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ELECTIONS AND TECHNOLOGY: PUTTING THE CART BEFORE THE HORSE

By Dr. Stephanie M. Burchard

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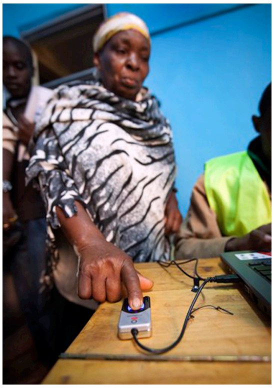

A Kenyan woman identifies herself using biometric voter registration technology during the 2013 election. (Source: AP)

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By George F. Ward

Worldwide demand for "frontier-market" debt has continued over the past several months, with investors seeking the best possible returns in a world of generally low interest rates. In this situation, several African countries have successfully issued international sovereign debt on favorable terms. At the same time, two African nations, both of which had recently issued sovereign bonds, have sought the help of the International Monetary Fund (IMF) to deal with current-account problems. These and other examples illustrate the increasing complexity of the African macroeconomic picture, in which conditions vary significantly from country to country. Drawing conclusions continent-wide is a hazardous business. Nevertheless, it is worth asking the question of whether increasing government debt poses a challenge to the African growth story. *more...*

Abuja, Nigeria. Ngozi Okonjo-Iweala, Nigeria Finance Minister, left, and Christine Lagarde, International Monetary Fund Chief, right, during her first visit to Africa as head of the IMF. (Source: AP Photo/Godwin Omoigui.)

Ambassador (ret.) George F. Ward is editor of IDA's Africa Watch and a Research Staff Member at the Institute for Defense Analyses. He is a former U.S. ambassador to the Republic of Namibia.

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IDA's three federally-funded research and development centers provide objective analyses of national security issues and related national challenges, particularly those requiring scientific and technical expertise.

IDA's Africa team focuses on issues related to political, economic, and social stability and security on the continent.

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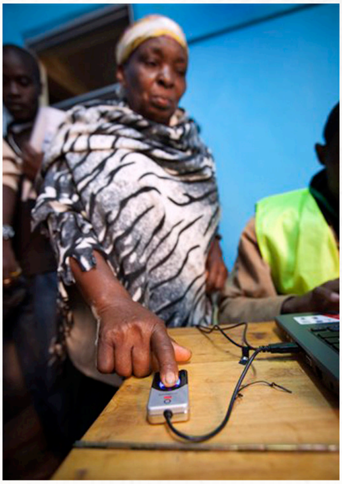

A Kenyan woman identifies herself using biometric voter registration technology during the 2013 election. (Source: AP)

Elections and Technology

In the wake of several problematic and destabilizing electoral events, such as the crisis in Côte d'Ivoire following the 2010 election and the post-election violence in Kenya in 2007, there has been a demand from various sectors (e.g., incumbent governments, opposition politicians, and civil society) in many different countries to improve election management. In a recently released volume of case studies, Mike Yard discusses the ways in which technology can be used to improve the transparency of the electoral process and prevent fraud, which presumably should reduce incentives for electoral violence. Biometric voter registration (BVR) adds voters to the rolls using unique identifying information such as thumbprints. This information is then used to verify the identity of voters on Election Day. BVR is meant to reduce electoral fraud by preventing such offenses as repeat voting and ballot stuffing. Properly designed and implemented, BVR can allow polling officials to quickly access a database of registered voters and ensure that those participating in the election are who they say they are and are casting their ballot at the proper polling station.

In addition, technology can provide immediate, real-time data to authenticate the vote (i.e., ensure that vote totals do not exceed the number of registered voters), facilitate the transmission of ballots from polling stations, and increase the speed of the vote tabulation. This technology is meant to improve transparency and to expedite the voting process, especially as delays in the announcement of results may be perceived as evidence of electoral malfeasance. In fact, many believe that the delay in announcing the results of the 2007 Kenyan presidential election was one of the main triggers that led to the cascade of violence that resulted in more than 1,300 deaths and 600,000 displaced.

Potential for Problems

As a response to the 2007 post-election violence, Kenya initiated several different reforms ahead of its 2013 elections to improve the credibility of results. In addition to a new constitution and a devolved structure of government, Kenya adopted BVR and decided to rely on the electronic transmission of provisional votes to deliver the results in a timely fashion.

The registration process, conducted over a 30-day period in late 2012, resulted in more than 14 million registered voters. On Election Day, however, technology failed in a spectacular way. Neither the BVR system nor the electronic transmission of votes functioned adequately. The BVR system required electricity that was often not available, and the servers crashed at the national tallying center for the electronic transmission of votes. After spending more than $95 million on these and other election-related technologies, Kenya was forced to resort to a manual tally of votes. Similarly, Ghana spent $45 million on BVR before the 2012 election only to have many of the electronic fingerprint readers fail on Election Day, which forced a second day of polling.

Kenya's official election results were not announced until March 9, 2013, five days after Election Day. To date, the electoral commission has not released the complete results of the election for every polling station. Compounding voter frustration, an ongoing audit of the BVR procurement process revealed that the government overpaid by several million dollars due to mismanagement of the process by members of the electoral commission.

Influenced by events in Kenya, Malawi announced in late March 2013 that it was abandoning BVR for the 2014 election but hoped to be ready to implement it before the 2019 election. The Malawi electoral commission stated that it simply wasn't prepared for such an exercise. The electoral commission's lack of capacity was demonstrated in the poorly managed 2014 elections. Many paper voter lists and ballots were delivered late, causing polling stations to remain open for an additional two days to allow all registered voters to cast their ballots. It took more than a week for officials to tally the vote and declare Peter Mutharika the victor over incumbent president Joyce Banda. During this time, scores of protests and riots took place, and at one point the incumbent Banda threatened to annul the elections and restart the voting process. Ultimately, Malawi's High Court stepped in and ruled that a recount was necessary but that Banda did not have the constitutional authority to annul the results. Had the electoral commission gone through with its initial plan to adopt BVR, the lack of electrical power and poor infrastructure in many of the rural parts of the country would probably have compounded the problems. Nigeria also considered adopting BVR for its 2015 elections but came to a similar conclusion, deciding that it was not yet ready for such a complex and expensive exercise. Other plans for BVR are going forward. Amid controversy over the cost, estimated at between $89 and 117 million, Tanzania is scheduled to roll out its biometric voter registration process in September.

Any technological advancement that improves the transparency and efficiency of the vote process is laudable; however, there are no quick fixes. Good elections take time, effort, education, infrastructure, and the involvement of multiple stakeholders committed to protecting the process. BVR and other technological innovations may be attractive to countries seeking to improve the conduct of elections, but inadequate preparation by already over-extended electoral commissions is a recipe for electoral disaster. The types of technologies adopted by Kenya, for example, should have been accompanied by extensive preparation, training, and testing. Testing would have revealed that Kenya's infrastructure—many polling stations did not have sufficient electricity to power the poll books, and the SMS relay system became overloaded very soon after voting began—was inadequate and incapable of handling the needs of an electronic election process. The 2013 election was an expensive lesson that other countries need not repeat. Instead of relying on technology to improve the conduct of elections, countries might be better served by embarking on more modest programs, such as grassroots civic education or training domestic electoral observers. In addition, a realistic assessment of the country's infrastructure, including power and information and communications technology, must be conducted before new methods of registration and balloting are implemented.

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Worldwide demand for "frontier-market" debt has continued over the past several months, with investors seeking the best possible returns in a world of generally low interest rates. In this situation, several African countries have successfully issued international sovereign debt on favorable terms. At the same time, two African nations, both of which had recently issued sovereign bonds, have sought the help of the International Monetary Fund (IMF) to deal with current-account problems. These and other examples illustrate the increasing complexity of the African macroeconomic picture, in which conditions vary significantly from country to country. Drawing conclusions continent-wide is a hazardous business. Nevertheless, it is worth asking the question of whether increasing government debt poses a challenge to the African growth story.

Abuja, Nigeria. Ngozi Okonjo-Iweala, Nigeria Finance Minister, left, and Christine Lagarde, International Monetary Fund Chief, right, during her first visit to Africa as head of the IMF. (Source: AP Photo/Godwin Omoigui.)

African Thirst for Credit Unquenched

In November 2013, an article in *Africa Watch* noted that 11 sub-Saharan African countries had accessed international sovereign bond markets in the last decade. A total of 20 African countries had obtained sovereign credit ratings, making them potentially eligible to seek international funding. Although the pace of new sovereign debt sales has slowed somewhat in 2014, Kenya has joined the list of issuers, raising $2 billion on the international market.

Despite the slowdown in international borrowing, overall sub-Saharan African government debt is projected to rise sharply this year. According to Standard and Poors Ratings Services, the total commercial and concessional debt stock will rise in 2014 to $392 billion, up $50 billion, or 14.6 percent, from 2013. Most of the commercial borrowing will be in local currencies. In addition to commercial borrowing in local currency and dollar-denominated Eurobond markets, African countries access concessional lending from development banks, China, and other donors. As noted in the last edition of *Africa Watch*, several countries are issuing or considering the issuance of Islamic financial instruments, or sukuk.

Debt—How Much Is Too Much?

At first glance, the percentage rise in total debt stock from year to year seems high, even compared to the generally relatively rapid 4 to 5 percent growth rates recently experienced in Africa. Already in mid-2013, one noted economist, Joseph Stiglitz, was saying in a co-authored article, "Evidence of either irrational exuberance or market expectations of a bailout is already mounting," and "signs of default stress are already showing." Sweeping judgments such as these remain in the minority, however, and country-by-country differentiation is certainly called for.

Overall, the IMF points out, the fiscal balances of African governments have changed only incrementally since 2009. From 2007 to 2013, the interest payment-to-revenue ratio grew from 6.4 percent to 7.7 percent. According to Standard and Poors, the average country credit rating in Africa has declined since 2009, but only moderately. According to the IMF, Local Currency Bond Markets (LCBMs) are still in an early stage of development in Africa. The IMF study reports that the stock of government bonds as a percentage of GDP is 14.8 percent in Africa, much lower than in other developing, emerging, and advanced countries. In macro, continent-wide terms, the African debt load does not seem to be a problem.

It's Not the Debt, but What You Use It For

In its most recent review of the economic outlook for sub-Saharan Africa, the IMF acknowledged that debt indicators in most countries remain benign. The Fund noted, however, that the number of countries with increasing debt-to-GDP ratios had risen from 25 in 2010 to 31 in 2013. In some instances, increasing debt may be sustainable, especially when new natural resource discoveries are expected to boost future revenues.

That said, the IMF found that a number of countries, particularly Ghana and Zambia, had undertaken excessive fiscal expansions partly financed by borrowing on the international markets. In both countries, the IMF noted that government spending had been growing unsustainably, producing large government deficits financed by debt. In both countries, large increases in the wages of public-sector workers were driving the deficits. The IMF also noted that countries such as Nigeria, Malawi, Cape Verde, the Gambia, and the Seychelles were also accumulating debt amid rising pressures for government spending, leaving them limited room to maneuver.

The deputy head of the Africa department of the IMF, Abebe Aemro Selassie, effectively summarized the situation of these countries in an April interview with the *Financial Times*: "The time to fix the roof is now. Growth has recovered to pre-crisis levels, however, the fiscal deficit stance is akin to the one that countries put in place during the crisis. We are cautioning of the need to revert to smaller deficits." The following month, Christine Lagarde, the IMF Managing Director, warned African finance ministers that increasing interest rates on the international markets were another reason to avoid fiscal deficits.

Ghana and Zambia Seek Help

The accuracy of the IMF's warnings was demonstrated in June, when Zambia requested discussions with the IMF, with the objective of arriving at an economic program and a funding arrangement. Zambia's problems include its fiscal deficit, 20 percent depreciation of its currency, decline in the price of copper (its key export commodity), and rising inflation. These factors have made servicing of its sovereign foreign debt more costly.

Ghana's problems, which were highlighted in *Africa Watch* in February 2014, were somewhat similar. According to Bloomberg, its current account deficit is likely to exceed 10 percent of gross domestic product this year, and its currency has declined 36 percent against the dollar. Inflation rose to 15 percent in June, increasing the cost of both goods on the market and government borrowing. The wages of state workers have ballooned to constitute almost 70 percent of tax revenues. Despite the flow of oil revenues, these circumstances dictated that Ghana also seek the help of the IMF, and in early August, President John Dramani Mahama instructed his economic team to open talks with the IMF.

Conclusion

Although the fiscal and debt trends in many African countries are headed in the wrong direction, a widespread debt crisis is not foreordained. The fact that two countries viewed to some degree as African success stories are now experiencing problems may have a positive aspect. If, with the help of international institutions, Ghana, Zambia, and perhaps others are able to cope with their debt and deficit problems, others may learn from their examples and change course before additional problems arise. The message to other African countries from the Ghanaian and Zambian examples is clear: get your government budget in order to avoid deficit spending and greater debt. If that message is received and acted upon, the current difficulties will not interrupt the African growth story.

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