This PDF is a selection from a published volume from the National Bureau of Economic Research

Volume Title: African Successes, Volume III: Modernization and Development

Volume Author/Editor: Sebastian Edwards, Simon Johnson, and David N. Weil, editors

Volume Publisher: University of Chicago Press

Volume ISBNs: 978-0-226-31572-0 (cloth)

Volume URL: http://www.nber.org/books/afri14-3

Conference Dates: December 11-12, 2009; July 18-20, 2010;

August 3–5, 2011

Publication Date: September 2016

Chapter Title: Introduction to "African Successes: Modernization and Development

Chapter Author(s): Sebastian Edwards, Simon Johnson, David N. Weil

Chapter URL: http://www.nber.org/chapters/c13357

Chapter pages in book: (p. 5 - 10)

# **Volume Introduction**

Sebastian Edwards, Simon Johnson, and David N. Weil

Volumes I and II in this series deal with some difficult fundamental issues, including whether African countries can put their civil wars behind them and now look forward to at least a reasonable life expectancy. Beset by both traditional tropical disease and the awful impact of HIV/AIDS, it is an uphill struggle. However, progress is being made—and this is a major theme of our research project—but a great deal of hard work remains to be done.

Volume III turns to quite different dimensions of African development, including some aspects where it is possible to imagine there may even be a "late mover" advantage: finance, mobile phones, and exports.

# **Finance and Capital Allocation**

For the financial sector there is much that can be gleaned from prior experience. At the very least, Africa should potentially be able to avoid some of the more serious problems seen elsewhere, and it is not unreasonable to imagine that some African countries could actually find institutional or technological innovations that will allow more effective, inclusive, and safer use of finance, either for firms or individuals or both.

Sebastian Edwards is the Henry Ford II Professor of International Economics at the University of California, Los Angeles, and a research associate of the National Bureau of Economic Research. Simon Johnson is the Ronald A. Kurtz (1954) Professor of Entrepreneurship and Professor of Global Economics and Management at the MIT Sloan School of Management and a research associate of the National Bureau of Economic Research. David N. Weil is the James and Merryl Tisch Professor of Economics at Brown University and a research associate of the National Bureau of Economic Research.

For acknowledgments, sources of research support, and disclosure of the authors' material financial relationships, if any, please see http://www.nber.org/chapters/c13357.ack

On finance, a major issue remains how best to bring people into the organized financial sector—with bank accounts, payments-related services, and access to credit. In chapter 1, "Resolving the African Financial Development Gap: Cross-Country Comparisons and a Within-Country Study of Kenya," Franklin Allen, Elena Carletti, Robert Cull, Jun Qian, Lemma Senbet, and Patricio Valenzuela emphasize the particular difficulties that arise from relatively low population density in the African context. They use comparative data to put this issue in appropriate context, but they also look for particular business models that may prevail despite this feature of the market environment.

In contrast to most of the other work represented in these volumes, the authors focus on a single company that appears to offer a potential role model for others. It remains to be seen how well this model will travel across countries, but there are potentially important lessons for private financial-sector firms across the continent and perhaps more broadly.

In chapter 2, Pascaline Dupas, Sarah Green, Anthony Keats, and Jonathan Robinson marshal a great deal of evidence that suggests how hard it will be to ensure relatively poor rural residents receive appropriate services from the financial sector. "Challenges in Banking the Rural Poor: Evidence from Kenya's Western Province" reviews relevant survey evidence and also reports on some insightful experiments run by this team of researchers. The problem is not so much supply-side constraints—that is, this is not about the banks being reluctant to lend. Rather the issue is much more about potential customers not actually wanting either the financial services already offered or what could reasonably become available in the near term.

The authors' investigations have uncovered a great deal of convincing detail regarding exactly what makes people reluctant to use banking services today—as well as some indications of what it would take to significantly change this situation. Simply reducing bank fees is unlikely to be enough. The authors also do a great service by outlining what should be the research agenda for this topic.

We gain some rare holistic insight into financial-sector functioning with chapter 3, "The Financial Sector in Burundi: An Investigation of Its Efficiency in Resource Mobilization and Allocation" by Janvier D. Nkurunziza, Léonce Ndikumana, and Prime Nyamoya. The authors have analyzed a considerable amount of data regarding who has access to credit, including how this is related to political connections. Is it profitable to lend to the rising middle class? What is the relative role of traditional banking compared with microfinance? Does the arrival of foreign banks help or hurt access to credit? And how should we evaluate regulation and supervision in this context? The authors address all of these questions.

Chapter 4 assesses a prominent episode from Nigeria that confirms that expanding access to finance is much harder than making the financial system more stable. In "Were the Nigerian Banking Reforms of 2005 a Success . . .

and for the Poor?" Lisa D. Cook argues that financial-sector safety, soundness, and accessibility have improved considerably over the past decade. Banks becoming better capitalized and more efficient is no small achievement. However, she also finds no evidence that financial services became more accessible to the poor. In addition, part of the improved performance may simply be due to a better macroeconomic environment. The reformed Nigerian banking system has not yet been fully stress tested by events. We probably need to see a full boom-bust cycle before we can really assess the resilience of the banks and their balance sheets.

Chapter 5 links financial development to nonfinancial-sector outcomes, while also suggesting some deeper causes of weak capital allocation mechanisms. In "Misallocation, Property Rights, and Access to Finance: Evidence from within and across Africa," Sebnem Kalemli-Ozcan and Bent E. Sørensen look at the marginal product of capital in ten African countries. They find evidence that the allocation of capital across opportunities is far from optimal, although there are important differences in this regard across types of countries—and also across specific kinds of firms.

The authors also shed light on whether the issues here are more about country-level institutions, such as the strength of property rights and the quality of the legal system, or more specific financial-sector rules and regulations. This analysis should be informative to anyone seeking policy levers that can help capital flow to activities with high private or social returns. This topic deserves to receive a significant amount of attention from the official sector, but also from anyone who would like the African private sector to become more productive.

#### **Mobile Phones**

Mobile phones are obviously an important new sector, for Africa as for the rest of the world. It is also possible that because the legacy fixed-line systems are weaker, mobile phone networks will provide opportunities in Africa—and perhaps even have an impact on development—not seen elsewhere. Two projects in our portfolio explored this issue in more detail.

Chapter 6, "New Cellular Networks in Malawi: Correlates of Service Rollout and Network Performance," by Dimitris Batzilis, Taryn Dinkelman, Emily Oster, Rebecca Thornton, and Deric Zanera, considers who gets high-quality access to the mobile phone network. Infrastructure for mobile networks has expanded dramatically over the past two decades, providing access even in remote areas within developing countries that never previously had phone service. The authors examine the rollout of coverage in Malawi. Overall, despite the low average income level in that country, within ten years over half of the country obtained access to at least one network.

Still, some initial advantages tend to help inhabitants get better access to

the mobile network. Higher population density and more education play a role. Areas that are far from a road are significantly less likely to get access to the network throughout the period. Further research needs to examine what kind of advantage is conferred by mobile phone access—and where the creation of these new networks actually reinforces existing inequality and barriers to development.

Africa is not a global player in terms of developing the hardware and basic software for mobile telephony. But some African companies have led the way in terms of thinking both about the traditional voice communications side of this industry (for example, selling air time in very small increments), as well as about how to bring mobile phones and banking closer together.

In chapter 7, "Mobile Banking: The Impact of M-Pesa in Kenya," by Isaac Mbiti and David N. Weil, the authors examine a mobile phone-based money transfer system in Kenya. M-Pesa grew rapidly following its inception in 2007 and has had a great deal of impact—including on how financial services are used more broadly and on the cost of competing money transfer services. It does not appear to be the case that people use their M-Pesa accounts as a place to store wealth. However, there are strong indications that M-Pesa improves individual outcomes by promoting the use of banking services and by making it cheaper and easier to transfer money—particularly from urban to rural areas.

Hopefully, researchers will be able to build on these results—both with regard to improved availability of financial services and more broadly. There are also important lessons for both private mobile phone companies and for their regulators. Relatively efficient regulation in Kenya has allowed a productive range of innovations in this product space. Other countries may consider changing the rules to allow or even encourage responsible mobile banking along Kenyan lines.

## **International Trade**

Does Africa have some particular problem developing goods and services suitable for export? The authors of chapter 8 have a clear answer: no. In "African Export Successes: Surprises, Stylized Facts, and Explanations," William Easterly and Ariell Reshef argue that the pattern of African exports is broadly in line with what we see elsewhere in the world. Export success is dominated by a small number of what they call "Big Hits." Interestingly, such Big Hits are no more or less common in Africa as anywhere else.

Some determinants of export success include: moving up the quality ladder, utilizing strong comparative advantage, trade liberalization, investment in technological upgrades, foreign ownership, ethnic networks, and personal foreign experience of the entrepreneur. Other successes are triggered by more idiosyncratic factors like entrepreneurial persistence, luck, and cost

shocks. At least in this reading of the evidence, the African export sector should have plenty of scope for growth.

Textiles are a particularly important topic for any low-income country seeking to increase exports. The MFA (Multi-Fiber Arrangement) quotas on US imports of textiles, by inducing constrained countries to move into higher-quality products, created a favorable environment for low value-added, fabric-intensive clothing production in countries with unused quotas. By allowing the least developed African countries to use third-country fabrics in their clothing exports to the United States, the African Growth and Opportunities Act (AGOA) of 2000 provided additional implicit effective subsidies to clothing that were multiples of the US tariffs on clothing imports.

However, there is a darker side to this attempt to help Africa, as documented in chapter 9, "AGOA Rules: The Intended and Unintended Consequences of Special Fabric Provisions," by Lawrence Edwards and Robert Z. Lawrence. Lesotho and other least developed African countries responded impressively to the preferences they were granted under AGOA with a rapid increase in their clothing exports to the United States. But this performance has not been accompanied by some of the more dynamic growth benefits that might have been hoped for—in part because these preferences discouraged additional value addition in assembly and stimulated the use of expensive fabrics that were unlikely to be produced locally.

When the broader system of quotas was removed, constrained countries such as China moved strongly into precisely the markets in which AGOA countries had specialized. Although AGOA helped the least developed countries withstand this shock, they were nonetheless adversely affected. Preference erosion due to reductions in US clothing tariffs could similarly have particularly severe adverse effects on these countries.

## Conclusion

If Africa is to develop economically, it will have to do so via the growth of firms in the private sector. The idea that it could be otherwise—for example, that the continent could achieve persistent income growth primarily based on state-owned enterprises—has now been thoroughly discredited.

The two previous volumes in this series focus on what one might view as the preconditions for private-sector development: peace, a stable political system, effectively functioning institutions, and a population that is healthy and educated enough to engage in production. The nine chapters in this volume look more closely at economics of private production, with much of the focus being on the behavior of firms.

Undoubtedly, these firms operate in a difficult institutional and physical environment. Outside of natural resource exports, industries that have to

compete in a world market (such as textiles) often struggle. At the same time, there exist pockets of dynamism, the most visible being mobile phones. In banking, the continent's position trails significantly behind the rest of the world in terms of both allocative efficiency and access by the poor to financial services. In some places, however, there are rapid improvements, often aided by new technology.

Volume IV completes our four-set volume with a series of chapters that are relevant for the question of whether or not recent African growth is likely to be sustained.