Banking for the **2**00,

State-of-the-art financial offerings for the developing world.

"INTERNATIONAL ECONOMY

THE MAGAZINE OF INTERNATIONAL ECONOMIC POLICY 888 16th Street, N.W. Suite 740 Washington, D.C. 20006 Phone: 202-861-0791 Fax: 202-861-0790 www.international-economy.com editor@international-economy.com

BY IGNACIO MAS

n sub-Saharan Africa, four out of five people do not have access to any kind of formal financial service, neither savings nor credit. The picture is better in South Asia: only three out of five people in the region lack access. The Middle East, North Africa, and Latin America are all somewhere in between (two-thirds don't have access), despite being substantially richer than South Asia.

There is much literature arguing how the absence of formal savings and credit services limits the ability of poor households and microentrepreneurs to smooth their expenditures, absorb shocks, and invest in their futures. Less attention is paid to the need by people and businesses at the base of the pyramid for payment or money transfer services. Such transactions are the building blocks of financial services, so fulfilling people's payments needs should help address the yawning gap in access to finance.

THE FUTURE OF MOBILE TRANSACTIONS IS HERE

Imagine if every business or individual in a developing country had a convenient way of making small payments instantly to anyone, anywhere in their country. This payment might be to a distant relative in need, a utility to settle a bill, a supplier or employee, or a financial service provider to park some money in an account or to repay a loan. This payment could be made directly from a mobile

Ignacio Mas is Deputy Director of Financial Services for the Poor with the Bill & Melinda Gates Foundation.

MAS

phone, or, if cash first needed to be loaded into the account, from one of several neighborhood stores. The service would be easy to use, affordable, and secure. The system would be similar to how mobile prepaid works, but a lot more flexible: any stored prepaid balance would be freely transferable to anyone; it could be used to buy anything and not just airtime; and it could be converted back into cash at those same outlets where prepaid value was loaded.

Far-fetched? Not at all. Remember that mobile operators have a version of this system running in every country. In Kenya, for instance, those who buy a prepaid card can make a "deposit" of cash with a value of as little as fifteen U.S. cents into their airtime accounts at any of more than 100,000 outlets across the country; they can then transfer the airtime to anyone else. If such a narrow proposition centered exclusively around airtime works for mobile operators, why not build a broader, more flexible proposition that works for any type of payment or financial service?

Safaricom has gone beyond its prepaid airtime offering and built such a system in Kenya. Just over three years after its commercial launch, their M-PESA mobile store-ofvalue and transfer service is now used by almost 50 percent of the population, who among themselves do more transactions than Western Union does globally, and who are able to perform full cash in and out at 20,000 participating stores nationwide.

That's happening in a country where only 19 percent of the population was banked in 2006, prior to M-PESA's launch. Imagine the financial education and technology literacy that goes with half the population now making remote payments and storing money privately and securely using their mobile phones.

We can draw two big lessons from the Kenyan experience. On the supply side, universal financial service provision is possible by leveraging infrastructures that already exist. There is no business case for banks to build branches and ATMs everywhere. But the economics can be made to work if neighborhood stores are used by poor people every-

Think of electronic micropayment platforms as a massive engine for social,

business, and financial innovation.



where to conduct basic financial transactions, if technology based on real-time communications is used to make those transactions reliable and secure, and if providers rely on people's own mobile phones to initiate transactions rather than on distributing dedicated equipment such as cards and pointof-sale terminals.

On the demand side, individuals' need to transfer value within family, social, or business networks is second only to the need to communicate with each other. It might take a while to get there, but in the end the mobile transactions wave will be no less momentous than the current mobile voice tidal wave.

A PLATFORM FOR INNOVATION At the base of the pyramid

The principal early-use case promoted by M-PESA was to enable intra-family remittances, driven by the "send money home" marketing tagline. But more businesses have begun to use M-PESA. Entrepreneurs operating in a cash economy or serving poor customers who are entirely cash-based face two key challenges. First, making remote payments is inconvenient and expensive, since physical cash is costly to move. Difficulties with making remote payments limit the size of markets in which entrepreneurs can participate, either to source inputs or to sell their products. Second, cash transactions are not traceable, giving rise to more opportunities for misappropriation of funds by employees or business associates.

If a mobile (micro-) payments system is in place, entrepreneurs are able to launch businesses without worrying about costly cash collection, disbursement, transport, and reconciliation processes. They wouldn't need to send someone to collect money from customers, or to send goods to Imagine if every business or individual in a developing country had a convenient way of making small payments instantly to anyone, anywhere in their country.

customers ahead of receiving payment. The entrepreneur could retain direct control over who gets paid for what, when, why, and he or she would have instant tracking of how much each customer paid.

Moreover, electronic payments are a natural entry point for business management software, which can help micro-entrepreneurs optimize and grow their businesses. Centralizing all payment transactions facilitates recordkeeping and provides real-time access to data on the business. One can imagine the emergence of resellers bundling the payment capability offered by a system like M-PESA with specialized software for running specific business segments.

In addition to serving as a platform for business innovation, efficient mobile transactions can also support innovation in financial services. Financial institutions would be able to package transactions profitably into savings, loans, and insurance products. Currently, many avoid marketing such products to the base of the pyramid because of the high cost of collecting and disbursing small amounts of cash. Microfinance would have a much more solid economic footing.

Banks have a long tradition of product innovation. Some even argue, in light of the recent global financial crisis, that their zeal for innovation is excessive. But at the base of the pyramid, banks' segmentation tends to be rudimentary and products are often inflexible or outright unsuitable for the poor (such as high minimum account balances). The lack of a business case is holding back much-needed product innovation. Banks find little incentive to experiment with new products if marketing and channel costs make the promotion of such products unviable. The best way to unleash the necessary diversity in financial services for the poor is to construct a sufficiently low-cost delivery platform that makes it worthwhile for financial institutions to innovate.

Think of electronic micropayment platforms as a massive engine for social, business, and financial innovation. Government and public entities—often the biggest payers and collectors—could operate more efficiently, and would have the tools to combat corruption at all levels. There would be less leakage in the distribution of social benefits and pensions. For these reasons, universal access to electronic payments ought to be a key policy objective.

REBUILDING CASH ECOSYSTEMS

This is not a vision of a cashless society. There is no reason to expect people to relinquish cash for uses for which it is well-suited, especially in-store payments and hoarding of small balances. Poor people who are today mired in a cash economy would be the last ones to want to dispense with cash.

But as the same time, the poor cannot efficiently make payments. Banks find them too costly as customers to want to serve them, and thus the poor are not building up financial histories that can help with access to credit. What poor people in developing countries need are readily available mechanisms to exchange cash for electronic value and vice versa. That is a key purpose of banking infrastructure such as branches and ATMs, which many poor communities lack.

Paradoxically, enabling mobile transactions does not eliminate cash but rather brings it closer to where people live. Local stores can now be equipped cheaply to offer deposit and withdrawal services securely for both customers and banks.

With M-PESA, we have seen many stores in rural villages flourish because villagers can collect remittances from urban relatives, pick up government welfare payments, or draw on their savings right in their village. The extra liquidity at the village level enhances local commercial activity, which before was diverted to the bigger towns.

ADAPTING BANKING REGULATION

Typical banking regulations need to be adapted in order to enable this vision of banking beyond bank branches. New technology solutions create new ways of addressing risks, and some older regulation has become obsolete. While branchless service is still globally in its early stages, regulation should focus on enabling commercial experimentation with a range of new models while ensuring that basic, commonplace banking risks are addressed. There are four key areas for regulatory action.

First, retail outlets acting as cash merchants on behalf of banks need not create financial risk for either the customer or the bank as long as the system operates on a purely prepaid basis, that is, if all customer transactions are undertaken against the store's own account and transactions are authorized in real time by the bank. There is no need for regulators to prescribe which stores can and cannot be cash merchants, much less to authorize them individually.

Second, the systems needs tiered know-your-customer (KYC) requirements, which allow for immediate opening of small-sized, entry-level accounts at authorized non-bank outlets. Customers who are new to banking don't need extra barriers. Then, as they develop bigger and broader financial needs, they can be asked to perform progressively tougher KYC tests.

Third, there should be a class of e-money or "narrow bank" licenses that allows non-banks (such as mobile operators) to operate money transfer and store-of-value services under strict investment, segregation of funds, and capital structure rules. All public monies they raise would need to be backed 100 percent by assets in prudentially regulated banks, so in effect all schemes must be ultimately bank-based.

Fourth, despite the "branchless banking" label, regulation still needs to be friendly towards continued penetration of branches in the territory. While retail outlets may handle the bulk of cash transactions on behalf of a bank's poorer customers, these outlets will still need somewhere to go to in order to deposit excess cash and access liquidity. In the new cash ecosystem, retail outlets handle the last mile, but banks still do the long haul. Bank branches will thus retain a role as cash distribution nerve centers in support of the bank's nonbank retail outlets located in their catchment area.

In this vision of the future, financial service providers would find it much more cost-effective to collect and disburse small amounts of cash, whether as part of a savings plan or a loan, from poor people. Their customers could build demonstrable records of savings and transactions which would help banks better assess their creditworthiness. Microentrepreneurs would be able to lower cash management and collection costs. And people generally would be able to pay for services and support each other much more conveniently and affordably, using access to the basic tools of banking and payments.