The mobile money revolution in Kenya: Can the promise be fulfilled?

A core component of financial wellbeing is the ability to deal with unexpected events. Such events are a fact of life in developing economies like Kenya, where often up to a third of households in any given year will experience a sickness, drought, floods, theft, or the death of a loved one. Add to this the fact that when both government safety nets and private insurance options are limited, such unexpected events can be devastating. In Kenya, as is well documented for other parts of the developing world, individuals rely on their friends and family to provide them with some form of insurance when risks materialize. These arrangements are quite simple — individuals agree to help others (usually via a transfer of cash) in their social networks often with an expectation that they will be helped when the tables turn. Although such informal arrangements are extremely valuable, they are far from efficient.

One of the main sources of inefficiency is high transaction costs. For individuals in a social network to be able to insure each other, money has to exchange hands. Prior to mobile money, a large share of money transfers happened either in person or by bus, both extremely costly ways to send money. When money is anchored to cash and cash movements are anchored to physical channels, the spatial distribution of social networks through which financial flows are possible, is limited. It implies that individuals largely share risk among friends or family who live close to them — this is not efficient as people who live close together are likely to face some of the same unexpected events, for example a drought in a farming community, and in such situations will be unable to insure each other.

The advent of M-PESA in Kenya led to a large reduction in transaction costs, giving individuals access to relatively cheap, reliable and instant money transfer services. William Jack and Tavneet Suri document these reductions in transaction costs and their impacts on households across Kenya in a number of studies with data they collected between 2008 and 2014. In 2008, the average distance a transaction travelled was over 200 km, which was a KShs 460 bus ride (the cost via M-PESA was KShs 3S). As a result of the reduction in costs of sending and receiving money across distance, households that use (or have access to) M-PESA are better able to deal with unexpected events. The per capita consumption for households that do not use M-PESA falls by 7 percent when their household is hit by a negative shock. On the other hand, M-PESA users are able to maintain consumption levels steady in the aftermath of shocks. This capacity to absorb financial shocks is stronger for households in the bottom three quintiles of the wealth distribution in Kenya.

Looking at mechanisms, remittances, rather than savings, are the main pathway for these effects: M-PESA users are more likely to receive remittances and receive higher value transactions from a wider variety of people who are located further away. Mobile money users are therefore able to reach deeper into their networks when in need of informal insurance after a shock. After episodes of illness, households that use M-PESA are able to increase spending on food and non-food subsistence, while maintaining education expenditure. Households without access to M-PESA on the other hand, are unable to increase food expenditure, and instead decrease non-food subsistence and education expenses to cover the necessary medical expenses. This reduction in education expenses may have longer term negative consequences for these households.

Mobile money has influenced the welfare of households and is shaping the emergence of a new financial economy in Kenya. Although M-PESA has led to large reductions in transaction costs, there is room for further reductions in transaction costs that would benefit Kenyan households. As is often the case, the next reductions in transactions costs will also be harder to achieve, and will require new innovations and new investments.