THE 2015 BROOKINGS FINANCIAL AND DIGITAL INCLUSION PROJECT REPORT

Measuring Progress on Financial Access and Usage

BY JOHN D. VILLASENOR, DARRELL M. WEST, AND ROBIN J. LEWIS

Center for Technology Innovation at BROOKINGS

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Comments and feedback regarding the Financial and Digital Inclusion Project can be submitted to FDIPcomments@brookings.edu.

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EXECUTIVE SUMMARY

KEY TAKEAWAYS

- Access to and use of formal financial services provide opportunities for facilitating individual prosperity and economic development
- Women and other marginalized groups can benefit from greater access to mobile money and other digital financial services
- Joining multi-national financial inclusion networks, coordinating among diverse stakeholders, and setting quantifiable targets based on nationally representative data can drive progress toward greater financial inclusion
- Investing in digital infrastructure that is accessible and affordable contributes to the availability and adoption of digital financial services among underserved populations
- Facilitating competition by allowing non-banks to provide financial services, encouraging providers to improve interoperability, and limiting agent exclusivity through regulation helps foster the emergence and adoption of innovative and affordable services
- Advancing financial literacy and ensuring reliability and accessibility of financial services will help overcome barriers to adoption

Many people around the world live outside the formal financial system. According to the 2014 World Bank Global Financial Inclusion (Global Findex) database, about 62 percent of adults age 15 and older around the world have access to an account at a formal financial institution or mobile money[1] provider.[2] That leaves about 2 billion adults globally who are not account holders.[3] However, only 4 percent of adults without accounts surveyed for the Global Findex database indicated that the sole reason they did not have an account was that they did not need one.[4]

In recent years, many developing countries have made commitments to expand financial services for the poor. For example, as of May 2015 government leaders representing 54 institutions across 61 countries[5] had signed the Maya Declaration on Financial Inclusion pledging to recognize the importance of financial inclusion, affirm the value of peer-to-peer knowledge sharing, expand the Alliance for Financial Inclusion network, develop a financial inclusion policy, implement sound regulatory frameworks, recognize the importance of consumer protection, and use data to track progress toward financial inclusion.[6 7]

The 2015 Brookings Financial and Digital Inclusion Project (FDIP) Report and Scorecard seek to help answer a set of fundamental and interrelated questions, including 1) Do country commitments make a difference in progress toward financial inclusion?; 2) To what extent do mobile and other digital technologies advance financial inclusion?; and 3) What legal, policy, and regulatory approaches promote financial inclusion?

To answer these questions, we analyzed financial inclusion in 21 geographically, economically, and politically diverse countries: Afghanistan, Bangladesh, Brazil, Chile, Colombia, Ethiopia, India, Indonesia, Kenya, Malawi, Mexico, Nigeria, Pakistan, Peru, the Philippines, Rwanda, South Africa, Tanzania, Turkey, Uganda, and Zambia. Each of these nations has committed to improving financial access and usage, and collectively they represent a diverse range of geographies, cultures, and political and economic systems. For the purposes of our study, we considered financial inclusion as "both access to and usage of appropriate, affordable, and accessible financial services."[8]

The top-scoring countries in our analysis included Kenya (achieving 89 percent of the total possible points), South Africa (80 percent), Brazil (78 percent), Rwanda and Uganda (tied with 75 percent each), and Chile, Colombia, and Turkey (tied with 74 percent each). These countries demonstrated considerable commitment to financial inclusion by defining specific inclusion objectives and taking policy, regulatory, and technological steps to speed progress toward inclusion. These steps included passing laws that facilitated financial inclusion, implementing legal and regulatory changes that permitted involvement of diverse institutions in the financial services market, supporting mobile and digital networks that enabled service delivery, developing shared payments infrastructure, providing incentives for digital money usage, and adopting other changes that helped implement inclusion goals.

More generally, our analysis resulted in several overarching conclusions:

1. Country commitments matter.

Most of the countries that performed well in our study took their pledges seriously and made significant progress on implementing them. Of the FDIP countries that received the highest score for country commitment (India, Nigeria, Pakistan, Rwanda, Tanzania, Uganda, and Zambia), all completed at least one of their latest Maya Declaration targets (or, in the case of India, completed targets within the Maya Declaration's key policy areas).[9] While we recognize that correlation does not necessarily equal causation, the correlation alone is noteworthy.

We found four key takeaways regarding the nature of country commitments.

- Involvement in multinational financial inclusion-oriented networks can drive development of country commitments and facilitate knowledge-sharing among groups (and in this sense, the link is causal because membership in those networks by definition promotes engagement aimed at advancing inclusion).

- Creating a national financial inclusion strategy with measurable targets is often an important component of financial inclusion.[10]

- Coordinating across government agencies and between public and private sectors is vital for developing and implementing commitments in order to advance sustainable financial inclusion. Based on an assessment of our top-scoring countries, we found that the development of a dedicated financial inclusion body was a common thread in promoting financial inclusion.

- Developing surveys that diagnose the status of financial inclusion is critical to developing a targeted strategy and assessing the success of future inclusion initiatives.

2. The movement toward digital financial services[11] will accelerate financial inclusion.

Mobile money and other digital financial services are enabling enormous progress in access to finance, particularly in places — for example, in many sub-Saharan African countries — where there is often a lack of legacy systems and established traditional financial institutions.[12] To drive access to and adoption of digital financial services (including but not limited to mobile money), governments and the private sector will need to increase investments in digital communications and payments infrastructure and ensure services are affordable.

- While mobile money adoption and growth has been strongest in Africa, accessing financial services through mobile devices has tremendous potential to drive financial inclusion beyond the continent. For example, India is home to over a fifth of the world's unbanked adults.[13] In addition, India also has high (and growing) rates of mobile phone access, with about 86 percent of adults age 15 and older having access to a phone as of December 2014.[14]

- Governments and the private sector should invest in technological and digital payments infrastructure to drive access to and use of formal financial services. For example, in Peru, an ecosystem of mobile payments is being developed by Peru's telecommunications and banking sectors under the leadership of Asbanc (the national bank association) in order to provide single platform for all parties engaged in mobile payments and to facilitate financial inclusion.[15]

- Mobile money providers can offer incentives such as reduced fees to promote takeup of their services. For example, in Pakistan, mobile money service Easypaisa launched a person-to-person (P2P) pilot in 2014 that "eliminated all fees related to money transfers (P2P) between Easypaisa account customers and cash-out transactions."[16]

- We believe that increasing smartphone penetration will expand access to more user-friendly interfaces, that regulatory and policy initiatives in many countries will enable a wider array of non-bank institutions to offer mobile financial services, and these services will become more diversified over time. To promote greater smartphone penetration, countries should remove barriers to the availability and affordability of these devices. For example, countries considering smartphones and other digital devices with broadband services to be "luxury goods," and therefore subject to higher taxes, should consider reducing these taxes to facilitate greater access to mobile services.[17]

3. Geography generally matters less than policy, legal, and regulatory changes, although some regional trends in terms of financial services provision are evident.

We found high-performing countries in Africa, South America, and Asia; we also found low performers on each of those continents.

- Among the countries that ranked within the top five on our scorecard, the three African countries generally had higher mobile money takeup than the South American countries in the study. Conversely, the South American countries generally had higher rates of formal account ownership among marginalized groups (i.e., women and low-income individuals) and higher rates of debit card, credit card use, and Internet use for bill payments and purchases than the African countries. The extensive banking correspondent (also known as banking agent)[18] and government-to-person payment systems in place in many South American countries are widely credited with incentivizing and extending basic banking access to otherwise excluded groups.

- Among the 21-country FDIP sample, the developing countries in Asia generally ranked lower on the scorecard. Most of these countries received low scores for formal account penetration among low-income individuals, as well as for debit card use, credit card use, use for bill payment and purchases, and mobile money adoption. However, regulatory and policy changes in countries such as Indonesia and India are likely to accelerate financial inclusion outcomes within the region.

- While there are a variety of pathways to financial inclusion, having accessible and affordable digital networks and appropriate regulatory frameworks is crucial**.** For example, in analyzing why some nations perform better than others with respect to financial inclusion, the factors that often distinguish top performers include mobile capacity and regulatory frameworks. In order to promote digital financial services, countries need a robust digital ecosystem that promotes innovation. The variation across nations provides insights into concrete and practical suggestions on what central banks, finance ministries, and other financial inclusion stakeholders can do to enhance inclusion.

4. Central banks, ministries of finance, ministries of communications, banks, non-bank financial providers, and mobile network operators have major roles in achieving greater financial inclusion. These entities should closely coordinate with respect to policy, regulatory, and technological advances.

- Central banks and finance ministries often take the lead on the development of national strategies and formal commitments regarding financial inclusion. Ministries of communication and mobile network operators should cooperate to develop accessible and affordable mobile networks. Commercial financial service providers are key to implementing effective payment and transfer solutions. Overall, coordination among policymakers, regulators, supervisors, and industry leaders is critical to ensuring a vibrant and inclusive financial ecosystem.

- It is important to advance financial inclusion by leveraging regulatory and policy capacity to open up the financial services market to both banks and non-banks, encouraging interoperability[19] among providers and nonexclusivity among agents, minimizing burdensome restrictions on service provisions that constrain scalability, and designing tiered/graduated taxes to avoid barriers to usage by financially underserved groups. For example, the GSMA's 2014 "State of the Industry" report noted that mobile operators in Indonesia, Pakistan, and Tanzania have interconnected their networks, which has the potential to facilitate greater customer convenience and therefore drive takeup of mobile money services.[20]

- Government regulators can reduce access barriers for marginalized groups through risk-proportionate know-your-customer requirements and digital financial ID programs and incentivize use of formal financial services through government-to-person payment (G2P) programs. For example, a study of Mexican social welfare program Oportunidades found that using debit cards as the means of disbursing G2P payments was associated with an increase in the number of families using banking services.[21]

- Mobile network operators and financial service providers can advance financial inclusion by developing and implementing interoperability agreements, strengthening mobile and digital networks, extending financial access points, and ensuring services target customer needs.

5. Full financial inclusion cannot be achieved without addressing the financial inclusion gender gap and accounting for diverse cultural contexts with respect to financial services.

The 2014 Global Findex report found that the financial inclusion gender gap has not narrowed: an average difference of 7 percentage points globally in financial account ownership between men and women has persisted from 2011 to 2014. In developing economies the gender gap has remained at an average 9 percentage points, and in some countries that gap is much higher.[22]

- Digital financial services such as mobile money give women more control over their financial lives. Access to and usage of mobile phones and availability of mobile money services reinforce each other in a positive feedback loop that facilitates financial inclusion. A gender gap in access to mobile phone ownership remains — a 2015 GSMA study found that "women are on average 14% less likely to own a mobile phone than men" — but creating appropriate and affordable mobile money products can help bridge the mobile phone ownership gap by creating incentives for ownership.[23]

- Increasing the number of access points to financial services through mobile money agents or branchless banking[24] agents can facilitate access to and use of financial services among women by making these services more convenient. Financial service providers should also aim to recruit more female staff members at financial access points, as in some countries women may be more comfortable transacting with other women than men.[25] However, cultural norms, legal traditions, and educational disparities may nonetheless constrain access to finance among women. For example, in some Middle Eastern and South Asian countries, women are required to have a husband or male relative co-sign in order to obtain a loan.[26]

- In some places, mistrust and lack of awareness remain an impediment to adoption of formal financial services. To facilitate acceptance of formal financial services, public and private sector leaders should educate the public about these services and strengthen communications networks to ensure reliability and efficiency.

THE IMPORTANCE OF FINANCIAL INCLUSION

Financial inclusion has become a crucial aspect of economic development. Developing economies need consumers who can pay bills or send remittances in an affordable and convenient manner. Digital services are an increasingly important component of the nexus between development and financial inclusion. According to estimates from a recent Imperial College and Citi report, "a 10% increase in the digital money readiness and commensurate increase in adoption for the countries included in the Index, can help up to an estimated 220 million individuals enter the formal financial sector. This translates to an additional $1 trillion moving from the informal economy to the formal economy […]."[27]

Having greater access to financial services promotes entrepreneurship, lifts people out of poverty, and gives them greater hope for a brighter economic future. This is especially the case in regard to women and marginalized groups. In many places, these individuals lack access to financial services and therefore have little opportunity of advancing themselves beyond their current circumstances.[28]

In recent years, financial services have evolved with new technologies. Thus, we examined both "traditional" formal financial accounts (primarily those provided by commercial banks) and digital financial services, including mobile money.

The prevalence of accounts provided by traditional financial institutions is one common measure of financial inclusion because the range of products offered by non-banks (e.g., mobile money solutions) tends to be limited in many nations.[29] For example, electronic money (e-money) typically does not accumulate interest for the end-user since mobile money services are often classified as "payment" services.[30] [31] Indeed, takeup of accounts from formal financial institutions has accounted for nearly all of the recent growth in use of formal financial services.[32] However, while only 2 percent of adults globally have a mobile money account, 12 percent do in sub-Saharan Africa — and of those 12 percent, half have *only* a mobile money account as their form of formal financial service.[33]

Use of digital financial services has grown significantly in recent years among many people who have little or no previous experience with formal financial services. Digital financial services are often seen as safer than carrying cash. They also promote financial inclusion by empowering people who have been excluded from traditional financial networks. For example, digital financial services such as mobile money can help minimize gender gaps in access to finance. These gaps can be quite large: As of 2014, there was a difference of 7 percentage points between the percentage of women (58 percent) and men (65 percent) with accounts through a formal financial institution or mobile money service provider.[34]

Use of digital financial services has grown significantly in recent years among many people who have little or no previous experience with formal financial services.

One way digital financial services can help provide women with more control over their financial lives is through receipt of digital G2P payments,[35] as these digital channels enable them to access funds without others knowing or being able to easily access the stored value.[36] While digital financial services available through such channels as mobile phones can help to address gender gaps regarding access to and use of financial services, it should be noted that there are still gender disparities with respect to mobile access in some countries. A 2010 GSMA study found that in developing countries, women were roughly 21 percent less likely to own a mobile phone than men; as of 2014, regionally, the largest gender gap was in South Asia, where women were 38 percent less likely to own a phone than men.[37]

The advantages of digital services extend beyond individuals. For example, in Mexico, the government saved an estimated $1.3 billion annually by shifting to electronic payments.[38] Other governments, such as that of India, have recognized the value of digital transfers to reduce "leakage" — payments that do not reach recipients.[39] Digital payments are also more transparent. For example, use of mobile money can reduce the risk of money laundering, terrorism, drug smuggling, and other illicit activities, since electronic transactions are more easily monitored than liquid currency.[40]

We anticipate that with further progress in mobile infrastructure and enabling regulation, momentum toward providing a greater diversity of mobile financial services will continue.

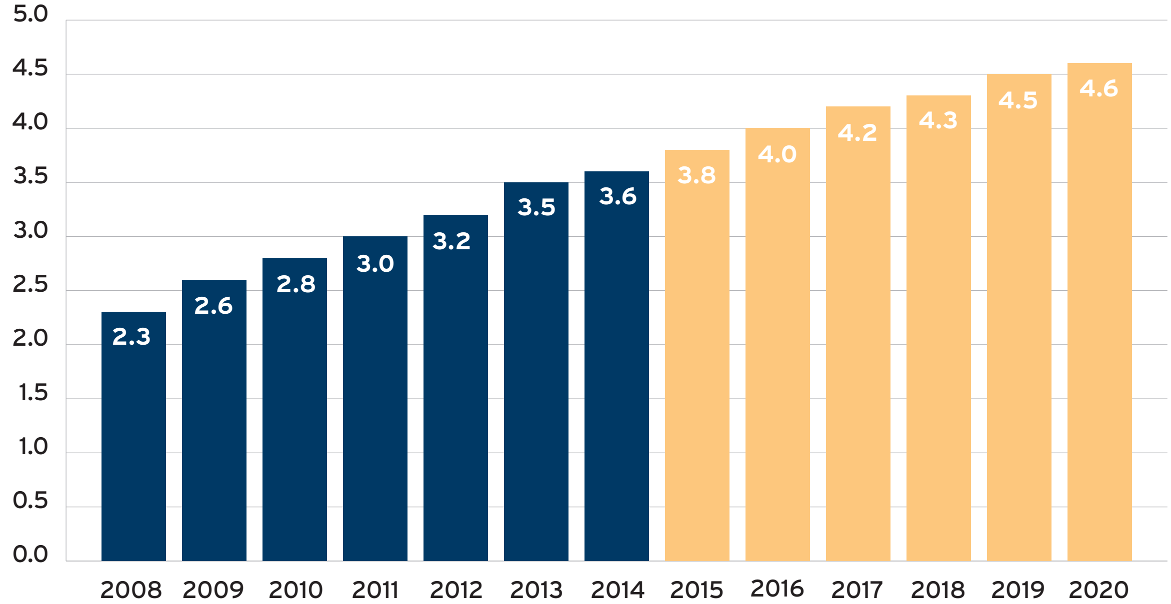
Given our focus on services that can help reach the "unbanked," this report looks at a range of traditional and non-traditional financial services relevant to people at the margins of, or outside of, the formal financial system. We examine not just services linked to traditional financial accounts, but also mobile money services and new digital products that have arisen in many places. While mobile money accounts typically do not provide access to as extensive an array of services as traditional financial accounts, they still play a vital role in allowing people — particularly those who cannot afford the high fees of traditional "brick and mortar" institutions — to save, send, and receive funds with great ease and safety.[41]

In 2014, seven new markets had more mobile money accounts than bank accounts, bringing the total markets in this position to 16.[42] There were just under 300 million registered mobile money accounts globally in 2014 — an impressive number, but one that represents only about "8% of mobile connections in the markets where mobile money services are available."[43] Thus, there is still an opportunity for tremendous growth in mobile money services. Mobile money services featuring high-volume, low-value transactions can be profitable at scale for providers, which should continue to draw prospective providers into the market.[44]

Moreover, given trends in mobile money markets[45] we expect that over time, mobile money providers will begin offering a broader range of financial services, including interest-bearing savings accounts.[46] To date, the movement to transition beyond basic transactional services has been relatively slow — for example, in 2013 about 93 percent of all mobile money transactions only involved airtime purchase or person-to-person (P2P) transfers.[47] However, we anticipate that with further progress in mobile infrastructure and enabling regulation, momentum toward providing a greater diversity of mobile financial services will continue.[48] Given that a number of governments are launching G2P systems for paying government subsidies and support, we expect that money flow to increase dramatically in the future.

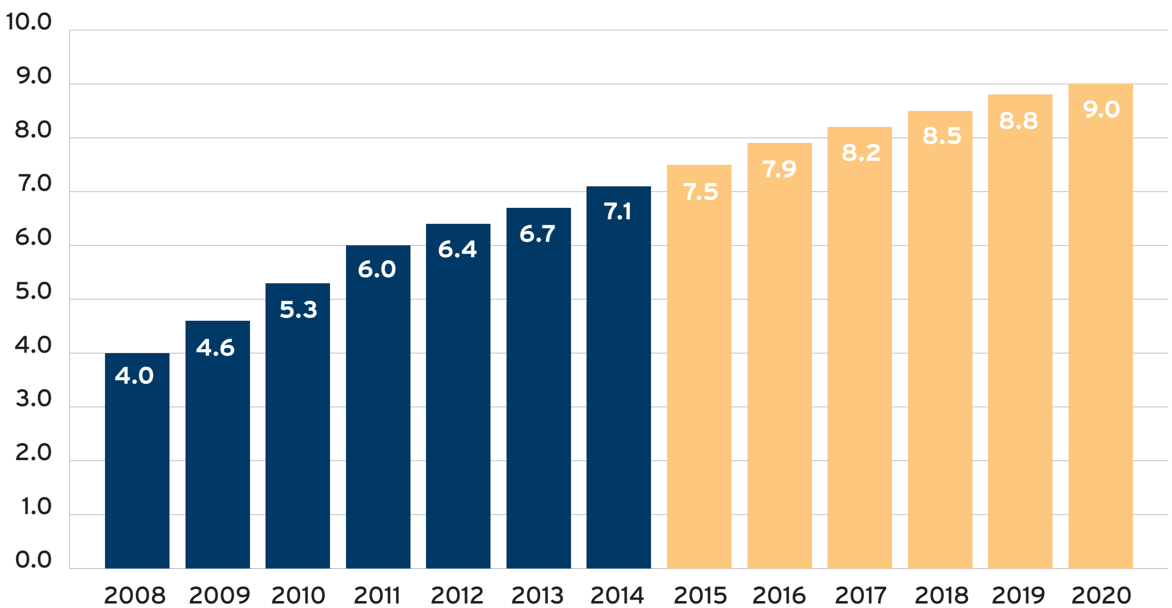
Increases in smartphone penetration will also advance the diversification of mobile money features offered and provide more user-friendly interfaces to attract interest in the services.[49] Additionally, mobile broadband usage is rising rapidly throughout the world. According to a 2015 GSMA report, the number of unique mobile subscribers has risen dramatically since 2008 and is expected to grow even further in the next few years (see Figure 1).[50] It has increased from 2.3 billion in 2008 to 3.8 billion in 2015 and is predicted to rise to nearly 4.6 billion by 2020.[51] To promote greater smartphone penetration, countries should remove barriers that impede the availability and affordability of these devices. For example, countries considering smartphones and other digital devices with broadband services to be "luxury goods," and therefore subject to higher taxes, should consider reducing these taxes to facilitate greater access to mobile services.[52]

Figure 1 Worldwide Unique Subscribers in Billions[53] [54]



With respect to the number of mobile devices, the figures are even more dramatic. Many people have more than one mobile phone, smartphone, or tablet. The total number of cellular connections was more than 7.5 billion in 2015 (see Figure 2). That figure is expected to increase to over 9 billion by 2020.[55]

Figure 2 Worldwide Mobile Connections in Billions[56] [57]



MEASURING FINANCIAL INCLUSION

The FDIP scorecard provides a comparative assessment of the state of financial inclusion across 21 countries. As noted above in the Executive Summary, financial inclusion is a complex, multidimensional landscape, and there is no single "optimal" way to measure it. Designing a set of indicators inherently involves making choices about which aspects of the financial inclusion landscape to include and how performance should be measured. For example, we have used mobile capacity as one of the four dimensions of financial inclusion — reflecting a belief that mobile technology is a critical component of financial inclusion in the emerging financial services landscape.

This study focuses primarily on basic financial services, as these services typically constitute the entry point and are the area of greatest immediate need for individuals whose prior engagement with the formal financial sector has been limited.[58] In subsequent annual editions of this report, as digital financial service offerings — particularly those accessible through mobile telephones — mature and become more readily available to the underserved (and consequently, as data associated with these offerings become more widely available), we will expand our consideration of financial service offerings to include a broader scope of financial services (e.g., microinsurance and microcredit). It is our hope in the longer term to be able to consider not only financial inclusion but also digital inclusion – a broader term that can encompass access to non-financial information and services.

For each of the 21 subject countries, the 2015 FDIP Report provides a description of the overall financial inclusion environment, as well as an assessment of 33 indicators spanning four "dimensions" that represent key areas associated with access to and usage of financial services: country commitment, mobile capacity, regulatory environment, and adoption. Each of the 33 indicators was scored on a scale from 1 (low) to 3 (high), leading to a maximum possible score of 99. An interactive online tool for comparing scores and rankings by dimension is available at www.brookings.edu/FDIP.

To develop the country profiles and scores, we consulted with individual financial inclusion experts and surveyed organizational publications, government websites, news articles, and other resources. The FDIP team reviewed key developments in each country, including the passage of relevant legislation, implementation of policies and regulations, legal decisions, progress toward stated goals, and barriers to greater inclusion. To corroborate and enhance our analysis of the financial inclusion landscape across our 21 countries, we reached out to financial inclusion authorities in each country. We benefited from high levels of engagement among many of these country contacts, which, along with the sources detailed above, enabled us to capture as accurate a portrait as possible of the rapidly evolving financial inclusion landscapes in our focus countries.

The 2015 FDIP Report provides a description of the overall financial inclusion environment in 21 diverse countries, as well as an assessment of 33 indicators spanning four "dimensions" that represent key areas associated with access to and usage of financial services: country commitment, mobile capacity, regulatory environment, and adoption.

The 2015 FDIP Report and Scorecard are intended to serve as a complementary resource to the extensive array of other available reports, data sets, indexes, and initiatives surrounding financial inclusion. The FDIP report is based on a detailed survey of these existing resources, including the Global Findex and associated reports, and the Alliance for Financial Inclusion's Maya Declaration progress reports, which highlight signatories' commitments and progress toward greater financial inclusion. Like the Global Findex, FDIP focuses on the demand side of financial inclusion at the individual level.

Although we have not emphasized the supply side of financial inclusion extensively within our scorecard framework, the International Monetary Fund's Financial Access Survey data appear throughout the report to provide a high-level sense of the availability and density of certain service providers in our focus countries. As geographic information system data related to financial service access points become more widely available through FSP Maps,[59] the Microfinance Information Exchange (MIX)'s FINclusion Lab,[60] and other initiatives, we expect that in future years we will be able to include more in-depth data on the distribution of a wide array of service providers.

With respect to other financial inclusion indexes, one example is the Economist Intelligence Unit (EIU)'s "Global Microscope 2014: The Enabling Environment for Financial Inclusion,"[61] which examines policy and regulatory drivers of access to finance, both as they are "on the books" and on the ground.[62] In the "Global Microscope 2014," the EIU provides brief profiles of the financial inclusion landscape in 55 countries, in addition to detailed data on individual indicators in a separate spreadsheet. While there is some overlap with the "Global Microscope" report regarding our respective considerations of country commitments and enabling regulatory policies, this report places greater emphasis on mobile solutions and incorporates more extensive country analysis.

Other reports feature assessments of digital financial services. For example, the World Economic Forum's 2011 "Mobile Financial Services Development Report"[63] scores countries on regulatory and infrastructural aspects of the mobile financial services environment, while the 2015 Citi and Imperial College London "Digital Money Index" ranks countries based on their readiness for digital money. The United States Agency for International Development and NetHope recently collaborated to develop a mobile financial services market viability tool that ranks e-payments ecosystem readiness in over 100 countries.[64]

FDIP's emphasis on mobile money reflects our belief that mobile technology offers a critically important opportunity to increase access to and use of financial services by those at the bottom of the economic pyramid or otherwise traditionally underserved by formal financial institutions.

FDIP differs from these efforts in that we provide detailed country summaries surrounding both traditional *and* digital financial services, an evaluative scorecard that measures progress on access and usage, and a roadmap of recommendations designed to move countries closer to inclusion. FDIP's emphasis on mobile money reflects our belief that mobile technology offers a critically important opportunity to increase access to and use of financial services by those at the bottom of the economic pyramid or otherwise traditionally underserved by formal financial institutions. We hope that the information in this analysis can complement other reports and studies and that it can help governments, policymakers, financial inclusion thought leaders, and others with an interest in this vitally important topic to identify and implement solutions that can bring hundreds of millions of people into the formal financial system in the coming years.

DIMENSIONS OF EVALUATION

In the 2015 FDIP scorecard, we examined four broad dimensions relevant to financial inclusion: country commitment, mobile capacity, regulatory environment, and adoption of traditional and digital financial services. We evaluate countries on overall financial inclusion as well as each of the four component dimensions.

The indicators used in this study were developed based on an examination of best practices for facilitating and measuring financial inclusion, and we have endeavored to ensure the use of up-to-date information in the evaluation process. Where we made particular choices in terms of concepts or measurement, we have included notes to explain those decisions.

Scores are based on a total of 33 indicators distributed across the four dimensions. Each of the indicators was scored out of 3 possible points, corresponding to a maximum total possible score of 99 across all of the indicators. Certain indicators are dichotomous (i.e., they could be awarded a score of 1 or 3), while others are trichotomous (i.e., these indicators could be awarded a score of 1, 2, or 3). All indicators are weighted equally in computing overall scores. In addition to the multi-country primary data sets and resources listed under the scoring descriptions section of the report, we used country-specific information, which is cited in the endnotes.

Overall ranking on financial inclusion

The top-scoring country was Kenya with 89 percent, followed by South Africa (80 percent), Brazil (78 percent), Rwanda/Uganda (75 percent each), and Chile, Colombia, and Turkey (74 percent each).

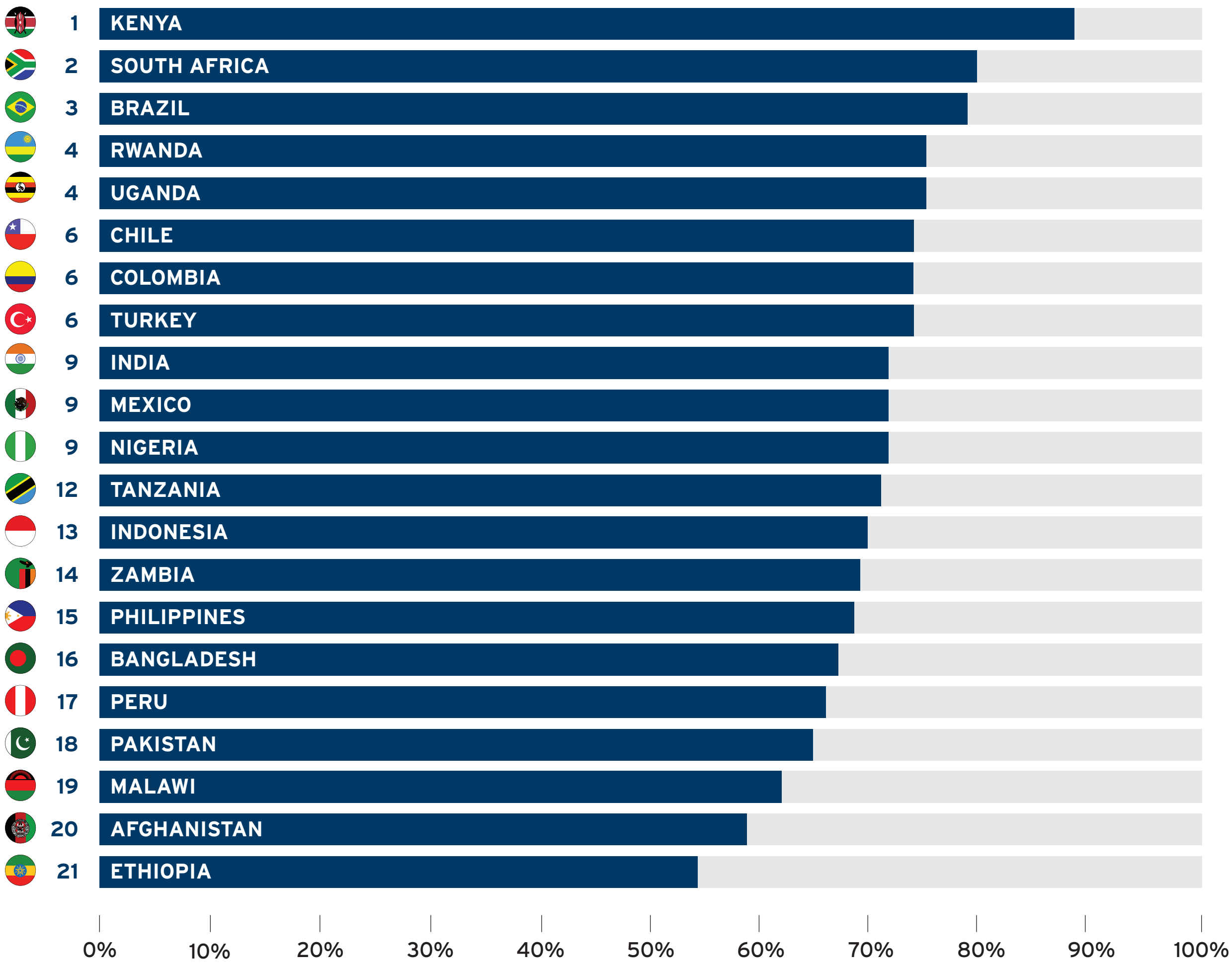
The highest-performing countries shared a number of key elements. Each of them demonstrated considerable commitment to financial inclusion, took policy, regulatory, and technological steps to speed progress toward inclusion, and made measurable progress toward financial inclusion. Having access to digital technology is one way to improve access to financial services. Many countries that have strong mobile or digital networks and enable financial services through these networks have demonstrated progress toward financial inclusion because these mechanisms help poor people use financial services in a convenient and affordable manner.

For example, Kenya permits both banks and non-bank institutions, including mobile operators, to offer financial services.[65] Within this enabling environment, diverse mobile money offerings have emerged that allow customers to pay bills, send remittances to other people, and purchase insurance, among other services.[66] As we note in our country profile, as of August 2014 about 90 percent of Kenyan households had used mobile money services.[67]

South Africa also ranked highly in our analysis. As of 2014, around 75 percent of adults had bank accounts and 5 percent used non-bank financial products.[68] ATM/debit cards have become more common, with 34 percent of the banked population owning a South African Social Security MasterCard.[69] Unlike in many other countries in our study, women in South Africa are generally not disproportionately excluded from formal financial services. The 2014 Global Findex found that about 69 percent of men and 69 percent of women had accounts with a formal financial institution or mobile money provider.[70]

Countries such as Brazil and Rwanda have made regulatory changes that enable alternative vehicles for

FDIP Overall Scorecard



financial services, such as banking services offered through retailers, lottery outlets, and post offices, and mobile money services led by bank and non-bank institutions.[71 72] As long as there is sufficient security and consumer protection in these networks, they represent a way for more people to gain access to quality financial accounts and financial services.

While each of these countries shares strong commitment to financial inclusion, there is significant variation among their dimension scores. This variation and the implications for each country's path forward are discussed later in this paper.

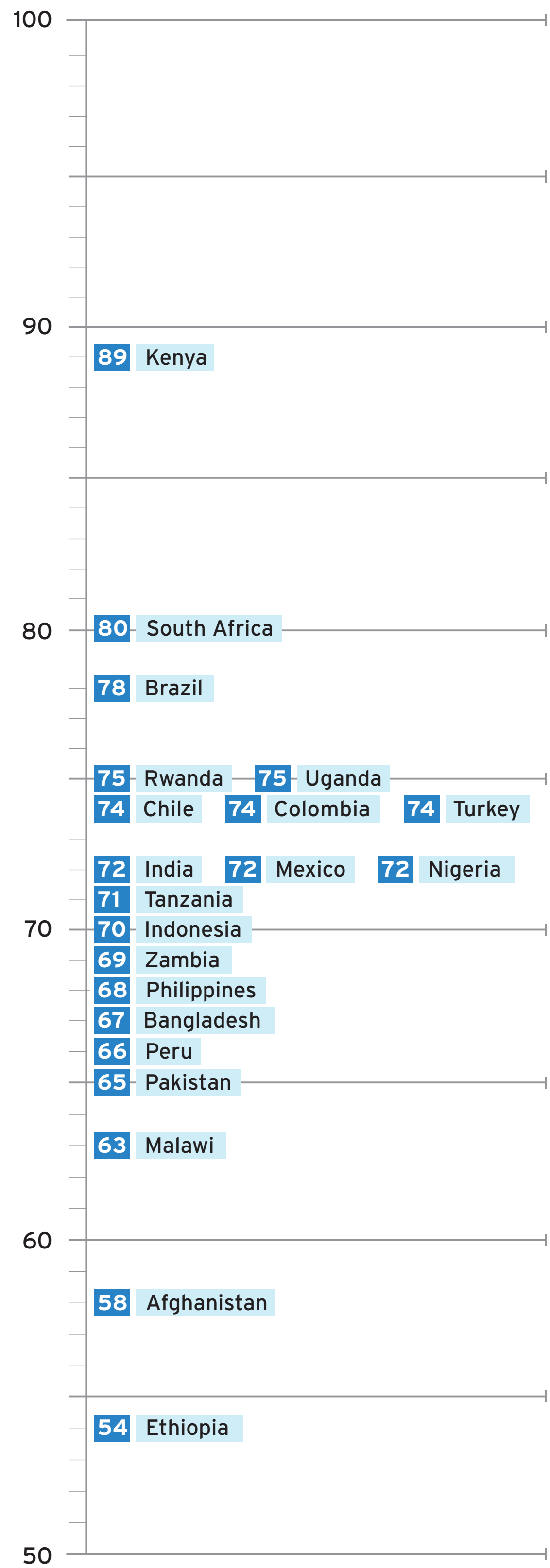
Countries that were not among the top-scoring nations overall, such as Ethiopia and Afghanistan, can improve financial access by strengthening infrastructure, reforming their policies and regulations, and improving adoption levels. For example, in Ethiopia, high poverty levels and limited infrastructure make it challenging to engage the local population.[73] As of 2014, the Global Findex found that about 22 percent of adults held formal financial accounts.[74] However, the country is making progress toward a more enabling environment for financial inclusion: For example, in 2013, Ethiopia approved a mobile and agent banking framework.[75]

In Afghanistan, continued instability has rendered access to formal financial services very difficult. Despite a recent focus on reconstruction,[76] telecommunications and banking infrastructure remain limited.[77] Moreover, there is widespread mistrust of the banking system.[78] Even if people do want to access formal financial services, many live too far from a bank branch to reach those access points easily. Yet with over 80 percent of the population now covered by a 3G mobile network, the country is poised for higher utilization of mobile financial services in the future.[79]

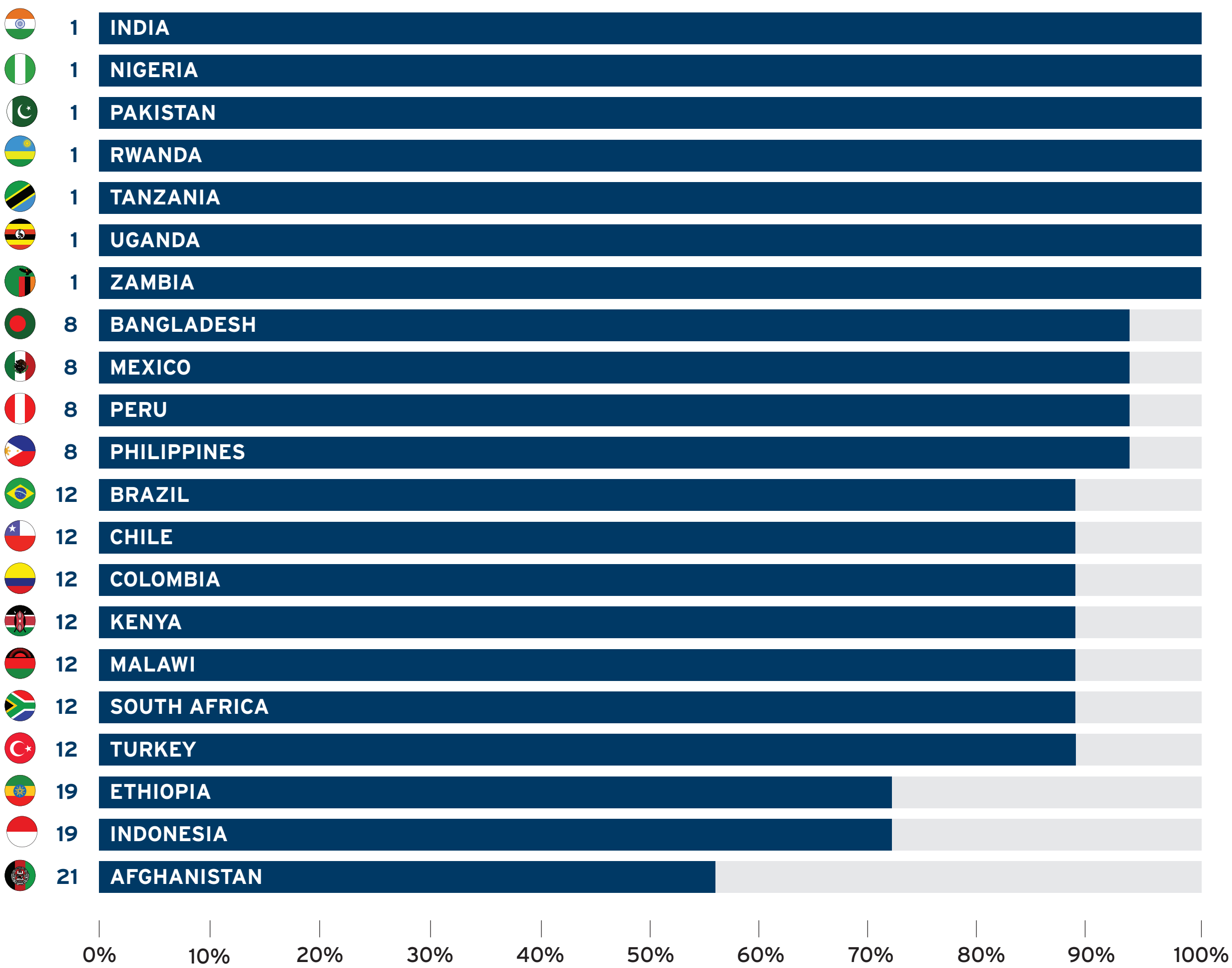
As demonstrated by the scoring distribution chart to the right, the difference between country scores can be quite small. Thus, scoring changes in even one or two indicators can correspond to a significant change in ranking. Given the dynamic nature of the global financial services ecosystem, we fully expect that rankings will be very fluid as countries continue to improve aspects of each of the four dimensions. Please note that all scores represent percentage values, as each score comprises the proportion of possible points received.

Given the dynamic nature of the global financial services ecosystem, we fully expect that rankings will be very fluid as countries continue to improve aspects of each of the four dimensions.

2015 FDIP Scorecard Distribution



Country Commitment Scorecard



Country commitment ranking

In addition to overall ranking, we compared our 21 countries on each of the four underlying dimensions. With respect to country commitment, we examined the role of the government (particularly the national regulator or other public sector financial inclusion authority) as a driver of enabling conditions for financial inclusion. Given each government's ability to collect data at a national scale, coordinate with members of the private sector, and develop a clear and enabling regulatory framework, the public sector plays a critical role in advancing financial inclusion. That said, the private sector is also instrumental in terms of expanding access to and use of financial services, and we include indicators relating to private sector offerings in our regulatory section below.

Our scorecard indicators assess commitments to multinational financial inclusion organizations or networks, specific digital financial service commitments, whether a comprehensive national financial inclusion strategy exists, whether the country has established specific quantifiable financial inclusion targets, whether recent demand-side financial services survey(s) have been conducted or supported by a government entity, and whether there is a national-level financial inclusion body.

Based on our analysis, India, Nigeria, Rwanda, Tanzania, Uganda, Pakistan, and Zambia received the

India performed well on the country commitment dimension in large part because of the government's Pradhan Mantri Jan-Dhan Yojana initiative, launched in 2014.[86] The program aimed to provide 75 million individuals with bank accounts, distribute RuPay debit cards to enable financial transactions, and provide insurance and pension schemes to those in need.[87]

Yet while the target number of accounts has already been exceeded (as of February 2015, the initiative had facilitated the opening of nearly 137 million bank accounts),[88] usage of accounts is low.[89] Government leaders are seeking to improve this situation by linking public subsidies for products such as kerosene, food, liquefied petroleum gas, pensions, and fertilizer to financial accounts.[90] Funneling these payments through financial accounts creates incentives for usage.

Importantly, the government has passed legislation permitting "payments banks," which will enable non-bank entities, including mobile operators, to offer financial services.[91] These new regulations are expected to broaden the financial services market and encourage competition and innovation within the sector.

highest scores for country commitment, although their approaches to certain components of country commitment differ. For example, the Bank of Tanzania set and completed a specific digital financial services-related target to implement interoperability[80] and also launched a National Financial Inclusion Framework in December 2013[81] featuring specific commitments related to traditional and digital financial services. The National Financial Inclusion Council serves as the monitoring mechanism for this framework.[82] Tanzania has also sought to learn more about the status of financial inclusion in the country: The government of Tanzania and Bank of Tanzania collaborated with several foreign governments to establish the Financial Sector Deepening Trust, which has supported several FinScope surveys in the country (the latest in 2013).[83]

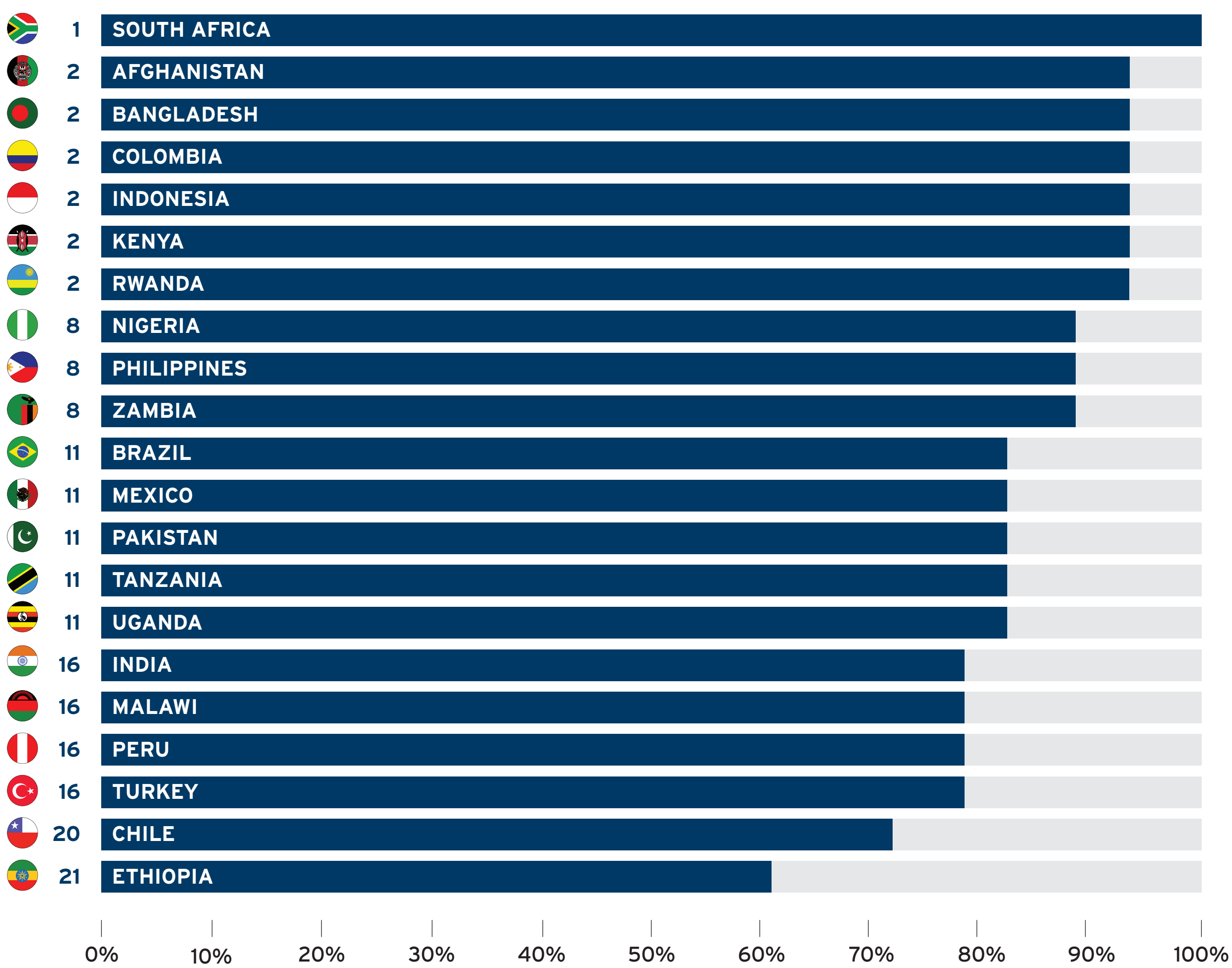
While Rwanda does not have a standalone strategy, it included a comprehensive action plan for financial inclusion within its broader Financial Sector Development Program and set up a working group to monitor the implementation of the program. Within this framework, Rwanda has set a numeric target to increase access to formal financial services from 21 percent to 80 percent by 2017.[84] The government commissioned a FinScope survey to collect information on financial services, and additional surveys should help Rwanda monitor progress toward its goals.[85]

Mobile capacity ranking

Our second dimension is mobile capacity, which includes indicators that measure mobile infrastructure and adoption as well as indicators specific to mobile money. We assessed the extent of 3G mobile network coverage[92] and the degree of unique mobile subscribership.[93] With respect to mobile money, we considered the availability of mobile money-enabled P2P payments, bill payments, and international remittances, as well as the number of deployments, or active mobile money services, within each country.

As noted, we believe that mobile money services are a powerful mechanism for increasing access to financial services among the underserved, and we fully expect that over time, regulatory shifts, consumer demand, and the increasing prevalence of smartphones will lead to an expansion in the diversity of mobile financial services offered to those at the bottom of the economic pyramid and more broadly. As mobile money services continue to scale up, we expect to evaluate whether the diversity of offerings increases among our focus countries.

Mobile Capacity Scorecard



South Africa achieved the highest ranking for mobile capacity, with the percentage of unique subscribers comprising about 70 percent of the population and about 96 percent 3G mobile network coverage by population.[94] South Africa also has a number of mobile money deployments offering P2P domestic transfers, bill payment, and international remittances.[95] This has allowed it to reach more people and engage them in financial services.

Kenya, which tied with Indonesia, Bangladesh, Colombia, Rwanda, and Afghanistan for the second highest ranking on the mobile capacity dimension, provides a salient example of how mobile financial service offerings can diversify beyond basic transactions. In 2012, the M-Shwari service was launched in Kenya as a partnership between the Commercial Bank of Africa and Safaricom to offer interest-bearing accounts and microloans.[96] Innovative services such as M-Shwari have been a major spur to financial inclusion. These services have helped many marginalized groups, including poor people and women, gain access to affordable services.

At the other end of the spectrum, Ethiopia has room for growth regarding its mobile network. It does not have an extensive mobile communications infrastructure, making it difficult to broaden access to financial services.[97] Without pervasive mobile or digital access, it has been challenging to provide financial products to a range of people across the country. As of 2014, less than 0.05 percent of adults in Ethiopia had a mobile money account, according to the Global Findex.[98]

South Africa achieved the highest ranking for mobile capacity.

Regulatory environment ranking

The regulatory environment comprises the third dimension of evaluation. Among the specific indicators used to assess the regulatory environment were agent banking,[99] non-bank led mobile financial service deployments (with a focus on the role of mobile network operators, or MNOs), e-money regulations, mobile money platform interoperability, proportionate know-your-customer processes, and cash-in/cash-out[100] capability at agent locations.

Regulations and policies surrounding traditional and digital financial services vary widely across countries and are critical factors in determining the success of financial service provision.[101] Particularly in countries with strong banking infrastructure, agent banking has been instituted to provide opportunities for banks to extend access to formal financial services by contracting with other legal entities to provide financial services on their behalf. Eva Gutierrez and Sandeep Singh describe agent banking by stating "the principle on agent/branchless banking takes into account if banks can use agents to receive deposits and accept withdrawals outside of bank branches."[102] While this model has been highly successful in some markets (particularly in some Latin American countries),[103] mobile money services also hold tremendous opportunity for extending access to finance in locations with less developed infrastructure. Mechanisms for promoting these and other enabling conditions are explored below.

We recognize that arrangements within mobile money models can vary widely. However, differentiating broadly between the degrees of participation for each entity within the models is helpful in comparing different countries' mobile money landscapes. To that end, in an "MNO-led" model the MNO typically provides the network of agents and handles the customer relationship;[111] in a "bank-led" model, the mobile component is limited to acting primarily as a new channel for existing banking services.[112] The latter has arguably not been as widely successful, in part because the value proposition for mobile services is more limited than with traditional banking services.[113]

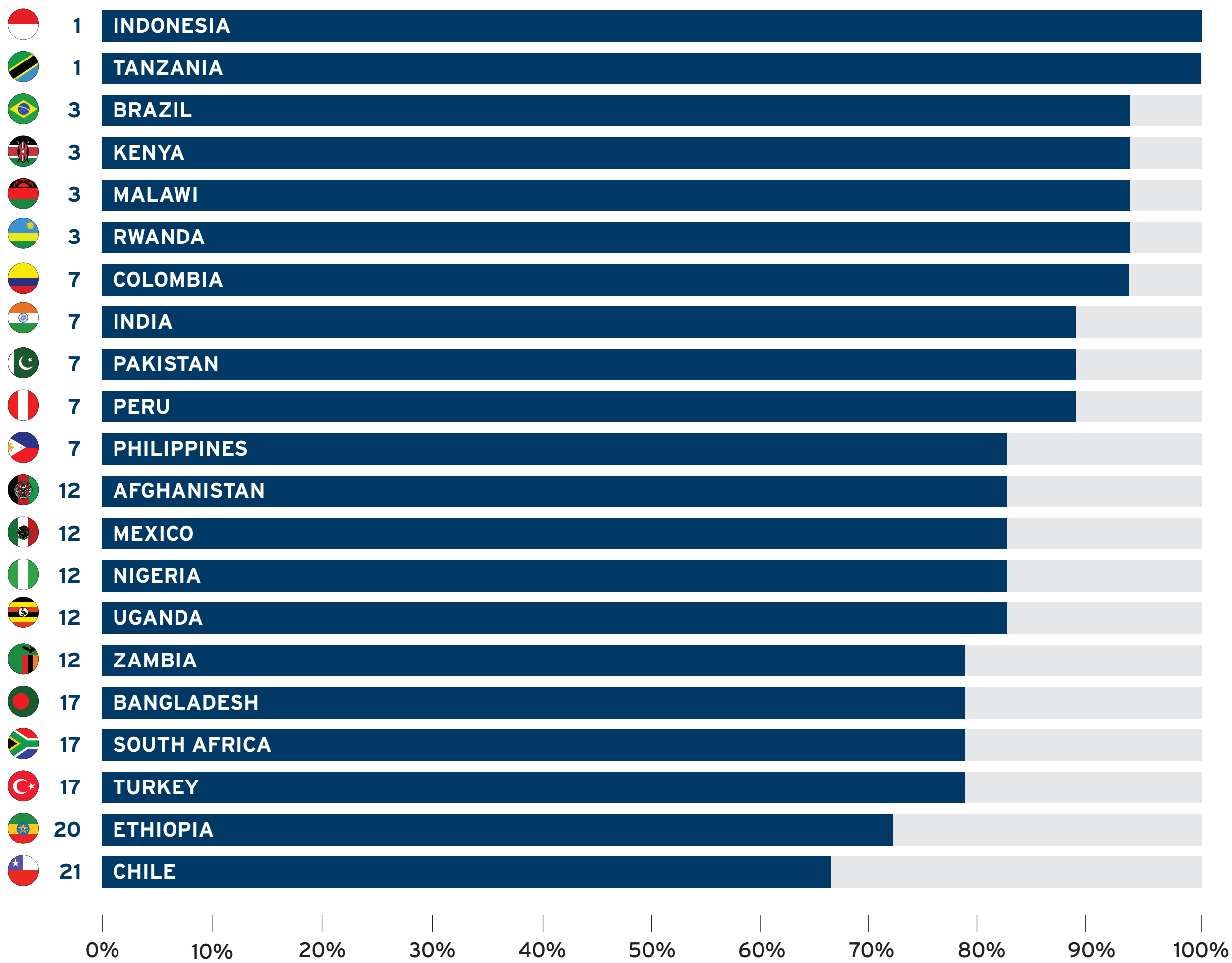
Ensuring that users of different services can send money to one another easily facilitates use of mobile money. For this reason, among others, we encourage the

Regulators have taken a wide range of approaches toward the issuing of e-money and associated mobile financial service provision. MNOs and banks must generally collaborate on mobile money offerings[104] since the operator provides the data channel for customers and agents to interact while a bank (or another regulated financial institution) keeps the deposits that mirror the electronic value stored in customers' and agents' wallets.[105] While we recognize that mobile money services do not exist within a bank-led/MNO-led binary[106] — for example, microfinance institutions and independent third-party providers have entered the mobile money space[107] — we highlight the MNO-led model in our study because most mobile money users are operating under this scheme,[108] and because it has been very successful in providing mobile financial services to those at the bottom of the economic pyramid.[109] [110]

movement toward platform interoperability, meaning that subscribers of different networks are able to easily send money to one another across networks.[114] This process requires a significant amount of coordination both in terms of infrastructure and of the standards to which providers must agree. Some analysts have cautioned against requiring interoperability too early in the development of mobile money services, as providers may be hesitant to invest in infrastructure that other entities can build on.[115] However, we believe that at least requiring operators to develop the capacity to connect their platforms is important for facilitating future interoperability and greater takeup of services by consumers. In 2014, MNOs interconnected their services in two FDIP countries, Pakistan and Tanzania; interoperability was implemented in Indonesia in 2013.[116]

Indonesia and Tanzania were the top-scoring countries in the regulatory environment dimension. Both of these countries recently developed interoperable systems and have relatively enabling regulatory environments that permit non-banks to enter the mobile money ecosystem.[117] Still, even in high-performing countries like these, opportunities exist for improving the regulatory environment. For example, while Indonesia has moved forward with more enabling regulation relating to its cash-in/cash-out platform,[118] e-money regulations by Bank Indonesia disproportionately favor the four major banks. These banks can offer services through a wide variety of agents, while smaller banks and telecommunications companies can use only formal entities as their agents — meaning that small entities like the mom-and-pop shops frequently found in Indonesia are broadly unable to act as agents.[119] Branchless banking regulations by Indonesia's new financial services authority Otoritas Jasa Keuangan (OJK) are more flexible, allowing a variety of banks to offer a broad array of financial services through agents.[120] However, the OJK regulations include a

Regulatory Environment Scorecard



provision that agents must be exclusive, which could limit the utility of the service among consumers.[121]

Risk-proportionate KYC and customer due diligence processes enable financial service providers to ensure the identification requirements for customers with low-value or otherwise low-risk accounts are not overly stringent in order to reduce access barriers to financial services.[122] This risk-based approach facilitates financial services provision for the underserved. Tiered KYC procedures in Mexico, in which different "levels" of accounts have different documentation requirements and transaction limits, have been associated with facilitating greater access to financial accounts for low-income individuals.[123] Another example of enabling identification requirements is in the Philippines, where customers seeking Globe and SMART mobile money products need to present only one ID card and have the option of presenting a company-issued ID, among many other types of IDs.[124] While enabling regulations and policies such as proportionate KYC are important, lack of documentation continues to pose challenges to takeup in many developing economies such as Malawi.[125]

Adoption ranking

The last dimension of evaluation focuses on adoption of traditional and digital financial services. We sought to capture the state of financial inclusion in each focus country through penetration of traditional accounts, digital services linked to traditional formal financial institutions (e.g., debit cards), and mobile money accounts. We have included measures pertaining to women and low-income and rural individuals, given that these groups are often affected by disparities in access to financial services.

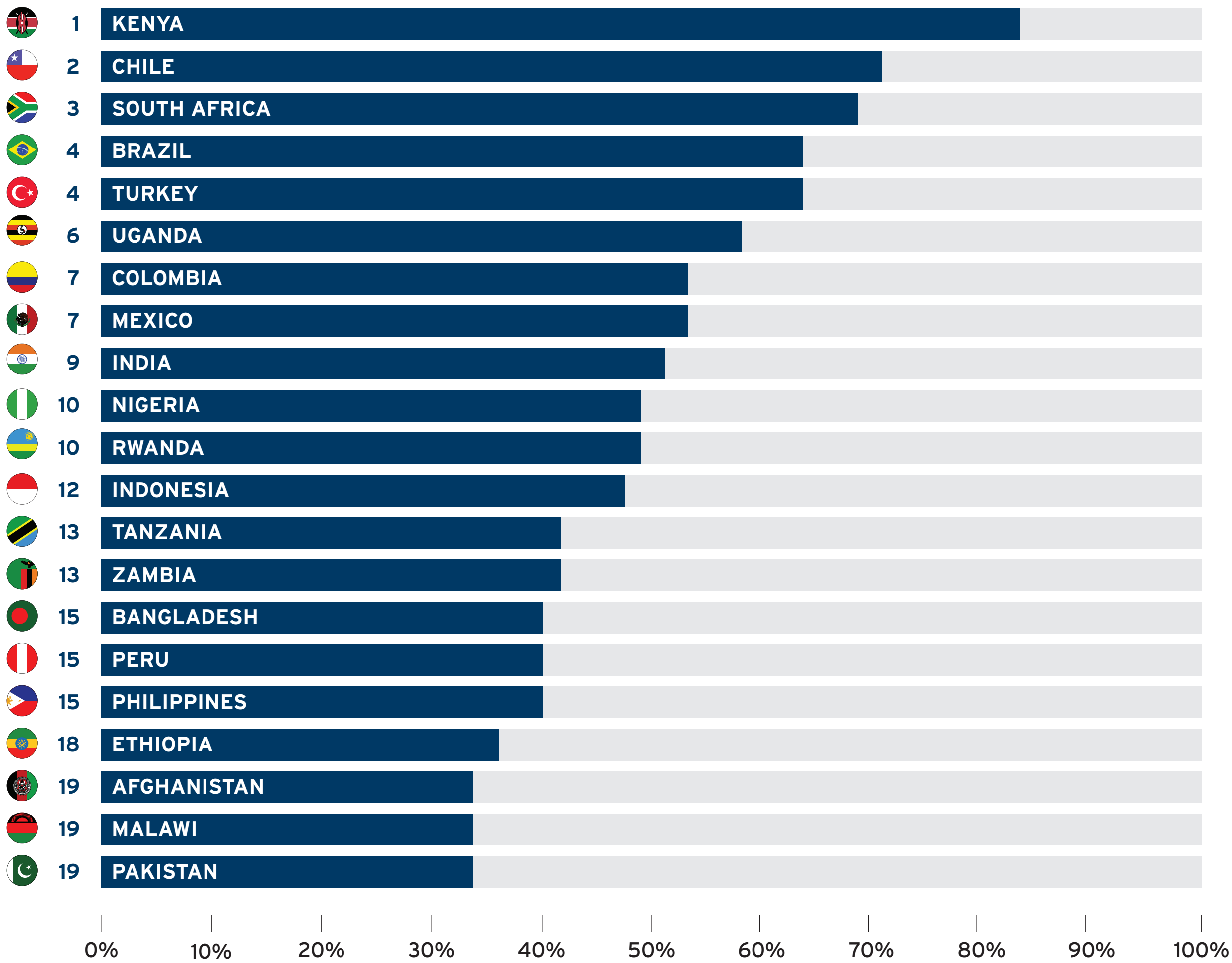
Measurement of adoption focused on traditional account penetration among the total population, rural adults, low-income adults, and women; the percentage of adults who borrowed and saved at a financial institution within the past year; the percentage of debit and credit card use; the percentage of adults utilizing online bill payment and purchases; the percentage of mobile money account penetration among the general population, rural adults, low-income adults, and women; the percentage of wage earners using a mobile phone to receive salary and wages; and the percentage of adults who used a mobile phone to make utility payments (among those regularly paying utility bills). As noted in the scoring description section of this report, for each of the percentage indicators in the adoption dimension, the scoring ranges were normalized since the range of data across all countries included in this study spanned a relatively narrow subrange.

All scores for the indicators in the adoption dimension are based on data from the 2014 Global Financial Inclusion (Global Findex) database. With respect to these indicators, it is important to note that the Global Findex considers dormant accounts to be those that have not been accessed within a year — but notes that even dormant accounts with formal financial institutions are typically preferable to not having accounts since at least the account may be readily accessible if the customer later decides to use it.[126] For example, as part of the Pradhan Mantri Jan-Dhan Yojana initiative, by the end of January 2015 about 125 million new bank accounts had been opened in India. However, about 72 percent of the accounts showed zero balances.[127] We will be better positioned to assess initiatives like this in future years as more usage statistics for both formal financial institution and mobile money accounts become available.

Kenya is the top-ranked country in the adoption dimension. Its financial services sector is characterized by very high rates of mobile money usage: The 2014 Global Findex found that 58 percent of adults in Kenya had used mobile money within the preceding 12 months.[128] The leading driver of this success is the widely used M-Pesa deployment, which is discussed further in the Kenya summary.

Lower-scoring countries such as Afghanistan and Pakistan tended to have weaker mobile and banking infrastructure and/or few mobile money offerings. This made it difficult for people to access financial services or take advantage of alternative payment systems. Moreover, unless there is awareness of services and trust in these services, it is difficult to get people to take advantage of them.

Adoption Scorecard



DIVERSE ROADMAPS TOWARD INCLUSION

Our goals in this project were to compile and analyze data on global financial inclusion, rank selected countries on the path to financial inclusion, examine the benefits of digitizing financial services, and develop action-oriented recommendations on ways that central banks, ministries of finance, ministries of communications, bank and non-bank financial service providers, and mobile network operators can design appropriate policy and regulatory frameworks for inclusion. As part of this analysis, we have identified several conclusions regarding ways to advance access to and use of financial services by key stakeholders in each country.

1. Country commitments matter.

Of the FDIP countries that received the highest score for country commitment (India, Nigeria, Pakistan, Rwanda, Tanzania, Uganda, and Zambia), all completed at least one of their latest Maya Declaration targets or achieved targets within the Maya Declaration's key policy areas.[129] These policy areas include digital financial services, consumer protection, financial literacy, financial inclusion data, national financial inclusion strategy, and SME finance.[130]

We identified four key takeaways regarding the nature of country commitments. First, joining multinational financial inclusion networks such as the Alliance for Financial Inclusion and Better Than Cash Alliance can drive development of country commitments and facilitate knowledge-sharing among different entities. Each of our FDIP countries is a member of a financial inclusion-oriented network, although some are more engaged with these networks than others.

Second, establishing a national financial inclusion strategy with measurable targets is an important component of financial inclusion. National financial inclusion strategies have been correlated with increases in account ownership, although it is much more difficult to establish the existence of a causal relationship. Countries that have national financial inclusion strategies have been shown to have twice the average increase in the number of account holders as countries without financial inclusion strategies, and setting measurable goals provide financial inclusion authorities with incentives to operationalize commitments and adopt best practices.[131] We found that there is further room for growth regarding the existence of quantified goals within national financial inclusion strategies, since (as of May 2015) about one-third of FDIP countries lacked publicly available, readily accessible, national-level quantifiable goals relating to financial inclusion.

Third, based on an assessment of our top-scoring countries, we believe that the development of a dedicated financial inclusion body is a valuable, but not always essential, mechanism for promoting financial inclusion. For example, Mexico's Financial Inclusion Council has been credited with advancing broad

Joining multinational financial inclusion networks such as the Alliance for Financial Inclusion and Better Than Cash Alliance can drive development of country commitments and facilitate knowledge-sharing among different entities.

In a majority of countries in which mobile money was available as of 2014, mobile money agent outlets outnumbered bank branches

representation in the development of financial inclusion strategies and working toward better data and measurement policies to inform those strategies.[132] In contrast, consultation between the public and private sectors in Kenya regarding financial inclusion-related initiatives and approaches was conducted without the existence of a dedicated financial inclusion body.[133]

Fourth, we believe that central banks and ministries of finance should lead or support the development of nationally representative demand-side financial services surveys to complement supply-side data. These surveys enable financial inclusion authorities to better diagnose the financial inclusion landscape and implement appropriately targeted solutions. While the majority of FDIP countries have recently led or supported a national demand-side financial services survey, as of May 2015 very few FDIP countries had publicly available surveys that disaggregated by gender, geography, income, and other demographic features, suggesting an opportunity to more fully integrate data-driven inclusion approaches into national strategies.

2. The movement toward digital financial services will accelerate financial inclusion.

In many respects, digital financial services drive growth in financial inclusion. Digital financial services such as mobile money provide individuals with greater convenience, privacy, and, in many cases, enhanced security compared to storing cash at home or traveling with cash.[134] Mobile money has been particularly successful in countries where there is often a lack of legacy systems and established traditional financial institutions — for example, in many sub-Saharan African countries.[135]

However, mobile money has tremendous potential to drive financial inclusion beyond Africa. For example, mobile money outlets in many countries are more accessible than banks, which we expect will continue to drive adoption of mobile money services. In a majority of countries in which mobile money was available as of 2014, mobile money agent outlets outnumbered bank branches, providing more access points for individuals who might previously have been unable to engage with formal financial services.[136] We anticipate in future years, as smartphones become more prevalent, agent networks expand, and consumers become more familiar with digital financial service offerings, use of mobile money will continue to expand beyond Africa.[137]

In order to leverage technology to promote financial inclusion, government ministries, bank and non-bank financial service providers, and mobile network operators should place a high priority on building digital communications and payments infrastructure. Having accessible and affordable infrastructure is crucial for long-term economic development and financial inclusion. This includes robust mobile networks, accessible Internet service, sufficient cell towers for mobile communications, reliable connections that enable people to access needed financial services, and strong digital payments infrastructure. For example, in Peru, an ecosystem of mobile payments is being developed by Peru's telecommunications and banking sectors under the leadership of Asbanc (the national bank association) as a means of ensuring a single platform for all parties engaged in mobile payments and facilitating financial inclusion.[138] The integrated system is expected to help facilitate broad use of digital financial services. In India, the National Payments Corporation of India provides two services, the National Unified USSD Platform and Immediate Payment Service, which enable basic mobile banking options from customers on any mobile network and any handset and facilitate fund transfers between mobile accounts, respectively.[139] Ensuring networks are reliable is critical for building trust in digital financial services. For example, a UNCDF Mobile Money for the Poor report noted that non-users of digital financial services from both urban and rural areas interviewed in Uganda in October 2014 cited unstable networks as one of their top three reasons for not using digital financial services.[140]

Moreover, finance leaders should incentivize use of affordable, high-quality digital financial services. For example, offering government-to-person, person-to-business, person-to-person, and other financial services through digital channels such as mobile technology can facilitate access to and use of financial services by those who otherwise would be excluded from them. Mobile money providers can provide incentives such as reduced fees to increase takeup of their services. For example, in Pakistan, mobile money service Easypaisa launched a P2P pilot in 2014 that "eliminated all fees related to money transfers (P2P) between Easypaisa account customers and cash-out transactions."[141] Providing such incentives should speed the adoption of digital money.

3. Geography generally matters less than an enabling policy, legal, and regulatory environment, but some regional trends in financial services provision are nonetheless evident.

The five top-rated countries in the "adoption" dimension of the 2015 FDIP Scorecard (Kenya, Chile, South Africa, Brazil, and Turkey) represent diverse regional backgrounds and affinity for different digital financial services. For example, debit and credit card use was lower in Kenya and Uganda than in the other three top-scoring countries, while use of mobile money accounts (both by total adult population and by demographic breakdown) was significantly higher in Kenya and Uganda than the other countries.

While these other countries had lower rates of mobile money usage, their adoption of other branchless banking services was generally strong. For example, the extensive banking correspondent (also known as banking agent) systems in many South American countries such as Brazil have been credited with expanding basic banking access and incentivizing use of formal financial services among traditionally under-served populations.[142]

Among the 21 FDIP countries, the developing nations in Asia generally ranked lower on the scorecard. Most received low scores for formal account penetration among low-income individuals, as well as for digital financial services such as debit card use, credit card use, internet use for bill payment and purchase, and mobile money adoption. However, we anticipate that in certain countries where regulatory reforms are underway, such as Indonesia and India, adoption of formal financial services will be accelerated. In other countries such as Pakistan, addressing gender disparities in access to and use of formal financial services, raising awareness of mobile money functionality, and ensuring services are targeted toward the population (e.g., providing menu options in local languages) will help drive adoption.

The countries that scored the highest overall on the FDIP scorecard demonstrate that there are a variety of pathways toward financial inclusion. The table below shows the overall ranking and overall score for each of the five leading FDIP countries, in addition to their performance on specific dimensions. In examining why some countries perform better than others, each of the top five countries demonstrated significant national-level commitment to financial inclusion and reasonable progress on adoption (all these countries scored within the top 10 in terms of adoption, and all but one was within the top five).

Kenya was ranked number one in part because it has accessible mobile networks, a regulatory framework that promotes digital financial services, and service providers that offer targeted financial products that reflect market interests and drive adoption. The result has been a digital ecosystem that is flourishing. In South Africa, initiatives to digitize government transfers, along with the country's quite extensive banking infrastructure, have supported financial inclusion; efforts to diversify the digital financial services market and encourage digital transactions could propel further advancements in financial inclusion. Rwanda and Uganda have demonstrated national commitment to financial inclusion and have fostered increasingly enabling regulatory environments; further work remains in strengthening digital and payments infrastructure and increasing adoption of formal financial services.

Other countries that performed well, but not quite at the level of Kenya and other top-scoring countries,

Roadmaps to Financial Inclusion Among the Top Five FDIP Countries

	KENYA	SOUTH AFRICA	BRAZIL	RWANDA	UGANDA
Overall Rank	1	2	3	4 (tie)	4 (tie)
Overall Score	89%	80%	78%	75%	75%
Country Commitment Score	89%	89%	89%	100%	100%
Mobile Capacity Score	94%	100%	83%	94%	83%
Regulatory Environment Score	94%	78%	94%	94%	83%
Adoption Score	84%	69%	64%	49%	58%

have opportunities to improve their mobile capacity and/or regulatory frameworks to better optimize them for the emergence and adoption of innovative digital financial services. For example, India is in the process of building out its mobile networks, encouraging the entry of new financial service providers within the digital financial ecosystem, and attempting to increase accessibility by lifting restrictions on agent locations and modifying stringent know-your-customer requirements.[143]

The variation across national boundaries provides guidance on what central bank and finance ministry leaders can do to improve financial inclusion, in addition to making a commitment to financial inclusion. Policymakers and regulators should work in conjunction with bank and non-bank financial service providers and telecommunications industry leaders to promote access and usage that will move them closer to financial inclusion.

4. Central banks, ministries of finance, ministries of communications, banks, non-bank financial providers, and mobile network operators have significant roles in achieving greater financial inclusion and need to closely coordinate with respect to policy, regulatory, and technological advances.

Regardless of the degree to which policies follow practice or vice versa, one of the critical ingredients in creating an enabling financial inclusion environment is the willingness of public and private sector leaders to coordinate to extend access to and use of financial services. For example, the Bank of Tanzania closely monitored the development of new digital financial services and facilitated dialogue with mobile money providers before developing regulations specifically surrounding mobile money services and non-bank mobile money offerings. As noted, dedicated financial inclusion bodies can serve as useful platforms for engagement.

Government authorities can utilize legal, regulatory, and policy mechanisms to encourage a financial inclusion-enabling environment within the private sector. For example, these authorities can (1) Open up the financial services market to both bank and non-bank players by leveraging regulatory and policy, (2) Encourage interoperability among providers and non-exclusivity among agents, (3) Minimize burdensome restrictions on service provision that constrain scalability, and (4) Design tiered/graduated taxes to avoid barriers to usage by financially underserved groups.

Opening up the financial services market to non-bank entities can broaden the field of providers, reduce prices through competition, and drive adoption. In order for digital financial services to be effective, regulations and policies must reflect a balance between being sufficiently flexible to permit innovation and providing sufficient clarity to encourage diverse providers to enter the market. A study by David Evans and Alexis Pirchio of mobile money adoption in 22 developing nations found that "[h]eavy regulation, and in particular an insistence that banks play a central role in the schemes, together with burdensome KYC and agent restrictions, is generally fatal to igniting mobile money schemes."[144]

Building a competitive digital ecosystem is vital for the future of financial inclusion. While there often have been monopolies or near-monopolies in key sectors, it is important for banks, non-banks, mobile network operators, and digital payment firms to provide accessible and affordable services for the unbanked. Competition across sectors can keep fees down and access open to a range of consumers and businesses.

Government authorities can use regulations to encourage interoperability and limit agent exclusivity. Governments do not have to mandate that providers achieve interoperability — in fact, doing so might constrain growth of the services[145] — but the appropriate regulations and policies should ensure that payments systems allow interconnection across platforms. Allowing customers of one provider to use the agent of another provider can also expand financial access.

Regulators should minimize conditions on service provision — for example, high minimum capital requirements and convoluted licensing restrictions — that constrain the ability of entities to enter the market and potential to attain sustainable profits. For example, in 2013 Bank Indonesia removed a requirement that agents could not perform cash-out unless the outlet had a remittance license issued by the bank in order to reduce barriers to service provision and facilitate takeup of agent services.[146]

Other important means of reducing barriers to access and usage of financial services include designing tiered/graduated taxes to avoid barriers to usage by financially underserved groups and keeping taxes on telecommunications and mobile money providers reasonable so that they can keep fees low.[147] One of the biggest disincentives for mobile devices, and consequently mobile money, is high charges. Some places, such as Mexico, South Africa, Bangladesh, and Brazil have "connectivity" taxes on mobile broadband that

> Another important means of reducing barriers to access and usage of financial services is to design tiered/graduated taxes and keep taxes on telecommunications and mobile money providers reasonable so they can keep fees low.

increase the cost of mobile services and represent a significant access barrier, especially for underserved communities where affordability is a major consideration. In those places, it is hard to expand mobile money usage when people can't afford mobile devices or services in the first place due to high taxation. Similarly, some countries impose per-user fees on mobile operators, discouraging them from investing in services for unconnected communities (because they will generate less revenue, yet comparable tax bills).[148]

Keeping these taxes low is an effective way to expand financial services. A 2011 Telecom Advisory Services study by Raul Katz, Ernesto Flores-Roux, and Judith Mariscal found that reducing Brazil's 43.3 percent tax on mobile services by one percentage point could raise the number of subscribers between 520,000 and 1,050,000 subscribers.[149] With respect to taxes on mobile money providers, Kenya provides one example of such a tax affecting fees on customers. In early 2013, Kenya's National Treasury instituted a 10 percent excise duty tax on transaction fees for money transfers. To attempt to recover some of the cost, Safaricom charged an additional 10 percent on M-Pesa transfers exceeding 101 shillings (amounting to about $1.20).[150]

With respect to facilitating financial inclusion among individuals, government authorities can also reduce access barriers and encourage use by (1) Incentivizing use of formal financial services through government-to-person payment programs, (2) Facilitating risk-proportionate know-your-customer requirements, and (3) Developing digital financial identification programs.

For example, with respect to using government-to-person (G2P) payments to incentivize adoption of formal financial services, a study of Mexican social welfare program Oportunidades found that using debit cards as the means of disbursing G2P payments was associated with an increase in the number of families using banking services.[151]

Central banks and finance ministries can reduce access barriers for marginalized groups through risk-proportionate know-your-customer requirements, as well as digital financial identification programs. The study by Evans and Pirchio found that the countries with the most successful mobile money schemes generally had "relatively light KYC requirements and minimal restrictions on who could serve as an agent."[152]

A number of countries have undertaken electronic identification programs that help low-income individuals to access benefits, subsidies, and certain financial services. For example, India's Unique Identification Authority of India (UIDAI) provides a unique identification number (Aadhaar number) to all citizens, and payments to those individuals can be transferred over a UIDAI-linked payment system.[153]

Bank and non-bank financial service providers and mobile network operators clearly also have a major role in advancing financial inclusion. For example, financial service providers and mobile network operators can advance financial inclusion by (1) Developing and implementing interoperability agreements, (2) Strengthening mobile and digital networks, (3) Extending financial access points, and (4) Ensuring services target customer needs. For instance, in Tanzania, representatives of the payments and mobile industries worked together to lead efforts on defining the operating standards for interoperability, which was implemented in 2014.[154] As noted, mobile network operators in Indonesia and Pakistan also recently interconnected their networks (2013 and 2014, respectively).[155] Interoperability initiatives have the potential to facilitate greater customer convenience and consequently encourage further adoption of mobile money services.

Ensuring networks are reliable is critical to building customer trust, and expanding agent networks will remove access barriers for many underserved individuals who do not have the time, money, or inclination to travel long distances to reach formal financial service providers. Additionally, service providers should make an effort to identify market needs and develop products that fit those needs — for example, a recent InterMedia survey noted that adoption of mobile money in Pakistan may be constrained by the lack of traditional Urdu script within mobile money menus.[156]

5. Full financial inclusion cannot be achieved without addressing the financial inclusion gender gap and accounting for diverse cultural context with respect to financial services.

Having extensive mobile networks and accessible financial services will not be sufficient unless barriers to usage are reduced at the "last mile" of access at the village level. There are a range of potential barriers at this level, including mistrust of formal financial services or personal preferences for cash transactions.[157] [158] For example, in many countries where digital money has been set up for government payments, people automatically empty their accounts so they can rely upon cash payments.[159] This trend demonstrates that it can be difficult to persuade people that digital money is more secure than cash, there is less fraud involved, and there are benefits to relying upon this technology.[160]

Thus, it is vital to build consumer trust in digital money. To facilitate acceptance of formal financial services, the public and private sectors must educate the public about these services, strengthen communications networks to ensure reliability and efficiency, and ensure services are accessible and affordable.

However, even if individuals are interested in using formal financial services, equitable access to these services may be constrained by legal restrictions, cultural norms, or educational disparities.

The 2014 Global Findex report found that the financial inclusion gender gap has not narrowed: An average difference of 7 percentage points globally in financial account ownership between men and women has persisted from 2011 to 2014, and in developing economies the gender gap has remained at 9 percentage points.[161] Financial inclusion cannot be achieved without addressing these disparities.

The FDIP countries with the highest financial account penetration among women are Kenya, South Africa, Chile, and Brazil. Of those countries, Kenya is the only country that is not among the top ten FDIP countries in terms of GDP. However, Uganda, which is among the bottom four countries in terms of GDP, is the only country besides Tanzania that received a score of “two” in terms of the mobile money accounts among women (only one other country, Kenya, received a higher score).

This suggests that mobile money can serve as a valuable channel for providing access to financial services among those who might not otherwise be able to engage with them, particularly in countries with less extensive resources. We predict that as mobile phones (especially smartphones) become less expensive and more prevalent, more women will be able to access and use formal financial services.[162]

An important step in achieving equitable financial inclusion is for governments to establish a set of financial inclusion indicators that are disaggregated by gender. Governments should consult these indicators to support or lead financial services surveys that assess the status of financial inclusion across demographic sectors. For example, FinScope surveys conducted in countries such as South Africa track financial access and use by gender, among other demographic groups.[163] Only by identifying who does or does not use financial services, and why, can governments effectively craft targeted frameworks with measurable goals for increasing equitable financial access and use.

Financial service providers can alleviate cost, convenience, and security concerns for women and other marginalized groups by building up agent networks. Additionally, financial service providers can ease some cultural barriers for women who are concerned about transacting with male staff members at financial service points by recruiting more female staff members.[164] Some have suggested that increasing financial literacy among women could also help facilitate greater use of financial services,[165] though the role of financial literacy in advancing financial inclusion remains mixed.[166] However, in some countries legal and/or cultural traditions still limit the ability of many women to control their financial lives. For example, in some Middle Eastern and South Asian countries, women are required to have a husband or male relative co-sign in order to obtain a loan.[167] These systemic issues must be addressed in order to ameliorate the financial inclusion gender gap.

An average difference of 7 percentage points globally in financial account ownership between men and women has persisted from 2011 to 2014, and in developing economies the gender gap has remained at 9 percentage points.

AFGHANISTAN

OVERALL RANK
#20

OVERALL SCORE
58%

DIMENSION SCORES

Country commitment	56%
Mobile capacity	94%
Regulatory environment	83%
Adoption	33%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$20	16	39%	10%	4%

Formal commitment milestone

- Committed to the Alliance for Financial Inclusion in 2009

Selected financial inclusion highlights

- Money Service Providers Regulation was issued in 2008, with electronic money institution-related amendments implemented in 2011
- The Afghanistan Payments Systems was established in 2011 and aims to encourage payments interoperability — for example, by allowing payment service providers such as mobile network operators to connect their mobile money systems

Ranking highlights

- As of May 2015, three mobile money providers offered an array of financial services, including bill payment and international remittances
- With significantly higher rates of mobile penetration than bank account ownership, opportunities remain for expanding mobile money takeup

Next steps

- Instituting agent banking regulations could enable the expansion of financial service points in underserved areas
- Building awareness and trust in formal financial services will help facilitate financial inclusion

Afghanistan

Overview

Decades of conflict, systemic corruption, and limited banking infrastructure render the many advantages of digital financial services — including transparency, efficiency, security, and cost-effectiveness — particularly attractive in Afghanistan. With several live deployments offering mobile money services as of May 2015 and over 80 percent of the population covered by a 3G mobile network, Afghanistan is positioned for further growth within its mobile financial services ecosystem.[6] However, distrust of formal financial mechanisms, lack of sufficiently widespread awareness of mobile financial services, insufficient agent capacity, and a need for interoperability across platforms are issues that should be addressed in the future to further advance digital financial inclusion in the country.[7]

Access and usage

Banking landscape

Banking infrastructure is very limited in Afghanistan. In 2013, there were about 0.6 commercial bank branches per 1,000 km^2 and about two bank branches for every 100,000 adults.[8] As of 2014, only about 10 percent of adults in Afghanistan had an account at a formal financial institution.[9] The share of women and lower-income individuals with accounts was even lower: About 4 percent of women held an account at a formal financial institution, as did about 7 percent of those in the bottom 40 percent.[10] The percentage of adults saving with and borrowing from financial institutions was also low in 2014, at about 4 percent each.[11]

Mobile ecosystem

In contrast to access to traditional "brick and mortar" bank branches, access to mobile coverage is fairly widespread: In 2012, the Afghan Ministry of Communications and Information Technology stated that more than 90 percent of the population lived in areas with access to mobile cellular services.[12] As of 2014, takeup of mobile phones was also relatively high: While less than 5 percent of adults in Afghanistan had bank accounts, over 63 percent were mobile phone subscribers.[13] [14] In 2013, for every 1,000 adults there were about seven active mobile money accounts and about 89 registered mobile money accounts.[15] The 2014 Global Financial Inclusion (Global Findex) database found that less than 1 percent of adults over age 15 used mobile money, with almost no adults in the bottom 40 percent of the income scale using the service — thus, there is significant room for growth.[16]

As with many mobile money systems, one of the primary challenges has been the creation of a reliable agent system with sufficient liquidity.[17] A 2013 report by the International Finance Corporation stated that Afghanistan's hawala network, in which unofficial brokers provide money transfer services based on an honor system, was less expensive and more trusted than other transfer services.[18] As of 2010, about 152 hawala dealers had been licensed by Da Afghanistan Bank as money service providers; a 2013 report noted that there were an estimated 3,000 to 5,000 hawala agents in the country.[19] It is possible that this existing network of brokers could serve as a pool from which to expand and build trust in the country's agent network.[20] As of 2013, there were about four active agent outlets per 100,000 adults and about one active agent outlet for every 1,000 km^2.[21]

As of May 2015, according to the GSMA's Mobile Money for the Unbanked Deployment Tracker, Afghanistan had several active mobile money deployments: Telecommunications company Roshan's M-Paisa service, Etisalat's mHawala service, and Afghan Wireless Communications Company (AWCC)'s My Money service (provided through subsidiary Afghan Besim Mobile Money Co.).[22 23] At the end of the first quarter of 2015, Roshan had the largest market share of Afghanistan's mobile network operators (MNOs).[24] As of May 2015, Roshan's M-Paisa service offered merchant payments, airtime top-ups, person-to-person domestic transfers, bill payments, and loan repayment and disbursement, as well as links to other banking products.[25]

The M-Paisa service was created by Vodafone and Roshan in 2008[26] and was first utilized to facilitate payroll for Afghanistan's national police force.[27] This payment method highlighted the efficiency of digital financial services, for example, by preventing third-party agents, who typically paid government workers in cash, from siphoning as much as 30 percent of the paychecks.[28] The pilot between the Afghan National Police and Roshan ended in December 2014 with about 300 policemen.[29]

M-Paisa facilitates fund transfers through text messaging and an Interactive Voice Response (IVR) system, the latter of which is available in Dari, Pashto, and English.[30] Offering IVR in a number of languages ensures that the services are broadly accessible. With M-Paisa, customers can engage in a variety of financial services, including repayment of loans to microfinance institutions (MFIs) and bill payments, fund transfers, salary disbursements, and airtime purchases.[31] Roshan's website notes that its mobile network covers 230 cities and towns across all 34 of Afghanistan's provinces.[32]

My Money's services are somewhat more limited — in May 2015, they included services such as domestic person-to-person transfers, merchant payments, salary payments, and airtime top-ups.[33] My Money's Web page noted in early 2015 that it hopes to "provide electricity bill payment services and international funds transfer/receipts services in the near future."[34] In May 2015, mHawala offered an array of services, including international remittances, bill payment, and mobile microinsurance.[35]

Country commitment and regulatory environment

While Afghanistan has not made specific committments under the Maya Declaration,[36] the government has committed to the principles of the Better Than Cash Alliance, which provides expertise to and knowledge-sharing opportunities among entities involved with the transition to digital payments.[37] The government also formed a Digital Finance Committee to oversee the salary payments of civil servants.[38] There is currently no national financial inclusion strategy in place in Afghanistan, and no recent national demand-side surveys of financial services appear to be publicly available.[39] Executing such a survey could provide useful data in crafting a future strategy.

Regarding players within the regulatory sphere, Da Afghanistan Bank (DAB) is responsible for licensing, regulating, and supervising banks, money service providers, payment system operators, and other relevant entities, while the Ministry of Finance collects revenue and provides budget formulation, payments processing, and other services to various government agencies.[40]

The Microfinance Investment Support Facility for Afghanistan (MISFA), a non-profit limited liability company, is owned by the Ministry of Finance and acts as the country's apex body for MFIs and other development finance institutions supporting financial inclusion for underserved individuals as well as sustainable growth of small- and medium-sized enterprises.[41 42] Several other key players in Afghanistan's financial inclusion sector are discussed below.

The Afghanistan Payments Systems (APS) was established in 2011 with a share capital from its three shareholders: Bank-e Mille Afghan (BMA), Pashtany Bank (PB), and Ghazanfar Bank (GB).[43] APS currently has four full members: Aziz-e-Bank, BMA, PB, and GB.[44] The mission of the APS is "[t]o deliver a shared interoperable retail payments infrastructure, which provides a low cost, multi-channel switch that combines ATM and POS payment processing & switching, merchant acquiring, card services and Mobile Financial Services for the mutual benefit of all consortium members."[45] Among the key objectives of the APS are to support financial inclusion[46] and comply with the mission of the Better Than Cash Alliance, of which Afghanistan is a member, by implementing innovative banking technologies.[47] The APS seeks to promote payments interoperability by encouraging all banks, MNOs, and agent aggregators to connect to the National Switch.[48]

APS has received over $5 million from the World Bank for the hardware and implementation of a national card and mobile payment switch,[49] which is expected to be implemented by the APS by the end of 2015.[50] The platform will enable any user to transfer and receive money from any ATM, point-of-sale terminal, or mobile phone.[51]

In August 2011, Dr. Rajiv Shah, the United States Agency for International Development (USAID) administrator at the time, announced the approval of USAID/Financial Access for Investing in the Development of Afghanistan (FAIDA) grants totaling $2.1 million to support the expansion of mobile money solutions among MNOs Etisalat, MTN, and Roshan.[52]

USAID, through its funded project FAIDA, also awarded grants from 2012 to the present to cover the APS's operational expenses and provide technical support.[53] Additionally, FAIDA launched a $5 million mobile money innovation grant providing funds to MNOs to establish the infrastructure for mobile money services.[54]

FAIDA has supported three of the four major MNOs (Roshan, Etisalat, and AWCC) with investments of over $3 million to date in their mobile money platforms.[55] According to FAIDA, the value of transactions through the three mobile money services supported by FAIDA reached about $1.7 million in May 2015, with around 18,500 customers.[56] Overall, FAIDA has been a key player in promoting the mobile money sector in Afghanistan, for example, by supporting the establishment of the APS to promote platform interoperability.[57]

FAIDA seeks to promote mobile money, branchless banking, and electronic payments efforts conducted by commercial banks, MNOs, MFIs, IT solutions providers, etc. FAIDA has helped promote the regulatory and infrastructure components of the mobile money ecosystem by coordinating among public and private sector actors and engaging with the government to promote civil service salary payments, among other initiatives.[58] FAIDA is promoting a mobile money and branchless banking awareness campaign, implementing a platform to enable electronic payment of municipal taxes via mobile money channels, and instituting 200 "white label" agents across Kabul who will be able to serve customers irrespective of their mobile network operator.[59]

In terms of specific regulations, the Money Service Providers Regulation states that "the EMI [e-money institution] entity must ensure that the mobile money system must use technological and other standards which will permit eventual interconnection and operation of other mobile money systems."[60] E-money is defined as "monetary value that is stored on an electronic device or server, accepted in exchange for undertakings other than the issuer, and generally intended to make payments or transfer money for another purpose, of a limited amount." The regulations note that e-money is not considered a deposit; instead cash-in/cash-out transactions at EMIs are considered "check cashing," while mobile value transfers are considered "money transmission."[61]

With the technical assistance of FAIDA, the DAB made a number of key amendments to the Money Service Provider regulations, including anti-money laundering and countering the financing of terrorism provisions, and provisions to improve transparency and accountability among mobile money operators and agents.[62] The amendments were approved by the Supreme Council of the DAB in July 2011 and approved for implementation in October 2011.[63] Following the implementation of this new regulation, Da Afghanistan Bank issued new EMI licenses to Roshan, Etisalat, and AWCC.[64]

As of September 2013, money service providers could operate as e-money institutions and perform e-money transfers with a special license from DAB; however, they could not accept deposits or grant loans.[65] Banks and non-bank financial institutions could operate as e-money institutions, but those sectors were subject to different guidelines from non-financial institutions.[66] Uses for e-money include peer-to-peer or person-to-person transfers, bill payments, airtime top-up, and money transfers or remittances.[67] Electronic money issuers are permitted to provide mobile banking, mobile finance, microcredit, and microinsurance services.[68] Tiered know-your-customer (KYC) procedures are permitted within the Money Service Providers Regulations — low-, medium-, and high-risk categories are in place, with varying minimum and maximum transaction amounts and customer ID requirements associated with each level of risk.[69] No regulations appear to have been developed regarding agent banking.

While digital financial inclusion efforts such as those described above have the potential to increase access to and use of financial services, challenges remain, including lack of trust in the formal financial system and fairly low levels of international remittances to generate further interest in and use of digital financial solutions.[70] However, adoption of mobile financial services in other countries demonstrates the potential of this channel for increasing access to and use of formal financial services. Accelerating interoperability through the planned shared switch infrastructure could contribute to the accessibility, cost-effectiveness, and efficiency of mobile services.[71] Finally, expanding the agent network in Afghanistan will be critical for ensuring access to services, particularly for those in remote areas. The development of guidelines surrounding agent banking could provide clarity to providers seeking to advance this service — with the caveats that the value proposition for banks may be more limited than for mobile providers, and lack of trust in banks could constrain the success of any such service.[72]

See Afghanistan endnotes on page 143

BANGLADESH

OVERALL RANK
#16

OVERALL SCORE
67%

DIMENSION SCORES

Country commitment	94%
Mobile capacity	94%
Regulatory environment	78%
Adoption	40%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$150	110	42%	31%	26%

Formal commitment milestone

- Committed to the Maya Declaration in 2012

Selected financial inclusion highlights

- Significant growth in the number of mobile financial services (MFS) agents, from about 9,000 agents in March 2012 to over 400,000 agents in June 2014, according to Bangladesh Bank
- MFS usage has helped expand financial inclusion in Bangladesh, although significant room for growth remains regarding adoption rates

Ranking highlights

- By 2014, Bangladesh's Maya Declaration Implementation Unit was in place to track progress toward commitments
- Joined six Alliance for Financial Inclusion Working Groups by 2014

Next steps

- Finalize national financial inclusion strategy
- Encourage the transition from over-the-counter services to registered MFS accounts

Bangladesh

Overview

While Bangladesh has demonstrated its commitment to providing access to quality financial services for the under-resourced through a responsive regulatory environment and emphasis on digital financial services,[6] further work remains: The World Bank's 2014 Global Financial Inclusion (Global Findex) database found that the majority (nearly 70 percent) of Bangladesh's adult population did not have an account with a formal financial institution or mobile money provider.[7] Mobile financial services (MFS) have been an increasingly prominent aspect of the digital financial services landscape and provide opportunities for financial inclusion growth: In 2013, registered MFS accounts in Bangladesh experienced the fastest rate of increase of any country.[8] Bangladesh is home to bKash Ltd., which in 2014 boasted more than 80,000 agents and was the second largest mobile money company in the world in terms of the number of individual accounts.[9]

In the future, the scaling up of other deployments could produce a more competitive MFS market.[10] Further efforts to increase awareness of MFS broadly could also enhance access to and use of the channel.[11] As of 2014, about 64 percent of adults in Bangladesh were unfamiliar with the concept of "mobile money," although 91 percent of adults were aware of at least one mobile money provider.[12] Improvements in the national information and communications technology sector could further enhance the state of financial services in Bangladesh.[13] Moreover, strengthening use of digital channels for government-to-person payments could expand financial inclusion in the country by advancing access to formal financial services and incentivizing use.[14]

Access and usage

Banking landscape

According to the 2014 Global Findex, about 29 percent of adults in Bangladesh age 15 and older had an account at a bank or other formal financial institution.[15] About 10 percent of adults in Bangladesh reported in the 2014 Global Findex that they borrowed money from a bank or other formal financial institution, while about 7 percent reported saving at a bank or other formal financial institution.[16] An InterMedia survey conducted between June and August 2014 found that 18 percent of adults age 15 and older stated they were bank account holders, although only 12 percent of respondents reported using a registered bank account within the previous 90 days.[17]

On the supply side, as of 2013 there were about 68 commercial bank branches per 1,000 km^2 and about eight commercial bank branches per 100,000 adults. There were about 52 ATMs per 1,000 km^2 and about six ATMs per 100,000 adults.[18] The 2014 InterMedia survey noted that the perception of not having enough money to need a bank account "was by far the most commonly cited reason non-bank users did not open accounts," whereas distance to a bank was not found to strongly influence bank use — therefore, the study concluded that "it is likely not a lack of bank branches that is limiting bank use but rather other factors such as real or perceived fees."[19]

Mobile ecosystem

According to the World Bank, there were about 76 mobile cellular subscriptions for every 100 people in Bangladesh in 2014.[20] The rate of access was higher when considering the number of individuals who could borrow phones: According to the 2014 InterMedia survey, while 61 percent of respondents owned a mobile phone, 97 percent owned or could borrow a mobile phone.[21] There is a significant gender gap in mobile phone ownership: In 2014, about 76 percent of men owned mobile phones, compared with only 46 percent of women.[22]

In 2013, there were about 172 registered mobile money agent outlets[23] per 100,000 adults and about 1,421 registered agent outlets per 1,000 km^2. There were about 127 active agent outlets[24] per 100,000 adults in 2013 and about 1,047 active agent outlets per 1,000 km^2. On the demand side, there were 42 active mobile money accounts[25] per 1,000 adults in 2013, significantly fewer than the about 123 registered mobile money accounts[26] per 1,000 adults.[27]

The 2014 InterMedia survey found that 23 percent of respondents had access to a mobile money account, though only about 4 percent were registered, active mobile money users.[28] The survey also noted figures from Bangladesh Bank showing there has been significant growth in the number of mobile money agents within a relatively brief period, from about 9,000 agents in March 2012 to over 400,000 in June 2014.[29] Respondents to an earlier InterMedia survey in 2013 stated that the customer service experience at agents is generally positive.[30]

Bangladesh continues to work with the Alliance for Financial Inclusion (AFI)'s Mobile Financial Services and Financial Inclusion Data Working Groups (along with several other working groups) to explore ways to increase the value of MFS.[31] According to AFI's 2014 Maya Declaration progress report, efforts to use mobile banking for loan disbursement and payment, as well as e-commerce, are ongoing in Bangladesh.[32] Notably, the 2013 InterMedia survey found about 71 percent of unregistered mobile money users (those that used over-the-counter services only) and 55 percent of registered mobile money users in Bangladesh did not use a bank account, demonstrating that mobile money can be an effective means of reaching those who may be excluded from other formal financial services.[33]

One of the challenges to increasing mobile money adoption in Bangladesh is that trust in mobile money is lower than trust in banks. The 2013 InterMedia survey found about 66 percent of adults in Bangladesh "fully" or "rather" trusted mobile money services, and about 63 percent "fully" or "rather" trusted mobile money agents; in contrast, 97 percent stated they trusted state-owned banks, and 79 percent trusted private banks.[34] Another obstacle to mobile money takeup is that transaction fees are considered prohibitively high by many adults in Bangladesh.[35]

Among active account holders in 2014, when asked to specify their top uses for mobile money accounts, 77 percent of mobile money users listed withdrawing money, 56 percent listed depositing money, 24 percent listed receiving money from other people for "regular support/allowances, or emergencies," 16 percent listed purchasing airtime top-ups, 15 percent listed receiving money from other people "for other reasons or no particular reason," and 14 percent listed sending money to other people (the question permitted multiple responses).[36]

There are still opportunities to educate consumers about the availability of different mobile money services: For example, only about 25 percent of respondents in the 2013 InterMedia survey realized that bill payment was even an option for mobile money services.[37] The 2014 Global Findex found about 3 percent of adults age 15 and older had used a mobile money account during the preceding 12 months, with about 0.06 percent of salary/wage recipients using it to receive salaries and wages and about 4 percent of adults who regularly pay utility bills using mobile channels to pay utility bills.[38]

Deployment profile: bKash

An early leader in MFS, bKash, provides a useful snapshot of mobile money emergence and operation. While Bangladesh had approved 28 banks to offer MFS as of March 2015,[39] more than 80 percent of transactions as of July 2014 were made through mobile money deployment bKash Ltd.[40] In 2001, BRAC Bank was founded by development organization BRAC; in 2011, BRAC Bank launched a 51 percent-owned subsidiary called bKash. Bangladesh Bank granted permission to BRAC Bank and bKash to operate the MFS business as a joint venture.[41]

BRAC Bank is responsible for regulatory compliance, and bKash is required to deposit mobile account balances within a prudentially regulated commercial bank.[42] Money in Motion LLC invested the initial minority 49 percent shares in bKash, and the International Finance Corporation and the Bill & Melinda Gates Foundation later joined as minority investors; BRAC retained 51 percent ownership.[43]

Broadening and aggregating its agent network has enabled bKash to scale up rapidly.[44] In its initial year, bKash gained 5,000 agents under a contract with BRAC, with BRAC recruiting and managing the agents.[45] After that year, bKash adjusted its approach and linked to more than 100 regional distribution companies that could manage high volumes of agents.[46] Its service was not limited to a specific area — rather, the deployment has attempted to provide access to its services across the country.[47]

This approach was valuable, since unlike many mobile money companies, bKash is not a mobile network operator (MNO) and therefore did not have a preexisting customer base.[48] Greg Chen and Stephen Rasmussen have stated that bKash's success is mainly due to three reasons: its identity as a "specialized organization built to deliver mobile financial services," its "shared vision for scale among a diverse investor group," and "an enabling and flexible regulatory environment."[49]

In terms of its business model, bKash earns revenue primarily through fees.[50] It entered into revenue-sharing agreements to access an Unstructured Supplementary Service Data (USSD) gateway with all four major MNOs in Bangladesh, which allows bKash to reach over 98 percent of Bangladesh's mobile phone subscriptions.[51] Similarly, Dutch Bangla Bank's DBBL Mobile, the other major MFS available in Bangladesh, is available on every MNO.[52] In exchange for USSD access, MNOs usually receive 5 to 20 percent of the MFS revenue.[53] Participating in mobile money solutions, even if they are not driving the service, is valuable for MNOs since they gain access to another revenue source and can attract customers that might otherwise seek out the service from another provider.[54]

Country commitment and regulatory environment

Bangladesh Bank, the Microcredit Regulatory Authority of Bangladesh, and the Ministry of Finance of Bangladesh made a commitment to the Maya Declaration,[55] and a designated team within Bangladesh Bank is in place to monitor the country's progress toward its Maya Declaration targets. By 2014, Bangladesh Bank had joined six Alliance for Financial Inclusion working groups.[56] Regarding the division of MFS responsibilities, Bangladesh Bank licenses banks to carry out MFS,[57] and banks are responsible for selecting, training, and conducting oversight of agents.[58] While bank agents can acquire new customers, banks are responsible for ensuring that mobile accounts are activated and that the appropriate know-your-customer (KYC) procedures have been implemented.[59]

Financial inclusion is a target component of the central bank's strategic plan.[60] As part of its aim to promote financial inclusion through digital services, Bangladesh Bank issued guidelines surrounding MFS.[61] The 2011 guidelines stated that only a bank-led MFS model would be permitted in Bangladesh.[62] Under the regulations, a mobile account is linked with the bank and must be accessible through the customer's mobile device. The mobile account serves as a non-chequing account classified differently from a standard banking account.[63]

Bangladesh's MFS guidelines permit person-to-person payments only between holders of registered mobile accounts; this restricts the "use of services in which the recipient cashes out a payment without opening a mobile account."[64] Inward foreign remittances are allowed, but outward foreign remittances are not.[65] Other approved MFS include cash-in/cash-out transactions using a mobile account through agents, bank branches, ATMs, and mobile operators' outlets; person-to-business payments; business-to-person payments; government-to-person payments; person-to-government payments; and other payments (e.g., microfinance).[66]

Following a 2011 circular, transaction limits for the account holders of MFS were set at 10,000 Taka (about $131)[67] daily and 25,000 Taka (about $328) monthly for person-to-person transactions.[68] Banks can link their MFS with those of other banks, but interoperability is not mandated.[69] In 2013, Bangladesh Bank issued anti-money laundering/combating the financing of terrorism guidelines for non-financial businesses.[70] The guidelines allow for risk-based KYC, including for mobile accounts.[71]

Agent banking regulations were issued in December 2013, with amendments in March 2014 "that limited customers to four transactions a day — two withdrawals and two deposits" — and raised the cap on individual transactions.[72] The drafting of a national financial inclusion strategy under a committee chaired by the governor of the Bangladesh Bank was underway as of April 2015.[73] Completion of this strategy, as well as the undertaking of another national demand-side financial services survey (the last being published in 2011)[74] could help Bangladesh better identify and advance specific financial inclusion targets. As noted by the 2014 InterMedia study, extensive MFI networks could be leveraged to increase financial inclusion if more MFI accounts were digitized.[75] Opening up the regulatory environment to non-bank actors could also generate more competition among providers and stimulate more diverse offerings.

See Bangladesh endnotes on page 145

BRAZIL

OVERALL RANK
#3

OVERALL SCORE
78%

DIMENSION SCORES

Country commitment	89%
Mobile capacity	83%
Regulatory environment	94%
Adoption	64%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$2,246	152	57%	68%	65%

Formal commitment milestone

- Committed to the Maya Declaration in 2011

Selected financial inclusion highlights

- As of 2014, Brazil had the largest mobile market in Latin America, providing significant opportunities for increased mobile financial services takeup
- Law 12865 and associated regulations in 2013 enabled non-banks to issue e-money as payments institutions

Ranking highlights

- Brazil launched the National Partnership for Financial Inclusion in November 2011
- Regulations enable nearly any retailer to be eligible as a banking correspondent

Next steps

- A third report on financial inclusion in Brazil is in development
- Expanding banking correspondents into underserved (primarily rural) areas and reducing agent exclusivity arrangements could further expand financial inclusion

Brazil

Overview

While Brazil's national commitments to financial inclusion and advanced correspondent banking models are heralded as positive steps for financial inclusion, further efforts to increase access to and use of financial services and to broaden the variety of financial services offered to low-income consumers are needed in order to continue Brazil's positive trajectory.[6] As one of the largest mobile markets in the world and the largest mobile market in Latin America, Brazil has significant potential to increase its mobile financial services uptake and usage, which could facilitate greater financial inclusion if targeted toward under-banked segments of the population.[7]

The supply-side and regulatory aspects of financial inclusion in Brazil are quite developed, as evidenced by the operation of government payment systems through digital platforms, the development of enabling reforms in the sphere of e-payments and other digital financial services, and the prevalence of branchless banking options targeting financially vulnerable populations. However, some analysts caution the continued growth of financial inclusion in Brazil, particularly through digital platforms, may be hampered in the future by macro-economic factors, including increasing consumer over-indebtedness and an economic slowdown.[8]

Access and usage

Brazil has high literacy rates (over 90 percent for the total population) and a relatively young population, with about 40 percent of the population under age 25 as of 2014.[9] The country also possesses a high level of urban concentration, with urban dwellers comprising about 85 percent of the total population in 2014.[10] Regional disparities are particularly pronounced in Brazil, with the southeast region featuring more major industries and a higher average standard of living than the rest of the country, and many correspondents are effectively exclusive.[11]

Banking landscape

Brazil's financial infrastructure is fairly extensive. A 2012 report by Brazil's National Partnership for Financial Inclusion stated that "all of Brazil's 5,565 municipalities have at least one access point," and "the proportion of municipalities with more than five access points per 10,000 adults rose from just 18% in 2000 to 94% in 2010."[12] As of 2013, the number of commercial bank branches per 100,000 adults was fairly high, at around 48; the number of bank branches per 1,000 km^2 was about eight.[13]

On the demand side, about 68 percent of adults in Brazil had an account at a formal financial institution as of 2014.[14] About 12 percent of adults had borrowed money within the previous 12 months from a bank or other type of formal financial institution, and around 12 percent saved money within that period at a formal financial institution.[15]

Government-to-person payment programs

Government-to-person programs are prevalent in Brazil: 20 percent of adults in the country reported receiving government transfers via a bank account as of 2014.[16] For example, the Bolsa Família conditional cash transfer[17] program is heavily utilized.[18] As noted in a 2014 World Bank report, Bolsa Família provides payments to nearly 14 million families in a country of almost 202 million people.[19] The transfer is conducted through a variety of mechanisms. A 2012 report found that about 1 percent of Bolsa Família recipients were paid in cash, 15 percent received funds through a mainstream Caixa Facil bank account, and 84 percent used a "Social Card."[20] With the Social Card, recipients must withdraw their funds within 60 days, and recipients may not deposit additional funds onto the card.[21] While programs such as Bolsa Familia provide support to low-income families, one concern is that virtual accounts that do not permit deposits or extended storage of funds limit functionality and possible financial benefits for users.[22] However, Caixa has been applauded for promoting awareness of broader financial services among Bolsa Família recipients, and a 2012 report noted that "40% of Bolsa Família clients use at least one other product of the bank."[23]

Branchless banking

Banking correspondents, or BCs, are widespread in Brazil, with more than 400,000 correspondents nationwide as of December 2013.[24] Banking correspondents are sometimes defined as "financial and non-financial firms contracted by financial institutions to provide certain types of financial services."[25] The correspondent model for extending access to financial services has been credited with improving financial inclusion among the traditionally underserved; for example, a 2013 study found "evidence that those using agents are poorer, less educated, more likely to work in the informal sector, and to be women than those using other channels."[26]

However, the functionality of these entities is variable and often somewhat limited. The World Bank describes disparities among rural versus urban correspondents, stating in a 2014 report that "correspondents in poorer and more remote areas tend to be limited to providing basic access to payments, and services such as savings, credit, and insurance are not readily available for many low-income consumers."[27] Because banks determine which correspondents can open new accounts for customers and which are permitted merely to transmit applications for new accounts to banks, in 2013 only about 19 percent of BCs nationally were authorized to open new accounts for customers.[28] Only 4 percent of respondents with bank accounts in a 2013 survey indicated they opened their bank account at a BC.[29] However, BCs are highly popular for some services — a 2013 article noted that about 67 percent of Brazilian households paid at least one bill at a BC,[30] and 79 percent of "unbanked" households in Brazil paid at least one bill at a BC.[31]

Mobile ecosystem

Brazil's mobile telecommunications sector is quite competitive, with market shares split among multiple network operators, and several mobile financial service solutions are available.[32] As of May 2015, four active mobile money deployments were operating in Brazil.[33] While the number of mobile cellular subscriptions is high — in 2014, there were about 139 subscriptions per 100 people — the rate of mobile financial services use is quite low.[34] Less than 1 percent of Brazilians used a mobile phone to pay bills, receive money, or send money, according to 2014 estimates.[35]

Country commitment and regulatory environment

Brazil launched the National Partnership for Financial Inclusion in November 2011.[36] The Central Bank of Brazil (BCB) is the Maya member agency for Brazil and committed to the Maya Declaration on September 30, 2011.[37] The BCB is responsible for the growth and stability of the Brazilian financial system.[38] In September 2012, the BCB created the Financial Education Department (Depef); Depef is responsible for coordinating the National Partnership for Financial Inclusion.[39] Other major players directly or indirectly involved in the financial inclusion sector include the Agência Nacional de Telecomunicações, which is responsible for regulating and promoting the expansion and development of the telecommunications sector, and the Conselho de Controle de Atividades Financeiras, which monitors and reports on suspicious transactions, as well as reports on the cross-border movements of currency.[40]

In 2011, the BCB developed a new financial inclusion index to help measure access to financial services for the population,[41] and in 2012 the Central Bank of Brazil developed the department of Institutional Relations and Citizenship to be "responsible for customer service, financial inclusion and education, and institutional communication."[42] A focus area for the department involves defining indicators of financial inclusion and coordinating data collection and evaluation related to those financial inclusion indicators (including those highlighted by the Alliance for Financial Inclusion).[43] Efforts to move forward on improving information technology systems in order to centralize financial inclusion-related data collection were underway as of 2015, and outcomes are expected to be reflected in Brazil's upcoming third report on financial inclusion.[44]

An "Action Plan to Strengthen the Institutional Environment" was issued by the BCB National Partnership for Financial Inclusion in May 2012; among the activities described was an initiative to define a legal and regulatory framework for mobile payments in the future (a framework was developed in 2013, as discussed below).[45] The BCB and Ministry of Communications were designated as being among the coordinating authorities for this effort.[46] Another goal defined in the action plan was strengthening the network of distribution channels for financial services.[47] In 2013, the Brazilian government issued a legal framework, Decree 7.963, designed to enhance consumer protection regarding financial services.[48] The Committee of Consumption and Regulation, of which the BCB is a member, was developed following the decree.[49]

According to the Economist Intelligence Unit, "major private actors who serve as government interlocutors on financial inclusion" include entities such as the Federation of Brazilian Banks, Organization of Brazilian Cooperatives, Brazilian Association of Credit Cards and Services, and the Brazilian Internet Association.[50] To engage public and private sector actors, Brazil hosted the Sixth Central Bank of Brazil Forum on Financial Inclusion in November 2014.[51] As noted previously, a third report on financial inclusion, the latest in a series of reports (with the first published in 2010, and the other in 2011) is underway.[52]

Regulatory provisions for banking correspondents

The emergence of correspondent banking in Brazil can be traced back several decades. The Brazilian banking system grew rapidly in the hyperinflationary years, including between 1990 and 1992, when inflationary revenue constituted nearly 40 percent of the total banking revenue.[53] This opportunity for profit incentivized the opening of new banks and bank branches.[54] In the late 1990s and early 2000s, Brazilian authorities launched initiatives to foster financial access, including creating correspondent banking legislation in 1999, simplified bank accounts in 2003, and payroll bank loans.[55] The original functions of BCs were quite constrained. In 1999, the BCB "enacted a resolution allowing banks to establish agreements with non-banking entities to provide bill payment services and distribute social payments."[56]

The acceleration of correspondent banking in Brazil arguably dates to the launch of Bolsa Família in 2003,[57] when the government determined that all benefits would be distributed through Caixa Economica Federal, the Brazilian government's "socially-motivated public bank."[58] Transporting cash to remote areas was highly costly and posed potential security concerns, so Caixa established correspondents, called Caixa Aqui, in areas where distribution costs were particularly high. Caixa already administered the sales of Brazil's "extensive lottery sales program" and operated a large network of small stores established for lottery sales. These stores (Lótericas) began accepting bill payments and dispersing social transfer payments before eventually offering additional financial services.[59]

In 2003, Resolutions 3.110/03 and 3.156/03 modified regulations for BCs in order to be less restrictive — consequently, nearly any retailer can become a BC, and authorization for each BC/bank relationship by the BCB is no longer mandatory.[60] More specifically, as stated by Boston University's Center for Finance, Law and Policy, Resolution 3.110 on "norms governing banking agents" allowed a broader range of financial institutions (including credit cooperatives and microcredit institutions) to hire correspondents, which can be any type of "commercial establishment or financial institution."[61] According to the 2011 Central Bank Resolution 3954, correspondents are allowed to receive and forward deposit account opening applications, execute payment orders, receive and forward loan and leasing requests, receive and forward credit card applications, and other such services.[62]

Correspondents are paid a commission per transaction, and the initial investment and staffing is provided by the contracting financial institution.[63] BCs are often open longer than traditional bank branches, as they are subject to commercial rather than central bank regulations in this respect, and the contracting financial institution bears the risks of transactions.[64]

The widespread success of Brazil's correspondent banking program may be attributed in part to regulators gradually loosening restrictions, and to the legal framework placing the burden on regulated institutions to train and be accountable for their correspondents.[65] Moreover, when a private bank won the right to use post offices as BCs, it may have provided an impetus for other private banks to develop their BC networks.[66] Other drivers of BC growth include: "[T]he need to distribute social transfer payments to millions of poor families, many of whom live in remote areas"; regulatory measures conducive to branchless banking; economic growth; and the "boleto" payment system, which permits bills to be paid at nearly any shop.[67]

One of the important aspects of correspondent banking is that it appears to be serving historically excluded populations — those who use BCs are more likely to be poor, female, less educated, and from a smaller town than the average customer.[68] Correspondent networks have also thrived in the generally lower-income northeast region, since large pharmacy chains previously established partnerships with banks to receive electricity and water bill payments; these chains could then be converted into correspondents offering a variety of financial services.[69]

Non-banks in Brazil were initially not permitted to issue e-money or other stored-value instruments (e.g., electronic accounts stored in mobile phones).[70] However, recent legislation has opened up the financial services playing field to a more diverse array of entities, and Brazil is considered a leader in the field of non-bank e-money provision in Latin America.[71] In May 2013, a legal framework on payment arrangements, including mobile payments, was developed in Brazil.[72] In October 2013, Brazil passed a law that instituted a "category of electronic payment institutions regulated by the Central Bank" that specified "the principles of non-exclusion and interoperability."[73] [74]

The BCB introduced regulations in November 2013 that could further facilitate mobile money uptake, as one of the changes from the original regulations is that non-banks may issue e-money as "payment institutions." [75] [76] Resolutions 4282 and 4283 of November 2013 established requirements for companies to become payments institutions that could operate as a card issuer, owner of a payment scheme, or card processer.[77] Circular 3680, issued in November 2013, and Circulars 3704 and 3705 (amending Circulars 3681, 3682, and 3683), issued in May 2014, provided additional guidance regarding capital requirements and interoperability.[78] Funds entering the system are "held on account at the central bank and do not form part of the deposit base of the banks," meaning that they cannot be loaned. [79]

This development may herald greater autonomy for mobile network operators and other non-financial institutions in providing some transformative financial services; requests for mobile payment authorization were expected to be submitted beginning in May 2014.[80] As of 2014, interoperability was recognized by the government of Brazil as a long-term goal for mobile money license holders but was not mandated for current usage; [81] discussions are underway among financial service providers to develop business models for interoperability.[82]

To encourage the engagement of a variety of entities within the financial services market, until January 2017, institutions that manage payment schemes and are below specific thresholds (e.g., about $190 million for transaction amounts and 25 million transactions) will be exempted from applying for a license from the central bank and integrating the Central Bank Payments System; after January 2017, these thresholds are expected to be reduced by 10 percent.[83] The new payments system also includes "purpose-free payment schemes," which means that customers can engage in deposits, withdrawals, transfers, and payments without being tied to one particular financial institution; the purpose-free payment schemes will be overseen by the central bank.[84] These developments are expected to contribute to financial inclusion in Brazil moving forward.

See Brazil endnotes on page 147

CHILE

OVERALL RANK
#6

OVERALL SCORE
74%

DIMENSION SCORES

Country commitment	89%
Mobile capacity	72%
Regulatory environment	67%
Adoption	71%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$227	14	64%	63%	59%

Formal commitment milestone
- Committed to the Maya Declaration in 2012

Selected financial inclusion highlights
- Possesses one of the most advanced telecommunications infrastructures in South America
- Created the Consejo Nacional de la Inclusion Financiera, Chile's national financial inclusion council, in 2014

Ranking highlights
- Tied for the highest score regarding adoption of formal accounts
- While use of mobile money services is low, Chile is tied for the highest score for other digital services, including debit card use, credit card use, and Internet use for bill payment and purchases

Next steps
- Expanding the number of mobile money providers could boost competition and increase the diversity of offerings
- Expanding the prevalence of electronic government-to-person payments could also enhance financial inclusion

Chile

Overview

Chile boasts one of the most robust economies in South America and has a predominantly urban and literate population, with about 90 percent of the population based in an urban area and about 98 percent of the adult population considered literate as of 2015.[6 7] As of 2014, about 63 percent of Chile's adult population had an account at a formal financial institution.[8] While further efforts are needed to expand access to financial services among underserved individuals, Chile is lauded for its "robust system of financial inclusion policies, ranging from social benefits payments, to financial education programmes, to consumer protection regulation."[9] In March 2014, Chile's government announced the establishment of the Consejo Nacional de la Inclusion Financiera (CNIF); the CNIF's mandate is to coordinate with public institutions working toward greater financial inclusion and financial literacy and to develop a strategy "to create products aimed at vulnerable populations."[10] The CNIF will act as Chile's first centralized body to manage the country's existing set of financial policies and programs oriented toward consumer protection, financial literacy, financial access, and the like.[11]

As of 2014, Chile had emphasized financial education programs and piloted an e-payments system specifically targeted toward low-income populations in several municipalities; the country was also moving forward with the development of a survey to assess the national financial inclusion landscape.[12] Expanding the prevalence of electronic government-to-person payments could also serve as a beneficial financial inclusion mechanism in the future.[13] However, it is possible that an economic slowdown in the country, with reduced consumer demand and investment, may impede Chile's immediate progress toward greater financial inclusion.[14]

Access and usage

Banking landscape

In 2013, there were about 17 commercial banks for every 100,000 Chilean adults and about three commercial bank branches for every 1,000 km^2.[15] The 2014 Maya Declaration progress report indicated that one of Chile's primary financial inclusion goals was to "facilitate the recipient access to a simplified debt account or a similar instrument."[16] As of 2014, Chile's BancoEstado had about 5 million customers using simplified bank accounts.[17]

Mobile ecosystem

The Central Intelligence Agency's "World Factbook" noted in 2014 that Chile possessed the "most advanced telecommunications infrastructure in South America."[18] In addition, mobile penetration rates are high: According to the World Bank's World Development Indicators database, in 2014 Chile had about 133 mobile subscriptions for every 100 people (individuals can hold more than one subscription).[19] The combination of advanced telecommunications infrastructure and less pervasive "brick and mortar" banks provides a potentially conducive environment for mobile money services; however, there is currently only one mobile money deployment in Chile, Cuenta Móvil.[20]

As of May 2015, Cuenta Móvil's offerings included person-to-person transfers, bill payment, and airtime top-up.[21] Customers of Chilean telecommunications company Entel can subscribe to the Cuenta Móvil service through Banco de Chile, a commercial partner bank.[22] Money can then be sent to other Entel users.[23] As of 2014, approximately 4 percent of Chile's population had a mobile money account.[24] While in some circumstances the existence of a single mobile money provider can generate favorable economies of scale and accelerate adoption, the absence of competing actors in Chile may be partly responsible for the limited use of mobile money services.

Country commitment and regulatory environment

The Ministerio de Desarrollo Social de Chile (Ministry of Social Development) is the agency in Chile charged with implementing financial inclusion commitments made under the Maya Declaration.[25] The ministry has developed several initiatives to promote financial inclusion in Chile, including the creation of a high-level financial inclusion coordination platform.[26] In 2011, the Ministry of Planning created a Financial Inclusion Unit to work with various government entities — including the Ministry of Finance, Superintendence of Banks and Financial Institutions, and central bank — and members of the private sector to implement Chile's national financial inclusion strategy.[27 28]

In its 2012 financial inclusion strategy, the government outlined its interest in pursuing mobile payment solutions, expanding other e-payment systems, and increasing financial points of service in order to foster financial inclusion.[29] BancoEstado's CajaVecina is identified as one program advancing Chile's overall financial inclusion strategy.[30] CajaVecina consists of a network of microenterprise and small business owners who perform various transactions for consumers. By 2011, 40 percent of BancoEstado agents were placed in rural areas, and BancoEstado was the only financial service provider in 207 of Chile's 346 municipalities.[31] For holders of certain debit cards, including CuentaRUT cards,[32] the transactions include withdrawals, cash deposits, transfers between accounts of BancoEstado customers, credit card payments, and balance inquiries.[33 34] As of 2014, there were over 7 million active CuentaRUT cards.[35]

A 2011 article noted that about 50 percent of transactions at CajaVecina locations consisted of financial service transactions such as deposits, withdrawals, loan repayment, and account-based money transfers, rather than other processes like bill payments.[36] The same article stated that 4,500 agents performed about 30 transactions per agent daily (around 10 percent more transactions than those through BancoEstado's 350 branches).[37] CajaVecina has continued to expand, with more than 13,500 locations as of 2014.[38] As noted, CajaVecina's network is present in both rural and urban communities.[39 40]

Electronic payments

In 2013, the ministry set a goal to implement an electronic payment system intended to target the country's financially disadvantaged population by September 2014.[41] The system was piloted in nine municipalities by 2014.[42] Another Maya Declaration goal made by the ministry was to provide state benefits through electronic channels by May 2013;[43] as of 2014, the transition appeared to be ongoing.[44] There is significant opportunity for growth in the e-payments space in Chile: In 2012, 1 percent of Chile's cash transfer subsidies to its Chile Solidario and Subsidio Familiar recipients was paid electronically,[45] compared with 99 percent of Brazil's social transfers to Bolsa Familia recipients and 91 percent of Colombia's transfers to Familias en Acción recipients.[46]

By 2013, the ministry successfully launched Chile Cuenta, which the 2013 Maya Declaration progress report described as "a financial education program designed to promote and educate beneficiaries on electronic payments."[47] However, Chile Cuenta evidently evolved into an initiative with a broader mandate than financial education alone: Chile Cuenta is now a program that promotes the payment of government benefits into a bank account for recipients, who must be beneficiaries of certain government programs (i.e., Ingreso Ético Familiar, Programa Puente, Subsidio Único Familiar, Subsidio de Discapacidad Mental, and Pensión Básica Solidaria).[48] The program provides recipients with a $700 subsidy per month to cover the cost of maintaining the account.[49] All recipients must have an active bank account at a participating financial institution.[50]

Services such as Chile Cuenta and CajaVecina have the potential to increase financial access for underserved members of the Chilean population, and mobile money could serve as a complementary mechanism to these initiatives. Completion and analysis of the ongoing national financial inclusion survey may help Chile's government better identify financially excluded populations and create policies to serve those individuals.[51] By assessing the current state of access to and use of financial services among different demographics, providing clarity to the digital financial services sector through the development of electronic money regulation, and involving non-bank actors in the national financial inclusion dialogue, Chile can further increase its capacity to promote sustainable financial inclusion efforts.

See Chile endnotes on page 149

COLOMBIA

OVERALL RANK
#6

OVERALL SCORE
74%

DIMENSION SCORES

Country commitment	89%
Mobile capacity	94%
Regulatory environment	89%
Adoption	53%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$378	35	52%	39%	34%

Formal commitment milestone

- Committed to the Maya Declaration in 2012

Selected financial inclusion highlights

- By 2014, nearly 100 percent of Colombia's municipalities had at least one financial access point in place, and nearly three-quarters of Colombia's adult population had at least one financial product
- Colombia's national financial inclusion strategy was launched in March 2014

Ranking highlights

- Established an Intersectoral Economic and Financial Education Committee in February 2014
- Law 1735 of 2014 creates a new category of financial institutions (Sociedades Especializadas en Depósitos y Pagos Electrónicos) that specialize in electronic deposits, payments, and money transfers

Next steps

- Develop quantifiable goals pertaining to financial inclusion
- Promote adoption of savings with formal financial service providers

Colombia

Overview

Colombia has made significant strides in developing enabling regulations to advance access to financial services through the expansion of banking correspondents, electronic payments providers, and simplified accounts.[6] However, while larger entities (e.g., the government and large corporations) have generally shifted to electronic payments, use of digital financial services at the person-to-person level is less common.[7 8] Given the prevalence of mobile phones and the high number of Colombians without formal bank accounts, mobile devices could be further leveraged to increase access to financial services for Colombia's underserved populations. Personal income growth in the region and high mobile penetration rates — along with a fairly young population and high literacy levels[9] — may serve as enabling conditions for improving financial inclusion through mobile financial services.[10] The recent Law on Financial Inclusion should help to facilitate the growth of digital financial services by opening up the market for electronic deposit and payment service provision to non-bank entities, including mobile network operators (MNOs).[11] These entities are able to apply for licenses as Sociedades Especializadas en Depósitos y Pagos Electrónicos (Companies Specialized in Electronic Deposits and Payments).[12]

Access and usage

Banking landscape

According to the 2014 Global Financial Inclusion (Global Findex) database, nearly 40 percent of Colombian adults age 15 and older had an account at a formal financial institution in 2014.[13] Approximately 34 percent of women had an account with a formal financial institution, but only about 23 percent of Colombian adults in the bottom 40 percent of the income scale had an account with a formal financial institution.[14] A 2014 Asobancaria report found that the percentage of adults over 18 in Colombia with access to at least one financial product had increased to 71.5 percent from about 66 percent in 2012.[15]

Branchless banking

Banking correspondents, microfinance institutions, and private sector offerings can increase financial opportunities for underserved populations. Banking correspondents, which can be natural persons or corporate entities,[16] were authorized through Decree 2233 in July 2006.[17] The number of services correspondents are able to offer has increased over time — 2009's Decree 112 allowed correspondents to open savings accounts, while 2012's Decree 2672 permitted correspondents to provide services to "credit institutions, investment management companies, stock market brokerages, pension fund administrators, trust fund companies, and foreign exchange agents."[18] Correspondents are permitted to complete transactions using any technology (e.g., point-of-sale terminals, cellphones) approved by the affiliated bank.[19]

From 2011 to 2014, the number of banking correspondents increased at an annual rate of about 70 percent.[20] By 2014, about 99.9 percent of Colombia's municipalities had at least one point of access to financial services,[21] and in some cases banking correspondents served as the only access point.[22] Nonetheless, rural disparities exist: In December 2013, there were 40,555 agents in urban areas and 8,626 in rural areas.[23] Branches were noticeably scarcer — at that time, there were about 5,560 branches in urban areas and 2,042 in rural areas.[24] A 2014 report noted that banking infrastructure in

Colombia is generally less extensive than the Latin American average.[25] One obstacle to the accelerated proliferation of banking correspondents may be the long wait time for banking correspondent contracts to be approved by the Financial Superintendency.[26] Other challenges generally applicable to banking correspondents include connectivity challenges, liquidity concerns, and security issues.

Banks and banking correspondents are not the only entities offering basic financial services. For example, Efecty, a private company with roots in the postal service, provides payment and transfer services; the company serves 930 of Colombia's municipalities and features over 5,000 service points.[27] Unlike a bank account, individuals do not have to register for a formal account — instead, they provide a cédula (national identity card) or Colombian passport and the correct identification information for the recipient of the transfer.[28] Each transaction can count toward a reward scheme, and Efecty users have the option to send and receive remittances through Efecty's correspondent agreement with Western Union.[29] As of October 2011, the Ministerio de Tecnologías de la Información y las Comunicaciones, la Comisión de Regulación de las Comunicaciones, and la Superintendencia de Industria y Comercio were responsible for regulating Efecty.[30]

Price controls and taxes

The Financial Transactions Tax (GMF), also known as the "cuatro por mil" (four per thousand) tax may serve as a disincentive for the use of formal financial services, both because of the actual costs to consumers and the reputational impact it has on the financial system by lending credence to suggestions that formal financial institutions extract some of the funds entrusted to them by depositors. The tax, introduced in 1998 during Colombia's financial crisis,[31] applies to "financial transactions for debits over $3,500 from savings accounts and withdrawals from checking accounts."[32] Although the cuatro por mil tax will therefore not be applicable to all transactions, concern remains that the tax discourages individuals from using formal financial services. However, as noted below, financial inclusion-oriented products have been developed that are exempt from the tax.

Mobile ecosystem

According to a 2012 DANE[33] Quality of Life Survey, as of December 2011 ownership of cellphones in Colombia was in excess of 67 percent for those age 5 and older, and about 94 percent of households had at least one mobile phone.[34] As of 2014, there were about 113 mobile subscriptions for every 100 people in Colombia (the number reflects the existence of multiple subscriptions per person).[35] Geographic and gender disparities exist with respect to mobile phone ownership and mobile money use. According to the 2012 Quality of Life survey, of the 28.3 million Colombians who owned a mobile phone in 2012, 23.2 million lived in urban areas while 5.1 million lived in rural Colombia.[36] By 2014, about 2 percent of adults in Colombia had mobile money accounts.[37]

Percentages of total transactions occurring via banking correspondents and mobile telephones have increased over time, reaching about 5 percent and 0.8 percent of total transactions, respectively, during January to June 2014.[38] [39] Improving awareness of mobile financial services going forward will be vital, as a 2012 International Finance Corporation survey in Colombia found that almost none of the 900 low-income respondents were familiar with mobile financial services technology.[40]

By 2014, the market share among mobile network operators (MNOs) Comcel, Telefónica, Colombia Movil S.A., Uff Móvil S.A.S. and UNE EPM Telecomunicaciones S.A. was about 61.5 percent, 24.6 percent, 13.1 percent, 0.63 percent, and 0.51 percent, respectively.[41] A transition to more widespread smartphone use could increase use of mobile financial services, as it is generally easier for banks to deploy smartphone banking services than to establish mobile banking channels using text messaging or USSD (Unstructured Supplementary Service Data).[42] MNOs in Colombia have been criticized for maintaining high fees that create a difficult environment for the development of mobile money services by other entities.[43] [44] However, the Communications Regulatory Commission (Comisión de Regulación de las Comunicaciones) issued Resolution 4458 of 2014 to reduce the prices telecommunications companies can charge financial institutions for the use of mobile banking services and to set limits on text message fees — these efforts may reduce barriers to mobile financial service provision.[45]

Government-to-person payment programs

As noted, by March 2014, 71.5 percent of Colombia's population had at least one financial product.[46] A portion of the increase is credited to accounts opened for beneficiaries of Familias en Acción, a conditional cash transfer subsidy for low-income mothers of infants and/or schoolchildren.[47] These beneficiaries, many of whom were previously unbanked, receive "payments as deposits into savings accounts at Banco Agrario, a public bank."[48 49] In 2012, the government of Colombia contracted DaviPlata, a mobile wallet issued by Banco Davivienda, to pay conditional cash transfers to nearly one million beneficiaries of Familias en Acción. As of June 2014, Daviplata had over two million wallets, about half of which were associated to conditional cash transfers.[50] In 2015, Davivienda launched a pilot program to encourage a systematic transition to electronic transactions using the DaviPlata platform.[51]

A study by the International Finance Corporation noted that further room for improvement remains in providing consumer education to recipients of such government programs as Familias en Acción, as evidenced by the fact that one survey found only 38 percent of Familias en Acción recipients realized that their accounts functioned as savings accounts.[52] The same study found significant regional differences in terms of financial services use more broadly among the three areas examined (Bogota, Barranquilla, and Cali, along with adjacent rural zones).[53]

Country commitment and regulatory environment

The Ministerio de Hacienda y Crédito Público de Colombia is the country's Maya Declaration implementing agency.[54] The ministry has made a concerted effort to involve groups from across sectors in the national financial inclusion dialogue, such as the Banco de la Republica (Colombia's central bank), the Department for Social Prosperity, Banca de las Oportunidades, and representatives of the private sector.[55] In early 2014, a draft executive order for the development of an Intersectoral Commission for Financial Inclusion was published;[56] by February 2014, Decree 457 created the Intersectoral Economic and Financial Education Committee.[57] In March 2014, Colombia launched a national financial inclusion strategy.[58] Both the creation of the financial inclusion committee and the design of a financial inclusion strategy were country-specific goals highlighted in recent Maya Declaration reports.[59]

Banca de las Oportunidades, begun in 2006 as a policy of the Colombian government to advance financial inclusion, has supported regulations allowing financial institutions to offer services though agents and banks to offer simiplified savings accounts.[60] The program is managed by Bancoldex (Bank for Foreign Trade).[61] While the number of banking correspondents and bank accounts has increased over time, access alone is not sufficient for fostering sustainable financial inclusion — as demonstrated by a 2013 Banca de las Oportunidades report that found about 33 percent of Colombian adults who opened savings accounts did not use them.[62] Further work is needed to identify why these accounts become dormant and ensure that services are suitable for consumers' needs.

In 2007, the Financial Superintendency of Colombia issued Circular 52, which provided regulatory background for financial distribution channels; it was replaced by Circular 22 in 2010.[63] External Circular 53 of 2009 set out identification requirements for simplified accounts (credit institutions were required to collect the applicant's full name, as well as the number, date, and place of issue of the ID, and the date and place of the applicant's birth) and placed limits on the value of debit transactions and balances.[64] The emergence of these simplified accounts is often considered one of the major enabling conditions for financial inclusion in Colombia.[65]

In 2011, Decree 4687 created online demand deposits offered by credit institutions; these deposits required a minimum balance and were subject to institutional discretion regarding remunerative interest.[66] New types of accounts were developed and implemented by 2011 with lower KYC requirements, and the available retail payment systems became partially interoperable.[67]

In 2012, External Circular 42 designated mobile banking as a distribution channel, specified transactions included in the concept (e.g., transfers, balance enquiries, withdrawals, payments, deposits, receiving international remittances, and topping up cell phones[68]), and provided guidelines to maintain security and quality of the distribution channel.[69] The circular defined mobile banking as an "electronic banking channel in which the mobile device is used to perform operations, with its number being associated with the service" and noted that "the services performed through mobile devices and Internet browsers are considered Internet banking."[70] External Circular 7, issued in 2013, regulated e-money deposits by setting limits on debit transactions and establishing a maximum balance (not applicable to government benefits).[71] These online deposits became exempt from payment of the GMF, per the Tax Reform Law 1607.[72]

In April 2014, a draft financial inclusion bill creating a special license for e-money issuers and prepaid card scheme administrators was submitted to the Colombian Congress by the minister of finance and public credit and minister of information technologies and communications.[73] This bill introduced "a new type of financial entity called Sociedad Especializadas en Depositós y Pagos Electrónicos (Specialized Electronic Deposit Companies, or SEDPES), where people can hold electronic accounts that will facilitate affordable and safe money transfers."[74] National deposit insurance covers all clients subject to this system.[75] These institutions have lower minimum capital requirements than credit institutions,[76] and payments through accounts with these institutions will be exempt from the Financial Transactions Tax on withdrawals.[77] While SEDPES are not permitted to provide credit to consumers, those excluded from formal financial services will have opportunities to "build a payments and savings history that can help them access credit in the future."[78]

By September 2014, the Financial Inclusion Bill was approved by Congress and awaiting presidential sanction; [79] a month later, the bill became Law 1735 of 2014.[80] The law allows a variety of players, including non-bank entities such as mobile network operators, to receive financial licenses and possibly expand opportunities for financial access to the underserved.[81] This is particularly valuable since banking correspondents are still primarily concentrated in urban areas.[82] According to a representative of Colombia's Financial Regulation Agency, "existing rules on simplified KYC requirements for opening and handling electronic deposits will be extended to the new entities, including those that allow electronic deposits to be opened remotely using a mobile phone, by simply entering some data on the national ID card for verification purposes."[83] These regulatory changes are expected to further promote financial inclusion in Colombia.

See Colombia endnotes on page 150

ETHIOPIA

OVERALL RANK
#21

OVERALL SCORE
54%

DIMENSION SCORES

Country commitment	72%
Mobile capacity	61%
Regulatory environment	72%
Adoption	36%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$48	54	23%	22%	21%

Formal commitment milestone

- Committed to the Maya Declaration in 2011

Selected financial inclusion highlights

- Approved a mobile and agent banking regulatory framework in 2013
- The Ethiopian Financial Inclusion Project was developed in 2009 with the goal of increasing financial access

Ranking highlights

- Ethiopia has established commitments to expand electronic money services and move away from cash
- Strengthening the communications sector could increase Ethiopia's mobile capacity and adoption rates moving forward

Next steps

- The National Bank of Ethiopia is in the process of developing a Financial Inclusion Council and associated secretariat
- Opening up the mobile money ecosystem to greater participation from non-financial institutions could help drive financial inclusion growth in the country

Ethiopia

Overview

While Ethiopia has experienced a significant reduction in poverty since 2000, further opportunities remain to promote the financial well-being of the country's underserved population.[6] As noted by the World Bank's Global Financial Inclusion (Global Findex) database, about 22 percent of adults age 15 and older in Ethiopia had an account with a formal financial institution or mobile money provider as of 2014.[7] While pervasive poverty and a need to continue improving communications markets have posed challenges to financial inclusion in Ethiopia,[8] the country has engaged in a number of efforts to advance inclusive growth.[9] For example, Ethiopia became a signatory of the Alliance for Financial Inclusion's Maya Declaration in 2011, and in January 2013 Ethiopia approved a mobile and agent banking regulatory framework.[10] Ethiopia's strong economic growth in recent years may also contribute to greater provision of, and consumer engagement with, formal financial services.[11]

Access and usage

Banking landscape

Data from a 2015 quarterly bulletin available from the National Bank of Ethiopia's website noted that there were over 2,000 commercial bank branches nationwide.[12] A 2014 report noted that many of these bank branches are concentrated in larger cities; for example, about 33 percent of all commercial bank branches in Ethiopia were located in the capital city.[13] In 2012, there were about two commercial bank branches per 1,000 km^2 in Ethiopia and about three commercial bank branches for every 100,000 adults.[14] The same year, there were about 0.2 ATMs for every 1,000 km^2 in 2012 and about 0.5 ATMs for every 100,000 adults.[15]

Ethiopia has a strong tradition of informal financial services but low takeup of formal products.[16] According to a 2014 report, less than 8 percent of Ethiopians had a bank account during 2013.[17] As noted previously, the 2014 Global Findex survey found that about 22 percent of adults in Ethiopia age 15 and older had an account with a bank or other formal financial institution.[18]

Mobile ecosystem

Ethiopia's information and communications technology systems are still developing, with opportunities for fostering more robust competition and strengthening infrastructure.[19] According to the World Bank, there were about 32 mobile cellular subscriptions per 100 people in 2014.[20] The GSMA's Mobile Money for the Unbanked Deployment Tracker noted that as of May 2015 there were two mobile money deployments in Ethiopia.[21]

The M-Birr mobile money service was instituted in 2013, allowing clients to make domestic money transfers, engage in withdrawals and savings, view account balances, complete airtime top-up, make loan repayments, and receive salary payments.[22] Agents are able to execute cash-in/cash-out services,[23] though a 2014 FINclusion Lab map showed that only about 27 mobile money agents were available nationally.[24]

The five main microfinance institutions (MFIs) in the country, which accounted for about 95 percent of the microfinance market in Ethiopia as of 2013, provide the M-Birr service.[25 26] To facilitate use of the service, the menu for M-Birr was designed to be as accessible and clear as possible,[27] particularly given low literacy rates.[28] Fees are clearly displayed on M-Birr's website,[29] and mobile Internet access is not needed to use the service through a mobile phone.[30]

In February 2015, Ethiopia's Lion International Bank and Somali Micro Finance partnered with BelCash Technology Solution PLC to launch the

HelloCash mobile money pilot; the system is designed for multiple banks and MFIs to be interconnected and to provide the service through partnerships with financial institutions. These financial institutions can "share each other's agent and branch network to serve each other's customers," which should facilitate scaling up of the service.[31] There is significant room for growth with respect to mobile money adoption — according to the 2014 Global Findex, only about 0.03 percent of adults in Ethiopia had a mobile money account.[32]

Country commitment and regulatory environment

National Payment System No. 718/2011 offered rules on the regulation and operation of Ethiopia's national payment system,[33] and Proclamation 657/2009 provided guidance on prevention of money laundering and terrorist financing.[34] Ethiopia's Growth and Transformation Plan (GTP)[35] is the latest strategy in the country's successive development plans. The GTP spans 2010/2011 — 2014/2015 and seeks to promote equitable economic growth, among other goals.[36] Among the GTP's goals is to improve access to finance levels significantly by 2015.[37] Developing specific, quantifiable financial inclusion goals could strengthen Ethiopia's financial inclusion objectives.

Ethiopia committed to the Maya Declaration in 2011, with the National Bank of Ethiopia, Ethiopia's central bank, serving as the Maya member agency.[38] Ethiopia has set several targets in areas such as digital financial services, financial literacy, and payment systems.[39] In 2013, the government of Ethiopia approved a mobile and agent banking regulatory framework to permit banks and MFIs to offer financial services through mobile phones and agents.[40] By 2014, Ethiopia had made progress on several other Maya Declaration goals, including recruiting a consultant to create a financial literacy framework in order to promote national financial literacy programs.[41] With respect to payment systems, by 2014 a Real Time Gross Settlement system was in place.[42]

As of 2014, Ethiopia was still preparing a national financial sector master plan.[43] The National Bank of Ethiopia is also in the process of developing a Financial Inclusion Council and associated secretariat.[44] Launching a dedicated national inclusion body and opening up the mobile money ecosystem to greater participation from non-financial institutions (e.g., mobile network operators) could help drive financial inclusion growth in the country.

See Ethiopia endnotes on page 152

INDIA

OVERALL RANK
#9

OVERALL SCORE
72%

DIMENSION SCORES

Country commitment	100%
Mobile capacity	78%
Regulatory environment	89%
Adoption	51%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$1,875	888	37%	53%	43%

Formal commitment milestone

- The Reserve Bank of India committed to the Alliance for Financial Inclusion as a principal member in 2012

Selected financial inclusion highlights

- Launched national financial inclusion initiative Pradhan Mantri Jan-Dhan Yojana (PMJDY) in 2014
- As of February 2015, PMJDY had facilitated the opening of nearly 137 million bank accounts, according to the initiative's website

Ranking highlights

- Introduced Payments Bank guidelines in November 2014 that will enable entities such as mobile network operators to offer some financial services to previously excluded groups
- The JAM (Jan-Dhan, Aadhaar, and Mobile) framework promotes digital government-to-person payments

Next steps

- Issue payments bank licenses to mobile network operators and other approved applicants
- Utilize demand-side data to assess — and work to address — high levels of dormancy among formal account holders

India

Overview

With about 21 percent of the world's unbanked adult population and about 67 percent of South Asia's unbanked adult population residing in India, there is tremendous potential for growth in financial inclusion.[6] Current guidelines, such as those for payment banks, and the overall JAM framework (Jan Dhan-Yojana, Aadhaar and Mobile numbers)[7] are expected to facilitate a more enabling environment for digital financial services by allowing a multiplicity of providers to offer innovative financial services to underserved populations. The Pradhan Mantri Jan-Dhan Yojana ("Prime Minister's People's Wealth Scheme," or PMJDY), an ambitious financial inclusion program aiming to broaden access to financial services, was launched in 2014 and has already yielded significant results: As of February 2015, the initiative had facilitated the opening of nearly 137 million bank accounts.[8] [9] Further strengthening India's developing branchless banking environment[10] and focusing on promoting use of, as well as access to, financial services could help to advance quality financial services among those outside of the traditional banking system.[11] India's advanced digital payments infrastructure, mobile capacity, and national-level commitment to financial inclusion are expected to facilitate these efforts.

Access and usage

While India has long made an effort to develop extensive bank networks to facilitate access to financial services, these networks have arguably not been as profitable or sustainable as originally envisioned. Between the 1970s and the 1990s, regulations required banks to open four branches in previously unbanked locations each time a new branch opened in an urban area. This led to the opening of up to 30,000 rural bank branches.[12] However, the economies of scale that generally enable banks to operate profitably in urban neighborhoods with low per capita incomes[13] are reduced or absent in rural areas. This can make it difficult to sustain banks in more sparsely populated areas, as evidenced by the choice to discontinue India's branch development program in 1991, partly because of high default rates among rural branches.[14] Nonetheless, Burgess and Pande (2005) observe that bank branching regulation in India has had a "substantial impact on poverty reduction."[15]

Banking landscape

In terms of physical banking infrastructure, according to the International Monetary Fund's Financial Access Survey, there were about 12 bank branches per 100,000 people in India in 2013.[16] In 2011, the World Bank estimated formal financial institution account ownership among adults in India at 35 percent.[17] By 2014, about 53 percent of adults had an account at a bank or other financial institution.[18] The 2014 Global Financial Inclusion (Global Findex) database report notes that by January 2015 (less than six months after the Pradhan Mantri Jan-Dhan Yojana initiative was launched), about 125 million new bank accounts had been opened; however, about 72 percent of the accounts did not show a balance.[19] More time is needed to determine whether and how these accounts will be utilized. One positive trend is that between January 2014 and December 2014, the highest rate of increase in bank account ownership was among women, particularly those below the poverty line.[20]

Payments services in India are still primarily cash-driven: According to an InterMedia survey conducted between September and December 2014, the vast majority of all financial activities surveyed (e.g., buying goods/groceries, paying bills, purchasing airtime, receiving wages, making person-to-person transfers, paying loans, purchasing insurance, and making large acquisitions) were conducted through cash.[21]

Informal savings remain popular. According to the InterMedia survey, about 82 percent of adults in India said they saved money. However, about 64 percent saved cash at home, while about 43 percent saved through a bank.[22]

Mobile ecosystem

With over 900 million cell phone subscriptions in 2014, India had the second-highest number (after China) of mobile phones subscriptions in the world.[23] As of 2014 the mobile penetration rate in India was about 74 subscriptions per 100 people.[24] Another — and, since a single person can have multiple subscriptions, not necessarily inconsistent — 2014 figure provided by the InterMedia survey indicated that as of December 2014, 52 percent of survey respondents in India owned a mobile phone.[25] An additional 34 percent of adults could access a mobile phone they did not own, bringing the total share of adults with access to a mobile phone to about 86 percent.[26] However, significant demographic disparities exist regarding mobile phone ownership: According to the survey, 70 percent of men in India own a personal mobile phone, compared with 34 percent of women.[27]

According to the GSMA Mobile Money for the Unbanked Deployment Tracker, as of May 2015 there were over a dozen active mobile money deployments in India.[28] However, despite the availability of multiple mobile money services and increasing (though still limited) awareness of mobile money services,[29] mobile money use is still low. According to the InterMedia survey, about 0.3 percent of adults reported they had accessed a mobile money account,[30] and about 0.2 percent of adults had active, registered mobile money accounts (meaning that the registered account had been used within the last 90 days).[31] [32]

As of January 2014, only about 5 percent of InterMedia survey respondents had access to a smartphone; however, this percentage is sure to increase rapidly in the next several years.[33] The increasing prevalence of smartphones may contribute to mobile money takeup, as basic skills regarding mobile phones are still not broadly prevalent among underserved individuals,[34] and smartphones have the technological capacity to offer more user-friendly interfaces than most basic or feature phones. Thus, increasing mobile money offerings and mobile penetration rates, combined with India's evolving regulatory landscape, herald tremendous potential for accelerated growth of mobile money services.

Country commitment and regulatory environment

While India has not made commitments under the Maya Declaration, it did commit to the Financial Inclusion Strategy Peer Learning Group within the Alliance for Financial Inclusion.[35] The Reserve Bank of India (RBI) and government of India are the primary institutions involved in the push for financial inclusion.[36] Large-scale financial inclusion programs in India arguably accelerated in the mid-2000s,[37] when the RBI called on banks to "provide basic financial services in all unbanked villages in two phases: first, to all villages with a population of at least 2,000 and, second, to all villages with a population of less than 2,000."[38] Banks "used a combination of new branches, fixed location business correspondent outlets, and mobile-technology based banking correspondents to meet this target."[39] More recently, initiatives such as JAM are focusing on incentivizing use of traditional banks while also emphasizing the use of digital channels as mechanisms for providing access to financial services among those previously excluded from the formal financial sector.

Branchless banking

According to the 2013 Mobile Money Scoping Report on India by the International Finance Corporation (IFC), business correspondents (BCs) are defined as "representative[s] authorized to offer services such as cash transactions where the lender does not have a branch."[40] The IFC report lists mobile service providers and financial service companies such as EKO as BCs.[41] According to the IFC, BCs own or contract with customer service points, which are individuals or retail units that "collect account opening documentation, offer cash-in/cash-out services, and receive payments."[42]

The RBI's 2006 regulations indicate that business correspondents are permitted to disburse small amounts of credit; collect interest and deposits; sell microinsurance, mutual fund products, pension products, and other third-party products; and receive and send small remittances.[43] Banks are ultimately responsible for adhering to know-your-customer (KYC) procedures.[44] Proportionate KYC procedures are in place to allow relaxed identification requirements for basic accounts.[45]

As noted, BCs are licensed to sell a diverse array of products such as insurance and pension products.[46] However, BCs in India have faced significant challenges in the past that have contributed to high attrition rates[47]: At least 45,000 banking correspondents in India have become untraceable to the banks, according to a senior government official.[48] RBI initially prohibited charging of fees to the end-user in the BC model, which some experts argue made the development of viable business models challenging, and in response to the drive to increase financial inclusion, many banks opened branches that could not gain enough volume to be sustainable.[49]

In 2009, the RBI began allowing banks to collect service charges for new accounts.[50] Although BCs receive a one-time remuneration for opening accounts in addition to remuneration for transactions, low levels of use in rural areas continue to make achieving profitability challenging.[51] To address this issue, India's new financial inclusion policy (described below) seeks to boost the number of registered, active account holders and to ensure minimum remuneration for banks.[52]

The RBI has modified regulations over time to expand the types of entities that can be considered BCs. By 2006, "NGOs/MFIs [nongovernmental organizations and microfinance institutions] set up under Societies/Trust Acts, Societies registered under Mutually Aided Cooperative Societies Acts or the Cooperative Societies Acts of States, section 25 companies, registered NBFCs[53] [non-banking financial companies] not accepting public deposits and Post Offices may act as Business Correspondents."[54]

By 2009, a circular on the use of business correspondents added to the list of prospective BCs: "(i) Individual kirana/medical /fair price shop owners; (ii) Individual Public Call Office (PCO) operators; (iii) Agents of Small Savings schemes of Government of India/Insurance Companies; (iv) Individuals who own Petrol Pumps; (v) Retired teachers; and (vi) Authorised functionaries of well-run Self Help Groups (SHGs) linked to banks."[55] A 2010 amendment determined that "it has been decided to permit banks to engage any individual, including those operating Common Service Centres (CSCs) as BC, subject to banks' comfort level and their carrying out suitable due diligence as also instituting additional safeguards as may be considered appropriate to minimise the agency risks."[56] Finally, in 2014, NBFCs were permitted to operate as BCs.[57] New regulations concerning payments banks, discussed below, are expected to further expand the scope of providers within the financial ecosystem.

Government-to-person payment programs

In 2012, under the Direct Benefit Transfer program, the government of India decided to transfer social welfare benefits directly to beneficiaries' bank accounts using the Aadhaar unique identification (UID) number, which is linked to individuals' bank accounts.[58 59] The PaHal (Pratyaksha Hastaantarit Laabh) program, a direct benefit transfer program to facilitate consumer access to liquid petroleum gas, is the first direct benefit transfer program of India's new government and disbursed about $2 billion to around 130 million beneficiaries as of May 2015.[60]

A 2014 report noted that the government also implemented its commitment to digitizing government-to-person payments in part by "depositing government pension and scholarship payments directly into the bank accounts of almost 250,000 people in 20 districts."[61] Further digitization of government payments could benefit both the government and recipients alike, as some sources project the government could save over $22 billion a year by paying subsidies for services like health care and education directly.[62]

To promote provider sustainability, in 2013 the government expressed its willingness to pay a 3.14 percent fee to banks for delivering G2P payments, which improves the business case for banks.[63] The Task Force on an Aadhaar-Enabled Unified Payment Instructure proposed this approach in 2012 as a means to combat the difficulty of maintaining sufficient float at BCs and to incentivize bank use in rural markets. More specifically, the task force recommended that the Indian government bear a "last mile" transaction process fee of 3.14 percent with a cap of 20 rupees per transaction; for interoperable transactions, 31 percent of the fee would be directed to the issuing bank, 64 percent to the acquiring bank, and 5 percent to the switch.[64]

However, the government has not implemented the recommended 3.14 percent fee — in January 2015, the government set the rate for direct benefit transfer commissions in rural areas at only 1 percent.[65] Increasing the direct benefit transfer commission could help enable BCs to offer their services sustainably.[66]

The Unique Identification Authority of India (UIDAI)'s Aadhaar program is continuing the process of assigning identification numbers to all citizens; each number is linked to biometric data, including a photograph, iris scans, and fingerprints.[67] These identification numbers and the borrower's credit history could potentially be linked to the Aadhaar Enabled Payment Systems to facilitate greater transparency and reduce information problems in the credit market.[68] The system is "a bank-led model which allows online interoperable financial inclusion transaction at PoS [point-of-sale] through the business correspondent of any bank using the Aadhaar authentication."[69] These transactions include balance inquiries, cash withdrawals and deposits, and "Aadhaar to Aadhaar funds transfer."[70]

As of December 2014, "over 720 million citizens had been allocated an Aadhaar card."[71] Because Aadhaar numbers are linked to bank account numbers through the Aadhaar Payments Bridge (APB) system, government departments can disburse payments to consumers using the APB.[72] Beyond government recognition of Aadhaar as an enabler for the shift from in-kind to direct cash transfers,[73] another benefit of the program related to digital financial inclusion is that since Aadhaar registrations include the customer's mobile number, this could offer another platform for direct Aadhaar-based transfers.[74]

Branchless banking and mobile money regulation in India

Electronic payments are regulated under the provisions of the 2007 Payments Act.[75] Both mobile wallets and mobile banking are offered in India, although regulations for the two services vary.[76] Mobile money services include both non-bank semi-closed mobile money accounts[77] and full service mobile money accounts that allow for cash withdrawals — the latter are considered bank accounts and require customers to transfer money to a formal, full service bank account before withdrawing funds.[78]

The inability of third-party agents to perform cash-out withdrawals, and the inability of mobile money providers to offer interest on funds stored in e-wallets, may have constrained the scalability and sustainability of mobile money services.[79] Some analysts have attributed the slow takeup of mobile money services in India in part to the country's bank-led approach, arguing that mobile network operators are less enthusiastic about mobile money service provision when they are unable to contract their own agents, and banks do not have adequate financial incentives to provide services to the unbanked.[80]

Disparities in regulations applying to mobile money accounts opened by non-banks and banks have been identified as possibly constraining growth — for example, the GSMA noted in 2013 that varying transaction limits between mobile money accounts opened by banks versus telecommunications companies were issues that should be addressed through regulatory reform.[81] However, regulatory changes related to payments banks (discussed further below) should ensure the financial services ecosystem is more conducive to a wide array of service providers entering the market.

Mobile ecosystem

India continues to develop its mobile payments infrastructure. Its Immediate Payment Service (IMPS), developed by the National Payments Corporation of India (NPCI), enables bank account holders to instantly transfer funds from one account to another via mobile phone.[82] In 2012, the Telecom Regulatory Authority of India issued mobile banking regulations "requiring service providers to facilitate banks to use SMS, USSD and interactive voice response (IVR) to provide banking services to customers."[83] The National Unified USSD Platform, operated by the NPCI, allows customers to input a USSD code "on any handset on any mobile network to launch a basic mobile banking menu to check balances and transfer funds."[84] The platform connects all telecommunications companies with banks' mobile banking system, which permits customers to access mobile banking services regardless of their telecommunications service provider.[85]

Mobile wallets, which have been regulated under the category of prepaid payments instruments,[86] allow customers to transfer funds from mobile to mobile within same operator network, top off pre-paid airtime, and pay utility bills.[87] Agent interoperability for branchless banking is permitted.[88] With wallet-to-wallet transactions under the same mobile network operator or a closed prepaid payment issuer network,[89] bank KYC review is not required.[90] Wallet-to-cash transactions require bank KYC certification, with the BC managing liquidity.[91] As of 2013, a pre-approval requirement for wallet-to-wallet interoperability was in effect; this requirement allows the RBI to select which service providers can operate with other players in the mobile financial services ecosystem.[92]

Financial inclusion commitments and regulatory reform

In August 2014, Prime Minister Narendra Modi announced the PMJDY program.[93] This initiative aims to provide at least one bank account to every household, develop an insurance scheme for the poor, facilitate financial literacy and access to credit, and foster other initiatives to promote financial access and adoption among the under or unbanked.[94] The plan will be implemented in two phases. The first phase took effect immediately after the announcement and aimed to ensure universal banking within a year, and the second phase will begin one year from the announcement of the scheme and seek to provide insurance and pension opportunities to those without them by August 14, 2018.[95] In addition to a bank account, each account holder will receive a debit card (RuPay card) and a 1 lakh (100,000 rupees) in insurance coverage.[96]

The plan is complementary to the RuPay program implemented by the NPCI in May 2014, which seeks to enable ATM withdrawals and electronic payments at all banks and financial institutions in the country.[97] The NPCI was formed as a result of the RBI's objective to "consolidate and integrate the multiple [retail payment] systems with varying service levels into nation-wide uniform and standard business process for all retail payment systems."[98] NPCI launched the RuPay debit card program to offer an open, domestic payment system that would allow interoperable electronic payments across banks and other financial institutions in India.[99]

While the Indian government's stated commitment to promoting financial inclusion is clearly an important step,[100] other questions remain regarding how the government will cover the costs of the program's overdraft facility and whether the focus on traditional bank accounts neglects more efficient and scalable digital financial service programs. Rishabh Khosla and Vikas Raj of the Center for Financial Inclusion have written that although India's financial inclusion mission is "an exciting vision, [...] it does not address a seeming lack of consumer interest in traditional banking products and services: numerous government and non-profit initiatives have focused on opening bank accounts for the poor, which then see little or no use."[101]

In 2014, guidelines were produced allowing the creation of "payments banks" and "small banks."[102 103] These guidelines allow companies such as mobile operators, retail chains, and current agent managers to provide deposit accounts and payments; the deposit accounts will be eligible for risk-proportionate KYC.[104] There is speculation that the Indian Postal Service may be included with recipients of payments bank licenses, which arguably would prove beneficial for financial inclusion as the service has a broader network even than the State Bank of India, the largest Indian bank.[105] Indeed, the government has noted the value of the Post Office's network to "serve many geographically isolated consumers in the country."[106] Moreover, telecommunications companies are expected to apply for payment bank licenses, which would permit them to create customer accounts, offer remittance services, and presumably engage in cash-out transactions; they would not, however, be permitted to offer credit.[107] As noted by Kabir Kumar and Dan Radcliffe, customers at payments banks will have to avoid excessive dependence on over-the-counter transactions, whereby customers transact via agents rather than setting up their own accounts.[108] Moreover, payments banks will need to invest in developing their correspondent or agent networks to reach underserved populations.[109] License applications were due in early February 2015, and licenses should be awarded later in the year.[110]

In 2014, the RBI undertook other enabling regulation, removing a requirement for any banking correspondent to be within a 30 km range of a bank branch.[111] According to Tilman Ehrbeck, then-CEO of the Consultative Group to Assist the Poor, this change allows financial service providers, including banking correspondents, to compete with state-owned banks, which have the most sizable branch networks.[112] While these various regulations are valuable steps forward, certain concerns remain: For example, Khosla and Raj have raised concerns regarding the issue of minimum capital requirements potentially precluding new financial service providers from scaling up.[113] Nonetheless, strong digital payments infrastructure, development of policies and regulations promoting digital financial services in India, and strong government commitment to financial inclusion should allow India to better take advantage of its information and communications technology capacity and mobile penetration rates in order to increase financial inclusion.

See India endnotes on page 153

INDONESIA

OVERALL RANK
#13

OVERALL SCORE
70%

DIMENSION SCORES

Country commitment	72%
Mobile capacity	94%
Regulatory environment	100%
Adoption	47%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$868	178	42%	36%	37%

Formal commitment milestone

- Committed to the Maya Declaration in 2012

Selected financial inclusion highlights

- Branchless banking regulations by Otoritas Jasa Keuangan enable financial service providers to appoint individuals and business entities as agents and to provide simplified customer due diligence requirements
- A series of e-money pilots was launched in fall 2014 to use digital financial services to disburse government-to-person payments

Ranking highlights

- Tied for the second highest ranking on the mobile capacity dimension with a score of 94 percent
- Implemented mobile money platform interoperability in 2013

Next steps

- Agent exclusivity provisions and other restrictions within the branchless banking regulations should be reconsidered in order to facilitate access to financial services for the underserved
- Permitting a wider vary of electronic money issuing entities (e.g., telecommunications companies, smaller banks) to appoint individual agents could help broaden financial access points and facilitate financial inclusion

Indonesia

Overview

According to the World Bank's Global Financial Inclusion (Global Findex) database, about 36 percent of adults in Indonesia had an account with a formal financial institution or mobile money provider as of 2014.[6] Favorable demographics[7] and significant mobile penetration rates may facilitate greater financial inclusion in Indonesia. Further, regulations now permit mobile financial services to follow a bank, mobile network operator (MNO), or hybrid-led model, and interoperability agreements may increase the ease of use of digital financial services going forward.[8]

While traditional banks remain the dominant providers of financial services, rural banks, pawnshops, cooperatives, and other microfinance institutions provide financial services to underserved populations.[9] Recent legislation, such as e-money regulations from Bank Indonesia[10] and the branchless banking regulations from Otoritas Jasa Keuangan (OJK),[11] as well as recent government-to-person (G2P) initiatives are indicative of Indonesia's willingness to advance financial inclusion through channels beyond traditional "brick and mortar" banks; however, room for improvement remains regarding various constraining elements of the regulations, including exclusivity arrangements and restricted options for agent selection among certain financial service providers.[12]

Access and usage

Banking landscape

As of 2013 there were about 10 commercial bank branches per 1,000 km^2 in Indonesia and about 10 commercial bank branches per 100,000 adults.[13] There were about 40 ATMs per 1,000 km^2 and approximately 42 ATMs per 100,000 adults.[14] According to the 2014 Global Findex, about 36 percent of adults in Indonesia had an account with a bank or other formal financial institution.[15] Only about 22 percent of adults in the lowest 40 percent of the income scale had an account with a formal financial institution.[16]

Mobile ecosystem

Mobile device penetration within Indonesia is high, and continued growth in the number of mobile subscriptions will provide further opportunities for mobile money solutions to reach scale.[17] As of 2014, Indonesia was the fourth largest mobile market in the world.[18] According to the World Bank, there were about 126 mobile subscriptions for every 100 people in Indonesia in 2014.[19] As of 2014, smartphones made up about 15 percent of all handsets, and smartphone penetration was expected to reach about 40 percent by 2015.[20]

As of 2014, about 80 percent of the mobile market share was held by three MNOs, with Telkomsel (44 percent) holding the largest share, followed by Indosat (20 percent) and then XL Axiata.[21] As of May 2015, there were several active mobile money service deployments.[22] Nonetheless, there is significant space for increased mobile financial service usage: In 2011, only about 0.2 percent of adults age 15 and older used their mobile phones to pay bills, 0.6 percent used their phones to receive money, and 0.6 percent used their phones to send money.[23] There has not been a significant amount of growth in mobile money takeup since: The 2014 Global Findex found that less than 1 percent of adults in Indonesia were mobile money account holders,[24] and an InterMedia survey conducted from August to November 2014 found that only about 3 percent of surveyed adults were even familiar with the concept of mobile money (about 6 percent were familiar with a brand).[25]

In May 2013, Telkomsel, Indosat and XL Axiata launched an initiative enabling mobile money customers to send and receive money across each other's networks.[26] This initiative was one of the earliest examples in the mobile money industry of enabling mobile money platforms run by different mobile operators to "talk" to each other's accounts in real time.[27] Prior to this development, money sent to an individual on a different mobile network from the sender typically generated a voucher that could be cashed out exclusively at an agent within the sender's network.[28]

Given that money transfers for payments and remittances are widespread (in 2013, 83 percent of adults reported sending or receiving a remittance or payment in the previous month),[29] and the majority of these transactions are made in cash, Indonesia features a potential market opening for greater use of digital financial solutions.[30] However, a 2011 assessment of Indonesia's mobile money landscape found that barriers for mobile money solutions included fairly strict wallet and transaction limits, low awareness, adoption, and usage, and insufficient cash-out points.[31]

Country commitment and regulatory environment

Indonesia's National Strategy for Financial Inclusion was solidified in 2010 and placed a strong focus on financial literacy.[32] The country's financial inclusion strategy was later revised to include a financial education component for mobile banking.[33] However, the strategy has not been formally adopted and is subject to revision.[34]

Other national-level initiatives have been undertaken to promote financial inclusion. Bank Indonesia (BI), a Maya Declaration member, completed its target to implement a national financial literacy survey, which was conducted in 2012-2013. With respect to traditional banks, Indonesia has also invested in promoting the "TabunganKu" no-frills savings account; by March 2014, there were almost 12 million TabunganKu accounts.[35] The BI's Financial Inclusion Development Group within the Financial Access and SME (Small and Medium Enterprises) Development Department noted that the government considers financial inclusion to be "the right of every individual to have access to a full range of quality financial services in a timely, convenient, informed manner and at an affordable cost in full respect of his/her personal dignity."[36] The Decree of the President of the Republic of Indonesia Number 15 of 2010 on the Acceleration of Poverty Reduction created TNP2K, an institution "established to coordinate the acceleration of poverty reduction across sectors and stakeholders at the central level."[37] As part of its mandate, TNP2K aims to promote financial inclusion.[38]

In 2009, BI published the first regulations on electronic money (e-money), allowing banks and MNOs to offer cash-in/cash-out services from e-wallet accounts; however, these entities were required to have money remitter licenses, and banks and MNOs could not appoint agents to perform cash-out unless they procured individual money remitter licenses from BI.[39] Further, customers had to go to an outlet managed directly by their mobile operator (despite the fact that each operator had only about 25 access points across the country).[40]

However, the Regulation on Funds Transfer 14/23/PBI/2012 allowing "cash payment points" to provide cash-out without requiring each agent to have an "individual funds transfer license,"[41] followed by branchless banking pilot guidelines in May 2013, indicated greater willingness by the central bank to allow service providers to extend their networks.[42] BI's 2013 guidelines for banks and mobile network operators allowed those entities to outsource some banking activities to agents, known as UPLKs (financial intermediary service units).[43] The 2013 guidelines required the pilot entities to institute agents in rural areas and allow agents to perform cash-in/cash-out functions. However, these pilots ended in November 2013.

In April 2014, BI announced new rules on e-money. While these rules did not address the extension of bank accounts through agents, they did establish a "multi-tier approach to appointing agents for cashing out."[44] This is a positive development for BUKU IV banks, which are commercial banks that possess capital of at least 30 trillion Indonesian Rupiah (about $2.5 billion),[45] because they can appoint "individuals" (either individuals or unregistered business entities such as "mom and pop" stores and airtime sellers) as agents.[46] However, agents for smaller banks and telcos were required to be incorporated legal entities, which has created a challenge since many businesses in Indonesia are not formally registered.[47]

Other changes established in the regulations included forbidding agency exclusivity and allowing service providers to establish their own fees (though BI retained the power to limit those fees as needed).[48] As of 2014, mobile money customers could use the money in their e-wallets to pay bills, buy airtime, transfer money to other customers in their network, or send money to an account in another network's mobile money scheme.[49] To develop this interoperability scheme, teams consisting of representatives from each of the three operator's legal, customer care, IT, and other departments met to address the challenges of establishing interoperability, which include routing transactions among schemes, "talking" across platforms, managing anti-money laundering/combating the financing of terrorism rules, and reviewing financial processes (e.g., reconciliation and settlement).[50]

Regarding know-your-customer (KYC) rules associated with e-money regulations, the issuer holds responsibility for opening the account, and the documents provided in compliance with anti-money laundering laws are required to at least include "name, address, date of birth, and other data" as needed.[51] Given that e-money can be registered or unregistered, some experts expect that issuers should be able to design a formal tiered KYC process related to e-money in the future.[52]

Indonesia's new financial services authority, OJK,[53] which was developed in 2011 but came into power in January 2014,[54] has the authority to "(i) issue a permit for the establishment of a bank and supervise all bank activities (bank business plans, mergers, consolidations and acquisitions, and articles of association), (ii) regulate and supervise a bank's financial health (capital ratio, liquidity, reserves, reports, and accounting standards), and (iii) assess prudence such as risk management, bank governance, and know your customer principles in order to prevent money laundering and terrorism and banking crimes."[55] These responsibilities were ceded by BI, although OJK can coordinate with BI and other financial institutions in determining relevant policies. OJK also has the authority to impose sanctions on financial sector entities.[56]

OJK issued draft branchless banking regulations in September 2014 that were finalized in November 2014.[57] These regulations permit banks to contract with a wide array of agents to offer a diverse suite of products, including basic savings accounts, microloans, microinsurance, and transfers.[58] In March 2015, OJK launched the Laku Pandai program, in which four banks (BRI, Bank Mandiri, BTPN, and BCA) plan to offer financial services through more than 125,000 agents and offer a basic savings account with no minimum balance.[59] While these efforts are largely enabling with respect to financial inclusion, an exclusivity clause in the regulations prevents agents from partnering with more than one provider, which could limit utility for customers and constrain growth.[60] The regulations also institute some geographical and other restrictions that could limit the expansion of services to the unbanked or underbanked.[61]

Regarding KYC guidance associated with the branchless banking regulations, customers can open a basic savings account using any photo ID or a reference letter from a community leader.[62] [63] These proportionate requirements, combined with the fact that more than 90 percent of the population of Indonesia had signed up for a national ID program as of 2014, may facilitate greater access to and use of financial services.[64]

In terms of government-to-person payments, regulations specify that e-money and digital financial services can be used for the disbursement of social payments.[65] However, only banks and post offices have been permitted to institute electronic disbursement schemes. In 2014, BI conducted a disbursement trial for about 1,800 families in the PKH (Family Hope Programme) through e-money accounts associated with two leading banks and retail agents.[66] In January 2015, about a million households began receiving a set of electronic social security cards and a pre-activated SIM card linked to a savings account at Bank Mandiri for the PSKS program (Prosperous Family Savings Program).[67] The government's emphasis on electronic distribution of social welfare schemes should strengthen the financial inclusion landscape in Indonesia moving forward.

See Indonesia endnotes on page 156

KENYA

OVERALL RANK
#1

OVERALL SCORE
89%

DIMENSION SCORES

Country commitment	89%
Mobile capacity	94%
Regulatory environment	94%
Adoption	84%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$55	26	44%	75%	71%

Formal commitment milestone

- Committed to the Maya Declaration in 2011

Selected financial inclusion highlights

- Highest rate of mobile money account ownership of the FDIP countries
- Enabling regulatory environment that promotes entry of bank and non-bank providers in the market and diverse offerings such as mobile savings and credit products

Ranking highlights

- Received the highest overall score due to strong country commitment to promoting financial inclusion, high mobile capacity, an enabling regulatory environment, and high adoption rates of formal financial services
- Operationalized the National Payment Systems Act and National Payment Systems Regulations in 2014

Next steps

- Increase provider support to agents to ensure agents' security and sustainability
- Recent legal, regulatory, and private sector actions may increase competition within the digital financial services ecosystem

Kenya

Overview

Kenya has made significant strides in advancing financial inclusion in recent years,[6] as evidenced by a 33 percentage point increase in the level of account penetration at a formal financial institution or mobile money provider between 2011 and 2014.[7] Much of the progress in Kenya's financial inclusion landscape has been credited to the country's vibrant mobile money ecosystem, which features exceptionally high levels of takeup.[8] A "Financial Diaries" survey conducted in Kenya between June 2012 and October 2013 found that about 90 percent of households used mobile money services.[9]

Looking at financial services more broadly, according to the 2014 Global Financial Inclusion (Findex) database, about 75 percent of adults in Kenya held an account with a financial institution or mobile money provider.[10] This is consistent with the results of an InterMedia survey that found about 74 percent of Kenyans surveyed in September 2014 had access[11] to a bank, mobile money services, or both.[12] The Central Bank of Kenya (CBK) has been noted for its willingness to provide an enabling environment for digital services to evolve, first by issuing "letters of no objection" to non-bank entities seeking to introduce mobile money services,[13] and later by developing specific regulations clarifying the standards informally adopted.[14]

The rise of the country's highly successful mobile money deployment M-Pesa (a product of Kenya's largest mobile network operator, Safaricom) serves as one model for leveraging market expertise and existing infrastructure to scale up mobile money services and advance financial inclusion. Citing figures from the CBK, a representative of Safaricom stated in 2014 that financial inclusion figures had increased to about 70 percent, largely driven by greater use of the M-Pesa service — without M-Pesa, the figure was estimated to have been closer to 26 percent.[15]

Yet further work remains in promoting a high-quality digital financial services ecosystem accessible to under-resourced individuals. For example, the CBK, which serves as the authority responsible for regulating and supervising payment service providers, has alluded to concerns about insufficient market competition in the area of mobile financial services. The National Payment System Regulations issued in 2014 highlight what the CBK has identified as key priorities, including the need to increase access to financial services, lower the risk of fraud, and foster competition and interoperability.[16] Lowering the cost of financial services and strengthening consumer experience in using financial services have also been identified as key areas for further improvement.[17]

Access and usage

As noted in a keynote speech by the then-governor of the CBK, Professor Njuguna Ndung'u, a 2013 FinAccess survey incorporating geographic information system spatial mapping of financial access points in Kenya concluded that the percentage of the population living within 3 km of a financial access point was about 59 percent, significantly higher than other countries in the region (e.g., about 44 percent for Uganda and 28 percent for Tanzania).[18] Data available from FSP Maps as of May 2015 noted that about 63 percent of Kenya's population was within a 3 km radius of financial service points.[19]

Banking landscape

The International Monetary Fund's 2014 Financial Access Survey found that in 2013 there were about two commercial bank branches per 1,000 km^2 in Kenya and about six commercial bank branches per 100,000 adults.[20] On the demand side, a survey conducted in fall 2014 by InterMedia found that about 21 percent of Kenyan adults had an active bank account.[21] A 2013 FinAccess report noted that in terms of use of financial service provider by type, banks were at 29 percent, savings and credit cooperatives (SACCOs) at about 9 percent, and microfinance institutions (MFIs) at 3.5 percent.[22]

By 2014, according to the Global Findex about 55 percent of adults had an account at a formal financial institution,[23] with about 36 percent of those in the bottom 40 percent of income levels holding an account.[24] About 52 percent of women had an account with a formal financial institution.[25] Approximately 30 percent of adults saved at a financial institution, while about 15 percent of adults borrowed from a financial institution.[26]

Mobile ecosystem

As of 2014, there were about 74 mobile cellular subscriptions per 100 people in Kenya.[27] The 2013 FinAccess National Survey highlighted demographic disparities in mobile phone ownership. About 62 percent of rural adults owned a mobile phone in 2013, for example, compared with about 84 percent of urban adults.[28] According to a 2013 InterMedia survey, "51 percent of Kenyan adults […] use basic phones, while 36 percent use feature phones, [and] only 6 percent have smartphones."[29] Future increases in the level of smartphone penetration could further enhance takeup of mobile financial services.

The 2014 InterMedia survey on financial inclusion in Kenya found that the top uses for mobile money accounts among active account holders were depositing money (90 percent), withdrawing money (87 percent), buying airtime top-ups (68 percent), receiving money from other people for regular support/allowances or for emergencies (54 percent), receiving money from other people for another reason or no particular reason (43 percent), and sending money to other people for other reasons or no particular reason (38 percent).[30] Of surveyed active account holders, 42 percent reported they began using mobile money services to receive transfers, while 21 percent started using the service because they needed to send money.[31]

According to the 2014 Global Findex, about 58 percent of the adult population in Kenya used a mobile money account within the previous 12 months, with about 56 percent of rural adults, 53 percent of low-income adults (among the bottom 40 percent of the income scale), and 55 percent of women using mobile money accounts. About 25 percent of those who received salary or wages within the previous year did so through a mobile phone, and about 55 percent of those who paid utility bills within the previous year did so through a mobile phone.[32]

Several demographic disparities among mobile money users were evident in recent surveys. For example, the 2014 Intermedia survey noted that under-resourced individuals in Kenya were about 30 percentage points less likely than those above the poverty line to be active, registered users of money.[33] Moreover, about 70 percent of urban respondents were active, registered users of mobile money, in contrast to about 51 percent of rural respondents.[34]

In terms of age, the 2013 InterMedia survey found that 73 percent of active account holders were in the 25-to-44 age bracket.[35] The survey also found a pronounced gender gap was evident in urban areas but not in rural areas — in urban areas, 83 percent of men were active mobile money account holders, contrasted with 68 percent of women, while in rural areas the difference between men and women was about one percentage point.[36]

Despite the success of mobile money in Kenya, the customer experience at agents could be further improved. For example, over 50 percent of mobile money users surveyed in 2014 reported they were unable to complete at least one mobile transaction within the previous six months due to the network being down.[37] Fifty-five percent of respondents noted that insufficient e-float or cash at the point of service prevented them from completing a transaction.[38]

While Kenya had several active mobile money deployments as of May 2015, the M-Pesa service has experienced the greatest takeup.[39] Of active mobile money account holders in the 2014 InterMedia survey, 99 percent used M-Pesa, while about 9 percent used Airtel Money (active mobile money account holders can have accounts with more than one provider).[40]

M-Pesa was launched commercially by Safaricom in March 2007.[41] Safaricom's high market shares (about 80 percent at the time of M-Pesa's launch in 2007) ensured broad awareness of the brand, a sizable network of airtime resellers that could be converted into cash-in/cash-out agents, and a significant budget for development of the product.[42] Moreover, bank branch networks such as Equity Bank and the presence of many MFIs ensured a reasonable number of liquidity points.[43] M-Pesa signed up banks as agents, allowing any M-Pesa customer to walk into a variety of bank branches to conduct cash-in/cash-out transactions.[44] In 2008, M-Pesa partnered with PesaPoint, one of the largest ATM service providers in Kenya, further increasing the service's accessibility.[45] Another factor noted by *The Economist* as possibly contributing to the takeup of M-Pesa was the post-election instability in early 2008, as individuals needed to send money to friends and family unable to travel from other locations and may have trusted local M-Pesa agents more than banks.[46]

Like other mobile money services, M-Pesa allows customers to deposit and withdraw cash by exchanging cash for electronic value through a network of agents (often people who own retail stores) who are paid a transaction fee by Safaricom.[47] Customers can also pay bills, purchase airtime, and transfer funds to other M-Pesa users and even to non-registered users.[48] Registration can be done at any M-Pesa retail outlet for free.[49] The customer's name, ID number (found on a variety of identity documents, including a Kenyan national ID, passport, military ID, diplomatic ID or alien ID), date of birth, occupation, and mobile phone number need to be entered into a registration form.[50] If the customer's SIM card does not contain the M-Pesa application, the clerk provides a SIM compatible with the M-Pesa application.[51] There is no fee to deposit money through M-Pesa and no minimum balance, although there is a minimum transaction amount of Ksh 10 (about $0.10).[52]

The experience of Kenya highlights how mobile money services can evolve and provide new financial service offerings, although it may take time for customers to fully utilize the new services.[53] In November 2012, Safaricom and the Commercial Bank of Africa partnered to launch M-Shwari, a mobile savings and credit service.[54] The 2013 InterMedia survey found that only 30 percent of survey respondents who used M-Shwari actually took out a loan, and even fewer (14 percent) reported that they saved money with it for a future purchase or payment.[55] Instead, customers primarily used the product to deposit and withdraw money.[56] In March 2015, Safaricom and KCB launched the KCB M-Pesa account, a mobile phone-based savings and loan product similar to M-Shwari but with some differences, including a longer repayment term and higher loan limits.[57]

Other offerings include services such as the Lipa na M-Pesa merchant payment service, introduced in 2013, which allows subscribers to pay for goods and services from their phones.[58] [59] In 2014, Airtel launched Akiba Mkononi, a savings account held by UBA Bank Kenya, with the Airtel Money menu as the form of access to the virtual account.[60]

The proliferation of mobile money agents has increased the accessibility and cost-effectiveness of financial services for consumers in Kenya, particularly among those in rural areas. The 2013 FinAccess survey found that for approximately 76 percent of the rural population, the nearest financial service provider was a mobile money agent;[61] similarly, 75 percent of urban respondents cited mobile money agents as the closest financial service provider.[62] Some 55 percent of the rural population surveyed stated it took longer than 30 minutes to get to the nearest bank branch, while the number was 42 percent for bank agents and 22 percent for mobile money agents.[63] Regarding costs, 36 percent of the rural population stated they would have to spend over 100 Kenyan shillings to get to a bank, compared with about 23 percent for bank agents and 9 percent for mobile money agents.[64]

The 2014 Financial Access Survey found that in 2013 there were about 455 active agent outlets per 100,000 adults and about 199 active agent outlets per 1,000 km^2 in Kenya.[65] A Microfinance Information Exchange (MIX) financial inclusion map accessed in April 2015 indicated that there were more than 45,000 mobile money agents in Kenya, compared with about 7,000 bank agents.[66]

The prevalence of M-Pesa agents in particular highlights the potential of agents to increase points of access to financial services for underserved populations. A 2010 paper by Ignacio Mas and Dan Radcliffe noted that there were already nearly five times as many M-Pesa outlets as the total number of Postbank branches, post offices, bank branches, and ATMs in the country.[67] In terms of reaching scale, Mas and Radcliffe stated that using existing retail stores as M-Pesa cash-in/cash-out outlets reduced deployment costs, lowered the cost of access to users, and increased convenience to consumers.[68]

A 2014 Helix Institute report noted that a shift in agent market presence (defined as the proportion of cash-in/cash-out agents by provider) has tended toward banks; banks accounted for 5 percent of market presence in 2013 and held 15 percent in 2014.[69] Equity Bank has been a significant player in this shift, increasing its market presence from just over 1 percent in 2013 to 8 percent in 2014.[70]

Moving forward, there are still opportunities for growth with respect to advancing widespread access to financial services. For example, as of 2014, a MIX map noted that Nairobi held about 41 percent of all financial access points, while seven large counties in Kenya had low numbers of access points among more sparsely distributed populations.[71]

Country commitment and regulatory environment

Kenya made a commitment under the Maya Declaration in September 2011.[72] The CBK, which has prudential oversight over the payments system, made specific commitments under the Maya Declaration as a principal member of the Alliance for Financial Inclusion in order to enhance financial inclusion through digital finance.[73] Other key players in the financial inclusion field include the Financial Sector Deepening Trust (FSD Kenya) and FinMark Trust.[74]

Kenya's Vision 2030 strategy sets a goal of a "vibrant and globally competitive financial sector" in which the "savings rates will rise from 17 percent to 30 percent of GDP in about a decade."[75] The country set a quantifiable target of decreasing the percentage of the population without access to finance from 85 percent to below 70 percent.[76] The latest FinAccess survey, which evaluates Kenya's national financial inclusion landscape, was completed and published in 2013; FSD Kenya and CBK were among the principal partners and funders of the project.[77]

In 2009, the Finance Act introduced modifications to the Banking Act to permit agent banking, and in 2010, the CBK released agent banking guidelines.[78] These guidelines allowed banks to appoint third parties as agents, but "banks faced difficulties in building effective agent networks due to the higher compliance requirements for bank agents than mobile money agents, for instance, the requirement for specific agent approval."[79] The agent banking guidelines allowed post offices, supermarkets, pharmacies, gas stations, and various other entities to conduct specific financial activities (including cash-in and cash-out services) on behalf of a licensed commercial bank.[80 81]

Other recent regulations include prudential guidelines on consumer protection, which were launched in January 2013.[82] Revised agent guidelines for commercial banks were also issued in January 2013 and became fully operational that year.[83] Further, the National Payment Systems Act and Regulations were passed and issued in 2011 and 2014, respectively.[84 85] The legislation requires all electronic money issuers in the country to have open back-end systems able to be interoperable both domestically and internationally, which could increase competition from other mobile network operators (MNOs) and services. As noted in the 2014 InterMedia report, interoperable arrangements among providers are not mandated, but the legislation encourages such arrangements.[86 87] The 2014 National Payment Systems Regulations do not permit agents to be required to serve one provider exclusively.[88] These regulations codified that banks and non-banks (including MNOs) can apply to the CBK to be authorized as a mobile payment service provider.[89]

Customer funds from mobile money transactions through such services as M-Pesa have been required to be kept in a prudentially regulated financial institution; in turn, CBK has allowed entities such as Safaricom to operate mobile money services as payment products under the National Payment Systems legislation, outside the provisions of traditional banking law.[90 91] Customers are not paid interest on the balance in their accounts,[92] as the electronic value stored in the account is not considered a deposit — any interest earned on deposited balances is sent to a not-for-profit trust, and limits on transaction amounts are in place to address anti-money laundering concerns.[93 94]

Recent taxes and fees have affected prices in the digital financial services sector. For example, in early 2013 the National Treasury instituted a 10 percent excise duty on transaction fees for money transfer services. In an effort to recover some of the cost, Safaricom proceeded to charge an additional 10 percent on M-Pesa transfers of more than 101 shillings.[95]

As of early 2015, regulations on anti-money laundering did not "explicitly provide for a risk-based or tiered approach to KYC [know your customer];" however, since mobile money providers are "permitted to accept additional KYC information incrementally […] a risk-based approach can be implemented."[96] Future regulations may enable more flexible KYC procedures, as draft CBK guidelines as of 2014 titled "Anti-Money Laundering Guidelines for the Provision of Mobile Payment Services" would allow mobile payments providers greater discretion regarding which forms of identification they choose to accept from their customers at registration.[97] Likely due in part to the ease of registration, only 8 percent of mobile money users in Kenya in 2013 reported that they conducted transactions through someone else's account rather than using their own registered account.[98] Use of registered accounts is valuable for the expansion of financial opportunities, as a registered mobile account is required to use more advanced products (e.g., savings, insurance, loans).[99]

With respect to facilitating competition, in April 2014 the Kenyan government approved mobile virtual network operator (MVNO) licenses under existing legislation (MVNOs supply their SIM cards and mobile money services over existing mobile networks).[100] The entry of banks and MVNOs into the mobile money market is hoped to spur competitive pricing and generate innovative services.[101] Another factor that may stimulate greater competition is the ruling by the Competition Authority of Kenya (CAK) in July 2014 that Safaricom was required to end its agent exclusivity agreement in order to allow Safaricom M-Pesa agents to transact business for other mobile operators (it should be noted that Safaricom stated several weeks earlier that it had already permitted its agents to work for other telcos).[102] As noted, the 2014 National Payment Systems Regulations required that "[a] contract for the provision of retail cash services entered into between a payment service provider and an agent or a cash merchant shall not be exclusive."[103]

The regulations and ruling may facilitate greater opportunities for non-Safaricom customers to transact at financial access points, since as of 2014 about 90 percent of agents in Kenya were exclusive to Safaricom, with about 4 percent non-exclusive.[104] The court did not make a ruling on platform interoperability and the cost of transactions (some telcos had expressed concern that Safaricom's practice were anti-competitive, stating that users of other networks were charged more the Safaricom's subscribers) since the CAK contended these issues required the input of the CBK and the Communications Authority.[105]

Kenya's government has recently focused on promoting digital transactions in the area of public sector payments; for example, the government has banned cash for public transport payments (e.g., bus and matatu fares). Though the change was scheduled to take effect in July 2014, the deadline was extended to accommodate operators.[106] In 2014, the government of Kenya also launched a Government Digital Payments program to encourage payments to the government to be made through digital channels such as mobile money and credit cards. By accessing the www.ecitizen.go.ke web portal, individuals can make digital payments for services such as passport and driving license applications and renewals.[107]

One area for possible regulatory improvement flagged by the Economist Intelligence Unit is the issue of oversight for certain financial institutions. While "deposit-mobilizing" microfinance banks and deposit-taking SACCOs are subject to regulatory oversight by the CBK and SACCO Societies Regulatory Authority, respectively, credit-only institutions (including most MFIs and SACCOs) are not prudentially or non-prudentially regulated and supervised. This lack of regulation could potentially leave customers without adequate consumer protection.[108]

See Kenya endnotes on page 158

MALAWI

OVERALL RANK
#19

OVERALL SCORE
63%

DIMENSION SCORES

Country commitment	89%
Mobile capacity	78%
Regulatory environment	94%
Adoption	33%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$4	9	24%	18%	14%

Formal commitment milestone

- Committed to the Maya Declaration in 2011

Selected financial inclusion highlights

- Under the Financial Sector Technical Assistance Project, Malawi implemented its National Switch in February 2015; this switch is expected to facilitate interoperability in the future
- Malawi's Mobile Money Coordination Group has brought together diverse public and private sector stakeholders aiming to expand mobile money access and usage

Ranking highlights

- The 2011 Mobile Payment Systems Guidelines enabled non-banks to offer mobile money services
- The Government of Malawi committed to the Better Than Cash Alliance in 2013

Next steps

- Instituting e-money regulations will provide greater clarity to the digital financial services sector for both banks and non-banks
- Increasing the use of digital channels for government-to-person payments could incentivize use of these channels and increase efficiency and transparency of payments

Malawi

Overview

Although economic and infrastructural conditions have constrained its progress toward financial inclusion, Malawi has engaged in a number of efforts to advance access to quality financial products through regulatory mechanisms and various infrastructure initiatives. Challenges to financial inclusion in Malawi include limited economic capital and telecommunications infrastructure, as well as fairly low literacy rates, income levels, and mobile and banking penetration rates.[6] Only about 16 percent of the adult population has an account with a formal financial institution, and about 4 percent of the adult population uses a mobile money account.[7]

However, Malawi has received support from international entities and programs, including the Financial Inclusion in Malawi (FIMA) initiative of the United Nations Capital Development Fund (UNCDF) and the World Bank's Financial Sector Technical Assistance Project (FSTAP), discussed later in this summary. Malawi has also engaged with diverse stakeholders to create a mobile money coordination group and provide an enabling regulatory environment conducive to the expansion of branchless banking options. Further development in Malawi's economic, telecommunications, and social sectors may be necessary in order to accelerate financial inclusion growth.

Access and usage

According to the International Monetary Fund's Financial Access Survey, in 2013 there were about three commercial bank branches per 1,000 km^2 and about three commercial bank branches per 100,000 adults in Malawi. At that time, there were about four ATMs per 1,000 km^2 and nearly five ATMs per 100,000 adults.[8] Findings from a 2014 FinScope survey in Malawi, which surveyed adults age 18 and older from November 2013 to March 2014, showed that 40 percent of adults were considered "formally served,"[9] up from 26 percent in 2008.[10] About 33 percent were "banked," compared with 19 percent in 2008.[11] The remaining 67 percent were not banked, either directly or indirectly; insufficient income was the most common reason cited as a barrier to banking.[12]

Although it took the average adult in Malawi about 77 minutes to reach the nearest bank branch, only 4 percent of respondents stated that that the nearest bank was too far away or that transportation was too difficult for them to access a bank.[13] However, the cost associated with traveling to a bank may nonetheless serve as a deterrent.[14] The financial inclusion distribution varied noticeably among rural and urban respondents in Malawi: In 2014, 78 percent of adults residing in urban areas were formally or informally financially included, compared with 50 percent of those in rural areas.[15] About 55 percent of men were financially included,[16] compared with 51 percent of women.[17]

The same survey noted that 86 percent of adults in Malawi reported living in rural areas, and 91 percent of households were involved in farming — a pursuit often subject to financial shocks.[18] Moreover, only 10 percent of adults reported receiving regular salaries.[19] Financial products like savings accounts and insurance could therefore be particularly valuable — however, the 2014 FinScope survey noted that about 98 percent of adults in Malawi did not subscribe to any financial products covering risk.[20] More than half (54 percent) of respondents indicated that they were not saving (an increase from 26 percent in 2008), with 71 percent of those respondents noting they did not make enough money to have disposable income left after living expenses.[21]

Low income levels, agent liquidity issues, limited understanding of mobile money solutions, and difficulties associated with developing a financially viable agent network across sporadically populated rural areas all pose challenges to Malawi's financial inclusion goals.[22] Some sources have also cited burdensome costs associated with opening and maintaining a bank account, and the widespread lack of marked physical addresses as well as formal identification system creates further challenges for account registration. [23 24] While non-bank entities such as post offices can transfer funds, the fees charged are often cited as being quite high and maintaining sufficient float for cash-out services can prove challenging.[25]

Mobile ecosystem

In 2011, the mobile penetration rate among adults in Malawi was about 27 percent, significantly below the African average of 40 percent.[26] In 2014, the World Bank's World Development Indicators database noted mobile subscriptions were at about 30 per 100 people.[27] By the end of 2014, mobile penetration rates were estimated at 38 percent.[28] In 2013, the Financial Access Survey found there were about 151 registered mobile money agent outlets[29] per 100,000 adults and about 139 registered agent outlets per 1,000 km^2.[30]

In 2011, the share of adults age 15 and older who used a mobile phone to receive money was about 0.7 percent, while the share of adults who used a mobile phone to send money was about 0.5 percent.[31] The share of adults who used a mobile phone to pay bills was about 0.8 percent.[32] By 2013, there were 36 active mobile money accounts[33] per 1,000 adults, up from about six in 2012, and about 84 registered mobile money accounts per 1,000 adults, up from about 21 in 2012.[34]

More recently, the 2014 FinScope survey found that 4 percent of adults age 18 and older in Malawi used mobile money services (3 percent were registered users, while 1 percent were unregistered).[35] Of the 96 percent who did not use mobile money, the most commonly reported barrier by far was a lack of awareness of mobile money services.[36] Only about 20 percent of adults in Malawi stated that they were familiar with mobile money.[37] A 2014 report estimated that about 10 percent of total mobile phone subscribers in Malawi engaged in mobile money transactions and/or had a mobile money account.[38]

As of May 2015, the GSMA Mobile Money for the Unbanked Deployment Tracker noted that mobile money options were provided by two mobile network operators (MNOs), Airtel and TNM, as well as one mobile money transfer service, Zoona, which initiated a pilot phase in July 2014.[39 40] Airtel's Airtel Money (Khusa M'manja) service was launched in February 2012 and provides cash-in/cash-out, transfers, airtime top-ups, and insurance.[41] International non-governmental organizations have also used the mobile money service to distribute cash subsidies.[42] In May 2013, TNM launched TNM Mobile Money, which provides bill payment, cash-in/cash-out services, airtime top-ups, salary payments, remittances, and insurance options.[43] MNOs, which are subject to regulation under the Communications Act, were originally permitted to provide mobile money services by receiving a "Letter of No Objection" from the Reserve Bank of Malawi.[44]

Country commitment and regulatory environment

The 2010 Banking Act and Financial Services Act serve as the regulatory framework for banks in Malawi.[45] A National Payments Council was established in 1993 following a recommendation by the International Monetary Fund; the council comprises the governor of the Reserve Bank of Malawi (RBM) and the chief executives of all commercial banks and other key non-bank financial institutions.[46] In 2001, the National Payments Council endorsed the Malawi National Payment Systems Vision and Strategy Framework, in conjunction with the RBM and the Bankers Association of Malawi. The Malawi Switch Centre (Malswitch), a "relay-based national network infrastructure and transaction switch," was developed by the RBM with reference to this framework.[47] However, the National Switch (NatSwitch) implemented under FSTAP in February 2015 has replaced the Malawi Switch Centre as the nation's network infrastructure and transaction switch.[48]

FSTAP is a five year program launched in 2011 with funding from the World Bank. Its objective is to increase access to finance for underserved populations by advancing enabling regulation and supervision, financial infrastructure, consumer protection and financial literacy, and financial sector policy.[49] As part of this initiative, Malawi has implemented an interlinked national payment system infrastructure that includes the NatSwitch.[50] The NatSwitch could also allow MNOs to integrate with commercial banks' payment systems in the future.[51] The FIMA initiative, conducted from 2007 to 2011, provided Malawi with technical assistance, grants, and advisory services designed to advance financial inclusion.[52] [53]

Malawi committed to the Alliance for Financial Inclusion's Maya Declaration in 2011, with the RBM serving as the designated Maya member agency.[54] That same year, Malawi's Mobile Payment System Guidelines were developed to address the non-bank led model of mobile money provision, allowing MNOs in Malawi to provide mobile money services.[55] Draft Reserve Bank E-Money Regulations, which are expected to be finalized by the Ministry of Finance in the near future, are expected to replace the 2011 Mobile Payment System Guidelines.[56] These regulations will allow electronic money service providers to use tiered know-your-customer (KYC) procedures.[57] In the interim, while the AML Act does not explicitly provide for a tiered KYC framework, the Financial Intelligence Unit can permit use of simplified KYC requirements — and it has used this authority to inform Airtel and TNM that "a letter from a local chief or voter registration card is sufficient for KYC requirements."[58]

In 2012, Malawi introduced agent banking, and three banks were granted permission to implement agent networks.[59] By February 2015, Malawi finalized a Payment Systems Bill (which is expected to be enacted by December 2015),[60] [61] instituted the Mobile Money Coordination Group (MMCG), and developed consumer protection regulation requiring banks to publicly disclose their charges and tariffs on products and services.[62] The MMCG is composed of members from the RBM, consumer associations, telecommunications industry, and international nongovernmental organizations such as the United States Agency for International Development and the World Bank.[63]

As part of its Maya Declaration involvement, the RBM set a quantifiable goal of increasing the number of banked adults to 40 percent by 2014.[64] A 2014 FinScope survey indicated that Malawi has made progress toward that goal, with about 33 percent of adults banked.[65] In terms of digital financial services, Malawi committed to promoting mobile payment solutions.[66] Malawi also developed a methodology for collecting financial inclusion data and created a transparent pricing strategy, with provisions for transparency in new directives for non-deposit taking microfinance institutions.[67] Finally, Malawi created a national financial literacy and consumer education strategy as part of its national financial sector development plan.[68]

By September 2014, MNOs in Malawi partnered with select commercial banks to offer mobile money services, allowing mobile money subscribers to transfer money from their mobile accounts and bank accounts, complete interbank money transfers, monitor their balances, and engage in cardless ATM withdrawals.[69] The NatSwitch will permit interoperability of ATMs and point-of-sale (POS) devices affiliated with different banks or other financial institutions and could also allow MNOs to integrate with commercial banks' payment systems in the future. Interoperability is stated as a requirement within the Mobile Guidelines, but it has not been enforced to date.[70]

Promoting interoperability, improving the national telecommunications infrastructure, and strengthening the overall economy could help facilitate financial inclusion in Malawi. The financial infrastructure initiatives under FSTAP are expected to promote interoperability, while other international non-governmental organizations, including the UNCDF and United Nations Development Programme, support economic development in particular as part of their efforts to achieve the Millennium Development Goals, of which a major one for Malawi is halving poverty by 2015.[71] Another area in which mobile financial services could be promoted is that of government-to-person (G2P) payments. Current G2P payments could be linked to mobile money accounts, particularly given the government's decision to require salary payments for civil servants to be distributed through electronic channels.[72]

See Malawi endnotes on page 161

MEXICO

OVERALL RANK
#9

OVERALL SCORE
72%

DIMENSION SCORES

Country commitment	94%
Mobile capacity	83%
Regulatory environment	83%
Adoption	53%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$1,261	87	37%	39%	39%

Formal commitment milestone

- Committed to the Maya Declaration in 2011

Selected financial inclusion highlights

- Developed the 2009 Ley de Corresponsales Bancarios to promote agent banking
- Created the Consejo Nacional de Inclusión Financiera, Mexico's national financial inclusion body, in 2011

Ranking highlights

- Strong government commitment to advancing financial inclusion through recent government-to-person payment and consumer protection initiatives, including Bansefi's Prospera program
- Financial inclusion-related data featured in regular financial inclusion reports published by the Consejo Nacional de Inclusión Financiera

Next steps

- Foster competition within the telecommunications and banking sectors and promote platform interoperability
- Finalize and implement the national financial inclusion strategy

Mexico

Overview

While various government reforms have reflected Mexico's focus on financial inclusion,[6] points of access to financial services continue to be concentrated in more urban areas,[7] and takeup of mobile money services has been fairly limited.[8] Fostering greater competition within the telecommunications and banking sectors, promoting platform interoperability, and increasing access points in rural areas may help to accelerate financial inclusion within Mexico. Given Mexico's active role within the international financial inclusion community, the political will to advance financial inclusion efforts appears evident — however, ensuring coherence among the many coordinating bodies will require strong communication and leadership. Several branchless banking models serving economically disadvantaged populations in Mexico have emerged, but sustainability, suitability, and awareness of these services are issues that must be examined as Mexico's financial landscape continues to evolve.

As an upper middle income developing economy in Latin America, Mexico possesses a fairly developed telecommunications and banking sector.[9] The country also has a relatively young population (about 86 percent of the population was 54 years old or under in 2014)[10] and strong literacy rates (about 94 percent for adults age 15 and older as of 2012).[11] While these conditions should facilitate the growth of digital financial services, mobile phone-based financial service solutions have not been widely adopted, and developing a viable business model for banking entities in rural areas has proven challenging. In 2012, a survey conducted by Mexico's financial regulator, the Comisión Nacional Bancaria y de Valores (CNBV), and the Instituto Nacional de Estadística y Geografía found that approximately 44 percent of Mexican households relied on informal financial services.[12] Overcoming a culture of informality in the financial services sector by enhancing trust in financial institutions, providing affordable formal financial products, and developing sustainable business models for financial service providers in under-banked areas remain important steps for advancing financial inclusion in Mexico.[13]

Access and usage

Banking landscape

According to Mexico's National Survey for Financial Inclusion (ENIF), 56 percent of the adult population used one or more formal financial services in 2012.[14] The ENIF also noted that in 2012, 35.5 percent of the adult population had a deposit or savings account with a formal financial institution.[15] By 2014, about 39 percent of adults age 15 and older had an account with a bank or other formal financial institution.[16]

In terms of geographic distribution, as of 2013 approximately 73 percent of municipalities in Mexico had access to financial services through a banking agent, branch, ATM, or point-of-sale terminal.[17] According to the CNBV, as of 2012 about 96 percent of Mexico's population lived in a municipality with at least one access point.[18] However, in 2012 about 87 percent of banking agents (commercial third parties contracted by banks) were located in areas with more than 50,000 inhabitants[19] — only about 18 percent were located in rural or peri-urban[20] environments.[21] While services offered by banking agents are less extensive than those offered at a typical bank, many experts have noted that these entities can serve as strong conduits for extending access to the under-banked and unbanked, particularly as these agents can often build on the consumer trust already established at retail outlets within communities.[22]

Government-to-person payments

The Mexican government's shift toward electronic government-to-person (G2P) payments[23] over the course of several political administrations was accelerated after a 2010 budget decree that certain government departments shift to centralized electronic payments.[24] As of 2013, the shift was still ongoing.[25]

Electronic G2P programs are often cited as a first step in building the infrastructure and public-private partnerships crucial to advancing financial inclusion.[26] However, former head of the CNBV Guillermo Babatz observed in a 2013 report that during the G2P acceleration period in Mexico, electronic G2P payments were primarily directed to individuals, such as government employees, who already experienced some level of access to financial services.[27] Still, the report noted a number of benefits from efforts to promote electronic G2P and treasury centralization, including reduced leakage, lowered costs to government, and enhanced consumer choice of banks.[28]

Branchless banking

In "corresponsales" arrangements, existing banks extend basic financial services through retailers, pharmacies, convenience stores, and other businesses.[29] For example, Banco Azteca, a retailer bank authorized as a commercial bank by the Ministry of Finance in 2002, began by selling durable goods on credit and now offers savings products.[30] The bank works in partnership with retailer Elektra and had 813 branches in Grupo Elektra stores as of 2003.[31] The partnership's remittance service, in which money can be sent between any Elektra stores, has proven very popular. Similar entities include BanCoppel and Banco Famsa, the latter of which is also involved in the pawn broking industry.[32]

Compartamos Banco serves as an example of an organization that grew to scale while providing services for economically disadvantaged segments of the population. The organization became a microfinance bank in 2006 after reaching scale[33] and primarily offers loans, with limited savings products available.[34]

Another successful entity is Banamex (short for Banco Nacional de México), which boasts one of the largest branch networks in Mexico (about 1,700 stores)[35] and has engaged in various initiatives targeting financially underserved individuals.[36]

Banamex partnered with Telcel, a wireless telco owned by América Móvil, and Banco Inbursa to offer "Transfer," a service that allows individuals to use mobile financial services by creating an account online (or in person at an Oxxo store or Banamex branch) and depositing money in their account at Transfer Banamex branches, Oxxo retailers, 7-Eleven shops, and Soriana stores.[37] The service allows individuals to send a transfer to a Telcel phone or Banamex account, send a transfer to an account at another bank, or receive money from another bank.[38] The user's mobile number serves as an account number.[39] As of 2014, Transfer Banamex had more than 2.5 million active customers, and almost 3.5 million registered customers.[40]

Oxxo collaborated with Banamex, Visa, and Telcel to offer Saldazo, a product similar to Transfer but with an additional loyalty rewards function.[41] Saldazo provides a debit card associated with a savings account and requires no minimum balance or annuity payments; with a valid ID, it can be obtained at any Oxxo store.[42] According to Oxxo's website, the retailer has more than 11,000 stores in Mexico.[43] Consumers can top up at any Oxxo store and have a variety of banking options since Oxxo connects with several major banks.[44] As of February 2014, there were more than 100,000 active Saldazo cards in Mexico; the number of active Saldazo cards was expected to reach 1 million by the end of 2014.[45]

In another related development, in 2013 Grupo Bimbo, Mexico's largest baking company, partnered with Visa and Grupo Bimbo's subsidiary Blue Label Mexico, "a provider of technology solutions," to "expand the acceptance of credit and debit card payments in retail locations in the country, using the Red Qiubo, a transactional platform that already facilitates payments of services and the purchase of wireless airtime top up." Given that more than 700,000 small retailers in Mexico carry Grupo Bimbo's products, the network for this new partnership is already in place.[46]

Mobile financial services

Further integrating the provision of mobile financial services at agent locations could enhance financial inclusion for those in rural areas. Mobile penetration in Mexico reached around 83 subscriptions per 100 people in 2014.[47] As of the third quarter of 2014, Mexico's smartphone adoption rate was about 18 percent; this rate is projected to increase to about 62 percent by the end of 2020.[48]

As of 2014, about 3 percent of adults in Mexico had used a mobile money account within the previous 12 months; of those who regularly received a salary or wages, about 4 percent received them via a mobile phone, while among respondents who regularly made utility bill payments, the percentage who did so through a mobile phone was about 3 percent.[49] A fully interoperable network is still in development, so mobile financial payments are primarily restricted to payments within the same bank, limiting the variety of possible transactions.[50] All mobile payment models are linked through a payments system, but this system does not yet appear to be fully operational.[51]

Registered banks and non-banks are the only entities permitted to offer mobile financial services — and the role of mobile network operators (MNOS) in that context is limited.[52] Non-banks are permitted to become authorized as "payment banks," which are niche banks subject to lower capitalization requirements, in order to issue electronic payments.[53] However, these capitalization requirements are still considerably higher than those for e-money issuers in many other markets in Latin America and the Caribbean.[54] Concerted efforts to facilitate the entry of non-banks such as MNOs into the mobile money sphere could help accelerate the growth of these services.

Country commitment and regulatory environment

The Maya Declaration, which affirms measurable country commitments to financial inclusion, was drafted and endorsed in Riviera Maya, Mexico in 2011, signaling Mexico's awareness and active support of financial inclusion as a national priority.[55] The CNBV is Mexico's Maya member agency, and one of its first financial inclusion commitments was to modify the regulatory framework to permit interoperability of mobile products among the nation's three largest retail banks. Those three banks now offer interoperable products.[56] Another goal was to have a banking agent or branch present in every municipality by 2014; as of 2014, Mexico was reevaluating this goal.[57] Although 96 percent of Mexico's population lived in a municipality with a financial access point as of 2013, further work remains in providing adequate financial services to those living outside those municipalities and to improve access for those who live within those municipalities but are not conveniently located by a financial access point.[58]

The National Council for Financial Inclusion (CONAIF) was created by presidential decree in 2011.[59] The intent of the council is to establish guidelines of the National Financial Inclusion Policy (which had been drafted by the publication of the Maya Declaration progress report in 2014 but was still under final review as of April 2015),[60] [61] coordinate financial education initiatives with the Financial Education Committee, and propose regulatory changes at the federal, state, and municipal levels.[62]

Other major players include the La Secretaría de Hacienda y Crédito Público de México (SHCP), which is responsible for economic, fiscal, and financial policy;[63] the CNBV, which is the SHCP agency mandated to supervise most financial entities, formulate prudential regulation, and license banks and other financial intermediaries;[64] and Banxico (Banco de México), the regulator and supervisor of the payment system, as determined by Mexico's Payment System Law.[65] The National Commission for the Protection and Defense of Financial Users (or CONDUSEF, as the acronym is known in Spanish), is "in charge of developing strategies to protect and defend the rights and interests of the users of financial services in the country."[66]

Mexico's efforts to create an enabling regulatory environment through mechanisms such as payment banks have yielded positive trends: Between 2007 and 2012, 14 commercial banks and almost 4,000 bank branches were created.[67] Some experts have suggested that the emergence of an emphasis on financial sector development in Mexico occurred in the mid-to-late 2000s, when authorities issued banking licenses linked to various entities that included retailers and new financial players catering to low-income individuals.[68] In 2007, Mexico required banks to offer a broader array of services conducive to the needs of lower income households: free no-frills savings accounts, salary accounts without fees or a minimum balance, and checking accounts without charges (up to a certain amount).[69] However, one challenge with basic accounts is that they often do not offer a sustainable business model for banks and are often not offered to under-resourced individuals. For example, while there were 24 million basic accounts in 2013, most of these accounts were "associated with payroll collection for formal employees" — and when individuals in a 2013 study paid more than 100 visits to various financial institutions, they found that basic savings accounts were not offered to them.[70]

In 2009, the CNBV enabled the introduction of banking agents through the Ley de Corresponsales Bancarios.[71] The General Dispositions for Credit Institutions Law was amended to address "safeguards for the use of the new banking agent channels and using mobile phones for payments and transactions" and also allowed for tiered accounts that could be linked to a mobile device.[72] Banco Wal-Mart launched Mexico's first banking agent model in 2009.[73] Initially, the banking agent models developed by banks tended to center on retailers' preexisting networks. Later, however, several banks began to build small retailer networks of their own.[74]

Authorized banks, financial cooperatives, and regulated "SOFIPOS" are permitted to have banking agents.[75] The "Sector de Ahorro y Crédito Popular," comprising Popular Savings and Credit Cooperatives (SOCAPS) and Popular Financial Societies/"Sociedades Financieras Populares" (SOFIPOS), constitutes the "main authorized forms of deposit-taking institutions in the popular savings and credit sector" in Mexico. The rules governing prudential supervision for these entities are evolving — federations are expected to continue supervising their members' SOFIPOS, while "a new Protection Fund containing a central oversight authority (the CSA) will be created for S[O]CAPS."[76] The legal framework for SOCAPS was established in 2009.[77]

As contracted third parties, banking agents can offer cash deposits and withdrawals, credit and utilities payments, check cashing, balance inquiries, and opening of low risk accounts.[78] Mobile money agents fulfill more limited roles — primarily cash-in/cash-out services for person-to-person transfers.[79] Mobile phones can also be used to purchase some goods and services.[80] In 2010, MNOs were permitted to set up agent networks and manage mobile money accounts on behalf of banks.[81] All banks can link customers' accounts to mobile phones, and banks must allow interbank electronic transfers regardless of the mobile carrier of the beneficiary.[82]

Under the administration of President Enrique Peña Nieto, who took office in December 2012,[83] Mexico has undertaken reforms across a variety of sectors, including fiscal reform, legal reform, energy reform, and telecommunications reform.[84] Together, these initiatives are known as the Pacto por México.[85] Fiscal reforms passed in October 2013 included measures such as tax increases on wealthier individuals[86] and other reforms that aimed to promote access to less expensive credit.[87] The Redes de Medios de Disposición, or "Media Networks," regulation issued by the SHCP in March 2014 included a variety of provisions, such as requiring that information on charges and fees associated with use of a network be disclosed on the CNBV's website and requiring that "brand owners" create standards that permit interoperability for issuers and acquirers of the payment card network.[88]

In August 2011, the SHCP issued "Disposiciones de carácter general a que se refiere el artículo 115 de la Ley de Instituciones de Crédito,"[89] which included a scheme of tiered bank accounts. For example, Tier 1 accounts have the strictest limit on monthly transactions, and the only means of access allowed is a debit card (rather than wire transfers, mobile payments, etc.). This risk-based approach helps facilitate access to financial services among the underserved.[90]

Regarding the telecommunications environment, in 2013 the Mexican government "established a new telecoms and media regulator, IFT, with greater powers than its predecessor COFETEL to impose remedies for competitive imbalances in the market."[91] A 2014 legislative action was undertaken to reduce the dominance of one telecommunications firm, América Móvil.[92] América Móvil's mobile carrier Telcel controlled 70 percent of mobile subscriptions as of 2014,[93] but the services have been described as "slow and expensive."[94] Efforts to facilitate competition within the sector may advance affordability of telecommunications services.

Also in 2014, the SHCP provided several modifications to financial regulations and updated the Law to Regulate Financial Groups.[95] As noted by the 2014 Economist Intelligence Unit's "Global Microscope" study, Mexico has not yet developed any regulations surrounding electronic money.[96] Doing so could provide greater regulatory clarity for non-banks to engage in mobile financial services provision.

See Mexico endnotes on page 162

NIGERIA

OVERALL RANK
#9

OVERALL SCORE
72%

DIMENSION SCORES

Country commitment	100%
Mobile capacity	89%
Regulatory environment	83%
Adoption	49%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$522	97	45%	44%	34%

Formal commitment milestone
- Committed to the Maya Declaration in 2011

Selected financial inclusion highlights
- Launched a financial inclusion strategy in 2012 and instituted a Financial Inclusion Secretariat
- In August 2014, MasterCard (in cooperation with the Nigerian government) launched a program that provides individuals with a national ID card featuring electronic payment capabilities

Ranking highlights
- Developed an extensive set of quantifiable goals, including increasing the percentage of the adult population using formal financial services to 70 percent by 2020
- The 2013 guidelines on agent banking enabled banks to expand beyond traditional brick-and-mortar infrastructure, and a 2014 Helix Institute survey found that agent networks have expanded rapidly

Next steps
- Enable mobile network operators to take a leadership role in deployments, as this could potentially accelerate takeup of mobile money services
- Promote awareness of mobile money services (only about 13 percent of adults were aware of mobile money in 2014, according to an EFinA survey)

Nigeria

Overview

With about 44 percent of adults age 15 and older holding an account with a formal financial institution or mobile money provider as of 2014, up from about 30 percent in 2011, Nigeria has clearly demonstrated progress toward financial inclusion.[6] However, further work remains with respect to expanding access to formal financial services among the remaining 56 percent of adults who are largely excluded from the formal financial sector. While as of 2014 Nigeria possessed the largest economy in Africa in terms of gross domestic product,[7] as well as an impressive array of natural resources, a 2013 InterMedia survey noted that about 90 percent of Nigerian adults lived on less than $2.50 a day.[8] Facilitating access to and use of formal financial services could help under-resourced individuals in the country store and send money safely, manage risk, and gain more control over their financial lives. However, burdensome distances to bank branches in many areas, fairly high levels of unemployment, and irregular incomes have posed challenges to financial inclusion.[9] For example, as of 2011 approximately 70 percent of workers in Nigeria were employed by the informal sector, and a 2014 InterMedia report noted that about 32 percent of adults in Nigeria did not have an income-generating job.[10] Moreover, access to financial services in Nigeria varies by geographic regions — for example, individuals in the country's North East and North West have been identified as being disproportionately excluded from formal financial services.[11]

Digital financial services, including mobile money, could help facilitate access to finance in these underserved areas. However, building awareness and trust in mobile money will be necessary to encourage further use. A 2014 article noted that a recent poll by research firm NOI found while six out of ten Nigerians were aware of mobile money, only 13 percent of those who were aware of mobile money used it.[12] An InterMedia poll conducted in fall 2013 found even less awareness of mobile money operators, noting that only about 12 percent of respondents were familiar with them.[13] Moreover, only about 21 percent of respondents stated they trusted mobile money.[14]

Some experts have suggested that the Central Bank of Nigeria (CBN)'s bank-led approach to mobile money has served as a constraining factor in the takeup of mobile money services.[15] Providing a more enabling environment for mobile network operators (MNOs) to enter and play a more active role in the mobile money space could drive greater adoption of mobile services, given MNOs have been among the most "capable entities of launching and scaling mobile money services."[16]

While regional disparities in terms of financial access and usage remain, there has been some growth in the formal financial services sector. However, levels of financial exclusion have not decreased significantly in recent years.[17] Between 2012 and 2014, financial exclusion rates in the following regions shifted: North East, from 59.5 percent to 68.4 percent; North West, 63.8 percent to 56 percent; North Central, 32.4 percent to 32.7 percent; South East, 25.6 percent to 25.4 percent; South West, remaining at 24.8 percent; and South South, 30.1 percent to 32.7 percent.[18] Recent initiatives to promote financial inclusion in Nigeria include launching a financial inclusion strategy, instituting a Financial Inclusion Secretariat, and developing a set of quantifiable goals.[19] Financial service providers will have to continue strengthening reliability and security among their networks to increase consumer trust in the formal financial sector.[20]

Access and usage

Banking landscape

The share of individuals formally included within Nigeria's financial system has increased over time. In 2011, 30 percent of adults in Nigeria had an account at a formal financial institution.[21] An InterMedia survey conducted in Nigeria from September to November 2013 found that about 38 percent of Nigerian adults had bank accounts and that 35 percent used their accounts actively.[22] There were some evident demographic disparities: For example, 40 percent of males held active bank accounts versus 30 percent of females, and 44 percent of urban residents were active bank holders, compared with 28 percent of rural residents.[23]

By 2014, the Global Financial Inclusion (Findex) database found that 44 percent of adults had an account with a bank or other formal financial institution, although only about 34 percent of low-income adults and women had accounts with a formal financial institution.[24] With respect to banking infrastructure, in 2013 there were about six commercial branches per 1,000 km^2 and about six commercial bank branches per 100,000 adults.[25]

Mobile ecosystem

In 2012, Ecobank estimated that of the 60 million mobile subscribers in the country, 45 percent were unbanked.[26] Thus, there is significant opportunity to extend access to the financially underserved through mobile phones. Mobile cellular subscriptions amounted to about 78 subscriptions per 100 people in 2014, according to the World Bank.[27] InterMedia's fall 2013 survey found that the percentage of mobile phone ownership was higher, with about 90 percent of respondents reporting owning a mobile phone.[28]

As of May 2015, there were 19 mobile money deployments in Nigeria, according to the GSMA's Mobile Money for the Unbanked Deployment Tracker.[29] In terms of points of access to mobile agents, the International Monetary Fund's Financial Access Survey did not contain information on the number of active agent outlets or active mobile money accounts per 1,000 adults in Nigeria; however, there were about 36 registered agent outlets[30] per 100,000 adults and about 37 registered agent outlets per 1,000 km^2 in 2013.[31] The 2014 Maya Declaration progress report noted that there were approximately 715 mobile money agents and more than 325,000 mobile money customers in Nigeria.[32] As of 2014, according to the World Bank's Global Findex approximately 2 percent of Nigerian adults age 15 and older had used mobile money within the previous 12 months.[33]

However, takeup of mobile money to date has primarily been among those who already have bank accounts, indicating that these services are not yet providing many underserved customers with access to formal financial services. The fall 2013 InterMedia survey found that only about 0.3 percent of Nigerian adults age 15 and older used mobile money services, and almost all those who did also had bank accounts.[34] Facilitating registered usage of mobile money services is also a salient concern. Only 0.1 percent of adults had a registered mobile money account in 2014 and had used it at least once in the 90 days prior to the survey.[35]

Transaction fees for mobile money use may serve as an impediment to takeup among under-resourced individuals, and some caution that the cost of smartphones and broadband services must decline before other efforts at promoting the widespread use of mobile money in Nigeria can be successful.[36] As noted above, offering greater leadership to MNOs within the sector and building awareness of and trust in mobile money services will also be critical to scaling up consumer engagement with available deployments.

Since the majority of unemployed adults in Nigeria are dependent on remittances as their primary source of funds for daily expenses, mobile money could serve as an efficient and cost-effective conduit for these remittance flows.[37] In January 2015, it was announced that World Remit, an online money transfer service, had agreed to a global partnership with MTN, Nigeria's largest telecommunications operator — this partnership will enable customers of WorldRemit to send remittances to MTN's mobile money customers.[38]

Country commitment and regulatory environment

One of the goals that the Central Bank of Nigeria (CBN) identified among its Maya Declaration commitments was to implement a national financial inclusion strategy, which was launched in October 2012.[39] The National Financial Inclusion Strategy (NFIS) outlined the roles and responsibilities of key stakeholders, acknowledged the challenges to broadening financial inclusion in Nigeria, and set specific "targets for payments, savings, credit, insurance, pensions, branches of deposit banks and microfinance banks."[40] Goals of the NFIS included halving the number of financially excluded Nigerians and expanding the number of participants in the formal sector to 70 percent by 2020.[41]

Other targets include increasing the number of bank branches per 100,000 adults from 6.8 units in 2010 to 7.6 units in 2020.[42] Over the same period, the number of ATMs is expected to increase from 11.8 units per 100,000 adults to 203.6 units, point-of-sale devices from 13.3 units per 100,000 adults to 850 units, and mobile money agents from 0 units per 100,000 adults to 62 units.[43]

As of 2014, the NFIS was being implemented by the CBN, the National Pension Commission, National Insurance Commission, Securities and Exchange Commission, and Deposit Money Banks.[44] NFIS members have worked to create and implement a tiered framework for KYC regulations, and to develop financial literacy and agent banking frameworks — between 2012 and 2013, CBN released regulations concerning these priorities and distributed new guidelines to help "facilitate the implementation of the NFIS."[45]

Tiered KYC requirements for banks and other financial institutions were released in 2012.[46] While these regulations should be helpful in facilitating greater access to financial services, the agent banking regulations noted below may require further adjustments. For example, some experts caution that existing rules requiring agents to have operated as commercial entities for at least one year prior to their application for agency status may preclude more informal entities in rural areas from participating in the sector.[47]

Agent Banking Guidelines were released in February 2013, and a circular was issued in August 2013 to "provide guidance on the approval process for financial institutions wishing to deploying agent banking services in Nigeria."[48] One of the initial challenges to establishing an agent network in Nigeria was that no major retail chains were in place, rendering the available market and infrastructure for agents fairly fragmented.[49] To address this, the CBN is in the process of finalizing a partnership with the Nigerian Postal Service to serve as a retail agent for the provision of financial services.[50]

Under the 2009 Regulatory Framework for Mobile Money, MNOs are not permitted to lead mobile money services.[51] Mobile money operators must work with sponsoring banks, which hold customer funds; these funds are covered under the Nigeria Deposit Insurance Corporation.[52] An International Finance Corporation report in 2011 suggested that by sidelining MNOs with experience in developing mobile solutions and reaching lower-income populations, growth in the sector to date has been inhibited.[53]

Further opportunities exist for Nigeria to expand adoption of mobile money: The 2011 IFC report stated that "Nigeria has massive opportunities for m-money in P2P transfers, payroll for informal workers, and utility payments; it could become a second Kenya."[54] However, while other countries have adapted digital government-to-person payments as an initial effort to promote digital financial services, social welfare programs may not be sufficiently pervasive in Nigeria to render this a viable sector of opportunity for mobile financial services.[55]

Recent initiatives have provided additional momentum for mobile money solutions. In September 2014, eTranzact International Plc and EFInA signed a deal to initiate a mobile money project, "The PocketMoni 500," in Northern and South Western Nigeria; the project aims to register local merchants and consumers for mobile money services.[56] Also in September, Globacom (Nigeria's national telecommunications carrier) led financial institutions and mobile money operators FirstMonie (a subsidiary of First Bank of Nigeria), Ecobank, and StanbicIBTC to implement "Glo Xchange," a mobile money agent network.[57]

In terms of financial infrastructure, the Nigeria Central Switch, or NCS, was operational as of 2013 and allowed interoperability among deposit-taking institutions and licensed payment service providers; it also facilitated "inter-scheme card and mobile payments."[58] However, mobile money platform interoperability has not yet been achieved.[59]

In August 2014, MasterCard (in cooperation with the Nigerian government) launched a program that provides a national ID card with electronic payment capabilities.[60] The prepaid functionality of the card will allow people to "engage in electronic payments in the form of transferring, cash, digital payments, and more."[61] The card was expected to be distributed to more than 100 million people, and eventually a mobile wallet will be associated with it.[62] This push toward electronic payments is part of the government's "cashless policy," which promotes non-cash transactions (for example, by instituting a surcharge for cash transactions above a certain amount).[63]

As noted previously, Nigeria has set a number of quantifiable goals for financial inclusion. Moving forward, the 2014 Maya Declaration progress report noted that Nigeria seeks to "reduce the percentage of adults who are excluded from financial services from the current 46.3% to 20% by 2020." Nigeria plans to increase access to savings to 42 percent by 2015 and 60 percent in 2020. It also seeks to increase access to credit to 26 percent in 2015 and 40 percent by 2020. Finally, Nigeria aims to increase "access to insurance from 1% in 2010 to 21% in 2015 and 40% by 2020."[64] One of the enabling conditions for increased financial inclusion within the country moving forward is that 80 percent of Nigerian adults had some form of ID in 2014, which should help facilitate account registration.[65] By strengthening consumer trust in and use of digital financial services and providing more opportunities for MNO leadership within the mobile money sector, Nigeria can advance its goals to increase access to and use of high quality formal financial services.

See Nigeria endnotes on page 165

PAKISTAN

OVERALL RANK
#18

OVERALL SCORE
65%

DIMENSION SCORES

Country commitment	100%
Mobile capacity	83%
Regulatory environment	89%
Adoption	33%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$232	121	32%	13%	5%

Formal commitment milestone

- Committed to the Maya Declaration in 2011

Selected financial inclusion highlights

- Issued branchless banking regulations in 2008
- Launched its National Financial Inclusion Strategy in May 2015

Ranking highlights

- Reached 100 percent for its country commitment score following the launch of its national financial inclusion strategy in 2015
- A 2011 circular introduced modifications to the branchless banking regulations, including Level "0" accounts aimed at promoting inclusion

Next steps

- Facilitate the shift from over-the-counter transactions to mobile wallets
- Reduce the "gender gap" in use of formal financial services

Pakistan

Overview

The launch of Pakistan's national financial inclusion strategy in May 2015[6] and the development of several financial inclusion-enabling regulations and policies, such as branchless banking models with a range of risk-appropriate know-your-customer (KYC) requirements and transaction/balance limits, demonstrate Pakistan's commitment to and progress toward greater financial inclusion.[7] [8] However, there is still significant room for growth, as according to the 2014 Global Financial Inclusion (Global Findex) database, only 13 percent of adults age 15 and older in Pakistan had accounts with a formal financial institution or mobile money provider.[9]

Further efforts to enhance consumer understanding of financial services, incentivize mobile money registration, and promote use of such services could help promote financial inclusion. For example, although using "over-the-counter" (OTC) transactions without registering for a mobile wallet can facilitate greater access to financial services for many individuals, one of the challenges posed by these OTC transactions is that people cannot use their accounts to independently engage with an array of financial services. An InterMedia survey conducted between September and December 2014 found that the ease of using an agent's account may be a barrier to individuals registering for their own accounts: Among mobile money users who had not yet registered for an account, 31 percent cited as their reason for being unregistered that they could get all the services they needed through an agent.[10]

Service providers and regulators in Pakistan are working to incentivize registration of these digital accounts. For example, a January 2015 article noted that the Easypaisa service had "eliminated account registration, cash-in, money transfer, and cash-out fees on an experimental basis."[11] Moreover, the State Bank of Pakistan (SBP) and the National Database Registration Authority signed an agreement to reduce biometric verification fees for mobile account registration by about 78 percent.[12] The willingness of these entities to ease barriers to registration is a positive sign for future mobile money adoption in Pakistan.

The InterMedia survey noted several positive trends regarding mobile money in Pakistan, including an improvement in awareness of mobile money services: About 68 percent of adults were aware of mobile money as a concept, and 76 percent of adults recognized at least one mobile money provider.[13] The survey also found that proximity to an agent was cited far less frequently than in the previous wave of the survey as an obstacle to registering for an account.[14] Further expansion of the agent network should continue to facilitate increased access to and adoption of mobile money services.

Fostering more equitable access to financial services constitutes a key challenge for Pakistan moving forward. While an earlier InterMedia survey conducted among almost 5,000 households in Pakistan from May to September 2012 concluded that use of mobile money was not closely correlated with socio-economic status or location at the household level,[15] demographic disparities regarding accounts exist. For example, the fall 2014 InterMedia survey found that among users of the Telenor Easypaisa mobile money service (which had 86 percent market share among mobile money users as of 2014), 84 percent were male and 16 percent were female.[16]

Access and usage

Banking landscape

In 2013, Pakistan had about nine commercial bank branches per 100,000 adults and 14 branches per 1,000 km^2.[17] The InterMedia survey found that about

8 percent of adults held bank accounts in fall 2014.[18] Of the nearly 9 percent of adults in Pakistan that reported using banks at some point, only about 7 percent had full-service bank accounts, while 0.3 percent had loan-only accounts and 0.9 percent held other kinds of accounts.[19] About 6 percent of adults were active bank account holders, meaning that the account had been used within the previous 90 days.[20]

An earlier InterMedia survey conducted in Pakistan between November 2013 and January 2014 found that banks were generally more trusted as a channel for financial activities than mobile money: About 32 percent of respondents indicated that they "fully trust" or "rather trust" mobile money, compared with about 61 percent and 51 percent for state-owned and private banks, respectively.[21] However, a planned 0.6 percent tax on banking transactions over a certain threshold could serve as a disincentive to use of banking services, particularly among Pakistan's under-resourced population.[22]

Mobile ecosystem

Mobile cellular subscriptions have increased significantly in Pakistan within the last few years.[23] About 54 percent of InterMedia survey respondents owned a mobile phone in 2014, and about 72 percent owned or could borrow a mobile phone.[24] Pakistan has a young population — approximately 55 percent of the population was under 25 in 2014[25] — and as of 2014, more than 90 percent of people in Pakistan were living within areas with cellphone coverage (however, just over half of the population was covered by a 3G network as of 2015).[26] [27] Men benefit from higher levels of access to mobile devices than women; for example, the InterMedia survey noted that as of 2014, about 84 percent of men owned or could borrow a mobile phone, compared with 59 percent of women.[28]

As of 2013 there were approximately 86 active agent outlets[29] per 100,000 adults,[30] up from about 28 in 2012.[31] The SBP's October to December 2014 quarterly branchless banking report found that there were over 200,000 branchless banking agents (a 9 percent increase from the previous quarter) and about 160,000 active branchless banking agents (a 5 percent increase from the previous quarter); "active" agents must have opened within the last 90 days and performed at least one transaction within that period.[32]

In 2013, there were about 30 registered mobile money accounts per 1,000 adults, though only about 14 accounts per 1,000 adults were active[33] in that period.[34] While mobile money awareness is fairly high — as noted, 76 percent of adults had heard of at least one mobile money brand in 2014 — use is still limited.[35] As of 2014, about 8 percent of adults had used mobile money (as either registered or unregistered users); only about 0.3 percent of adults had used a registered mobile money account.[36] The October to December 2014 quarterly branchless banking report from the SBP found that there were almost 5.5 million total accounts[37] but that 57 percent of branchless banking accounts were inactive.[38]

By May 2015, according to the GSMA there were several deployments of mobile money services in Pakistan,[39] and the country's telecommunications infrastructure is expected to continue to improve.[40] The Easypaisa service has been particularly successful. Mobile network operator Telenor Pakistan and Tameer Micro Finance Bank launched Easypaisa in October 2009 with the aim of serving traditionally financially excluded households in Pakistan.[41] Telenor Pakistan acquired a 51 percent ownership stake in Tameer Bank before establishing the mobile money service.[42] Easypaisa was able to scale up rapidly, primarily because it could build on Telenor Pakistan's preexisting GSM distribution structure.[43]

By 2014, Easypaisa had 31 percent market share of the national agent network, defined as "the proportion of cash-in/cash-out outlets by provider."[44] While Easypaisa is Pakistan's leading service,[45] competition among branchless banking services is high.[46] Easypaisa provides mobile wallet accounts for registered users of the Telenor Pakistan mobile phone service,[47] and it also provides OTC mobile money services.[48]

Despite the growth of mobile financial services, supply and demand-side challenges remain. In October 2013, Nadeem Hussain, CEO of Tameer Bank, wrote that KYC requirements for opening accounts remained expensive for Easypaisa.[49] Moreover, use of Easypaisa is still limited since few merchants accept e-wallet payments or permit customers to store value in e-wallets.[50] The doubling of a sales tax on mobile handsets for fiscal year 2015/2016 may limit affordability of, and therefore access to, mobile phones and mobile financial services for consumers.[51]

Even among those who have mobile phones, observers have highlighted the difficulty of encouraging consumers to shift from OTC payments, where they do not have to open a mobile wallet account, to mobile wallets that facilitate a wider range of financial services.[52] In 2013, of the over 7 million unique users of the Easypaisa service, about 2.4 million had created an e-wallet, while 5 million were unique OTC customers.[53] The October to December 2014 quarterly branchless banking report from the SBP noted that OTC comprised 86 percent of the volume and 88 percent of the value of customer transactions.[54]

Without registering for a wallet, consumers cannot be connected to other institutions that may wish to participate in ongoing financial transactions with them, as with government-to-person disbursements.[55] There is significant room for growth in this respect: For example, a 2013 survey found that 10 percent of households in Pakistan reported receiving payments within the six months prior to the survey, with the government acting as the sender of 72 percent of those payments in the form of salaries and/or benefits; however, only about 1 percent of incoming and outgoing payments reported by the surveyed households were provided through mobile money.[56] The SBP's October to December 2014 branchless banking newsletter found that 2 percent of the total value of mobile wallet transactions came from pension payments and 21 percent comprised government-to-person payments.[57]

Country commitment and regulatory environment

Pakistan is a Maya Declaration signatory and a member of the Financial Inclusion Strategy Peer Learning Group.[58] Pakistan's recent Maya commitments built on the country's previous efforts to promote financial inclusion: For example, in 2008 Pakistan launched its national Financial Inclusion Programme (FIP), which was implemented by the SBP with the support of the UK Department for International Development (DFID).[59] FIP has been managed through a steering and technical committee — the steering committee comprises the governor of the SBP and representatives of DFID, while the technical committee includes SBP officials, market experts, and fund managers, among other experts.[60]

In March 2008, the SBP took other steps to promote financial inclusion when it issued Branchless Banking Regulations (among the first regulations in the world specifically designed to foster branchless banking)[61] that accommodated three types of branchless accounts (Levels 1–3), each with progressively more stringent KYC requirements and higher transaction/balance limits.[62] The regulations permitted a bank-led model, allowing commercial banks and microfinance banks with a banking license to apply for a branchless banking license. MNOs were allowed to operate only as agents on behalf of a bank, which enabled them to provide marketing, distribution, and product development services.[63] In 2011, a Level 0 account with very flexible KYC requirements was introduced.[64] 2015 guidelines on low-risk Asaan accounts state that they require a minimum 100 Pakistani rupee (about $1)[65] opening deposit, but there is no minimum balance requirement.[66] The account is "targeted at common people and is open to all low-income unbanked/under-banked masses who face difficulties in account opening […]."[67]

In August 2014, a biometric verification system (BVS) was instituted and used for the issuing of all new SIMs, and mobile operators have since "started to roll out biometric SIM registration terminals across the country at retail locations."[68] Building upon this infrastructure can facilitate the remote opening of new level 0 customer acccounts.[69] According to the October to December 2014 branchless banking newsletter from the SBP, 56 percent of newly opened level 0 accounts were opened using BVS,[70] and 63 percent of all new accounts opened during the quarter were opened through BVS.[71]

The SBP has taken steps to fulfill Pakistan's Maya Declaration commitments, which span across a range of areas, including consumer protection, access to finance for small and medium enterprises, microcredit, microsavings, and data and measurement. As noted, the SBP regularly publishes branchless banking newsletters featuring supply and demand-side data,[72] and it also moved forward on its commitment of completing an Access to Finance survey by hiring a firm to conduct the survey in 2014.[73]

Pakistan has committed to joining the Better Than Cash Alliance and has also stressed the importance of moving toward digitizing all government payments.[74] Regarding the use of digital channels for government-to-person payments and remittances, a 2015 InterMedia report noted that "the major government payers currently are the Benzanir Income Support Program (which has digitized 85% of total payments via pre-paid cards), the Employees Old-Age Benefits Institution (EOBI) Pensioners Program (which has digitized over 80% of payments), and the Thardeep Rural Development Program."[75]

Further, the SBP has made efforts to promote consumer protection and financial literacy — a draft Secured Transaction Law was prepared and subject to revision in 2014,[76] and a National Financial Literacy Program was expected to be launched in July 2014.[77] Pakistan committed to developing an agent dashboard by February 2014 to strengthen oversight and to creating an "agent bureau application;" as of 2014, Pakistan had developed software for the agent dashboard and agent bureau application.[78] Also in 2014, some mobile network operators interconnected their mobile money services in Pakistan, becoming one of the few countries to do so;[79] further efforts on this front could enhance ease of use for customers of different services. In May 2015, Pakistan launched its national financial inclusion strategy, developed by the SBP in collaboration with the World Bank,[80] for 2015–2020.[81]

See Pakistan endnotes on page 166

PERU

OVERALL RANK
#17

OVERALL SCORE
66%

DIMENSION SCORES

Country commitment	94%
Mobile capacity	78%
Regulatory environment	89%
Adoption	40%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$202	22	51%	29%	22%

Formal commitment milestone

- Committed to the Maya Declaration in 2011

Selected financial inclusion highlights

- The Peruvian Association of Banks (ASBANC) is working on the development of an electronic money platform available for both financial institutions and telecommunications companies
- As of 2014, about 92 percent of Peru's population lived in a district with access to financial services

Ranking highlights

- Peru's Law 29985, issued in 2013, enabled both banks and non-banks to issue electronic money
- 2013 regulations by the Superintendencia de Banca, Seguros y AFP (SBS) del Peru allowed e-money issuers to follow a simplified account opening progress to facilitate takeup of formal financial products by the underserved

Next steps

- Address liquidity and network concerns at agents to improve reliability and encourage utilization
- Finalize national financial inclusion strategy

Peru

Overview

Peru's legislative efforts to foster an enabling regulatory environment for financial inclusion, ongoing initiatives to assess elements of the national financial landscape, and concerted coordination across relevant government entities demonstrate the country's commitment to advancing access to, and use of, quality financial services.[6] By 2014, Peru experienced a significant increase in the number of agents and was engaged in several initiatives to better inform the development of a national financial inclusion strategy, including assessments of financial literacy, financial access, financial education, and payment system efficiency.[7]

However, further room for improvement remains with respect to fostering a more robust digital financial services landscape and ensuring that financial services are accessible to those who need them. While Peru features one of the most dynamic economies in the region,[8] as of 2012 the country had one of the lowest banking inclusion rates in South America.[9] Moreover, banking services — both at financial institutions and through agent networks — have primarily been used by people who already have access to formal financial services.[10] However, according to recent statistics, nearly 40 percent of the total districts with a formal financial presence in Peru have banking agents as their only financial access points; of those districts, more than 80 percent are among high poverty quintiles (quintiles 1 and 2).[11] Thus, banking agents clearly provide opportunities to reach underserved populations. Expansion of mobile money services and enhanced distribution of agents in underserved areas could offer greater opportunities for financial inclusion among those underserved by traditional banks.

Access and usage

Banking landscape

As of 2014, according to the Superintendencia de Banca, Seguros y AFP (SBS) del Peru, there were approximately 22 bank branches for every 100,000 adults in Peru (the International Monetary Fund's Financial Access Survey found a higher penetration rate, listing 88 commercial bank branches per 100,000 adults as of 2013).[12] The number of total access points (including ATMs, bank branches, and agents) per 100,000 adults increased from about 92 in June 2009 to 280 in June 2014.[13] According to the SBS, the number of total service points per 100,000 adults increased from 52 in December 2006 to 362 in December 2014.[14]

In 2012, 18 percent of the population was excluded from financial services and lived in 66 percent of the districts without a point of access to financial services;[15] about 82 percent of the Peruvian population resided in a district with access to financial services.[16] By December 2014, the share of Peru's districts that did not have a point of access to financial services had decreased to about 47 percent.[17] Moreover, as of 2014, about 92 percent of Peru's population lived in a district with access to financial services, according to the SBS.[18] However, since some of the districts in Peru can be quite large, service locations can still sometimes involve significant travel times and distances.[19]

While these numbers indicate consistent growth in terms of access to financial services broadly, use of banking services is fairly low in comparison and tends to be concentrated among wealthier, urban citizens. Less than 30 percent of Peruvian adults had an account at a formal financial institution in 2014, and only about 18 percent of low-income adults held an account. About 11 percent of adults borrowed money from a financial institution that year, while about 12 percent saved at a financial institution.[20]

Branchless banking

The SBS exceeded its Maya Declaration goal (discussed below) of increasing the number of bank agents in Peru to 15,000; by December 2012, there were nearly 19,000.[21] However, according to the International Finance Corporation, agents were initially "primarily used to decongest branches by pushing low value transactions away from costly branches" and are often located very near a bank.[22] Agent networks have been primarily concentrated in major cities: For example, Lima held 51 percent of the agent network in 2011, while 31 percent of the agent network was located within 24 other major cities at that time.[23] However, while agents are primarily located in urban areas, they do serve as critical access points in many low-income communities — according to an SBS representative, agents serve as the only access point in about 57 percent of the districts located in income quintile 1 and in 37 percent of the districts located in quintile 2.[24]

Developing sustainable solutions for financial institutions to operate in areas with low-population densities and where there is significant demand for low-value transactions will be critical to the advancement of financial inclusion in Peru.[25] A January 2015 report noted that Peru's extensive agent network could be further strengthened, as limited liquidity and system instability can impede transactions.[26] Moreover, some customers stated that agent transaction limits were too low for the value of the transaction they sought to initiate.[27]

Mobile ecosystem

Mobile penetration rates in Peru have experienced steady growth and exceed the percentage of formally banked individuals. At 69 percent, mobile penetration levels were moderate in 2011.[28] By 2014, the World Bank cited 103 mobile cellular subscriptions per 100 people (individuals can hold more than one subscription).[29] However, important demographic disparities exist: While 75 percent of Peruvian households had access to mobile telephones, individuals with higher educational or income levels had cell phone access rates of above 90 percent, contrasted with access levels of about 50 percent for those with lower incomes or without education, according to the 2011 National Household Survey (ENAHO).[30]

A 2015 study identified opportunities for mobile money expansion in the form of mobile bill payment services (particularly with respect to school fees) and mobile savings.[31] As of May 2015, the GSMA Mobile Money Deployment Tracker listed two existing mobile money deployments in Peru.[32]

Country commitment and regulatory environment

Peru committed to the Maya Declaration on September 30, 2011; Peru's Maya member agency is the SBS.[33] Peru is also a member of the Alliance for Financial Inclusion's Financial Inclusion Strategy Peer Learning Group.[34] The SBS assumed the AFI chairmanship beginning at the 2014 AFI Global Policy Forum.[35] Peru's president, Ollanta Humala, came to office in 2011, and under his administration the Peruvian government has been credited with making an effort to increase social programs and include more citizens in the formal economy.[36]

The main players in Peru's financial environment include the SBS, Banco Central de Reserva del Perú (Central Reserve Bank), Organismo Supervisor de Inversion Privada en Telecomunicaciones (OSIPTEL), and the Ministerio de Transportes y Comunicaciones.[37] The SBS serves as the "regulatory and supervisory body of the financial system, insurance, and pensions" and is responsible for preventing and combating money laundering and financial terrorism, while the central bank is responsible for implementing Peru's monetary policy.[38] Klaus Prochaska writes that "a key lesson from the Peruvian experience is the importance of coordination between agencies when regulating e-money."[39]

Prochaska states that the SBS took a strong lead in "fostering a regulatory dialogue" among agencies, including the telecommunications agency, the Ministry of Development and Social Inclusion (MIDIS), the Central Reserve Bank, and the Ministry of Economy and Finance.[40] In 2014, President Humala instituted the Comisión Multisectorial de Inclusión Financiera, under the Ministry of the Economy and Finance, to promote financial inclusion across government entities.[41] Members of the commission include the MIDIS, SBS, Banco Central de Reserva del Perú, and Banco de la Nación.[42] The Ministry of Education was also recently included within the commission.[43]

Peru has been applauded for the development of regulations and programs that contribute to the country's financial inclusion landscape. In 2005, the SBS developed a regulation that permitted the use of a variety of agents by banks and promoted takeup of agent services by requiring that neither banks nor the agents themselves charge customers for transacting at agents.[44] Operators of "cajeros corresponsales" include "natural or legal persons operating out of proprietary or third party establishments distinct from those of the financial system."[45] Agents include pharmacies and grocery stores, among other establishments, and are usually staffed by the retailer's employees, although other staffers may be contracted.[46]

An amendment to the 2005 agent banking regulation permitted agents to begin opening individual accounts, established a tiered account system, and eased some restrictions for basic accounts (including e-money accounts).[47] Other functions of agents originally included: loan payments, withdrawals, deposits (either to a customer or third party's account), transfers, payments for goods or services, and other functions designated by SBS.[48] A 2008 SBS resolution specified that any licensed financial institution could use third parties to deliver services on its behalf, although these arrangements were subject to SBS authorization.[49] In 2011, regulation permitted retail agents to open basic deposit accounts (which were subject to risk-proportionate anti-money laundering/combating the financing of terrorism rules).[50] In 2013, agent banking legislation permitted agents to offer microinsurance.[51]

In January 2013, Peru's parliament became the first in Latin America to enact e-money legislation when it passed Law No. 29985, fulfilling one of the country's major Maya Declaration commitments.[52] The law defines e-money and permits banks and non-banks — including mobile companies — that are regulated by the SBS to issue electronic money as a means of promoting greater financial inclusion.[53] Basic electronic accounts were "defined in the framework of the e-money regulation" and were also permitted to be opened by banking agents.[54] The law created electronic money issuer companies — Entidades Emisoras de Dinero Electrónico, or EEDE[55] — which are "specialized companies supervised by the SBS whose main purpose is to issue e-money."[56] EEDEs can "contract third parties to channel transactions" and perform limited functions on their own (for example, EEDEs are not permitted to grant loans).[57]

In May 2013, the Ministry of Economy and Finance approved the regulation of the Law through the issuance of Supreme Decree No. 090-2013-EF.[58] OSIPTEL provided regulations for use of e-money in April 2013: One of the primary provisions is that telephone operators must provide e-money issuers with equal access to networks with respect to offering financial services; if operators also provide financial services, they must not have any advantage.[59] Network operators are allowed to provide financial services in addition to other non-banks, but there has not been significant takeup in this area.[60]

In October 2013, the SBS issued Resolution No. 6283-2013 and Resolution No. 6284-2013, which "established the regulatory framework for e-money transactions and issuer companies."[61] These supplementary regulations permitted e-money issuers to simplify the account opening process, particularly in rural and poor communities.[62] The regulations stipulate that while no bank account is needed to use e-money since e-money is not considered a deposit, recipients must have an e-money account subject to basic identification processes — primarily through provision of an ID card or passport.[63] Money can remain in an e-wallet for 10 years before it is remitted.[64]

The law in Peru states that interoperability can be regulated by the SBS in the future, although as of 2013 it was not mandated.[65] However, the movement toward interoperability is well underway. Peru's electronic money law has become part of the foundation of a recently developed initiative called the "Modelo Peru," or Peru Model, created by Asbanc (Peru's National Bank Association). The Peru Model is "an ecosystem of mobile payments, based on electronic money, which aims to convert this means of payment into a mainstream option in Peru." By promoting collaboration among telecommunication companies and the banking sector, Asbanc and its partners hope to remove access barriers to financial inclusion.[66] In 2014, Asbanc partnered with Ericsson's wallet platform in an effort to include over 2 million unbanked Peruvians in the formal financial system within five years.[67] The interconnection among platforms is anticipated to be piloted later in 2015.[68]

Peru successfully met its Maya Declaration targets for implementing a law regulating the use of e-money, increasing the number of agents from 10,000 to 15,000, implementing cellular banking, instituting basic microcredit and microsavings accounts, and developing "user-friendly" financial contracts, among other initiatives.[69] In 2012, the SBS conducted a demand-side survey on access to and use of financial services in four regions of the country that represented both urban and rural areas.[70] Baseline assessments of the microinsurance market, consumer protection landscape, and state of financial literacy in Peru were underway as of 2014;[71] as of 2015, the SBS was also undertaking a national-demand survey on financial inclusion that examines both rural and urban areas.[72]

Peru's 2014 Maya Declaration targets included developing an assessment of financial inclusion indicators (which include the "number of individuals holding accounts, by type of deposit and geographical location"), creating a demand-side financial inclusion and financial literacy survey, and working toward an evaluation of payment systems and emerging business models for financial inclusion (regarding the latter, relevant assessments were performed by the World Bank in 2013 and were under review by the SBS as of 2014).[73] The findings of these efforts will be incorporated into a national strategy for financial inclusion.[74]

See Peru endnotes on page 169

PHILIPPINES

OVERALL RANK
#15

OVERALL SCORE
68%

DIMENSION SCORES

Country commitment	94%
Mobile capacity	89%
Regulatory environment	89%
Adoption	40%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$272	65	50%	31%	38%

Formal commitment milestone

- Committed to the Maya Declaration in 2011

Selected financial inclusion highlights

- Developed two of the earliest mobile financial services schemes, Smart's Smart Money and Globe's GCash
- Committed to establishing a national financial inclusion strategy to coordinate public and private sector financial inclusion efforts

Ranking highlights

- Circular 649 in 2009 and Circular 704 in 2010 provided e-money regulatory guidance and enabled non-bank institutions to be eligible to become e-money issuers
- The Bangko Sentral ng Pilipinas was the first central bank in the world to establish an office, the Inclusive Finance Advocacy Staff, dedicated to financial inclusion

Next steps

- Working on a draft national payments system law and associated regulations
- Supporting USAID's E-PESO project, which will support the establishment of a national retail payment system

Philippines

Overview

As home to two of the earliest mobile financial service schemes and a robust microfinance environment, the Philippines demonstrates strong commitment to integrating the efforts of private and public sector actors to advance financial inclusion.[6] Between 2001 and 2012, the Bangko Sentral ng Pilipinas (BSP) issued approximately 40 regulations pertaining to microfinance and financial inclusion issues;[7] these regulations have, among other things, provided flexibility for alternative financial services providers (FSPs), including "pawnshops, remittance agents, money changers/foreign exchange dealers, and mobile banking agents," to better engage traditionally underserved consumers.[8]

The BSP has also permitted mobile network operators to offer mobile money services independently of banks, as exhibited by GCash's stand-alone accounts.[9] By 2013, the number of registered e-money accounts had grown to over 25 million accounts for a population of about 98 million.[10] Use of these accounts was quite high, according to mobile network operators, but data on the types of transactions conducted and the socioeconomic background of users would provide greater insight into the utility and benefits of these accounts.[11] The completion of a demand-side survey (in development by the BSP as of 2014)[12] and the finalization and implementation of the BSP's draft financial inclusion strategy[13] could foster greater insight into who comprises the unbanked and generate greater coherence regarding ways to facilitate more widespread access to and use of financial products.[14]

Access and usage

Banking landscape

According to the World Bank 2011 Global Financial Inclusion database, 27 percent of adults age 15 and older in the Philippines had an account at a formal financial institution.[15] However, only 10 percent of adults at the bottom 40 percent of the income scale held an account at a formal financial institution.[16] By 2014, about 28 percent of adults had an account at a formal financial institution, with about 15 percent of those in the bottom 40 percent of the income scale holding an account.[17] About 12 percent of adults had borrowed from a financial institution within the previous 12 months, and about 15 percent saved at a financial institution within that time.[18] From the supply side, there were about 18 commercial bank branches per 1,000 km^2 in 2013, and about nine commercial bank branches per 100,000 adults.[19] There were about 49 ATMs per 1,000 km^2 and around 23 ATMs per 100,000 adults.[20]

The archipelagic nature of the country serves as a challenge to building the infrastructure needed to increase access.[21] Moreover, a 2014 report noted that 610 of 1,634 cities and municipalities in the Philippines did not have a bank branch in Q2 2013, and even among those that did, availability and use of banking services was skewed toward more densely populated areas.[22] The report stated that metropolitan Manila "account[ed] for 43 percent of the total number of deposit accounts and 68 percent of the amount of bank deposits."[23]

Mobile ecosystem and branchless banking

As of 2014, there were about 111 mobile subscriptions per 100 people in the Philippines (individuals can hold more than one subscription).[24] There were about 17 active agent outlets[25] for every 100,000 adults in the

Philippines in 2013 and 36 active agent outlets per 1,000 km^2. About 38 registered agent outlets[26] were available for every 100,000 adults and about 81 registered agents per 1,000 km^2. From the demand side, for every 1,000 adults, there were about 127 registered mobile money accounts[27] in 2013 and about 85 active mobile money accounts.[28] In 2014, about 4 percent of adults age 15 and older in the Philippines had mobile money accounts, with about 3 percent of individuals on the bottom 40 percent of the income scale and 5 percent of women holding mobile money accounts.[29]

Mobile money systems can also be used for government-to-person payments. The Pantawid Pamilyang Pilipino Program (4Ps), begun in 2008[30] and managed by the Department for Social Welfare and Development,[31] provides recipients' transfers through a debit card that can be used at select bank branches and ATMs.[32] While the program was not specifically designed to improve financial inclusion, the program has utilized various channels to deliver payments to recipients. In 2010, for example, GCash Remit used its mobile money infrastructure to dispense 4Ps payments in remote areas in cash.[33]

Mobile network operators Globe Telecom and Smart both launched mobile money services in 2004 (SmartMoney was initially presented to BSP in 2001 but did not receive approval until 2004).[34] Smart partnered with Banco d'Oro;[35] in contrast, Globe Telecom's GCash (which was formally approved in 2005)[36][37] issues mobile money accounts itself.[38] Registered e-money accounts increased to about 27 million in 2013 — a 34 percent increase from the previous year; 8 million of these accounts were mobile money accounts.[39] The increase is particularly significant since about 90 percent of registered e-money accounts were considered "active" (i.e., for GCash users the account had been used in the preceding month, and for Smart Money users the account had been used in the preceding six months).[40]

A variety of other service providers are working to provide access to the financially underserved. The number of micro-banking offices[41] increased from 370 in 2012 to 465 in 2013, and the number of local government units (i.e., cities and municipalities) that did not have access to a bank branch but did have access to a micro-banking office increased from 50 in 2012 to 56 in 2013.[42] Of the 604 unbanked local government units in 2013, 398 had access to alternative financial services providers — so only 4 percent of the total Philippine population technically remained fully financially excluded.[43]

One of the challenges with microfinance institutions and other financial services providers is that they are primarily found in urban and semi-urban areas with larger populations, and lenders tend to charge fairly high interest rates.[44] Additionally, non-regulated financial institutions — for example, cooperatives — are not always transparent with respect to pricing and may also charge high interest rates.[45]

Country commitment and regulatory environment

The Philippines has been very active in participating in financial inclusion leadership roles. From 2012 to 2014, the BSP chaired the Steering Committee of the Alliance for Financial Inclusion (AFI) and the AFI Mobile Financial Services Working Group and Consumer Empowerment and Market Conduct Working Group. BSP is also one of the few non-G20 countries that engages closely with the Standard Setting Bodies and is a member of the Global Partnership for Financial Inclusion.[46]

In terms of the Philippines' regulatory environment, the General Banking Law of 2000 required the BSP to recognize microfinance as a "legitimate banking activity" and to determine regulations for microfinance practice within the banking sector.[47] Circulars 240 and 269 were issued in 2000 to establish general guidelines for banks to gain approval for electronic services.[48] Circular 240 was issued in May 2000 and required banks to receive permission from BSP before starting e-banking.[49] An "e-commerce act" (RA 8792) was also passed at that time. In December 2000, Circular 269 established "new guidelines for e-banking applications" and provided expedited approval processes.[50]

An anti-money laundering act was passed in 2001,[51] and Circular 706 of 2011 updated these rules to ensure a proportionate know-your-customer (KYC) system permitting broader options for proving identification.[52]

Regulations on remittance agents were issued through BSP Circular 471, issued in January 2005; the rules applied to foreign exchange dealers/money changers and to remittance agents, bringing them under the authority of the BSP.[53]

With respect to mobile money deployments, Globe Telcom (Globe)'s GCash electronic money service is issued through Globe's subsidiary, G-Xchange Inc.; G-Xchange became a licensed electronic money issuer in 2009 and is a licensed remittance agent.[54] Smart recently followed a similar business model by establishing Smart E-Money Inc., a financial services subsidiary licensed in 2013 by the BSP as an electronic money issuer and responsible for issuing Smart Money accounts.[55]

By 2008, a payment system bill had been developed, but no payment system law or formal definition of electronic money was available.[56] However, in 2009 Circular 649 defined e-money and stated that e-money issuers could include banks, non-bank financial institutions supervised by the BSP, and "non-bank institutions registered with the BSP as a money transfer agent under section 4511 of the Manual of Regulations for Non-Bank Financial Institutions."[57] The circular noted that e-money would not be considered a deposit.[58] E-money is non-interest bearing, and the amount in the electronic account is subject to a monthly limit.[59]

In 2010, Circular 704 addressed outsourcing of services by e-money issuers electronic money network service providers by allowing "linkage of banks with e-money issuers" and affirming e-money issuers to be either bank or non-bank entities.[60] Circular 704 also promoted the establishment of an agent network and provided a "platform for an efficient retail payments platform."[61] In 2011, the Payment and Settlement Systems Act was subject to deliberation by the legislature.[62] By October 2012, the BSP had opened micro-banking offices, which were permitted under Circular 694 of 2010.[63]

The BSP noted it used existing regulations to permit e-money expansion (with the understanding that a more defined regulatory approach would later be taken based on outcomes).[64] Authorized e-money issuers include banks and non-banks (e.g., mobile network operators, or MNOs, and pawn shops), provided they meet certain standards; once they are granted a license by the BSP to issue e-money, they are "regulated as a payment systems provider." As noted above, MNOs can also issue e-money through a subsidiary.[65] In March 2011, the Philippine Development Plan 2011-2016 was approved by the president and noted financial inclusion as a critical aim.[66]

With respect to financial inclusion commitments, the Philippines signed on to the Maya Declaration, and the BSP is the designated Maya member agency.[67] The Philippines is also a founding member of the Asia Pacific Group, a "FATF-style" regional body to exchange best practices.[68] A Core Information Technology Specialist Group was created in 2005; in 2006, the BSP established the Payments and Settlements Office to manage the Philippine Payments and Settlements System.[69]

Notably, the BSP was the first central bank to establish an office, called the Inclusive Finance Advocacy Staff, dedicated to financial inclusion.[70] The office "implements, coordinates, and advocates the microfinance and financial inclusion initiatives of the BSP."[71] As noted in the 2014 Economist Intelligence Unit report, the Inclusive Finance Steering Committee (IFSC) is one of only three internal committees that the governor chairs, which is indicative of the importance ascribed by the government to financial inclusion.[72] The IFSC was mandated to craft a national strategy for financial inclusion.[73] As of 2014, the BSP had drafted a national financial inclusion strategy;[74] a consultation draft was approved in 2015.[75] The BSP also created a Data and Measurement Group within the IFSC.[76] Other groups within the IFSC include the Regulatory and Supervisory Framework Group, the Financial Education and Consumer Protection Group, and the Financial Inclusion Advocacy Group.[77] In May 2014, the BSP approved a general consumer protection framework, which is expected to be fully functional in 2016.[78]

A quantified Maya Declaration goal made by the Philippines was for all adults to have a deposit account in a regulated financial institution "in order to save and access credit, payments, remittances, and micro-insurance."[79] As noted, Circular No. 796 broadened the scope of microfinance savings deposit accounts, and the number of microdeposit accounts subsequently increased by 26 percent from pre-May 2013 levels to 2014; the number of deposit accounts increased 9 percent from 2012 to 2013.[80]

As of 2014, the BSP was undergoing efforts to implement a nationwide demand-side survey on financial inclusion.[81] The BSP has also issued a quarterly report on the state of financial inclusion and is working with the Bill & Melinda Gates Foundation and MIX Market to complete a spatial mapping and data visualization project on financial points of access.[82] With respect to moving forward, the BSP is working with industry leaders to design governance and operational structures for a national retail payment system, which is being developed with support from the United States Agency for International Development through the E-PESO project.[83] Moreover, the BSP is working on a draft national payment systems law and associated regulations.[84] Both initiatives expect to address the issue of interoperability going forward.

See Philippines endnotes on page 171

RWANDA

OVERALL RANK
#4

OVERALL SCORE
75%

DIMENSION SCORES

Country commitment	100%
Mobile capacity	94%
Regulatory environment	94%
Adoption	49%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$8	7	34%	42%	35%

Formal commitment milestone

- Committed to the Maya Declaration in 2011

Selected financial inclusion highlights

- Increased its financial inclusion goal to 90 percent of the adult population by 2020
- Promoted access to and use of financial services through offerings provided by a diverse array of both banks and non-bank providers

Ranking highlights

- Adopted the second phase of the national financial sector development program in 2013, which includes an action plan for financial inclusion, and established a unit to monitor progress
- Supported development of diverse mobile money offerings — for example, Rwanda was one of the first countries in Africa to support mobile money-based cross-border remittances

Next steps

- Develop a set of financial inclusion indicators to help monitor the country's progress toward its quantified inclusion target
- Finalize regulations concerning the issuing of e-money by non-bank entities

Rwanda

Overview

Following a 2008 FinScope survey measuring the state of financial inclusion in Rwanda that found only 21 percent of adults over age 15 were accessing formal financial services, and 52 percent of adults were completely financially excluded,[6 7] the government of Rwanda has engaged in a variety of initiatives to address these findings and has increased its financial inclusion goal to 90 percent of the adult population by 2020.[8] A demand-side survey will be conducted in 2015 to measure progress toward this goal.[9] As of 2014, progress toward greater financial inclusion was evident, with about 38 percent of adults holding an account with a formal financial institution; however, among low-income adults, only 15 percent had an account. About 8 percent of adults borrowed money from a financial institution, while about 26 percent saved at a financial institution.[10] Challenges to financial inclusion in Rwanda include a predominantly rural population (about 29 percent of the population lived in urban areas as of 2015)[11] and low familiarity with formal financial services.[12] However, efforts to foster an enabling regulatory environment and concerted government support for financial inclusion render Rwanda well-positioned to continue to strengthen its financial inclusion status.[13]

Access and usage

Banking landscape

In 2013, there were approximately 16 commercial bank branches in Rwanda per 1,000 km^2 and about six commercial bank branches per 100,000 adults. There were about 14 ATMs per 1,000 km^2 and about five ATMs per 100,000 adults.[14] Opening a basic account with a formal financial institution is generally feasible in Rwanda, as all Rwandans over age 16 are required to have a national identity card that can be used as proof of identity when opening an account.[15] Moreover, few financial institutions maintain strict deposit and minimum balance requirements.[16] However, low levels of financial awareness pose a potential barrier to takeup of financial services.[17]

Mobile ecosystem

In 2014, Rwanda had a fairly low mobile subscription rate, with the number of mobile subscriptions per every 100 people at about 64.[18] As of 2013 there were about 135 registered agent outlets[19] per 100,000 adults and about 354 registered agent outlets per 1,000 km^2. The same numbers held true for active agent outlets[20] per 100,000 adults and active agent outlets per 1,000 km^2. For every 1,000 adults, there were approximately 393 registered mobile money accounts[21] and 263 active mobile money accounts.[22] In 2014, the Global Financial Inclusion (Global Findex) database found that about 18 percent of adults used mobile money accounts; further, of those who earned a salary or wages, about 5 percent received them through a mobile phone and of those who regularly paid utility bills, about 26 percent made those payments through a mobile phone.[23]

As of May 2015, there were several mobile money deployments in Rwanda, three of which were provided by mobile network operators: Airtel, MTN, and Tigo.[24] As of the end of 2014, MTN was the dominant player in terms of market share.[25]

In 2013, Bank of Kigali, in collaboration with Urwego Opportunity Bank,[26] introduced mVisa, a mobile banking solution that is interoperable with accounts from other financial service providers and across mobile networks in the country.[27] mVisa allows users to deposit and withdraw cash, send money, top-up airtime, pay bills, pay merchants, and view their accounts.[28] This collaboration serves as the commercial alternative to a government-sponsored national payment switch, SIMTEL, which was unsuccessful due primarily to technological challenges.[29]

The mVisa initiative should facilitate broader access to electronic financial services.[30] Further, in 2014, Rwanda became one of the first countries in Africa to allow mobile money-enabled cross-border remittances (in this case, between customers in Rwanda and Tanzania).[31] The Rwanda Integrated Payment Processing System serves as a national infrastructure supporting the momentum to interoperable payments.[32]

Country commitment and regulatory environment

Rwanda has made substantial progress toward its Maya Declaration goals, and financial exclusion rates have dropped significantly in the past several years. According to a 2012 FinScope study, financial exclusion rates in Rwanda dropped from 52 percent in 2008 to 28 percent in 2012, while formal financial inclusion increased from 21 percent to 42 percent over the same period.[33] The report found that the banked population in Rwanda had increased from 14 percent of adults in 2008 to 23 percent in 2012.[34] In 2008, 39 percent of those surveyed used informal financial mechanisms to save, borrow, manage financial risks, or send money; in 2012, the percentage was 58.[35] Rwanda recently increased its financial inclusion goal to 90 percent financial inclusion by 2020, and in 2014 the World Bank launched a $2.25 million program to support Rwanda's efforts.[36]

The National Bank of Rwanda (NBR) is responsible for "all aspects related to payments system, including licensing of banks and non-bank providers," and the National Payments Council is a subordinate organization under the NBR that provides input from the banking, payments, and telecom industries.[37] The Rwanda Utilities Regulatory Agency regulates public utilities, including the telecom network services.[38]

The regulatory environment in Rwanda, which enables various entities (e.g., bank and non-bank formal providers) to offer mobile financial services, has been identified as one of the drivers of increased financial inclusion rates.[39] Rwanda allows both mobile operator-led mobile money[40] and bank-led mobile banking models.[41] A license must be issued by the NBR, and agents of banks and microfinance institutions are treated as branches. Bank agents can receive deposits, cash-out, and process a few transactions. While non-bank agents originally could conduct only cash-in/cash-out operations, new rules were in development in 2012.[42] The Economist Intelligence Unit noted in 2014 that Rwanda's financial sector development plan (discussed further below) allows e-money agents to conduct account opening, know-your-customer (KYC) processes, and cash-in/cash-out services.[43]

Community savings and credit cooperatives are credited with significantly increasing financial inclusion among underserved communities[44] — for example, more than 90 percent of Rwandans now live within a 5 kilometer radius of an Umurenge savings and credit cooperative (SACCO).[45] The NBR developed agent banking guidelines in 2012 that permit both bank and non-bank financial institutions to contract agents.[46] However, the Economist Intelligence Unit has noted that "agents must have possessed a business license or permit for lawful commercial activity for at least 18 months immediately preceding the date of the application, and commercial activity must be ongoing"; these conditions are considered by some to pose substantial barriers to scaling agent networks.[47]

The Rwandan Financial Sector Development Program (FSDP) was launched in 2006 as one of the key aspects of the implementation of the Vision 2020 Economic Development and Poverty Reduction Strategy of Rwanda.[48] The FSDP has developed action plans for strengthening financial inclusion, financial education, and financial literacy.[49] Among the program's objectives are "to enhance access and affordability of financial services" and to "develop an appropriate policy, legal, and regulatory framework for non-bank financial institutions."[50] Efforts to promote financial literacy and to ensure transparency and accountability within the financial services system are crucial, as a World Bank diagnostic review of financial literacy in Rwanda found that "58 percent of adults fear that banks will seize their property if they borrow from them, and around 60 percent expressed the need for more information on how to keep money safe, how credit works, and how to spend money wisely."[51]

According to the NBR, by the completion of the first phase of the FSDP in 2011, access to financial services grew from 47 to 72 percent of the population, 416 Umurenge SACCOs were established, four microfinance institutions developed into microfinance banks, and the number of new bank service locations increased by almost 60 percent, with 110 new locations. The Economist Intelligence Unit states that SACCOs have been instrumental in promoting access to formal financial services in Rwanda — almost 25 percent of Rwandans age 18 and older were members as of 2014.[52] Agent banking was introduced, the legal and regulatory framework for financial services was further developed, and a new electronic and payment settlement was instituted.[53]

In September 2013, the second phase of the FSDP was approved by the Cabinet; an "Action Plan for Financial Inclusion" comprises one of the four "pillars" of FSDP Phase II. The action plan set a target of reaching 80 percent financial inclusion by 2017 and 90 percent by 2020, defining financial inclusion, and evaluating supply-side progress in future FinScope studies and other surveys such as the digital financial survey spearheaded by NBR in coordination with the Consultative Group to Assist the Poor as of 2015. A third FinScope survey is expected to be conducted in late 2015.[54]

As part of its national financial inclusion strategy, Rwanda instituted a national financial inclusion task force to coordinate financial inclusion initiatives.[55] By 2014, a national financial education strategy was adopted by Rwanda's cabinet, and the financial sector development working group has been tasked with coordinating implementation of the strategy.[56] As of 2014, a diagnostic of the national consumer protection environment had also been completed.[57]

Going forward, Rwanda's financial inclusion goals include developing a set of financial inclusion indicators inspired by the Alliance for Financial Inclusion's Core Set of Financial Inclusion Indicators and monitoring the country's progress toward its quantified inclusion target.[58] In terms of mobile money, Rwanda will also continue to support the movement toward mobile money interoperability, which is not yet complete. Rwanda also aims to recognize the use of mobile money accounts as de facto savings accounts.[59] Finally, specific regulation concerning the issuing of e-money by non-bank entities is underway and is expected to allow for tiered KYC requirements.[60] In the interim, multiple sources have stated that account opening is proportionate, as the main requirement for opening simple accounts is proof of identity and a passport photo — given the existence of a national ID, these requirements do not appear to be overly burdensome.[61]

See Rwanda endnotes on page 173

SOUTH AFRICA

OVERALL RANK
#2

OVERALL SCORE
80%

DIMENSION SCORES

Country commitment	89%
Mobile capacity	100%
Regulatory environment	78%
Adoption	69%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$366	37	70%	70%	70%

Formal commitment milestone

- National Treasury of the Republic of South Africa joined the Alliance for Financial Inclusion as a principal member in 2010

Selected financial inclusion highlights

- Financial inclusion rates increased from 61 percent in 2004 to 86 percent in 2014, according to a 2014 FinScope consumer survey
- Demand-side FinScope surveys, which include National Treasury as a key stakeholder, have been implemented regularly in South Africa since 2009 (the most recent was undertaken between June and July 2014)

Ranking highlights

- Highest mobile capacity score (100 percent) among FDIP countries
- Tied for the highest score for formal account penetration, including among rural, low-income, and female groups

Next steps

- Finalize and approve draft documents to establish a national financial inclusion strategy and forum
- Foster competition within the financial services sector to encourage entities to target underserved populations

South Africa

Overview

South Africa has experienced steady growth in financial inclusion, as demonstrated by the results of the latest FinScope survey, which found that financial inclusion[6] in the country increased from 61 percent in 2004 to 86 percent in 2014.[7] FinScope consumer surveys, which have been conducted in South Africa since 2002,[8] examine access to and usage of financial services by individual South African adults (defined in the survey as age 16 and older).[9] The 2014 FinScope survey was conducted in June and July 2014 and considered the extent to which adults in the country were "financially included," defined in the survey as those "who have/use financial products and/or services — formal and/or informal."[10]

According to the FinScope "access strand" for financial inclusion, 75 percent of the adult population in South Africa was "banked" as of 2014, 5 percent had/used other formal (non-bank) financial products, and 6 percent were served by the informal financial sector only.[11] [12] The survey also found that 14 percent of adults over 16 were considered financially excluded in 2014, down from 16 percent in 2013.[13] Bank account penetration remained at 75 percent in 2013 and 2014.[14] Growth in access to and usage of financial services in South Africa has been attributed in part to the increase in banking[15] and associated ownership of ATM/debit cards — for example, approximately 34 percent of the banked population in South Africa owned a South African Social Security Agency (SASSA) MasterCard as of 2014, and Mzansi accounts (discussed shortly) "represented 6% of the market in 2013 and 4% in 2014."[16]

Access and usage

Banking landscape

According to the International Monetary Fund's Financial Access Survey, in 2013 there were about three commercial bank branches in South Africa per 1,000 km^2 and about 10 commercial bank branches per 100,000 adults.[17] With respect to consumer engagement with formal financial services, the 2014 Global Financial Inclusion (Global Findex) database found that nearly 70 percent of adults age 15 and older had an account at a formal financial institution in 2014, compared with about 56 percent of those in the bottom 40 percent income bracket.[18]

By 2014, according to the FinScope survey about 20 percent of South African adults had formal savings products:[19] 11 percent of adults reported saving in banks, and 15 percent of adults reported holding a formal savings product from a non-bank financial institution.[20] About 8 percent of adults used other informal savings mechanisms, and 11 percent stated they saved at home;[21] in contrast, 68 percent of adults reported they did not save.[22] In terms of risk mitigation, insurance levels in South Africa rose from 41 percent in 2004 to 60 percent in 2014.[23] By 2014, 14 percent of adults were insured through banks, 35 percent had formal insurance from non-bank financial institutions, and 35 percent belonged to a burial society; 40 percent of adults did not have insurance.[24] Finally, the share of adults engaging in savings and investments increased from 30 percent in 2004 to 32 percent in 2014, and borrowing (primarily from formal institutions) increased from 31 to 44 percent over the same period.[25] [26]

The 2014 FinScope survey found more women than men were engaged in the formal financial sector: 89 percent of women were financially included, compared with 82 percent of men, and 79 percent of women were banked, compared with 70 percent of men.[27] This gender divide has been linked in part to higher takeup of SASSA grants by women.[28] Other demographic disparities exist with respect to financial inclusion: For example, 72 percent of black adults in South Africa were banked in 2014, compared with 95 percent of white adults, and 17 percent of the black population was not financially served (either formally or informally), compared with only 2 percent of the white population.[29] About 48 percent of financially excluded South African adults in 2014 were living in rural areas.[30]

Mobile ecosystem

South Africa has a high level of mobile subscriptions, with about 150 subscriptions per 100 people as of 2014.[31] As of 2014, 57 percent of adults in South Africa had smartphones, and 43 percent of adults actively used smartphones; further increases in smartphone penetration and usage could enhance opportunities for financial inclusion through mobile financial services.[32] About 90 percent of adults in South Africa used a cellphone in 2014, and about 24 percent of the adult population used "cellphone banking" (mobile banking) that year. This reflects a slight increase in the number of users engaging in cellphone banking between 2012 and 2014, from 8.3 million to 8.6 million.[33] In 2014, 24 percent of those who used cellphone banking withdrew all their money once it was deposited, versus 33 percent of all depositors.[34]

Further efforts may be needed to encourage financial transactions that extend beyond monitoring existing accounts — the 2013 FinScope survey noted that among the 28 percent of adults who used cellphone banking,[35] 84 percent bought airtime, 54 percent checked their bank balances, 15 percent paid bills, and 12 percent sent and received money by cellphone.[36]

In 2013, there were three active agent outlets per 1,000 km^2, and 11 active agent outlets per 100,000 adults.[37] [38] The same year, for every 1,000 adults in South Africa, there were about seven active mobile money accounts, and there were about 76 registered mobile money accounts.[39] Data from the 2014 Global Findex found that while about 14 percent of adults age 15 and older had a mobile money account in 2014, the distribution was slanted toward those in the top 60 percent of the income scale (about 19 percent) rather than the bottom 40 percent (about 8 percent).[40] Among those who received a salary or wages within the previous year, about 12 percent received those funds through a mobile phone, and of those who made utility bill payments regularly within the previous year, about 12 percent made those payments through a mobile phone.[41] As of May 2015, there were six mobile money deployments in South Africa, according to the GSMA Mobile Money for the Unbanked Deployment Tracker.[42]

The M-Pesa mobile money service was relaunched in South Africa in 2014 after the original 2010 launch experienced slower initial takeup than projected.[43] In 2010, Vodacom had partnered with only one bank (Nedbank), whose limited resources in lower income areas of the country may have contributed to the lower-than-expected takeup.[44] As of 2014 M-Pesa had over 8,000 agents at "informal outlets" and retailers, with a goal to reach 30,000 points of service by the end of the year.[45] The recent expansion of access points and relative ease of registration may facilitate greater takeup of the service in the future — with respect to ease of registration, as of 2014 customers could also pre-register via mobile phone using their ID number.[46] However, as of late May 2015, the service was off to a very slow start, with about 72,000 customers signed up since July 2014.[47]

Government-to-person payments

In 2014, about 30 percent of South Africa's population age 16 and older received government grants.[48] About 42 percent of grant recipients had an additional bank account as of 2013,[49] and about 34 percent of grant recipients withdrew all their money once it was deposited.[50] Further digitization of government-to-person payments — particularly through mobile channels — could facilitate financial inclusion. In 2014, less than 7 percent of those who received government transfers received them through a mobile phone, indicating significant room for growth.[51]

Country commitment and regulatory environment

South Africa's National Treasury is the primary entity responsible for advancing and coordinating financial inclusion initiatives.[52] The National Treasury represents South Africa in the G20 Global Partnership for Financial Inclusion and as a principal member of the Alliance for Financial Inclusion; it has not yet made specific Maya Declaration commitments.[53] In terms of numerical targets, according to a World Bank Group report South Africa's National Development Plan "targets an increase in the share of the population with access to transactional banking services and savings facilities from 63 percent in 2011 to 90 percent in 2030."[54]

South Africa's Financial Sector Charter was formalized in 2004 and served as a "social pact between government, labor, organized civil society and the financial services sector to both transform the sector and for the sector to play a quantifiable and meaningful role in steering the use of financial services towards specific developmental objectives."[55] The charter expired in 2008 and was replaced in 2012 with the Financial Sector Code.[56] The National Treasury represented the government during the charter negotiations as well as the negotiations under the Financial Sector Code.[57]

The Financial Sector Charter set initial goals that at least 80 percent of its target market (Living Standards Measure 1–5)[58] should be within "20 km of a service point (branch or ATM)," and at least 80 percent of the target market should also be within "20 km of a transaction point (non-ATM, but where an electronic transaction can be performed)"; when this goal was met, the target was raised to 15 km for service points and 10 km for transaction points.[59] South Africa is considering draft documents regarding a national-level financial inclusion policy, financial inclusion forum, and financial inclusion strategy.[60]

One initiative to promote financial inclusion among the underserved was the Mzansi account, launched in October 2004 by South Africa's four major banks and the Postbank as a basic bank account for low-income populations.[61] [62] The service faced a number of challenges, including high dormancy rates, but the account has been credited with introducing some underserved individuals to formal financial services.[63] Initially, "maximum balances and a limited range of transactions were introduced by individual institutions"; over time, however, the transaction limits were removed.[64] According to the World Bank, about 3.5 million of approximately 6 million new basic accounts opened over four years were actively used.[65]

In 2001, the Financial Intelligence Centre Act was developed as an anti-money laundering and counterterrorism measure; however, in recognition of the need for flexible "know-your-customer" requirements, Exemption 17 was included to ensure that customers' identities could be verified without requiring verification of a physical address.[66] The Mzansi account was one of the accounts that followed this exemption.[67] South Africa's national identity system has been credited with facilitating effective identification and uptake.[68]

Another program relevant to financial inclusion efforts is the SASSA grant program.[69] In 2012, 12 percent of adults in South Africa held a SASSA MasterCard associated with bank accounts opened for grant recipients.[70] These card holders constituted just under two million of the newly banked as of 2013, with the other 1.5 million attributed to "organic" growth.[71] Each month, 82 percent of SASSA recipients used their card at least once, with 72 percent getting cash from the till at least once a month, 43 percent withdrawing cash at an ATM, and 27 percent making payments at a store.[72] Some 18 percent of holders were not using their cards to withdraw cash, make payments at a store, or check their accounts.[73] As noted, by 2014 34 percent of the banked population in South Africa owned a SASSA MasterCard.[74]

Branchless banking and mobile money regulation

In terms of agent banking, South Africa's regulations permit banks to use third-party entities to offer banking services on their behalf.[75] Banks are responsible for all regulatory and compliance issues.[76] With respect to issuing e-money, South Africa follows a bank-led model in which organizations must have a banking license or partner with a bank in order to offer mobile financial services.[77]

According to the 2014 FinScope survey of South Africa, a tiered banking initiative involving "dedicated banks" may have the potential to further increase financial inclusion in the country once it is formally considered by Parliament.[78] "Dedicated banks" were described by the Consultative Group to Assist the Poor in 2008 as "new categories of banks subject to reduced minimal capital requirements, thereby facilitating the entrance of new branchless banking actors."[79] Also with respect to branchless banking, cooperation between retailers and banks has led to some banking services and/or limited transactions (e.g., store-to-store remittances) being offered at retailers.[80] [81] Moving forward with finalizing the draft financial inclusion policy and strategy and implementing interoperability across payment platforms[82] could help facilitate further expansion of financial inclusion in the country.

See South Africa endnotes on page 174

TANZANIA

OVERALL RANK
#12

OVERALL SCORE
71%

DIMENSION SCORES

Country commitment	100%
Mobile capacity	83%
Regulatory environment	100%
Adoption	42%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$44	27	39%	40%	34%

Formal commitment milestone

- Committed to the Maya Declaration in 2011

Selected financial inclusion highlights

- In 2014, mobile network operators implemented interoperability agreements that allow customers of different providers to send money to each other's accounts
- Interoperability is coupled with increasingly robust competition among multiple operators

Ranking highlights

- One of the strongest performers under the country commitment and regulatory environment dimensions, scoring 100 percent respectively
- Launched a National Financial Inclusion Framework in 2013, which contains a quantified objective of 50 percent financial inclusion by 2016

Next steps

- Develop and implement regulations enhancing consumer protection to ensure transparency from financial institutions regarding loan interest rates and annual percentage rates
- Promote takeup of mobile money services beyond transfers

Tanzania

Overview

Tanzania has made significant progress in advancing its financial inclusion commitments, due in part to a flexible regulatory environment, strong support from the central bank, and coordination between public and private stakeholders through such entities as the National Council for Financial Inclusion.[6] In 2009, Tanzania had one of the lowest levels of financial inclusion in the world.[7] However, by 2014 Tanzania had already surpassed its 2015 target of achieving financial access for 50 percent of the population.[8] The 2014 Global Financial Inclusion (Global Findex) database found that 40 percent of adults age 15 and older had an account with a formal financial institution or mobile money provider.[9]

The use of non-bank formal products — particularly mobile money — has risen significantly over time, from about 7 percent of Tanzanian adults age 16 and older in 2009 to about 44 percent in 2013.[10] [11] Digital financial services such as mobile money are especially valuable in Tanzania given its highly dispersed population.[12]

Access and usage

The number of mobile money agent locations in Tanzania far exceeds the number of "brick and mortar" banks. In 2013, Tanzania had about 0.8 commercial bank branches for every 1,000 km^2, and about three commercial bank branches for every 100,000 adults.[13] In contrast, there were about 173 registered agent outlets for every 1,000 km^2 and about 582 registered agent outlets[14] for every 100,000 adults.[15] [16]

On the demand side, in 2014, about 19 percent of Tanzanian adults age 15 and older had an account at a formal financial institution.[17] An InterMedia survey conducted from November 2013 to March 2014 among adults age 15 and older found that 50 percent of Tanzanian adults had access to financial services through banks or mobile money accounts, and 40 percent of Tanzanian adults were active users of bank or mobile money accounts.[18]

Active mobile money accounts far outpaced active bank accounts in 2013–2014: 32 percent of adults said that they were only active mobile money account users (and not bank account users), 2 percent said they were only active bank account users, and 6 percent said they actively used both a bank account and mobile money.[19] Overall, mobile money account ownership was almost five times as prevalent as bank account ownership.[20]

Significantly, the survey found that unregistered and inactive mobile money account use was low, suggesting that consumers have generally found the products accessible and useful.[21] This finding stands in contrast to a 2010 study that noted that only 10 percent of Vodacom's mobile money customers in Tanzania continued to actively use the service after subscribing.[22]

A 2013 FinScope survey in Tanzania highlights strong progress in mobile money takeup: About 50 percent of adults age 16 and older used mobile money in 2013, compared with just over 1 percent of adults in 2009.[23] The International Monetary Fund's Financial Access Survey found that for every 100,000 adults in 2013 there were about 1,200 registered mobile money accounts[24] and about 418 active[25] mobile money accounts.[26] In terms of uses of mobile money services, about 33 percent of adults in Tanzania surveyed for the 2013 FinScope used mobile money to send funds, around 38 percent used mobile services to receive money, about 26 percent used mobile services to save or store money, and about 10 percent used mobile money to pay bills and execute business transactions.[27] Increasing understanding of more advanced services could promote takeup of these services.

Competition among mobile network operators (MNOs) in Tanzania is increasingly robust, with Vodacom, Airtel, Zantel, and Tigo all holding significant market shares.[28] The divided market has led to opportunities for collaboration and the development of innovative services. In June 2014, mobile network operators Tigo, Airtel, and Zantel announced an interoperability agreement regarding connecting their mobile money platforms.[29] By September 2014, "industry partners agreed… on a new set of standards governing person-to-person payments across multiple networks."[30]

In fall 2014, operators Airtel and Tigo officially launched a cross-network money transfer service,[31] and Tigo introduced an interest-bearing mobile money service.[32] In December 2014, Tigo and Zantel launched a cross-network money transfer service.[33] A March 2015 update noted that Tigo, Airtel, Zantel, and Vodacom had all opted in to interoperability operating standards through bilateral Application Programming Interfaces (API) connections.[34] [35] As of May 2015, implementation of an interoperability agreement[36] between Vodacom and Tigo was ongoing.[37]

In 2014, Tanzania became one of the first countries in Africa to allow mobile money-enabled cross-border remittances when Tigo Pesa subscribers in Tanzania became able to send money to Tigo Cash subscribers in Rwanda (and vice versa).[38] In March 2015, a cross-border transfer service was established between Vodacom Tanzania and Safaricom in Kenya.[39]

As with other agent networks in emerging markets, liquidity management for agents in Tanzania can prove challenging.[40] Issues with the Global System for Mobile (GSM) communications network have also been common; however, while six in ten active mobile money users experienced network problems in the 2013-2014 InterMedia survey, mobile money transactions conducted through agents still tended to be quicker and more effective (if slightly more costly) than conducting transactions at a "brick and mortar" bank.[41]

One area for improvement noted in the same report was the disparity between men and women in terms of financial access: 45 percent of men were either active bank or active mobile money account users, compared with 35 percent of women.[42] The most frequently reported barrier to banking among the total unbanked adult population in a 2013 FinScope survey was insufficient money to justify use of a bank account, at about 30 percent.[43]

The case of M-Pesa in Tanzania illustrates how mobile money services can adapt to different markets sustainably. In 2008, Vodacom launched M-Pesa in Tanzania, following the successful launch of the service in Kenya in 2007.[44] [45] In contrast to Safaricom's market share in Kenya as of 2009 (79 percent), Vodacom's market share in Tanzania was significantly lower (41 percent); thus, M-Pesa's registration base in Tanzania was more limited.[46]

However, efforts by Vodacom, as well as legislative developments, facilitated greater takeup of the service over time. For example, Vodacom adapted its marketing strategy to place more focus on financial services beyond basic transfers,[47] and the Tanzanian Communication Regulatory Authority passed know-your-customer (KYC) legislation in 2009 that required all mobile operators to register customers with new and existing SIM cards, which presented an opportunity for increased mobile money registration given that SIM and mobile money registration requirements were similar.[48]

In 2009 Vodacom introduced new services through M-Pesa, allowing customers to pay their electricity, water, and television bills, as well as pay back loans to microfinance institutions.[49] In addition, by 2010 the tiered fee system for person-to-person transfers for registered customers was simplified to a flat rate.[50] Vodacom also adopted an aggregator model, in which "a single agency agreement is signed with a large master agent that in turn registers and manages several M-Pesa retail agent outlets."[51] This system was intended to alleviate recruitment and management burdens for the operator and maximize the number of available agents.[52]

Efforts were also made to expand the reach of mobile money to rural customers. M-Pesa agents in Tanzania are required to be registered companies with at least five outlets prepared to offer the service, two of which should be located in rural regions.[53] Agents can facilitate cash withdrawals and deposits, register users, implement KYC rules, and educate users about the service.[54] These efforts seem to have been successful in reaching rural customers: The InterMedia survey found that 61 percent of active Vodacom M-Pesa customers in Tanzania were located in rural areas in 2014.[55]

Country commitment and regulatory environment

Tanzania adopted a "test and learn" approach to mobile money by providing space for innovative services to emerge while also developing regulations and policies relevant to the changing financial landscape.[56] In 2006, the Bank of Tanzania amended the Bank of Tanzania Act so that it could regulate non-bank entities offering payment services.[57] The Electronic Payment Schemes Guidelines (2007) were used to permit MNOs to offer payment services, even though the rules were designed to apply specifically to banks and other financial institutions.[58] In 2008, the Bank of Tanzania issued "letters of no objection" to partner banks of MNOs seeking to provide mobile money solutions, which allowed the service providers to offer innovative products while still providing the bank a measure of control.[59] Agent banking guidelines were issued in 2013.[60] In March 2015, the parliament of Tanzania passed the National Payment Systems Act, which provides the Bank of Tanzania a more clearly defined role with respect to mobile financial service regulation.[61] [62]

With respect to information gathering, the FinScope and InterMedia surveys and other studies have helped identify the status of financial access and use. To date, FinScope surveys have been undertaken in Tanzania in 2006, 2009, and 2013.[63] Moreover, the Bank of Tanzania established a credit bureau in 2012 and another one in 2013; it has also developed a credit reference databank.[64]

The Bank of Tanzania reached several of its 2014 Maya Declaration goals. Tanzania launched the Tanzania National Financial Inclusion Framework in 2013, which included core financial inclusion indicators identified by the Alliance for Financial Inclusion.[65] Tanzania also completed — ahead of schedule — its goal of increasing financial access to 50 percent of the population by 2015.[66] Commercial banks have implemented agent banking at the approval of the Bank of Tanzania; this development should further extend financial opportunities to the underserved.[67]

Concerning consumer protection, between 2013 and 2014 Tanzania committed to setting up a dedicated unit within the Bank of Tanzania to address complaints from financial consumers who exhaust the redress mechanisms at their own institutions;[68] as of April 2015, this unit was operational.[69] Further work in the area of consumer protection may be required, as the Economist Intelligence Unit noted in 2014 that there remained a lack of transparency from banks regarding loan interest rates and annual percentage rates; at that time, regulations to require greater transparency had not been promulgated.[70]

One of Tanzania's major commitments was a goal to implement interoperability in digital financial services by 2013.[71] As noted, in 2014 Tanzania became the first country in Africa to have mobile money platform interoperability in place.[72]

See Tanzania endnotes on page 176

TURKEY

OVERALL RANK
#6

OVERALL SCORE
74%

DIMENSION SCORES

Country commitment	89%
Mobile capacity	78%
Regulatory environment	78%
Adoption	64%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$822	56	44%	57%	44%

Formal commitment milestone

- Committed to the Alliance for Financial Inclusion in 2013

Selected financial inclusion highlights

- Published a national financial inclusion strategy in 2014
- Assumed the G20 Presidency in 2015 and has identified financial inclusion as a key driver of inclusive growth

Ranking highlights

- Strong scores on adoption of services from formal financial institutions, including formal account penetration among low-income and rural customers
- Among highest-scoring countries regarding mobile 3G coverage and penetration of unique mobile subscriptions

Next steps

- Develop agent banking regulations
- Expand number of mobile money providers and offerings

Turkey

Overview

Turkey has made important strides in galvanizing its commitment to financial inclusion through regulatory reform and involvement with the broader financial inclusion community. However, there is still room for improvement in Turkey's financial inclusion ecosystem, particularly with respect to regional and gender disparities associated with access to and use of financial services and products.[6] As of 2014, Turkey was ranked 18th in terms of gross domestic product (GDP) in U.S. dollars (2015 estimates rank the country at 17th),[7] and it had high literacy rates of about 94 percent, according to 2013 figures provided by the Turkish Statistical Institute.[8] About 73 percent of Turkey's population resided in urban areas as of 2014.[9] As of 2013, more than 85 percent of Turkey's adult population had some form of "saving and deposit account."[10]

A report that same year, however, found that levels of financial inclusion for regions and provinces in Turkey generally aligned with their respective income levels, indicating that there is room to progress in fostering equitable access to financial services among lower-income populations.[11] Moreover, a recent diagnostic review found that while Turkey has a fairly strong supply-side presence overall, financial literacy and consumer protection frameworks require further enhancement.[12]

A 2014 report noted that only about 36 percent of adults in Turkey trusted the banking industry in 2010;[13] therefore, alternate channels of financial service provision (e.g., mobile money) led by non-bank providers may potentially enhance financial opportunities for those who are not comfortable with traditional banking. Developing the country's mobile money sector could connect more underserved individuals with access to financial services, particularly given that mobile and smartphone penetration rates in Turkey are close to those found in major European Union economies.[14]

In June 2014, Turkey published its national financial inclusion strategy, Circular No. 2014/10 on "Financial Access, Financial Education and Financial Consumer Protection Strategy and Action Plans."[15] The strategy notes an interest in strengthening the demand side of financial inclusion in Turkey and identifies over 50 actions relating to financial education and consumer protection, rather than developing a separate plan centering on financial access.[16] A representative of the Undersecretariat of Treasury noted that the strategy has connected the need for financial education with the country's "long-term macroeconomic goals," including that financial education will increase savings rates domestically.[17]

Access and usage

Banking landscape

A 2014 Access to Finance Scorecard noted that bank branch penetration in Turkey was less extensive than in comparable economies, although ATM penetration was higher.[18] In 2013, there were about 14 commercial bank branches per 1,000 km^2, and about 20 commercial bank branches per 100,000 adults. There were about 52 ATMs per 1,000 km^2 and about 73 ATMs per 100,000 adults.[19]

In terms of account opening processes, the documents needed to open a bank account in Turkey are not particularly extensive, and only select banks charge account opening fees.[20] According to the Global Financial Inclusion (Global Findex) database, 57 percent of adults in Turkey age 15 and older held an account at a formal financial institution in 2014. Of those in the bottom 40 percent of the income scale, 51 percent held an account at a formal financial institution. The gender gap in access to formal financial services remains, although access to financial services among women has improved: Female ownership of accounts with a formal financial institution increased from about 33 percent in 2011 to 44 percent in 2014.[21] Among men, about 69 percent had an account with a formal financial institution in 2014.[22]

About 6 percent of adults used an account (through a bank, other type of financial institution, card, or mobile phone) to receive government transfers in 2014, while about 17 percent used one to receive wages.[23] In 2014, about 9 percent of adults reported they saved at a financial institution within the previous 12 months, and about 20 percent borrowed from a financial institution within the same period.[24]

Regional disparities with respect to access to traditional financial services, including banks and ATMs, are fairly pronounced — a 2014 MicroFinance Centre scorecard assessing Turkey's financial inclusion status noted a very low penetration of bank infrastructure (i.e., bank branches and ATMs) existed in East Anatolia, a region with one of the lowest income levels in Turkey.[25] Generating further data regarding the levels of access and use pertaining to financial services may enhance Turkey's ability to advance financial inclusion by identifying the distribution and types of services needed.[26]

Mobile ecosystem

Mobile cellular subscription rates in Turkey are fairly high, with about 95 subscriptions per 100 people in 2014.[27] Turkcell's Cuzdan mobile money service, provided by Turkcell in partnership with Turkcell Teknoloji and Mastercard, provides airtime top-up, person-person domestic transfers, and merchant payments.[28] The a+PARA service, launched in 2013, offers those services in addition to bill payment.[29] As of 2014, less than 1 percent of adults in Turkey used a mobile money account to send or receive money or make payments.[30]

A digital wallet option in Turkey is BKM Express, which was developed and launched by Bankalararası Kart Merkezi, or BKM (Interbank Card Center of Turkey). The service is supported by major banks in Turkey (about 17, according to a representative of the Undersecretariat of Treasury), as well as all major e-commerce merchants since 2012.[31] The service allows its users to "link their credit and debit cards to their virtual wallet," which can be used for mobile and online payments.[32] According to a representative of the Undersecretariat of Treasury, BKM Express reached almost 1,000 merchants and 900,000 users as of April 2015.[33]

Country commitment and regulatory environment

Although Turkey has not made specific commitments under the Maya Declaration,[34] it is a member of the Alliance for Financial Inclusion. In 2012, at the G20 Los Cabos Summit, Turkey committed to the G20's Financial Inclusion Peer Learning Program (PLP); the Undersecretariat of Treasury is the lead institution for Turkey.[35] In 2015, Turkey assumed chairmanship of the G20, and the country's government has placed significant emphasis on financial inclusion efforts in association with this transition.[36]

Under Decree Law No. 637, Article 38, dated June 8, 2011, the Financial Stability Committee (FSC) was established.[37] The FSC is headed by the deputy prime minister for economic and financial affairs.[38] Other members of the FSC include the undersecretary of treasury, governor of the Central Bank of Turkey, and the heads of the Banking Regulation and Supervision Agency, Capital Markets Board, and Saving Deposit Insurance Fund.[39]

Turkey's financial inclusion strategy was prepared by the FSC and published in the Official Gazette No. 29021 on June 5, 2014 as Circular No. 2014/10 on "Financial Access, Financial Education and Financial Consumer Protection Strategy and Action Plans."[40] As noted in the strategy, the "Financial Education Action Plan will be monitored and coordinated by the Capital Markets Board, and the Financial Consumer Protection Action Plan will be monitored and coordinated by the Banking Regulation and Supervision Agency."[41]

The Undersecretariat of Treasury, as secretariat for the FSC, is responsible for monitoring the implementation of the strategy.[42] The strategy comprises a Financial Education and Financial Consumer

Protection Action Plan for 2014–2017.[43] While the action plans are applicable to Turkey's population broadly, targets groups include women, the elderly, and individuals with disabilities.[44]

In 2013, Turkey developed a new Consumer Protection Law.[45] The country also adopted a Law on Payment and Securities Settlement Systems, Payment Services and Electronic Money Institutions,[46] whose regulations prohibit payment institutions and e-money institutions from offering credit or opening accounts[47] but permit banks, e-money institutions, and payment institutions to issue e-money.[48] E-money institutions cannot accept deposits, but they can process cash payments, withdrawals, remittances, and utility bill payments.[49]

E-money institutions also cannot "grant interest or any other benefit related to the length of time during which the electronic money holder holds electronic money."[50] Turkey's Banking Regulation and Supervision Agency requires non-banking financial service providers apply for operating licenses; [51] mobile network operators can use subsidiaries under their control to issue electronic money but may not issue e-money directly.[52] According to the Economist Intelligence Unit's "Global Microscope 2014: The Enabling Environment for Financial Inclusion," agent banking regulations are not yet in place in Turkey.[53] Developing agent banking regulations, encouraging the development of interoperable electronic money platforms, and creating specific numeric targets within its financial inclusion action plan are concrete steps Turkey could pursue to advance financial inclusion.

See Turkey endnotes on page 178

UGANDA

OVERALL RANK
#4

OVERALL SCORE
75%

DIMENSION SCORES

Country commitment	100%
Mobile capacity	83%
Regulatory environment	83%
Adoption	58%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$25	19	31%	44%	37%

Formal commitment milestone

- Committed to the Maya Declaration in 2011

Selected financial inclusion highlights

- Advancing a national ID initiative, which may remove some access barriers for those who wish to engage with formal financial services
- Developed Mobile Money Guidelines in 2013 in an effort to provide guidance surrounding mobile money use and provide clarity to the industry, pending the possible development of formal regulations

Ranking highlights

- Strong adoption of basic mobile money services and relatively frequent use among the majority of account holders
- Entry of new institutions offering mobile money services may have helped encourage the emergence of new value-add products

Next steps

- Finalize the amendments to the Financial Institutions Act to provide clarity on agent banking
- Combat mobile money fraud, facilitate shift from over-the-counter transactions to registered mobile wallets, and consider reducing taxes on mobile money withdrawals

Uganda

Overview

The expansion of mobile money services in Uganda has facilitated greater access to finance in recent years, although barriers to access and use, including network and interoperability challenges, remain.[6 7] Modifications to the legal environment, particularly the introduction of agent banking and a law regulating mobile money, could further promote clarity within and growth of the digital financial services sector. An InterMedia survey conducted from June to July 2014 found that about 62 percent of Ugandan adults age 15 and older were excluded from the formal financial sector, down from 86 percent of Ugandan adults in the September to December 2013 wave of the survey.[8]

Regarding digital financial services, mobile money accounts[9] were the most common form of digital financial accounts, with about 33 percent of Ugandan adults holding a mobile money account.[10] Bank and mobile money account access and use generally rose slightly between 2013 and 2014.[11]

However, room for growth remains in addressing gender disparities regarding access to and use of mobile devices and digital financial services – for example, low-income women based in rural areas comprised 31 percent of Uganda's population as of 2014 but only 17 percent of digital financial service account holders.[12] Addressing issues of fraud, building consumer trust in services, and encouraging the shift from over-the-counter to registered accounts are all relevant concerns for Uganda moving forward. Nonetheless, a youthful population, high awareness of mobile money products, strong rates of access to mobile phones, and ongoing regulatory efforts with respect to mobile financial services and branchless banking are expected to serve as enabling conditions for increased takeup of financial services in Uganda moving forward.[13 14]

Access and usage

Banking landscape

On the supply side, in 2013 there were about three commercial bank branches in Uganda for every 1,000 km^2 and about three branches for every 100,000 adults.[15] There were about five ATMs per 1,000 km^2 and per 100,000 adults.[16] Networking among banks has improved over time: The 2014 InterMedia report noted, for example, that Centenary Bank had joined the Interswitch East Africa network.[17]

On the demand side, as of 2014 approximately 28 percent of Ugandans age 15 and older had an account at a bank or other formal financial institution, according to the World Bank Global Financial Inclusion (Global Findex) database.[18] At that time, 23 percent of females age 15 and older had an account at a formal financial institution, and only 14 percent of those in the bottom 40 percent of the income scale had an account at a formal financial institution.[19]

Between 2013 and 2014, according to the InterMedia surveys, the percentage of adults with access to a bank account increased from 14 percent to 16 percent, and the percentage of active bank account holders (meaning individuals who had used a registered account within the previous 90 days) increased from 10 to 11 percent of adults.[20] Among active bank account holders in 2014, bill payment was the most common "advanced" use.[21] The most common reported "basic" use for active bank accounts was withdrawing money.[22] Among those with active bank accounts, 90 percent deposited money and 26 percent engaged in person-to-person transfers.[23]

Mobile ecosystem

About 52 out of 100 people in Uganda had a mobile cellular subscription in 2014, according to the World Bank's World Development Indicators database.[24]

According to the 2014 InterMedia survey, about 58 percent of respondents owned a mobile phone, and 79 percent owned or could borrow a phone.[25] However, the 2014 InterMedia survey demonstrated a pronounced gender gap in mobile phone ownership (67 percent ownership among men compared with 50 percent among women).[26] The disparity between urban and rural residents' ownership of mobile phones was even greater, with 80 percent of urban residents owning a mobile phone versus only 51 percent of rural residents.[27] Differences in ownership by income level were similar, with 81 percent of adults above the poverty line owning a mobile phone, compared with 47 percent of those below the poverty line.[28]

Access to a mobile money account among adults remained static at 43 percent between 2013 and 2014, according to InterMedia, but the percentage of active mobile money account holders increased from 26 to 29 percent of adults.[29] Uganda features higher levels of mobile money takeup across demographic divisions than nearly all of the other FDIP countries. The 2014 Global Findex found that about 35 percent of adults age 15 and older had a mobile money account,[30] with 29 percent of women holding an account and 21 percent of low-income individuals holding an account.[31] Moreover, active, registered mobile money use increased among nearly every demographic between 2013 and 2014, most significantly among women (22 percent in 2013 to 27 percent in 2014).[32]

According to the GSMA's Mobile Money for the Unbanked Deployment Tracker, six live mobile money services were operating in Uganda as of May 2015.[33] A 2014 report found MTN was the largest provider in Uganda, with about 86 percent of active mobile money account holders using the service. The next closest was Airtel Money/Warid Pesa, with about 30 percent of active mobile money account holders using the service (active account holders could have accounts with more than one provider).[34] In terms of agent penetration, in 2013 there were about 286 registered agent outlets[35] per 100,000 adults and about 268 registered agent outlets per 1,000 km^2.[36]

The top uses for mobile money accounts (among active account holders) in 2014 were withdrawing money (96 percent), depositing money (78 percent), receiving money from others for "regular support/ allowances, or emergencies," (55 percent), buying airtime top-ups (53 percent), and sending money to other people (44 percent).[37] There is room for growth in terms of the diversity of financial services individuals engage with: A 2014 Helix Institute Report noted that the products and services offered in the country by agents are quite limited, with almost no banking services (e.g. credit, savings, insurance) offered.[38] Moreover, a 2014 InterMedia survey noted that "less than half of wages and business payments are disbursed through mobile money (MM) or banks."[39]

Moving away from over-the-counter (OTC) services will be an important aspect of the drive to increase user adoption of diverse services, such as savings. As of 2014, 64 percent of unregistered mobile money users preferred to use OTC via an agent, and even among registered users, 57 percent preferred agent-assisted transactions.[40]

Although about 91 percent of Ugandan adults were aware of at least one mobile money provider as of 2014, other challenges to mobile money adoption remain.[41] Rural users in the 2012 FinScope survey reported more issues than users in urban areas with agents being unavailable or unable to complete transactions, and rural residents had to cover, on average, three times the distance as urban dwellers and pay more for transportation to reach a point of service.[42]

The first wave of the 2014 InterMedia report found that Global System for Mobile (GSM) communications or mobile network problems were the most common problems experienced by users of mobile money.[43] Another common challenge was agents' inability to complete transactions due to shortage of cash or "e-float."[44] While profits for agents in Uganda are generally strong (a 2014 Helix Institute report noted that 40 percent of agents made at least $100 of profits per month), service interruptions reduce profitability; the Helix Institute report estimated that agents in Uganda could increase daily transactions by 33 percent if the problem of service downtime was addressed.[45]

Concerns about fraud, stemming from experiences with some fraudulent microfinance institutions and a purported "lack of transparency" in the banking sector, among other factors, may also contribute to the unwillingness of some individuals to participate in the formal financial sector.[46] The mobile money sector is not exempt from this issue either: For example, several former employees of MTN were charged with defrauding the company of over 3 million dollars,[47] and media reports have cited customer complaints about issues such as double charges.[48]

Taxation is another factor that may affect takeup of digital financial services. In 2012, the Uganda Revenue Authority imposed a 10 percent tax on all money transfers (including mobile money transfers) in Uganda.[49] In July 2014, a city economist petitioned Uganda's Constitutional Court to prevent the Ugandan government from collecting a 10 percent tax on mobile money withdrawals, stating that the act interfered with the Bank of Uganda's mandate to regulate the financial sector.[50] The 10 percent excise duty had been presented in June 2014 and was expected to begin in August 2014.[51] In August 2014, Emmanuel Kikoni, the executive director of the Uganda Bankers Association, noted that banks would likely pass the cost of the excise tax on to consumers.[52] In response to the tax, MTN increased its mobile money withdrawal fees.[53]

The first wave of the InterMedia report identified the lack of interoperability among mobile money services as another concern with respect to the expansion of mobile money,[54] even though the country's mobile money guidelines note that mobile money providers should "foster interoperability across each other's systems."[55]

Finally, less than 50 percent of adults in Uganda had a know-your-customer (KYC)-approved ID as of 2014, rendering access to financial services more challenging.[56] However, the government is working on issuing a national ID to facilitate more effective KYC processes.[57] In February 2015, Parliament passed the Registration of Persons Bill 2014, which required every citizen of Uganda to register for the national ID.[58] An April 2015 article stated that 16 million adults age 16 and older in Uganda had registered for the national ID, and the deadline for registration had been extended to April 30, 2015.[59]

Country commitment and regulatory environment

Major players in Uganda's traditional and digital financial sectors include Bank of Uganda, the Ministry of Finance (Department of Financial Services), the Uganda Communications Commission, and the Uganda Revenue Authority.[60] The Bank of Uganda committed to the Maya Declaration in 2011.[61] Uganda demonstrated its commitment to promoting financial inclusion by creating a joint working group on Mobile Money Financial Services between the Bank of Uganda and the Uganda Communications Commission and developing guidelines on mobile money services.[62 63] Moreover, a national-level Financial Inclusion Project created "to increase access to financial services and empower the users of financial services to make rational decisions in their personal finances so as to contribute to economic growth" is expected to run from 2012 to at least 2015.[64]

In 2011, Bank of Uganda distributed Financial Consumer Protection Guidelines to the public, held workshops on consumer protection, and created a draft "Key Facts Document" (KFD) to standardize informational templates for savings and loan products;[65] the KFD was officially launched in April 2015, and all supervised financial institutions (e.g., commercial banks, credit institutions, and micro deposit-taking institutions) are expected to issue these KFDs to clients seeking any of the offered products.[66]

Certain aspects of Uganda's regulatory environment complicated the emergence and scaling of digital financial services: For example, Uganda does not have a payments law that the Bank of Uganda could draw from in order to issue licenses to electronic money issuers, and the central bank law in Uganda does not "provide the regulator with the general authority to regulate the payments sector."[67] Moreover, only banks and other institutions regulated under the Financial Institutions Act are permitted to provide retail payment services.[68] As noted below, changes to the regulatory environment to provide greater clarity and diversity to the digital financial services sector are underway.[69]

When several mobile network operators (MNOs) in Uganda brought up the possibility of introducing mobile financial services, the Bank of Uganda communicated that those MNOs should find a partner bank to apply for a "letter of no objection" to offer the services.[70] In October 2013, Uganda issued Mobile Money Services Guidelines, which included a non-exclusivity clause for mobile money agents.[71] The guidelines were created by the Bank of Uganda, with the input of the Uganda Communications Commission,[72] mobile network operators, supervised financial institutions, the National Information Technology Authority, the Uganda National Bureau of Standards, and other stakeholders.[73]

The guidelines note that MNOs can act as primary service providers, with banks working as partners to conduct anti-money laundering checks and manage the financial aspects of the services.[74] Since these guidelines are not binding in the same way as formal regulation, in February 2015, the governor of the Bank of Uganda, Tumusiime Mutebile, noted that he perceived a need for the creation of a law to regulate mobile money operations and increase supervision of the sector by the Bank of Uganda.[75]

Looking forward, Uganda set several quantifiable financial inclusion targets in 2014, including a goal of increasing the percentage of adults age 16 and older who are formally financially included from 54 percent to 70 percent or higher by 2017 and increasing the percentage of adults with bank accounts from 33 percent in 2013 to 39.5 percent by 2017.[76]

Another goal was established to "fast track the finalization of the regulatory frameworks for Agent Banking and Tier IV financial institutions such as savings and credit cooperatives (SACCOs), microfinance institutions (MFIs), and self-help groups (SHGs)."[77] As of April 2015,[78] the Bank of Uganda Financial Institutions Act did not explicitly permit banks to provide services through agents; however, amendments to the Financial Institutions Act and the Micro-Finance and Deposit-Taking Institutions Act, as well as new draft agency banking guidelines, are underway to permit agent banking.[79] [80] The amendments will enable banks to enter the agent space. Mobile money has already shown positive effects on access to and use of financial services in Uganda, and facilitating agent banking, ensuring quality services, and increasing equity regarding access to and use of digital financial services will further promote financial inclusion in the country.

See Uganda endnotes on page 179

ZAMBIA

OVERALL RANK
#14

OVERALL SCORE
69%

DIMENSION SCORES

Country commitment	100%
Mobile capacity	89%
Regulatory environment	83%
Adoption	42%

GDP (billion USD)[1]	Adult population (millions)[2]	Unique mobile subscribership[3]	Financial account ownership among adults[4]	Financial account ownership among women[5]
$27	8	42%	36%	33%

Formal commitment milestone

- Committed to the Maya Declaration in 2011

Selected financial inclusion highlights

- Completed its goal of developing a national financial literacy strategy as part of the country's Financial Sector Development Plan
- Finalized a draft framework on branchless banking

Ranking highlights

- Adopted a tiered approach to know-your-customer requirements for e-money wallets
- Developed a financial inclusion index

Next steps

- Finalize and issue draft e-money directives
- Approve and implement draft branchless banking regulations

Zambia

Overview

At the time of its independence in 1964, Zambia was one of Africa's most prosperous countries; its economy, however, was later adversely affected by a number of events, including oil price shocks in the 1970s and a decrease in copper revenue.[6] Significant levels of poverty and a predominantly rural population pose challenges to greater financial inclusion for Zambians,[7] but the country's demographics, developing mobile money environment, and both public and private sector support for advancing financial equity provide opportunities for greater financial inclusion. Zambia has a young population, with about 46 percent of its population age 14 and younger, according to July 2014 estimates.[8] Recent investments in Zambia's financial services industry may contribute to greater inclusion. For example, in August 2014, the International Finance Corporation (IFC) committed to providing $1 million to Airtel Zambia over three years to help increase access to mobile financial services.[9] The agreement is part of an initiative by the IFC and MasterCard Foundation to support mobile financial inclusion in sub-Saharan Africa.[10]

As of 2013, the number of mobile money agents in Zambia had surpassed the number of traditional bank points of service, with commercial bank branches comprising about 25 percent of all points of service, mobile agents comprising about 43 percent, and other institutions (e.g., post offices, microfinance institutions) comprising about 33 percent.[11] By 2014, mobile money agents accounted for about 45 percent of all financial access points in the country.[12] While the expansion of agent networks provides greater opportunities for individuals to engage in financial activities outside "brick and mortar" banks, it should be noted that the range of services provided by agents varies (e.g., not all agents offer cash-in/cash-out services).[13] Moreover, a 2013 article noted that data included in a Microfinance Information Exchange (MIX) financial inclusion map of the country showed that financial access points in Zambia were concentrated in urban areas, even though more than 8 million of Zambia's 13 million inhabitants lived in rural areas.[14]

Access and usage

Overall progress and challenges

Zambia's inaugural FinScope study was completed in 2005, with a second FinScope developed in 2009.[15] According to FinScope 2009 data, Zambia's financial inclusion levels increased from about 34 percent of adults in 2005 to about 37 percent in 2009.[16] The 2009 FinScope findings also suggested that usage barriers were "more significant" than access barriers — for example, less than one in three unbanked adults indicated they trusted banks and less than one in three unbanked adults knew where to go when they decided to use a bank. While proportionate know-your-customer (KYC) procedures are in place,[17] another challenge concerned identification, as less than 3 percent of unbanked adults in Zambia had access to the KYC documentation necessary to open a bank account in 2009.[18]

Banking landscape

Overall, the number of bank branches and agencies grew from 277 in September 2011 to 322 in March 2013.[19] In 2014, 31 percent of adults age 15 and older in Zambia had an account at a formal financial institution. However, less than 18 percent of those in the bottom 40 percent of the income scale had an account at a formal financial institution.[20] From the supply side, the International Monetary Fund's 2014

Financial Access Survey found that in 2013 there were about 0.5 commercial bank branches per 1,000 km^2 and about five commercial bank branches per 100,000 adults in the country.[21]

Mobile ecosystem

The World Bank estimated there were 67 cellular subscriptions per 100 people in Zambia in 2014.[22] There were five live mobile money deployments as of May 2015, according to the GSMA's Mobile Money for the Unbanked Deployment Tracker.[23] One of the deployments, MTN's Mobile Money, announced in August 2014 that its MTN Mobile Money Service would be integrated with all banks by September 2014 through the Ericsson Wallet Platform.[24]

There were about 48 active agent outlets[25] per 100,000 adults in 2013, and about five active agent outlets per 1000 km^2.[26] There were far more registered agent outlets than active agent outlets,[27] with about 194 registered agent outlets per 100,000 adults in 2013 and about 20 registered agent outlets per 1,000 km^2.[28] One of the challenges of assessing the utility of these points of service is the lack of widespread public information on which agents can provide such services as cash-in/cash-out, rather than more basic services like airtime top-up.[29]

According to the 2014 Financial Access Survey, for every 1,000 adults in Zambia in 2013 there were about 12 active mobile money accounts and about 333 registered mobile money accounts.[30] Statistics from the Bank of Zambia indicated that mobile money accounts were significantly more prevalent in 2014 than conventional bank accounts — 3.4 million versus 2 million, respectively.[31] The 2014 Global Financial Inclusion (Global Findex) database found that about 12 percent of adults used mobile money accounts within the previous 12 months.[32] Among those who received a salary or wages, about 5 percent received those funds through a mobile phone; of people who paid utilities regularly, about 11 percent paid them through a mobile phone.[33]

Country commitment and regulatory environment

Overlap between the mandates of the Bank of Zambia, the Securities and Exchange Commission, and the Pensions and Insurance Authority was identified as leading to challenges of coordination concerning the financial sector following national economic reforms in 1991.[34] Currently, the Bank of Zambia serves as the lead implementer of the Financial Sector Development Plan (FSDP) on behalf of the government; the FSDP was drafted as a strategy to "address challenges in the Zambian financial sector."[35] The FSDP was implemented in 2004, after the Financial Sector Assessment Program (FSAP) was conducted in 2002[36] and noted a variety of weaknesses in the Zambian financial sector, including lack of access to financial services for those in rural areas, high bank fees and burdensome account opening requirements, and lack of coordination among government actors.[37]

Access to financial services became a primary focus within FSDP Phase II,[38] and the FSDP has identified equitable access to financial services for men and women as a major goal.[39] The broader objective of the FSDP is to help Zambia become a middle income country by 2030, and the initiative features an extensive collaborative network that includes the Ministry of Finance (the coordinator and funder of FSDP's activities and leader of the FSDP steering committee), the Bank of Zambia (which houses the secretariat for FSDP) and FinMark Trust (which provides technical expertise).[40]

In 2007, the National Payment Systems Act provided a means for businesses involved in mobile banking and money transfer to be designated as such.[41] In 2011, the Bank of Zambia committed to the Alliance for Financial Inclusion's Maya Declaration and set a goal of ensuring access to financial services for 50 percent of its population by the end of 2016 as part of the bank's strategic plan.[42] By 2014, the country was already nearing the 50 percent target.[43]

Zambia completed its goal of developing a national financial literacy strategy as part of its financial sector development plan, and in July 2012 launched a strategy to integrate financial education into the school curriculum.[44] As part of the Bank of Zambia's efforts to enhance consumer protection, the 2013 Maya Declaration report noted that the bank instituted caps on interest rates for lending, which apply to "commercial banks, microfinance institutions, and all other non-bank financial institutions."[45] Zambia also completed a draft framework on branchless banking by 2013 that is still under review;[46] draft e-money directives are also undergoing final review and are expected to include a provision for interoperability.[47]

In terms of data and measurement, the FinScope survey, which was conducted in 2005 and 2009, offered metrics for assessing financial inclusion and has informed the FSDP's efforts toward greater financial inclusion.[48] More recently, in 2013, the Bank of Zambia presented an index to assess the extent of financial inclusion in the country.[49] Moving forward, the Bank of Zambia, Pensions and Insurance Authority, and Securities and Exchange Commission are coordinating with the Ministry of Finance and the World Bank on the development of a new financial inclusion strategy to be instituted after the expiration of the current FSDP in June 2015.[50]

See Zambia endnotes on page 181

METHODOLOGY AND SOURCE NOTES

Research process

To help us assess financial inclusion across our country sample, in addition to the sources detailed below and in the endnotes, we reached out to government representatives in each of the FDIP countries to obtain feedback on their respective draft country profiles (though not on the country scores). Where possible, we also reached out to non-government representatives for their perspectives. We benefited from high levels of engagement among many of these country contacts and are grateful for their assistance in helping us to capture as complete and accurate a picture of the financial inclusion environment as possible.

While we endeavored to ensure accuracy in our country descriptions, the financial inclusion landscape is rapidly evolving. As a result, the country descriptions should be viewed as snapshots in time — and as snapshots that we expect and in fact hope will become outdated as new services that improve financial inclusion are introduced in the coming months and years. To learn more about the financial inclusion landscape in our 21 countries and beyond, we engaged with a number of representatives of multinational financial inclusion-oriented organizations, government officials, industry leaders, and other key stakeholders.

The complexity and breadth of the financial inclusion ecosystem means that certain elements salient to financial inclusion could not be included within the scorecard due to data or other resource constraints — examples include levels of G2P payments and insurance takeup, supply-side barriers such as high capitalization requirements, and some aspects of mobile services taxation, distribution of financial service provider locations, etc. However, where possible, we have highlighted information regarding these types of indicators within the country summaries. As data on these and other components relevant to financial inclusion become more widely available, we expect to consider them for inclusion in future annual editions of the FDIP report.

Scoring descriptions[1]

Country commitment indicator descriptions

National-level participation in international financial inclusion-oriented organizations or networks.

- Description: Has the country signed the Alliance for Financial Inclusion's Maya Declaration on Financial Inclusion or joined international groups such as the Better Than Cash Alliance or the G20's Financial Inclusion Peer Learning Program?
- Scoring: 1=No; 3=Yes
- Sources: Information for this indicator is based on the online membership listings for the Alliance for Financial Inclusion, the Maya Declaration on Financial Inclusion, the Better Than Cash Alliance, and the G20's Financial Inclusion Peer Learning Program.

Existence of specific digital financial service commitments[2] by a government entity.

Scoring: 1=No; 3=Yes

- Description: Do specific, publicly available government commitments to develop digital financial services exist at the national level?
- Note: For this study, the term "digital financial services" is used broadly to include agent banking, e-money, and mobile financial services (MFS), in keeping with the definition used by the Alliance for Financial Inclusion's Digital Financial Services Working Group.[3]

- Sources: Information for this indicator is primarily derived from the Alliance for Financial Inclusion's "2014 Maya Declaration Progress Report: Measurable Goals with Optimal Impact." Supplementary information was located through surveys of laws, regulations, and other publicly available documents available from the website of focus countries' central banks or other regulatory institutions; secondary sources such as the Economist Intelligence Unit's "Global Microscope 2014: The Enabling Environment for Financial Inclusion;" and evaluations of web content available from INGOs and industry associations.

Existence of a national financial inclusion strategy.

- Description: Does a comprehensive national financial inclusion strategy exist?
- Scoring: 1=No; 2=A national financial inclusion strategy is in development; 3=Yes
- Note: As noted in the Alliance for Financial Inclusion's "Financial Inclusion Strategies: Global Trends and Lessons Learnt from the AFI Network" presentation, comprehensive national financial inclusion strategies may be presented within a national financial sector development plan or as a standalone strategy.[4]
- Sources: Information for this indicator was primarily derived from surveys of the Alliance for Financial Inclusion's "2014 Maya Declaration Progress Report: Measurable Goals with Optimal Impact;" the Alliance for Financial Inclusion Financial Inclusion Strategy Peer Learning Group's "A Timeline of Achievement;" the Economist Intelligence Unit's "Global Microscope 2014: The Enabling Environment for Financial Inclusion;" evaluations of Web content available from governmental and INGO websites; and information provided by government officials within select FDIP countries.

Existence of quantifiable financial inclusion targets.

- Description: Do formal, publicly available quantifiable goals related to financial inclusion exist at a national level?
- Scoring: 1=No; 3=Yes
- Note: While many countries have developed action items related to financial inclusion that contain timelines for completion, this indicator specifically focuses on numerical targets. For the purposes of this study, macroeconomic goals, such as an increase in the percentage of savings as GDP, and goals related solely to microfinance (in the narrow sense of microloans) were not included in our consideration of quantifiable financial inclusion goals.
- Sources: Information for this indicator was based on the Alliance for Financial Inclusion's "2014 Maya Declaration Progress Report: Measurable Goals with Optimal Impact," with surveys of governmental authorities' websites, news reports, INGO websites, and correspondence with country contacts used as supplementary data.

Existence of a recent demand-side financial services survey conducted or supported by a government entity.

- Description: Has a nationally representative, demand-side financial services survey been recently conducted or supported by a government entity within the country?
- Scoring: 1=No; 3=Yes
- Note: For purposes of this study, "recent" refers to surveys published within the previous four years (i.e., surveys published prior to 2011 are not considered recent). "Conducted or supported" in this context signifies that the government either commissioned the survey or was explicitly noted as a partner institution by the lead institution conducting the survey.
- Sources: The predominant sources consulted for this indicator include the Alliance for Financial Inclusion's "2014 Maya Declaration Progress Report: Measurable Goals with Optimal Impact"

and the Economist Intelligence Unit's "Global Microscope 2014: The Enabling Environment for Financial Inclusion." Other supplementary sources include surveys of governmental authorities' and INGOs' websites, as well as correspondence with government representatives in various FDIP focus countries.

Existence of a dedicated financial inclusion body within the public sector.

- Description: Does the country have a dedicated financial inclusion body within the regulator, ministry of finance, or other governmental entity?
- Scoring: 1=No; 2=A dedicated final inclusion body is in development; 3=Yes
- Sources: The primary source consulted for this indicator was the World Bank's "Financial Inclusion Strategies Database," which features 56 countries that have either "made formal commitments under the Alliance for Financial Inclusion's Maya Declaration or have been identified by the Financial Inclusion Strategy Peer Learning Group as having significant national strategies."[5] Supplementary sources include searches of governmental websites and correspondence with government representatives.

Mobile capacity indicator descriptions

Percentage of unique mobile subscribers.

- Description: Unique mobile subscribership refers to "a unique user who is subscribed to mobile services at the end of the period,[6] excluding machine-to-machine (M2M). Subscribers differ from connections such that a unique user can have multiple connections," according to the GSMA.[7]
- Scoring: 1=0-33%; 2=34-66%; 3=67-100%
- Source: GSMA Intelligence Database, 2015.

Percentage of the population covered by a 3G mobile cellular network.

- Description: "3G mobile coverage, expressed as a percentage of the total market population, at the end of the period," according to the GSMA.
- Scoring: 1=0-33%; 2=34-66%; 3=67-100%

Source: GSMA Intelligence Database, 2015.

Number of mobile money service deployments.

- Description: How many mobile money service deployments are active within the country?
- Scoring: 1=Country has one mobile money deployment; 2=Country has two mobile money deployments; 3=Country has three or more mobile money deployments
- Source: GSMA Mobile Money for the Unbanked Deployment Tracker.[8]

Availability of person-to-person domestic transfers via mobile money services.

- Description: Do mobile money service operators offer person-to-person domestic financial transfers?
- Scoring: 1=No; 3=Yes
- Source: GSMA Mobile Money for the Unbanked Deployment Tracker.

Availability of bill payment via mobile money services.

- Description: Do mobile money service operators offer bill payment services?
- Scoring: 1=No; 3=Yes
- Source: GSMA Mobile Money for the Unbanked Deployment Tracker.

Availability of international remittances via mobile money services.

- Description: Do mobile money service operators offer international remittances? 1=No; 3=Yes
- Scoring: 1=No; 3=Yes
- Source: GSMA Mobile Money for the Unbanked Deployment Tracker.

Regulatory environment indicator descriptions

Agent banking.

- Description: Can banks or other formal financial institutions contract with other legal entities to serve as agents to provide financial services?
- Scoring: 1=No; 3=Yes
- Sources: The 2011 World Economic Forum's "Mobile Financial Services Development Report" was used as a benchmark for the FDIP countries covered in the study. Other sources used to score this indicator include the Economist Intelligence Unit's "Global Microscope 2014: The Enabling Environment for Financial Inclusion," surveys of country-specific legislation, news reports, INGO publications, and correspondence with government representatives.

Mobile network operator-led mobile financial service deployments.

- Description: Are mobile network operators eligible to apply for licenses or other formal approval from the regulator to lead mobile money deployments?[9]
- Scoring: 1=No; 3=Yes
- Sources: The 2011 World Economic Forum "Mobile Financial Services Development Report" was used as a benchmark for the FDIP countries included in the study. Other sources used to score this indicator include the Economist Intelligence Unit's "Global Microscope 2014: The Enabling Environment for Financial Inclusion," surveys of country-specific legislation, news reports, INGO publications, and correspondence with government representatives.

E-money regulations.

- Description: Have regulations, policies, or other guidance concerning electronic money (e-money) been issued?
- Scoring: 1=No e-money regulations are in place or appear to be in development; 2=E-money regulations are in development; 3=E-money regulations have been issued.
- Sources: Scoring for this indicator is primarily based on analysis from the Economist Intelligence Unit's "Global Microscope 2014: The Enabling Environment for Financial Inclusion," in addition to surveys of regulation on governmental websites and correspondence with government representatives.

Mobile money platform interoperability.

- Description: Are mobile money platforms required by the regulator or other financial inclusion authority to be interoperable?
- Scoring: 1=No requirements concerning platform interoperability have been issued by the regulator, and there is no evidence of interoperability; 2=Platforms are explicitly required to have the capacity for interoperability; 3=Two or more mobile money platforms are actively interoperable.
- Note: While there are numerous types of interoperability, for the purposes of this study we focus on platform interoperability, in which mobile money platforms are interconnected so that a "customer with an account with one service provider can send or receive money to or from the account of a customer with a different service provider."[10]
- Sources: The 2011 World Economic Forum "Mobile Financial Services Development Report" was referenced in developing the country scores, as was the Economist Intelligence Unit's "Global Microscope 2014: The Enabling Environment for Financial Inclusion." Further information was located through surveys of regulation on governmental websites, news articles, INGO publications, and correspondence with country representatives.

Proportionate know-your-customer processes.

- Description: Are proportionate know-your-customer (KYC) processes[11] in place for financial service providers?
- Scoring: 1=No; 2=Proportionate KYC processes are in development; 3=Yes
- Sources: The 2011 World Economic Forum "Mobile Financial Services Development Report" was referenced in developing the country scores, as was the Economist Intelligence Unit's "Global Microscope 2014: The Enabling Environment for Financial Inclusion." Correspondence with country contacts, country-specific regulations, INGO and industry

reports, and news articles were used as supplementary sources.

Cash-in/Cash-out at agent locations.

- Description: Are agents permitted to perform both cash-in and cash-out services?
- Scoring: 1=No; 3=Yes
- Sources: Scores were based on data from the 2011 World Economic Forum "Mobile Financial Services Development Report," the Economist Intelligence Unit's "Global Microscope 2014: The Enabling Environment for Financial Inclusion," news articles, and websites of industry associations and financial service providers.

Adoption indicator descriptions

Please note that all scores for the indicators in the "adoption" dimension are based on data from the 2014 Global Financial Inclusion Database (Global Findex). For each of the percentage indicators below, the scoring ranges have been normalized since the range of data across all countries included in this study spanned a relatively narrow subrange. We normalized the data by taking the difference between the highest and lowest values across all countries in this study, and then dividing that range into three equal subranges, corresponding respectively to a score of 1, 2, and 3. For example, using this approach, for an indicator in which the raw data ranged from 50 percent for the worst-performing country to 79 percent for the best-performing country, countries with raw data scores from 50 percent to 59 percent would receive a "1", countries with raw data scores from 60 percent to 69 percent would receive a "2", and countries with raw data scores from 70 percent to 79 percent would receive a "3."[12]

The specific indicators we used to measure adoption are the following:

Traditional account penetration.

- Description: The 2014 Global Findex description for the data used for this indicator is "percentage of [adult] respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; or receiving wages or government transfers into a card in the past 12 months."
- Scoring: 1=9-28%; 2=29-49%; 3=50-69%

Traditional account penetration among rural adults.

- Description: The 2014 Global Findex description for the data used for this indicator is "percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; or receiving wages or government transfers into a card in the past 12 months (rural, % age 15+)."
- Scoring: 1=8-27%; 2=28-49%; 3=50-69%

Traditional account penetration among lower-income adults.

- Description: The 2014 Global Findex description for the data used for this indicator is "percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; or receiving wages or government transfers into a card in the past 12 months (income, poorest 40%, % age 15+)."
- Scoring: 1=6-22%; 2=23-41%; 3=42-58%

Traditional account penetration among women.

- Description: The 2014 Global Findex description for the data used for this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; or receiving wages or government transfers into a card in the past 12 months (female, % age 15+)."
- Scoring: 1=3-24%; 2=25-47%; 3=48-69%

Borrowing from a financial institution.

- Description: The 2014 Global Findex description for the data used for this indicator is the percentage of adults who "borrowed any money in the past 12 months (by themselves or together with someone else) from a bank or another type of financial institution. This does not include the use of credit cards."
- Scoring: 1=2-7%; 2=8-14%; 3=15-20%

Saving at a financial institution.

- Description: The 2014 Global Findex description for the data used for this indicator is the percentage of respondents who "report saving or setting aside any money in the past 12 months by using an account at a bank or another type of financial institution (% age 15+)."
- Scoring: 1=3-12%; 2=13-23%; 3=24-33%

Debit card use.

- Description: The 2014 Global Findex description for the data used for this indicator is "the percentage of respondents who report using their own debit card directly to make a purchase in the last 12 months (% age 15+)."
- Scoring: 1=0-13%; 2=14-28%; 3=29-42%

Credit card use.

- Description: The 2014 Global Findex description for the data used for this indicator is "the percentage of respondents who report using their own credit card in the past 12 months (% age 15+)."
- Scoring: 1=0-9%; 2=10-19%; 3=20-29%.

Percentage of adults utilizing online bill payment and purchases.

- Description: The 2014 Global Findex description for the data used for this indicator is the percentage of adults who reported "paying bills or making purchases online using the Internet in the past 12 months (% age 15+)."

Scoring: 1=0-5%; 2=6-13%; 3=14-19%

Mobile money account penetration.

- Description: The 2014 Global Findex description for the data used for this indicator is the "percentage of respondents who report personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months; or receiving wages, government transfers, or payments for agricultural products through a mobile phone in the past 12 months (% age 15+)."
- Scoring: 1=0-18%; 2=19-39%; 3=40-58%

Mobile money account penetration among adults from rural areas.

- Description: The 2014 Global Findex description for the data used for this indicator is the "percentage of respondents who report personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months; or receiving wages, government transfers, or payments for agricultural products through a mobile phone in the past 12 months (rural, % age 15+)."
- Scoring: 1=0-18%; 2=19-37%; 3=38-56%

Mobile money account penetration among lower-income adults.

- Description: The 2014 Global Findex description for the data used for this indicator is the "percentage of respondents who report personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months; or receiving wages, government transfers, or payments for agricultural products through a mobile phone in the past 12 months (income, lowest 40%, % age 15+)."
- Scoring: 1=0-17%; 2=18-35%; 3=36-53%

Mobile money account penetration among women.

- Description: The 2014 Global Findex description for the data used for this indicator is the percentage of women "personally using a mobile phone to pay bills or to send or receive money through a mobile money service in the previous 12 months or who received wages, government transfers, or payments for agricultural products through a phone in the previous 12 months."
- Scoring: 1=0-17%; 2=18-37%; 3=38-55%

Mobile phone used to receive salary or wages (among recent wage-earners).[13]

- Description: The 2014 Global Findex description for the data used for this indicator reads "among respondents who reported receiving any money from an employer in the past 12 months in the form of a salary or wages for doing work, percentage of adults who received salary or wages through a mobile phone in the last 12 months."
- Scoring: 1=0-7%; 2=8-17%; 3=18-25%

Mobile phone used to make utility payments (among adults regularly making utility bill payments).[14]

- Description: The 2014 Global Findex description for the data used for this indicator "denotes, among respondents reporting personally making regular payments in the past 12 months for water, electricity, or trash collection, the percentage who made these payments through a mobile phone (% paying utility bills, age 15+)."
- Scoring: 1=0-17%; 2=18-37%; 3=38-55%

ENDNOTES

1 There is significant variation in the way electronic money associated with a mobile phone is defined. For example, Eva Gutierrez and Sandeep Singh note in an article on enabling mobile banking frameworks that "[…] the use of mobile phones to send, receive money, pay bills and execute other financial transactions has been variously referred to as mobile banking (Porteous 2006), mobile money (IFC 2011, GSMA), mobile transactions (Alexandre et al. 2011), or simply mobile payment." See Eva Gutierrez and Sandeep Singh, "What regulatory frameworks are more conducive to mobile banking? Empirical evidence from Findex data," Policy Research Working Paper 6652, The World Bank, October 2014, 2, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/10/10/000158349_20131010135452/Rendered/PDF/WPS6652.pdf.

In this report, we use the term "mobile money" to signify access to electronic money through a mobile phone that can exist independently of a traditional bank account, in keeping with the definitions used by the Global Financial Inclusion (Global Findex) database and the GSMA. The Global Findex defines mobile money as "services that can be used without an account at a financial institution. Adults using a mobile money account linked to their financial institution are considered to have an account at a financial institution." See page 4 of the 2014 Global Findex report, available at http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2015/04/15/090224b082dca3aa/1_0/Rendered/PDF/The0Global0Fin0ion0around0the0world.pdf#page=3.

The GSMA Mobile Money for the Unbanked initiative considers that mobile money services must, among other considerations, "rely heavily on a network of transactional points outside bank branches and ATMs that make the service accessible to unbanked and underbanked people. Customers must be able to use the service without having been previously banked. Mobile banking services that offer the mobile phone as just another channel to access a traditional banking product, and payment services linked to a current bank account or credit card, such as Apple Pay and Google Wallet, are not included." See Claire Scharwatt, Arunjay Katakam, Jennifer Frydrych, Alix Murphy, and Nika Naghavi, "2014 State of the Industry: Mobile Financial Services for the Unbanked," GSMA, 2015, 10, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/03/SOTIR_2014.pdf.

2 Asli Demirguc-Kunt, Leora Klapper, Dorothe Singer, and Peter Van Oudheusden, "The Global Findex Database 2014: Measuring Financial Inclusion around the World," Policy Research Working Paper 7255, World Bank, April 2015, VI, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2015/04/15/090224b082dca3aa/1_0/Rendered/PDF/The0Global0Fin0ion0around0the0world.pdf#page=3.

3 Demirguc-Kunt, Klapper, Singer, and Van Oudheusden 2015, VI.

4 Demirguc-Kunt, Klapper, Singer, and Van Oudheusden 2015, 60.

5 "The Maya Declaration," Alliance for Financial Inclusion, Undated, Accessed May 2015, http://www.afi-global.org/maya-declaration.

6 "Maya Declaration Commitments," Alliance for Financial Inclusion, Undated, Accessed May 2015, http://www.afi-global.org/maya-declaration-commitments.

7 "Maya Declaration on Financial Inclusion: Alliance for Financial Inclusion," 30 September 2011, http://www.afi-global.org/sites/default/files/mayadeclaration_30sep2011.pdf?op=Download.

8 Leora Klapper and Dorothe Singer, "The Opportunities of Digitizing Payments: How digitization of payments, transfers, and remittances contributes to the G20 goals of broad-based economic growth, financial inclusion, and women's economic empowerment," Report by the World Bank Development Research Group, the Better Than Cash Alliance, and the Bill & Melinda Gates Foundation to the G20 Global Partnership for Financial Inclusion, 28 August 2014, 1, http://www.gpfi.org/sites/default/files/documents/FINAL_The%20Opportunities%20of%20Digitizing%20Payments.pdf.

9 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion, 2014, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

10 "Measurable Goals" 2014, 6.

11 A 2015 Consultative Group to Assist the Poor (CGAP) article notes that there are "three components of any such digital financial services: a digital transactional platform, retail agents, and the use by customers and agents of a device – most commonly a mobile phone – to transact via the platform." See Timothy Lyman and Kate Lauer, "What is Digital Financial Inclusion and Why Does it Matter?," CGAP, 10 March 2015, www.cgap.org/blog/what-digital-financial-inclusion-and-why-does-it-matter.

12 See David S. Evans and Alexis Pirchio, "An Empirical Examination of Why Mobile Money Schemes Ignite in Some Developing Countries but Flounder in Most," University of Chicago Coase-Sandor Institute for Law & Economics Research Paper No. 723, March 2015, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2578312.

13 Demirguc-Kunt, Klapper, Singer, and Van Oudheusden 2015, 59.

14 "Access" to a mobile phone signifies an individual either owns a mobile phone or can access but does not own a mobile phone. See "India: Driving Financial Inclusion Wave 2," Financial Inclusion Insights, InterMedia, June 2015, 32, http://finclusion.org/wp-content/uploads/2014/05/FII-India-2014-Wave-2-Wave-Report.pdf.

15 Noelia Cámara and David Tuesta, "New Banking, Banking for All: The 'Peru Model,'" BBVA Research, September 2014, https://www.bbvaresearch.com/en/publicaciones/new-banking-banking-for-all-the-peru-model/.

16 Sabahat Iqbal, "EasyPaisa: Incentivizing Mobile Wallet Usage in Pakistan," CGAP, 27 April 2015, http://www.cgap.org/blog/easypaisa-incentivizing-mobile-wallet-usage-pakistan.

17 "Digital inclusion and mobile sector taxation 2015," GSMA, 2015, 39, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/06/Digital-Inclusion-Mobile-Sector-Taxation-2015.pdf.

18 As stated by the Alliance for Financial Inclusion, "[a]gent banking is known by different names in different countries. In Mexico, they are called correspondent banks, but in other parts of the world they are known as non-bank correspondents, non-bank agents, bank agents, or correspondents." See "Discussion paper: Agent banking in Latin America," Alliance for Financial Inclusion, 2012, 3, http://www.afi-global.org/sites/default/files/discussion_paper_-_agent_banking_latin_america.pdf.

19 This study primarily focuses on mobile money platform-level interoperability, which is when a "customer with an account with one service provider can send or receive money to or from the account of a customer with a different service provider." Agent exclusivity is a related issue that "revolves around the ability of a customer of one provider to use the agent of another provider for cash-in/cash-out services related to that customer's account." See Kabir Kumar and Michael Tarazi, "Interoperability in Branchless Banking and Mobile Money," CGAP, 9 January 2012, http://www.cgap.org/blog/interoperability-branchless-banking-and-mobile-money-0.

20 Claire Scharwatt, Arunjay Katakam, Jennifer Frydrych, Alix Murphy, and Nika Naghavi, "2014 State of the Industry: Mobile Financial Services for the Unbanked," GSMA, March 2015, 16, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/03/SOTIR_2014.pdf.

21 "Financial Inclusion," Better Than Cash Alliance, Undated, Accessed May 2015, http://betterthancash.org/why-e-payments/financial-inclusion/.

22 Demirguc-Kunt, Klapper, Singer, and Van Oudheusden, 2015, 5.

23 "Connected Women 2015: Bridging the Gender Gap: Mobile access and usage in low- and middle-income countries," GSMA, 2015, 6, http://www.gsma.com/connectedwomen/wp-content/uploads/2015/04/GSM0001_03232015_GSMAReport_NEWGRAYS-Web.pdf.

24 According to a 2010 CGAP article, "Branchless banking is defined as the delivery of financial services outside conventional bank branches, often using agents and relying on information and communications technologies to transmit transaction details — typically card-reading point-of-sale (POS) terminals or mobile phones." See "Branchless Banking Diagnostic Template," CGAP, 15 February 2010, http://www.cgap.org/publications/branchless-banking-diagnostic-template.

25 Tilman Ehrbeck, "Closing the Financial Inclusion Gender Gap," *The Huffington Post,* 17 June 2015, http://www.huffingtonpost.com/tilman-ehrbeck/closing-the-financial-inclusion-gender-gap_b_7600516.html.

26 C.W., "Discrimination abounds," *The Economist,* 19 November 2013, http://www.economist.com/blogs/freeexchange/2013/11/gender-and-finance.

27 Sandeep Dave, Ashwin Shirvaikar, and Greg Baxter, "Digital Money: A Pathway to an Experience Economy," Imperial College London and Citi, January 2015, 26, http://icg.citi.com/icg/sa/digital_symposium/digital_money_index/pdf/Digital%20money%20A%20pathway%20to%20an%20Experience%20Economy.pdf.

28 Darrell M. West, *Going Mobile: How Wireless Technology Is Reshaping Our Lives,* Brookings Institution Press, 2015.

29 Beth Porter, "A means to an end: The post-2015 future of financial inclusion," Better Than Cash Alliance, 5 April 2015, http://betterthancash.org/a-means-to-an-end-the-post-2015-future-of-financial-inclusion/.

30 "E-Money," GSMA, Undated, http://www.gsma.com/mobilefordevelopment/faq/e-money.

31 "Mobile Financial Services Development Report," World Economic Forum, 2011, 7, http://www3.weforum.org/docs/WEF_MFSD_Report_2011.pdf.

32 Asli Demirguc-Kunt, Leora Klapper, Dorothe Singer, and Peter Van Oudheusden, "The Global Findex Database 2014: Measuring Financial Inclusion around the World," Policy Research Working Paper 7255, The World Bank, April 2015, 4, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2015/04/15/090224b082dca3aa/1_0/Rendered/PDF/The0Global0Fin0ion0around0the0world.pdf#page=3.

33 Demirguc-Kunt, Klapper, Singer, and Van Oudheusden 2015, 4.

34 Demirguc-Kunt, Klapper, Singer, and Van Oudheusden 2015, 5.

35 According to Sarah Rotman Parker, "G2P payments include the spectrum of social cash transfers, wages and pension payments paid by governments to its citizens. Because many of these payments, especially social cash transfers, are specifically targeted at the poor, this presents a huge potential to bring financial services to the unbanked by linking these payments to financial accounts." See Sarah Rotman Parker, "Branchless Banking and Financial Inclusion for G2P Recipients," CGAP, 15 March 2012, http://www.cgap.org/blog/branchless-banking-and-financial-inclusion-g2p-recipients.

36 Leora Klapper and Dorothe Singer, "The Opportunities of Digitizing Payments: How digitization of payments, transfers, and remittances contributes to the G20 goals of broad-based economic growth, financial inclusion, and women's economic empowerment," Report by the World Bank Development Research Group, the Better Than Cash Alliance, and the Bill & Melinda Gates Foundation to the G20 Global Partnership for Financial Inclusion, 28 August 2014, 7-8, http://www.gpfi.org/sites/default/files/documents/FINAL_The%20Opportunities%20of%20Digitizing%20Payments.pdf.

37 "Connected Women 2015: Bridging the Gender Gap: Mobile access and usage in low- and middle-income countries," GSMA, 2015, 6, 14, http://www.gsma.com/connectedwomen/wp-content/uploads/2015/04/GSM0001_03232015_GSMAReport_NEWGRAYS-Web.pdf.

38 Guillermo Babatz, "Sustained Effort, Saving Billions: Lessons from the Mexican Government's Shift to Electronic Payments," November 2013, iv, http://betterthancash.org/wp-content/uploads/2013/12/Evidence-Paper-English1.pdf.

39 Klapper and Singer 2014, 3.

40 Simone di Castri, "Mobile Money: Enabling Regulatory Solutions," GSMA, February 2013, 18, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU-Enabling-Regulatory-Solutions-di-Castri-2013.pdf.

41 Beth Porter, "A means to an end: The post-2015 future of financial inclusion," Better Than Cash Alliance, 5 April 2015, http://betterthancash.org/a-means-to-an-end-the-post-2015-future-of-financial-inclusion/.

42 Claire Scharwatt, Arunjay Katakam, Jennifer Frydrych, Alix Murphy, and Nika Naghavi, "2014 State of the Industry: Mobile Financial Services for the Unbanked," GSMA, 2015, 8, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/03/SOTIR_2014.pdf.

43 Ibid.

44 Scharwatt, Katakam, Frydrych, Murphy, and Naghavi 2015, 46.

45 Ignacio Mas and Dan Radcliffe, "Mobile Payments go Viral: M-PESA in Kenya," March 2010, 7, http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/M-PESA_Kenya.pdf.

46 Bill Gates and Melinda Gates, "2015 Gates Annual Letter: Mobile Banking Will Help the Poor Transform Their Lives," 2015, http://www.gatesnotes.com/2015-annual-letter?page=3&lang=en.

47 Marcia Parada and Greta Bull, "In the Fast Lane: Innovations in Digital Finance," International Finance Corporation, May 2014, 3, http://www.ifc.org/wps/wcm/connect/d2898b80440daa039453bc869243d457/In+The+Fast+Lane+-+Innovations+in+Digital+Finance+IFC.pdf?MOD=AJPERES.

48 Ibid.

49 John Villasenor, "Smartphones for the Unbanked: How Mobile Money Will Drive Digital Inclusion in Developing Countries," Brookings Institution, Issues in Technology Innovation Number 25, September 2013, 6, http://www.brookings.edu/~/media/research/files/papers/2013/09/16-smartphones-mobile-money-developing-countries-villasenor/brookingsmobilemoneyrevised-92313.pdf.

50 "GSMA: The Mobile Economy 2015," GSMA, London: United Kingdom, 2015, 7, http://www.gsmamobileeconomy.com/GSMA_Global_Mobile_Economy_Report_2015.pdf.

51 Ibid.

52 "Digital inclusion and mobile sector taxation 2015," GSMA, 2015, 39, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/06/Digital-Inclusion-Mobile-Sector-Taxation-2015.pdf.

53 Chart developed from GSMA Intelligence data featured in the GSMA's "Mobile Economy 2015" report. See "GSMA: The Mobile Economy 2015," GSMA, London: United Kingdom, 2015, 7, http://www.gsmamobileeconomy.com/GSMA_Global_Mobile_Economy_Report_2015.pdf.

54 Note that yellow bars within the graph signify projected values.

55 "GSMA: The Mobile Economy 2015," GSMA, London: United Kingdom, 2015, 9, http://www.gsmamobileeconomy.com/GSMA_Global_Mobile_Economy_Report_2015.pdf.

56 Chart developed from data featured in the GSMA "Mobile Economy 2015" report. Data courtesy of GSMA Intelligence. See "GSMA: The Mobile Economy 2015," GSMA, London: United Kingdom, 2015, 9, http://www.gsmamobileeconomy.com/GSMA_Global_Mobile_Economy_Report_2015.pdf.

57 Note that yellow bars within the graph signify projected values.

58 As noted in the 2015 Citi and Imperial College London Digital Money Index, "[A]t the early stages of digital money readiness (Incipient and Emerging), consumers require products that fulfill basic needs. Examples of such products include mobile-assisted deposits, money transfer and cash-out solutions as a safer alternative to managing physical cash. These transactions are conducted without the need for traditional bank branches." See Sandeep Dave, Ashwin Shirvaikar, and Greg Baxter, "Digital Money: A Pathway to An Experience Economy," Citi and Imperial College London, January 2015, 24, http://www.citibank.com/icg/sa/digital_symposium/digital_money_index/pdf/Digital%20money%20A%20pathway%20to%20an%20Experience%20Economy.pdf.

59 See http://fspmaps.org/.

60 See http://finclusionlab.org/.

61 "Global Microscope 2014: The Enabling Environment for Financial Inclusion," Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION and Citi, 2014, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014.

62 "Global Microscope 2014," 2014, 7.

63 See "Mobile Financial Services Development Report," World Economic Forum, 2011, http://www3.weforum.org/docs/WEF_MFSD_Report_2011.pdf.

64 "Mobile Financial Services Market Viability Tool," NetHope, 2015, http://solutionscenter.nethope.org/products/view/1638.

65 Brian Muthiora, "Enabling Mobile Money Policies in Kenya: Fostering a Digital Financial Revolution," GSMA, January 2015, 19, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/02/2015_MMU_Enabling-Mobile-Money-Policies-in-Kenya.pdf.

66 Muthiora 2015, "Forward."

67 Julie Zollmann, "Kenya Financial Diaries: Shilingi Kwa Shilingi - The Financial Lives of the Poor," August 2014, 18, http://www.fsdkenya.org/pdf_documents/14-08-08_Financial_Diaries_report.pdf.

68 "FinScope South Africa 2014 Consumer Survey," FinMark Trust, 2014, 21, http://www.finmark.org.za/wp-content/uploads/pubs/Pres_Finscope2014_FNL.pdf. Note that the FinAccess strand from which the data is drawn employs mutually exclusive categories.

69 "FinScope South Africa 2014 Consumer Survey" 2014, 25.

70 "South Africa," 2014 Global Financial Inclusion (Global Findex) database, 2015, http://datatopics.worldbank.org/financialinclusion/.

71 "Brazil's innovative 'banking correspondents' expand financial services to underserved areas," Consortium on Financial Services and Poverty, 5 June 2012, http://www.cfsp.org/news/brazil%E2%80%99s-innovative-%E2%80%98banking-correspondents%E2%80%99-expand-financial-services-underserved-areas#.VYtlHCFVhHw.

72 Simone di Castri, "Is regulation holding back financial inclusion? A look at the evidence," GSMA, 29 January 2015, http://www.gsma.com/mobilefordevelopment/is-regulation-holding-back-financial-inclusion-a-look-at-the-evidence.

73 "Press Release: Data Services and Mobile Money Solutions to Drive Mobile Communications Markets of the DRC and Ethiopia," Frost & Sullivan, 24 July 2014, http://www.frost.com/prod/servlet/press-release.pag?docid=291589016.

74 "Ethiopia," 2014 Global Findex, 2015, http://datatopics.worldbank.org/financialinclusion/.

75 "Putting Financial Inclusion on the Global Map: 2013 Maya Declaration Progress Report," Alliance for Financial Inclusion, 12 September 2013, 24, http://www.afi-global.org/library/publications/2013-maya-declaration-progress-report; "Ethiopia," Mobile Money for the Unbanked Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

76 Margarete Biallas, Scott Stefanski, and Cherine El Sayed, "IFC Mobile Money Scoping Country Report: Afghanistan," International Finance Corporation, September 2013, http://www.ifc.org/wps/wcm/connect/7cdac90043efb2839599bd869243d457/Afghanistan+Scoping+Public.pdf?MOD=AJPERES.

77 Katherine Loh, "What's Holding Mobile Money Back?," *The Diplomat,* 1 September 2012, http://thediplomat.com/2012/09/whats-holding-mobile-money-back-in-asia/.

78 Biallas, Stefanski, and El Sayed, "IFC Mobile Money Scoping Country Report: Afghanistan" 2013, 5.

79 GSMA Intelligence Database, GSMA, Q1 2015, https://gsmaintelligence.com/.

80 Scharwatt, Katakam, Frydrych, Murphy, and Naghavi 2015, "Forward."

81 "Official Launch of the National Financial Inclusion Framework: Welcome and Opening Remarks Delivered by Prof. Benno Ndulu, Governor of the Bank of Tanzania," 12 December 2013, https://www.bot-tz.org/NFIF/Governor's%20Speech%20rev_10122013.pdf.

82 Jeffrey Riecke, "Tanzania Launches National Financial Inclusion Framework," Center for Financial Inclusion Blog, 23 December 2013, http://cfi-blog.org/2013/12/23/tanzania-launches-national-financial-inclusion-framework/.

83 "Financial Sector Deepening Trust," Undated, http://www.bot-tz.org/mfi/Documents/FSDT%203%20background%202_copy%281%29.pdf.

84 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion, 9 September 2014, 31, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.31.

85 "FinScope Survey Report 2012," October 2012, http://www.statistics.gov.rw/publications/finscope-survey-report-2012#main-content-area.

86 "Modi delivers on promised financial inclusion mission (Roundup)," *Business Standard,* 15 August 2014, http://www.business-standard.com/article/news-ians/modi-delivers-on-promised-financial-inclusion-mission-roundup-114081500158_1.html.

87 Kabir Kumar and Dan Radcliffe, "Can India Achieve Universal Digital Financial Inclusion?," CGAP, 20 January 2015, http://www.cgap.org/blog/can-india-achieve-universal-digital-financial-inclusion.

88 "No. of Accounts opened under PMJDY as on 28.02.2015 (Summary)," 28 February 2015, Accessed April 2015, http://www.pmjdy.gov.in/ArchiveFile/2015/2/28.02.2015.pdf.

89 Demirguc-Kunt, Klapper, Singer, and Van Oudheusden 2015, 26.

90 See "Economic Outlook Report," Vol. 1, 2015, 64, http://indiabudget.nic.in/es2014-15/echapter-vol1.pdf.

91 Kabir Kumar and Dan Radcliffe, "What Will It Take for Payments Banks to Succeed in India?," CGAP, 27 January 2015, http://www.cgap.org/blog/what-will-it-take-payments-banks-succeed-india.

92 While we recognize mobile money services can be offered through 2G networks, we utilized 3G coverage as our criterion for this indicator because 1) 3G coverage data was available for all FDIP countries, and 2) As smartphone adoption continues to accelerate among the lower levels of the economic pyramid, smartphone-based mobile money solutions will become more widespread — and those solutions will require more advanced networks, thus making 3G coverage a key indicator of potential future growth in mobile money services.

93 Unique mobile subscribership refers to "a unique user who is subscribed to mobile services at the end of the period, excluding M2M. Subscribers differ from connections such that a unique user can have multiple connections," according to the GSMA. See "How do you forecast unique subscribers?," GSMA Intelligence, Undated, https://gsmaintelligence.com/help/172/.

94 GSMA Intelligence Database, GSMA, Q1 2015, https://gsmaintelligence.com/.

95 "GSMA Mobile Money for the Unbanked Deployment Tracker," GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

96 Muthiora 2015, 3.

97 "Press Release: Data Services and Mobile Money Solutions to Drive Mobile Communications Markets of the DRC and Ethiopia," Frost & Sullivan, 24 July 2014, http://www.frost.com/prod/servlet/press-release.pag?docid=291589016.

98 "Ethiopia," 2014 Global Findex, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

99 As stated by the Alliance for Financial Inclusion, "[A]gent banking is known by different names in different countries. In Mexico, they are called correspondent banks, but in other parts of the world they are known as non-bank correspondents, non-bank agents, bank agents, or correspondents. In this chapter, these terms are used interchangeably." See http://www.afi-global.org/sites/default/files/discussion_paper_-_agent_banking_latin_america.pdf.

100 The agent platform that enables people to input or remove cash from mobile money accounts (or branchless banking accounts) is known as the Cash-In/Cash-Out platform. See David S. Evans and Alexis Pirchio, "An Empirical Examination of Why Mobile Money Schemes Ignite in Some Developing Countries but Flounder in Most," University of Chicago Coase-Sandor Institute for Law & Economics Research Paper No. 723, March 2015, 2, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2578312.

101 As a 2014 article in *The Economist* notes, "research by the World Bank has found that countries with similar levels of income often display very different levels of financial inclusion. The main reason for this disparity is government policy." Read more at http://www.economist.com/news/briefing/21632441-worlds-poor-need-stability-and-security-banks-have-traditionally-offered.

102 Eva Gutierrez and Sandeep Singh, "What regulatory frameworks are more conducive to mobile banking? Empirical evidence from Global Findex data," Policy Research Working Paper 6652, The World Bank, October 2014, 6, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/10/10/000158349_20131010135452/Rendered/PDF/WPS6652.pdf.

103 See Santiago Fernandez de Lis, Maria Claudia Llanes, Carolos Lopez-Moctezuma, Juan Carlos Rojas, and David Tuesta, "Financial inclusion and the role of mobile banking in Colombia: developments and potential," BBVA Research Working Paper No. 14/04, February 2014, 3, https://www.bbvaresearch.com/wp-content/uploads/migrados/WP_1404_tcm348-420839.pdf. Also see "Extending Financial Services with Banking Agents," CGAP Brief, April 2008, https://www.cgap.org/sites/default/files/CGAP-Brief-Extending-Financial-Services-with-Banking-Agents-Apr-2008.pdf.

104 Note: We do not discuss mobile virtual network operators (MVNOs) at length in this study, but we may consider exploring the topic in future years as they become more widespread.

105 Neil Davidson, "Mapping and Effectively Structuring Operator-Bank Relationship to Offer Mobile Money for the Unbanked," GSMA, "Introduction," http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2012/03/mappingandeffectivestructuringfinal2643.pdf.

106 "The Mobile Money Revolution: Part 2 Financial inclusion Enabler," ITU Technology Watch Report, May 2013, 14, http://www.itu.int/dms_pub/itu-t/oth/23/01/T23010000200002PDFE.pdf.

107 Parada and Bull 2014, 3.

108 Simone di Castri, "Mobile Money: Enabling Regulatory Solutions," GSMA, February 2013, 11, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU-Enabling-Regulatory-Solutions-di-Castri-2013.pdf.

109 David S. Evans and Alexis Pirchio, "An Empirical Examination of Why Mobile Money Schemes Ignite in Some Developing Countries but Flounder in Most," University of Chicago Coase-Sandor Institute for Law & Economics Research Paper No. 723, March 2015, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2578312.

110 Kyla Yeoman, "M-Pesa helps world's poorest to go to the bank using mobile phones," *The Christian Science Monitor,* 6 January 2014, http://www.csmonitor.com/World/Making-a-difference/Change-Agent/2014/0106/M-Pesa-helps-world-s-poorest-go-to-the-bank-using-mobile-phones.

111 "The Mobile Money Revolution" 2013, 13.

112 "The Transformative role of Mobile Financial Services and the Role of the German Development Cooperation," GIZ on behalf of the Federal Ministry for Economic Cooperation and Development, 2011, 16.

113 "The Mobile Money Revolution" 2013, 13.

114 Parada and Bull 2014, 5.

115 "10 Ways to Accelerate Mobile Money," Citi and USAID, 2012, 5, http://www.citibank.com/transactionservices/home/public_sector/docs/Mobile_Money_Article.pdf

116 Scharwatt, Katakam, Frydrych, Murphy, and Naghavi 2015, "Forward."

117 Scharwatt, Katakam, Frydrych, Murphy, and Naghavi 2015, 8.

118 Michael Joyce, "Good News for E-Money and Remittance Operators in Indonesia," Mobile Money Asia Blog, 27 March 2013, http://www.mobilemoneyasia.org/2013/03/good-news-for-e-money-and-remittance.html; Gunnar Camner, "Snapshot: Implementing Mobile Money Interoperability in Indonesia," GSMA, 2013, 5-6, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/10/Implementing-mobile-money-interoperability-in-Indonesia.pdf.

119 "The Quiet Before the Storm," eMITRA, 3 March 2015, http://www.emitraindonesia.org/indonesia-the-quiet-before-the-storm.

120 Grace D. Amianti, "BNI Prepares to Launch Branchless Banking Program," *The Jakarta Post,* 14 March 2015, http://www.thejakartapost.com/news/2015/03/14/bni-prepares-launch-branchless-banking-program.html.

121 Ghiyazuddin Mohammad and Grace Retnowati, "Draft Branchless Banking Regulations in Indonesia – A Review," MicroSave, September 2014, http://blog.microsave.net/do-the-new-regulations-in-indonesia-foster-growth-of-branchless-banking-well-almost/; Email correspondence with representative of MicroSave on April 29, 2015.

122 Simone di Castri, "Mobile Money: Enabling Regulatory Solutions," GSMA, February 2013, 18, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU-Enabling-Regulatory-Solutions-di-Castri-2013.pdf; Gutierrez and Singh 2014, 6.

123 Xavier Faz, "Mexico's Tiered KYC: An Update on Market Response," CGAP, 25 June 2013, http://www.cgap.org/blog/mexicos-tiered-kyc-update-market-response.

124 "Mobile Money in the Philippines – The Market, the Models and Regulation," GSMA Mobile Money for the Unbanked, 2012, 9, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2012/06/Philippines-Case-Study-v-X21-21.pdf.

125 Jonathan Greenacre, Louise Malady, and Ross Buckley, "The Regulation of Mobile Money in Malawi: Project Report," March 2014, 35, http://www.uncdf.org/sites/default/files/Documents/the_regulation_of_mobile_money_in_malawi_project_report_final_version.pdf.

126 Demirguc-Kunt, Klapper, Singer, and Van Oudheusden 2015, 18.

127 Demirguc-Kunt, Klapper, Singer, and Van Oudheusden 2015, 26.

128 "Kenya," 2014 Global Findex, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

129 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion, September 2014, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

130 "Measurable Goals" 2014, 9.

131 "Universal Financial Access 2020," The World Bank, Quote by Dr. Jim Yong Kim beginning at 6:01, 17 April 2015, http://live.worldbank.org/universal-financial-access-2020.

132 "The Use of Financial Inclusion Data Country Case Study: Mexico: Using data for improving public policies – the case of banking agents and mobile payments," Prepared by Comisión Nacional Bancaria y de Valores, Mexico and the AFI Financial Inclusion Data Working Group on behalf of the Data and Measurement sub-group of the Global Partnership for Financial Inclusion, January 2014, 4, http://www.gpfi.org/sites/default/files/documents/The%20Use%20of%20Financial%20Inclusion%20Data%20Country%20Case%20Study_Mexico.pdf.

133 Muthiora 2015, 14; "National Financial Inclusion Strategies Database," The World Bank, 2014, http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,contentMDK:23491959~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html.

134 Klapper and Singer 2014, 17.

135 Evans and Pirchio 2015.

136 Scharwatt, Katakam, Frydrych, Murphy, and Naghavi 2014, 20.

137 Villasenor 2013, 1–2.

138 Noelia Cámara and David Tuesta, "New Banking, Banking for All: The 'Peru Model,'" BBVA Research, 2 September 2014, https://www.bbvaresearch.com/en/publicaciones/new-banking-banking-for-all-the-peru-model/.

139 Kabir Kumar and Dan Radcliffe, "Can India Achieve Universal Digital Financial Inclusion?," CGAP, 20 January 2015, http://www.cgap.org/blog/can-india-achieve-universal-digital-financial-inclusion.

140 Isaac Holly Ogwal, "Tracing the Customer Journey," Digital Financial Services in Uganda: Briefing Note 2, UNCDF Mobile Money for the Poor (MM4P), February 2015, 2, http://www.uncdf.org/sites/default/files/Documents/bn2_uganda_v7.pdf.

141 Sabahat Iqbal, "EasyPaisa: Incentivizing Mobile Wallet Usage in Pakistan," CGAP, 27 April 2015, http://www.cgap.org/blog/easypaisa-incentivizing-mobile-wallet-usage-pakistan.

142 "Brazil's innovative 'banking correspondents' expand financial services to underserved areas," Consortium on Financial Services and Poverty," 5 June 2012, http://www.cfsp.org/news/brazil%E2%80%99s-innovative-%E2%80%98banking-correspondents%E2%80%99-expand-financial-services-underserved-areas#.VZSNPSFVhHx.

143 Kabir Kumar and Dan Radcliffe, "2015 Set to be Big Year for Digital Financial Inclusion in India," CGAP, 15 January 2015, http://www.cgap.org/blog/2015-set-be-big-year-digital-financial-inclusion-india.

144 David Evans and Alexis Pirchio, "An Empirical Examination of Why Mobile Money Schemes Ignite in Some Developing Countries but Flounder in Most," University of Chicago Law School, Coase-Sandor Institute for Law and Economics, March 2015, 1, http://www.law.uchicago.edu/faculty/research/david-evans-empirical-examination-why-mobile-money-schemes-ignite-some-developing-c.

145 Neil Davidson and Paul Leishman, "The case for interoperability: Assessing the value that the interconnection of mobile money services would create for customers and operators," GSMA, 2012, 1-2, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2012/06/mmu_interoperability.pdf.

146 Gunnar Camner, "Snapshot: Implementing mobile money interoperability in Indonesia," GSMA, 2013, 5, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/10/Implementing-mobile-money-interoperability-in-Indonesia.pdf.

147 Darrell M. West, "Digital Divide: Improving Internet Access in the Developing World Through Affordable Services and Diverse Content," Brookings Institution Center for Technology Innovation, February 2015, http://www.brookings.edu/~/media/research/files/papers/2015/02/13-digital-divide-developing-world-west/west_internet-access.pdf.

148 Darrell M. West, "Digital Divide: Improving Internet Access in the Developing World Through Affordable Services and Diverse Content," Brookings Institution Center for Technology Innovation, February 2015, 5, http://www.brookings.edu/~/media/research/files/papers/2015/02/13-digital-divide-developing-world-west/west_internet-access.pdf.

149 Raul Katz, Ernesto Flores-Roux, and Judith Mariscal, "The Impact of Taxation on the Development of the Mobile Broadband Sector," Telecom Advisory Services for GSMA, 2011, 6-7, http://www.gsma.com/latinamerica/wp-content/uploads/2011/09/tasreport.pdf.

150 "Digital Pathways to Financial Inclusion: Findings from the First FII Tracker Survey in Kenya," InterMedia, July 2014, 10, http://finclusion.org/wp-content/uploads/2014/04/FII-Kenya-Wave-One-Wave-Report.pdf.

151 "Financial Inclusion," Better Than Cash Alliance, Undated, http://betterthancash.org/why-e-payments/financial-inclusion/.

152 Evans and Pirchio 2015, 4.

153 Greg Chen, "India's Unique ID Could Generate Big Boost in Financial Access," CGAP, 30 January 2014, http://www.cgap.org/blog/indias-unique-id-could-be-about-generate-big-boost-access.

154 Omoneka Musa, Charles Niehaus, and Martin Warioba, "How Tanzania Established Mobile Money Interoperability," CGAP, 4 March 2015, http://www.cgap.org/blog/how-tanzania-established-mobile-money-interoperability.

155 Scharwatt, Katakam, Frydrych, Murphy, and Naghavi 2015, 8. .

156 "Pakistan: Driving Financial Inclusion (Wave 2)," Financial Inclusion Insights, InterMedia, April 2015, 10, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Pakistan-Wave-2-Wave-Report1.pdf.

157 Tilman Ehrbeck, "Closing the Financial Inclusion Gender Gap," *The Huffington Post,* 17 June 2015, http://www.huffingtonpost.com/tilman-ehrbeck/closing-the-financial-inclusion-gender-gap_b_7600516.html.

158 Asli Demirguc-Kunt and Leora Klapper, "Measuring Financial Inclusion: The Global Findex Database," Policy Research Working Paper 6025, The World Bank, 2012, 21, http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-6025.

159 Klapper and Singer 2014, 12.

160 Sandeep Dave, Ashwin Shirvaikar, and Greg Baxter, "Digital Money: A Pathway to an Experience Economy," Imperial College London and Citi, 2015.

161 Demirguc-Kunt, Klapper, Singer, and Van Oudheusden 2015, 5.

162 Villasenor 2013, 1–2.

163 See http://www.finmark.org.za/wp-content/uploads/pubs/Pres_Finscope2014_FNL.pdf.

164 Tilman Ehrbeck, "Closing the Financial Inclusion Gender Gap," *The Huffington Post,* 17 June 2015, http://www.huffingtonpost.com/tilman-ehrbeck/closing-the-financial-inclusion-gender-gap_b_7600516.html.

165 Christine Lagarde, "Empowerment Through Financial Inclusion: Address to the International Forum for Financial Inclusion" [Speech], 26 June 2014, http://www.imf.org/external/np/speeches/2014/062614a.htm.

166 "Global Financial Development Report 2014: Financial Inclusion," The World Bank, 2014, 12-13, http://siteresources.worldbank.org/EXTGLOBALFINREPORT/Resources/8816096-1361888425203/9062080-1364927957721/GFDR-2014_Complete_Report.pdf.

167 C.W., "Discrimination abounds," *The Economist,* 19 November 2013, http://www.economist.com/blogs/freeexchange/2013/11/gender-and-finance.

AFGHANISTAN ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months;

or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion Database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 "Afghanistan," Mobile Money for the Unbanked (MMU) Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker; "GSMA Intelligence Database," GSMA, Q1 2015, https://gsmaintelligence.com/.

7 Margarete Biallas, Scott Stefanski, and Cherine El Sayed, "IFC Mobile Money Scoping Country Report: Afghanistan," International Finance Corporation, September 2013, 5, http://www.ifc.org/wps/wcm/connect/7cdac90043efb2839599bd869243d457/Afghanistan+Scoping+Public.pdf?MOD=AJPERES.

8 "Afghanistan," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

9 "Afghanistan," 2014 Global Findex, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

10 Ibid.

11 Ibid.

12 "Afghanistan," The World Factbook, Central Intelligence Agency, 2015, https://www.cia.gov/library/publications/the-world-factbook/geos/af.html.

13 "USAID Lauds Expansion of Mobile Money," August 2011, http://kabul.usembassy.gov/emmm.html.

14 Note that this value does not comprise unique subscribership; therefore, the percentage includes individuals using multiple mobile phones. As with the other country summaries, unless otherwise denoted, mobile subscribership does not refer to unique subscriptions.

15 "Afghanistan," Financial Access Survey (2013), 2014.

16 "Afghanistan," 2014 Global Findex, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

17 Jan Chipchase and Panthea Lee, "Mobile Money Afghanistan," 2011, 28, http://www.janchipchase.org/fp/wp-content/uploads/presentations/ChipchaseLee_MobileMoney_Afghanistan.pdf.

18 Biallas et al. 2013, 16.

19 Ibid.

20 Chipchase and Lee 2011, 8.

21 "Afghanistan," Financial Access Survey (2013), 2014.

22 "Afghanistan," Mobile Money for the Unbanked (MMU) Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

23 "My Money," Afghan Wireless, 2015, http://afghan-wireless.com/e-payments/my-money/.

24 "GSMA Intelligence Database," GSMA, 2015, https://gsmaintelligence.com/.

25 "Afghanistan," Mobile Money for the Unbanked Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

26 Chipchase and Lee 2011, 7.

27 Erik Heinrich, "How Afghanistan is on the Leading Edge of a Tech Revolution," *Time,* 2 March 2013, http://world.time.com/2013/03/02/how-afghanistan-is-on-the-leading-edge-of-a-tech-revolution/.

28 "Afghans now pay bills, share funds using 'mobile money.'" U.S. Agency for International Development, 13 February 2014, http://www.usaid.gov/pioneers-prize/mobile-money.

29 Email correspondence with representative of the World Bank Group on July 24, 2015.

30 "The Central Bank of Afghanistan Issues First Electronic Money Institution License to M-Paisa," Roshan, 25 April 2011, http://www.roshan.af/Roshan/Media_Relations/News/News_Details/11-04-26/The_Central_Bank_of_Afghanistan_Issues_First_Electronic_Money_Institution_License_to_M-Paisa.aspx.

31 Ibid.

32 "About M-Paisa," Roshan, 2013, http://www.roshan.af/roshan/Business/Solutions/Pay/Emergency_Services/M-Paisa.aspx.

33 "Afghanistan," Mobile Money for the Unbanked Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

34 "My Money" 2015.

35 "Afghanistan," Mobile Money for the Unbanked Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

36 "Maya Declaration Commitments," Alliance for Financial Inclusion, Undated, http://www.afi-global.org/maya-declaration-commitments.

37 "Our Members," Better Than Cash Alliance, 2014, http://betterthancash.org/about/our-members/.

38 Email correspondence with representative of Financial Access for Investing in the Development of Afghanistan (FAIDA) on July 31, 2015.

39 Email correspondence with representative of the Microfinance Investment Support Facility (MISFA) on April 30, 2015.

40 Biallas et al. 2013, 7.

41 "History," Microfinance Investment Support Facility for Afghanistan (MISFA), 2011, http://www.misfa.org.af/history.

42 Email correspondence with MISFA representative on March 9, 2015.

43 Email correspondence with FAIDA representative on July 31, 2015.

44 Ibid.

45 "Vision and Mission," Afghanistan Payments Systems, 2014, http://www.aps.af/vision-mission/.

46 Ibid.

47 "Our Vision and Goals," Better Than Cash Alliance, Undated, http://betterthancash.org/about/our-vision-and-goals/; "Our Members," Better Than Cash Alliance, Undated, http://betterthancash.org/about/our-members/.

48 Email correspondence with FAIDA representative on July 31, 2015.

49 Ibid.

50 "World Bank Mid Term Review in Da Afghanistan Bank," Afghanistan Payments Systems, 2014, http://www.aps.af/world-bank-mid-term-review-in-dab/.

51 "Vision and Mission," Afghanistan Payments Systems, 2014, http://www.aps.af/vision-mission/.

52 "USAID Lauds" 2011.

53 Email correspondence with FAIDA representative on July 31, 2015.

54 "Fact Sheet," Financial Access for Investing in the Development of Afghanistan (FAIDA), USAID Afghanistan, December 2012, http://www.usaid.gov/sites/default/files/documents/1871/FAIDA%20Fact%20Sheet%20-%20Dec%202012%20-%20FINAL.pdf.

55 Email correspondence with FAIDA representative on July 31, 2015.

56 Ibid.

57 Ibid.

58 Ibid.

59 Ibid.

60 "Money Service Providers Regulation," Da Afghanistan Bank, 2008, 19, http://dab.gov.af/Content/Media/Documents/MoneyServiceProvider_English2512201334642335533253 25.pdf.

61 "Money Service Providers Regulation" 2008, 2.

62 "Office of Inspector General: Audit of USAID/Afghanistan's Financial Access for Investing in the Development of Afghanistan Report. Audit Report No. F-306-14-002-P," USAID: Kabul, Afghanistan, 29 March 2014, 3, https://oig.usaid.gov/sites/default/files/audit-reports/f-306-14-002-p.pdf.

63 Email correspondence with FAIDA representative on July 31, 2015.

64 Ibid.

65 Biallas et al. 2013, 9.

66 Ibid.

67 Biallas et al. 2013, 10.

68 Ibid.

69 "Money Service Providers Regulation," Da Afghanistan Bank, 2008, 21, http://dab.gov.af/Content/Media/Documents/MoneyServiceProvider_English2512201334642335533253 25.pdf.

70 Adam Brown, "Mobile Money in Afghanistan: An Uphill Battle," Center for Financial Inclusion Blog, 31 January 2014, http://cfi-blog.org/2014/01/31/mobile-money-in-afghanistan-an-uphill-battle/.

71 Biallas et al. 2013, 3.

72 Ibid.

BANGLADESH ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 "Global Microscope 2014: The enabling environment for financial inclusion," The Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION, and Citi, 2014, 24, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014.

7 "Bangladesh," 2014 Global Financial Inclusion Database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

8 Greg Chen and Stephen Rasmussen, "bKash Bangladesh: A Fast Start for Mobile Financial Services," Consultative Group to Assist the Poor (CGAP), 29 July 2014, 1, http://www.cgap.org/publications/bkash-bangladesh-fast-start-mobile-financial-services.

9 Shamsin Ahmed and Maria A. May, "Mobile Money in Bangladesh: Shifting from Scale to Innovation," 18 June 2014, http://www.impatientoptimists.org/Posts/2014/06/Mobile-Money-in-Bangladesh-Shifting-from-Scale-to-Innovation.

10 Greg Chen and Stephen Rasmussen, "bKash: A Fast Start for Mobile Financial Services" [Blog post], CGAP, 29 July 2014, http://www.cgap.org/publications/bkash-bangladesh-fast-start-mobile-financial-services.

11 "IFC Mobile Money Scoping Country Report: Bangladesh," International Finance Corporation (IFC), April 2013, 2, http://www.ifc.org/wps/wcm/connect/c5a33c80407b90ef90b990cdd0ee9c33/Bangladesh+Scoping+Report+051513_final_publication.pdf?MOD=AJPERES.

12 "Bangladesh: Steps Toward Financial Inclusion 2014 (Wave 2)," Financial Inclusion Insights, InterMedia, 2014, 33, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Wave-2-Bangladesh-Wave-Report.pdf.

13 "Global Microscope" 2014, 24.

14 Greg Chen, "Comparing Branchless Banking in Bangladesh and Pakistan," CGAP, 6 June 2013, http://www.cgap.org/blog/comparing-branchless-banking-bangladesh-and-pakistan.

15 "Bangladesh," 2014 Global Findex, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

16 Ibid.

17 "Bangladesh: Steps Toward Financial Inclusion 2014 (Wave 2)," Financial Inclusion Insights, InterMedia, 2014, 14, 56, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Wave-2-Bangladesh-Wave-Report.pdf.

18 "Bangladesh," Financial Access Survey (2013), International Monetary Fund (IMF), 2014, http://fas.imf.org/Default.aspx.

19 "Bangladesh: Steps Toward Financial Inclusion 2014 (Wave 2)," Financial Inclusion Insights, InterMedia, 2014, 48, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Wave-2-Bangladesh-Wave-Report.pdf.

20 "Bangladesh," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

21 "Bangladesh: Steps Toward Financial Inclusion 2014 (Wave 2)," Financial Inclusion Insights, InterMedia, 2014, 20, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Wave-2-Bangladesh-Wave-Report.pdf.

22 Ibid.

23 A registered agent outlet is one in which "one or several mobile money agents are contracted to facilitate transactions for users." An agent is a "person, quasi-corporation, corporation, or machine that facilitates mobile money account registration, cash-in/cash-out (CICO) transactions, and customer support. Normally, they are registered with MMSPs and perform as agents of MMSPs on a commission basis." See "Explanatory Notes," IMF, http://fas.imf.org/misc/Explanatory_Notes.pdf.

24 The number of active agent outlets is the "number of agent outlets that have facilitated at least one transaction over the past 30 days." See "Explanatory Notes," IMF, http://fas.imf.org/misc/Explanatory_Notes.pdf.

25 The number of active mobile money accounts is the "number of registered mobile money accounts that have been used to conduct mobile money or cash-in-cash-out (CICO) transactions over the past 90 days. Balance inquiries, PIN resets, and other transactions that do not constitute mobile money or CICO transactions should not qualify a customer account as active." See "Explanatory Notes," IMF, http://fas.imf.org/misc/Explanatory_Notes.pdf.

26 The number of registered mobile money accounts is the "number of accounts with resident mobile money service providers (MMSPs) that are primarily accessed by mobile phones and are useable or have been used for mobile money transactions." See "Explanatory Notes," IMF, http://fas.imf.org/misc/Explanatory_Notes.pdf.

27 "Bangladesh," Financial Access Survey (2013), IMF, 2014, http://fas.imf.org/Default.aspx.

28 "Bangladesh: Steps Toward Financial Inclusion 2014 (Wave 2)," Financial Inclusion Insights, InterMedia, 2014, 14, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Wave-2-Bangladesh-Wave-Report.pdf.

29 "Bangladesh: Steps Toward Financial Inclusion 2014 (Wave 2)," Financial Inclusion Insights, InterMedia, 2014, 7, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Wave-2-Bangladesh-Wave-Report.pdf.

30 "Bangladesh: Steps Toward Financial Inclusion - Highlights from the FII Tracker Survey and Qualitative Studies on Access and Use of Banking and Mobile Money Services," Financial Inclusion Insights, InterMedia, 2014, 35, http://finclusion.org/wp-content/uploads/2014/12/InterMedia-FII_Bangladesh_Year-1-Wave-Report.pdf.

31 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), 9 September 2014, 20, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

32 Ibid.

33 "Bangladesh: Steps Toward Financial Inclusion - Highlights from the FII Tracker Survey and Qualitative Studies on Access and Use of Banking and Mobile Money Services," Financial Inclusion Insights, InterMedia, 2014, 8, http://finclusion.org/wp-content/uploads/2014/12/InterMedia-FII_Bangladesh_Year-1-Wave-Report.pdf.

34 Ibid.

35 "Bangladesh: Steps Toward Financial Inclusion - Highlights from the FII Tracker Survey and Qualitative Studies on Access and Use of Banking and Mobile Money Services," Financial Inclusion Insights, InterMedia, 2014, 32, http://finclusion.org/wp-content/uploads/2014/12/InterMedia-FII_Bangladesh_Year-1-Wave-Report.pdf.

36 "Bangladesh: Steps Toward Financial Inclusion 2014 (Wave 2)," Financial Inclusion Insights, InterMedia, 2014, 39, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Wave-2-Bangladesh-Wave-Report.pdf.

37 "Bangladesh: Steps Toward Financial Inclusion - Highlights from the FII Tracker Survey and Qualitative Studies on Access and Use of Banking and Mobile Money Services," Financial Inclusion Insights, InterMedia, 2014, 24, http://finclusion.org/wp-content/uploads/2014/12/InterMedia-FII_Bangladesh_Year-1-Wave-Report.pdf.

38 "Bangladesh," 2014 Global Financial Inclusion database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

39 "Mobile Financial Services," Bangladesh Bank, Last updated March 2015, https://www.bb.org.bd/fnansys/paymentsys/mobilefin.php.

40 Chen and Rasmussen 2014, 1.

41 Golzare Nabi, Sanaullah Talukder, Prajna Paramita Saha, Rama Rani Sutradhar, Ayesha-E-Fahmida, Gregory Chen, and Shweta Banerjee, "Mobile Financial Services in Bangladesh: An Overview of Market Development," Bangladesh Bank, July 2012, 19, http://www.bangladesh-bank.org/pub/research/policypaper/pp072012.pdf.

42 Chen and Rasmussen 2014, 1.

43 Ibid.

44 Chen 2013.

45 Chen and Rasmussen 2014, 1.

46 Ibid.

47 Chen and Rasmussen 2014, 3.

48 Chen and Rasmussen 2014, 1.

49 Ibid.

50 Chen and Rasmussen 2014, 3.

51 Chen and Rasmussen 2014, 4.

52 "IFC Mobile Money Scoping" 2013, 26.

53 Chen 2013.

54 Nabi et al. 2012, 13.

55 "Maya Declaration Commitments," AFI, Undated, http://www.afi-global.org/maya-declaration-commitments.

56 "Measurable Goals" 2014, 20.

57 Offering a full suite of MFS services requires a separate license from transferring remittances. See "IFC Mobile Money Scoping" 2013, 9.

58 "IFC Mobile Money Scoping" 2013, 8.

59 Ibid.

60 "IFC Mobile Money Scoping" 2013, 7.

61 Nabi et al. 2012, 8.

62 Ibid.

63 Ibid.

64 Nabi et al. 2012, 9.

65 "IFC Mobile Money Scoping" 2013, 10.

66 "Mobile Financial Services," Bangladesh Bank, Last updated March 2015, https://www.bb.org.bd/fnansys/paymentsys/mobilefin.php.

67 Conversions from Bangladeshi Taka to US Dollar in this instance were calculated as of September 22, 2011 (the date the original guidelines on mobile financial services were issued). See http://www.oanda.com/currency/converter/.

68 Ibid.

69 "IFC Mobile Money Scoping" 2013, 10.

70 "Measurable Goals" 2014, 20.

71 "Money Laundering and Terrorist Financing Risk Assessment Guidelines for Banking Sector," Bangladesh Financial Intelligence Unit, Bangladesh Bank, 2015, 22, 28, http://www.bangladesh-bank.org/aboutus/regulationguideline/aml/20150108guidelines.pdf; "Guidelines on Mobile Financial Services for the Banks," Bangladesh Bank, 2011, http://www.bu.edu/bucflp/files/2012/01/Guidelines-on-Mobile-Financial-Services-for-the-Banks-consumer-protection-related.pdf.

72 "Bangladesh: Steps Toward Financial Inclusion 2014 (Wave 2)," Financial Inclusion Insights, InterMedia, 2014, 6, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Wave-2-Bangladesh-Wave-Report.pdf.

73 Email correspondence with representative of Bangladesh Bank on April 30, 2015.

74 Information available from downloadable Excel document associated with the 2014 Economist Intelligence Unit's "Global Microscope 2014: The enabling environment for financial inclusion," Sponsored by MIF/IDB, CAF, ACCION, and Citi, 2014, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014.

75 "Bangladesh: Steps Toward Financial Inclusion 2014 (Wave 2)," Financial Inclusion Insights, InterMedia, 2014, 10, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Wave-2-Bangladesh-Wave-Report.pdf.

BRAZIL ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 Helen Wernik, "Brazil Launches Action Plan for Financial Inclusion Initiatives," Consultative Group to Assist the Poor (CGAP), 22 May 2012, http://www.cgap.org/blog/brazil-launches-action-plan-financial-inclusion-initiative.

7 Camilo Tellez-Merchan, "Mobile Payments in Brazil: Ready, Set, Go?," CGAP, 2 August 2013, http://www.cgap.org/blog/mobile-payments-brazil-ready-set-go.

8 Judah J. Levine and Chris Connolly, "Is Brazil the Country of the Future for Mobile Money?," 2 June 2014, http://www.nextbillion.net/blogpost.aspx?blogid=3904.

9 "Brazil," The World Factbook, Central Intelligence Agency (CIA), 2015, https://www.cia.gov/library/publications/the-world-factbook/geos/br.html.

10 "Brazil," The World Factbook, 2014.

11 Caitlin Sanford and Laura Cojocaru, "Do Banking Correspondents Improve Financial Inclusion? Evidence from a National Survey in Brazil," Bankable Frontier Associates, 1 November 2013, 14–15, http://bankablefrontier.com/wp-content/uploads/documents/1.-Do-Banking-Correspondents-Improve-Financial-Inclusion-Evidence-from-Brazil.docx.pdf.

12 "National Partnership for Financial Inclusion: Action Plan to Strengthen the Institutional Environment," Central Bank of Brazil, May 2012, 1, http://www.bcb.gov.br/Nor/relincfin/Brazil_Financial_Inclusion_Action_Plan.pdf.

13 "Brazil," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

14 "Brazil," 2014 Global Financial Inclusion database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

15 "Brazil," 2014 Global Findex, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

16 "Global Financial Development Report 2014: Financial Inclusion," The World Bank, 2014, 47, http://siteresources.worldbank.org/EXTGLOBALFINREPORT/Resources/8816096-1361888425203/9062080-1364927957721/GFDR-2014_Complete_Report.pdf.

17 Conditional cash transfers are provided through government programs "that provide cash to poor families on condition that they make verifiable investments in human capital, such as regular school attendance or use of basic preventative nutrition and health care." See "Conditional Cash Transfers in LAC," The World Bank, Undated, http://go.worldbank.org/ZZV8B9FJ30.

18 "Global Financial Development Report" 2014, 47.

19 "Global Financial Development Report" 2014, 59.

20 Chris Bold, David Porteous, and Sarah Rotman, "Social Cash Transfers and Financial Inclusion: Evidence from Four Countries," Focus Note No. 77, CGAP, February 2012, 6, http://www.cgap.org/sites/default/files/Focus-Note-Social-Cash-Transfers-and-Financial-Inclusion-Evidence-from-Four-Countries-Feb-2012.pdf.

21 Ibid.

22 Mark Pickens, David Porteous, and Sarah Rotman, "Banking the Poor Via G2P Payments," Focus Note No. 58, CGAP, December 2009, 6, http://www.cgap.org/sites/default/files/CGAP-Focus-Note-Banking-the-Poor-via-G2P-Payments-Dec-2009.pdf.

23 Bold, Porteous, and Rotman 2012, 19.

24 Caitlin Sanford, "Do Agents Improve Financial Inclusion? Evidence from Brazil" [Blog post], CGAP, 3 April 2014, http://www.cgap.org/blog/do-agents-improve-financial-inclusion-evidence-brazil.

25 Marcio I. Nakane and Bruno de Paula Rocha, "Policy Innovations to Improve Access to Financial Services: The Case of Brazil," Center for Global Development, Updated February 2012, 4, http://www.cgdev.org/doc/LRS_case_studies/Nakane_PaulaRocha_Brazil_r1.pdf.

26 Caitlin Sanford, "Do Agents Improve Financial Inclusion? Evidence from Brazil," Bankable Frontier Associates, November 2013, 1, http://bankablefrontier.com/wp-content/uploads/documents/BFA-Focus-Note-Do-agents-improve-financial-inclusion-Brazil.pdf.

27 "Global Financial Development Report" 2014, 59.

28 Sanford and Cojocaru 2013, 7.

29 Ibid.

30 Sanford and Cojocaru 2013, 6.

31 Sanford and Cojocaru 2013, 8.

32 Tellez-Merchan 2013.

33 "Brazil," Mobile Money for the Unbanked Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

34 "Brazil," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

35 "Brazil," 2014 Global Findex, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

36 "Putting Financial Inclusion on the Global Map: 2013 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), 12 September 2013, 20, http://www.afi-global.org/library/publications/2013-maya-declaration-progress-report.

37 "National Financial Inclusion Strategies Database," The World Bank, 2014, http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,contentMDK:23491959~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html.

38 "IFC Mobile Money Scoping Country Report: Brazil," International Finance Corporation (IFC), 7 July 2011, 8, http://www.ifc.org/wps/wcm/connect/ec214d804a05b5879386ffdd29332b51/RetailPayments-IFC-LAC-%2BBrazil_final.pdf?MOD=AJPERES.

39 "Putting Financial Inclusion" 2013, 20.

40 "IFC Mobile Money Scoping," 2011, 8.

41 "Action Plan to Strengthen the Institutional Environment," National Partnership for Financial Inclusion, Banco Central Do Brasil, May 2012, http://www.bcb.gov.br/Nor/relincfin/Brazil_Financial_Inclusion_Action_Plan.pdf.

42 "Management Report 2012," Banco Central Do Brasil, 2012, 90, http://www.bcb.gov.br/pre/SureI/RelAdmBC/ing/management_report_2012.pdf.

43 Email correspondence with representative of the Central Bank of Brazil on March 18, 2015.

44 Ibid.

45 "Action Plan" 2012.

46 Ibid.

47 Ibid.

48 "Putting Financial Inclusion" 2013, 20.

49 Ibid.

50 "Global Microscope 2014: The enabling environment for financial inclusion," The Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION, and Citi, 2014, 43, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014.

51 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," AFI, 9 September 2014, 21, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

52 Email correspondence with representative of the Central Bank of Brazil on March 18, 2015.

53 Nakane and de Paula Rocha 2012, 8.

54 Ibid.

55 Nakane and de Paula Rocha 2012, 11.

56 Sanford and Cojocaru 2013, 14.

57 Deborah Wetzel, "Bolsa Família: Brazil's Quiet Revolution," The World Bank, 4 November 2013, http://www.worldbank.org/en/news/opinion/2013/11/04/bolsa-familia-Brazil-quiet-revolution.

58 Sanford and Cojocaru 2013, 14.

59 Ibid.

60 Ibid.

61 "Resolution 3110 on norms governing banking agents," Financial Inclusion Guide, Boston University Center for Finance, Law and Policy, Undated, http://www.bu.edu/bucflp/laws/resolution-3110-on-norms-governing-bank-agents/.

62 Nakane and de Paula Rocha 2012, 28.

63 Nakane and de Paula Rocha 2012, 30.

64 Nakane and de Paula Rocha 2012, 30, 32.

65 "Global Financial Development Report" 2014, 59.

66 Ibid.

67 Sanford and Cojocaru 2013, 5.

68 Sanford and Cojocaru 2013, 5, 7.

69 Sanford and Cojocaru 2013, 16.

70 "IFC Mobile Money Scoping" 2011, 9.

71 Xavier Faz, "A New Wave of E-Money in Latin America," CGAP, 11 June 2013, http://www.cgap.org/blog/new-wave-e-money-latin-america.

72 "Putting Financial Inclusion" 2013, 20.

73 "Global Microscope 2014: The enabling environment for financial inclusion," The Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION, and Citi, 2014, 43, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014.

74 "Law 12865," Banco Central do Brasil, [Unofficial translation], 9 October 2013, http://www.bcb.gov.br/Pom/Spb/Ing/InstitucionalAspects/Law12865.pdf.

75 Levine and Connolly 2014.

76 Ibid.

77 Jorge Porter, "Brazil's Central Bank Releases Regulatory Framework for Local Card Industry," BN Americas, 5 November 2013, http://www.bnamericas.com/news/banking/brazils-central-bank-releases-regulatory-framework-for-local-card-industry.

78 Email correspondence with representative of the Central Bank of Brazil on March 18, 2015.

79 Levine and Connolly 2014.

80 "Measurable Goals" 2014, 15.

81 Levine and Connolly 2014.

82 Email correspondence with representative of the Central Bank of Brazil on March 18, 2015.

83 Ibid.

84 Ibid.

CHILE ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 "Chile Country Profile," *BBC News,* 14 August 2012, http://news.bbc.co.uk/2/hi/americas/country_profiles/1222764.stm.

7 "Chile," The World Factbook, Central Intelligence Agency (CIA), 2015, https://www.cia.gov/library/publications/the-world-factbook/geos/ci.html.

8 "Chile," 2014 Global Financial Inclusion database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

9 "Global Microscope 2014: The enabling environment for financial inclusion," The Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION, and Citi, 2014, 43-44, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014.

10 Ibid.

11 Ibid.

12 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), October 2014, 21, http://www.afi-global.org/library/publications/2014-maya-declaration-progress-report-measurable-goals-optimal-impact-high-res.

13 "Global Microscope" 2014, 44.

14 Javiera Quiroga, "Chile Economy Grows at Slowest Pace in More than Four Years," *Bloomberg,* 5 August 2014, http://www.bloomberg.com/news/2014-08-05/chile-s-economy-grows-at-slowest-pace-in-more-than-four-years.html.

15 "Chile," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

16 "Measurable Goals" 2014, 21.

17 "Global Microscope" 2014, 44.

18 "Chile," The World Factbook (2014), 2015.

19 "Chile," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

20 "Chile," Mobile Money for the Unbanked Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

21 Ibid.

22 "Cómo activo Cuenta Móvil?" [English translation by Google Translate], Undated, http://personas.entel.cl/PortalPersonas/appmanager/entelpcs/personas?_nfpb=true&_pageLabel=P15401390071300133332854.

23 Ibid.

24 "Chile," 2014 Global Findex, 2015.

25 "Putting Financial Inclusion on the Global Map: 2013 Maya Declaration Progress Report," AFI, 12 September 2013, 12, http://www.afi-global.org/library/publications/2013-maya-declaration-progress-report.

26 "Putting Financial Inclusion" 2013, 22.

27 Sarah Fathallah and Douglas Pearce, "Coordination Structures for Financial Inclusion Strategies and Reforms," Financial Inclusion and Consumer Protection Service Line, The World Bank, October 2013, 5, http://siteresources.worldbank.org/EXTFINANCIALSECTOR/Resources/282884-1339624653091/8703882-1339624678024/8703850-1368556147234/Coordination-Structures-for-Financial-Inclusion-Strategies.pdf.

28 "National Financial Inclusion Strategies Database," The World Bank, 2014, http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,contentMDK:23491959~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html.

29 "Financial Inclusion Strategy in Chile," Gobierno de Chile/Ministerio de Desarrollo Social, 2012, 15, http://www.ipc-undp.org/conference/south-south-learning-event/presentations/Benjamin%20Almarza.pdf.

30 "Financial Inclusion Strategy in Chile" 2012, 17.

31 Clara Veniard, "Banco Estado in Chile: A rarely discussed, but surprisingly successful agent network," Retail Banking Blog, 14 June 2011, http://retailbankingblog.wordpress.com/2011/06/14/banco-estado-in-chile-a-rarely-discussed-but-surprisingly-successful-agent-network/.

32 "Beneficios," BancoEstado, 2013, http://www.bancoestado.cl/88F6102DD50B49CCA890EA5D1C709D18/2AFFC3F2549E4562892EAB3C053AD23C/articulo/37762.asp.

33 "Servicios Bancarios" [English translation by Google Translate], BancoEstado, 2015, http://www.bancoestado.cl/CDCBF770095146CD8DE974DEB97B9BDA/E72F5C5AFFA341C995EC39427259E51C/articulo/37577.asp.

34 "Qué es CajaVecina?," BancoEstado, 2013, http://www.bancoestado.cl/CDCBF770095146CD8DE974DEB97B9BDA/E72F5C5AFFA341C995EC39427259E51C/articulo/14135.asp.

35 "Memoria Anual Integrada 2014: Estados Financieros: Con Todos, de Todos, para Todos" [English translation by Google Translate], BancoEstado, 2014, http://www.corporativo.bancoestado.cl/docs/default-source/memorias-bancoestado/memoriaintegrada_2014.pdf?sfvrsn=4.

36 Veniard 2011.

37 Ibid.

38 "Memoria Annual" 2014, 6.

39 "Preguntas Frecuentes" [English translation by Google Translate], BancoEstado, 2015, http://www.bancoestado.cl/CDCBF770095146CD8DE974DEB97B9BDA/E72F5C5AFFA341C995EC39427259E51C/articulo/14138.asp.

40 Veniard 2011.

41 "Putting Financial Inclusion" 2013, 12.

42 "Measurable Goals" 2014, 21.

43 Ibid.

44 Ibid.

45 "Financial Inclusion Strategy in Chile" 2012, 21.

46 Chris Bold, David Porteous, and Sarah Rotman, "Social Cash Transfers and Financial Inclusion: Evidence from Four Countries," Focus Note No. 77, Consultative Group to Assist the Poor (CGAP), February 2012, 3, http://www.cgap.org/sites/default/files/Focus-Note-Social-Cash-Transfers-and-Financial-Inclusion-Evidence-from-Four-Countries-Feb-2012.pdf.

47 "Putting Financial Inclusion," 2013, 21.

48 "Qué es Chile Quenta" [English translation by Google Translate], Ministerio de Desarrollo Social, Undated, http://chilecuenta.ministeriodesarrollosocial.gob.cl/chile-cuenta/.

49 Ibid.

50 Ibid.

51 "Global Microscope" 2014, 44.

COLOMBIA ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 Santiago Fernandez de Lis, Maria Claudia Llanes, Carlos Lopez-Moctezuma, Juan Carlos Rojas, and David Tuesta, "Financial Inclusion and the role of mobile banking in Colombia: developments and potential," Working Paper No. 14/04, BBVA, February 2014, 13, https://www.bbvaresearch.com/wp-content/uploads/migrados/WP_1404_tcm348-420839.pdf.

7 "Colombia Country Diagnostic: Highlights," Bankable Frontier Associates, January 2015, 1, http://betterthancash.org/wp-content/uploads/2015/01/Colombia-Diagnostic-Highlights-ENG-Jan-2015.pdf.

8 "Colombia," 2014 Global Financial Inclusion database (Global Findex), 2015, http://datatopics.worldbank.org/financialinclusion/.

9 "IFC Mobile Money Scoping Country Report: Colombia," International Finance Corporation (IFC), 5 September 2011, 4, http://www.ifc.org/wps/wcm/connect/2f21b0004a0529ad8ac3ffdd29332b51/Colombia+Public.pdf?MOD=AJPERES.

10 Robin Arnfield, "Slow Takeoff for mobile money in Latin America," 12 August 2013, http://2013.mobilemoneylatam.com/slow-take-off-for-mobile-banking-in-latin-america-2/.

11 José Sanin, "Digital Financial Inclusion in Colombia at a turnaround: An Interview with Felipe Lega of the Colombian Financial Regulation Agency," GSMA, 17 October 2014, http://www.gsma.com/mobilefordevelopment/digital-financial-inclusion-in-colombia-at-a-turnaround-an-interview-with-felipe-lega-of-the-colombian-financial-regulation-agency.

12 Ibid.

13 "Colombia," 2014 Global Findex, 2015, http://datatopics.worldbank.org/financialinclusion/.

14 Ibid.

15 "Reporte Trimestral de Inclusión Financiera," Asobancaria, March 2014, 2, http://www.asobancaria.com/portal/pls/portal/docs/1/4389553.PDF.

16 de Lis et al. 2014, 14.

17 de Lis et al. 2014, 15.

18 Ibid.

19 de Lis et al. 2014, 14.

20 de Lis et al. 2014, 3.

21 "Global Microscope 2014: The enabling environment for financial inclusion," The Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION, and Citi, 2014, 44, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014. "Global Microscope" 2014, 44.

22 de Lis et al. 2014, 3.

23 "Financial Inclusion Report 2013," Superintendencia Financiera and Banca de las Oportunidades, 2013, 46, http://www.bancadelasoportunidades.gov.co/documentos/Reporte%20Inclusion%20Financiera/3er_reporte/reporte_ver_ingles/reporte_web_ingles.pdf.

24 "Financial Inclusion Report" 2013, 52.

25 de Lis et al. 2014, 7.

26 de Lis et al. 2014, 15.

27 "Preguntas Frecuentes," Efecty, Undated, Accessed 30 July 2015, https://www.efecty.com.co/webefecty/preguntas_frecuentes.html.

28 Ibid.

29 "Giros Internacionales," Efecty, Undated, Accessed 30 July 2015, https://www.efecty.com.co/webefecty/giros_nacionales.html.

30 "Preguntas Frecuentes."

31 "Tax Bulletin," Sanclemente Fernandez Abogados, 2014, 4, http://www.sfa.com.co/assets/pdf/Tax_Bulleting_October_2014.pdf.

32 "IFC Mobile Money Scoping Report" 2011, 10.

33 For more information, see https://www.dane.gov.co/index.php/about-dane.

34 de Lis et al. 2014, 4.

35 "Colombia," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

36 de Lis et al. 2014, 23.

37 "Colombia," 2014 Global Findex, 2015.

38 "Informe de Operaciones," Superintendencia Financiera de Colombia, 2014, 8, https://www.superfinanciera.gov.co/descargas?com=institucional&name=pubFile1009489&downloadname=informetransacciones0614.pdf.

39 de Lis et al. 2014, 9.

40 "Demand Study for Transformational Mobile Financial Services in Colombia," IFC Advisory Services in Latin America and the Caribbean, August 2012, 10, http://www.ifc.org/wps/wcm/connect/d9456f004eef938f937fdb3eac88a2f8/Demand+study+MFS+in+Colombia.pdf?MOD=AJPERES.

41 de Lis et al. 2014, 23.

42 Arnfield 2014.

43 Ibid.

44 "IFC Mobile Money Scoping" 2011, 2.

45 "Government seeks to expand mobile banking and create new entities for unbanked people," Convergencia Latina, 3 June 2014, http://www.convergencialatina.com/News-Detail/131240-3-45-Government_seeks_to_expand_mobile_banking_and_create_new_entities_for_unbanked_people?Lang=EN.

46 "Reporte Trimestral de Inclusión Financiera," Asobancaria, March 2014, 2, http://www.asobancaria.com/portal/pls/portal/docs/1/4389553.PDF.

47 "Demand Study" 2012, 45.

48 "Global Microscope" 2014, 44.

49 de Lis et al. 2014, 12.

50 "Going Mobile with Conditional Cash Transfers," CGAP, 30 June 2015, http://www.cgap.org/publications/going-mobile-conditional-cash-transfers.

51 Carlos Gustavo Rodríguez, "En Concepción, ahora los helados, los mototaxis y la ropa se pagan con cellular" [English translation by Google Translate], 11 July 2015, http://www.larepublica.co/en-concepci%C3%B3n-ahora-los-helados-los-mototaxis-y-la-ropa-se-pagan-con-celular_275711; "Concepción, primer municipio sin efectivo en Colombia," 9 July 2015, http://www.elespectador.com/noticias/economia/concepcion-primer-municipio-sin-efectivo-colombia-articulo-571537.

52 "Demand Study" 2012, 9.

53 "Demand Study" 2012, 8.

54 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report." Alliance for Financial Inclusion (AFI), 9 September 2014, 22, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

55 "Global Microscope" 2014, 44.

56 "Measurable Goals" 2014, 22.

57 "Decreto 457," Ministerio de Hacienda y Crédito Publico, 28 February 2014, https://www.superfinanciera.gov.co/descargas?com=institucional&name=pubFile1010337&downloadname=dcto457febrero2014__1_.pdf.

58 "Keynote Speech at the Presentation of Colombia's National Strategy for Financial Inclusion," Speech by H.M. Queen Máxima of the Netherlands, UNSGSA, in Bogotá, Colombia, 5 March 2014, http://www.unsgsa.org/files/6513/9464/4800/Keynote_Speech_at_the_Presentation_of_Colombias_National_Strategy_for_Financial_Inclusion_.pdf.

59 "Measurable Goals" 2014, 22.

60 "Global Financial Development Report 2014: Financial Inclusion," The World Bank, 2014, 60, http://siteresources.worldbank.org/EXTGLOBALFINREPORT/Resources/8816096-1361888425203/9062080-1364927957721/GFDR-2014_Complete_Report.pdf.

61 "Who are We?" [Official English translation], Banca de las Oportunidades, 2014, http://www.bancadelasoportunidades.gov.co/ingles/contenido/contenido.aspx?catID=324&conID=705.

62 "Global Microscope" 2014, 45.

63 de Lis et al. 2014, 13.

64 de Lis et al. 2014, 16

65 Ibid.

66 de Lis et al. 2014, 16.

67 "IFC Mobile Money Scoping," 2011, 9–10.

68 de Lis et al. 2014, 19.

69 de Lis et al. 2014, 13.

70 de Lis et al. 2014, 30.

71 de Lis et al. 2014, 16.

72 Ibid.

73 "Measurable Goals" 2014, 22.

74 "Global Microscope" 2014, 45.

75 Ibid.

76 de Lis et al. 2014, 10.

77 Juan Blanco, "Pending Presidential Approval: Colombia's Financial Inclusion Bill Set to Become Law," Center for Financial Inclusion at Accion, 9 September 2014, http://cfi-blog.org/2014/09/09/pending-presidential-approval-colombias-financial-inclusion-bill-set-to-become-law/.

78 Ibid.

79 Ibid.

80 Ley 1735 of 2014, El Congreso De Colombia, October 2014, http://www.sic.gov.co/drupal/sites/default/files/files/Ley_1735_2014.pdf.

81 José Sanin, "Digital Financial Inclusion in Colombia at a turnaround: An Interview with Felipe Lega of the Colombian Financial Regulation Agency," GSMA, 17 October 2014, http://www.gsma.com/mobilefordevelopment/digital-financial-inclusion-in-colombia-at-a-turnaround-an-interview-with-felipe-lega-of-the-colombian-financial-regulation-agency.

82 Ibid.

83 Ibid.

ETHIOPIA ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 Ruth Hill and Eyasu Tsehaye, "Ethiopia – Poverty Assessment," 1 January 2014, The World Bank, xv, http://documents.worldbank.org/curated/en/2014/01/24047887/ethiopia-poverty-assessment.

7 "Ethiopia: Key Indicators," 2014 Global Financial Inclusion (Global Findex) database, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/country/ethiopia.

8 "Press Release: Data Services and Mobile Money Solutions to Drive Mobile Communications Markets of the DRC and Ethiopia," Frost & Sullivan, 24 July 2014, http://www.frost.com/prod/servlet/press-release.pag?docid=291589016.

9 Hill and Tsehaye 2014.

10 "Putting Financial Inclusion on the Global Map: 2013 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), 12 September 2013, 24, http://www.afi-global.org/library/publications/2013-maya-declaration-progress-report.

11 Admit Zerihun Wondifraw, Haile Kibret, and James Wakaiga, "Ethiopia," African Economic Outlook, 2014, http://www.africaneconomicoutlook.org/en/countries/east-africa/ethiopia/.

12 "Quarterly Bulletin: Volume 31 Quarter 2: Macroeconomic and Social Indicators," National Bank of Ethiopia, 2015, http://www.nbe.gov.et/publications/quarterlybulletin.html.

13 Getnet Alemu Zwedu, "Financial inclusion, regulation, and inclusive growth in Ethiopia," Working paper 408, Overseas Development Institute (ODI), November 2014, 47, http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9278.pdf.

14 "Ethiopia," Financial Access Survey (2012), 2013, http://fas.imf.org/Default.aspx.

15 "Ethiopia," Financial Access Survey (2012), 2013.

16 Antonique Koning, "Aspirations for Financial Inclusion in Africa," Consultative Group to Assist the Poor (CGAP), March 2012, http://www.cgap.org/blog/aspirations-financial-inclusion-africa.

17 Getnet Alemu Zwedu, "Financial inclusion, regulation, and inclusive growth in Ethiopia," Working Paper 408, Overseas Development Institute (ODI), November 2014, 46, http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9278.pdf.

18 "Ethiopia," 2014 Global Financial Inclusion database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

19 "Press Release: Data Services and Mobile Money Solutions to Drive Mobile Communications Markets of the DRC and Ethiopia," Frost & Sullivan, 24 July 2014, http://www.frost.com/prod/servlet/press-release.pag?docid=291589016.

20 "Ethiopia," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

21 "Ethiopia," Mobile Money for the Unbanked Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

22 Dominque Magada, "Mobile Money Comes to Ethiopia," *African Business Magazine,* 9 January 2013, http://africanbusinessmagazine.com/sector-reports/technology/mobile-money-comes-to-ethiopia/.

23 "M-Birr," Undated, http://www.m-birr.com/index.html.

24 "Ethiopia: National Overview" 2014.

25 Lena Phillips, "Microcapital brief: M-Birr, Ethiopian Microfinance Institutions to Launch Mobile Money Service," 22 January 2013, http://www.microcapital.org/microcapital-brief-m-birr-ethiopian-microfinance-institutions-to-launch-mobile-money-service/.

26 "About the M-Birr Service," M-Birr, Undated, http://www.m-birr.com/aboutMbirr.html.

27 Magada 2013.

28 "Ethiopia," World Development Indicators (2007), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

29 "Pricing," M-Birr, Undated, http://www.m-birr.com/pricing.html.

30 "M-Birr," M-Birr, Undated, http://www.m-birr.com/index.html.

31 Niyi Aderibigbe, "HelloCash Mobile Money Service Launches in Ethiopia," 9 February 2015, http://www.ventures-africa.com/2015/02/hellocash-mobile-money-service-launches-in-ethiopia/.

32 "Ethiopia," 2014 Global Financial Inclusion database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

33 "Proclamation No. 718/2011," National Bank of Ethiopia, http://www.nbe.gov.et/pdf/Proclamation/nationalpaymentsystem.pdf.

34 "Proclamation No. 657/2009 (amended through 2009)," Financial Inclusion Guide, Boston University Center for Finance, Law & Policy, http://www.bu.edu/bucflp/laws/proclamation-no-6572009/.

35 "Press Release" 2014.

36 "The Federal Democratic Republic of Ethiopia: IMF Country Report No. 14/303," International Monetary Fund, October 2014, 4, http://www.imf.org/external/pubs/ft/scr/2014/cr14303.pdf.

37 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), 9 September 2014, 23, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

38 "National Financial Inclusion Strategies Database" 2014.

39 Ibid.

40 "Measurable Goals" 2014, 23.

41 Ibid.

42 Ibid.

43 Ibid.

44 Fasika Tadesse, "National Bank of Ethiopia Moves to Increase Ethiopia Account Holders," *Fortune,* 14 December 2014, http://addisfortune.net/articles/national-bank-of-ethiopia-moves-to-increase-ethiopian-account-holders/.

INDIA ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 Asli Demirguc-Kunt, Leora Klapper, Dorothe Singer, and Peter Van Oudheusden, "The Global Findex 2014: Measuring Financial Inclusion around the World," The World Bank Group, April 2015, 59, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2015/04/15/090224b082dca3aa/1_0/Rendered/PDF/The0Global0Fin0ion0around0the0world.pdf#page=3.

7 "Economic Outlook Report," Vol. 1, 2015, 64, http://indiabudget.nic.in/es2014-15/echapter-vol1.pdf.

8 Kabir Kumar and Dan Radcliffe, "Can India Achieve Universal Digital Financial Inclusion?," Consultative Group to Assist the Poor (CGAP), 20 January 2015, http://www.cgap.org/blog/can-india-achieve-universal-digital-financial-inclusion.

9 "No. of Accounts opened under PMJDY as on 28.02.2015 (Summary)," 28 February 2015, Accessed April 2015, http://www.pmjdy.gov.in/ArchiveFile/2015/2/28.02.2015.pdf.

10 "IFC Mobile Money Scoping Country Report: India," International Finance Corporation (IFC), June 2013, 5, http://www.ifc.org/wps/wcm/connect/49a11580407b921190f790cdd0ee9c33/India+Scoping+report+063013+for+publication.pdf?MOD=AJPERES.

11 Kumar and Radcliffe, "Can India Achieve," 2015.

12 "Global Financial Development Report 2014: Financial Inclusion," The World Bank, 2014, 43, http://siteresources.worldbank.org/EXTGLOBALFINREPORT/Resources/8816096-1361888425203/9062080-1364927957721/GFDR-2014_Complete_Report.pdf.

13 "Global Financial Development Report" 2014, 66.

14 "Global Financial Development Report" 2014, 43.

15 Ibid.

16 "India," Financial Access Survey (2013), International Monetary Fund (IMF), 2014, http://fas.imf.org/Default.aspx.

17 "India," 2011 Global Financial Inclusion database (Global Findex), The World Bank, 2011, http://datatopics.worldbank.org/financialinclusion/.

18 "India," 2014 Global Financial Inclusion database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

19 Demirguc-Kunt, Klapper, Singer, and Van Oudheusden, "The Global Findex 2014: Measuring Financial Inclusion around the World," The World Bank Group, April 2015, 25, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2015/04/15/090224b082dca3aa/1_0/Rendered/PDF/The0Global0Fin0ion0around0the0world.pdf#page=3.

20 "India: Driving Digital Financial Inclusion Wave 2," Financial Inclusion Insights, InterMedia, June 2015, 20, http://finclusion.org/wp-content/uploads/2014/05/FII-India-2014-Wave-2-Wave-Report.pdf.

21 "India: Driving Digital Financial Inclusion Wave 2," Financial Inclusion Insights, InterMedia, June 2015, 45, http://finclusion.org/wp-content/uploads/2014/05/FII-India-2014-Wave-2-Wave-Report.pdf.

22 "India: Driving Digital Financial Inclusion Wave 2," Financial Inclusion Insights, InterMedia, June 2015, 49, http://finclusion.org/wp-content/uploads/2014/05/FII-India-2014-Wave-2-Wave-Report.pdf.

23 "Country Comparison: Telephones – Mobile Cellular," The World Factbook, Central Intelligence Agency (CIA), 2014, https://www.cia.gov/library/publications/the-world-factbook/rankorder/2151rank.html?countryname=India&countrycode=in&regionCode=sas&rank=2#in.

24 "India," World Development Indicators (2014), 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

25 "India: Financial Services and Digital Pathways: A comparison of the nationally representative FII Tracker Survey of 45,024 Indian adults with FII surveys conducted in Kenya, Tanzania, Uganda, Nigeria, Pakistan, and Bangladesh," InterMedia, 2014, http://finclusion.org/wp-content/uploads/2014/05/India-Country-Comparisons-Report.pdf.

26 "India: Driving Digital Financial Inclusion Wave 2," Financial Inclusion Insights, InterMedia, June 2015, 32, http://finclusion.org/wp-content/uploads/2014/05/FII-India-2014-Wave-2-Wave-Report.pdf.

27 "India: Driving Digital Financial Inclusion Wave 2," Financial Inclusion Insights, InterMedia, June 2015, 31, http://finclusion.org/wp-content/uploads/2014/05/FII-India-2014-Wave-2-Wave-Report.pdf.

28 "India," Mobile Money for the Unbanked Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

29 Awareness of mobile money increased from 6 to 13 percent between the end of the first wave of the InterMedia survey in January 2014 and the end of the second wave in December 2014. Awareness was measured by the percentage of adults who recognized at least one mobile money provider. See "India: Driving Digital Financial Inclusion Wave 2," Financial Inclusion Insights, InterMedia, June 2015, 15, http://finclusion.org/wp-content/uploads/2014/05/FII-India-2014-Wave-2-Wave-Report.pdf.

30 "India: Driving Digital Financial Inclusion Wave 2," Financial Inclusion Insights, InterMedia, June 2015, 13, http://finclusion.org/wp-content/uploads/2014/05/FII-India-2014-Wave-2-Wave-Report.pdf.

31 "India: Driving Digital Financial Inclusion Wave 2," Financial Inclusion Insights, InterMedia, June 2015, 11, http://finclusion.org/wp-content/uploads/2014/05/FII-India-2014-Wave-2-Wave-Report.pdf.

32 "India: Financial Services and Digital Pathways" 2014, 6.

33 "India: Financial Services Use and Emerging Digital Pathways: Highlights from the FII Tracker Survey and the Digitized Government Payments Qualitative Study Conducted October 2013-January 2014," InterMedia, 2014, 31, http://finclusion.org/wp-content/uploads/2014/05/FII-India-Wave-One-Research-Report.pdf.

34 "India: Driving Digital Financial Inclusion Wave 2," Financial Inclusion Insights, InterMedia, June 2015, 15, http://finclusion.org/wp-content/uploads/2014/05/FII-India-2014-Wave-2-Wave-Report.pdf.

35 "Financial Inclusion Strategy Peer Learning Group," Alliance for Financial Inclusion (AFI), 2014, http://www.afi-global.org/about-us/how-we-work/about-working-groups/financial-inclusion-strategy-peer-learning-group-fisplg.

36 "National Financial Inclusion Strategies Database," The World Bank, 2014, http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,contentMDK:23491959~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html.

37 "IFC Mobile Money Scoping" 2013, 8.

38 "Global Financial Development Report" 2014, 58.

39 "Global Financial Development Report" 2014, 59.

40 "IFC Mobile Money Scoping" 2013, 32.

41 Ibid.

42 Ibid.

43 "Financial Inclusion by Extension of Banking Services: Use of Business Facilitators and Correspondents," Reserve Bank of India, 2006, http://www.bu.edu/bucflp/files/2012/01/RBI-Circular-on-the-Use-of-Business-Facilitators-and-Business-Correspondents.pdf.

44 "IFC Mobile Money Scoping" 2013, 36.

45 "IFC Mobile Money Scoping" 2013, 11; Kabir Kumar and Dan Radcliffe, "2015 Set to be Big Year for Digital Financial Inclusion in India," CGAP, 15 January 2015, http://www.cgap.org/blog/2015-set-be-big-year-digital-financial-inclusion-india.

46 Adi Narayan and Anto Antony, "Banking correspondents risking lives to bring financial inclusion," *LiveMint* and *The Wall Street Journal,* 12 August 2014, http://www.livemint.com/Industry/t9WTmKL7GsQLplXykcQ1OK/Banking-correspondents-risking-lives-to-bring-financial-incl.html.

47 BS Suran, "Financial inclusion excludes the client," *Business Standard,* 13 August 2014, http://www.business-standard.com/article/opinion/b-s-suran-financial-inclusion-excludes-the-client-114081400027_1.html.

48 "Banks to ensure minimum remuneration to BCs," *Business Standard,* 6 August 2014, http://www.business-standard.com/article/finance/banks-to-ensure-minimum-remuneration-to-bcs-114080601538_1.html.

49 "IFC Mobile Money Scoping" 2013, 6.

50 "IFC Mobile Money Scoping" 2013, 10.

51 "Banks to ensure minimum remuneration" 2014.

52 Ibid.

53 According to the Reserve Bank of India, a non-banking financial company (NBFC) is defined as: "a company registered under the Companies Act, 1956 engaged in the business of loans and advances, acquisition of shares/stocks/bonds/debentures/securities issued by Government or local authority or other marketable securities of a like nature, leasing, hire-purchase, insurance business, chit business but does not include any institution whose principal business is that of agriculture activity, industrial activity, purchase or sale of any goods (other than securities) or providing any services and sale/purchase/construction of immovable property." See "Non-Banking Financial Companies," RBI, http://www.rbi.org.in/scripts/FAQView.aspx?Id=71.

54 "Financial Inclusion by Extension of Banking Services" 2006.

55 "Circular on Financial Inclusion by Extension of Banking Services—Use of Business Correspondents," Reserve Bank of India, 30 November 2009, http://www.bu.edu/bucflp/files/2012/01/Circular-on-Financial-Inclusion-by-Extension-of-Banking-Services-Use-of-Business-Correspondents.pdf.

56 "Circular on Financial Inclusion by Extension of Banking Services—Use of Business Correspondents (amendment)," Reserve Bank of India, 26 April 2010, http://www.bu.edu/bucflp/files/2012/01/Circular-on-Financial-Inclusion-by-Extension-of-Banking-Services-Use-of-Business-Correspondents-amendment.pdf.

57 Dinesh Unnikrishnan, "RBI Lets NBFCs work as banking correspondents," *Live Mint* and *The Wall Street Journal,* 24 June 2014, http://www.livemint.com/Industry/PuwOHdv8crJQ28dIWY7TGK/RBI-allows-NBFCs-work-as-banking-correspondents.html.

58 "India: FII Quicksights Report Digitized Government Payments in India Qualitative Study Wave 1," InterMedia, April 2014, http://finclusion.org/wp-content/uploads/2014/04/FII-India-Wave-One-G2P-Study-QuickSights-Report.pdf.

59 While such transfer programs can minimize leakage and reduce costs, the application process for an UID has been criticized as time-consuming and lacking effective customer protection mechanisms. Addressing these concerns could further facilitate financial inclusion. See "India: FII Quicksights Report" 2014.

60 Leena Datwani, "India's List of Financial Inclusion Efforts Grows," CGAP, 19 May 2015, http://www.cgap.org/blog/india%E2%80%99s-list-financial-inclusion-efforts-grows.

61 "Global Financial Development Report" 2014, 47.

62 Adi Narayan and Anto Antony, "Banking correspondents risking lives to bring financial inclusion," *LiveMint* and *The Wall Street Journal,* 12 August 2014, http://www.livemint.com/Industry/t9WTmKL7GsQLpIXykcQ1OK/Banking-correspondents-risking-lives-to-bring-financial-incl.html.

63 "IFC Mobile Money Scoping" 2013, 5.

64 "Report of the Task Force on an Aadhaar-Enabled Unified Payment Infrastructure," February 2012, 30, http://finmin.nic.in/reports/Report_Task_Force_Aadhaar_PaymentInfra.pdf.

65 Pawan Bakhshi, Manoj Sharma and Graham A. N. Wright, "Policy Brief #12: How a 1% DBT Commission Could Undermine India's Financial Inclusion Efforts," MicroSave, May 2015, http://www.microsave.net/files/pdf/1430745205_PB_12_How_a_1_DBT_Commission_Could_Undermine_India_s_Financial_Inclusion_Efforts.pdf.

66 "Digital Financial Inclusion: Agenda for India," Indicus Center for Financial Inclusion, March 2015, http://www.indicus.info/index.php/policies/details/27.

67 It should be noted that individuals in rural areas face challenges to using biometric devices: One kiosk operator noted that the fingerprint scanners used to identify customers often could not effectively read the fingerprints of those who performed manual labor. See Adi Narayan and Anto Antony, "Banking correspondents risking lives to bring financial inclusion," *LiveMint* and *The Wall Street Journal,* 12 August 2014, http://www.livemint.com/Industry/t9WTmKL7GsQLpIXykcQ1OK/Banking-correspondents-risking-lives-to-bring-financial-incl.html.

68 "Global Financial Development Report" 2014, 61.

69 "Background: AEPS," National Payments Corporation of India, Undated, http://www.npci.org.in/AEPSOverview.aspx.

70 Ibid.

71 "Economic Outlook Report" 2015, 64.

72 Kabir Kumar and Dan Radcliffe, "Can India Achieve Universal Digital Financial Inclusion?," CGAP, 20 January 2015, http://www.cgap.org/blog/can-india-achieve-universal-digital-financial-inclusion.

73 "Economic Outlook Report" 2015, 64.

74 "Economic Outlook Report" 2015, 64–65.

75 "IFC Mobile Money Scoping" 2013, 8.

76 "IFC Mobile Money Scoping" 2013, 36.

77 A semi-closed mobile money account/wallet is defined by InterMedia as "an account that allows the customer to cash-in, buy airtime, or make other purchases (e.g., buy train tickets), but not to withdraw money without first transferring it to a formal, full-service bank account." See "India: Financial Services Use" 2014, 62.

78 "India: Financial Services Use" 2014, 5.

79 "Mobile Money: The Opportunity for India," GSMA, 13 November 2013, 11, 16, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/12/MMAI-GSMA-on-Mobile-Money-in-India-for-RBI-Financial-Inclusion-Committee_Dec13.pdf.

80 Leo Mirani, "Why Mobile Money Has Failed to Take Off in India," *Quartz,* 20 June 2014, http://qz.com/222964/why-mobile-money-has-failed-to-take-off-in-india/.

81 "Mobile Money: The Opportunity" 2013, 2.

82 "IFC Mobile Money Scoping" 2013, 16.

83 "IFC Mobile Money Scoping" 2013, 9.

84 Kumar and Radcliffe, "Can India Achieve," 2015.

85 "National Payments Corporation of India," Undated, http://www.npci.org.in/pro_over.aspx.

86 "Master Circular – Policy Guidelines on Issuance and Operation of Pre-paid Payment Instruments in India," Reserve Bank of India, 1 July 2014 (updated 3 December 2014), https://www.rbi.org.in/scripts/NotificationUser.aspx?Id=8993&Mode=0.

87 "IFC Mobile Money Scoping" 2013, 36.

88 Greg Chen, "Branchless Banking in India: More Reasons for Optimism," CGAP, 29 March 2012, http://www.cgap.org/blog/branchless-banking-india-more-reasons-optimism.

89 In a closed prepaid payment system, "payment instruments [are] generally issued by business establishments for use at their respective establishments only. These instruments do not permit cash withdrawal or redemption." See "Draft Guidelines for Issuance and Operation of Prepaid Instruments in India," The Reserve Bank of India, 30 January 2009, 3, http://www.rbi.org.in/Scripts/bs_viewcontent.aspx?Id=1902.

90 "IFC Mobile Money Scoping" 2013, 24.

91 Ibid.

92 "Mobile Money: The Opportunity" 2013, 16.

93 "Modi delivers on promised financial inclusion mission (Roundup)," *Business Standard,* 15 August 2014, http://www.business-standard.com/article/news-ians/modi-delivers-on-promised-financial-inclusion-mission-roundup-114081500158_1.html.

94 "PMJDY Mission," Pradhan Mantri Jan-Dhan Yojana (PMJDY), Undated, Accessed July 2015, http://www.pmjdy.gov.in/pmjdy_mission.aspx.

95 "Modi delivers" 2014.

96 Kumar E. Sharma, "PM Narendra Modi kicks off Phase 1 of financial inclusion programme on Independence Day," *Business Today,* 16 August 2014, http://businesstoday.intoday.in/story/pm-narendra-modi-financial-inclusion-drive-independence-day/1/209251.html.

97 "Modi delivers" 2014.

98 "Background — RuPay," National Payments Corporation of India, Undated, http://www.npci.org.in/RuPayBackground.aspx.

99 "Background — RuPay."

100 Sharma 2014.

101 Rishabh Khosla and Vikas Raj, "The Implications of India's 2014 Budget for Financial Inclusion," Center for Financial Inclusion Blog, 24 July 2014, http://cfi-blog.org/2014/07/24/the-implications-of-indias-2014-budget-for-financial-inclusion/.

102 Khosla and Raj 2014; Sharma 2014.

103 The difference between payments banks and small banks is that "while small banks will provide a whole suite of basic banking products, such as deposits and supply of credit, but in a limited area of operation, payments banks will provide a limited range of products, such as, acceptance of demand deposits and remittances of funds, but will have a widespread network of access points particularly to remote areas, either through their own branch network or through Business Correspondents (BCs) or through networks provided by others." From "RBI releases Draft Guidelines for Licensing of Payments Banks and Small Banks," Reserve Bank of India (Press Release), 17 July 2014, http://rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=31646.

104 Kabir Kumar and Dan Radcliffe, "2015 Set to Be Big Year for Digital Financial Inclusion in India," CGAP, 15 January 2015, http://www.cgap.org/blog/2015-set-be-big-year-digital-financial-inclusion-india.

105 Khosla and Raj 2014.

106 "Economic Outlook Report," 2015, 65.

107 Kalyan Parbat, "Mobile wallet won't take off unless direct withdrawal allowed: experts," *The Economic Times,* 3 October 2014, http://articles.economictimes.indiatimes.com/2014-10-03/news/54599706_1_mobile-wallet-wallet-service-vodafone-india.

108 Kabir Kumar and Dan Radcliffe, "What Will It Take for Payments Banks to Succeed in India?," CGAP, 27 January 2015, http://www.cgap.org/blog/what-will-it-take-payments-banks-succeed-india.

109 Kumar and Radcliffe, "What Will It Take," 2015.

110 Kumar and Radcliffe, "2015 Set to Be a Big Year," 2015.

111 "Financial Inclusion by Extension of Banking Services – Use of Business Correspondents," Reserve Bank of India, 24 June 2014, https://www.rbi.org.in/scripts/BS_CircularIndexDisplay.aspx?Id=8955.

112 Tilman Ehrbeck, "Can India Achieve Financial Inclusion within the Next Few Years?," *The Huffington Post,* 23 June 2014, http://www.huffingtonpost.com/tilman-ehrbeck/can-india-achieve-financi_b_5610403.html?utm_hp_ref=business&ir=Business.

113 Khosla and Raj 2014.

INDONESIA ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 "Indonesia: Key Indicators," Global Financial Inclusion (Global Findex) database, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/country/indonesia.

7 As of 2013, over 60 percent of Indonesia's population was working age and a significant proportion was entering the middle class. See Gunnar Camner, "Snapshot: Implementing Mobile Money Interoperability in Indonesia," GSMA, 14 October 2013, 5, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/10/Implementing-mobile-money-interoperability-in-Indonesia.pdf.

8 Yvonne Chen, "Indonesia's Booming Mobile Money Market," American Chamber of Commerce in Indonesia, 12 March 2014, http://www.amcham.or.id/nf/features/4510-indonesia-s-booming-mobile-money-market.

9 "Global Microscope 2014: The Enabling Environment for Financial Inclusion," Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION and Citi, 2014, 27, http://www.eiu.com/public/thankyou_download.aspx?activity=download&campaignid=microscope2014.

10 Maha Khan and Ghiyazuddin Mohammad, "Indonesia: The Quiet Before the Storm," e-MITRA, 3 March 2015, http://www.emitraindonesia.org/indonesia-the-quiet-before-the-storm/.

11 "OJK Launches Digital Financial Services Program Laku Pandai," e-MITRA, 9 April 2015, http://www.emitraindonesia.org/ojk-launches-digital-financial-services-program-laku-pandai/.

12 Khan and Mohammad 2015.

13 "Indonesia," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

14 "Indonesia," Financial Access Survey (2013), 2014.

15 "Indonesia," 2014 Global Financial Inclusion database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

16 Ibid.

17 "Global Microscope" 2014, 28.

18 Chen 2014.

19 "Indonesia," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

20 Chen 2014.

21 Ibid.

22 "Indonesia," Mobile Money for the Unbanked (MMU) Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

23 "Indonesia," 2011 Global Findex, The World Bank, 2011, http://datatopics.worldbank.org/financialinclusion/.

24 "Indonesia," 2014 Global Findex, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

25 "Mobile Money in Indonesia," Financial Inclusion Insights, InterMedia, 2015, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Indonesia-MM-Asia-Conference-2015.pdf.

26 Camner 2013, 4.

27 Ibid.

28 Ibid.

29 Camner 2013, 5.

30 Ibid.

31 "Accelerating Mobile Money in Indonesia: Opportunity Assessment," USAID, October 2011, 14, http://pdf.usaid.gov/pdf_docs/pnadz190.pdf.

32 "Global Microscope" 2014, 27.

33 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), 9 September 2014, 24, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

34 Email correspondence with a TNP2K representative on April 14, 2015.

35 "Measurable Goals" 2014, 24.

36 "Booklet: Financial Inclusion," Financial Access and SME Development Department, Bank Indonesia, 2014, 2 http://www.bi.go.id/id/perbankan/keuanganinklusif/edukasi/Contents/Booklet%20Financial%20Inclusion%20(English%20Version).pdf.

37 "About TNP2K," Undated, http://www.tnp2k.go.id/en/about-tnp2k/about-tnp2k/.

38 Charmaine Oak, "New regulations enable Digital Financial Services in Indonesia" [Interview with Michael Joyce], Digital Money: Shift Thought, 13 March 2015, http://digitalmoney.shiftthought.co.uk/new-regulations-enable-digital-financial-services-in-indonesia/.

39 Michael Mori and Trevor Zimmer, "Mobilizing Banking for Indonesia's Poor," 2014, "Timeline," http://fletcher.tufts.edu/~/media/Fletcher/Microsites/IBGC/Student%20Research/Mobilizing%20Banking%20for%20Indonesias%20Poor.pdf.

40 Camner 2013, 5.

41 Leesa Shrader, "Latest on Branchless Banking from Indonesia," CGAP, 12 July 2013, http://www.cgap.org/blog/latest-branchless-banking-indonesia.

42 Camner 2013, 6.

43 Shrader, "Latest on Branchless Banking," 2013.

44 Michael Joyce, "New e-money regulations in Indonesia," 17 April 2014, http://mobilemoneyasia.blogspot.in/.

45 Ghiyazuddin Mohammad and Grace Retnowati, "Draft Branchless Baking Regulations in Indonesia — A Review," MicroSave, September 2014, http://blog.microsave.net/do-the-new-regulations-in-indonesia-foster-growth-of-branchless-banking-well-almost/.

46 Fauzan Jamaludin, "New Phase Development of Branchless Banking," *The Citizen Daily,* 11 July 2014, http://en.citizendaily.net/new-phase-development-of-branchless-banking/; Joyce, "New e-money regulations" 2014; Michael Joyce, "Indonesian regulations favor the four biggest banks," 25 April 2014, http://mobilemoneyasia.blogspot.in/.

47 Joyce, "New e-money regulations" 2014.

48 Ibid.

49 Camner 2013, 4.

50 Camner 2013, 7.

51 Joyce, "Indonesian regulations" 2014.

52 Ibid.

53 Joyce, "New e-money regulations" 2014.

54 Email correspondence with a representative of TNP2K on April 14, 2015.

55 "Indonesia's New Financial Services Authority," January 2012, http://www.worldservicesgroup.com/publications.asp?action=article&artid=4305.

56 Ibid.

57 Email correspondence with representative of MicroSave on April 29, 2015.

58 Ghiyazuddin Mohammad, "Branchless Banking Regulatory Environment in Indonesia," MicroSave, 28 January 2015, http://www.microsave.net/resource/branchless_banking_regulatory_environment_in_indonesia#.VWMmwPPD9Qs.

59 "OJK Launches Digital Financial Services Program 'Laku Pandai,'" e-MITRA, 9 April 2015, http://www.emitraindonesia.org/ojk-launches-digital-financial-services-program-laku-pandai/.

60 Mohammad, "Branchless Banking Regulatory Environment in Indonesia," 2015.

61 Ibid.

62 Ibid.

63 Email correspondence with representative of MicroSave on April 29, 2015.

64 Jan Hallberg, "Mobile Money in Indonesia," 10 May 2014, http://www.ericsson.com/m-commerce/blog/mobile-money-indonesia.

65 Joyce, "Indonesian regulations" 2014.

66 Email correspondence with representative of MicroSave on April 29, 2015 and with representative of TNP2K on April 15, 2015.

67 Ibid; Jack Hewson, "Indonesia's ambitious social reforms launched," *Al Jazeera*, 24 November 2014, http://www.aljazeera.com/indepth/features/2014/11/indonesia-ambitious-social-reforms-launched-201411248297500401.html.

KENYA ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 "Global Microscope 2014: The enabling environment for financial inclusion," The Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION, and Citi, 2014, 65, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014.

7 "Kenya," 2014 Global Financial Inclusion (Global Findex) database, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

8 "Global Microscope" 2014, 65.

9 Julie Zollmann, "Kenya Financial Diaries: Shilingi Kwa Shilingi - The Financial Lives of the Poor," August 2014, 18, http://www.fsdkenya.org/pdf_documents/14-08-08_Financial_Diaries_report.pdf.

10 "Kenya," 2014 Global Financial Inclusion (Global Findex) database, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

11 In this InterMedia report, "access" to a bank account or mobile money account indicates that a person has used those respective services at least once through their own account or through the account of another individual. The report also provides data on "active" account holders who have a "registered digital account and [have] used in the last 90 days." See "Kenya: Digital Pathways to Financial Inclusion: 2014 Survey report," InterMedia, February 2015, 83, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Kenya-2014-Wave-2-summary-report.pdf.

12 "Kenya: Digital Pathways to Financial Inclusion: 2014 Survey report," InterMedia, February 2015, 7, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Kenya-2014-Wave-2-summary-report.pdf.

13 Brian Muthiora, "Enabling Mobile Money Policies in Kenya: Fostering a Digital Financial Revolution," GSMA, January 2015, 11, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/02/2015_MMU_Enabling-Mobile-Money-Policies-in-Kenya.pdf.

14 Brian Muthiora, "Enabling Mobile Money Policies in Kenya: Fostering a Digital Financial Revolution," GSMA, January 2015, 6, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/02/2015_MMU_Enabling-Mobile-Money-Policies-in-Kenya.pdf.

15 James Mbugua, "In Kenya M-Pesa is king...and says the best is yet to come," *Mail & Guardian Africa*, 10 December 2014, http://mgafrica.com/article/2014-12-10-in-kenya-m-pesa-is-kingand-says-the-best-is-yet-to-come.

16 "Digital Pathways to Financial Inclusion: Findings from the First FII Tracker Survey in Kenya," InterMedia, July 2014, 9, http://finclusion.org/wp-content/uploads/2014/04/FII-Kenya-Wave-One-Wave-Report.pdf.

17 Brian Muthiora, "Enabling Mobile Money Policies in Kenya: Fostering a Digital Financial Revolution," GSMA, January 2015, "Foreward [by Professor Njuguna Ndung'u]," http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/02/2015_MMU_Enabling-Mobile-Money-Policies-in-Kenya.pdf.

18 "Keynote Speech by Professor Njuguna Ndung'u, CBS, Governor, Central Bank of Kenya during the Launch of the FinAccess GIS Mapping of All Financial Access Touch Points, 2014," Alliance for Financial Inclusion, 13 March 2014, 2, http://www.afi-global.org/sites/default/files/publications/r140317a.pdf.

19 "Access Analysis for Kenya," FSP Maps, 2013, Accessed April 2015, http://fspmaps.org/.

20 "Kenya," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

21 "Kenya: Digital Pathways to Financial Inclusion: 2014 Survey report," InterMedia, February 2015, 7, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Kenya-2014-Wave-2-summary-report.pdf.

22 "FinAccess National Survey 2013: Profiling Developments in Financial Access and Usage in Kenya," FinAccess, October 2013, 42, http://www.fsdkenya.org/finaccess/documents/13-10-31_FinAccess_2013_Report.pdf.

23 According to the 2014 Global Findex, the percentage of adults with an account at a formal financial institution "[d]enotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; or receiving wages or government transfers into a card in the past 12 months (% age 15+)." See http://datatopics.worldbank.org/financialinclusion/.

24 "Kenya," 2014 Global Findex, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

25 Ibid.

26 Ibid.

27 "Kenya," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

28 "FinAccess National Survey 2013: Profiling Developments in Financial Access and Usage in Kenya," FinAccess, October 2013, 32, http://www.fsdkenya.org/finaccess/documents/13-10-31_FinAccess_2013_Report.pdf.

29 "Digital Pathways to Financial Inclusion: Findings from the First FII Tracker Survey in Kenya," InterMedia, July 2014, 5, http://finclusion.org/wp-content/uploads/2014/04/FII-Kenya-Wave-One-Wave-Report.pdf.

30 "Kenya: Digital Pathways to Financial Inclusion: 2014 Survey report," InterMedia, February 2015, 42, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Kenya-2014-Wave-2-summary-report.pdf.

31 Ibid.

32 "Kenya," 2014 Global Findex, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

33 "Kenya: Digital Pathways to Financial Inclusion: 2014 Survey report," InterMedia, February 2015, 41, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Kenya-2014-Wave-2-summary-report.pdf.

34 Ibid.

35 "Digital Pathways to Financial Inclusion: Findings from the First FII Tracker Survey in Kenya," InterMedia, July 2014, 7, http://finclusion.org/wp-content/uploads/2014/04/FII-Kenya-Wave-One-Wave-Report.pdf.

36 Ibid.

37 "Kenya: Digital Pathways to Financial Inclusion: 2014 Survey report," InterMedia, February 2015, 76, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Kenya-2014-Wave-2-summary-report.pdf.

38 Ibid.

39 "Kenya," Mobile Money for the Unbanked (MMU) Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

40 "Kenya: Digital Pathways to Financial Inclusion: 2014 Survey report," InterMedia, February 2015, 43, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Kenya-2014-Wave-2-summary-report.pdf.

41 Ignacio Mas and Dan Radcliffe, "Mobile Payments Go Viral: M-PESA in Kenya," March 2010, 1, http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/M-PESA_Kenya.pdf.

42 Mas and Radcliffe 2010, 12.

43 Ibid.

44 Mas and Radcliffe 2010, 17.

45 Ibid.

46 "Why does Kenya lead the world in mobile money?," *The Economist*, 27 May 2013, http://www.economist.com/blogs/economist-explains/2013/05/economist-explains-18.

47 Mas and Radcliffe 2010, 1.

48 Ibid.

49 Mas and Radcliffe 2010, 13.

50 Ibid.

51 Ibid.

52 Mas and Radcliffe 2010, 13; "M-Pesa Tariffs," Safaricom, Undated, http://www.safaricom.co.ke/personal/m-pesa/tariffs. Currency conversion from oanda.com as of May 2015.

53 Brian Muthiora, "Enabling Mobile Money Policies in Kenya: Fostering a Digital Financial Revolution," GSMA, January 2015, 8, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/02/2015_MMU_Enabling-Mobile-Money-Policies-in-Kenya.pdf.

54 Muthiora 2015, 17.

55 Michelle Kaffenberger, "M-Shwari in Kenya: How is it Really Being Used?," Consultative Group to Assist the Poor (CGAP), 10 April 2014, http://www.cgap.org/blog/m-shwari-kenya-how-it-really-being-used.

56 Kaffenberger 2014.

57 "M-Shwari vs KCB M-Pesa: convergence or divergence?," FSD Kenya Blog, 2015, http://www.fsdkenya.org/fsd-blog/11-blogs/216-m-shwari-vs-kcb-m-pesa-convergence-or-divergence.html.

58 Ephraim Batambuze III, "Kenya's mobile money transactions hit KES 1 trillion," *PC Tech Magazine,* 11 August 2014, http://pctechmag.com/2014/08/kenyas-mobile-money-transactions-hit-kes1-trillion/.

59 Brian Muthiora, "Enabling Mobile Money Policies in Kenya: Fostering a Digital Financial Revolution," GSMA, January 2015, 2, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/02/2015_MMU_Enabling-Mobile-Money-Policies-in-Kenya.pdf.

60 Muthiora 2015, 2.

61 "FinAccess National Survey" 2013, 30.

62 "FinAccess National Survey" 2013, 31.

63 "FinAccess National Survey" 2013, 30.

64 Ibid.

65 "Kenya," Financial Access Survey (2013), 2014.

66 "National Overview," FINclusion Lab, Microfinance Information Exchange (MIX), 2015, http://finclusionlab.org/country/Kenya/analytics?title=National-Overview.

67 Mas and Radcliffe 2010, 2.

68 Ibid.

69 Sheharyar Khan, Aakash Mehrotra, Leena Anthony, and Dorieke Kuijpers, "Agent Network Accelerator Survey: Kenya Country Report 2014," Helix Institute of Digital Finance, May 2015, 7, http://helix-institute.com/sites/default/files/Publications/Agent%20Network%20Accelerator%20Survey%20-%20Kenya%20Country%20Report%202014_0.pdf.

70 Khan et al. 2015, 7.

71 "Key Findings: Kenya," FINclusion Lab, MIX, 2014, http://finclusionlab.org/country/kenya/analytics.

72 "National Financial Inclusion Strategies Database," The World Bank, 2014, http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,contentMDK:23491959~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html.

73 "National Financial Inclusion Strategies Database" 2014.

74 "Global Financial Development Report 2014: Financial Inclusion," The World Bank, 2014, 98, http://siteresources.worldbank.org/EXTGLOBALFINREPORT/Resources/8816096-1361888425203/9062080-1364927957721/GFDR-2014_Complete_Report.pdf.

75 "Kenya Vision 2030: Popular Version," Government of the Republic of Kenya, 2007, 15, http://www.usaid.gov/sites/default/files/documents/1860/3%29%20Vision%202030%20Abridged%20version.pdf.

76 "Kenya Vision 2030" 2007, 15.

77 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion, 9 September 2014, 24, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

78 Brian Muthiora, "Enabling Mobile Money Policies in Kenya: Fostering a Digital Financial Revolution," GSMA, January 2015, 2-3, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/02/2015_MMU_Enabling-Mobile-Money-Policies-in-Kenya.pdf.

79 Brian Muthiora, "Enabling Mobile Money Policies in Kenya: Fostering a Digital Financial Revolution," GSMA, January 2015, 20, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/02/2015_MMU_Enabling-Mobile-Money-Policies-in-Kenya.pdf.

80 "IFC Mobile Money Study 2011: Summary Report," International Finance Corporation, 2011, 18, http://www.ifc.org/wps/wcm/connect/fad057004a052eb88b23ffdd29332b51/MobileMoneyReport-Summary.pdf?MOD=AJPERES.

81 Antony Langat, "Agent banking key to local financial inclusion," *CAJ News Africa,* 28 July 2014, http://cajnewsafrica.com/2014/07/28/agent-banking-key-to-local-financial-inclusion/.

82 "Putting Financial Inclusion on the Global Map: 2013 Maya Declaration Progress Report," Alliance for Financial Inclusion, 12 September 2013, 27, http://www.afi-global.org/library/publications/2013-maya-declaration-progress-report.

83 "Putting Financial Inclusion" 2013, 27.

84 "National Payment System Act No. 39 of 2011" (Revised Edition 2012), Published by the National Council for Law Reporting, http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/NationalPaymentSystemsAct__No39of2011.pdf.

85 "National Payment System Regulations, 2014," Kenya Gazette Supplement No. 119, Available from the GSMA, 1 August 2014, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/08/NPSRegulationsLegalNoticeNo-2-109.pdf.

86 "Digital Pathways" 2014, 9.

87 Gareth van Zyl, "Kenya: Safaricom's mobile money dominance under threat," *IT Web Africa,* 14 October 2013, http://www.itwebafrica.com/mobile/309-kenya/231728-kenya-safaricoms-mobile-money-dominance-under-threat#sthash%2Ej82PQJY7%2Edpuf.

88 "National Payment System Regulations," Central Bank of Kenya, 2014, 699, https://www.centralbank.go.ke/images/docs/legislation/NPSRegulations2014.pdf.

89 Brian Muthiora, "Kenya's New Regulatory Framework for E-Money Issuers," 21 August 2014, http://www.gsma.com/mobilefordevelopment/kenyas-new-regulatory-framework-for-e-money-issuers.

90 Mas and Radcliffe 2010, 11.

91 According to the NPS regulations, mobile money providers may be designated as payment service providers or electronic money issuers. See Brian Muthiora, "Enabling Mobile Money Policies in Kenya: Fostering a Digital Financial Revolution," GSMA, January 2015, 19, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/02/2015_MMU_Enabling-Mobile-Money-Policies-in-Kenya.pdf.

92 Brian Muthiora, "Enabling Mobile Money Policies in Kenya: Fostering a Digital Financial Revolution," GSMA, January 2015, 12, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/02/2015_MMU_Enabling-Mobile-Money-Policies-in-Kenya.pdf.

93 Mas and Radcliffe 2010, 11.

94 Brian Muthiora, "Enabling Mobile Money Policies in Kenya: Fostering a Digital Financial Revolution," GSMA, January 2015, 8, 10, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/02/2015_MMU_Enabling-Mobile-Money-Policies-in-Kenya.pdf.

95 "Digital Pathways" 2014, 10.

96 Brian Muthiora, "Enabling Mobile Money Policies in Kenya: Fostering a Digital Financial Revolution," GSMA, January 2015, 22, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/02/2015_MMU_Enabling-Mobile-Money-Policies-in-Kenya.pdf.

97 "Digital Pathways" 2014, 9.

98 "Digital Pathways" 2014, 18.

99 Ibid.

100 "Digital Pathways" 2014, 9.

101 Nioroge Njoroge, "Kenyan banks take on mobile," *East African Business Week,* 31 August 2014, http://www.busiweek.com/index1.php?Ctp=2&pI=1765&pLv=3&srI=69&spI=221&cI=11.

102 Okuttah Mark, "Safaricom wins M-Pesa charges case," *Business Daily Africa,* 24 July 2014, http://www.businessdailyafrica.com/Corporate-News/Safaricom-wins-M-Pesa-charges-case/-/539550/2396726/-/v7sxibz/-/index.html.

103 "National Payment System Regulations" 2014.

104 "Global Microscope" 2014, 65.

105 Mark 2014.

106 "Digital Pathways" 2014, 10.

107 "Services," eCitizen, 2014, https://www.ecitizen.go.ke/service.html.

108 "Global Microscope" 2014, 66.

MALAWI ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 "Malawi," The World Factbook, CIA, 2015, https://www.cia.gov/library/publications/the-world-factbook/geos/mi.html.

7 "Malawi," 2014 Global Financial Inclusion database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

8 "Malawi," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

9 "Formally served" includes individuals who are banked, as well as those with other formal (non-bank) financial products/services. See "FinScope Consumer Survey Malawi 2014 (Brochure)," FinMark Trust, August 2014, 5, http://www.finmark.org.za/wp-content/uploads/pubs/Broch_FSMalawi_2014.pdf.

10 "FinScope Consumer Survey Malawi 2014 (Brochure)," FinMark Trust, August 2014, 5, http://www.finmark.org.za/wp-content/uploads/pubs/Broch_FSMalawi_2014.pdf.

11 "Finscope Consumer Survey" 2014, 5.

12 "Finscope Consumer Survey" 2014, 7.

13 Ibid.

14 Ibid.

15 "Finscope Consumer Survey" 2014, 6.

16 "Financial inclusion" in the FinScope survey signifies "product uptake of both formal and informal products/services." See "FinScope Consumer Survey" 2014, 6.

17 "FinScope Consumer Survey" 2014, 6.

18 "Finscope Consumer Survey" 2014, 2.

19 Ibid.

20 "FinScope Consumer Survey" 2014, 9.

21 "FinScope Consumer Survey" 2014, 7.

22 "Scaling Usage of Mobile Money to Boost Financial Inclusion in Malawi: Summary Action Plan," USAID and Financial Sector Knowledge Sharing, 30 November 2011, 8, http://egateg.usaidallnet.gov/sites/default/files/Malawi_MM_Action_Plan_FINAL.pdf.

23 Sunduzwayo Madise, "Payment Systems and Mobile Money in Malawi: Towards Financial Inclusion and Financial Integrity," ANULJ 2014 Vol. 2 (2) 71-96, 27 November 2014, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2531319&download=yes.

24 "Supply side study of financial inclusion in Malawi: Final Report," Oxford Policy Management and Kadale Consultants, December 2009, viii, http://www.mamn.mw/images/resources/2.pdf.

25 Madise 2014.

26 "Scaling Usage" 2011, 8.

27 "Malawi," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

28 "Malawi - Telecoms, Mobile and Broadband - Market Insights and Statistics," 2014, http://www.budde.com.au/Research/Malawi-Telecoms-Mobile-and-Broadband-Market-Insights-and-Statistics.html.

29 The number of registered agent outlets signifies "the number of locations where one or several mobile money agents are contracted to facilitate transactions for users. An agent is a person, quasi-corporation, corporation, or machine that facilitates mobile money account registration, cash-in cash-out (CICO) transactions, and customer support. Normally, they are registered with mobile money service providers (MMSPs) and perform as agents of MMSPs on a commission basis." See "Explanatory Notes," International Monetary Fund, 2014, http://fas.imf.org/misc/Explanatory_Notes.pdf.

30 "Malawi," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

31 "Malawi," 2011 Global Financial Inclusion (Global Findex) database, The World Bank, 2011, http://data.worldbank.org/data-catalog/world-development-indicators.

32 "Malawi," 2011 Global Findex, 2011, http://datatopics.worldbank.org/financialinclusion/.

33 An active mobile money account is defined as "registered mobile money accounts that have been used to conduct mobile money or cash-in-cash-out (CICO) transactions over the past 90 days. Balance inquiries, PIN resets, and other transaction that do not constitute mobile money or CICO transaction should not qualify a customer account as active." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

34 "Malawi," Financial Access Survey (2013), 2014; "Malawi," Financial Access Survey (2012), International Monetary Fund, 2013, http://fas.imf.org.

35 "Finscope Consumer Survey" 2014, 10.

36 Ibid.

37 Ibid.

38 Jonathan Greenacre, Louise Malady, and Ross Buckley, "The Regulation of Mobile Money in Malawi: Project Report," March 2014, 13, http://www.uncdf.org/sites/default/files/Documents/the_regulation_of_mobile_money_in_malawi_project_report_final_version.pdf.

39 "Malawi," Mobile Money for the Unbanked (MMU) Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

40 "Case Study: Zoona," Mobile for Development Impact, GSMA, October 2014, http://www.m4dimpact.com/analysis/case-studies/zoona.

41 Greenacre et al. 2014, 13.

42 Ibid.

43 Ibid.

44 Sunduzwayo Madise, "Payment Systems and Mobile Money in Malawi: Towards Financial Inclusion and Financial Integrity," 27 November 2014, ANULJ 2014 Vol. 2 (2) 71-96, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2531319&download=yes.

45 "Supply side" 2009, vii.

46 "The Payment System in Malawi," 1998, Bank for International Settlements (BIS), 63, http://www.bis.org/cpmi/paysys/malawi.pdf.

47 "Supply side" 2009; Email correspondence with representative of the Reserve Bank of Malawi on April 30, 2015.

48 Email correspondence with representative of the Reserve Bank of Malawi on April 30, 2015.

49 "Malawi – Financial Sector Technical Assistance Project," The World Bank, 2011, http://www.worldbank.org/projects/P122616/malawi-financial-sector-technical-assistance-project?lang=en.

50 Email correspondence with representative of the Reserve Bank of Malawi on April 30, 2015.

51 Madise 2014.

52 "UNCDF Special Projects: Midterm Review Financial Inclusion Malawi Project (FIMA)," UNCDF, May 2011, xii, http://www.uncdf.org/sites/default/files/Documents/mwi_fima_midterm_0511_en_0.pdf.

53 "Financial Inclusion in Malawi (FIMA) Project: setup and progress to 30 September 2009," UNCDF, 2009, http://www.undp.org/content/dam/undp/documents/projects/MWI/FIMA_-upgraded_progress_report.pdf.

54 "National Financial Inclusion Strategies Database," The World Bank, 2014, http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,contentMDK:23491959~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html.

55 Greenacre et al. 2014, 19.

56 Greenacre et al. 2014, 5, 19. Note: A representative of the Reserve Bank of Malawi provided an updated estimated date in email correspondence on April 30, 2015.

57 Greenacre et al. 2014, 35.

58 Ibid.

59 "Putting Financial Inclusion on the Global Map: 2013 Maya Declaration Progress Report," AFI, 12 September 2013, 27, http://www.afi-global.org/library/publications/2013-maya-declaration-progress-report.

60 Greenacre et al. 2014, 28. Note: A representative of the Reserve Bank of Malawi provided an updated estimated date in email correspondence on April 30, 2015.

61 A draft Payments System Bill was originally prepared in 2002, but as of November 2014 it had not been promulgated into law. Therefore, even though there is an electronic based payment system in Malawi, there is no "specific legislation governing the system." See Madise 2014.

62 "Putting Financial Inclusion" 2013, 27–28.

63 "Putting Financial Inclusion" 2013, 28.

64 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), 9 September 2014, 25, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

65 "Finscope Consumer Survey" 2014, 5.

66 "Measurable Goals" 2014, 25.

67 Ibid.

68 Ibid.

69 Rodgers Siula, "Airtel, FDH Bank partner on mobile banking," *Nyasa Times*, 5 September 2014, http://www.nyasatimes.com/2014/09/05/airtel-fdh-bank-partner-on-mobile-banking/.

70 Greenacre et al. 2014, 48.

71 "UNCDF Special Projects" 2011.

72 "Scaling Usage" 2011, 16.

MEXICO ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 "Global Microscope 2014: The enabling environment for financial inclusion," The Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION, and Citi, 2014, 53, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014.

7 "The Use of Financial Inclusion Data: Country Case Study - Mexico: Using data for improving public policies - the case of banking agents and mobile payments," Prepared by the Comisión Nacional Bancaria y de Valores, Mexico and the AFI Financial Inclusion Data Working Group, Published by GPFI and AFI, January 2014, 7, http://www.afi-global.org/library/publications/use-financial-inclusion-data-country-case-study-mexico.

8 Robin Arnfield, "Slow take-off for mobile banking in Latin America," 12 August 2013, http://2013.mobilemoneylatam.com/slow-take-off-for-mobile-banking-in-latin-america-2/.

9 "Mexico," World Factbook, The Central Intelligence Agency, 2015, https://www.cia.gov/library/publications/the-world-factbook/geos/mx.html.

10 Ibid.

11 "Mexico," World Development Indicators (2012), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

12 Edward Skelton, "Mexico Develops Niche Approach to Expansion of Banking Services," Federal Reserve Bank of Dallas, 2013, 12, http://www.dallasfed.org/assets/documents/research/swe/2013/swe1301c.pdf.

13 Skelton 2013, 12.

14 "The Use of Financial Inclusion Data" 2014, 3.

15 "The Use of Financial Inclusion Data" 2014, 5.

16 "Mexico," 2014 Global Financial Inclusion (Global Findex) database, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

17 "Financial Inclusion Report 5: 2013," Consejo Nacional de Inclusión Financiera, 2013, 37, http://www.cnbv.gob.mx/en/Inclusion/Documents/Reportes%20de%20IF/Financial%20Inclusion%20Report%205.pdf.

18 "Key Indicators for Financial Inclusion (2012)," SHCP and CNBV, 2014, http://www.cnbv.gob.mx/en/Inclusion/Paginas/Indicators.aspx.

19 "The Use of Financial Inclusion Data" 2014, 5, 8.

20 The CNBV classifies "peri-urban" as 15,000 – < 50,000 inhabitants per municipality. See "The Use of Financial Inclusion Data" 2014, 8.

21 "The Use of Financial Inclusion Data" 2014, 7.

22 Alberto Chaia, Robert Schiff, and Esteban Silva, "A new idea in banking for the poor," McKinsey & Company, November 2010, http://www.mckinsey.com/insights/financial_services/a_new_idea_in_banking_for_the_poor.

23 As noted by Mark Pickens, David Porteous, and Sarah Rotman Parker, G2P payments may include social transfers, pension payments, and wages — for example, for those on government payrolls. See Mark Pickens, David Porteous, and Sarah Rotman Parker, "Banking the Poor via G2P Payments," CGAP, 1 December 2009, http://www.cgap.org/publications/banking-poor-g2p-payments.

24 Guillermo Babatz, "Sustained Effort, Saving Billions: Lessons from the Mexican Government's Shift," Better Than Cash Alliance, November 2013, 38, http://betterthancash.org/wp-content/uploads/2013/12/Evidence-Paper-English1.pdf.

25 Babatz 2013, 39.

26 Solano Cozzo, "G2P Electronic Payments Leading to Increased Aid and Inclusion in LAC," Center for Financial Inclusion, 9 October 2013, http://cfi-blog.org/2013/10/09/g2p-electronic-payments-leading-to-increased-aid-and-inclusion-in-lac/.

27 Babatz 2013, 39.

28 Babatz 2013, 38.

29 Skelton 2013, 11.

30 "Nuestra Historia" [English translation by Google Translate], Banco Azteca, 2013, http://www.bancoazteca.com.mx/PortalBancoAzteca/publica/conocenos/historia/nuestra.jsp.

31 "Nuestra Historia" 2013.

32 "Banco Ahorro Famsa," BNamericas, Undated, http://www.bnamericas.com/company-profile/en/Banco_Ahorro_Famsa,_S,A,_-_Institucion_de_Banca_Multiple-Banco_Ahorro_Famsa.

33 "Our history" [Official English translation], Compartamos Banco, Undated, http://www.compartamos.com.mx/wps/portal/Banco/AboutCompartamos/History.

34 "Can We Help You?" [Official English translation], Compartamos Banco, Undated, http://www.compartamos.com.mx/wps/portal/Banco/ClientService.

35 "Banamex," BNamericas, 2015, http://www.bnamericas.com/company-profile/en/Banco_Nacional_de_Mexico_S,A,-Banamex.

36 "Banks and Banking Services in Mexico," Mexperience, 2015, http://www.mexperience.com/living/banks-in-mexico.php.

37 "What is Transfer?" [English translation by Google Translate], Transfer Banamex, Undated, http://www.banamex.com/transfer/queEsTransfer.html; "Transfer in Mexico: The Successful Partnership Between Telcel, Banamex and Inbursa Offers Mobile Payments Using SMS," 2013, http://mex.mobilemoneylatam.com/transfer-mexico-la-alianza-exitosa-entre-telcel-banamex-e-inbursa-ofrece-pagos-moviles-via-sms-2/.

38 "How Does it Work?" [English translation by Google Translate], Transfer Banamex, Undated, http://www.banamex.com/transfer/queEsTransfer.html.

39 "How do I send and receive money from my mobile?" [English translation by Google Translate], http://www.banamex.com/transfer/comoFuncionaEnvio.html.

40 "Transfer Banamex" presentation, provided by the Secretaría de Hacienda y Crédito Público in January 2015.

41 "Banamex and Oxxo launch debit card Saldazo," Citigroup Inc., 11 February 2014, https://www.banamex.com/en/conoce_banamex/quienes_somos/prensa/contenido/2014/11_february.htm.

42 "Banamex and Oxxo" 2014.

43 "Preguntas Frequentes" [English translation by Google Translate], Undated, http://www.oxxo.com/quienes-somos/preguntas-frecuentes.htm.

44 "IFC Mobile Money Scoping Country Report: Mexico," International Finance Corporation (IFC), 29 July 2011, 23, http://www.ifc.org/wps/wcm/connect/37512b004a052b268adeffdd29332b51/Mexico+Public.pdf?MOD=AJPERES.

45 "Banamex and Oxxo launch debit card," 11 February 2014, https://www.banamex.com/en/conoce_banamex/quienes_somos/prensa/contenido/2014/11_february.htm.

46 "Grupo Bimbo, Blue Label Mexico and Visa, Increase the Acceptance of Electronic Payments in Mexico," Grupo Bimbo, 30 October 2013, http://www.grupobimbo.com/en/press-room/press-releases/2013/october/grupo-bimbo-blue-label-mexico-and-visa-increase-the-acceptance-of-electronic-payments-in-mexico.html.

47 "Mexico," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

48 "The Mobile Economy: Latin America 2014," GSMA Intelligence, 2014, 18, http://www.gsmamobileeconomylatinamerica.com/GSMA_Mobile_Economy_LatinAmerica_2014.pdf.

49 "Mexico," 2014 Global Financial Inclusion Database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

50 "The Use of Financial Inclusion Data" 2014, 7.

51 Ibid.

52 "IFC Mobile Money Scoping," 2011, 8.

53 Xavier Faz, "A New Wave of E-Money in Latin America," CGAP, 11 June 2013, http://www.cgap.org/blog/new-wave-e-money-latin-america.

54 Mireya Almazán and Jennifer Frydrych, "Mobile financial services in Latin America & the Caribbean: State of Play, commercial models, and regulatory approaches," GSMA Mobile Money for the Unbanked, May 2015, 22, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/05/2015_GSMA_Mobile-financial-services-in-Latin-America-the-Caribbean.pdf.

55 "Putting Financial Inclusion on the Global Map: 2013 Maya Declaration Progress Report," Alliance for Financial Inclusion, 12 September 2013, 2, http://www.afi-global.org/library/publications/2013-maya-declaration-progress-report.

56 "Putting Financial Inclusion" 2013, 26.

57 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), 9 September 2014, 26, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

58 "Measurable Goals" 2014, 29.

59 Juan Manuel Valle, "Mexico's National Council for Financial Inclusion," CGAP, 16 February 2012, http://www.cgap.org/blog/mexico%E2%80%99s-national-council-financial-inclusion.

60 "Measurable Goals" 2014, 26.

61 Email correspondence with representative of the La Secretaría de Hacienda y Crédito Público de México on April 30, 2015.

62 Valle 2012.

63 "Payment, Clearing and Settlement Systems in Mexico," CPSS, 2011, 258, http://www.bis.org/cpmi/publ/d97_mx.pdf.

64 "Payment, Clearing and Settlement Systems" 2011, 258.

65 "Update on Branchless Banking Policy and Regulation in Mexico," CGAP, January 2010, 9, http://www.cgap.org/sites/default/files/CGAP-Regulation-of-Branchless-Banking-in-Mexico-Jan-2010.pdf.

66 "Financial Inclusion Report 5: 2013" 2013, 183.

67 "The Use of Financial Inclusion Data" 2014, 3.

68 "The Use of Financial Inclusion Data" 2014, 2–3.

69 Elisabeth Rhyne, Anita Gardeva, and David Levai, "Mexico's Prospects for Full Financial Inclusion: A White Paper from the Financial Inclusion 2020 Project (Draft for Discussion)," Center for Financial Inclusion, September 2009, 19, http://centerforfinancialinclusionblog.files.wordpress.com/2011/10/mexicos-prospects-for-full-financial-inclusion-english.pdf.

70 Rekha Reddy, Miriam Bruhn, and Congyan Tan, "Financial Capability in Mexico: Results from a National Survey on Financial Behaviors, Attitudes, and Knowledge," The World Bank, 2013, 59, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/12/24/000442464_20131224120134/Rendered/PDF/835680WP0P12260Box0382091B00PUBLIC0.pdf.

71 "Global Microscope 2014: The Enabling Environment for Financial Inclusion," Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION and Citi, 2014" 2014, 53, http://www.eiu.com/public/thankyou_download.aspx?activity=download&campaignid=microscope2014.

72 "The Use of Financial Inclusion" 2014, 5–6.

73 "The Use of Financial Inclusion" 2014, 5.

74 "The Use of Financial Inclusion" 2014, 7.

75 "IFC Mobile Money Scoping" 2011, 8; Email correspondence with representative of MetLife Foundation on October 27, 2014.

76 "Mexico," Financial Inclusion Guide, Boston University Center for Finance, Law and Policy, Undated, http://www.bu.edu/bucflp/countries/mexico/.

77 Ibid.

78 "Mexico's Financial Inclusion Strategy," Presentation for Global Payments Week 2010, http://siteresources.worldbank.org/FINANCIALSECTOR/Resources/282044-1260476242691/Mexico_Financial_Inclusion.pdf.

79 Ibid.

80 Ibid.

81 "IFC Mobile Money Scoping" 2011, 7.

82 "Payment, Clearing, and Settlement Systems in Mexico" 2011, 263.

83 Hugo Dubovoy and Manuel Padron, "Mexico's Fiscal and Legal Reform 2014," U.S. - Mexico Chamber of Commerce and Baker & McKenzie, 23 January 2014, 3, http://www.usmcocma.org/presentaciones/CHIDMS1.ppt.

84 Andres Sada, "Explainer: Mexico's 2013 Reforms," Americas Society/Council of the Americas, 17 December 2013, http://www.as-coa.org/articles/explainer-mexicos-2013-reforms.

85 Andres Sada, "Explainer: What is the Pacto por Mexico," Americas Society/Council of the Americas, 11 March 2013, http://www.as-coa.org/articles/explainer-what-pacto-por-m%C3%A9xico.

86 Sada, "Explainer: Mexico's 2013 Reforms," 2013.

87 Enrique Díaz-Infante Chapa, "The Financial Reform and the Pact for Mexico," 2014, http://www.lse.ac.uk/government/Events/Mexico-Week-2014/Speakers/Enrique-Diaz-Infante,-The-Financial-Reform-and-Pact-for-Mexico.pdf.

88 "Redes de Medios de Disposicion" [English translation directly from website], SHCP, 11 March 2014, http://www.dof.gob.mx/nota_detalle.php?codigo=5335483&fecha=11/03/2014.

89 "Disposiciones de carácter general a que se refiere el artículo 115 de la ley de institutions de crédito," 2011, https://www.imolin.org/doc/amlid/Mexico/Disposiciones_de_Carater_General_a_que_se_refiere_Articulo_115_de_la_Ley_de_Instituciones_de_Credito.pdf.

90 Xavier Faz, "Mexico's Tiered KYC: An Update on Market Response," CGAP, 25 June 2013, http://www.cgap.org/blog/mexicos-tiered-kyc-update-market-response.

91 "The Mobile Economy," 2014, 23.

92 Tracy Wilkinson, "Mexico telecom overhaul passes, billionaire Carlos Slim loses—maybe," *LA Times*, 9 July 2014, http://www.latimes.com/world/mexico-americas/la-fg-mexico-telecom-slim-20140709-story.html.

93 Wilkinson 2014.

94 "Slim's Chances," *The Economist*, 1 March 2014, http://www.economist.com/news/business/21597894-carlos-slim-faces-biggest-challenge-yet-his-dominance-telecoms-and-golden.

95 "Decreto por el que se reforman, adicionan y derogan diversas disposiciones en material financier y se expide la Ley para regular las Agrupaciones Financieras," 10 January 2014, http://www.dof.gob.mx/nota_detalle.php?codigo=5329408&fecha=10/01/2014.

96 "Global Microscope 2014: The enabling environment for financial inclusion," Sponsored by MIF/IDB, CAF, ACCION and Citi," Economist Intelligence Unit, 2014, 53, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014.

NIGERIA ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 "Nigeria," 2014 Global Financial Inclusion (Global Findex) database, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

7 "Nigeria becomes Africa's biggest economy," *BBC*, 6 April 2014, http://www.bbc.com/news/business-26913497.

8 Aibek Iliasov and Anastasia Mirzoyants, "Digital Pathways to Financial Inclusion: Findings from the FII Tracker Survey in Nigeria and Consumer Focus Groups," Intermedia, September 2014, 14, http://finclusion.org/wp-content/uploads/2014/04/FII-Nigeria-Wave-One-Wave-Report.pdf; Nadia van de Walle, "Nigeria sets its sights on financial inclusion," Center for Financial Inclusion, 20 August 2013, http://cfi-blog.org/2013/08/20/nigeria-sets-the-policy-stage-for-financial-inclusion/.

9 van de Walle 2013; "Nigeria Mobile Money Model," EcoBank (The Pan African Bank), Presented at Mobile Money Africa 2012 in Johannesburg, South Africa, 14-17 May 2012, 12, http://mobile-money-gateway.com/sites/default/files/16.50%20-%20Ecobank%20-%20Nigeria%20Mobile%20Money%20Model.pdf.

10 "IFC Mobile Money Study 2011: Summary Report," International Finance Corporation, 2011, 30, http://www.ifc.org/wps/wcm/connect/fad057004a052eb88b23ffdd29332b51/MobileMoneyReport-Summary.pdf?MOD=AJPERES; Iliasov and Mirzoyants, 7.

11 "Global Microscope 2014: The Enabling Environment for Financial Inclusion," Economist Intelligence Unit, 2014, 68, http://www.eiu.com/public/thankyou_download.aspx?activity=download&campaignid=microscope2014.

12 Ben Uzor and Daniel Ojabo, "Nigeria requires national accelerator programme for mobile money," 29 July 2014, http://businessdayonline.com/2014/07/nigeria-requires-national-accelerator-programme-for-mobile-money/#.U9fD8fldUeA.

13 Iliasov and Mirzoyants 2014, 46.

14 Iliasov and Mirzoyants 2014, 10.

15 Simone di Castri, "What could we learn from Nigeria barring MNOs from participating in the mobile money market?," GSMA, 29 April 2013, http://www.gsma.com/mobilefordevelopment/what-could-we-learn-from-nigeria-barring-mnos-from-participating-in-the-mobile-money-market.

16 Ibid.

17 "EFInA Access to Financial Services in Nigeria 2014 Survey: Key Findings," EFInA, 2 December 2014, 75, http://www.efina.org.ng/assets/ResearchDocuments/A2F-2014-Docs/Updated/EFInA-Access-to-Financial-Services-in-Nigeria-2014-Survey-Key-FindingswebsiteFINAL.pdf.

18 "EFInA Access" 2014, 62.

19 "Global Microscope" 2014, 68.

20 Antonique Koning, "Nigeria targets real financial inclusion," CGAP, 4 February 2013, http://www.cgap.org/blog/nigeria-targets-real-financial-inclusion.

21 "Nigeria," 2011 Global Financial Inclusion (Global Findex) database, The World Bank, 2011, http://datatopics.worldbank.org/financialinclusion/.

22 Iliasov and Mirzoyants 2014, 7.

23 Iliasov and Mirzoyants 2014, 8.

24 "Nigeria," 2014 Global Financial Inclusion Database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

25 "Nigeria," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

26 "Nigeria Mobile Money" 2012, 12.

27 "Nigeria," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

28 "Key Metrics," Financial Inclusion Insights, InterMedia, 2014, http://finclusion.org/country-pages/nigeria-country-page/.

29 "Nigeria," Mobile Money for the Unbanked (MMU) Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

30 A registered agent outlet is one in which "one or several mobile money agents are contracted to facilitate transactions for users." An agent is a "person, quasi-corporation, corporation, or machine that facilitates mobile money account registration, cash-in/cash-out (CICO) transactions, and customer support. Normally, they are registered with MMSPs and perform as agents of MMSPs on a commission basis." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

31 "Nigeria," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

32 "Measurable Goals" 2014, 28.

33 "Nigeria," 2014 Global Financial Inclusion (Global Findex) Database, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

34 Iliasov and Mirzoyants 2014, 9.

35 Iliasov and Mirzoyants 2014, 44.

36 Uzor and Ojabo 2014.

37 Iliasov and Mirzoyants 2014, 11.

38 "WorldRemit, MTN in pact to drive mobile money, remittance services," *Business Day*, 21 January 2015, http://businessdayonline.com/2015/01/worldremit-mtn-in-pact-to-drive-mobile-money-remittance-services/.

39 "Putting Financial Inclusion on the Global Map: 2013 Maya Declaration Progress Report," AFI, 12 September 2013, 31, http://www.afi-global.org/library/publications/2013-maya-declaration-progress-report.

40 "Global Financial Development Report 2014: Financial Inclusion," The World Bank, 2014, 101, http://siteresources.worldbank.org/EXTGLOBALFINREPORT/Resources/8816096-1361888425203/9062080-1364927957721/GFDR-2014_Complete_Report.pdf.

41 Iliasov and Mirzoyants 2014, 12.

42 "Financial Inclusion," Central Bank of Nigeria, Undated, http://www.cenbank.org/devfin/fininc.asp.

43 Ibid.

44 "Measurable Goals" 2014, 28.

45 Iliasov and Mirzoyants 2014, 12.

46 "Exposure Draft: Three tiered know your customers (KYC) requirement program," Central Bank of Nigeria, 22 May 2012, http://www.cenbank.org/OUT/2012/CIRCULARS/FPR/EXPOSURE%20DRAFT-THREE-TIERED%20KNOW%20YOUR%20CUSTOMER(KYC)%20REQUIREMENT%20PROGRAM.PDF.

47 Iliasov and Mirzoyants 2014, 12.

48 "Agent banking in Nigeria: Factors that would motivate merchants to engage – September 2013," EFInA, 2013, http://www.efina.org.ng/our-work/research/other-research/agent-banking-in-nigeria-factors-that-would-motivate-merchants-to-engage-sep-2013/.

49 "IFC Mobile Money Study" 2011, 66.

50 "Putting Financial Inclusion" 2013, 31; Email correspondence with representative of the Central Bank of Nigeria on July 27, 2015.

51 Oladipo Olasemo, "Web versus mobile payments," Mobile Money Nigeria [Slideshow], 13 January 2014, Slide 12, http://www.slideshare.net/olasemooladipo/web-versus-mobilepayments.

52 "Payments System Vision 2020: Release 2.0," Central Bank of Nigeria, September 2013, 20, http://www.cbn.gov.ng/icps2013/papers/NIGERIA_PAYMENTS_SYSTEM_VISION_2020[v2].pdf.

53 "IFC Mobile Money Study" 2011, 7–8.

54 "IFC Mobile Money Study" 2011, 7.

55 "IFC Mobile Money Study" 2011, 30.

56 Adeyemi Adepetun and Bankole Orimisan, "eTransact, EFInA seal $350,000 mobile money activation project deal in Nigeria,"2 September 2014, http://www.ngrguardiannews.com/business/177489-etranzact-efina-seal-350-000-mobile-money-activation-project-deal-in-nigeria.

57 "Glo Launches Nigeria's 1st Mobile Money Agent Network," *Nigerian Tribune*, 22 August 2014, http://www.tribune.com.ng/news/news-headlines/item/14018-glo-launches-nigeria-s-1st-mobile-money-agent-network-cbn-lauds-initiative.

58 "Payments System Vision 2020" 2013, 13.

59 Claire Scharwatt, Arunjay Katakam, Jennifer Frydrych, Alix Murphy, and Nika Naghavi, "2014 State of the Industry: Mobile Financial Services for the Unbanked," 2014, 14, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/03/SOTIR_2014.pdf.

60 "The Financial Inclusion Game Changer," Pymnts.com, 28 August 2014, http://www.pymnts.com/company-spotlight/2014/the-financial-inclusion-game-changer/#.VAcXffldUeA.

61 "Game Changer" 2014.

62 Ibid.

63 Ibid.

64 "Measurable Goals" 2014, 28.

65 Iliasov and Mirzoyants 2014, 17.

PAKISTAN ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank

or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 "Press Release: Finance Minister launches National Financial Inclusion Strategy for Pakistan," State Bank of Pakistan (SBP), 22 May 2015, http://www.sbp.org.pk/press/2015/FM-22-May-2015.pdf.

7 Simone di Castri, "Mobile Money: Enabling regulatory solutions," Mobile Money for the Unbanked (MMU), GSMA, February 2013, 22, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU-Enabling-Regulatory-Solutions-di-Castri-2013.pdf.

8 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), 9 September 2014, 28, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

9 "Pakistan: Key Indicators," 2014 Global Financial Inclusion (Global Findex) database, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/country/pakistan.

10 "Pakistan: Driving Financial Inclusion (Wave 2)," Financial Inclusion Insights, InterMedia, April 2015, 39, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Pakistan-Wave-2-Wave-Report1.pdf.

11 Kabir Kumar and Dan Radcliffe, "Mobile Money in Pakistan: From OTC to Accounts, Part 2," CGAP, 14 January 2015, http://www.cgap.org/blog/mobile-money-pakistan-otc-accounts-part-2.

12 Ibid.

13 "Pakistan: Driving Financial Inclusion (Wave 2)," Financial Inclusion Insights, InterMedia, April 2015, 32, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Pakistan-Wave-2-Wave-Report1.pdf.

14 "Pakistan: Driving Financial Inclusion (Wave 2)," Financial Inclusion Insights, InterMedia, April 2015, 10, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Pakistan-Wave-2-Wave-Report1.pdf.

15 "Mobile Money in Pakistan: Use, Barriers, and Opportunities," Financial Inclusion Tracker Surveys Project, InterMedia, April 2013, 4, http://www.intermedia.org/wp-content/uploads/2013/06/FITS_Pakistan_FullReport_final_REV1.pdf.

16 "Pakistan: Driving Financial Inclusion (Wave 2)," Financial Inclusion Insights, InterMedia, April 2015, 44, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Pakistan-Wave-2-Wave-Report1.pdf.

17 "Pakistan," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

18 "Pakistan: Driving Financial Inclusion (Wave 2)," Financial Inclusion Insights, InterMedia, April 2015, 15, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Pakistan-Wave-2-Wave-Report1.pdf.

19 "Pakistan: Driving Financial Inclusion (Wave 2)," Financial Inclusion Insights, InterMedia, April 2015, 29, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Pakistan-Wave-2-Wave-Report1.pdf.

20 "Pakistan: Driving Financial Inclusion (Wave 2)," Financial Inclusion Insights, InterMedia, April 2015, 11, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Pakistan-Wave-2-Wave-Report1.pdf.

21 "Pakistan: Quicksights report: Financial Inclusion Insights Tracker Survey: Wave 1," Financial Inclusion Insights, InterMedia, April 2014, 4, http://finclusion.org/wp-content/uploads/2014/04/FII-Pakistan-Wave-One-Survey-QuickSights-Report.pdf.

22 Syed Talal, "Government to Deduct 0.6% of All Banking Transactions in Taxes," *ProPakistani*, 10 June 2015, http://propakistani.pk/2015/06/10/government-to-deduct-0-6-of-all-banking-transactions-in-taxes/.

23 "Pakistan," The World Factbook, 2015, https://www.cia.gov/library/publications/the-world-factbook/geos/pk.html.

24 "Pakistan: Driving Financial Inclusion (Wave 2)," Financial Inclusion Insights, InterMedia, April 2015, 18, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Pakistan-Wave-2-Wave-Report1.pdf.

25 "Pakistan," The World Factbook (2014), 2015.

26 Ibid.

27 "GSMA Intelligence," GSMA, Accessed May 2015, https://gsmaintelligence.com/markets/2991/data/?report=533bc7e263bd0.

28 "Pakistan: Driving Financial Inclusion (Wave 2)," Financial Inclusion Insights, InterMedia, April 2015, 18, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Pakistan-Wave-2-Wave-Report1.pdf."

29 The IMF defines active agent outlets as the "number of agent outlets that have facilitated at least one transaction over the past 30 days." An agent is defined as "a person, quasi-corporation, corporation, or machine that facilitates mobile money account registration, CICO transactions, and customer support. Normally, they are registered with MMSPs and perform as agents of MMSPs on a commission basis." See "Explanatory Notes," International Monetary Fund, 2014, 4, http://fas.imf.org/misc/Explanatory_Notes.pdf.

30 "Pakistan," Financial Access Survey (2013), 2014.

31 "Pakistan," Financial Access Survey (2012), 2013, http://fas.imf.org/Default.aspx.

32 "Quarterly Branchless Banking Newsletter: October-December 2014," Issue 14, State Bank of Pakistan, 2014, 3, 20, http://www.sbp.org.pk/publications/acd/BranchlessBanking-Oct-Dec-2014.pdf.

33 The International Monetary Fund (IMF) defines active mobile money accounts as "accounts that have been used to conduct mobile money or a cash-in cash-out (CICO) transactions over the past 90 days. Balance inquiries, PIN resets, and other transactions that do not constitute mobile money or CICO transaction should not qualify a customer account as active." See "Explanatory Notes," International Monetary Fund, 2014, 4, http://fas.imf.org/misc/Explanatory_Notes.pdf.

34 "Pakistan," Financial Access Survey (2013), 2014.

35 "Pakistan: Driving Financial Inclusion (Wave 2)," Financial Inclusion Insights, InterMedia, April 2015, 10, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Pakistan-Wave-2-Wave-Report1.pdf.

36 "Pakistan: Driving Financial Inclusion (Wave 2)," Financial Inclusion Insights, InterMedia, April 2015, 11, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Pakistan-Wave-2-Wave-Report1.pdf.

37 "Quarterly Branchless Banking Newsletter: October-December 2014," Issue 14, 2014, 3, State Bank of Pakistan, http://www.sbp.org.pk/publications/acd/BranchlessBanking-Oct-Dec-2014.pdf.

38 "Quarterly Branchless Banking Newsletter: October-December 2014," Issue 14, 2014, 7, State Bank of Pakistan, http://www.sbp.org.pk/publications/acd/BranchlessBanking-Oct-Dec-2014.pdf.

39 "Pakistan," Mobile Money for the Unbanked (MMU) Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

40 "Pakistan," The World Factbook, 2015.

41 "Mobile Money in Pakistan: Use, Barriers, and Opportunities," Financial Inclusion Tracker Surveys Project, InterMedia, April 2013, 8, http://www.intermedia.org/wp-content/uploads/2013/06/FITS_Pakistan_FullReport_final_REV1.pdf.

42 Yasmina McCarty, "MMU (Mobile Money for the Unbanked) Case Study: Easypaisa Mobile Money Innovation in Pakistan," GSMA, 5 July 2013, http://www.gsma.com/mobilefordevelopment/mmu-case-study-easypaisa-mobile-money-innovation-in-pakistan.

43 McCarty 2013.

44 Aakash Mehrotra and Maha Khan, "Agent Network Accelerator Survey: Pakistan Country Report 2014," Helix Institute of Digital Finance, 12 May 2015, 8, http://helix-institute.com/sites/default/files/Publications/Agent%20Network%20Accelerator%20Pakistan%20Country%20Report%202014.pdf.

45 "Driving Financial Inclusion (Wave 2)" 2015, 37.

46 Kabir Kumar and Dan Radcliffe, "Mobile Money in Pakistan: From OTC to Accounts, Part 1," Consultative Group to Assist the Poor (CGAP), 8 January 2015, http://www.cgap.org/blog/mobile-money-pakistan-otc-accounts-part-1.

47 Nadeem Hussain, "The 'EasyPaisa' Journey from OTC to Wallets in Pakistan," CGAP, 10 October 2013, http://www.cgap.org/blog/%E2%80%9Ceasypaisa%E2%80%9D-journey-otc-wallets-pakistan.

48 McCarty 2013.

49 Hussain 2013.

50 Ibid.

51 Syed Talal, "Government doubles sales tax on mobile phones," *ProPakistani*, 5 June 2015, http://propakistani.pk/2015/06/05/government-has-doubled-sales-tax-on-mobile-phones/.

52 Kumar and Radcliffe 2015.

53 Hussain 2013.

54 "Quarterly Branchless Banking Newsletter: October-December 2014," Issue 14, 2014, 3, State Bank of Pakistan, http://www.sbp.org.pk/publications/acd/BranchlessBanking-Oct-Dec-2014.pdf.

55 "Mobile Money in Pakistan" 2013, 12.

56 "Mobile Money in Pakistan" 2013, 3.

57 "Quarterly Branchless Banking Newsletter: October-December 2014," Issue 14, 2014, 6, State Bank of Pakistan, http://www.sbp.org.pk/publications/acd/BranchlessBanking-Oct-Dec-2014.pdf.

58 "National Financial Inclusion Strategies Database," The World Bank, 2014, http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,contentMDK:23491959~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html.

59 "Financial Inclusion Programme," State Bank of Pakistan, 2008, http://www.sbp.org.pk/MFD/FIP/inclusion.htm.

60 "Financial Inclusion Programme: About Us," State Bank of Pakistan, 2008, http://www.sbp.org.pk/MFD/FIP/about.htm.

61 "Global Microscope" 2014, 30.

62 Simone di Castri, "Mobile Money: Enabling regulatory solutions," Mobile Money for the Unbanked, GSMA, February 2013, 22, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU-Enabling-Regulatory-Solutions-di-Castri-2013.pdf.

63 "Mobile Money for the Unbanked Case Studies: Insights, best practices and lessons from across the globe," GSMA Mobile Money for the Unbanked, 31 October 2013, 23, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/02/2013_MMU_Compendium-of-case-studies.pdf.

64 di Castri 2013, 22.

65 Conversion for May 2015 available from Oanda.com.

66 "Asaan Account: Guidelines on Low Risk Bank Accounts with Simplified Due Diligence for Banks & MFBs (Issued via BPRD Circular No. 11 of 2015)," State Bank of Pakistan, 2015, 4, http://www.sbp.org.pk/bprd/2015/C11-Guidelines.pdf.

67 Ibid.

68 Kabir Kumar and Dan Radcliffe, "Mobile Money in Pakistan: From OTC to Accounts, Part 2," CGAP, 14 January 2015, http://www.cgap.org/blog/mobile-money-pakistan-otc-accounts-part-2.

69 Kabir Kumar and Dan Radcliffe, "Mobile Money in Pakistan: From OTC to Accounts, Part 2," CGAP, 14 January 2015, http://www.cgap.org/blog/mobile-money-pakistan-otc-accounts-part-2.

70 "Quarterly Branchless Banking Newsletter: October-December 2014," Issue 14, 2014, 7, State Bank of Pakistan, http://www.sbp.org.pk/publications/acd/BranchlessBanking-Oct-Dec-2014.pdf.

71 "Quarterly Branchless Banking Newsletter: October-December 2014," Issue 14, 2014, 3, State Bank of Pakistan, http://www.sbp.org.pk/publications/acd/BranchlessBanking-Oct-Dec-2014.pdf.

72 "Branchless Banking Newsletters (Archive)," State Bank of Pakistan, Accessed 2015, http://www.sbp.org.pk/publications/acd/branchless.htm.

73 "Measurable Goals" 2014, 29.

74 Kabir Kumar and Dan Radcliffe, "Mobile Money in Pakistan: From OTC to Accounts, Part 2," CGAP, 14 January 2015, http://www.cgap.org/blog/mobile-money-pakistan-otc-accounts-part-2.

75 "Pakistan: Driving Financial Inclusion (Wave 2)," Financial Inclusion Insights, InterMedia, April 2015, 7, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Pakistan-Wave-2-Wave-Report1.pdf.

76 "Measurable Goals" 2014, 29.

77 Ibid.

78 Ibid.

79 Claire Scharwatt, Arunjay Katakam, Jennifer Frydrych, Alix Murphy, and Nika Naghavi, "2014 State of the Industry: Mobile Financial Services for the Unbanked," GSMA, 8, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/03/SOTIR_2014.pdf.

80 "Pakistan: Driving Financial Inclusion (Wave 2)," Financial Inclusion Insights, InterMedia, April 2015, 7, http://finclusion.org/wp-content/uploads/2014/04/InterMedia-FII-Pakistan-Wave-2-Wave-Report1.pdf.

81 "Dar launches national financial inclusion strategy 2015-2020," *Pakistan Today*, 22 May 2015, http://www.pakistantoday.com.pk/2015/05/22/business/dar-launches-national-financial-inclusion-strategy-2015-20/.

PERU ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 Jeffrey Riecke, "Defining the Path to Financial Inclusion in Peru," Center for Financial Inclusion, 17 December 2013, http://cfi-blog.org/2013/12/17/defining-the-path-to-financial-inclusion-in-peru/; Klaus Prochaska, "Peru leads the way to new approach for digital financial services to promote financial inclusion in Latin America," Alliance for Financial Inclusion, 5 March 2014, http://www.afi-global.org/blog/2014/03/05/peru-leads-way-new-approach-digital-financial-services-promote-financial-inclusion.

7 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), 9 September 2014, 30, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

8 Between 2004 and 2014, Peru's economic growth averaged 6.5 percent, and between 2004 and 2012 poverty rates dropped from 58.5 percent to 25.8 percent. See "The Use of Financial Inclusion Data Country Case Study: Peru – Fine-Tuning Regulation Based on Access Indicators," Prepared by Superintendencia de Banca, Seguros y AFP, Peru and the AFI Financial Inclusion Data Working Group on behalf of the Data and Measurement sub-group of the Global Partnership for Financial Inclusion, January 2014, 2, http://www.gpfi.org/sites/default/files/documents/The%20Use%20of%20Financial%20Inclusion%20Data%20Country%20Case%20Study_Peru_0.pdf.

9 Ryan Dube, "Peru: financial inclusion on the rise," 9 October 2012, http://latintrade.com/peru-financial-inclusion-on-the-rise/.

10 "Use of Financial Inclusion," 2014, 5; "IFC Mobile Money Scoping Country Report: Peru," International Finance Corporation (IFC), 5 September 2011, http://www.ifc.org/wps/wcm/connect/ff940d804a02ec039d90fdd1a5d13d27/Peru+Public.pdf?MOD=AJPERES.

11 Email correspondence with SBS representative on April 10, 2015.

12 "Péru: Indicadores de Inclusión Financiera de los Sistemas Financiero, De Seguros y De Pensiones: June 2014," Superintendencia de Banca, Seguros y AFP, 2014, 10, https://intranet1.sbs.gob.pe/estadistica/financiera/2014/Junio/CIIF-0001-jn2014.PDF.

13 "Péru: Indicadores" 2014, 7.

14 Email correspondence with representatives of the Superintendencia de Banca, Seguros y AFP del Peru (SBS) on April 10, 2015.

15 Narda L. Sotomayor, "Setting the Regulatory Landscape for the Provision of Electronic Money in Peru" 2012, 1, http://www.sbs.gob.pe/repositorioaps/0/0/jer/ddt_ano2012/DT-3-2012_Narda_Sotomayor.pdf.

16 Ibid.

17 Email correspondence with SBS representative on April 10, 2015.

18 Ibid.

19 Narda L. Sotomayor, "The Peruvian Regulatory Environment for Financial Inclusion. Achievements and Challenges," Superintendencia de Banca, Seguros y AFP, Presentation at the 2014 Asia-Pacific Forum on Financial Inclusion in Shanghai, China, 19-20 March 2014, http://adbi.adb.org/files/2014.03.19.cpp.sess3.1.sotomayor.peru.financial.inclusion.pdf.

20 "Peru," 2014 Global Financial Inclusion database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

21 "Putting Financial Inclusion on the Global Map: 2013 Maya Declaration Progress Report," Alliance for Financial Inclusion, 12 September 2013, 12, http://www.afi-global.org/library/publications/2013-maya-declaration-progress-report.

22 "IFC Mobile Money Scoping" 2011, 8.

23 "IFC Mobile Money Scoping" 2011, 5.

24 Email correspondence with SBS representative on April 10, 2015.

25 Sotomayor 2012, 1.

26 Tim Cooper, Michelle Kaffenberger, Scott Gardner, and Mireya Almazán, "Mobile Money in Peru: Assessing the Opportunity," InterMedia, January 2015, 6, http://www.intermedia.org/wp-content/uploads/2015/02/GSMA-MMU-Peru-Report-English-.pdf.

27 Cooper et al. 2015, 18.

28 "IFC Mobile Money Scoping" 2011, 2.

29 "Peru," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

30 Javier Alonso, Santiago Fernández de Lis, Carlos López-Moctezuma, Rosario Sánchez and David Tuesta, "The potential of mobile banking in Peru as a mechanism for financial inclusion," BBVA Research Working Papers No. 13/25, August 2013, 3, http://www.rrojasdatabank.info/mobilebanking5.pdf.

31 Cooper et al. 2015, 7.

32 "Peru," Mobile Money for the Unbanked (MMU) Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

33 "National Financial Inclusion Strategies Database," The World Bank, 2014, http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,contentMDK:23491959~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html.

34 Ibid.

35 "Peru assumes chairmanship of Alliance for Financial Inclusion (AFI)," 9 September 2014, http://www.andina.com.pe/Ingles/noticia-peru-assumes-chairmanship-of-alliance-for-financial-inclusion-afi-522568.aspx.

36 Ryan Dube, "Peru: financial inclusion on the rise," 9 October 2012, http://latintrade.com/peru-financial-inclusion-on-the-rise/.

37 "IFC Mobile Money Scoping" 2011, 7.

38 Ibid.

39 Prochaska 2014.

40 Ibid.

41 "Global Microscope 2014: The enabling environment for financial inclusion," The Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION, and Citi, 2014, 56, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014.

42 Ibid.

43 Email correspondence with SBS representative on April 10, 2015. See D.S. Nº 051-2015-EF at http://www.elperuano.com.pe/NormasElperuano/2015/03/18/1213133-3.html.

44 "IFC Mobile Money Scoping" 2011, 7.

45 Giovanna Priale Reyes and Denise Dias, "Financial Inclusion and Consumer Protection in Peru: The branchless banking business," CGAP and Superintendence of Banks, Insurance and AFPs, 15 February 2010, 21, http://www.cgap.org/publications/financial-inclusion-and-consumer-protection-peru.

46 Reyes and Dias 2010, 16.

47 "IFC Mobile Money Scoping" 2011, 8.

48 Reyes and Dias 2010, 21.

49 Ibid. The resolution in question was Resolution SBS No 775-2008.

50 "The Use of Financial Inclusion Data Country Case Study: Peru – Fine-Turning Based on Access Indicators," Superintendencia de Banca, Seguros y AFP, Peru and the AFI Financial Inclusion Data Working Group, January 2014, 7, http://www.gpfi.org/sites/default/files/documents/The%20Use%20of%20Financial%20Inclusion%20Data%20Country%20Case%20Study_Peru_0.pdf.

51 Email correspondence with SBS representative on April 10, 2015.

52 Prochaska 2014.

53 "Global Microscope" 2014, 57.

54 "The Use of Financial Inclusion Data Country Case Study: Peru – Fine-Tuning Regulation Based on Access Indicators," Prepared by Superintendencia de Banca, Seguros y AFP, Peru and the AFI Financial Inclusion Data Working Group on behalf of the Data and Measurement sub-group of the Global Partnership for Financial Inclusion," January 2014, 7, http://www.gpfi.org/sites/default/files/documents/The%20Use%20of%20Financial%20Inclusion%20Data%20Country%20Case%20Study_Peru_0.pdf.

55 Mireya Almazan, "Mobile Money Regulation in Latin America: Leveling the Playing Field in Brazil and Peru," Mobile Money for the Unbanked (MMU), GSMA, 19 December 2013, http://www.gsma.com/mobilefordevelopment/mobile-money-regulation-in-latin-america-leveling-the-playing-field-in-brazil-peru.

56 Alonso et al. 2013, 6.

57 Alonso et al. 2013, 3, 10.

58 "Use of Financial Inclusion Data" 2014, 5.

59 Alonso et al. 2013, 9.

60 "Country Overview: Peru," GSMA, February 2014, 17, https://gsmaintelligence.com/files/analysis/?file=140224-peru.pdf.

61 "Use of Financial Inclusion Data" 2014, 5 (footnote 2).

62 Prochaska 2014.

63 Alonso et al. 2013, 7–8.

64 Alonso et al. 2013, 7.

65 Almazan 2013.

66 Noelia Cámara and David Tuesta, "New Banking, Banking for all: The Peru Model," BBVA, Financial Inclusion Watch, 9 February 2014, 1, https://www.bbvaresearch.com/wp-content/uploads/2014/09/observatory-peru-inclusion-ing-maq2.pdf.

67 "Ericsson and Asbanc work toward financial inclusion in Peru," 23 December 2014, http://www.ericsson.com/ag/news/2014-12-04-asbancvid-en_254740125_c.

68 Email correspondence with SBS representative on April 29, 2015.

69 "Measurable Goals" 2014, 30.

70 "Studies on Financial Inclusion: Pilot Survey of Access and Use of Financial Services 2012," Superintendencia de Banca, Seguros y AFP," 2012, http://www.sbs.gob.pe/principal/categoria/estudios-sobre-inclusion-financiera/2652/c-2652.

71 "Measurable Goals" 2014, 30.

72 Email correspondence with SBS representative on April 10, 2015.

73 "Measurable Goals" 2014, 30

74 Ibid.

PHILIPPINES ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 "Mobile money regulation in the Philippines," Bankable Frontier Associates, 24 March 2011, 2, http://www.afi-global.org//library/publications/mobile-money-regulation-philippines.

7 "Financial Inclusion Initiatives," Bangko Sentral ng Pilipinas, 2013, http://www.bsp.gov.ph/downloads/Publications/2013/microfinance_2013.pdf.

8 "Report on the State of Financial Inclusion in the Philippines," Bangko Sentral ng Pilipinas, 2011, 2, http://www.bsp.gov.ph/downloads/Publications/2011/Financial%20Inclusion.pdf.

9 "Mobile money: an overview for global telecommunications operators," Ernst & Young, 2009, 8, http://www.ey.com/Publication/vwLUAssets/Mobile_Money./$FILE/Ernst%20&%20Young%20-%20Mobile%20Money%20-%2015.10.09%20(single%20view).pdf.

10 "Report on the State of Financial Inclusion in the Philippines," Bangko Sentral ng Pilipinas, 2013, 19, http://www.bsp.gov.ph/downloads/Publications/2013/Financial%20Inclusion.pdf.

11 "Report on the State of Financial Inclusion" 2013, 7, 19.

12 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), 9 September 2014, 9, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

13 "Gearing toward one strategy for financial inclusion," *The Manila Times,* 6 May 2015, http://www.manilatimes.net/gearing-toward-one-strategy-for-financial-inclusion/181394.

14 "Putting Financial Inclusion on the Global Map: 2013 Maya Declaration Progress Report," AFI, 12 September 2013, 9, http://www.afi-global.org/library/publications/2013-maya-declaration-progress-report.

15 "Philippines," 2011 Global Financial Inclusion database (Global Findex), The World Bank, 2011, http://datatopics.worldbank.org/financialinclusion/.

16 "Philippines," 2011 Global Findex, 2011.

17 "Philippines," 2014 Global Findex, The World Bank, 2015 http://datatopics.worldbank.org/financialinclusion/.

18 Ibid.

19 "Philippines," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

20 "Philippines," Financial Access Survey (2013), 2014.

21 "Philippines: Country Info," FINclusion Lab, Microfinance Information Exchange (MIX), 2014, http://finclusionlab.org/country/Philippines/analytics; "The Use of Financial Inclusion Data in South Africa, the Philippines and Peru," AFI, 20 August 2014, 11, http://www.afi-global.org//library/publications/use-financial-inclusion-data-south-africa-philippines-and-peru.

22 "The Use of Financial Inclusion Data" 2014, 11.

23 Ibid.

24 "Philippines," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

25 The number of active agent outlets is the "number of agent outlets that have facilitated at least one transaction over the past 30 days." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

26 A registered agent outlet is one in which "one or several mobile money agents are contracted to facilitate transactions for users." An agent is a "person, quasi-corporation, corporation, or machine that facilitates mobile money account registration, cash-in/cash-out (CICO) transactions, and customer support. Normally, they are registered with MMSPs and perform as agents of MMSPs on a commission basis." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

27 The number of registered mobile money accounts is the "number of accounts with resident mobile money service providers (MMSPs) that are primarily accessed by mobile phones and are useable or have been used for mobile money transactions." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

28 The number of active mobile money accounts is the "number of registered mobile money accounts that have been used to conduct mobile money or cash-in-cash-out (CICO) transactions over the past 90 days. Balance inquiries, PIN resets, and other transactions that do not constitute mobile money or CICO transactions should not qualify a customer account as active." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

29 "Philippines," 2014 Global Findex, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

30 Jamie M. Zimmerman, Kristy Bohling, and Sarah Rotman Parker, "Electronic G2P Payments: Evidence from Four Lower-Income Countries," Consultative Group to Assist the Poor (CGAP), April 2014, 2, http://www.cgap.org/publications/electronic-g2p-payments-evidence-four-lower-income-countries.

31 Zimmerman et al. 2014, 2.

32 Zimmerman et al. 2014, 4.

33 Zimmerman et al. 2014, 17.

34 "Mobile money regulation" 2011, 4, 9.

35 "Mobile money regulation" 2011, 4.

36 "Mobile money regulation" 2011, 9.

37 The monetary board of the Philippines provided a letter indicating the conditions under which GCash could operate; since GCash did not operate as an intermediary by lending to borrowers, it did not fit strictly within the parameters of the General Banking Law of 2000 Section 3.1, which considers banks to be "entities engaged in the lending of funds obtained in the form of deposits." See "Mobile money regulation" 2011, 4.

38 "Mobile money regulation" 2011, 4.

39 "Report on the State of Financial Inclusion" 2013, 7.

40 "Report on the State of Financial Inclusion" 2013, 19.

41 Microbanking offices are permitted to provide services "ranging from credit, savings, remittances, foreign exchange, e-money conversion, bills payment and government pay-out benefits." See "Report on the State of Financial Inclusion in the Philippines" 2013, 9.

42 "Report on the State of Financial Inclusion" 2013, 3.

43 Ibid.

44 "Global Microscope 2014: The enabling environment for financial inclusion," The Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION, and Citi, 2014, 31, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014.

45 "Global Microscope" 2014, 31.

46 "BSP Financial Inclusion Initiatives 2012 - Year End Report," Bangko Sentral ng Pilipinas, December 2012, 13, http://www.bsp.gov.ph/downloads/Publications/2012/microfinance_2012.pdf.

47 "The Use of Financial Inclusion Data" 2014, 11.

48 "Mobile money regulation" 2011, 4.

49 "Mobile money regulation" 2011, 9.

50 "Mobile money regulation" 2011, 9-10.

51 "Mobile money regulation" 2011, 9.

52 "Proportionality in Practice: Bangko Sentral ng Pilipinas (BSP) Experience: GPFI Conference on Standard Setting Bodies and Financial Inclusion," AFI, 29 October 2012, http://www.afi-global.org//library/publications/proportionality-practice-bangko-sentral-ng-pilipinas-bsp-experience.

53 "Mobile money regulation" 2011, 13.

54 "GCash Terms and Conditions," Globe, Undated, http://www.globe.com.ph/gcash-terms-and-conditions.

55 Kathleen A. Martin, "Smart expands e-money services beyond Smart Money," *The Philippine Star*, 6 September 2013, http://www.philstar.com/business/2013/09/06/1176461/smart-expands-e-money-services-beyond-smart-money.

56 "Mobile money regulation" 2011, 7.

57 "Circular No. 649," Bangko Sentral ng Pilipinas, 2009, 1, http://www.bu.edu/bucflp/files/2012/01/Circular-No.-649-issuance-of-electronic-money.pdf.

58 "Circular No. 649" 2009, 1.

59 "The Philippines engagement with the standard-setting bodies and the implications for financial inclusion," 30 September 2011, 5, Global Partnership for Financial Inclusion and AFI, http://www.afi-global.org//library/publications/philippines-engagement-standard-setting-bodies-and-implications-financial.

60 "Proportionality in Practice" 2012.

61 Ibid.

62 "The Philippines engagement with the standard-setting bodies and the implications for financial inclusion," 30 September 2011, 6, Global Partnership for Financial Inclusion and AFI, http://www.afi-global.org//library/publications/philippines-engagement-standard-setting-bodies-and-implications-financial.

63 "Philippines Engagement" 2011, 5; "Proportionality in Practice" 2012.

64 "Proportionality in Practice" 2012.

65 "Philippines Engagement" 2011, 5.

66 "Philippines Engagement" 2011, 1.

67 "National Financial Inclusion Strategies Database," The World Bank, 2014, http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,contentMDK:23491959~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html.

68 "Philippines Engagement" 2011, 1.

69 "Philippines Engagement" 2011, 5.

70 "Global Microscope" 2014, 31.

71 "Report on the State of Financial Inclusion" 2012, 2.

72 "Global Microscope" 2014, 31.

73 Ibid.

74 "Putting Financial Inclusion" 2013, 9.

75 "Gearing toward one strategy for financial inclusion," *The Manila Times,* 6 May 2015, http://www.manilatimes.net/gearing-toward-one-strategy-for-financial-inclusion/181394.

76 "The Use of Financial Inclusion Data: Country Case Study of the Philippines," AFI and GPFI, January 2014, 4, http://www.afi-global.org//library/publications/use-financial-inclusion-data-country-case-study-philippines.

77 "Financial Inclusion Initiatives" 2013.

78 "Global Microscope" 2014, 31.

79 "Measurable Goals" 2014, 31.

80 Ibid.

81 Ibid.

82 "Measurable Goals" 2014, 31; "Putting Financial Inclusion" 2013, 34.

83 Email correspondence with representative of the BSP on May 3, 2015; "E-PESO Activity," USAID, 26 June 2015, http://www.usaid.gov/philippines/partnership-growth-pfg/e-peso-activity.

84 Email correspondence with representative of the BSP on May 3, 2015.

RWANDA ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 Financial exclusion is defined by the FinScope report as the percentage of adults who are neither formally served (i.e., "adults who are either banked or who are served by formal non-bank financial institutions or both") nor informally served (i.e., "adults who use informal mechanisms to transact, save, borrow, or manage their financial risks"). See "Financial Inclusion in Rwanda" 2012, 12.

7 "Global Microscope 2014: The Enabling Environment for Financial Inclusion," Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION and Citi, 2014, 68, http://www.eiu.com/public/thankyou_download.aspx?activity=download&campaignid=microscope2014.

8 "Global Microscope" 2014, 68.

9 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), 9 September 2014, 31, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

10 "Rwanda," 2014 Global Findex, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

11 "Rwanda," The World Factbook, Central Intelligence Agency, 2015, https://www.cia.gov/library/publications/the-world-factbook/geos/rw.html.

12 "Financial Inclusion in Rwanda 2008-2012," FinScope, October 2012, "Key Findings," http://www.statistics.gov.rw/publications/finscope-survey-report-2012#main-content-area.

13 "Global Microscope" 2014, 68.

14 "Rwanda," Financial Access Survey (2013), 2014, http://fas.imf.org/Default.aspx.

15 "Financial Inclusion in Rwanda" 2012, "Key Findings."

16 Ibid.

17 "Financial Inclusion in Rwanda" 2012, 4.

18 "Rwanda," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

19 A registered agent outlet is one in which "one or several mobile money agents are contracted to facilitate transactions for users." An agent is a "person, quasi-corporation, corporation, or machine that facilitates mobile money account registration, cash-in/cash-out (CICO) transactions, and customer support. Normally, they are registered with MMSPs and perform as agents of MMSPs on a commission basis." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

20 The number of active agent outlets is the "number of agent outlets that have facilitated at least one transaction over the past 30 days." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

21 The number of registered mobile money accounts is the "number of accounts with resident mobile money service providers (MMSPs) that are primarily accessed by mobile phones and are useable or have been used for mobile money transactions." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

22 The number of active mobile money accounts is the "number of registered mobile money accounts that have been used to conduct mobile money or cash-in-cash-out (CICO) transactions over the past 90 days. Balance inquiries, PIN resets, and other transactions that do not constitute mobile money or CICO transactions should not qualify a customer account as active." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

23 "Rwanda," 2011 Global Findex, The World Bank, 2011, http://datatopics.worldbank.org/financialinclusion/.

24 "Rwanda," Mobile Money for the Unbanked Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

25 "GSMA Intelligence," GSMA, Accessed May 2015, https://gsmaintelligence.com/markets/2991/data/?report=533bc7e263bd0.

26 Margarete Biallas, John Ngahu and Scott Stefanski, "IFC Mobile Money Scoping Country Report: Rwanda," International Finance Corporation, 2012, http://www.ifc.org/wps/wcm/connect/0d2862004f1d479fb911fb3eac88a2f8/MobileMoneyScoping_Rwanda.pdf?MOD=AJPERES.

27 Leonard Magomba, "Rwanda: Bank Launches Mvisa in Rwanda," *East African Business Week*, 29 July 2013, http://allafrica.com/stories/201307291891.html.

28 Magomba 2013.

29 Biallas et al. 2012.

30 Magomba 2013.

31 John Owens, "National Bank of Rwanda Spotlights Financial Inclusion," Alliance for Financial Inclusion (AFI), 16 July 2014, http://www.afi-global.org/blog/2014/07/16/national-bank-rwanda-spotlights-financial-inclusion.

32 Biallas et al. 2012.

33 "Putting Financial Inclusion on the Global Map: 2013 Maya Declaration Progress Report," AFI, 12 September 2013, 7, http://www.afi-global.org/library/publications/2013-maya-declaration-progress-report.

34 "Financial Inclusion in Rwanda" 2012; "Key Findings" 2012.

35 Ibid.

36 Jeffrey Riecke, "With 72 percent of the population with access, Rwanda looks toward 2020 for next inclusion milestone," Center for Financial Inclusion Blog, 23 July 2014, http://cfi-blog.org/2014/07/23/with-72-percent-of-population-with-access-rwanda-looks-toward-2020-for-next-inclusion-milestone/.

37 Biallas et al. 2012.

38 Ibid.

39 "Putting Financial Inclusion" 2013, 7.

40 In its "Mobile Money Scoping" report on Rwanda, the International Finance Corporation defines mobile money as "mobile payments" offered by non-banks that include person-to-person payments, bill payments, and cash in/out functions. See Biallas et al. 2012.

41 Biallas et al. 2012.

42 Ibid.

43 Information available from downloadable Excel document associated with the 2014 Economist Intelligence Unit's "Global Microscope 2014: The enabling environment for financial inclusion," Sponsored by MIF/IDB, CAF, ACCION, and Citi, 2014, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014.

44 "Rwanda's Financial Inclusion Success Story: Umurenge Saccos," Alliance for Financial Inclusion, July 2014, 1, http://www.afi-global.org/sites/default/files/publications/afi_case_study_rwanda_finalweb.pdf.

45 Ibid.

46 Information available from downloadable Excel document associated with the 2014 Economist Intelligence Unit's "Global Microscope 2014: The enabling environment for financial inclusion," Sponsored by MIF/IDB, CAF, ACCION, and Citi, 2014, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014.

47 Ibid.

48 "Financial Inclusion in Rwanda" 2012, 1.

49 "Measurable Goals" 2014, 31.

50 "Financial Inclusion in Rwanda" 2012, 1.

51 "Global Microscope" 2014, 69.

52 Ibid.

53 Email correspondence with representative of the National Bank of Rwanda on February 11, 2015.

54 Ibid.

55 "Putting Financial Inclusion," 2014, 7.

56 "Measurable Goals" 2014, 31.

57 Ibid.

58 "Putting Financial Inclusion," 2014, 7.

59 Email correspondence with representative of the National Bank of Rwanda on February 11, 2015.

60 Email correspondence with representative of the National Bank of Rwanda on April 30, 2015.

61 Information available from downloadable Excel document associated with the 2014 Economist Intelligence Unit's "Global Microscope 2014: The enabling environment for financial inclusion," Sponsored by MIF/IDB, CAF, ACCION, and Citi, 2014, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014.

SOUTH AFRICA ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 "Financial inclusion" is defined in the FinScope South Africa report as "the proportion of the population using financial products and services – formal and informal." See "FinScope South Africa 2014," FinMark Trust, 2014, 2, http://www.finmark.org.za/wp-content/uploads/pubs/Broch_FS_SA_FNL.pdf. In contrast, some other entities, including the National Treasury (NT), only consider usage of formal financial service providers.

7 "South Africa: Highlights from the 2014 Survey," FinScope, FinMark Trust, 2014. http://www.finmark.org.za/finscope/consumer_south_africa/.

8 "FinScope South Africa 2014," FinMark Trust, 2014, 1, http://www.finmark.org.za/wp-content/uploads/pubs/Broch_FS_SA_FNL.pdf.

9 "FinScope South Africa 2014" 2014, 2.

10 Ibid.

11 "FinScope South Africa 2014 Consumer Survey," FinMark Trust, 2014, 21, http://www.finmark.org.za/wp-content/uploads/pubs/Pres_Finscope2014_FNL.pdf.

12 Under the FinScope definitions, of those who are financially included, formally served adults are those who "have/use financial products and/or services provided by a formal financial institution (bank and/or non-bank)," while informally served adults are those who "have/use financial products and/or services which are not regulated, e.g. farmer associations, savings clubs/groups, private money lenders." Banked adults are those "who have/use financial products and/or services provided by a commercial bank regulated by the central bank." The financially excluded are adults "who do not have/use any financial products and/or services – if borrowing, they rely only on friends/family; and if saving, they save at home." See "FinScope South Africa 2014" 2014, 4.

13 "FinScope South Africa 2014 Consumer Survey" 2014, 21.

14 "South Africa: Highlights from the 2014 Survey" 2014.

15 "Survey Highlights: FinScope South Africa 2014," FinMark Trust, 2014. http://www.finmark.org.za/finscope/consumer_south_africa/?title=FinScope%20Consumer.

16 "FinScope South Africa 2014 Consumer Survey" 2014, 25.

17 "South Africa," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

18 "South Africa," 2014 Global Financial Inclusion database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

19 "South Africa: Highlights from the 2014 Survey" 2014.

20 "FinScope South Africa 2014" 2014, 7.

21 Ibid.

22 Ibid.

23 "FinScope South Africa 2014 Consumer Survey" 2014, 26.

24 "FinScope South Africa 2014" 2014, 8.

25 "FinScope South Africa 2014 Consumer Survey" 2014, 26.

26 "FinScope South Africa 2014" 2014, 8. Note that the FinScope surveys are perceptual, which may lead to an under-reporting of certain financial activities (e.g., credit use).

27 "FinScope South Africa 2014" 2014, 6.

28 "Survey Highlights: FinScope South Africa 2012," FinMark Trust, 2012, 65, http://www.finmark.org.za/wp-content/uploads/pubs/FinScope_SA_Booklet_2012.pdf.

29 "FinScope South Africa 2014" 2014, 6.

30 "FinScope South Africa 2014 Consumer Survey" 2014, 51.

31 "South Africa," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

32 "FinScope South Africa 2014" 2014, 4.

33 "South Africa: Highlights from the 2014 Survey" 2014.

34 "FinScope South Africa Consumer Survey" 2014, 43.

35 "FinScope South Africa 2013 Consumer Survey," FinMark Trust, 2013, http://www.finmark.org.za/wp-content/uploads/pubs/Pres_FSSA_2013_excluding-videos2.pdf.

36 "FinScope SA 2013 Consumer Survey" 2013, 51.

37 "South Africa," Financial Access Survey (2013), 2014.

38 A registered agent outlet is one in which "one or several mobile money agents are contracted to facilitate transactions for users." An agent is a "person, quasi-corporation, corporation, or machine that facilitates mobile money account registration, CICO transactions, and customer support. Normally, they are registered with MMSPs and perform as agents of MMSPs on a commission basis." An active agent outlet is one that has "facilitated at least one transaction over the past 30 days." The number of active mobile money accounts per 1,000 adults is the "number of registered mobile money accounts that have been used to conduct mobile money or cash-in-cash-out (CICO) transactions over the past 90 days. Balance inquiries, PIN resets, and other transaction that do not constitute mobile money or CICO transaction should not qualify a customer account as active." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

39 "South Africa," Financial Access Survey (2013), 2014.

40 South Africa," 2014 Global Financial Inclusion database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

41 "South Africa," 2014 Global Findex, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

42 "South Africa," Mobile Money for the Unbanked (MMU) Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

43 Arthur Goldstuck, "Vodacom relaunches M-Pesa (again)," *Mail & Guardian*, 4 August 2014, http://mg.co.za/article/2014-08-04-vodacom-re-launches-m-pesa-again.

44 Goldstuck 2014.

45 Ibid.

46 Ibid.

47 "Vodacom's M-Pesa Relaunch is a Flop," *Mobile Money Africa,* May 2015, http://mobilemoneyafrica.com/content.php?id=2159.

48 "FinScope South Africa 2014 Consumer Survey" 2014, 9.

49 "FinScope South Africa 2013 Consumer Survey" 2013, 56.

50 Ibid.

51 "South Africa," 2014 Global Findex, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

52 "National Financial Inclusion Strategies Database," The World Bank, 2014, http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,contentMDK:23491959~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html.

53 "Alliance for Financial Inclusion (AFI) Official Member List," Alliance for Financial Inclusion, 4 March 2014, http://www.afi-global.org/library/publications/alliance-financial-inclusion-afi-official-member-list; Email correspondence with representative of the National Treasury on February 6, 2015.

54 "South Africa: Economic Update – Focus on Financial Inclusion," The International Bank for Reconstruction and Development and the World Bank, 2013, 33, http://www.worldbank.org/content/dam/Worldbank/document/Africa/South%20Africa/Report/south-africa-economic-update-2013.05.pdf.

55 "The Use of Financial Inclusion Data Country Case Study: South Africa: The Mzansi Story and Beyond," Prepared by The National Treasury, South Africa and the AFI Financial Inclusion Data Working Group on behalf of the Data and Measurement sub-group of the GPFI, January 2014, 3, http://www.gpfi.org/sites/default/files/documents/The%20Use%20of%20Financial%20Inclusion%20Data%20Country%20Case%20Study_South%20Africa.pdf.

56 "The Mzansi Story and Beyond" 2014, 8-9.

57 "The Mzansi Story and Beyond" 2014, 4.

58 According to a GPFI report, "LSM is the acronym for living standards measure, widely used in South Africa as an index of social welfare. It does not include but correlates closely with income. The higher the LSM, the higher the standard of living." LSM groups number 1–10. See "The Mzansi Story and Beyond" 2014, page 3, footnote 1.

59 "The Mzansi Story and Beyond" 2014, 6.

60 Email correspondence with representative of the National Treasury on May 4, 2015.

61 "FinScope South Africa 2014" 2014, 1.

62 "The Mzansi Story and Beyond" 2014, 4.

63 "The Mzansi Story and Beyond" 2014, 7.

64 "The Mzansi Story and Beyond 2014, 5.

65 "Global Financial Development Report 2014: Financial Inclusion," The World Bank, 2014, 1, http://siteresources.worldbank.org/EXTGLOBALFINREPORT/Resources/8816096-1361888425203/9062080-1364927957721/GFDR-2014_Complete_Report.pdf. Note: the 3.5 million figure may not include Postbank accounts.

66 "The Mzansi Story and Beyond" 2014, 5.

67 Ibid.

68 Ibid.

69 "Survey Highlights: FinScope South Africa 2012," FinMark Trust, 2012, 65, http://www.finmark.org.za/wp-content/uploads/pubs/FinScope_SA_Booklet_2012.pdf.

70 "Survey Highlights: FinScope South Africa 2012" 2012, 15.

71 "FinScope SA 2013 Consumer Survey" 2013, 54.

72 "FinScope SA 2013 Consumer Survey" 2013, 56.

73 "FinScope 2013 Consumer Survey" 2013, 57.

74 "FinScope South Africa 2014 Consumer Survey" 2014, 25.

75 "Regulation of Branchless Banking in South Africa," CGAP, 2010, http://www.cgap.org/sites/default/files/CGAP-Regulation-of-Branchless-Banking-in-South-Africa-Jan-2010.pdf.

76 Email correspondence with representative of the National Treasury of May 4, 2015.

77 Idongesit Williams, "Regulatory frameworks and implementation patterns for Mobile Money in Africa: The Case of Kenya, Ghana, and Nigeria," Paper presented at Ghana ICT Conference, Accra, Ghana, 2013, http://www.researchgate.net/profile/Idongesit_Williams/publication/236863291_Regulatory_frameworks_and_Implementation_patterns_for_Mobile_Money_in_Africa_The_case_of_Kenya_Ghana_and_Nigeria/links/00463519a65139bb70000000.pdf.

78 "FinScope South Africa 2014" 2014, 1.

79 "Notes on Regulation of Branchless Banking in South Africa," CGAP, February 2008, 5, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2012/06/notesonregulatingbranchlessbankinginsouthafrica.pdf.

80 "The Mzansi Story and Beyond" 2014, 9.

81 One of the challenges noted with measuring access to financial services by the type of provider is the variation of service provision by transaction point in South Africa — for example, some retailers in South Africa offer the equivalent of banking services, while others only offer direct store to store money transfers. See "Mzansi Story and Beyond" 2014, 8.

82 According to a representative of the National Treasury on May 4, 2015, the infrastructure for interoperable payment platforms is nearly in place, but industry standards must be agreed upon before interoperability can take effect.

TANZANIA ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 "Global Microscope 2014: The Enabling Environment for Financial Inclusion," Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION and Citi, 2014, 70, http://www.eiu.com/public/thankyou_download.aspx?activity=download&campaignid=microscope2014.

7 "Putting Financial Inclusion on the Global Map: 2013 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), 12 September 2013, 8, http://www.afi-global.org/library/publications/2013-maya-declaration-progress-report.

8 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," AFI, 9 September 2014, 33, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

9 "Tanzania," 2014 Global Financial Inclusion (Global Findex) database, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion.

10 "FinScope Tanzania 2013," 2013, 7, http://www.nbs.go.tz/nbs/takwimu/references/FinScope-Brochure-2013.pdf.

11 These statistics reflect the state of financial access on mainland Tanzania only. The data for 2009 was recalculated using the definitions prepared for the 2013 report. See "FinScope Tanzania 2013," 2013, 3, 6. Percentages of financial access/use within the 2013 FinScope "financial access strand" are mutually exclusive. See "FinScope Tanzania 2013," 2013, 7.

12 "Global Microscope" 2014, 71.

13 "Tanzania," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

14 A registered agent outlet is one in which "one or several mobile money agents are contracted to facilitate transactions for users." An agent is a "person, quasi-corporation, corporation, or machine that facilitates mobile money account registration, cash-in/cash-out (CICO) transactions, and customer support. Normally, they are registered with MMSPs and perform as agents of MMSPs on a commission basis." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

15 "Tanzania," Financial Access Survey (2013), 2014.

16 As of January 2015, information was not available for the number of active agent outlets in Tanzania in 2013. See "Tanzania," Financial Access Survey (2013), 2014.

17 "Tanzania," 2014 Global Financial Inclusion database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

18 "Tanzania: Quicksights Report FII Tracker Survey Wave 1," Financial Inclusion Insights, InterMedia, July 2014, http://finclusion.org/wp-content/uploads/2014/07/FII-Tanzania-Wave-One-Survey-QuickSights-Report.pdf.

19 Ibid.

20 Ibid.

21 Ibid.

22 "M-Money Channel Distribution Case – Tanzania," International Finance Corporation, 14 June 2010, 13, http://www.ifc.org/wps/wcm/connect/3aa8588049586050a27ab719583b6d16/Tool+6.8.+Case+Study+-+M-PESA,+Tanzania.pdf?MOD=AJPERES.

23 "FinScope Tanzania" 2013, 13.

24 The number of registered mobile money accounts is the "number of accounts with resident mobile money service providers (MMSPs) that are primarily accessed by mobile phones and are useable or have been used for mobile money transactions." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

25 The number of active mobile money accounts per 1,000 adults is the "number of registered mobile money accounts that have been used to conduct mobile money or cash-in-cash-out (CICO) transactions over the past 90 days. Balance inquiries, PIN resets, and other transactions that do not constitute mobile money or CICO transactions should not qualify a customer account as active." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

26 "Tanzania," Financial Access Survey (2013), 2014.

27 "FinScope Tanzania" 2013, 13.

28 "Global Microscope 2014" 2014, 70–71.

29 Jeffrey Riecke, "Interoperability Agreement Signed Between Leading Tanzanian Mobile Money Providers," Center for Financial Inclusion blog, 6 June 2014, http://cfi-blog.org/2014/06/06/interoperability-agreement-signed-between-leading-tanzanian-mobile-money-providers/.

30 Omoneka Musa, Charles Niehaus, and Martin Warioba, "How Tanzania Established Mobile Money Interoperability," Consultative Group to Assist the Poor (CGAP), 4 March 2015, http://www.cgap.org/blog/how-tanzania-established-mobile-money-interoperability.

31 "Airtel introduces cross-network money transfer services in Tanzania," *The Hindu Business Line*, 22 August 2014, http://www.thehindubusinessline.com/features/smartbuy/tech-news/airtel-introduces-crossnetwork-money-transfer-services-in-tanzania/article6341832.ece.

32 "Tanzania's Tigo launches interest-earning mobile money service," 11 September 2014, *Reuters,* http://www.reuters.com/article/2014/09/11/tanzania-tigo-telecomunications-idUSL1N0RB1BT20140911.

33 "Tigo and Zantel customers to enjoy 100% secure and reliable mobile money," 17 December 2014, http://www.tigo.co.tz/tigo-world/press-room/corporate/tigo-and-zantel-customers-enjoy-100-secure-and-reliable-mobile-money.

34 Musa, Niehaus, and Warioba 2015.

35 According to correspondence on April 16, 2015 with in-country experts, Airtel, Tigo, and Zantel were operational as of March 2015; Vodacom was expected to launch its service shortly.

36 "Vodacom, Tigo agree on mobile money interoperability," *Biztech Africa,* 25 February 2015, http://www.biztechafrica.com/article/vodacom-tigo-agree-mobile-money-interoperability/9785/#.VZ8V2CFVhHw.

37 Information provided by in-country independent financial inclusion consultant via email correspondence on July 1, 2015.

38 Lesego Motshegwa, "Tigo Launches World's First Cross Border Mobile Money Transfer," 24 February 2014, http://www.cnbcafrica.com/news/technology/2014/02/24/tigo-launches-world%E2%80%99s-first-cross-border-mobile-money-transfer/; Jennifer Frydrych, "The rise of mobile wallet-to-wallet cross-border remittance services: what's the opportunity?," Mobile Money for the Unbanked, GSMA, 22 May 2014, http://www.gsma.com/mobilefordevelopment/the-rise-of-mobile-wallet-to-wallet-cross-border-remittance-services-whats-the-opportunity.

39 "M-Pesa: Vodacom Tanzania, Safaricom Kenya connect on transfers," *Biztech Africa*, 9 March 2015, http://www.biztechafrica.com/article/m-pesa-vodacom-tanzania-safaricom-kenya-connect-tr/9843/#.VZ8RnCFVhHw.

40 "M-Money Channel Distribution Case — Tanzania" 2010, 13.

41 "Tanzania: Quicksights Report" 2014.

42 Ibid.

43 "FinScope Tanzania" 2013, 18.

44 Simone di Castri and Lara Gidvani, "Enabling mobile money policies in Tanzania," Mobile Money for the Unbanked, GSMA, February 2014, 8, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/03/Tanzania-Enabling-Mobile-Money-Policies.pdf.

45 "Why does Kenya lead the world in mobile money?," *The Economist*, 27 May 2013, http://www.economist.com/blogs/economist-explains/2013/05/economist-explains-18.

46 "M-Money Channel Distribution Case – Tanzania" 2010, 7.

47 "M-Money Channel Distribution Case – Tanzania 2010, 2.

48 "M-Money Channel Distribution Case – Tanzania" 2010, 9.

49 Gunnar Camner, Emil Sioblom, and Caroline Pulver, "What Makes a Successful Mobile Money Implementation? Learnings from M-PESA in Kenya and Tanzania," GSMA, 16 March 2009, 2, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2012/03/What-makes-a-successful-mobile-money-implementation.pdf.

50 "M-Money Channel Distribution Case – Tanzania" 2010, 10.

51 "M-Money Channel Distribution Case – Tanzania" 2010, 13.

52 "M-Money Channel Distribution Case – Tanzania" 2010, 10.

53 Simone Di Castri and Lara Gidvani, "Enabling mobile money policies in Tanzania," Mobile Money for the Unbanked, GSMA, February 2014, 8, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/03/Tanzania-Enabling-Mobile-Money-Policies.pdf.

54 "M-Money Channel Distribution Case – Tanzania" 2010, 13.

55 "Tanzania: Quicksights Report" 2014.

56 di Castri and Gidvani 2014, 9.

57 di Castri and Gidvani 2014, "Forward."

58 Ibid.

59 di Castri and Gidvani 2014, 2.

60 "Measurable Goals" 2014, 33.

61 Email correspondence with in-country experts on April 15, 2015.

62 Andrew Felix, "Government tables bill to curb electronic fraud," *IPP Media*, 24 March 2015, http://www.ippmedia.com/?l=78592.

63 "Global Microscope 2014," 2014, 71.

64 Ibid.

65 "Measurable Goals" 2014, 33.

66 Ibid.

67 Ibid.

68 Ibid.

69 Email correspondence with in-country independent financial inclusion consultant on July 1, 2015.

70 "Global Microscope 2014," 2014, 71.

71 "Measurable Goals" 2014, 33.

72 Claire Scharwatt, Arunjay Katakam, Jennifer Frydrych, Alix Murphy, and Nika Naghavi, "2014 State of the Industry: Mobile Financial Services for the Unbanked," GSMA, "Forward," http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/03/SOTIR_2014.pdf.

TURKEY ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 "Turkey: Financial Inclusion Conference," The World Bank – News, 3-4 June 2014, http://www.worldbank.org/en/events/2014/06/03/turkey-financial-inclusion-conference.

7 "Gross Domestic Product 2013," World Development Indicators database, World Bank, 14 April 2015, http://databank.worldbank.org/data/download/GDP.pdf; Ivan Kolesnikov, "World GDP Ranking 2015: Data and Charts," Knoema, 2015, http://knoema.com/nwnfkne/world-gdp-ranking-2015-data-and-charts.

8 Turkish Statistical Institute, 2013, http://www.turkstat.gov.tr/Start.do.

9 "Urban population (% of total)," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS.

10 Recep Yorulmaz, "Construction of a Regional Financial Inclusion Index in Turkey," 2013, 86, http://www.bddk.org.tr/websitesi/turkce/raporlar/bddk_dergi/12252makale4.pdf.

11 Yorulmaz 2013, 97.

12 "Global Microscope 2014: The enabling environment for financial inclusion," The Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION, and Citi, 40, 2014, http://www.eiu.com/public/topical_report.aspx?campaignid=microscope2014; "Financial Access, Financial Education, Financial Consumer Protection Strategy and Action Plans," Republic of Turkey Prime Ministry Undersecretariat of Treasury et al., June 2014, https://hazine.gov.tr/File/?path=ROOT%2F1%2FDocuments%2FGeneral+Content%2FFinancial+Inclusion.pdf.

13 "Focus on Inclusion: Measuring Financial Inclusion in Turkey," MicroFinance Centre (MFC), 2014, https://www.metlife.com/assets/cao/foundation/FocusInclusion_MeasuringFinancialInclusion-Turkey.pdf.

14 Ibid.

15 "Financial Access, Financial Education, Financial Consumer Protection Strategy and Action Plans," Republic of Turkey Prime Ministry Undersecretariat of Treasury et al., June 2014, https://hazine.gov.tr/File/?path=ROOT%2F1%2FDocuments%2FGeneral+Content%2FFinancial+Inclusion.pdf.

16 "Financial Access, Financial Education, Financial Consumer Protection Strategy and Action Plans," Republic of Turkey Prime Ministry Undersecretariat of Treasury et al., June 2014, 1, https://hazine.gov.tr/File/?path=ROOT%2F1%2FDocuments%2FGeneral+Content%2FFinancial+Inclusion.pdf.

17 Email correspondence with representative of the Undersecretariat of Treasury on April 17, 2015.

18 "Focus on Inclusion" 2014.

19 "Turkey," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

20 "Focus on Inclusion" 2014.

21 "Turkey," 2014 Global Financial Inclusion database (Global Findex), 2015, http://datatopics.worldbank.org/financialinclusion/.

22 Ibid.

23 Ibid.

24 Ibid.

25 "Focus on Inclusion" 2014.

26 Ibid.

27 "Turkey," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

28 "Turkey," Mobile Money for the Unbanked (MMU) Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

29 Ibid.

30 "Turkey," 2014 Global Financial Inclusion (Global Findex) database, The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

31 "Introduction," BKM Express, Undated, https://www.about-payments.com/knowledge-base/method/bkm-express.

32 Ibid.

33 Email correspondence with representative of the Undersecretariat of the Treasury on April 17, 2015.

34 "Maya Declaration Commitments," AFI, 2014, http://www.afi-global.org/maya-declaration-commitments.

35 "A Timeline of Achievement," Alliance for Financial Inclusion (AFI), 2013, http://www.afi-global.org/sites/default/files/publications/fisplg-timeline-achievement.pdf.

36 "Global Microscope" 2014, 40.

37 "About Financial Stability Committee," Republic of Turkey Prime Ministry Undersecretariat of Treasury, Undated, http://www.treasury.gov.tr/en-US/Pages/About-Financial-Stability-Committee?nm=682.

38 "About Financial Stability Committee."

39 Ibid.

40 "Financial Access" 2014.

41 "Financial Access," 2014, 4.

42 Email correspondence with representative of the Undersecretariat of Treasury on April 17, 2015.

43 "Financial Access" 2014, 3.

44 "Financial Access" 2014, 8.

45 "Global Microscope" 2014, 40.

46 "Law on Payment and Securities Settlement Systems, Payment Services and Electronic Money Institutions," Central Bank of the Republic of Turkey, 2013, http://www.tcmb.gov.tr/wps/wcm/connect/3deb8069-ce8d-4ba7-a31d-e075259aa60a/6493.pdf?MOD=AJPERES&CACHEID=3deb8069-ce8d-4ba7-a31d-e075259aa60a.

47 "Law on Payment and Securities Settlement Systems, Payment Services and Electronic Money Institutions," Central Bank of the Republic of Turkey, 2013, 11, http://www.tcmb.gov.tr/wps/wcm/connect/3deb8069-ce8d-4ba7-a31d-e075259aa60a/6493.pdf?MOD=AJPERES&CACHEID=3deb8069-ce8d-4ba7-a31d-e075259aa60a.

48 "Law on Payment and Securities Settlement Systems, Payment Services and Electronic Money Institutions," Central Bank of the Republic of Turkey, 2013, 7, http://www.tcmb.gov.tr/wps/wcm/connect/3deb8069-ce8d-4ba7-a31d-e075259aa60a/6493.pdf?MOD=AJPERES&CACHEID=3deb8069-ce8d-4ba7-a31d-e075259aa60a.

49 "Global Microscope" 2014, 40.

50 "Law on Payment" 2013, 11.

51 "Global Microscope" 2014, 40.

52 Email correspondence with representative of the Undersecretariat of the Treasury on May 5, 2015.

53 "Global Microscope" 2014, 40.

UGANDA ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 "Digital Pathways to Financial Inclusion: Findings from the Nationally Representative FII Tracker Survey in Uganda (Wave 1), Focus Group Discussions with Lapsed Users and Nonusers of Mobile Money, and Mobile Money Agent Research. Final Report," Financial Inclusion Insights, InterMedia, October 2014, 8, http://finclusion.org/wp-content/uploads/2014/03/FII-Uganda-Wave-One-Wave-Report.pdf.

7 "Global Microscope 2014: The Enabling Environment for Financial Inclusion," Economist Intelligence Unit, Sponsored by MIF/IDB, CAF, ACCION and Citi, 2014, 71, http://www.eiu.com/public/thankyou_download.aspx?activity=download&campaignid=microscope2014.

8 "Uganda: Digital Pathways to Financial Inclusion 2014 Survey Report," Financial Inclusion Insights, InterMedia, 2014, 5, http://finclusion.org/wp-content/uploads/2014/12/InterMedia-FII_Uganda_Year-2-Report.pdf; "Digital Pathways to Financial Inclusion: Findings from the Nationally Representative FII Tracker Survey in Uganda (Wave 1)" 2014, 7.

9 The 2014 InterMedia survey states that an account holder is "an individual who has a registered bank or mobile money digital account." See "Uganda: Digital Pathways to Financial Inclusion 2014 Survey Report," Financial Inclusion Insights, InterMedia, 2014, 79, http://finclusion.org/wp-content/uploads/2014/12/InterMedia-FII_Uganda_Year-2-Report.pdf.

10 "Uganda: Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]," Financial Inclusion Insights, InterMedia, 2014, 6, http://finclusion.org/wp-content/uploads/2014/12/InterMedia-FII_Uganda_Year-2-Report.pdf.

11 "Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]" 2014, 7.

12 "Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]" 2014, 71.

13 "Uganda," The World Factbook, Central Intelligence Agency, 2015, https://www.cia.gov/library/publications/the-world-factbook/geos/ug.html.

14 "Mobile Money in Uganda: Use, Barriers, and Opportunities," Financial Inclusion Insights Tracker Project, InterMedia, October 2012, 32, http://www.microfinancegateway.org/sites/default/files/mfg-en-paper-mobile-money-in-uganda-use-barriers-and-opportunities-oct-2012.pdf.

15 "Uganda," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

16 Ibid.

17 "Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]" 2014, 13.

18 "Uganda" 2014 Global Financial Inclusion database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

19 Ibid.

20 "Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]" 2014, 7.

21 "Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]" 2014, 63.

22 Ibid.

23 Ibid.

24 "Uganda," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

25 "Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]" 2014, 22.

26 Ibid.

27 Ibid.

28 Ibid.

29 "Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]" 2014, 7.

30 According to the 2014 Global Financial Inclusion (Global Findex) Database, a mobile money account "denotes the percentage of respondents who report personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months; or receiving wages, government transfers, or payments for agricultural products through a mobile phone in the past 12 months (% age 15+)." See http://datatopics.worldbank.org/financialinclusion/.

31 "Uganda" 2014 Global Financial Inclusion database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

32 "Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]" 2014, 42.

33 "Uganda," Mobile Money for the Unbanked (MMU) Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

34 "Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]" 2014, 45.

35 A registered agent outlet is one in which "one or several mobile money agents are contracted to facilitate transactions for users." An agent is a "person, quasi-corporation, corporation, or machine that facilitates mobile money account registration, cash-in/cash-out (CICO) transactions, and customer support. Normally, they are registered with MMSPs and perform as agents of MMSPs on a commission basis." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

36 "Uganda," Financial Access Survey (2013), 2014.

37 "Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]" 2014, 44.

38 Kimathi Githachuri, Mike McCaffrey, Leena Anthony, Annabel Lee, Anne Marie van Swinderen, and Graham A. N. Wright, "Agent Network Accelerator Survey: Uganda Country Report 2013," Helix Institute of Digital Finance, January 2014, 9, http://helix-institute.com/sites/default/files/Publications/Agent%20Network%20Accelerator_Uganda%20Country%20Report%202013.pdf.

39 "Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]" 2014, 39.

40 "Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]" 2014, 42.

41 "Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]" 2014, 41.

42 "Mobile Money Use in Uganda" 2012, 19.

43 "Digital Pathways to Financial Inclusion: Findings from the Nationally Representative FII Tracker Survey in Uganda (Wave 1)" 2014, 8.

44 "Digital Pathways to Financial Inclusion: Findings from the Nationally Representative FII Tracker Survey in Uganda (Wave 1)" 2014, 11.

45 Annabel Schiff, "Mobile Money Agents in Uganda: Sprinting ahead, but the marathon's not yet over," Helix Institute of Digital Finance, 7 March 2014, http://helix-institute.com/blog/mobile-money-agents-uganda-sprinting-ahead-marathon%E2%80%99s-not-yet-over.

46 "Global Microscope" 2014, 72.

47 Olga Morawczynski, "Fraud in Uganda: How Millions Were Lost to Internal Collusion," CGAP, 11 March 2015, http://www.cgap.org/blog/fraud-uganda-how-millions-were-lost-internal-collusion.

48 "Digital Pathways to Financial Inclusion: Findings from the Nationally Representative FII Tracker Survey in Uganda (Wave 1)" 2014, 12.

49 "Digital Pathways to Financial Inclusion: Findings from the Nationally Representative FII Tracker Survey in Uganda (Wave 1)" 2014, 13.

50 Hillary Nsambu, "Govt dragged to court over mobile money tax," *New Vision,* 17 July 2014, http://www.newvision.co.ug/news/657714-govt-dragged-to-court-over-mobile-money-tax.html.

51 Derrick Kiyonga, "Citizen sues government over mobile money tax," *The Observer,* 22 July 2014, http://www.observer.ug/index.php?option=com_content&view=article&id=32918:-citizen-sues-government-over-mobile-money-tax&catid=38:business&Itemid=68.

52 "New excise hikes Uganda bank charges," *East African Business Week*, 31 August 2014, http://www.busiweek.com/index1.php?Ctp=2&pI=1753&pLv=3&srI=68&spI=107&cI=10.

53 "Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]" 2014, 12.

54 "Digital Pathways to Financial Inclusion: Findings from the Nationally Representative FII Tracker Survey in Uganda (Wave 1)" 2014, 8.

55 "Digital Pathways to Financial Inclusion: Findings from the Nationally Representative FII Tracker Survey in Uganda (Wave 1)" 2014, 13.

56 "Digital Pathways to Financial Inclusion 2014 Survey Report [Year 2]" 2014, 8.

57 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), 9 September 2014, 34, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

58 "The Registration of Persons Bill, 2014," Parliament Watch Uganda, Updated 26 February 2015, http://parliamentwatch.ug/bills/the-registration-of-persons-bill-2014/.

59 Samuel Sanya, "Ugandans in the Diaspora given 7 days for national ID registration," *New Vision*, 23 April 2015, http://www.newvision.co.ug/news/667393-ugandans-in-the-diaspora-given-7-days-for-national-id-registration.html.

60 "Digital Pathways to Financial Inclusion: Findings from the Nationally Representative FII Tracker Survey in Uganda (Wave 1)" 2014, 12.

61 "Maya Declaration Commitments," Alliance for Financial Inclusion, Undated, http://www.afi-global.org/maya-declaration.

62 "Putting Financial Inclusion on the Global Map: 2013 Maya Declaration Progress Report," Alliance for Financial Inclusion, 12 September 2013, 39, http://www.afi-global.org/library/publications/2013-maya-declaration-progress-report.

63 "Measurable Goals" 2014, 34.

64 "Financial Inclusion Project," Bank of Uganda, Undated, https://www.bou.or.ug/bou/supervision/Financial_Inclusion/Financial_Inclusion_Project.html.

65 "Measurable Goals" 2014, 34.

66 "Financial Inclusion: Key Facts Documents," Bank of Uganda, Undated, https://www.bou.or.ug/opencms/bou/supervision/Financial_Inclusion/Key_Facts_Docs.html.

67 Stefan Staschen, "Mobile Money Moves Forward in Uganda Despite Legal Hurdles," CGAP, 9 March 2015, http://www.cgap.org/blog/mobile-money-moves-forward-uganda-despite-legal-hurdles.

68 Ibid.

69 Ibid.

70 Ibid.

71 "Measurable Goals" 2014, 9, 34.

72 "Digital Pathways to Financial Inclusion: Findings from the Nationally Representative FII Tracker Survey in Uganda (Wave 1)" 2014, 12.

73 Information provided by a representative of the Bank of Uganda in email correspondence on July 2, 2015.

74 "Digital Pathways to Financial Inclusion: Findings from the Nationally Representative FII Tracker Survey in Uganda (Wave 1)" 2014, 12.

75 Moses Walubiri, "Central Bank governor wants mobile money business regulated," *New Vision*, 26 February 2015, http://www.newvision.co.ug/news/665306-central-bank-governor-wants-mobile-money-business-regulated.html.

76 "Measurable Goals" 2014, 34.

77 Ibid.

78 Edward Kayiwa, "Expedite agency banking law – Sudhir urges govt," *New Vision,* 29 April 2015, http://www.newvision.co.ug/news/667625-expedite-agency-banking-law-sudhir-urges-govt.html.

79 "Digital Pathways to Financial Inclusion: Findings from the Nationally Representative FII Tracker Survey in Uganda (Wave 1)" 2014, 13; Data available from spreadsheet associated with the 2014 Economist Intelligence Unit "Global Microscope on Financial Inclusion" report, downloadable at http://www.eiu.com/public/thankyou_download.aspx?activity=download&campaignid=microscope2014.

80 Email correspondence with representative of the Consultative Group to Assist the Poor on July 17, 2015.

ZAMBIA ENDNOTES

1 See 2013 World Bank World Development Indicators data used for this indicator, available at http://data.worldbank.org/data-catalog/world-development-indicators.

2 Indicator calculated using 2013 World Bank World Development Indicators data, available at http://data.worldbank.org/data-catalog/world-development-indicators.

3 According to the GSMA, a unique mobile subscriber is considered a "single individual that has subscribed to a mobile service and that person can hold multiple mobile connections (i.e. SIM cards)." See https://gsmaintelligence.com/research/2014/05/measuring-mobile-penetration/430/. Data is up to date as of the first quarter of 2015. See the GSMA Intelligence database, available (with subscription) at https://gsmaintelligence.com/.

4 According to the World Bank, this indicator "denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSM Association (GSMA) Mobile Money for the Unbanked (MMU) service in the past 12 months (% age 15+)." See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

5 See 2014 World Bank Global Financial Inclusion database data, available at http://datatopics.worldbank.org/financialinclusion/.

6 "Financial Sector Development Plan for Zambia: 2004-2009 (Executive Summary)," Ministry of Finance and National Planning, Republic of Zambia, May 2004, i, http://www.boz.zm/FSDP/ExecutiveSummary.pdf.

7 "Zambia," The World Factbook, Central Intelligence Agency, 2015, https://www.cia.gov/library/publications/the-world-factbook/geos/za.html.

8 "Zambia," The World Factbook 2014.

9 Michael Malakata, "Africa mobile operator gets World Bank funding to offer finance apps," 22 August 2014, http://www.pcadvisor.co.uk/news/mobile-phone/3539338/africa-mobile-operator-gets-world-bank-funding-to-offer-finance-apps/.

10 Malakata, "Africa mobile operator," 2014.

11 Audrey Linthorst, "Zambia Map of Financial Inclusion: National efforts tackle financial inclusion goals," Microfinance Information Exchange (MIX), August 2013, http://www.themix.org/publications/mix-microfinance-world/2013/08/zambia-map-financial-inclusion-national-efforts-tackle-financial-inclusion-goals.

12 "Key Findings," FINclusion Lab, MIX, 2014, http://finclusionlab.org/country/Zambia/analytics.

13 Linthorst 2013.

14 Ibid.

15 "Zambia," FinScope, 2015, http://www.finmark.org.za/finscope/consumer_zambia/?title=FinScope%20Consumer.

16 "FinScope Zambia 2009," FinScope, 2009, http://www.boz.zm/FSDP/FinScope_Zambia_Brochure.pdf.

17 "Opening Remarks by Dr. Michael Gondwe, Bank of Zambia Governor: Women's Access to Financial Services in Zambia – Dissemination and Consultation Conference," 24 June 2014, http://www.boz.zm/(S(jzw3zy55wxx53b45vvlod5fk))/%5Cpublishing%5CSpeeches%5CGovernors_Remarks_Women_Conference_2014_AWES.pdf; Email correspondence with representative of the Bank of Zambia on May 15, 2015.

18 "Finscope Zambia" 2009.

19 "Putting Financial Inclusion on the Global Map: 2013 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), 12 September 2013, 40, http://www.afi-global.org/library/publications/2013-maya-declaration-progress-report.

20 "Zambia," 2014 Global Financial Inclusion database (Global Findex), The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

21 "Zambia," Financial Access Survey (2013), International Monetary Fund, 2014, http://fas.imf.org/Default.aspx.

22 "Zambia," World Development Indicators (2014), The World Bank, 2015, http://data.worldbank.org/data-catalog/world-development-indicators.

23 "Zambia," Mobile Money for the Unbanked (MMU) Deployment Tracker, GSMA, May 2015, http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/insights/tracker.

24 "MTN to integrate MTN Mobile Money with all banks by next month," *Lusaka Times,* 2 August 2014, http://www.lusakatimes.com/2014/08/02/mtn-integrate-mtn-mobile-money-banks-next-month/.

25 An active agent outlet is one that has facilitated at least one transaction over the past 30 days. See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

26 "Zambia," Financial Access Survey (2013), 2014.

27 A registered agent outlet is one in which "one or several mobile money agents are contracted to facilitate transactions for users." An agent is a "person, quasi-corporation, corporation, or machine that facilitates mobile money account registration, cash-in/cash-out (CICO) transactions, and customer support. Normally, they are registered with MMSPs and perform as agents of MMSPs on a commission basis." See "Explanatory Notes," International Monetary Fund, http://fas.imf.org/misc/Explanatory_Notes.pdf.

28 "Zambia," Financial Access Survey (2013), 2014.

29 Linthorst 2013.

30 "Zambia," Financial Access Survey (2013), 2014.

31 Malakata, "Africa mobile operator," 2014.

32 "Zambia," 2014 Global Findex, The World Bank, 2015, http://datatopics.worldbank.org/financialinclusion/.

33 Ibid.

34 "Financial Sector Development Plan for Zambia: 2004-2009 (Executive Summary)," Ministry of Finance and National Planning, Republic of Zambia, May 2004, iv, vi-vii, http://www.boz.zm/FSDP/ExecutiveSummary.pdf.

35 "Opening Remarks by Dr. Michael Gondwe, Bank of Zambia Governor: Women's Access to Financial Services in Zambia - Dissemination and Consultation Conference," Bank of Zambia, 24 June 2014, 7, http://www.boz.zm/(S(jzw3zy55wxx53b45vvlod5fk))/%5Cpublishing%5CSpeeches%5CGovernors_Remarks_Women_Conference_2014_AWES.pdf.

36 "Zambia: Bank of Zambia - Financial Sector Development Plan," FIRST Initiative, 2003, http://www.firstinitiative.org/Projects/projectdisplay.cfm?iProjectID=162.

37 Norbert Mumba, "Collaborating with Multiple Stakeholders to Measure Financial Inclusion - the Case for Zambia," Published by the Alliance for Financial Inclusion (AFI), 29 March 2011, http://www.afi-global.org/sites/default/files/fidwg_collaboratingstakeholders_zambia_mumba_0.pdf.

38 "FinScope Zambia" 2009.

39 "Opening Remarks" 2014, 8.

40 Mumba 2011.

41 "Improving Financial Inclusion in Zambia: Remarks by Dr. Caleb Fundanga, Governor of the Bank of Zambia, at the Celpay Mobile Banking Conference, Lusaka, 16-17 September 2009," September 2009, 2, http://www.bis.org/review/r090922c.pdf.

42 "Putting Financial Inclusion on the Global Map," 12 September 2013, 8.

43 "Measurable Goals with Optimal Impact: 2014 Maya Declaration Progress Report," Alliance for Financial Inclusion (AFI), 9 September 2014, 34, http://www.afi-global.org/sites/default/files/publications/2014_maya_declaration_progress_report_final_low_res.pdf.

44 "Measurable Goals" 2014, 34.

45 "Putting Financial Inclusion" 2013, 40.

46 "Measurable Goals" 2014, 34.

47 Email correspondence with representative of the Bank of Zambia on May 15, 2015.

48 "Caleb M. Fundanga: Zambia's Financial Sector Development Plan," Welcome remarks by Dr. Caleb M Fundanga, Governor of the Bank of Zambia, at the Financial Sector Development Plan (FSDP) Phase II Consultative Meeting, Lusaka, 20 October 2009, 2, http://www.bis.org/review/r091026e.pdf.

49 "Measurable Goals" 2014, 34.

50 Email correspondence with representative of the Bank of Zambia on May 15, 2015.

METHODOLOGY ENDNOTES

1 For long-form citations for specific publications (e.g., the Alliance for Financial Inclusion's "2014 Maya Declaration Progress Report: Measurable Goals with Optimal Impact"), please consult the relevant endnotes section.

2 We follow the Alliance for Financial Inclusion's definition, which includes "all commitments on electronic payments, mobile financial services, and agent banking." See "Measurable Goals" 2014, 5.

3 "Digital Financial Services Working Group (DFSWG)," Alliance for Financial Inclusion, Undated, http://www.afi-global.org/about-us/how-we-work/about-working-groups/digital-financial-services-working-group-dfswg.

4 Robin Newnham, "Financial Inclusion Strategies: Global Trends and Lessons Learnt from the AFI Network," Presented in Bogota, Colombia, 28-29 April 2014, 13, http://www.afi-global.org/sites/default/files/publications/nationalstrategies.pdf.

5 Martin Cihak and Parabal Singh, "An Analysis of National Financial Inclusion Strategies," All About Finance Blog, The World Bank, 2 December 2013, http://blogs.worldbank.org/allaboutfinance/analysis-national-financial-inclusion-strategies.

6 For this indicator, data is taken from the end of the first quarter of 2015.

7 "How do you forecast unique subscribers?," GSMA Intelligence, Undated, https://gsmaintelligence.com/help/172/.

8 All GSMA MMU Deployment Tracker data for mobile capacity indicators was current as of May 12, 2015.

9 Consistent with the GSMA's consideration of enabling mobile money environments, we consider regulatory landscapes in which mobile network operators are permitted to lead mobile money services directly, through a dedicated subsidiary, as a payments bank (or equivalent), or through a letter of no-objection to the non-bank or its partner bank, to constitute an "enabling" environment (note that the GSMA has additional criteria relating to cash-in/cash-out at agents, interoperability, and capital requirements). Therefore, countries that fit these criteria are awarded a 3 for this indicator. See http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/03/SOTIR_2014.pdf, page 71. As noted in the "Dimensions of evaluation" section of the 2015 FDIP report, we recognize that there are many non-bank mobile money providers beyond simply mobile network operators (MNOs); however, since data shows that leadership of MNOs is generally associated with the faster growing deployments, we focus on MNOs for the purposes of this study. See http://www.gsma.com/mobilefordevelopment/is-regulation-holding-back-financial-inclusion-a-look-at-the-evidence and http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2578312.

10 Kabir Kumar and Michael Tarazi, "Interoperability in Branchless Banking and Mobile Money," Consultative Group to Assist the Poor, 9 January 2012, http://www.cgap.org/blog/interoperability-branchless-banking-and-mobile-money-0.

11 For the purposes of this study, we consider proportionate "know-your-customer" processes to be such requirements that may be relaxed depending upon the level of perceived risk posed by the customer. The Financial Action Task Force states that a "progressive" know your customer/customer due diligence (CDD) approach allows transaction/payment limits to vary based on the level of documentation available from the customer confirming his/her identity. See "Anti-money laundering and terrorist financing measures," Financial Action Task Force Guidance, June 2011, 27, http://www.fatf-gafi.org/media/fatf/content/images/AML%20CFT%20measures%20and%20financial%20inclusion.pdf.

12 In this example, the subranges are equal; however, for instances where this was not the case, the subranges were adapted so that the subranges at the high and low ends of the overall range were equal, while the middle subrange was slightly wider. See the individual indicator descriptions for further details.

13 2014 Global Findex data for this indicator was not available for Tanzania or Ethiopia. Our approach to missing numerical data was to assign the respective countries a composite indicator score comprising the average of all country scores for the indicator — therefore, for the percentage of wage earners who used a mobile phone to receive their salary or wages, Tanzania and Ethiopia each received a score of 1.

14 2014 Global Findex data for this indicator was not available for Malawi. As noted above, our approach to missing numerical data was to assign the respective countries a composite indicator score comprising the average of all country scores for the indicator — therefore, for the percentage of adults who used a mobile phone to make utility payments (among adults who regularly made bill payments), Malawi received a composite score of 1.

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