Access to Cash: The First Step toward Financial Inclusion

Produced by the ATM Industry Association

Contributor:

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Foreword

Saving for the unexpected can be sound advice for anyone. Having money provides security and allows people to harness value for future prosperity. A bank account can increase savings, consumption and investment, satisfying basic needs and providing for innovation and job creation. However, financial services remain out of reach to 2 billion people around the world. The reasons for financial exclusion abound, including poverty, distrust of banks and an urban/rural divide. Approaches to bringing the excluded into the fold of finance have evolved over the years, from subsidizing bank branches in remote areas to enabling individuals and small to medium enterprises to execute transactions by mobile phone.

International organizations in tandem with policymakers now look to active penetration of mobile payment systems when devising financial inclusion plans. However, as users rely on them primarily for conducting transactions, rather than for storing value, these systems alone have not proven as effective in providing the level of stability policymakers had hoped for.[1] If Kenya, and other cases like it, are any indicator, cash will continue to play a central role in people's lives, even in areas where financial exclusion is eradicated. Cash remains embedded in cultures around the world. When disaster or crises emerge, people trust cash as a store of value. Above all, it is a means of payment that can be used by absolutely anyone at any time.

As financial inclusion continues to weigh heavily on national and international agendas, a thoughtful, comprehensive outlook must guide policy so that the measures put in place do not undermine the goal of bringing security and prosperity to the financially excluded.

This paper seeks to highlight the ways in which cash continues to be important for the communities targeted by financial inclusion policies and to show why further efforts should conserve and promote the use of cash.

[1] *Financial Inclusion: A Financial Industry Perspective*, (Institute of International Finance)

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Executive Summary

An estimated 2 billion adults worldwide live without a bank account, according to the World Bank. Unable to provide financial security for themselves or their families, this vulnerable "unbanked" part of the population relies primarily on cash for survival. As policymakers, banks, non-governmental organizations and private sector actors come together to eradicate financial exclusion, careful consideration must be given to the needs of the communities most affected by it. Cash will, and should, remain a vital part of the transition from exclusion to inclusion.

As part of its broader goal of eliminating poverty, the United Nations has defined financial inclusion as:

> Universal Access, at a reasonable cost, to a range of financial services for everyone needing them, provided by a diversity of sound and sustainable institutions.

Most of the financially excluded are poor and reside in developing countries.

By far, the greatest barrier to having a bank account most often cited by the financially excluded is a lack of sufficient funds. Other reasons for exclusion include living in an underserved rural area, the inability to prove one's identity and lack of financial literacy. Over 200 million micro, small and medium-sized businesses also lack access to basic bank accounts and adequate financing.

Aid to the impoverished has traditionally consisted in delivering commodities or vouchers that restrict payments to a list of specific goods. Today, organizations like Give Directly are leading a new trend towards direct cash transfers in humanitarian aid, empowering those in need to provide for themselves in the ways they know best. Innovations in electronic payments are also enhancing the efficiency of remittances, an even larger source of aid than the humanitarian sector. Above all, these cash transfers result in more value for the local economy than in-kind aid, and thus help reduce poverty in the long term.

In addition, traditional financial institutions fail to reach a large portion of those living in rural or remote areas, where issues such as underdeveloped infrastructure or geographical obstacles prevent dependable delivery of services. Fortunately, promising solutions to these problems have emerged in the form of mobile payment systems, like M-Pesa in Kenya, as well as new schemes to raise the presence of automatic teller machines (ATMs) in these underserved areas.

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Many are barred from financial access due to their lack of proof of identity. Although large-scale efforts are underway to improve the prevalence of documentation throughout the world, cash allows these individuals to continue to freely support themselves and their families without any strings attached.

Expanding access to cash also addresses the substantial challenges faced by the financially illiterate when handling money. Those without education in basic financial concepts or who cannot perform abstract calculations count on physical banknotes as a tool to measure value for their households and small businesses.

Financial exclusion only reinforces the marginalization of those who suffer from these more entrenched social problems.

Cash is universal and, therefore, cannot be ignored in financial inclusion efforts going forward. It is accepted everywhere and can be used by anyone, regardless of ethnicity, age or socioeconomic background. Even in the context of the proliferation of digital payment systems, cash persists.

An examination of the M-Pesa mobile payment system in Kenya shows that, while it has brought transactions and remittances to previously neglected portions of the population, far from replacing cash as some may have expected, it has contributed to making access to cash easier.

Other cases in the UK, Brazil and the Philippines show that there is still great promise for promoting inclusion by increasing the presence of ATMs as well as reducing their costs. Rather than drawing a line among the world's marginalized between the 'haves' with access to digital payments and the 'have-nots' whose social conditions preclude the luxury of such instruments, cash-friendly programs successfully boost inclusion by building upon the tool that these communities most trust and know best.

Cash is reinjected in the local economy and offers flexibility and dignity to those in need. The direct and simple nature of cash empowers individuals, households and businesses to best allocate resources, maximizing value for themselves and their communities. **Even when money is sent electronically, it is most often converted into cash.** Digital systems, as a faster and cheaper way to engage in transactions, can eventually raise the demand for cash, as the case of M-Pesa demonstrates.

Cash is the first step to financial inclusion. Attempts to replace cash with digital payment systems risk creating a new **'monetary divide'** that could exacerbate the social and economic problems that the excluded already face. Evidence consistently points to low financial resources as the main cause of financial exclusion today. Cash is the most accessible and efficient means of storing and exchanging value. Limiting cash use would cripple the end goal of financial inclusion—mitigating poverty. Cash and digital systems should continue to be complementary tools in the fight for higher global quality of life.

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Chapter 1. Scoping the Issue

1.1. What is Financial Inclusion?

Definitions of financial inclusion vary according to the underlying aims of the organizations promoting it. A recurring feature, however, is access to banking services within one's country. When measuring financial inclusion, the World Bank looks at the proportion of individuals and firms that use financial services. The goals of international organizations in this domain tend to prioritize basic bank account use as a benchmark for financial inclusion. Improving access beyond this basic level means making services more affordable, through lower costs or interest rates, and more readily accessible by increasing proximity between the provider and potential clients. Further measures include nurturing a broader range of activities, like credit, deposits, pensions, insurance, investment products and leasing.

At the 2010 Millennium Development Goals Summit, organized by the United Nations, the following more comprehensive definition was put forth:

> Universal access, at a reasonable cost, to a range of financial services for everyone needing them, provided by a diversity of sound and sustainable institutions.

Financial inclusion is a critical objective for development agencies and international bodies. As part of its Universal Financial Access goal, the World Bank has partnered with the International Finance Corporation and 30 other financial institutions, with the goal of enabling access for one billion adults to transaction accounts by the year 2020. The organization hopes to not only increase accounts, but envisions an exhaustive program of "expanding access points, improving financial literacy and driving scale and viability through high-volume government programs, such as social transfers, into those transaction accounts."

Behind these initiatives lies the idea that increased financial access provides security, allows people to save for emergencies and engage in long-term wealth accumulation.

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People, households and businesses remaining unbanked are vulnerable. They incur "high transaction costs for payment services, cannot use cash savings services for income smoothing and asset accumulation, do not have the option of generating additional income and investment through conventional credit services and lack risk management tools, such as health and crop insurance, to decrease vulnerability to external shocks."[2] The United Nations, in its 2030 Agenda for Sustainable Development, directly links financial access to its first goal of eliminating world poverty.

1.2. Who Are the Financially Excluded?

Two billion people worldwide remain financially excluded, most of them residing in the developing world. Surveying 55 developing countries, the Global Microscope 2016 from The Economist Intelligence Unit found that none surpassed a score of 50 out of 100 that would have shown progress halfway to an environment fully enabling financial inclusion.[3]

Half of the financially excluded live in South Asia, East Asia and the Pacific, where the three most populous developing countries—China (12% unbanked), India (21%) and Indonesia (6%)—are situated, accounting for 38% of the world's unbanked.

According to the 2014 World Bank Global Findex, inhabitants of the Middle East-North Africa region are the least served by formal financial institutions. Account penetration in this region is at 14%. Turkmenistan finds itself at the bottom of the World Bank's ranking of accounts per citizen, while Denmark tops the list.

However, Denmark itself is an example of how the idea of financial inclusion goes beyond the sole benchmark of account penetration. In its multidimensional index on financial inclusion, BBVA Research looked at three dimensions of inclusion: usage, access and barriers. The report measured access using four basic indicators: ATMs (per 100,000 adults), commercial bank branches (per 100,000 adults), ATMs (per 1,000 km$^{2)}$ and commercial bank branches (per 1,000 km$^{2)}$. Despite having the most bank accounts per citizen, Denmark ranked only 18th in terms of access defined by these indicators.[4]

[2] *A Quantum Leap Over High Hurdles to Financial Inclusion: The Mobile Banking Revolution in Kenya,* SWIFT Institute Working Paper No.2015-005 (The SWIFT Institute, Rosengrad, Jay K., John F. Kennedy School of Government, Harvard University, 29 June 2016).

[3] *The Global Microscope 2016* (The Economist Intelligence Unit).

[4] https://www.bbvaresearch.com/en/publicaciones/measuring-financial-inclusion-a-multidimensional-index/

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Indicators of an Enabling Environment for Financial Inclusion

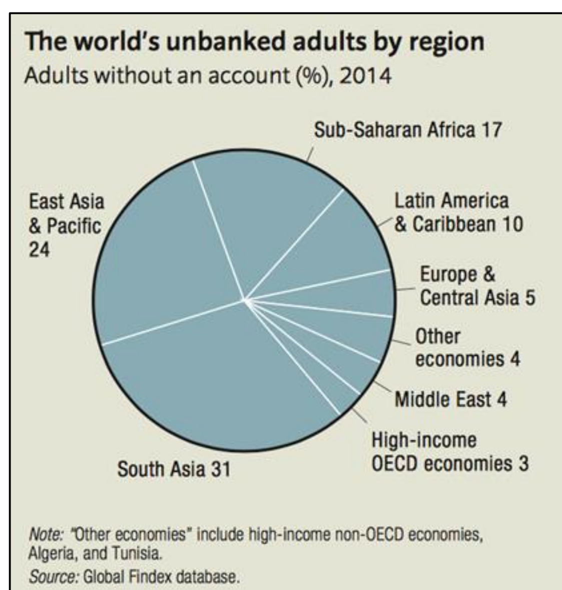
Government support for financial inclusion	Regulation and supervision of deposit-taking activities	Electronic payments
Regulatory and supervisory capacity for financial inclusion	Regulation of insurance targeting low-income populations	Credit-reporting systems
Prudential regulation	Regulation and supervision of branches and agents	Market-conduct rules
Regulation and supervision of credit portfolios	Requirements for non-regulated lenders	Grievance redress and operation of dispute-resolution mechanisms

Source: The Economist Intelligence Unit

Two billion people worldwide remain financially excluded, most of them residing in the developing world.

94% of adults in high-income OECD countries hold bank accounts. However, even wealthy regions of the world contain considerable populations of unbanked individuals. Based on data from the World Bank, MasterCard has estimated that 139 million Europeans possess neither a basic bank account nor a digital means of making transactions.[5]

Of course, the level of financial access varies across countries within the European continent. Switzerland boasts a 100% rate of account holding, while 37% of Bulgarians could not fit this definition of financial inclusion. Account penetration in the United States for adults is 94%.[6]



[5] *The Road to Inclusion: MasterCard Financial Inclusion Survey, Key Learnings Report* (5 December, 2016).

[6] Global Findex Database (World Bank, 2014).

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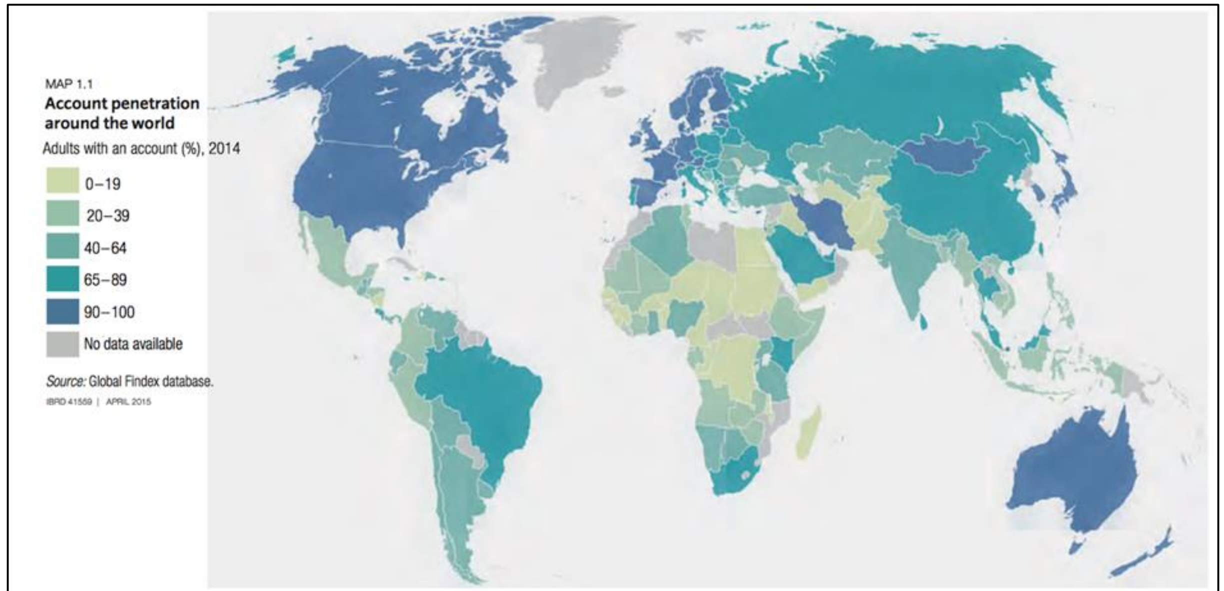

Source: World Bank
http://documents.worldbank.org/curated/en/187761468179367706/pdf/WPS7255.pdf

1.3. Why Are Certain People Financially Excluded?

Financial exclusion is a symptom of many factors, but primarily results from lack of money and is, therefore, part of a vicious cycle. Requirements for attaining a bank account—possession of money, proof of identity, mailing address and similar requirements—are a rare luxury for the world's marginalized.

Studies show that the cost of opening and maintaining a bank account, insufficient savings, a lack of physical accessibility to banks and a lack of trust in traditional financial institutions can act as hurdles to financial services.[7] Half of the world's unbanked belong to the poorest 40% of households. 59% of the financially excluded cite insufficient funds as a reason for not having a bank account.

It should also be noted that there seems to be a link between gender and access to finance. 1.1 billion of the world's financially excluded are women.

[7] https://www.iif.com/publication/research-note/financial-inclusion-financial-industry-perspective

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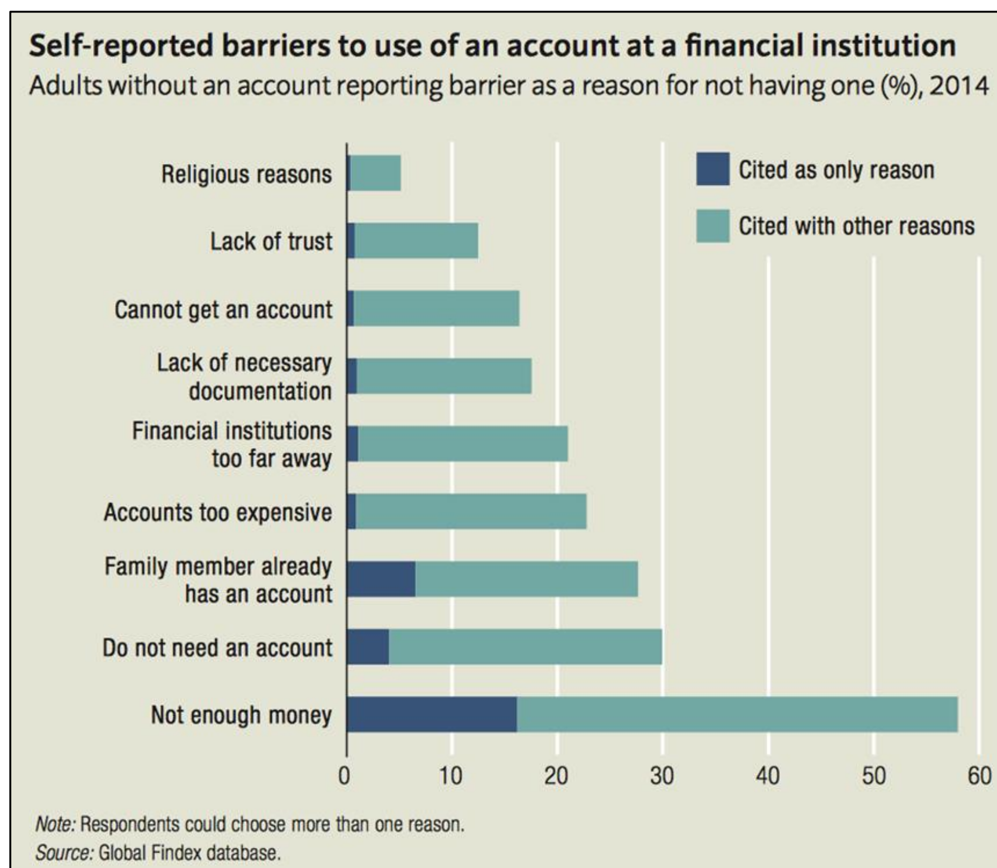

59% of the financially excluded cite insufficient funds as a reason for not having a bank account.

Most of the developing world's unbanked tend to live in rural areas. Bridging the urban-rural divide through development of physical and financial infrastructure, such as microloans for farmers, opens new possibilities for the excluded. Installation of banks, ATMS, or even branchless banking (through retail merchants, for example) requires safe transport routes, telecommunication networks and stability. Geographical layout, such as that of Indonesia, an archipelago of thousands of islands, can complicate exchanges inherent in traditional banking systems. Digital payment systems seek to overcome these obstacles, but have had mixed results.

From the same World Bank report, 1.5 billion people, mostly residing in Africa and Asia, possess no proof of identity. Unable to declare who they are, their fundamental rights are also kept at a distance. They are ineligible to vote, to register for schools or to receive welfare benefits. Lack of proper documentation currently keeps around 375 million adults from obtaining a bank account and is a severe hurdle to integration in developing countries. As international organizations impose stricter rules for proof of identity as part of antiterrorism initiatives, like that of the OECD's Financial Action Task Force, these individuals may find it even more difficult to access finance.

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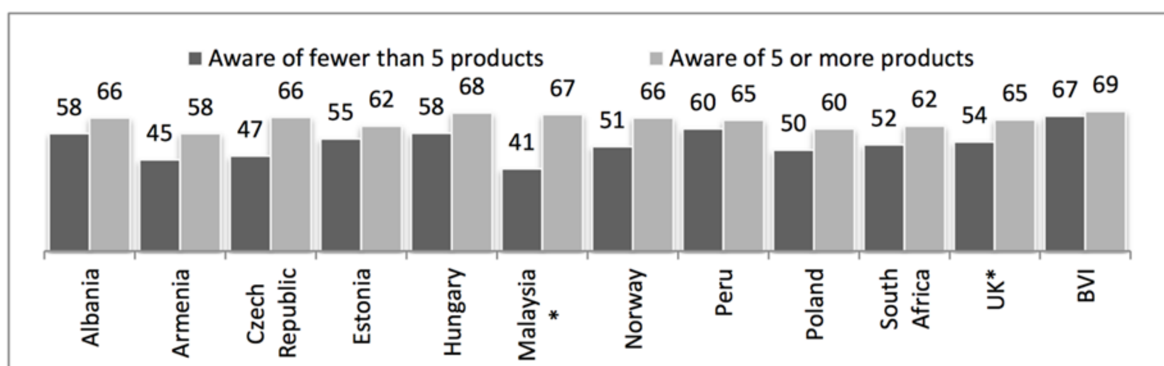
Recognition and authentication of one's identity is a feature in the UN's Sustainable Development Goals. Working with its Reserve Bank, the Government of India created its Aadhaar individual identification number to satisfy the Know Your Customer regulatory requirements of Jhan Dhan basic savings accounts. Thanks to this initiative, more than 200 million bank accounts were opened by the previously un-bankable.[8] However, cash still dominates transactions in India, where the value of banknotes and coins in circulation has grown at a compound annual growth rate of 14% between 2006 and 2015.[9]

A lack of financial literacy can also prevent people from signing up for services. After collecting data through its *Financial Literacy Measurement Survey*, the OECD/INFE, with support from the Russia Trust Fund, established a direct correlation between financial literacy and a propensity to benefit from financial products. In all countries surveyed, "average levels of financial literacy were higher amongst those who had made a recent product choice than those who had not."[10]

Average Financial Literacy Score by Product Awareness



Since most of the financially excluded already suffer from a combination of challenges, a lack of finance only magnifies their marginalization. Financial inclusion initiatives need to be executed with consideration for the unique needs of target populations, thereby avoiding the unintentional reinforcement of the conditions contributing to their exclusion.

[8] https://community.data.gov.in/accounts-opened-under-pradhan-mantri-jan-dhan-yojana-pmjdy-upto-25-05-2016/

[9] Bank for International Settlements

[10] https://www.microfinancegateway.org/sites/default/files/mfg-en-paper-the-role-of-financial-education-in-financial-inclusion-oecdinfe-evidence-policies-and-illustrative-case-studies-jun-2013.pdf

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Chapter 2. Addressing the Problem

2.1. Historical Evolution of Financial Inclusion

Although financial inclusion had been a part of the economic plans of developing countries, such as China and India since the 1950s, it was not laid out under a serious international agenda until the 21st century. In December 2003, Secretary General Kofi Annan addressed the issue at the United Nations General Assembly, making it the focal point for future international development policy and for national governments.

UN financial inclusion policy took shape around four explicit goals:

- Lowering costs of financial services;
- Regulation of financial institutions to encourage inclusion;
- Sustained investment in institutions to ensure further access; and
- Competition in banking to allow the entry of non-traditional providers.[11]

Financial institutions have since partnered with governments and NGOs to bring the excluded into the financial system.

Between the last two Global Financial Inclusion Indices published in 2011 and 2014, the share of adults with bank accounts increased by 11%, and the number of unbanked dropped from 2.5 billion to 2 billion. Yet, an important factor in calculation differs between the two data sets. The concept of "account ownership" as used in 2011 only applied to traditional bank accounts. In 2014, it encompassed mobile payment systems as well.

[11] http://www.finweb.com/banking-credit/overview-of-financial-inclusion.html#ixzz4YZD4LH3h

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2.2. How Governments, NGOs and Other Actors Have Addressed the Issue

Recognizing the barriers faced by the financially excluded, governments, central banks, NGOs and private actors have worked together to find innovative ways to improve access and encourage responsible financial behavior. The state plays a vital role by both ensuring that new models for financial instruments are secure, while recalibrating regulation so that institutions may accommodate low-income customers who would otherwise be high-risk. China, for example, made a deliberate effort to restructure its banking system to cater to its less developed western regions with new finance models, especially for farm households, and dramatically reduced the number of excluded. NGOs offering microfinancing have also been a boon for small businesses and low-income households.

Orienting services to the needs of the poor is key. Microfinance institutions (MFIs) specialize in providing financial services to individuals and businesses whose low-income prevents them from having access to traditional banking. The concept of microfinance dates to the 1970s. The Grameen Bank, in Bangladesh, was the first organization to be recognized for successfully implementing microfinance solutions, for which its founder, Mohammed Yunus, received the Nobel Peace Prize in 2006.

Ideally, these programs have the potential to lift their clients out of poverty. Although it is difficult to establish a direct link between microfinance and increases in borrowers' incomes, researchers have observed the palliative effects of income-smoothing that microloans offer by studying financial diaries of the poor in developing countries. Through their work in South Africa, Bangladesh and India, the authors of *Portfolios of the Poor: How the World's Poor Live on $2 a Day*[12] found that poor people cope much better with their poverty when using microcredit, which is more reliable than the informal types of financial instruments they may depend on, such as loans from family members or local moneylenders.[13]

The potential for such actors to make a difference depends on the favorability of a country's regulatory environment. Government authorities have the final say in whether MFIs can obtain licenses to lend. Interest rate caps can hinder them from providing their services, which involve relatively high interest rates—though, on average, the MFIs' rates are considerably lower than those of local moneylenders.

The push for further financial inclusion will require more work and more analysis of case studies. In evaluating programs in five developing Asian countries (China, India, Indonesia, Thailand and the Philippines), the Asian Development Bank Institute underlined three recurring challenges in boosting financial inclusion:

[12] Collins, Daryl, Jonathan Morduch, Stuart Rutherford, and Orlanda Ruthven, *Portfolios of the Poor: How the World's Poor Live on $2 a Day* (Princeton, N.J.: Princeton University Press, 2009).

[13] Idem.

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- The first relates to the need for further research on the effects of different regulatory policies on financial inclusion.
- Second is the importance of a positive enabling environment in which macroeconomic stability allows individuals to reach higher income levels, without which financial inclusion itself means little.
- Third, responsible expansion of access must be included in government strategies, so that those who end up being included in the financial system are also financially literate.

Challenges vary from country to country and depend on each one's unique culture, geography, wealth, education and other factors. In the case of emerging markets, alternate providers, such as mobile payment systems and non-bank retail businesses, have been the main force behind expanded financial inclusion.

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Chapter 3. The Persistence of Cash in Financial Inclusion – Case Studies

3.1. Kenya and the Rise of the M-Pesa

The success of financial inclusion in Kenya, where account ownership grew by 77% between 2011 and 2014, has been linked to the ground-breaking digital payment system M-Pesa. According to the *FinAccess Household Survey*, between 2006 and 2015, the number of adults completely without formal financial services plunged from 41.3 percent to 17.4 percent, and its share of adults using formal services rose from 26.7 to 75.3 percent.[14] Launched in 2007 by Safaricom as a tool for repaying microfinance loans, M-Pesa gained traction among citizens looking for a dependable alternative to traditional banks amid violent uprisings over that year's general elections.

Mobile payment systems in Kenya have facilitated transactions for those who, without debit or credit cards, would have been prevented from sending money to loved ones or paying merchants. Customers depositing cash at a payment point on one end can have their money transferred to recipients hundreds of kilometers away, boosting money flows across rural regions and encouraging habits of savings and investment. As recently as 2016, M-Pesa was providing services to 19 million users sending Ksh 15 billion (around $150 million) a day.[15] The system has been credited with raising the quality of life of the country and stimulating growth.

The telecommunications-led banking system now competes with the banking-led mobile banking system Airtel Money by Equity Banking. Competition in the mobile payment services sector has benefited consumers by encouraging cuts in tariffs and fees.

[14] http://fsdkenya.org/publication/finaccess2016/

[15] *A Quantum Leap Over High Hurdles to Financial Inclusion: The Mobile Banking Revolution in Kenya,* SWIFT Institute Working Paper No.2015-005 (The SWIFT Institute, Rosengrad, Jay K., John F. Kennedy School of Government, Harvard University, 29 June 2016).

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The Kenyan government's open regulatory approach led to rules that created common standards for banks and mobile network operators; authorities issued licenses to competitors of Safaricom; and the competition authority's decision ruling in 2014 against agent exclusivity clauses — letting individual agents serve more than one MFS provider— encouraged further competition. These services have also made handling cash much easier, reducing the cost of cash transactions to one-third of ATM transactions and one-tenth of branch cash transactions.

Yet, the high level of subscriptions and transactions performed using mobile payments does not provide a clear picture of the actual amount of money being transmitted. **In Kenya, cash still accounts for 98% of the value of all transactions.**[16] Even though three-fourths of adults in Kenya use mobile money, a survey of low-income households found that a mere 1% of the value of expenditures and only 3% of the value of transactions were done electronically.

Moreover, mobile payment operators are vulnerable to the use of their services by money launderers. The US State Department said in a recent report that the vigilance of Safaricom and the Kenyan Central Bank in monitoring networks does not remove the possibility of suspicious transactions going unnoticed. "For example, criminals could potentially use illicit funds to purchase mobile credits at amounts below reporting thresholds."[17]

3.2. Free-to-Use ATMs in the UK

Financial exclusion is not only a problem for emerging economies. The factors that block individuals and businesses from taking advantage of financial services persist throughout Europe and North America. Hoping to help three million of its citizens who rely on cash for their regular payments, the United Kingdom has devised a system to bring free cash machines to areas formerly with limited access to cash. Working with the Government and the Treasury Select Committee of Parliament, LINK[18] identified 1,700 areas of the UK that could potentially benefit from free-to-use ATMs. By 2015, LINK had installed 70,000 free-to-use ATMs across these deprived areas. Following further research and cooperation with local authorities, LINK decided to use smaller geographic areas (as the life circumstances of many low-income individuals reduced their mobility) and expanded the definition of deprived areas to comprise those where a higher number of recipients of government benefits are found. In 2014 alone, 2.8 billion withdrawals were made from these machines, amounting to £189 billion in cash.

[16] Idem.

[17] *International Narcotics Control Strategy Report, Volume II Money Laundering and Financial Crimes* (March 2017, Bureau of International Narcotics and Law Enforcement Affairs, US State Department).

[18] LINK is the UK's cash machine (ATM) network and the busiest ATM transaction switch in the world.

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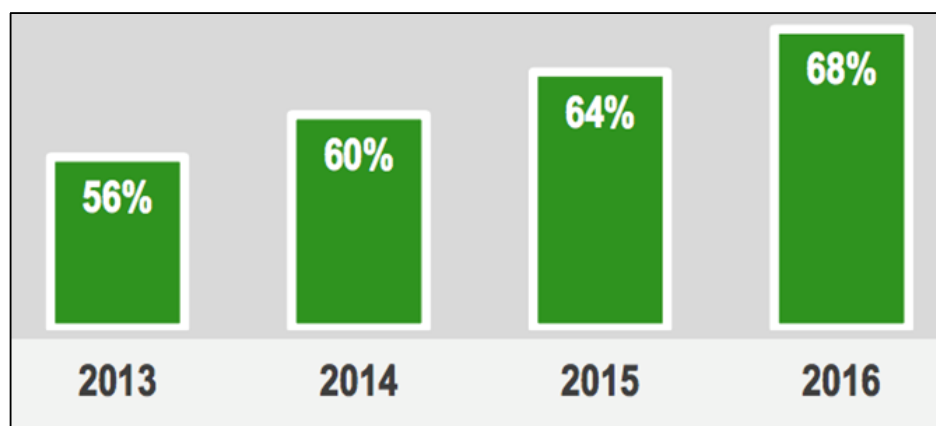
Customer feedback has shown that low-income consumers find cash easier for managing their money. These ATM machines are not only free-to-use, but also provide denominations as low as £5. Online mapping services allow users to locate these machines and to recommend sites where new ones might be needed.

3.3. Bringing ATMs to Brazilians in Need

Brazil has taken great strides toward comprehensive financial inclusion. Its banked population rose from 56% in 2013 to 68% in 2016. Its policies have put emphasis on digital payment systems. For example, its Law 12,865 of October 9, 2013, commits the Central Bank, the National Monetary Council, the Ministry of Communications and the National Telecommunications Agency to encourage financial inclusion by means of participation of the telecommunications sector in the provision of payment. Regardless, cash remains central to Brazilian society. It is the form in which 51% of the economically active receive their wages;[19] 86% of retailers prefer cash payments;[20] and 70% of all retail payments are made in cash.[21]

Measuring Brazil's Unbanked Population



Source: Febraban Bank Technology Research, 2013 and 2014; Brazil Agency – Fecomercio Research – RJ, 2015; Brazil Portal, 2016; Brazil Agency, 2015.

[19] *Brazilians and Their Relation to Cash* (Central Bank of Brazil, 2013).

[20] *Electronic Payments Market Research* (ABECs, 2013).

[21] *Annual Retail Report* (Brazil, 2015).

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As a trusted source of banknotes, automatic teller machines satisfy a demand for cash and facilitate the use of accounts. The presence of ATMs in Brazil reaches an exceptionally high rate of 88 per 100,000 people, according to the Central Bank, and even 114 for every 100,000 adults, according the World Bank. These are very high figures. The world average is 41 for every 100,000 adults. For Latin America and the Caribbean, excluding high-income countries, it is 39. But the persistently low level of interoperability between the machines—only 44% of ATMs are part of a shared network—results in overlapping points of service, which leaves certain areas unserved.[22] [23]

Nonetheless, the 100% increase in off-premises ATMs between 2010 and 2014 may represent a trend that will allow more Brazilians easier access to cash. Many of Brazil's financially included live in communities where bank branches cannot be set up due to security and logistical issues. The arrival of an ATM in one of these communities, where cash is essential to transactions, can represent relief to those who would otherwise have to catch a bus to withdraw money from their account. Banco24Horas, which has ramped up its presence strategy to serve such households, recently grabbed the attention of the media, as locals celebrated the installation of one of its ATMs in their neighborhood, illustrated by this photograph.

PAULO ALVADIA

Moradores abraçados ao caixa eletrônico: agora não é mais preciso pegar ônibus para ir ao banco

Caixa eletrônico vira 'celebridade'

Moradores tiram até foto abraçados à máquina

[22] *Financial Inclusion Report* (Central Bank of Brazil, 2015; Brazil Portal, 2016).

[23] http://data.worldbank.org/topic/financial-sector

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3.4. The Philippines: Overcoming the ATM Gap

Despite explosive economic development, a large portion of Philippine citizens also remain without easy access to ATM services. The presence of ATMs is equal to 25.27 machines per 100,000 people, according to the World Bank.[24] Yet the country remains attached to cash, accounting for 95% of its transactions.[25]

ENCASH, a company already involved in extending ATM networks to rural areas, announced a new solution in August 2016 in partnership with FEXCO, a global company specializing in financial solutions, including remittances and applications. Their project, EasyDebit, would let customers use a plug-in device on their mobile phones to withdraw funds from merchants. It is said to provide the same security as an ATM machine and may be leased affordably to merchants without any requirements on minimum balances or transaction amounts.

Commercial banks have also designed mobile ATMs—cash-dispensers fitted on trucks—which enable them to extend their reach to remote areas.[26] The units typically provide cash withdrawals, fund transfers, bill payment and payroll services. Moreover, the mobile ATMs play a key role in disaster recovery programs and are often deployed in areas which have been devastated by typhoons.[27]

The advent of mobile ATMs may represent a shift away from the many mobile payment systems popular in the Philippines. Most remittances across the provinces are done through pawn shops, pharmacies and small stores using prepaid mobile credits. These solutions have burdensome transaction costs and do not allow withdrawal from ATM-enabled accounts.[28]

[24] http://data.worldbank.org/indicator/FB.ATM.TOTL.P5

[25] https://www.finextra.com/pressarticle/65644/fexco-and-encash-team-on-philippines-mobile-cash-withdrawal

[26] http://www.philstar.com:8080/banking/171910/ucpb-launches-new-mobile-atm-service

[27] http://smart.com.ph/About/newsroom/press-releases/2013/11/19/landbank-mobile-atm-in-tacloban-city-now-online-powered-by-pldt-and-smart-data-connectivity

[28] http://techwireasia.com/2016/08/fintech-philippines-smartphone-atm-withdrawals/

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Chapter 4. Why Cash Counts

4.1. Universality, Non-Discrimination, Trust and Contingency

Cash is a common denominator for transactions, accessible to everyone, regardless of gender, age, ethnicity or financial situation. It does not discriminate. It can be used anywhere and does not depend on one's proximity to financial centers or on the infrastructure capacity in one's area. The spread of mobile payments has facilitated the circulation of cash rather than pushing it aside.

Cash is vital to raising living standards for those in emerging markets. International institutions often focus on humanitarian aid. Yet developing countries receive three times as much money in the form of remittances. The World Bank, in its survey of remittance costs, reported that in 2014, international money transfers to low and middle-income countries were expected to reach $442 billion. These remittances involve mostly cash at one point or another. Transactions as cash-to-cash, account-to-cash and cash-to-account make up 56% of remittances. The migrant workers responsible for most of these transactions, as well as the loved ones who receive them, depend a great deal on cash to ensure a brighter future for themselves and their family.

Holistic policies should favor these flows of capital. Over the course of 2016, when the increase in money transferred in remittances was a mere 0.8%, many regions saw a decline in remittances. This was due not only to market forces but to anti-money laundering efforts that have forced some banks to shutter.[29]

[29] http://www.worldbank.org/en/news/press-release/2016/10/06/remittances-to-developing-countries-expected-to-grow-at-weak-pace-in-2016-and-beyond

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As a lack of education can be a barrier to financial inclusion, cash represents an easier means for the less educated to manage their money. Hundreds of millions of people worldwide remain illiterate. Research in Tanzania and Cambodia shows that illiteracy has been a great impediment to the use of digital payment systems. Many are unable to read large numbers or perform simple arithmetic. But individuals who may have difficulty identifying multi-digit numbers can still succeed at counting physical banknotes.[30] A study conducted by My Oral Village, a not-for-profit organization specializing in "oral" financial tools and solutions, showed that three-fourths of participants could count 107,500 units of their country's bank notes but were unable to identify the same amounts in written form. These "oral" individuals rely on markers, such as shape, color and symbols, to identify their money.

4.2. Flexibility and Dignity for People in Need

Perhaps the best illustration of how electronic payment systems can complement cash delivery is the conscious shift within the humanitarian sector toward cash grants being led by non-profits, like Give Directly. Traditionally, donors have found the approach of in-kind-aid—commodities or cards with categorical purchase restrictions—more attractive for humanitarian programs. The founders of Give Directly believe, on the contrary, that direct cash transfers are less costly and more efficient. They cut out intermediaries, all the while allowing for easier evaluation of their programs, thus creating a new level of transparency.[31]

By mid-2016, the organization had donated 50 million dollars in cash to the poor through systems like M-Pesa. As part of their broader operations, the International Red Cross and the International Red Crescent now include cash transfers to disaster victims using mobile systems, as well as banknotes and vouchers. More than half of IIFC's emergency operations have consisted of cash transfers since 2016, even reaching 85% over the first eight months of 2016.[32] Aid organizations are progressively realizing the ability of cash grants to empower individuals and households in addressing their unique variety of needs.

[30] http://myoralvillage.org/wp-content/uploads/2012/09/Briefing-Note-Financial-Numeracy.pdf

[31] https://newrepublic.com/article/133678/want-save-world-try-using-cold-hard-cash

[32] http://www.rcrcmagazine.org/2016/12/the-case-for-cash/

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Such programs have proven that cash promotes the economic development of the local community. Among the various organizations shifting to cash grants, the World Food Programme has been able to quantify the economic effect cash, compared to in-kind aid, can have. In partnership with the University of California, Davis, its researchers documented experiences across Congolese refugee camps in Rwanda. They concluded that every dollar given to refugees in the camps of Gihembe and Nyabiheke had a growth effect of US $1.51 and $1.91 for the local community. Meanwhile, in the Kigeme camp, where only food was distributed, real income only increased by $1.20.[33] The researchers explain this by underlining the tendency of refugees to sell portions of the food they receive at below-market prices so they can have cash for other products. In comparison, giving cash directly raises their purchasing power and lets them engage with the rules of their local markets, bolstering the local economy.

In addition, the United Kingdom's Overseas Development Institute acknowledges the extraordinary benefits of humanitarian cash transfers. In its report, *Doing Cash Differently: How Cash Transfers Can Transform Humanitarian Aid*, it states:

> Cash impacts local economies by increasing demand and generating positive multiplier effects. **In Zimbabwe, every dollar of cash transfers generated $2.59 in income (compared to $1.67 for food aid).** It can encourage the recovery of credit markets by enabling repayment of loans. Evidence suggests that large grants can increase future income. In social protection programs, cash transfers have resulted in impacts on poverty, nutrition, healthcare utilization and school attendance.[34]

Disaster and humanitarian relief have benefited overall from private sector engagement, in large part by actors from the payments industry. But, as James Shephard Barron, Disaster Management Consultant & Disaster Epidemiologist, points out:

> Realizing the potential cost-utility of CTP (cash transfer programming) at scale will not be possible without coherent engagement at the national and global level by the entire Cash Management Industry (CMI), not just parts of it. This means involving the myriad 'back-end' services involved in end-to-end, omni-channel cash distribution, including in particular, specialized security printers, ATM manufacturers, Independent ATM deployers (IADs), Cash-in-Transit companies and the commercial banking sector.[35]

The fungible nature of cash empowers individuals, households and businesses to best allocate resources, maximizing value for themselves and their communities.

[33] http://www.wfp.org/news/news-release/rwanda-research-finds-cash-assistance-refugees-boosts-local-economy-nearby-communi

[34] https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9828.pdf

[35] http://www.cashessentials.org/news/news-details/2016/11/08/cash-is-critical-to-disaster-response

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4.3. Conversion of Electronic Money into Cash

Mobile money has made cash more efficient. Electronic solutions like M-Pesa have stretched networks of cash points into remote areas, shortening the distance for the user. The ease with which people can now pay their bills or send money using mobile payment systems helps to integrate small businesses and underdeveloped communities—previously cut off from their countries' financial hubs—into the more stable formal economy.

Nevertheless, mobile payments are far from becoming the substitute for cash that many expected and are rarely used for savings activities. E-payment systems have created the illusion that banknotes are being replaced by digital data. But for these solutions to reach users, money agents within their vicinity must guarantee a certain level of cash deposit at their point of sales. Although users experience the transaction electronically, the physical transportation of banknotes still occurs.

"In light of M-Pesa's impressive success and widespread use, it is perhaps surprising to note that since this 'mobile money' system was introduced, both the velocity (rate of cash use) and volume of currency in circulation in Kenya have actually increased," says Mr. Shepherd-Barron.[36]

Studies show that most M-Pesa customers use the system for obtaining cash, rather than for going cashless. It was estimated that between October 2012 and March 2013, two-thirds of M-Pesa users cashed-out after transacting once.[37] Looking at the research, Pablo García Arabéhéty of CGAP says:

> Overall, although there are some interesting new developments with loans and savings products such as M-Shwari, there is a consensus around the idea that M-Pesa usage consists mostly on domestic transfers and airtime top-ups, while evidence of store of value or savings is scarce.

The unexpectedly slow uptake in e-wallet accounts in Pakistan also exhibits a preference for the cash-in/cash-out service. In 2013, the mobile payment system Easy Paisa was servicing 7.4 million users in Pakistan. Yet only 2.4 million of them used the e-wallet, while the other 5 million users relied on its over-the-counter services. Over-the-counter services dominated the Pakistani mobile phone banking industry, with 41 million transactions worth $1.6 billion in the first quarter of 2013. The founders of Easy Paisa have admitted that regulations, like Know Your Customer (KYC) requirements, prevent branchless banking accounts from being commercially viable at many of the 30,000 Easy Paisa agent locations.

[36] Idem.

[37] http://www.cgap.org/blog/m-pesa-usage-data-otc-makes-sense-even-kenya

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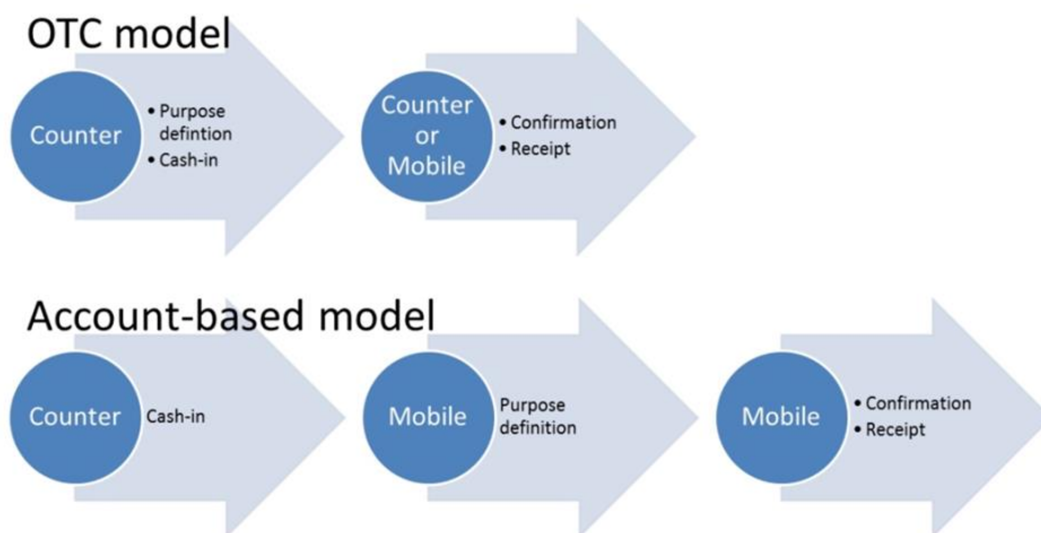
Secondly, the eco-system of e-wallet payments is only in its beginning stages. Most merchants would not accept payments through Easy Paisa. The appeal of the savings potential offered by e-wallets is overshadowed by the size of the networks through which transactions may be conducted.[38] Clearly, over-the-counter services are more relevant to the needs of certain populations in the developing world.



Source: More on Why OTC Makes Sense for Kenya, Pablo García Arabéhéty. cgap.org

4.4. Avoiding the Creation of an Additional Monetary Divide

It is essential that we avoid creating an additional 'monetary divide.' A transition away from cash would only serve to isolate the unbanked and the underserved from the rest of the population. Efforts to eliminate financial exclusion must take into consideration the ways in which those who make up the unbanked are already marginalized.

Researchers at the OECD have acknowledged fears of how substitutes for cash could undermine the overarching goal of inclusion within populations subjected to these technological transformations. In 2002, as a conclusion to debates between government officials and business leaders in Luxembourg, Riel Miller, Wolfgang Michalski and Barrie Stevens published their findings in *The Future of Money*. Their caution towards digital payment methods is clear:

[38] http://www.cgap.org/blog/"easypaisa"-journey-otc-wallets-pakistan

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> A profusion of new payment methods and issuers of money could have a perverse impact on social dynamism by further fragmenting and ghettoizing certain communities and regions. More sophisticated and differentiated monies might be used to discriminate and reinforce the existing correlation between hierarchies of creditworthiness and social status. Under these circumstances there is the risk that the political legitimacy and ultimately the viability of the monetary space are called into question. Without careful attention to the governance of new transaction systems, there is an increased danger, already heightened by the social dislocation of a transition period, of a political backlash against changes which are seen as undermining cherished symbols, like the national currency, without sufficiently opening up new horizons.[39]

India is an example of how a precocious top-down push toward digital payment systems can have adverse effects on the portions of the population most distanced from the financial system. Much progress in India has been achieved through regulatory flexibility, such as the creation of zero-balance accounts expanding bank account access to the poor. And, rather than one or two dominant digital payment systems, hundreds of fintech companies have moved into the market. One of the greatest novelties was to provide banking services through the post office network. India currently has 150,000 post office branches, of which 140,000 are in rural areas. In comparison, public sector banks only reach rural areas through 23,000 of their own branches.[40]

But when Prime Minister Narendra Modi decided, in November 2016, to demonetize 500 and 1,000 rupee notes—the country's largest—equaling 80% of currency in circulation, panic ensued. Hundreds of people lined up at ATMs and banks to exchange their notes. Never mind that at least 40% of the population remained without bank accounts and therefore without the option of depositing the banned bank notes. The main target was corruption—a deep-rooted problem in India. But experts worry that the measure will amount to little in reducing "black money" while inconveniencing 1.29 billion people, especially those whose financial situation is already less than ideal. According to Bloomberg:

> The immediate impact was cash shortages, long lines at banks and post offices, a slowdown in economic activity and a likely delay for another of Modi's major reforms, a national sales tax.[41]

[39] http://www.oecd.org/sti/futures/35391062.pdf

[40] http://www.thehindu.com/opinion/op-ed/maximising-the-post-office/article7256701.ece

[41] https://www.bloomberg.com/news/articles/2016-11-15/india-s-scramble-to-switch-23-billion-banknotes-quicktake-q-a

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Small businesses, real estate and the informal sector, all of which depend on cash, were hit hard. The World Bank, in downgrading its growth forecast for India for the fiscal year to March 2017 by 0.6%, cited the negative impact on the informal economy (agriculture, construction or home-based activities), which employs 80-90% of the workforce.[42]

Although consequences are still being evaluated, analysts from Deloitte Touche Tohmatsu India LLP predicted at the onset that domestic turmoil could be triggered by the effects being "disproportionately felt by the lower and upper income classes."[43] Indian women—who, like their counterparts around the world, are 15% less likely than men in their country to have a bank account—suffered needlessly.[44] According to *The Economist*, calls to the domestic violence hotline in the city of Bhopal doubled as men discovered the cash their spouses had been secretly saving.[45]

From the Indian perspective, a shift to a cashless society would leave many behind. As of June 2016, India had managed to create 219 million zero-balance bank accounts (of which 61% were for rural citizens) through its Pradhan Mantri Jan-Dhan Yojana system since its inception in 2014.[46] But most adults in India prefer to use cash. 43% of accounts in India are dormant and according to a World Bank estimate in August 2015, only 15% of Indian adults reported using a bank account to make or receive payments.

Wary of the push toward cashlessness, Anupam Manur, a research fellow at the Takshashila Institution in Bangalore, India says:

> Any move that makes cash redundant would necessarily be going against a policy aimed at financial inclusion. If the lack of a bank account marginalizes certain sections of the society who do not have access to these financial services, the move to a complete banking-based transaction system will completely alienate them.[47]

[42] https://www.theguardian.com/world/2017/jan/11/world-bank-india-growth-forecast-7-percent-rupee-recall

[43] https://www.bloomberg.com/news/articles/2016-11-15/modi-faces-risk-of-economic-stress-as-india-scrambles-for-cash

[44] http://ijbemr.com/wp-content/uploads/2015/09/Sonal-paper-11.pdf

[45] *Women in Asia: The Missing Middle* (The Economist, February 25th-March 3rd 2017).

[46] https://community.data.gov.in/accounts-opened-under-pradhan-mantri-jan-dhan-yojana-pmjdy-upto-25-05-2016/

[47] http://factordaily.com/digital-payment-cashless-society-good-or-bad/

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Chapter 5. Conclusion

Evidence consistently points to low financial resources as the main cause of financial exclusion today.

If poverty is the principal driver of financial exclusion, limiting the use of cash—the most basic means of storing value—would cripple any effort to tackle it. As cash is the only form of payment devoid of any prerequisite conditions for access, efforts to liberate people from financial inclusion should, instead, encourage its use. The narrow focus on digital instruments as gateways to checking and deposit accounts also misses the underlying factors that contribute to financial exclusion.

Cash and digital payments should be perceived and governed as complementary. Digital innovation has shown extraordinary potential for increasing the circulation of cash, which remains critical for low-income workers around the world. This is not a deficiency. Policymakers should take note of the progress these instruments have made in permitting new financial flows in heretofore neglected areas of the globe. E-payments, by both facilitating transactions and increasing the availability of cash, mitigate the various geographic and demographic challenges for the underserved.

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