3 A survey of financial services through mobile phones

Mobile money represents a stunning breakthrough in the goal of expanding financial inclusion across the developing world (see section 2). However, as of now, most mobile money offerings are limited to simple money transfer functions, falling far short of the menu of personal financial services enjoyed by formal bank customers.

At the Brookings Blum Roundtable, participants agreed that the potential impact of mobile money on poverty reduction and economic development could be further enhanced by expanding the range of financial services available through mobile phones. Progress is expected to occur as the mobile money sector matures and continues to innovate, supported by the spread of improved technologies such as smartphones, near-field communication and biometric identification. Here we take stock of progress in the application of mobile money to the provision of four financial services: savings, credit, insurance and international remittances.

Savings

Mobile money systems provide customers with the means for safely storing money in a cashless form. Given that most low-income customers lack access to formal savings products, mobile money accounts have been harnessed as an informal substitute. However, operators are typically precluded from offering interest on mobile money deposits by financial regulations, which limit this activity to the formal banking sector. The formation of interest-bearing mobile savings accounts instead requires a partnership between one or more mobile operators and banks. For instance, M-Kesho, a mobile-based interest-bearing account created through a partnership between Safaricom and Equity Bank in Kenya, has established 700,000 personal accounts with $8 million in deposits. Such partnerships, in theory, could provide a mechanism for bringing mobile money customers into the formal banking system and enabling greater inoperability between the mobile money system and the broader non–cash economy. However, this depends on new business models emerging from the banking sector and its willingness to serve the base of the pyramid.

One of the advantages of building mobile-based savings products is the possibility of using technology to induce saving behavior through customer-driven design and the application of simple nudges. Experian MicroAnalytics, a firm with experience developing mobile money tools, found that the most effective savings products supported clients in meeting their own specified savings goals.[10]

Credit

A lack of access to affordable credit is perceived as one of the most significant constraints to escaping poverty. Informal credit services for the poor usually come with exorbitant interest charges. These reflect the personal interaction required, and thus the high transaction cost, of effective debtor monitoring that is necessary to maintain low rates of default.

Photo: © Bill & Melinda Gates Foundation

A mother and child stand near a mobile banking vehicle in Michinji village, approximately 120km west of the capital Lilongwe, Malawi.

Mobile money has many potential ways of reducing the transaction costs incurred in credit services for the poor (cashless payments and repayments, SMS reminders) but it faces a significant challenge in replicating the personal aspect of credit services. Future options could include using mobile money agents as collection agents or employing new technologies such as biometric identification tools; but for now, these business models remain unproven. An experiment from the Philippines found that SMS reminders boosted repayments by microborrowers only when the loan officer's name was identified in the text, providing further evidence of the significance to debtor psychology of knowing their creditor.[11]

One fruitful development is the possibility of using mobile phone activity records as a basis for issuing credit scores. In a precommercial pilot developed by Cignifi, the Inter-American Development Bank and the mobile operator Oi Telecom in Brazil, it was shown that a single month of activity records from prepay mobile customers provided sufficient information to discriminate both the risk of credit default and customers' interest in credit services.[12]

Insurance

As is the case with savings, mobile money provides an informal, albeit incomplete, mechanism for allowing customers to insure themselves against shocks by enabling reciprocal transfers among interpersonal networks of customers. This has been vividly demonstrated by the flows of transfers entering the western Lake Kivu region of Rwanda following the 2008 earthquake,[13] and into Nairobi following the postelection violence in 2007–8.[14] Research has demonstrated that M-Pesa customers are better able to absorb shocks and smooth consumption than households that do not use the service.[15]

More recently, a number of promising formal insurance

Cash is a constraint to development-esp for millions who are not near a bank. Mobile money remove that barrier. #blum2012

Photo by Alex Irvin

"I think the power of this device and of mobile technology to accelerate development goals and gains is as powerful and has as much potential as a tool as anything I've seen in my lifetime maybe next to vaccines."

— **Neal Keny Guyer** @nealkg
Chief Executive Officer, Mercy Corps

services have been launched through mobile money. Indeed, mobile money is at the vanguard of the expansion of micro-insurance in Sub-Saharan Africa. Successful offerings have been able to harness mobile customer activity records, both to assess customer risk and to tailor products to customers' needs. They have also taken advantage of the reduced transaction costs made possible through mobile-based sales and the trust bestowed on mobile operators by customers, which is a critical factor in driving demand for insurance at the base of the pyramid.

Among the most notable examples of mobile money insurance are Kilimo Slama crop insurance in Kenya, which employs weather stations to monitor rainfall and determine when payouts are to be made; and Tigo Family Care life insurance in Ghana, which is enabling households to protect themselves against the exceptionally high funeral costs unique to that country.

An interesting development among mobile money insurance providers in Tanzania, Pakistan, the Philippines and Ghana is the launch of promotions that reward high-activity mobile customers with free insurance over a given period. These promotions are predicated on the intuition that these same customers are low risk and important to operators' bottom line.

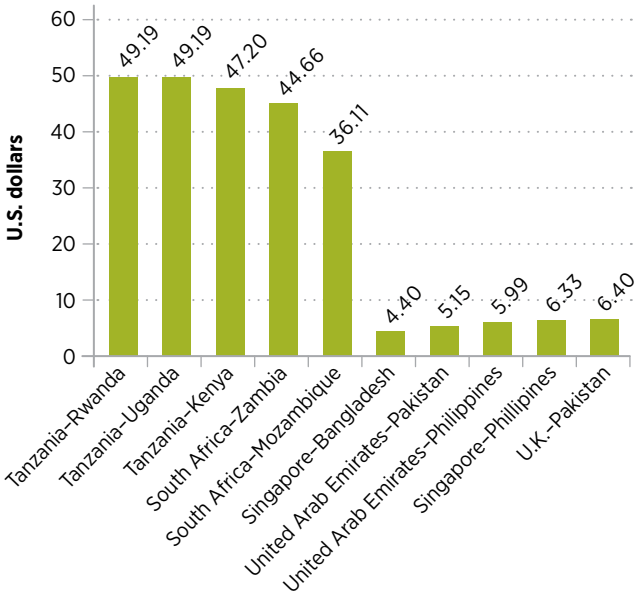
International Remittances

Mobile money has the potential to significantly reduce the cost of international remittances, as well as to increase access. The goal of reducing the cost of international remittances has been identified by both the Group of 8 and Group of 20, demonstrating its importance to global development objectives. Average global costs today are 8.96 percent (of the transfer value) and 12.4 percent for remittances to Africa. The cost of sending money across the Tanzania-Kenya border was nearly 10 times the price of sending money from the United Kingdom to Pakistan in 2011.

About one in five mobile money operators around the world offers international remittance services, in some cases in partnership with traditional money transfer operators such as Western Union. However, most of these services remain limited and have yet to drive down costs significantly.

A number of obstacles stand in the way of the development of this service. Chief among these is the prevalence of cumbersome regulations of international remittances in most countries. As with the payment of interest, the right to transact international remittances is typically limited to banks. Furthermore, remittances are subject to stringent rules to prevent money laundering and the financing of terrorism.

The Most and Least Expensive Remittance Corridors



Source: World Bank (http://remittanceprices.worldbank.org).
Note: Data is for Q3 2011.