, the continent should position itself strongly in terms of reforms ahead of a potential future recovery of the global economy and the ownership of its own growth path.

Can the market take care of itself?

The rationale that is often advanced for a pure market approach is that the institu-

\(^{(10)}\)See Gande and Senbet (2009) for more detailed analysis of the banking system vulnerabilities in low-income countries.
tions that took irresponsible risk and had benefitted in the boom period should not benefit from any government bailout. We should let the market take care of itself. This argument is not nonsensical!

To develop a market mechanism of crisis resolution, it is important to distinguish between financial distress and economic distress. Institutions may be financially distressed in the sense that they are unable to meet their outstanding debt obligations, but they can be economically viable. Economically viable institutions should remain in business, but their liabilities should be restructured. In this restructuring, current equity gets wiped out, but the creditors basically end up with a newly structured institution/bank. Creditors (and the government, via insured deposits) become equity holders. Alternatively, a holding company can acquire all the securities (debt and equity) and recapitalize the institution, if need be.

Under market solution or workouts involving the mortgage market, for instance, banks can write down mortgages and restructure homeowner debt in a way that allows the homeowner to continue to pay and occupy the house. The institution continues to function as a viable entity as long as there are productive/profitable opportunities. Viable institutions will lend to each other. On the other hand, if an institution is not viable, it will fail both financially (goes bankrupt) and economically (goes out of business). The market self-corrects by allowing the strong to survive and the weak to fall.

Can the market handle financial distress by itself? For market solution to work, the markets have to be well-functioning. There should be informational transparency, and market prices need to be rational and panic-free. The current environment does not appear conducive to a market solution. There are opaque securities with distorted prices. The systemic nature of the crisis accompanied with the crisis of confidence impedes free market transactions. This market failure can be resolved through an appropriate and temporary government intervention.

Direct capital injection into banks: target institutions

Under this approach, banks and bank holding companies are targeted for direct capital injection. The approach requires that viable but undercapitalized institutions be correctly identified. Also, the plan targets institutions rather than instruments, and it attempts to address the capital and credit crunch. The rationale for capital injection (and government
invention) is that, although these banks are viable, they face stress due to market panic, resulting in liquidation even though there is no fundamental reason to liquidate.

This mechanism of government intervention should be conducted in a manner to minimize cost to the taxpayers. The government can take a partial ownership typically in the form of preferred stock. The government can also hold an instrument that allows it to have an option to convert into the bank stock in the form of “warrants”. If the credit market unfreezes and the economy recovers, there is an opportunity for the government to profit from its preferred stock or warrant holdings. As explained later, the warrant feature has the added feature of producing the right incentives for bank risk-taking. Warrants held by the government create a disincentive for excessive risk-taking and help stabilize the banking system.

**Investment in liquidity and price discovery: target instruments**

Under this approach, the government invests in securities rather than, or in addition to, injecting capital into banks. The government is presumably deep pocketed and a patient investor. It can buy and hold assets and resell only when home prices stabilize. Banks gain immediate liquidity and credit markets revive. If the plan succeeds, it prevents panic and fire the sale of assets held by the banks. For instance, large institutions and banks have “toxic” securities which are not liquidity.

The goal is to find market valuations that are free of discounts for panic or discounts for the ill-health of the selling institution. In fact, the initial Paulson bailout plan in the USA targeted asset purchase but it did not materialize due to a host of incentive issues, including incentives for banks to try to sell the worst assets at the highest price possible. There is now a talk about stimulating private-public partnership in achieving price discovery, but the plan is yet to be announced.

**Government sanctioned workout: target consumers**

When the market solution fails, the government can step in and facilitate a workout between the borrowers (consumers) and the lenders (banks). Using the mortgage market as an illustration, under an alternative plan, home-owners receive direct subsidy from the government or have concessional loans. The modification of repayment terms include the reduction in interest rates, principal
amounts, lengthening maturities, and other similar features. This plan has the potential to prevent foreclosure and provide broad stimulus for the housing market. This is much welcome, since foreclosure are costly to the lender, as well as the borrower. Also, they adversely affect neighborhood house prices. This system is a variation of the restructuring by the US Federal Deposit Insurance Corporation (FDIC).

The bottom line is that if fair price discovery is needed, the government should give incentives to private capital to enter the initial auctions. If liquidity is needed for credible exit, the government should also pay special attention to the after-market liquidity of what is purchased at the auctions. Otherwise, the government will be forced into a lengthy buy and hold strategy and become the “owner” of last resort rather than a lender of last resort.

5.2. Should banks be renationalized in Africa?

There has been a widespread privatization of state-owned enterprises in Sub-Saharan Africa in the wake of the extensive economic forms that have taken place in the region. This is particularly welcome, given the available evidence that privatized firms generally outperform state-owned enterprises. Consequently, the conventional wisdom for the state ownership of business enterprises, particularly banks, is being challenged.

Capital injection into banks in exchange for government holdings of claims on the bank is tantamount to partial nationalization. This may show a defeat of a market system, though. However, it should really be viewed as a temporary rescue measure in the face of market failure. If done right and if the government exits (and reprivatizes) at the right opportunity, the rescue measure may help restore a well functioning banking system.

“Bad bank”, “good bank”, and exit

There is a successful precedence. The Swedish government nationalized its insolvent banks in 1992, but it subsequently reprivatized them after a clean-up. The Swedish restructuring agency actually outsourced the clean up process to private bankers and managers, and the process was smooth. The Swedish model is now in the works even in a large and more complex financial environment such as in the United States. Many venerable financial institutions and banks in the United States are now partially nationalized, and they include such institutions as Citibank, Fannie Mae, and AIG. The
remaining question, of course, is to know whether the Government will exit in an orderly manner.

The Swedish model is easier to apply to smaller and plain vanilla banking systems such as in Africa. However, certain procedures need to be followed for the renationalization process to work and restore confidence in the banking system. Once the insolvent banks are identified, they should be nationalized at the same time so as to avoid panic from a piece meal approach. Taking over a bank in a sequence in a failed system will have a negative spillover into the entire system. Also, upon government takeover of these insolvent banks, bank equity will be wiped out, but other claimholders are paid off in pecking order with depositors first in line. Moreover, the clean up process is an opportunity to break up large banks which are concentrated and too big to fail. The "bad" assets of the insolvent banks can be sold to the private investors and/or aggregated to a "bad bank" owned by the government. The government will then exit at an appropriate time by reprivatizing now smaller but healthy banks with "good" assets, while eventually liquidating the "bad bank" in an orderly manner. This process is likely to result in even a reformed banking system which is well capitalized but smaller and less likely to be systemically critical so as to bring down the entire system if it fails and engenders crisis.

Resist the temptation for continued renationalization

Renationalization without a clear strategy to exit into reprivatization creates a temptation to hold onto banks post-crisis. This temptation is, in part, fueled by the traditional thinking that state-owned banks serve underserved markets, particularly rural areas and small enterprises. However, the conventional view is contradicted by the emerging evidence. Under at least one available piece of evidence, state ownership is associated with less financial development, poor banking performance, and less growth (Barth, Caprio and Levine 2001).

Africa has experienced a sharp decline in the state ownership of banks in recent years, although some countries (e.g., Ethiopia) continue to resist bank privatization altogether. Unfortunately, the performance outcomes of bank privatization in Africa are mixed and not that encouraging (Senbet and Otchere, 2006). The evidence suggests some deterioration in the asset quality, credit quality, and profitability of the privatized banks. Even those which were privatized through the stock markets under performed based on stock market data. This is, of course, a general
picture and individual cases may be different. Thus, the results suggest a possibility that there have very limited gains from bank privatization in Africa.

The African evidence on the performance effects of bank privatization needs further examination, since it is inconsistent with the evidence emerging from other regions (Clarke, Cull, and Shirley, 2004). A couple of factors have been suggested to explain the puzzle. The first explanation is that weak quality of data on African stock markets may have made it difficult to get sharper results.

The second explanation has more credence and it is rooted on the prevalence of partial bank privatizations in Africa, which still leaves banks vulnerable to continued government intervention in their functioning. There is a strong piece of evidence supporting this view based on data from other regions. Souza, Megginson, and Nash (2001) provide convincing evidence that the performance of privatized banks improves with less government retention of shares. More recent evidence corroborates this, suggesting gains from privatization are insignificant under partial privatization even when the government has a minority stake (Clarke, Cull, Shirley, 2004). The collective evidence has a policy implication for a well functioning banking system. The continued ownership (partial) of the government in privatized banks should be abandoned.

5.3. Reforming banking regulation

The current crisis provides an opportunity to rethink about the regulatory schemes in a comprehensive way. What is brought home is the build-up of risk exposures not only by banks but “shadow” banks stemming from regulatory gaps and distorted incentives of decision-makers in the banking and the overall financial system. Although these issues are now getting global attention, African countries should also put in place the appropriate measures for its moving-forward so as to reduce both the frequency of future crises and their potential severity.

Design of incentive compatible deposit insurance scheme

The purpose of explicit deposit insurance is to stabilize the banking system by reducing the risk of systemic failure. However, if a deposit insurance scheme is ill-designed, it may produce the opposite effect. It can create incentive incompatibility problems between depository institutions and the regulator, which can increase the systemic risk and instability of a banking system (See Figure 4).
Figure 4: **Bank Investments and Deposit Insurance**

- **Bank collects deposits** $B$ from the depositors. Pays insurance premium to the FDIC.

**Beginning period**

**Intermediate**

**Investment Opportunity**

**Safe Investment**

**Ending**

- $q$  
- $A = H$
- $A = L$
- $1 - q$
- $A = I$

Bank pays $\min (F, A)$ to the depositors and Regulator pays $\max (0, A-T)$

**Symbols:**
- $F = Bank$ deposit/debt obligations
- $T = Bank$ assets
- $\Pi = Deposit$ insurance premium
- $q = Probability$ of success; $1-q = Probability$ of failure
As Figure 4 shows, the bank collects deposits and channels them into either risky investment opportunities (loans to the private sector) or riskless opportunities (holdings of government securities or loans to the government). With deposit insurance, depositors themselves face no risk, since the risk is transferred to an insuring agency. The insurance agency pays a shortfall (F-A in Figure 4), and the bank owners walk away. However, the bank pays the full amount of the deposit obligations (F) under favorable economic conditions, and the insurance agency pays nothing. The deposit insurance has a feature of what is known as a “put option”, whereby the government writes it and the bank holds it. This creates incentives for bank owners to gain by undertaking excessively high risky asset portfolios.

Thus, deposit insurance is a double-edge sword, and this is supported by the evidence in Cull, Sorge, and Senbet (2005). They study the impact of a variety of deposit insurance schemes around the world on financial development and stability of the countries adopting them. Countries with high quality regulation and institutions achieve stability, but deposit insurance is destabilizing to financial systems with weak institutional and regulatory regimes.

Finally, there is a continuing debate on the use of deposit insurance. Some have proposed an outright abolition. Unfortunately, as witnessed during the current crisis, even when there is no formal insurance there is an implicit insurance. Banks or bank-like institutions, which are deemed too big to fail or too interconnected to fail, are being bailed out to minimize the adverse impact of the crisis. There is no question that deposit insurance, implicit or explicit, can play a potentially useful function in enhancing the stability of financial institutions, if it is properly designed. There is a lesson for Africa. It is even more important for the African countries and shaky financial institutions that such insurance schemes be incentive compatible and help reduce excessive risk-taking and financial sector instability.

**Improving capital regulation**

The foregoing discussion argues that deposit insurance is insufficient for the stability of the banking system, and when it is ill-designed it can actually have a perverse effect and banking system instability. Banking regulation should have appropriate capital standards to reduce excessive risk-taking by bank owners. The bank risk distortion is a decreasing function of bank capital, and an increasing function of bank leverage. However, capital regulation is also limited in its effectiveness. Unless the bank is regulated to be totally “riskless”, there is still room for bank owners to engage in risk that is socially
Regulating shadow banking and systemic regulation

The current system of capital regulation is aimed at limiting bank risks individually in isolation, but it leaves open for banks and large bank-like institutions to take risks that build up aggregate and systemic risks. The presence of implicit guarantees for failure of systemically critical institutions gives perverse incentives for financial institutions to undertake concentrated and pro-cyclical risks so as to maximize their chances of being bailed out (Gande, John, and Senbet, 2008).

a. Regulating shadow banking

The current crisis has exposed that financial systems breed institutions which are complex with functions similar to what banks do. Traditional banks basically accept deposits and lend to transform deposits into longer term assets. They borrow short and lend long. In addition, the long-end is less liquid than the short-end. It turns out that there are non-banks, such as money market funds, investment banks, hedge funds, which perform very similar functions but in a more complex and non-transparent fashion. These "shadow" banks have been outside the banking regulatory regime. As financial systems develop in Africa, there will be more of "shadow banking", and this is now an opportune time to think about the disciplinary mechanisms.

Apart from unregulated shadow banks, there will be an emergence of systemically critical or interconnected institutions and entities that can hostage the entire financial and economic systems. African economies which are specialized in very few sectors are particularly vulnerable to
such systemic failures. The shadow banks and systemically critical institutions should be brought under the same regulatory umbrella.

**b. On the design of systemic regulation**

The current global crisis has revealed a serious regulatory gap for systemic risk. Moreover, financial institutions were able to build up risks in a non-transparent fashion through usage of complex securities which are often off-balance sheets. What is also disturbing is that systemic risks have become globalized. The current capital standards are inadequate in dealing with systemic risk. There is a growing consensus for some type of systemic regulation, but the debate on how it should be designed is unsettled. Systemic risk is easier to define than measure. How do we measure, for instance, the contribution of an institution to the potential failure of the entire system? The input to such a measure should include size, interconnectedness, and complexity, and pro-cyclicality of risk-taking. Capital ratios will then be raised to reflect this measure\(^\text{(11)}\).

The pricing of deposit insurance is also another instrument of discipline, but it is harder to apply in the case of these entities with implicit guarantees. With explicit insurance, an explicit insurance premium schedule can be designed as in the case of regular banks. An alternative to charging a premium is for the government to hold warrant like claims on such entities, which may even produce incentive compatibility by reducing the incentives for these institutions to engage in excessive risk that is damaging to society.

A variation of the warrant scheme is an establishment of an institution similar to a deposit insurance corporation into which systemically critical institutions can pay a premium based on the implicit guarantee, conditioned on the measure of systemic risk. This fund will then be tapped into by troubled institutions in the event of the system failure, such as in the current crisis. If the guarantee is priced correctly, it will have a disciplining effect on systemic risk behavior.

**Minimizing political capture:**

**who regulates the regulator?**

Designing an efficient regulation demands a well-functioning banking regulatory

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\(^\text{(11)}\)Banks in Africa can be both “too big to fail” and monopolistic. Size contributes to systemic risk, but also produces a monopoly power which leads to inefficient intermediation and allocation of resources. The observed high spreads prevailing in many African countries are attributable to bank monopoly. Market power from monopoly also translates into political power, as clearly pointed in a floor discussion at the April AfDB workshop (see the following subsection on political capture). Thus, an African regulator has to deal simultaneously with systemic risk and monopoly power. As discussed earlier, the former can be dealt with stricter capital standards, but the latter requires a set of measures for fostering competition in the banking system.
infrastructure with strong supervisory and monitoring role for regulators. In particular, the system should not allow for the regulators to be captured by the regulated banks and financial institutions. This is also why partial privatization of banking underperforms relative to fully privatized banking (see the earlier discussion on bank privatization). Full privatization minimizes continuing government interference in the functioning of the banking system.

Political capture can also arise in the context of resolving a crisis, where the tenure of politically connected but failing banks is prolonged. A more efficient resolution approach calls for speedy measures, including speedy closure of failed banks or restructuring of their balance sheets. The tenure of failed banks should not be prolonged, since it simply transfers private losses to the taxpayers. Moreover, in a crisis environment, failed banks have incentives to take even wilder risks and destabilize the system even further.

5.4. Reforming stock market regulation: A brief

Public confidence and informational efficiency through transparent and credible financial disclosure rules are vital for the functioning of stock markets. Financial statements should be trusted and transparent about firms producing them. The confidence factor cannot be over-emphasized for Africa. Legislation alone cannot produce confidence. We know there is no shortage of legislation in Africa. To foster public confidence, there should be an even playing field, with strict enforcement of laws and rules by a credible and independent judiciary and regulatory body.

The government should foster an environment for strict enforceability of private contracts and the existence of accounting procedures and disclosures. Thus, a well functioning stock market system requires regulatory schemes that promote, rather than inhibit, private initiative, and foster investor confidence in the functioning of these markets. Consistent with best international practices, the regulatory system should include a strong securities and exchange commission capable of enforcing securities laws, and capable of developing appropriate rules.

However, it is tempting to over-regulate stock markets, and that should be resisted. It is never the job of the regulator to determine what is best for the investor. The regulator should only create an environment in which the investor makes an informed decision. Government regulation of stock markets should be more of an oversight over self-regulatory agencies, with such an oversight coming from, for instance, the securities and exchange commission, an organ of the government. Self-regulatory organizations, such as the
stock exchanges, design rules for business and professional conduct of licensed members, and they build on the capacity and wisdom of individual inside the member firms. These individuals participate in the stock market directly unlike government regulators who lack intimate knowledge of the day-to-day functions of increasingly sophisticated markets.

5.5. Governance: overhauling bank governance and corporate governance

Banking and financial failures arise not only from regulatory gaps but also from distorted incentives of decision-makers and management. In a new order of oversight of banks and the financial system, the government needs to monitor how the incentives are structured. This has to be done without direct interference in the functioning of banks and other financial institutions. The added advantage of monitoring of governance in the banking industry is that it can be used in devising a more efficient and incentivized regulation.

Bank governance and regulation: toward an incentivized regulation.

Banks are managed by professionals who happen to have their own incentives that may be in conflict with the interests of bank owners and the society at large. Their managerial behavior is influenced by the way they are incentivized. Consequently, the incentive features of bank management compensation influence the risk-taking behavior of bank managers. It is important that regulatory design takes account of the structure of bank management compensation in place.

In fact, the incentive features of compensation can be used to design a more efficient and incentivized regulation. To see this, consider Figure 5 which characterizes a specific bank management compensation structure with three components – fixed salary, bonus, and equity participation. If the compensation consists only of fixed salary, the bank management becomes excessively conservative in its decision-making so as to stabilize its own compensation. However, the bank will end up being managed at a level of risk that is socially suboptimal. If, on the other hand, the compensation consists only of equity participation, the interests of bank management and bank owners are aligned. As discussed earlier, in an ill-designed regulatory environment, bank management working in the best interests of bank owners will engage in excessively high risk portfolios and lending. The bank gets managed at a risk level that is destabilizing to the system.

This suggests that there is an intermediate strategy of combining the three features of bank compensation which then
leads to the socially desirable managerial risk level. John, Saunders, and Senbet (2000) show that, if deposit insurance is priced to reflect the incentive features of bank management compensation, it pays bank owners to precommit to a compensation structure that incentivize decision-makers to stay at a socially desirable level of risk, and help achieve banking system stability.

It is interesting to notice that compensation incentives were silent in the regulatory schemes around the world until the

**Figure 5: Incentive Features of Bank Management Compensation Structure**

*Salary, bonus, equity participation: S, α*

- Fixed salary $S > 0$
- Fraction $α$ of the equity of the bank (alignment with shareholders)
- Bonus $λ$ (alignment with depositors)
- When the bank is solvent $(A-F > 0)$, the first $λ$ dollars of $(A-F)$ is paid as a bonus:

$$F = \text{Deposit}/\text{Debt obligations}, \ A = \text{Bank assets}$$

**Terminal Cashflows to the Bank**

leads to the socially desirable managerial risk level. John, Saunders, and Senbet (2000) show that, if deposit insurance is priced to reflect the incentive features of bank management compensation, it pays bank owners to precommit to a compensation structure that incentivize decision-makers to stay at a socially desirable level of risk, and help achieve banking system stability.

It is interesting to notice that compensation incentives were silent in the regulatory schemes around the world until the
advent of the global crisis. There is now an increasing recognition that the manner in which bank managers are compensated should be central to banking regulation – and also to the oversight of the overall financial system (see below). Hence, this is an opportune time for Africans to consider adopting regulatory schemes that are consistent with the evolving best practices triggered by this crisis.

Corporate governance and regulation

As financial systems develop in Africa, the corporate sector should be moving to best practices in corporate governance. Market systems will not function properly without quality corporate governance. Although privatization programs bring companies to a disciplinary force of the market system, corporate insiders may still engage in activities harmful to capital contributors. Once investors lose confidence in corporate governance, the company’s ability to raise funds and grow will be impaired.

Focusing on the internal mechanisms of corporate governance, getting governance right requires (a) a well-functioning corporate board and (b) a well designed compensation structure that provides proper incentives for decision-makers. The current global crisis has again drawn attention to the level and structure of executive compensation in the United States. There is a growing concern that some executive compensation plans might have been among the causes of the crisis by fostering a corporate environment of greed and aggressive risk-taking. This issue also came up in the wake of the corporate scandals associated with the information technology bubble.

a. Executive compensation and governance reform

Misaligned incentives can distort investment decisions toward more aggressive and excessively risky, eventually leading to the kind of crisis we are witnessing today. In fact, there was a dramatic rise in executive pay in the USA, leading up to the burst of the bubble, both in absolute and in relative terms. For the companies comprising the S&P 500 index, the average CEO pay grew from $3.5 million in 1992 to about $15 million in 2000. Relatively, this was about 500 times that of an average employee compensation. In 1980, it was only about 40 times!\(^{(12)}\)

The lion’s share of the increase in CEO pay came from the dramatic use of stock option grants during the 1990s.

Overly generous compensation packages and the widespread use of stock option grants may have created incentives for

\(^{(12)}\) Business Week (September 11, 2000).
aggressive risk behavior which is now being partly blamed for the current crisis. Again, there is a lesson here for policy reforms in Africa. Properly designed, top management compensation can serve as a key mechanism of corporate governance with the potential to provide the right incentives to perform in a way that maximizes an enterprise value. The corporate board has full authority to set the compensation plans for senior executives, and hence the policy reforms should get the corporate governance systems right.

The executive compensation setting process should be transparent and should be devoid of the influence of the executives themselves. Executives can influence the process in a variety of ways. In particular, they can dominate the nomination of directors in the board compensation committee. They can also exert influence through seats in interlocking boards. Therefore, one important reform of corporate governance is a requirement for the compensation committee of the board to be totally independent. This independence is achieved from appointing directors outside the company and with no direct or indirect relationships with the company. Moreover, there should be a majority independent overall board. In fact, board independence is growing around the world(13).

b. Adopting best corporate governance practices

African countries should strengthen institutions for corporate governance and adopt best international practices in terms of measures for the effectiveness of the corporate board, executive compensation practices, a system of disclosure rules, and increased protection of shareholder rights against controlling shareholders/management. It should be recognized, though, that best practices in corporate governance require a separation of the role of the government as a regulator and business operator, and fostering board independence through a majority non-executive directors. The growing consensus around the globe is that the corporate board be independent of the chief executive officer. Moreover, as discussed earlier, the compensation committee should be composed of independent directors to bring transparency and prevent ill-designed compensation structures that promote aggressive risk behavior that leads to instability and crisis. Finally, in the case of African stock markets, the stock exchanges themselves, in their role as

(13) The transparency of the compensation plans is enhanced through disclosure rules requiring that all elements of executive compensation, including retirement benefits and indirect compensation, be disclosed to the shareholders. There is also a growing movement for shareholders to vote on the equity-linked compensation plans, and this is one area of reform that African regulators may consider.
self-regulators, should establish standards for listing of companies, consistent with best governance practices.

5.6 Fostering market depth and functionality

African stock markets are still small and have low trading activity (see Table 3). There are certain institutional factors that impede the liquidity of these markets. Institutional investors, as well as governments which maintain minority stockholdings, are not active traders in the secondary market. Moreover, markets tend to be dominated by a few large companies. Fortunately, though, these markets have been experiencing improvement both in capitalization (size) and liquidity. These improvements have been in response to other improvements in regulatory and economic environments that the region has experienced over the recent past. However, more is needed. Below are two avenues for increasing capacity and depth of these markets discussed.

Exchange consolidation and regional cooperation

One important way to address the thinness and illiquidity of African stock markets is market consolidation through regional cooperation to pool and build capacity of these markets. Fortunately, there is a growing recognition for this, and some efforts are already in place and others on the way. The first such regional market is the Abidjan-based Bourse régionale des valeurs mobilières (BVRM) which came into existence in 1998, and it serves the Francophone countries of West Africa, comprising Benin, Burkina Faso, Cote d’Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo. The Anglophone countries of West Africa are also contemplating establishing a regional stock exchange under the ECOWAS umbrella. Moreover, Kenya, Tanzania and Uganda can be partners in forming an Eastern region stock exchange. A similar partnership is possible for a southern region under the auspices of the Southern African Development Community (SADC).

Regionalization and exchange consolidation has an added advantage of accelerating the momentum of African integration into the global financial economy. While injecting more liquidity into the markets, it allows regional companies to mobilize both domestic and global financial resources. There are certain prerequisites for market consolidation, and they include the establishment of regional securities and exchange commissions, regional self-regulatory organizations, the harmonization of legal and regulatory systems, the harmonization of accounting reporting systems, along with clearance, settlement and depository systems, as well as the harmonization of tax policies for security investments.
Promoting market-based privatizations

In view of the thinness of African stock markets, large-scale privatizations through the markets contribute directly to market depth through increased listing supply. It is encouraging that a growing number of African state-owned enterprises have recently used the stock markets for privatization (Senbet and Otchere, 2006). In general, the stock market vehicle is an important means of depoliticizing privatization programs, since it allows for price discovery, and hence makes it possible for large-scale privatization programs to be fairly and transparently priced.

There are less obvious benefits in the market-based privatization programs, though. First, state-owned enterprises are brought into the domain of market discipline and improved corporate governance. In the public domain, state-owned enterprises lack effective governance mechanisms and face little competition. Privatizing them and bringing them to the discipline of the stock markets should improve corporate efficiency and performance. Second, local stock markets provide an opportunity for local investor participation through purchases of privatization shares. This helps alleviate some concerns about foreign grab of privatization assets.

Finally, privatization programs through the stock market promote diversity in the ownership of the economy’s resources, helping alleviate public concerns that stock market serves just the few elite in society. Finally, privatization through the stock market increases public awareness about the market through a creation of first-time purchasers of shares, and other instruments through unit trusts. Unit trusts and/or institutional funds play a vital role in large-scale privatizations. This suggests another reason for cultivating an environment for the development of institutional funds that help promote wider share ownership.

5.7. Building capacity for oversight of risk and risk management

At the center of the global financial crisis is excessive risk which is fueled by excessive leverage. We got there as a result of distorted incentives for deliberate risky behavior that garnered huge rewards in boom periods. However, that is not the whole story. The risk exposures also became so complex and intertwined that they became opaque and beyond ordinary capacity to restrain. As the good times rolled, even the traditionally reputable institutions took huge bets through excessive leverage.\(^\text{14}\)

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\(^{14}\) Goldman Sachs, for instance, had $1 trillion of assets but supported only by a $43 billion equity by the end of 2007 (The Economist, October 18, 2008).
The lesson for Africa is straightforward, given the continuing commitment to build a well-functioning, dynamic, and innovative financial system. Dynamism and innovation are risky. The solution is not to avoid risk but to develop capacity to manage risk so that the system operates at an optimal risk level. This requires getting two things right. First, there should be a regulatory system and governance scheme that provides proper incentives for the discipline and management of risk. The earlier discussion pertaining to governance and regulatory mechanisms, particularly incentivized regulation, is intended to help achieve this goal. Second, there should be sufficient capacity to understand and manage risk.

**Risk management capacity and talented financial manpower**

Globally financial systems have become increasingly innovative and sophisticated, and they will be even more with ever advancing technology. The advanced innovation includes a variety of exotic securities and derivative instruments. Credit default swaps lead to the collapse of AIG and triggered financial crisis around the world. The dynamism and innovation is likely to continue hopefully at a more sober level, but they demand that market participants stay abreast of such advances.

Innovative products and a variety of derivatives are getting their way into low-income countries, including Africa. While they are vital in terms of risk control and hedging, they can also be mismanaged and produce explosive risks leading to financial disasters that we are currently witnessing. Given that African countries are committed to a continuing financial sector development, including stock markets, even derivative markets, commensurately they should also be committed to developing a talented financial manpower capable of managing risk. Sufficient resources should be committed to improve business school curricula in universities and training programs in financial market institutions, such as securities and exchange commissions and stock exchanges.

The development of financial market power should be both for the banking and equity market sectors. The significance of talented financial manpower can be illustrated as follows. Lack of capacity to evaluate credit risk is likely to produce two mistakes – unduly conservative lending policy that minimizes private credit (and maximize credit to the public sector) or unduly high-risk lending. Both are alloca-
tionally inefficient, and produce a malfunctioning or destabilizing banking system. Thus, building capacity for risk management and control is crucial for banks to perform their intermediation functions and acquiring information capital, and hence for the development of a well-functioning and stable banking system.

**Risk literacy and talented regulatory manpower**

Well-functioning financial systems demand well-informed participants: investors, investment advisors, brokers, accountants, government regulators, and self-regulators. Like financial institutions, financial regulators should also understand the risk exposures that build up in the system, and this is becoming even more important in this increasingly complex and connected environment. Therefore, literacy in financial regulation requires literacy in risk management and control. African university programs should be supplemented by specialized training programs to produce financial manpower and regulatory force that is appropriate for well-functioning financial systems.

**5.8. Managing financial globalization**

There are encouraging forces in place for Africa’s integration into the global financial economy. There is growing integration of world capital markets, including those in emerging economies, with increasing capital mobility. Moreover, there are rapid advances in information technology connecting Africa with the rest of the world, with the potential to facilitate capital flows. Thus, investors seeking the benefits of global diversification are now better able to access African markets.

**Financial globalization has mutual benefits**

Financial globalization has mutual benefits for international investors and Africa. International investors take a global view in their holdings of portfolio investments. Africa’s competitiveness in attracting international capital depends on its role in improving the global risk-reward ratio faced by global investors. These improvements come in two forms. The benefits of globalization risk diversification depend on the diversity in the economic cycles of countries. The available evidence suggests that such global strategies should include emerging markets, and even pre-emerging markets, such as those in Africa (e.g., Diwan, Errunza, and Senbet, 1993).

The second potential benefits of financial globalization of Africa arise from market return performance on a risk-adjusted measure as discussed earlier (see Section III (3.2)). There is growing evidence that African stock markets are generating appropriate investment rewards for an acceptable levels of risk.
Now we can also catalogue the potential benefits of financial globalization to African countries. First, financial globalization improves access to diversified source of external capital, potentially reducing reliance on sovereign debt and official aid flows. Second, financial globalization allows sharing of local country risks globally, and leads to reduction of cost of capital for local companies. This leads to enhanced liquidity of the local market and capital mobilization by firms in response to the reduced cost of capital. The spillover effect here is an improved economic performance as projects, which previously were foregone due to lack of risk sharing, would now be adopted.

Third, financial globalization exposes African financial systems to the best practices and standards, and in turn puts pressure for reforms of the local financial systems. Governments will be under greater pressure to strengthen the rule of law, enforce contracts, and increase the growth of available information in response to the demands of global investors. Financial globalization will also lead to improved accounting disclosures, regulations, trading systems and brokerage services.

**Financial globalization has costs too, but so does marginalization**

Financial systems tend to go bust periodically. Financial globalization exposes African countries to volatility of the global financial markets. This global risk exposure could then lead to large and suddenly unfavorable swings in capital flows to the region. The available evidence from other regions of the world is that countries that experienced large capital flows suffered commensurately large and sudden outflows. In the current global economic pandemic, the countries most open to financial globalization seem to be hit the hardest. As we are witnessing now, the collapse of capital flows can be enormously costly, leading to credit crunch in the local economy.

Now, given the costs of financial globalization and the current global Tsunami, it is tempting to avoid financial globalization altogether. However, this is misguided and short-sighted. First, as witnessed from the current global financial crisis, African economies cannot run away from its effects even when they are not integrated into the global financial economy, since its adverse consequences can be transmitted through the real sector (e.g., sharp decline in trade and direct investment flows). Second, marginalization in the global financial economy loses out on the potential benefits of globalization (see above). Finally, when promoting financial globalization, measures should also be in place to mitigate the adverse effects, and developing a deep financial system, inclu-
Financial globalization: outsourcing financial system development?

Should African countries bypass the challenges of developing domestic financial systems and just attempt to access global financial markets to meet their financing gap? This seems a logical question in view of some large companies already cross-listing on the foreign exchanges. However, this cannot be a substitute for domestic financial development. Well-functioning African financial systems, including the domestic stock markets, promote domestic resource mobilization by providing incentives and profitable options for domestic capital to be retained. Given the massive financial capital flight from Africa over the years, the use of domestic financial systems to retain domestic capital is highly desirable. Moreover, the existence of a deep and well-functioning domestic financial system is an important channel for integrating Africa into the global financial economy.

Building financial system/capital market database and research

Despite the extensive political, economic and financial sector reforms that have been implemented in Africa, negative images crowd out the positive in the international news headlines. Images of war, famine, massive corruption, and violations of human rights dominate the outside perception. The general perception, which is at odds with the fundamentals, is fueled by the monolithic view that Africa, particularly Sub-Saharan Africa, is a single “troubled” country. This information gap is costly and penalizes an entire region by masking the genuinely reforming countries. It has adverse consequences on African stock markets and the financial systems in large, and the ability of the countries to access outside debt countries at favorable terms. This is partly reflected in the low ratings concerning the creditworthiness of Sub-Sahara African countries relative to other regions (as shown in Figure 6/Table 5).

The ratings have displayed improvement over the more recent years, though, but they are still very low, suggesting high country risk. Therefore, the information gap surrounding African financial systems in the eyes of global investors, as well as local investors, needs to be addressed quickly. There is a need to build information capacity which allows for more extensive, detailed and reliable economic and capital market data that capture the diversity of Africa. In particular, there should be a reliable database capturing the finan-
cial circumstances of private institutions, listed companies, and banks. The timeliness and reliability of financial data are crucial for making reliable estimates of investment risks in Africa. Thus, the developing African financial systems require a research and information arm.

The financial system knowledge and database is one area for regional co-operation in terms of pooling resources. The activities of existing institutions, such as the AfDB, the UN ECA, AERC, can be leveraged for them to serve as an anchor for the collaborative effort in setting up the research and information arms of banking and stock market development in Africa. The added benefit of deep capital market and banking databases in Africa is that they allow for first-rate research to be conducted by African financial economists as well as others interested in Africa. Moreover, the database facilitates the establishment of a frontier between Africa’s index and regional indices monitored both by researchers and investors around the world.

Figure 6: Regional Ratings: Sub-Saharan Africa versus Others
Building capacity to manage currency risk

Depreciation and wide fluctuations in the values of African currencies can induce an important risk factor in the African stock market scene. High currency exchange volatility is endemic to African economies, creating an impediment to foreign investments. There is evidence that currency depreciation has an adverse impact on the performance of African stock markets (Senbet and Otchere, 2006). Unlike hard currencies, African currencies are not readily hedged. In view of the dearth of hedging mechanisms through derivative markets, an indirect approach would be to increase the number of export-oriented companies on the stock exchanges, particularly those with exposure to hard currency exports should be targeted.

Macro-economic stability: standard story but still important

Macro-economic and political instabilities lead to volatility in the financial markets.
The accumulating evidence is that macroeconomic stability, such as low and predictable rates of inflation, fosters financial development and helps stabilize the financial system.

Political risk is not just associated with political turmoil. It often arises from the lack of quality institutions such as law and order and democratic accountability, which then contribute to increased risk premia in financial markets. Political risk is also associated with the odds of adverse changes in government policies. Africa is unfortunately filled with frequent cases of changes in government policies and political climate. These abrupt changes have adverse consequences on financial system development.

With regard to the stock markets, high economic and political instability can lead to severe information asymmetries in the stock market. This in turn induces excess volatility in the market, serving as a breeding ground for noise traders and gamblers. This would be destabilizing to the stock market as well as to the economy at large. As the markets cease to accurately reflect the fundamentals, speculative bubble is likely to emerge, which will then burst into a crisis similar to what we are witnessing today.

5.9 Policy reversals? Continuation of a market-based reform path

The damage from this crisis to Africa is so severe that a temptation may exist both in policy and popular circles to reverse a course toward the old dysfunctional and command financial economy. The reversal of privatization of finance and of the momentum of integration into the global financial economy should be resisted. Otherwise, this is another collateral damage of the crisis, but this time, it is under the control of Africans themselves.

The temptation for reversal is being fueled in part by the advanced countries in which government intervention has become rampant in the crisis resolution. For instance, the USA has been an ardent exporter of financial services and of its philosophy of market economy. In the past, it often pushed for a market-based approach for the resolution of crises in emerging economies (e.g., the Asian crisis), but it now “part-nationalizes” its own institutions in the face of its own crisis. The presumption is that this is a temporary measure in view of market failure, and the government will promptly exit once things get reversed. We should hope so.

Interventionists around the globe are having a field day. African countries should not get caught up with that wave, and they should engage in policy responses and reforms to get the region back on a path of growth momentum and well-functioning financial systems. A well-functioning market is like a soccer game with clearly defined rules of game and a competent and well-behaved referee. If
unsupervised or poorly regulated, self-interested market participants will game the system and engage in excessive risk-taking. Self-regulation that is devoid of government participation is a myth and misconception. Now more than ever, paradoxically, government intervention is needed to save a market system, but the government should exit fast.

To sum up, the genuine reforms that Africa has undertaken have empowered private initiative, with considerable payoffs. The global financial crisis should not be an occasion to reverse course but a rare opportunity for Africa to undertake reforms that support, and even accelerate, the momentum of the recent growth path that should resume upon global economic recovery.

6. Concluding Note

This concluding note is an alert on two features of the current crisis: financial regulation and financial globalization. Based on lessons of financial history, financial crises are endemic to financial systems that are dynamic and innovative. The stark lesson from the current global financial crisis is that finance needs regulation. But what is needed is not just more regulation but good regulation. Moving forward regulatory reforms helps remove regulatory gaps, but they should not be expected to eliminate financial crises in the future. However, if these reforms produce good regulatory schemes, they should reduce the frequency and severity of future crises. The current crisis has given us a rare opportunity to improve, or even redesign, the financial and regulatory structure for the 21st century. This paper has attempted to make a contribution to that effort.

Financial globalization is here to stay. African countries should not avoid globalization in the pursuit of a total prevention of financial risk potentially arising from their integration into the global financial economy. Rise avoidance leads to lack of access to the potential benefits of financial globalization as detailed earlier. Moreover, with the crisis of such a global magnitude, those African countries which shun financial globalization are not immune but hurt through the real sector transmission of the crisis. Thus, the crucial lesson to be drawn from the current crisis is that, as Africa ventures into global integration, it should develop appropriate measures to reform the financial system, particularly building its capacity to manage risk (i.e., while the sun is still shining) and resolve the crisis efficiently if it arises. Without such measures and capacity, the region would have difficulty in withering the discipline coming from the global financial markets, which can be sudden and ruthless as witnessed by the ongoing global financial Tsunami.
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