MOBILE MONEY: LEADING THE WAY IN FINANCIAL INCLUSION

Mobile money is a pay-as-you-go digital medium of exchange and store of value using mobile money accounts which is typically offered by a mobile network operator (MNO) or another entity in partnership with an MNO. It has had a profound impact on the way people access finance, particularly in countries without deep banking penetration and with poor infrastructure.

Mobile money offers a novel way to access financial services, especially for individuals who do not have access to traditional banking services, as the only requirement is a basic mobile phone. Customers need to register with a mobile money agent to obtain an individual virtual account linked to their mobile phone number and accessible through a SIM card. Users can carry out financial transactions—including making peer-to-peer transfers, bill payments, in-store purchases, remittances and savings—across mobile money accounts through the data messaging channel. In select countries, microcredit is also offered via mobile money. Studies suggest that, as mobile money reaches scale, new and enhanced services including credit and insurance may be offered through this channel on a larger scale (GSMA, 2018a).

BOX. Mobile money is different from mobile wallets and mobile banking

There is an important distinction between mobile money and other digital financial services such as mobile banking and mobile wallets. The latter two are linked to traditional bank accounts while mobile money is not.

- **Mobile banking** is the use of an application on a mobile device to access and execute banking services, such as check deposits, balance inquiry, and payment transfers.

- **Mobile wallet** consists mainly of an application installed on a mobile device, such as a smart phone, which stores credit/debit card information, coupons, or bank account information and enables customers to make in-store purchases, online payments, peer-to-peer transfers etc.
MOBILE MONEY DEVELOPMENTS IN AND BEYOND EASTERN AFRICA

After initial success in Kenya, Tanzania and Uganda (see Table 1), mobile money has spread beyond East Africa. M-Pesa—launched in Kenya in March 2007 by Safaricom (part of the Vodafone group)—now has almost 30 million users in 10 countries (Monks, 2017). There are now 276 live mobile money services across the world with over 689 million registered mobile money accounts and 5.3 million registered mobile money agents (GSMA, 2017a).

<table>
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<tr>
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<th>Value of mobile money transactions during the reference year (percentage of GDP)</th>
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<tbody>
<tr>
<td></td>
<td>Kenya</td>
</tr>
<tr>
<td>2009</td>
<td>23</td>
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<tr>
<td>2013</td>
<td>44</td>
</tr>
<tr>
<td>2017</td>
<td>47</td>
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Note: For Tanzania the latest data shown is for 2015. Source: Financial Access Survey and IMF staff calculations.

Other parts of the African continent are fast catching up (see Figure 1). One of the biggest drivers of mobile money in West Africa is Ghana where the number of registered and active mobile money accounts has grown fivefold and elevenfold, respectively, between 2013 and 2017.

While mobile money growth shows no sign of ebbing in Sub-Saharan Africa, other regions of the world are not far behind. South Asia showed the highest growth in mobile money accounts in 2017 and constitutes 34 percent of all registered
accounts globally (GSMA, 2017a, see Figure 2). Bangladesh, Indonesia, Pakistan, and Philippines are some examples of countries experiencing high mobile money growth in Asia.

**FIGURE 2. Registered mobile money accounts by regions (Number per 1,000 adults)**

Source: Financial Access Survey and IMF staff calculations.

**GROWING IMPORTANCE OF MOBILE MONEY IN FRAGILE STATES¹**

Mobile money has proven to be a viable alternative to formal financial services in fragile states—where achieving financial inclusion is challenging. Currently, more than half of the 42 fragile states have mobile money services. In these states, on average, for every commercial bank branch there are close to 47 mobile money agents, providing the population an additional way to access finance (see Table 2).

**TABLE 2. Reach of mobile money in fragile states is wider than banks**

<table>
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<th>Fragile states where the ratio of mobile money agents to commercial bank branches are the highest</th>
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<tr>
<td>Guinea</td>
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<tr>
<td>Papua New Guinea</td>
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<tr>
<td>Zimbabwe</td>
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<td>Mali</td>
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<td>Guinea Bissau</td>
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<td>Togo</td>
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</table>

Source: Financial Access Survey and IMF staff calculations.

Note: Data for Papua New Guinea is from 2015, rest from 2017.

¹ The IMF defines fragile states (FS) as having either weak institutional capacity measured by the World Bank Country Policy and Institutional Assessment (CPIA) score (average of 3.2 or lower) and/or experience of conflict ( signaled by presence of a peace-keeping or peace-building operation in the most recent three-year period).
Moreover, the growth in mobile money agents in these areas far exceeds the growth in traditional financial access points like bank branches. In fragile states, from 2015 to 2017, while the number of commercial bank branches per square kilometer remained less than 2, the number of mobile money agents per square kilometer increased from 18 to 27. This increase in fragile states corresponds to a growth rate of 50 percent, compared to 16 percent in non-fragile states.

In addition, between 2015 and 2017, mobile money accounts in these states almost doubled while the value of money transactions carried out on these accounts have grown by more than three times (see Figure 3).

**FIGURE 3. Uptake of mobile money in fragile states has accelerated**

![Graph showing the growth of mobile money accounts and transactions in fragile states](source)

*Source: Financial Access Survey and IMF staff calculations. Note: Data includes 16 fragile states reporting these two indicators to the FAS.*

**THE DRIVERS BEHIND THE RISE OF MOBILE MONEY**

**Efficiency and safety for users**

Drivers behind the rapid up-take of mobile money include a relatively safe and affordable store of value and means of funds transfer. Mobile money can also facilitate efficient informal risk-sharing networks—by enabling timely transfers of small amounts of money among family/community members in times of financial distress. This in turn allows households to smooth their consumption and make more efficient investment decisions (Jack and Suri, 2011).
Public sector efficiency gains
Governments in several countries are also increasingly relying on mobile payment services because of its low-cost nature (see IMF, 2017). For example, in 2016, the Government of Liberia partnered with Mobile Solutions Technical Assistance and Research (mSTAR), a USAID program, to disburse teacher’s salary through mobile money. The initial pilot in Nimba County showed the potential to reduce costs and travel time by 84 percent (USAID, 2017). The mobile money salary payment program has since been adopted by several ministries in the country, including health and education.

The widespread use of mobile money in Kenya has also in part been supported by government efforts, such as digitizing payments for government services. Research shows that more than 90 percent of transactions on eCitizen—the official government payment platform in Kenya—are made using mobile money (GSMA, 2017b).

Targeted policies to promote mobile money and safeguard financial stability
Some countries have also adjusted the regulatory environment to promote the use of mobile money. For example, in Ghana, the central bank issued new guidelines on agents permitting MNOs under central bank supervision, to own and operate mobile money networks. This likely provided greater incentives for MNOs to make crucial investments and recruit agents (Mattern, 2018). Indeed, the aforementioned rapid growth in mobile money accounts in Ghana seems to have been supported by regulations enabling wide network of mobile money agents.

As mobile money continues to expand, governments must also strengthen their consumer protection and regulatory frameworks to maintain financial stability. In fact, several countries, including Kenya, Myanmar and Jordan, are already balancing the benefits of fast-growing mobile money use with new regulations requiring formal authorization of new services providers and holdings of 100 percent of mobile money liabilities in liquid assets (GSMA, 2018b).
ABOUT MOBILE MONEY DATA IN FAS

The Financial Access Survey (FAS) is a supply-side dataset on access to and use of financial services, including mobile money. The FAS started collecting data on mobile money in 2014. The source of the mobile money data is administrative data obtained from the regulators of mobile money service providers. The FAS is the only global database that collects and disseminates annual mobile money data at the country-level. Currently, there are close to 90 economies in which mobile money services are available (GSMA, 2017a), out of which 66 report data to the FAS.

The FAS is currently supported by the IMF's Data for Decisions (D4D) Fund, which was launched in June 2018.

REFERENCES


This note was prepared under the supervision of Kazuko Shirono by Esha Chhabra and Bidisha Das of the Financial Institutions Division of the IMF's Statistics Department.