

McKinsey on Payments

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Forging a path to payments digitization

Across the globe, payment systems vary widely in efficiency, especially in emerging economies where cash payments dominate and infrastructure is often under development. In China, Russia and India, for example, cash in circulation amounts to 11 to 13 percent of GDP—as compared to about 7 percent in the United States and 4 percent in the United Kingdom—and cash payments make up more than 90 percent of all transactions. The social cost of cash to these economies—that is, the total cost carried by all stakeholders—is high. Moving to a digital payments market can curtail expenses for banks, governments and merchants; stimulate economic growth; and facilitate financial transparency in emerging and developed economies alike.

Governments, banks, bank associations, central banks and other stakeholders in the payments industry—such as retailers, companies and consumers—must work together to plot a path toward a best-in-class payments system that will promote economic growth. Their efforts should begin with a systematic “war on cash.”

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The cost of cash

An economy dogged by a high percentage of cash payments faces a host of disadvantages. First, a low percentage of electronic payments hampers the productivity of a banking system. Almost 30 percent of the productivity gap between the Russian and North American banking systems, for example, can be attributed to the low percentage of electronic payments in Russia. Second, a

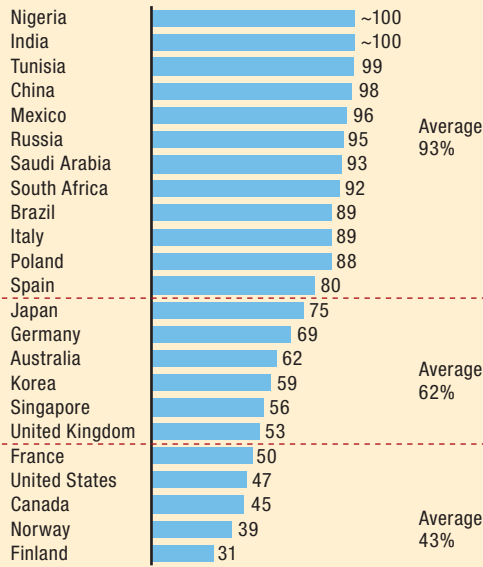
prevalence of cash often allows an “informal” or “shadow” economy—one that is not taxed, monitored by government, or included in the GDP—to grow or dominate. International comparisons show a clear correlation between cash usage in the economy and the size of the shadow economy (Exhibit 1, page 4). Third, non-bank players may take advantage of a population’s lack of trust in their unstable payments system to develop expen-

Exhibit 1

High cash usage perpetuates a shadow economy and hinders the evolution of a digital economy

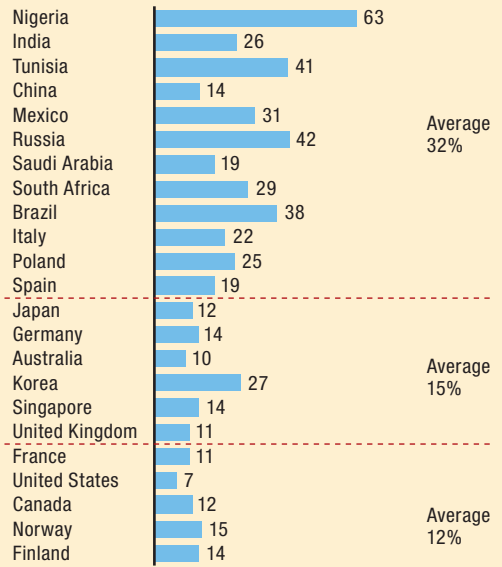
Cash transactions

Total 2011 transaction volume
Percent



Shadow economy

Estimated shadow economy
Percent of GDP



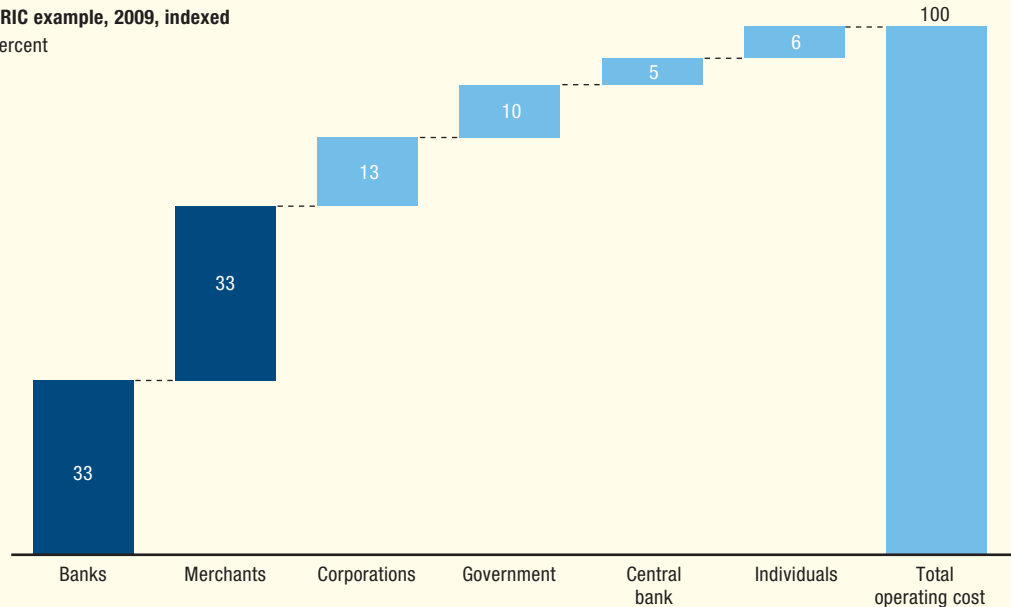
Source: McKinsey Payments Practice; BIS; Friedrich Schneider papers

Exhibit 2

Cash generates a social cost, carried mostly by banks and merchants

Share of operational cost of cash

BRIC example, 2009, indexed
Percent



Source: McKinsey analysis

sive, proprietary networks that fall outside of normative financial controls, rendering the system even less efficient and thus more costly for users.

Major stakeholders in these payments systems often exacerbate the problem. Often, a significant share of salaries, pensions and other benefits are still paid in cash. Even bill payment and tax collection mechanisms fail to leverage efficient, remote instruments such as direct debit or online bill payment. Furthermore, the infrastructure for accepting electronic payments (e.g., point-of-sale terminals) remains poorly developed and underused.

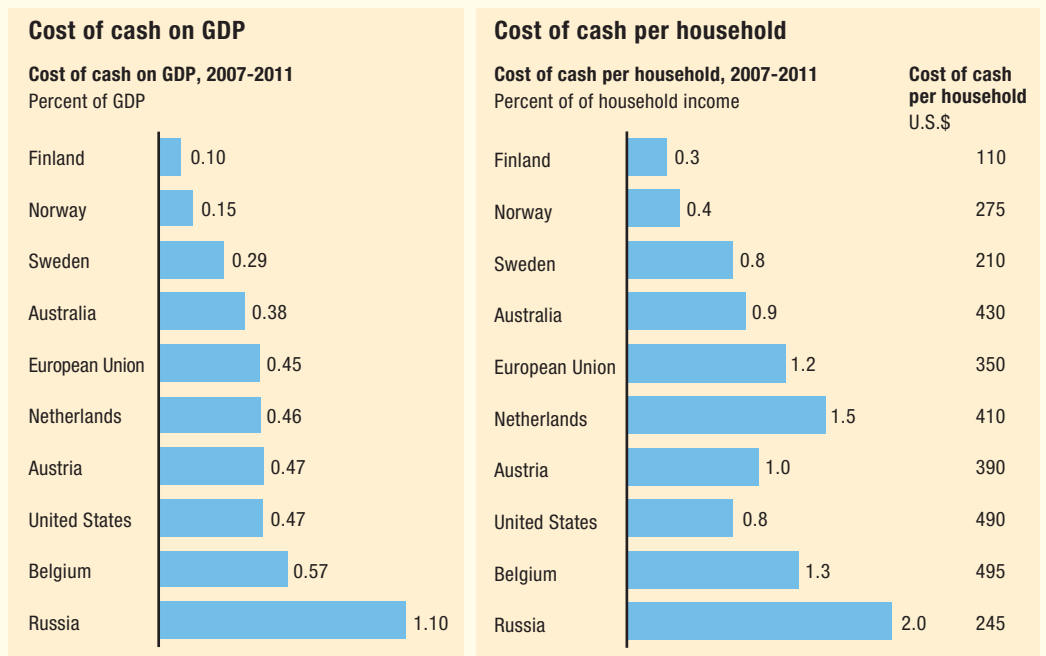
Cash also exacts an invisible but very real cost on households, businesses and government budgets. Though these costs are borne mostly by banks and merchants, a direct as well as indirect burden is passed on to busi-

nesses, government and households (Exhibit 2). In fact, the cost of cash to countries with a high rate of cash use can exceed 1 percent of GDP, and the annual cost per household may total as much as 2 percent of income (Exhibit 3).

The operational cost of cash includes the direct expense of producing, collecting, storing and safeguarding it; counterfeiting costs; and the time spent processing cash payments in merchant tills, business back offices, government agencies and banks. While banks and merchants directly incur most of these costs, the economy bears them indirectly in the form of fees, foregone interest, higher consumption prices and reduced corporate dividends. Add in revenues lost to the cash-driven informal economy, along with the drag on domestic production arising from corporations' having to allocate re-

Exhibit 3

Countries with a high rate of cash usage bear a higher social cost of cash, exceeding 1% of GDP



Source: McKinsey Global Payments Map

sources to inefficient cash-related business, and the burden of cash on developing economies become clear.

Toward a national digital payments strategy

Though the cost of cash is becoming increasingly clear, payments systems are changing slowly, because preferences are deeply rooted and provincial. A national strategy for a more digital payments market must incorporate three major phases (Exhibit 4): 1) a long-term plan for discouraging cash use; 2) improvement in the efficiency of the payments infrastructure; and 3) new solutions (e.g., e-invoices and micropayments). In this article we focus on the first phase: reducing the preeminence of cash.

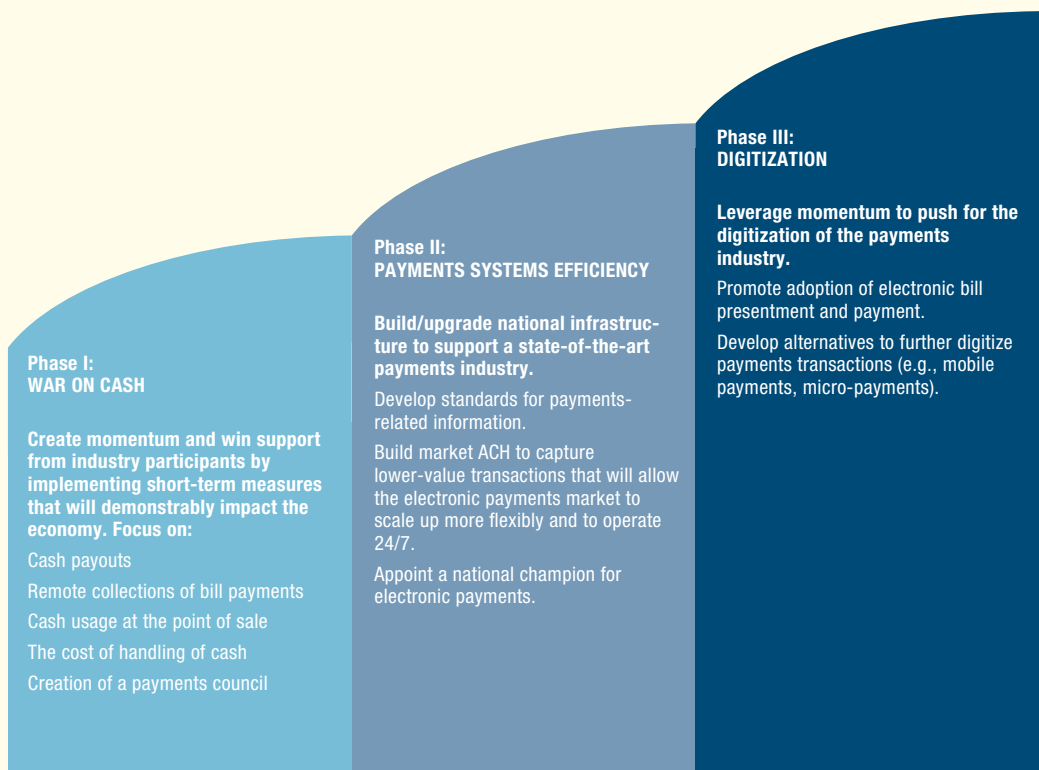
Combating cash: Success stories

An economy bent on curbing cash can start by alleviating the inefficiencies associated with it. Taken together, five actions could reduce the cost of cash by as much as 26 percent, while also increasing tax revenues by siphoning money from the informal economy into state budgets:

- Reduce cash pay-outs. If corporations and governments paid all salaries, social benefits and pensions through bank accounts or prepaid cards, the cost of handling cash in corporate front and back offices would fall, as would the amount of money languishing in corporate vaults or under the proverbial mattress. Two countries have recently taken this route. For three years,

Exhibit 4

Roadmap for a national payments strategy



Source: McKinsey analysis

the Brazilian government has been issuing social security and welfare benefits through prepaid social cards, resulting in an annual 10 percent increase in benefits paid electronically. In Italy, prepaid cards are now issued to pensioners who once received their allowances in cash. This initiative has boosted the usage of electronic payments and has alleviated security risks for both the recipients and the post office that delivers the pensions.

- Promote the remote collection of bill payments. In today's emerging markets, much of the populace stands in line to pay bills and invoices at corporate, government or banking offices. Promoting the use of electronic payments (through cards and direct debits, for example) at all organizations would drive down the cost of collection, as corporations would save collection and reconciliation costs, theft and fraud would decrease, and collection would be expedited. Efforts in Brazil and Saudi Arabia demonstrate the short-term impact of such measures. Brazil's Authorized Direct Debit system allows payment obligations that are issued through payment slips for individuals and enterprises—such as property tax payments, condominium payments, club payments, health plan premiums and tuition payments—to be received electronically. From its launch in September 2009 through November 2010, this initiative has generated 207 million cashless transactions. The Saudi Arabian Monetary Agency's SADAD Payment System serves as the national electronic bill presentment and payments service provider. SADAD's objective is to streamline billing collection by creating a single connection platform to funnel con-

sumers' bill payments through all channels. Since SADAD's creation in 2003, the number of cashless transactions has grown by 30 percent annually.

- Discourage the use of cash at the point of sale. Merchant acceptance of cards and consumer card use at the point of sale (POS) could be bolstered through a combination of incentives (e.g., a fund for payments innovation, a value-added tax cut) and legal obligations (e.g., requiring card acceptance by merchants of a certain size, placing a cap on cash payments). The incentives would lighten the operational burden merchants assume when they agree to accept cards, while also curtailing check-out time and thereby increasing shopping time, spending and customer satisfaction. In an attempt to shrink its informal economy, South Korea is encouraging card use through a 2 percent value-added tax (VAT) reduction on all card transactions for merchants and for 20 percent of total card spending by individuals (where fiscally deductible). The South Korean government also audits merchants who refuse to install card terminals and ensures that no extra fees are charged at the POS to prevent card usage. These measures doubled the number of card acceptance terminals at the POS—from 6 million in 1999 to 12 million in 2001—and drove up card transactions by 101 percent in 2001 and 69 percent in 2002. The government's VAT income from card transactions grew to more than 1.7 billion euros in 2001. Meanwhile, Mexico's largest banks have created a fund to provide POS terminals at relatively low fees to smaller merchants. Mexican regulators, too, have helped to drive massive

growth in electronic payments by supporting these initiatives and pushing for transparent tariffs. These efforts have multiplied the number of cashless POS transactions by more than 430 percent between 2002 and 2008, for an annual growth of 32 percent. Several countries—including France, Turkey, Greece, Italy, Sweden, Norway and the Netherlands—have imposed caps on cash payments, require merchants to issue receipts for each transaction, and have allowed merchants to refuse cash as a payment form to compel the use of cards at the POS. These measures have made fiscal controls easier and have allowed merchants to make major changes to gain efficiency.

Central banks in Canada, Norway and Australia have set up cooperative arrangements with banks and cash-handling companies to increase operational efficiency and cost transparency.

- Encourage efficient, transparent cash handling. Strengthening the standard requirements for cash transportation and storage—and even pooling resources—can dramatically improve the efficiency of cash operations. Stricter standards must assure adequate security and maintenance, and the real cost of cash should be charged to the initiator of these costs. The latter measure would encourage not only the responsible use of cash reserves, but also better allocation of industry resources. Finland has significantly reduced cash handling costs by 32 million euros—

twice as much as the initial target of 16 million euros—by creating a single, centralized entity responsible for the full value chain of cash. At the same time, the country has boosted card use from 23 percent of transactions in 1999 to 60 percent in 2007, thanks to a coordinated effort among all actors to design an efficient card system to replace cash. In parallel, the Finnish payments industry has imposed a strict but transparent charging mechanism that reflects the effective cost of cash. Charging corporations for deposits quickly diminished their preference for cash, especially given the competitive pricing of debit cards. Central banks in Canada, Norway and Australia have set up cooperative arrangements with banks and cash-handling companies to increase operational efficiency and cost transparency in cash-handling. In doing so, all three countries have not only curtailed costs, but have made these costs transparent to users throughout the economy.

- Build a structure to coordinate the transition to electronic payments. A comprehensive national cash project requires market-wide cooperation and commitment. A “National Payments Council” could work to engage, organize and align all relevant stakeholders and to win market-wide support for payments transformation—even beyond the short-term war on cash. Several countries—among them Canada, Australia, the United Kingdom and South Africa—have established such a council to drive policy development, self-regulation and standards development. Hong Kong and Singapore have created national technology bodies to promote

and operate innovative micropayments. The Netherlands and the European Union have created payment boards in which all stakeholders cooperate to bring more efficiency into the payments system.

Waging a war on cash can spur an economy toward digitization but is not enough to attain a truly digital payments market. Markets will also require a national payments infrastructure that supports a fully electronic payments industry and that facilitates new solutions for the digital economy.

Getting started

Preparing a cash-based economy for an efficient digital future is not an overnight undertaking. Arguably mature markets in Europe and North America embarked on the journey more than a decade ago and still have much ground to cover. An economy at any stage of development, though, can begin to lay the foundation for conversion to an electronic payments system by setting up constructive debate among stakeholders and outlining a clear path to national transformation. These fundamental building blocks will benefit banks, consumers, corporations and the government alike in the long term.

Plans will vary by market, but here are a few pointers for success:

- Establish a shared vision for the long term. While cooperative actions are not

necessarily needed, stakeholders should share a common understanding of the ultimate goal: a fully electronic, efficient payments system.

- Base plans on local reality, not on broad international maxims. Every market is different and has different needs; solutions can vary widely.
- Build on real facts, not beliefs or dreams. Stakeholders should have a solid grasp of current usage, needs and margins in the existing payments system.
- Be pragmatic. A successful conversion to an electronic payments system starts with profitable steps in the right direction, not with the unrealistic expectation of solving all payments problems.

While the best path to the payments market of the future will be unique to each market, the efforts will share one thing in common: The conversion to electronic payments systems is a long process, requiring years of coordinated hard work by multiple actors in the economy.

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