

Financial Inclusion and Economic Development

A Review of the Data and Evidence

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Development Economics

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January 2025

Abstract

This paper reviews the impact of financial inclusion on economic development outcomes. It highlights the benefits of financial inclusion, including greater savings, improved resilience to economic shocks, and higher levels of economic empowerment, among others. It looks deeper into both the effects of financial inclusion on marginalized groups, like women and the poor, while also examining

the impacts of different types of financial instruments, like digital payments and financial accounts. The paper further explores the role that government payment programs and regulatory actions can play in inducing greater financial inclusion, highlighting the need for more policies, products, and incentives to promote greater adoption of financial services for sustainable development.

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Financial Inclusion and Economic Development: A Review of the Data and Evidence

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JEL: G51, G53, G21, G23, G28

Keywords: Financial inclusion; Mobile money; Household finance; Digital payments

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1. Introduction

Financial inclusion refers to the ownership and use of financial products to enable personal financial wellbeing. Research shows that having and using a financial account creates significant economic benefits for individuals, households, and small businesses by enabling people to safely manage their finances, increase savings, access credit, and receive money from friends or family (Moore, et al., 2019). These benefits help account owners weather financial ups and downs and capture economic opportunities more effectively than their unbanked peers. As a result, organizations such as the World Bank, the United Nations, and the G20, as well as government financial ministries around the world, have made financial inclusion a cornerstone of their development policies.

However, significant barriers limit access to appropriate and affordable financial services for unbanked adults. Women, people with low incomes or low education, and adults who are out of the workforce are all more likely than men and higher-income, more educated adults to be unbanked and confront barriers to access and usage. If left unmediated, the lack of access to financial services creates a damaging cycle, whereby the people who are already the most vulnerable to poverty lack access to the financial tools and resources that could help them avoid it. Yet recent innovations, as well as new government-led interventions, have shown that overcoming access barriers is possible when accounts are affordable, practical, and convenient. This paper provides an overview of how global financial inclusion reduces poverty and improves outcomes, and how both technology and government-led programs are helping to increase access. The paper starts by highlighting available evidence about the benefits of account access and usage and an overview of the state of financial inclusion worldwide, followed by a discussion of the policies, products, and incentives that will be needed to safely expand financial access for positive development impact. Throughout, we highlight the impact of the pandemic and digital technology on recent advances in financial inclusion.

2. Account ownership and development outcomes

Around 76 percent of adults worldwide had a financial account as of 2021, according to the Global Findex database (2021). This represents a 50 percent increase from the worldwide

average of 51 percent reported in 2011. Growth in developing economies was even higher, increasing to 71 percent in 2021 from 42 percent in 2011—a more than 70 percent increase.¹

Financial account holders use their accounts for a range of purposes, such as storing money and making payments using electronic transfers, cards, the internet, or a mobile phone. “Accounts” can be with a regulated financial institution like a bank, credit union, or microfinance institution, any of which may offer internet or mobile phone-based access. Accounts may also be offered by mobile money service providers, which include telecommunications operators and “fintechs” (nonbank financial technology providers). In the case of mobile money, users often have the option of accessing their mobile money accounts through their mobile phones or using a brick-and-mortar agent network. These agents are often located in kiosks or convenience-type stores. The Global Findex database defines *account ownership* as ownership of an individual or jointly owned account either at a financial institution or through a mobile money provider.

The specific factors fueling the global rise in financial inclusion differ region-by-region and even country-by-country and may not be related to the economic bracket to which a country belongs. In Sub-Saharan Africa, for example, account ownership increased to 55 percent by 2021 from 23 percent in 2011, fueled by the adoption of mobile money accounts (33 percent of adults in the region have one). India, in contrast, achieved a 78 percent account ownership rate by 2017, largely driven by a government-led program that provided both digital IDs and bank accounts.

Access to a financial account can lead to a number of positive development outcomes for account holders. Research on the topic shows relationships between expanded account ownership and reductions in poverty (Beck, Demirgüç-Kunt, and Levine 2007); increased consumption (Karlan and Zinman 2012; Burgess and Pande 2005); increased productivity (Allen et al. 2016; Bruhn and Love 2009); greater investment in preventive health (Dupas and Robinson 2013; and Cramer 2023); and overall higher levels of savings (Karlan, Ratan, and Zinman 2014).

Partially through its facilitation of increased savings, formal financial inclusion holds significant implications for financial health during economic downturns. Owning an account allows adults

¹ Unless otherwise indicated in the text or through a footnote, all data in this paper is from the Global Findex 2021. The Global Findex 2021 Database, the fourth edition since 2011, includes comparable indicators of financial inclusion for 139 economies, including 15 economies in 2022. The data is collected through nationally representative surveys of about 1,000 adults per country. To download the complete database and for more information on the survey methodology, see: <https://globalfindex.worldbank.org>.

to more easily access savings, insurance, and credit (Beck, Demirgüç-Kunt, and Peria 2007), resulting in greater resilience to economic shocks. When individuals can easily access funds either through borrowing or using their savings, they are able to rebuild after climate or other disasters and smooth their consumption.

2.1 Role of mobile money accounts for financial inclusion

Worldwide, a modest 10 percent of adults own a mobile money account. In most places, mobile money serves as a complement to other financial accounts and banked adults will often have both a bank or microfinance account and a mobile money account. Across Sub-Saharan Africa, however, the share of adults with a mobile money account is 33 percent, a 21-percentage point increase since 2014, when 12 percent of adults in the region had one. Moreover, 46 percent of mobile money account owners (15 percent of adults) have *only* a mobile money account. The data even show mobile money account ownership increasing in some countries as bank or microfinance account ownership decreases, suggesting that people are replacing their bank accounts with mobile money accounts. Possible reasons for that replacement could be geographic convenience for people who live far from a bank branch, or widespread mobile money use within a person's financial ecosystem. While Sub-Saharan Africa leads the globe in mobile money adoption, it is not the only place embracing this form of digital financial services. Economies outside Sub-Saharan Africa with significant mobile money presence include Bangladesh, where 29 percent of adults have a mobile money account, the Philippines, where 22 percent of adults have one, and Paraguay, where 38 percent of adults have one.

Multiple research studies have documented the anti-poverty benefits of mobile money accounts. In Kenya, for example, mobile money users experiencing a drop in income were able to receive money from family and friends who lived further away, which allowed them to maintain household spending. Nonusers, in contrast, had to reduce spending on food and other items by as much as 10 percent (Jack and Suri, 2014). Also in Kenya, research found that mobile money users spent more on health care and were more likely to use formal health services when experiencing a medical emergency (Haseeb and Cowan, 2021).

In another study from Tanzania, where many are dependent on agriculture, low rainfall resulted in lower average consumption, yet mobile money users were able to maintain consumption

because of improved risk sharing among family and friends in their social networks (Riley, 2018). Researchers in Uganda also found that adopting mobile money services increased the total value of remittances the account holder received—these are transfers from friends and family living in other parts of the country or abroad—by 36 percentage points and was associated with a 13 percent increase in per capita consumption (Munyegera, et al., 2016).

Finally, in Bangladesh very poor rural households who were given mobile money accounts when a family member migrated to the city received more remittance payments, spent more on food, and decreased their reliance on borrowing (Lee, et al., 2021).

2.2 Financial inclusion during COVID-19

These connections between financial inclusion and improved consumption became particularly relevant during the COVID-19 pandemic, when mobility restrictions and other public health efforts dampened economic opportunities for millions. Financial inclusion efforts across the world increased due to the emergency relief payments that more than 55 governments worldwide sent directly to bank accounts and debit cards (Gentilini, et al., 2021). Some economies, such as Kenya and Rwanda, enacted short-term policies to reduce transaction fees to promote usage of digital financial tools (IMF, 2021). Others eased account opening requirements by increasing flexibility around eKYC (electronic know-your-customer) regulations and allowing remote onboarding (World Bank and Cambridge Centre for Alternative Finance, 2020).

The private sector also played a central role in serving burgeoning demand for digital financial services. The payment service provider Visa reported that early in 2020 more than 13 million users made their first digital transaction (Bary 2020). Paga, the Nigerian mobile money provider, reportedly doubled the number of merchants in its network and tripled the number of users; the mobile money service Orange likewise saw a 20 percent increase in worldwide merchant payments (Berger 2020). E-commerce also grew rapidly at 28 percent globally, especially in emerging markets—Latin America led the way with 37 percent growth (Cramer-Flood 2020).

The accelerated digital financial adoption seen during COVID-19 was not unique to this pandemic. A recent study found that during epidemics, more people conduct transactions via the internet, mobile bank accounts, and ATMs (automated teller machines). These shifts do not

always persist over time, however, and digital adoption tends to be concentrated among relatively younger and wealthier people (Saka, et al., 2021).

2.3 Women and financial inclusion

Financial inclusion is especially important for women, given research showing that accounts can enable financial independence and strengthen economic empowerment. In the Philippines, for example, women with a type of personal commitment savings account that encouraged regular deposits increased their household decision-making power (Ashraf, et al., 2010). In Kenya, geographic areas with high levels of mobile money access had female poverty rates 9 percentage points lower, and female consumption levels 18.5 percentage points higher, than areas with low mobile money access (Jack and Suri, 2014). In another study, women-headed households spent 15 percent more on nutritious foods after receiving free savings accounts (Prina, 2015).

While women have often been underserved by the formal financial sector, since the Global Findex began collecting data in 2011, women's account ownership in developing economies has risen dramatically from 37 percent of women in 2011 to 68 percent in 2021. Women still own accounts at lower rates than men (74 percent of men in developing economies own an account), though there has been progress, evidenced by the fact that the gender gap in account ownership has shrunk from 10 percentage points to 6 percentage points between 2011 and 2021.

The continued gender gap notwithstanding, financial inclusion advocates are wary of focusing too much on narrowing gaps, because doing so does not necessarily drive equitable inclusion. For example, the gender gap could narrow as a function of men becoming unbanked (after rising unemployment, for example) while women's access remains unchanged. The goal is instead to promote approaches that enable equitable access to financial services for everyone who can benefit from them.

Moreover, gender is not the sole determinant for equity in account ownership. For example, Table 2 shows regression results of more than 120,000 adults in 139 economies, including country fixed-effects and standard errors clustered at the country level.² This analysis finds that being male, wealthier (living in the wealthiest 40 percent of households), older (age above 35), in the workforce, and having obtained an education at the secondary level or above are all

² Summary statistics of all variables used in the regression are shown in Table 1.

significantly and positively associated with higher account ownership rates. These coefficients suggest opportunities for multi-pronged programs that drive employment or educational opportunities in combination with financial inclusion for women. For example, a government workfare program in India reached more than 100 million people and paid women government benefits directly into their own account. An impact analysis showed that the program increased women's financial control, influenced gender norms preventing women from working, and incentivized women to find employment, compared with those paid in cash (Field, et al., 2021).

3. The benefits of direct payments into and out of an account

Account ownership is a clear prerequisite to using financial services, but ownership alone is not enough to drive development outcomes. Owners must use their accounts to benefit from them. For example, an experimental study to test the impact of expanding access to basic bank accounts in Chile, Malawi, and Uganda showed that giving free bank accounts to previously unbanked adults had no impact on savings or welfare (Dupas, et al., 2018). The takeaway from this and other research suggests that expanding access to basic accounts is unlikely to deliver development outcomes without policies, products, and incentives to increase the use of accounts.

Globally, digital payments are the most used financial service. In developing countries, on average in 2021, 57% of account owners made or received a digital payment,³ compared to 24% who used their account to save and 22% who formally borrowed. Digital payment systems allow both individuals and micro, small, and medium-sized business entrepreneurs to pay for goods or services electronically using a mobile phone, the internet, retail points of sale, and other broadly available channels, instead of using cash. The share of adults making or receiving digital payments in developing economies grew to 57 percent in 2021, from 35 percent in 2014.

When account owners *use* their accounts for digital payments, savings, and appropriate credit, they experience a range of positive benefits, including greater security and greater privacy for their transactions. For example, a field experiment in Bangladesh found that factory workers

³ Digital payments are defined as using a mobile money account, a debit or credit card, or a mobile phone or the internet to make a payment from an account, or the use of a mobile phone or the internet to send money to relatives or friends or to pay bills. Digital payments also include in-store or online merchant payments; paying utility bills; sending or receiving domestic remittances; receiving payments for agricultural products; or receiving wages, government transfers, or a public pension directly from or into an account. Global Findex 2021 survey respondents were prompted to answer whether they used digital payments based on their experience during the 12 months prior to the survey.

saved more when they received their wages into their own account through direct deposit (Breza, et al., 2020). Likewise, workers in Afghanistan who automatically deposited part of their salary into a mobile savings account had higher savings and financial security than workers who did not (Blumenstock, et al., 2018).

In the realm of payments, receiving them directly into an account brings several benefits over receiving them in cash, including reduced transaction costs and increased safety. Teachers in Liberia, for example, saw the cost of collecting their money (including bus fare) reduced by 84 percent—from US\$25 per paycheck to US\$2—when they received their salaries as digital deposits. Because they no longer had to take time off to collect their wages, they were able to spend more time in the classroom (USAID, 2016). The teachers also experienced a safety benefit, as they were able to avoid traveling with cash in their pockets.

This safety connection between digital payments and crime has also been documented in high-income economies. For example, an analysis of 20 years of crime data from the US state of Missouri and nearby areas found that the introduction of digital safety net payments reduced burglary, assault, and larceny, lowering overall crime rates by about 9 percent (Wright, et al, 2017).

3.1 Government payments as a driver of broader financial usage

In developing economies, many payments from the government—such as social transfer and wage payments—are still made in cash. However, in high-income economies they are typically paid into an account.⁴ There is broad evidence showing that digitalizing these payments benefits both the government and the citizens receiving them. In India, for example, internal fraud and leakage from pension payments dropped by 47 percent when the country transitioned from cash to smart cards. Recipients spent less time collecting payments and received more money because of the fraud reductions. The government saved millions of dollars annually in administrative costs—more than enough to cover the cost of the new system (Muralidharan, et al., 2016).

Beyond South Asia, a study of safety net payments made primarily to women after a drought in Niger found that social benefits paid through mobile phones instead of in cash offered women

⁴ In the U.S., some government payments are made to cards that can only be used to make payments, but cannot be used to deposit money and are therefore not considered an account.

both greater privacy and control over their funds. The administrative costs for the social benefits program were 20 percent less for mobile transfers than for cash payments (Aker, et al., 2016).

Digitalization can also speed up the collection of social benefits payments. A recent study in Bangladesh on the impact of moving education subsidies from cash to digital channels found that nearly 80 percent of mothers preferred the digital payments because they removed the need to travel and wait for cash disbursements (Gelb, et al., 2019).

As evidenced by the examples above, government initiatives can play and have played a foundational role in expanding financial inclusion. India has been particularly proactive in this regard. A government program launched in 2016 provided every adult in the country a digital government ID, which was leveraged to open more than 250 million financial accounts (Agarwal, et al., 2017). This study also finds in some regions that this increase in account take-up also corresponds with increases in savings balances and the issuance of new loans.⁵

The idea that some degree of government engagement helps to fuel financial inclusion is not unique to India. In fact, Findex data finds that 865 million account owners in developing countries (18 percent of adults), including 423 million women, opened their first account to directly receive some type of government payment, including a government wage payment, a government benefit, or a government pension.

3.2 Private sector payments as a driver of financial usage

Government payments are not the only type of payment that can deliver benefits through digitalization. Receiving private sector wages directly into an account can also benefit recipients by being more convenient, safer, and sometimes less expensive, if the wage earner must travel to pick up their wages—just as government payments have proven to be more convenient, safer, and cheaper. In developing economies, 61 percent of adults receive their wages into an account, an increase from just 37 percent in 2014 and 45 percent in 2017. Among the unbanked, 12 percent—or about 165 million people—received private sector wage payments in cash.

Research also shows that farmers and other adults who receive payments from wholesale buyers of agricultural goods benefit from the expanded use of financial services. Farmers in Malawi

⁵ Yet about a third of account owners in India report no activity (deposits, withdrawals, or payments) from or to their account. Adults in India with an inactive account report not using their account for three main reasons: distant from a financial institution, lack of trust, and having no need for an account (Demirguc-Kunt, et al., 2022).

whose earnings were deposited into savings accounts, for example, spent 13 percent more on farming equipment and increased their crop value by 15 percent (Brune, et al., 2016). In another example, a coffee buyer in Uganda digitalized payments to 5,500 smallholder coffee farmers, leading to saved time and money (Ogwal and Mugabi, 2015).

However, unlike with government and private sector wage payments, the majority of which are already digital, a large majority of payments for agricultural goods continue to be made mostly in cash. Establishing a relationship with a formal financial service provider could enable farmers to access additional financial services, such as crop and fertilizer financing and insurance products. In developing economies, 11 percent of adults received payment for the sale of agricultural goods but only one-fourth of them received their money directly into an account. The exceptions are in Sub-Saharan Africa, where the share of adults receiving agricultural payments is more than twice the developing economy average (26 percent). Some economies have a much higher share of recipients getting their money directly into accounts, driven by mobile money proliferation and the availability of rural agent networks for withdrawals.

4. The benefits of savings and credit

Beyond payments, using financial accounts can help people build savings and access credit, which can lead to higher income-generating investments, such as in education or in a business.

4.1 The anti-poverty role played by savings

“Saving” refers to the act of putting aside money for a specific goal or for the purpose of having a nest egg in the case of an emergency. This is distinct from “storing money” for shorter term, cash management purposes, such as paying an upcoming bill.

Research finds that access to savings can help adults better manage risk—including women. In Chile, a study of low-income members of microfinance institutions found that women who received free savings accounts reduced their reliance on debt and improved their ability to make ends meet during an economic emergency (Kast and Pomeranz, 2022). Access to mobile money-based savings tools has been shown to also reduce women’s reliance on high-risk sources of income (such as transactional sex), according to a study of low-income women in urban and rural western Kenya (Jones and Gong, 2021).

Savings is also associated with greater financial resilience. The Global Findex defines financial resilience as the ability to come up with extra money equivalent to 5 percent of gross domestic income (or around \$3,000 in the U.S.) without difficulty within 30 days or less to deal with an unexpected expense, such as from an accident or a health event. Respondents who say they have and would rely on savings in an emergency are consistently more likely to say they could easily get the money (i.e., they are more financially resilient) in every region around the world. This is in contrast to adults who would rely on other sources of extra money. These include borrowing from friends and family, working extra hours, or taking out credit from a bank or other formal source, all of which are associated with lower resilience.

Beyond the individual and household levels, business owners who use their accounts to make payments and access savings are better able to access the digital economy, opening up new opportunities to connect with buyers, suppliers, and service providers than would be possible through analog networks alone.

In developing economies as of 2021, 42 percent of adults saved in any way and a slight majority of them did so formally using an account (storing money formally in an account was more common than saving, with 39 percent of adults in developing economies doing so). The first year that formal methods represented the most popular way to save was 2021. Prior to 2021, other methods dominated. These include semiformal methods such as community savings clubs, where individuals typically contribute a set amount on a regular basis (e.g., weekly or monthly) and one member receives the funds at each meeting; or saving using other methods such as saving cash at home. Mobile money accounts are playing a significant role in facilitating formal saving for mobile money account holders, especially in Sub-Saharan Africa, where an equal share of adults saved using a mobile money account as saved at a bank.

4.2 Mixed evidence on borrowing as a driver of financial wellbeing

Unlike digital payments and savings, which deliver uncomplicated benefits to the consumers who have access to them, borrowing shows mixed results for improving financial wellbeing. In developing economies, about 50 percent of adults borrow in some way. More than half of those loans come from friends or family. The share of adults borrowing formally through a bank, microfinance institution, or through mobile money has increased, however, from 16 percent of adults in 2014 and 2017 to 23 percent of adults in 2021.

Formal lending started to become a more common addition to development efforts in the 1970s. Despite its long history, the past 15 years saw a major surge in interest from development advocates, based on the idea that small-value credit could help low-income individuals, who are disproportionately dependent on self-employment for their household income, make productive investments in a micro or small business. Having access to larger lump sums of capital than they could otherwise accumulate through savings would theoretically eliminate the capital constraints that supposedly limit small business growth.

Microcredit saw a burst of funding and high-profile advocacy in the early 2000s. The classic microcredit model—espoused by Mohammed Yunus and Grameen Bank—focused on women and on “group” lending, implicitly or explicitly intended to capitalize a microenterprise. Within this model, the microfinance institution (MFI) forms groups of low-income women borrowers and pools their risk so that the whole group is responsible for the repayment of the full total represented by their collective loans (though MFIs vary in how aggressively they enforce group liability). The MFI operates biweekly meetings where these women make payments. The group model leverages social commitments to encourage repayment, in the belief that the borrowers will be less likely to skip a payment or default if their neighbors both know about it and must absorb the difference.

At the peak of microcredit’s popularity, its advocates often shared compelling stories or summary statistics to argue that loans invested in a business or in training resulted in reduced poverty. Yet more substantive, impact-based evidence has accumulated in the past 10 years, as the research community has pursued a range of studies and methods designed to understand the impact, and mechanisms of impact, that borrowing has on household wellbeing. The summary conclusion of this work is that borrowing is not associated with income growth or by extension with increased household wellbeing.

For example, a review of six separate randomized evaluations of microcredit offered in different countries and different contexts found that demand for loans was modest (between 17 and 31 percent of prospective borrowers; higher in cases where the lender approached only those who had expressed interest in credit in the past), suggesting that microentrepreneurs may not want credit or have the ability to use it to their benefit. The impact of credit on those who took it was, moreover, limited. While access to credit appeared to correspond with increases in business

activity, the borrowers did not increase household consumption. Nor did borrowers appear to experience widespread social benefits, such as increased schooling for their children, increased health care consumption, or, in the case of women, increased household bargaining power—only one study in four that looked at women’s bargaining power found a benefit (Banerjee, Karlan, and Zinman 2015). Another review looking at different impact evaluations came to similar conclusions (Banerjee 2013).

Those findings do not mean that credit cannot be a helpful financial tool for the right borrowers in the right circumstances. Although borrowers did not see increased household income or consumption across more than half a dozen evaluations of microcredit’s impact, there is evidence that access to credit allows borrowers more choice in how they make their money. Credit allowed them to spend their time on their business and not on other income-generating activities, creating a net-zero impact on income but perhaps increased personal satisfaction.

Moreover, some randomized evaluations that find no or insignificant impact from credit on average, show high positive impacts on business growth, household consumption, and/or social benefits for a subset of borrowers. An evaluation of a group-lending microcredit program offered in randomized neighborhoods in India, for example, found that borrowers with existing, profitable businesses saw significant profit growth after accessing credit, even though the average borrower in the sample saw no growth impact (Banerjee, Duflo, Glennerster, Kinnan 2015). When the researchers returned years later to reevaluate the long-term impact of microcredit on the entrepreneurial borrowers, they found that the benefits of credit for households with an existing business before the introduction of microcredit increased over time—even six years later, the entrepreneurial borrowers in neighborhoods with available microcredit had 35 percent more assets and twice the revenues compared with borrowers in the control neighborhoods where microcredit was not offered (Banerjee, Breza, Duflo, Kinnan 2015). The converse is also true—in India, a reduction in microfinance as a result of state-wide regulation in Andhra Pradesh was associated with significant decreases in wages, income, and consumption, presumably because consumers had less access to capital to spend across the economy (Breza and Kinnan, 2021).

There is also evidence that product design can expand the share of borrowers who experience tangible, positive benefits from credit. For example, the classic microfinance model of group

lending and fast repayment windows may not allow low-income borrowers enough time to invest in the kinds of assets that have the potential to produce returns. One experiment in India found that giving borrowers a two-month grace period before loan repayment corresponded with increased revenues and household incomes, though these borrowers also had a higher rate of default compared with borrowers given the traditional contract (Field et al.2013). Another experiment, also in India, offered business owners the option of a more expensive loan with more flexible repayment terms, and showed better business returns *without* higher rates of default (Barboni and Agarwal 2023).

The form the loan comes in may also make a difference. Women borrowers who receive their loan in cash may be vulnerable to pressure from family members or friends to share the money. Women borrowers in Uganda who received money into a mobile money account, in contrast, had higher business capital and higher profits; the effect was largest for the women who reported the most intense pressure to share (Riley 2022).

Mobile money is making it easier for people to borrow and is beginning to play a more significant role. Worldwide only 3 percent of adults have borrowed using a mobile money account, though the share is 7 percent in Sub-Saharan Africa, with far higher shares in economies such as Kenya, where 30 percent of adults have borrowed using their mobile money account, and in Uganda, where 16 percent of adults have. A minority of those mobile money borrowers in Sub-Saharan Africa also borrowed from a bank or microfinance institution, suggesting that mobile money is reaching a share of potential borrowers who otherwise lacked access.

5. Barriers to financial inclusion

Globally, about 1.4 billion adults do not have an account at a financial institution or through a mobile money provider, a decline from 2.5 billion in 2011. Nearly all unbanked adults live in developing economies and the majority—or 740 million people—live in only seven high-population countries: Bangladesh, China, the Arab Republic of Egypt, India, Indonesia, Nigeria, and Pakistan. Women, poor adults, less educated adults, and those outside the workforce make up the majority of people outside of the formal financial sector. This continues to be true even in countries that have seen recent increases in account ownership. The reason is that vulnerable

adults are often excluded from formal banking services because they face more barriers to account access.

Specifically, when asked why they do not have an account, the largest share of unbanked adults without an account at a financial institution cite a lack of money among their reasons. Yet a lack of money is not the only reason, and most respondents give more than one answer. They include that bank services are too expensive; that banks are located too far from where the respondent lives; that a family member has an account (this latter answer is often more common among women than men); and that they lack the documentation, such as a government-issued ID, needed to open an account. Distrust of the financial system also plays a role for unbanked adults around the world. Finally, religion can be a barrier, particularly in Arab economies where adults might prefer Sharia-compliant banking services.

Mobile money accounts can overcome some of these barriers, specifically distance and cost. Yet when unbanked adults in Sub-Saharan Africa were similarly asked why they did not have a mobile money account, one of the top reasons they gave was that they did not have a mobile phone. This points to a parallel access issue related to digital connectivity via a mobile phone, a computer, or other digital device with internet access. In addition, many unbanked adults say that excess distance to a mobile money agent is a barrier to mobile money account ownership. Though the goal may be a seamless digital experience where money is sent and received digitally, in reality, mobile money typically includes cash-in/cash-out (CICO), especially in predominantly cash-based economies. For this, agents are necessary.

Yet as digital financial services become more popular, a larger share of consumers are exposed to financial risks from fraud and phishing scams, over-indebtedness in digital credit, and incomplete or incorrect information on the fees and costs of financial products.⁶ A lack of financial experience among unbanked or newly banked adults exacerbates these risks. In fact, about one in three of all mobile money account owners in Sub-Saharan Africa say they cannot use their account without help from a mobile money agent or from a friend or relative. Such lack of financial and digital independence may expose these users to increased risks. Safely

⁶ For a review of studies on consumer protection, see Innovations for Poverty Action, “Consumer Protection Initiative: Research Initiatives” (dashboard), <https://www.poverty-action.org/program-area/financial-inclusion/consumer-protectFion-initiative>.

improving financial access for these groups must therefore include provisions for building an enabling, inclusive infrastructure. It starts by addressing these known barriers to financial inclusion. Doing that should start with pro-inclusion regulation.

5.1 The role of financial regulation

As alluded to previously in this paper, governments and financial authorities around the world are adopting new programs and regulations to spur financial inclusion. Regulatory frameworks encompass policies that ease the opening and maintenance of accounts, entry and licensing of service providers and agents, monitoring and enforcement of consumer protection rules, and overall safeguarding of consumer funds.

Bank regulations, especially for consumer protection, can lead to higher financial inclusion. For example, one study finds that individuals in economies with the best regulations are 12.4 percent more likely than those in economies with the worst regulations to have an account at a financial institution such as a bank (Chen and Divanbeigi, 2019). Cross-country analysis has found that higher financial inclusion is correlated with lower costs of financial services, closer proximity to financial institutions, strong legal protections, and political stability (Allen, et al., 2016). These studies suggest that market conditions and the policy environment can have a significant impact on financial inclusion.

Beyond direct government programs and policies, innovation-friendly regulation also plays a role. The most obvious example is the regulation of fintechs such as mobile money providers, which are playing an increasingly important role in the financial sector. Sub-Saharan Africa offers a case in point for the impact that pro-innovation regulation can have. A supportive environment for mobile money has inarguably played a role in enabling Sub-Saharan Africa to become the global leader in mobile money account ownership. Enabling policies include not only licensing and oversight of mobile money providers—often mobile network operators—but also general support for enabling infrastructure, such as widespread telecommunications networks, mobile phone access, payments networks, and reliable electricity and power grids.

One of the mechanisms by which effective regulation appears to drive financial inclusion is by increasing consumer trust. Early evidence for this idea came from Allen et al. (2016), who used data from the inaugural 2011 edition of the World Bank's Global Findex Database to study the

individual and country-level factors that drive account ownership and use of accounts such as for savings. The Global Findex team reconsidered that analysis using data from the 2021 edition of the Global Findex database, specifically to assess consumer protection regulations as potential determinants of account ownership at financial institutions. To do so, we combine Global Findex 2021 data with data from the World Bank's 2017 Financial Inclusion and Consumer Protection (FICP) Survey, which tracks the supervisory activities and enforcement powers of the consumer protections agencies in a country (World Bank Group 2017). The final merged dataset consists of more than 91,000 observations covering 89 economies. Data on GDP per capita are from the World Bank's World Development Indicators Database.

We construct three indices based on FICP indicators on the following themes: (1) if there are simplifications or exemptions to the documentation (KYC) requirements for certain types of applicants or products; (2) if the country has strong and enforced consumer protection provisions, such as collection of data on consumer complaints, and market monitoring of provider's advertisements and websites, etc.; and (3) if tax incentives for saving schemes have been implemented to promote financial inclusion.⁷ A higher score indicates a more extensive set of monitoring activities undertaken by consumer protection authorities and enforcement powers held by them.

The results of the country-level analysis show a positive correlation between pro-inclusion regulations—such as tax incentivized savings schemes—and increases in account ownership. In all, an increase in the quality of regulations is associated with a 4.3 percent increase in the share of adults in the country who have an account. When we in turn examine the individual observations, however, consumer protection regulations appear to be the only ones associated with increases in financial account ownership. These results highlight the importance of transparent terms and conditions and clear recourse to increase trust in financial institutions enough to encourage take-up of financial products.

⁷ We exclude a fourth category identifying explicit regulations on the cost of maintaining an account, financial accounts, since fewer than 10 economies are identified as having these regulations.

5.2 Improving the enabling environment for financial inclusion

Beyond regulatory interventions, some of the barriers to account ownership highlighted by the unbanked require investments in government-enabled infrastructure to help increase financial inclusion. One example is official government-issued identification, which the barriers data discussed above shows is a significant reason why many unbanked adults do not have an account, as it is almost always required to open any type of account, whether with a financial institution or with a mobile money provider. Biometric identification, such as a fingerprint-based identification, can increase account ownership (as seen in India, discussed above), as well as significantly increase loan repayment rates for borrowers with the highest predicted default risk (Giné, et al., 2012).

Identification is not the only documentation barrier people face, however. Within the sample of adults who report documentation as a barrier, for example, almost half do have an ID. Government identification does not always fully satisfy KYC (“know your customer”) requirements defined by a country’s regulator, however. People may also need documentation such as a utility bill with a home address, which may be difficult to produce.

Access to a mobile phone is another example in which expanding infrastructure and access could facilitate broader inclusion. As mentioned in the section on barriers, the second most common reason adults in Sub-Saharan Africa name for not having a mobile money account was the lack of a mobile phone. The Gallup World Poll data on mobile phone ownership finds that in Sub-Saharan Africa, 44 percent of the 166 million unbanked do not have a mobile phone. Likewise in South Asia, 44 percent of the 432 million unbanked adults in the region do not have a mobile phone. Access to mobile phones could overcome the barriers of physical distance and the high cost of banking fees that unbanked adults say prevent them from accessing financial services. This could be especially beneficial for expanding access for women, who are much less likely than men to own a mobile phone in Sub-Saharan Africa (11 percentage points less) and in South Asia (22 percentage points less).

6. Building financial capability is critical for safe ownership and usage

Beyond the external barriers to access, there are also social and personal barriers that people face, including their financial confidence. In developing economies, 64 percent of unbanked

adults said they could not use an account at a financial institution without help, and in some economies the proportion was even larger. Unbanked women in developing economies are 10 percentage points more likely than unbanked men to say they could use banking services confidently. Interestingly, it is not only the unbanked who lack financial confidence. As mentioned, nearly one-in-three mobile money account owners in Sub-Saharan Africa say they cannot use their account without help.

This finding points to a key area of concern related to financial inclusion: poor and financially inexperienced users may not gain as much benefit from account ownership and financial services access if they do not understand how to use their account or other financial products in a way that avoids consumer protection risks such as exploitation, high and hidden fees, over-indebtedness, fraud, and discrimination.⁸ For example, inexperienced account owners who must ask a family member or a banking agent for help using their account may be more vulnerable to financial abuse. Women in particular are more likely to report that another family member spent their government transfer funds and to say they had to pay a fee or a tip to an agent to get their money when, officially, there should have been no charge. Overall, one in five adults in developing economies receiving a wage payment into an account paid higher fees than expected to receive it.

Financial service institutions and supportive regulators can play a role in addressing some of the risks that financially inexperienced adults face participating in the financial system. For example, there is a significant opportunity around the world to increase product transparency and communication. Easy-to-understand product terms are important for everyone, but especially for those who lack financial experience. New account holders must be able to understand the fee structure for the account and receive ongoing support in using it. Financial service providers have a responsibility to ensure that staff and agents provide complete and accurate information. However, such information is not always provided. Evidence from a mystery shopper audit of 1,000 microfinance firms in Uganda found that information on account costs was inconsistent; inexperienced borrowers received less information than experienced borrowers; and printed materials with product specifications were missing or violated regulatory guidelines

⁸ For a discussion of consumer financial protection, see Garz et al. (2020).

(Atuhumuza, et al., 2019). A similar multi-country mystery shopper study in Ghana, Mexico, and Peru found that actors posed as potential customers rarely received the cheapest product offer or the correct costs. The reason may be that financial provider staff are often paid more when customers accept more expensive products; that creates an incentive for staff to withhold information or even to actively mislead (Giné and Mazer, 2022).

Developing and enforcing clearer regulatory guidelines about disclosure and pricing transparency could help build trust in the financial system—another factor, as discussed, that makes unbanked adults wary of opening an account. When presented in a clear and transparent way, account holders can understand product information and use it to make product decisions that fit their needs, as shown in lab experiments in Mexico and Peru (Giné, et al., 2017).

Financial literacy training is another way to improve financial knowledge and encourage more responsible financial behaviors (Kaiser, et al., 2022). A meta-analysis of 76 randomized experiments finds that traditional classroom-based financial education, has, on average, improved financial knowledge and financial behavior (Kaiser, et al., 2022). In addition, financial training structured as learning-by-doing during financial account onboarding can lead to regular use of accounts and help users become savvier financial customers (Breza, et al., 2020; Lee et al., 2021). The evidence also points to the importance of real-time information to increase trust and usage—for example, through functionality that allows users to check balances using a card, phone, or the internet (Bachas, et al., 2021).

Beyond the direct steps that financial institutions can take to improve transparency and embed clarity in product design, regulators also have an opportunity to expand and innovate, to identify bad actors and enforce the rules. As noted throughout this paper, digital financial services have already transformed how people move and manage their money in every region of the world. Although millions of people have been able to take advantage of these offerings, they also bring the potential for increased harm from aggressive marketing, poor dispute resolution, data or identity theft, fraud, and over-indebtedness. A recent study in Malawi, for example, found that consumers who took out digital loans offered via text message marketing campaigns were less likely to repay them (Brailovskaya, et al., 2021). In Mexico, faster origination of internet-based loans is associated with lower loan repayment (Burlando, et al., 2021).

Knowing that new methods bring increased risks creates an imperative for regulators and financial institutions alike to inform consumers about the risks of predatory financial practices and what they look like. Because of the growing use of digital financial services by less educated adults and other vulnerable groups, it is important for public service initiatives to offer this information in a language and format that users can easily understand.

7. Conclusion

The goal of making financial services available and accessible to everyone who can benefit from them remains a cornerstone of efforts to reduce poverty and increase financial empowerment. Significant progress has been made toward that goal in the past decade. There is still more to do, however. As the share of adults with an account grows, more of those account owners come from traditionally underserved and more vulnerable populations. The responsibility to ensure financial wellbeing for them, as for everyone, should be shared between individuals, financial regulators, and financial institutions.

Financial regulators and supervisory agencies need updated monitoring systems to identify the types of financial risks in the market and measure their frequency and impact.⁹ Meanwhile, financial providers must take steps to ensure that users of digital financial services fully understand disclosures about product features and fees. Financial service providers can also embed design features into their products that enhance the financial well-being of customers. Examples include features that help people accrue emergency savings to deal with shocks, or goal-based savings to finance a specific purpose. Behavioral insights can also help financial institutions communicate more effectively by highlighting salient details and ensuring that the benefits and risks of financial products are clear.

⁹ For additional information, see Consultative Group to Assist the Poor, “Market Monitoring for Financial Consumer Protection,” <https://www.cgap.org/topics/collections/market-monitoring/tools>.

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Table 1: Summary Statistics

“Account ownership” is the percent of adults with an account with a bank or similar financial institution or with a mobile money provider. “Save” is the percent of adults that saved in the past year using an account at a formal financial institution. “Borrow” is the percent of adults that borrowed in the past year from a formal financial institution. “Made or received a digital payment” is the percent of adults that received or made a payment directly into or from their account, including payments using a card or phone.

		<i>Used an account to:</i>		
	Account ownership (% of adults)	Save	Borrow	Made or received a digital payment
Afghanistan	10%	1%	2%	8%
Albania	44%	10%	13%	35%
Algeria	44%	16%	4%	34%
Argentina	72%	14%	32%	65%
Armenia	55%	7%	28%	47%
Australia	99%	69%	57%	99%
Austria	100%	67%	57%	99%
Azerbaijan	46%	4%	19%	43%
Bangladesh	53%	7%	16%	45%
Belgium	99%	57%	48%	97%
Benin	49%	13%	11%	44%
Bolivia	69%	21%	20%	55%
Bosnia and Herzegovina	79%	19%	21%	67%
Botswana	59%	27%	11%	52%
Brazil	84%	25%	41%	77%
Bulgaria	84%	23%	26%	75%
Burkina Faso	36%	16%	9%	33%
Cambodia	33%	7%	31%	26%
Cameroon	52%	23%	11%	50%
Canada	100%	64%	81%	98%
Chad	24%	9%	10%	18%
Chile	87%	31%	24%	84%
China	89%	45%	39%	86%
Colombia	60%	13%	19%	52%
Comoros	34%	14%	9%	20%
Congo, Dem. Rep.	27%	13%	5%	26%
Congo, Rep.	47%	20%	10%	44%
Costa Rica	68%	22%	17%	59%
Côte d'Ivoire	51%	20%	8%	48%
Croatia	92%	25%	33%	87%
Cyprus	93%	28%	31%	87%
Czechia	95%	60%	31%	94%

		<i>Used an account to:</i>		
	Account ownership (% of adults)	Save	Borrow	Made or received a digital payment
Denmark	100%	67%	53%	100%
Dominican Republic	51%	13%	22%	39%
Ecuador	64%	13%	23%	47%
Egypt, Arab Rep.	27%	4%	8%	20%
El Salvador	36%	8%	11%	28%
Estonia	99%	62%	34%	99%
Eswatini	66%	33%	33%	65%
Ethiopia	46%	23%	5%	20%
Finland	100%	62%	53%	98%
France	99%	54%	44%	98%
Gabon	66%	27%	12%	66%
Gambia, The	33%	17%	6%	22%
Georgia	70%	9%	24%	62%
Germany	100%	57%	55%	99%
Ghana	68%	46%	17%	66%
Greece	95%	26%	20%	91%
Guatemala	37%	10%	11%	26%
Guinea	30%	13%	8%	28%
Honduras	38%	11%	11%	32%
Hong Kong SAR, China	98%	59%	70%	93%
Hungary	88%	32%	19%	86%
Iceland	100%	76%	73%	100%
India	78%	14%	13%	35%
Indonesia	52%	20%	13%	37%
Iran, Islamic Rep.	90%	24%	26%	84%
Iraq	19%	2%	4%	14%
Ireland	100%	63%	54%	98%
Israel	93%	59%	80%	91%
Italy	97%	49%	55%	96%
Jamaica	73%	25%	12%	50%
Japan	98%	64%	61%	96%
Jordan	47%	4%	10%	36%
Kazakhstan	81%	19%	30%	78%
Kenya	79%	45%	40%	78%
Korea, Rep.	99%	59%	69%	98%
Kosovo	58%	10%	18%	48%
Kyrgyz Republic	45%	7%	18%	39%
Lao PDR	37%	17%	9%	21%
Latvia	97%	43%	23%	95%

		<i>Used an account to:</i>		
	Account ownership (% of adults)	Save	Borrow	Made or received a digital payment
Lebanon	21%	3%	3%	14%
Lesotho	64%	31%	19%	59%
Liberia	52%	22%	17%	46%
Lithuania	94%	47%	12%	91%
Madagascar	26%	12%	9%	24%
Malawi	43%	21%	10%	40%
Malaysia	88%	49%	15%	79%
Mali	44%	19%	13%	38%
Malta	96%	46%	39%	91%
Mauritania	23%	10%	12%	20%
Mauritius	91%	29%	20%	80%
Mexico	49%	14%	16%	44%
Moldova	64%	8%	13%	60%
Mongolia	98%	29%	35%	97%
Morocco	44%	8%	5%	30%
Mozambique	49%	17%	15%	42%
Myanmar	48%	13%	10%	40%
Namibia	71%	36%	23%	66%
Nepal	54%	17%	15%	29%
Netherlands	100%	66%	34%	99%
New Zealand	99%	69%	60%	98%
Nicaragua	26%	7%	12%	21%
Niger	12%	3%	4%	10%
Nigeria	45%	18%	7%	34%
North Macedonia	85%	15%	22%	74%
Norway	99%	81%	67%	99%
Pakistan	21%	3%	4%	18%
Panama	45%	15%	10%	36%
Paraguay	54%	7%	14%	51%
Peru	57%	15%	22%	49%
Philippines	51%	21%	19%	43%
Poland	96%	36%	32%	93%
Portugal	93%	43%	30%	91%
Romania	69%	19%	19%	64%
Russian Federation	90%	19%	31%	87%
Saudi Arabia	74%	36%	32%	73%
Senegal	56%	33%	13%	53%
Serbia	89%	19%	21%	87%
Sierra Leone	29%	11%	6%	27%

		<i>Used an account to:</i>		
	Account ownership (% of adults)	Save	Borrow	Made or received a digital payment
Singapore	98%	60%	44%	95%
Slovak Republic	96%	59%	34%	95%
Slovenia	99%	40%	42%	97%
South Africa	85%	41%	19%	81%
South Sudan	6%	2%	3%	5%
Spain	98%	54%	52%	98%
Sri Lanka	89%	34%	22%	55%
Sweden	100%	80%	49%	99%
Switzerland	99%	56%	61%	98%
Taiwan, China	95%	68%	62%	88%
Tajikistan	39%	2%	13%	33%
Tanzania	52%	22%	13%	50%
Thailand	96%	54%	30%	92%
Togo	50%	18%	8%	44%
Tunisia	37%	15%	10%	28%
Türkiye	74%	10%	38%	68%
Uganda	66%	39%	29%	63%
Ukraine	84%	11%	34%	81%
United Arab Emirates	86%	11%	24%	77%
United Kingdom	100%	61%	55%	99%
United States	95%	65%	66%	93%
Uruguay	74%	15%	42%	68%
Uzbekistan	44%	3%	7%	42%
Venezuela, RB	84%	10%	11%	81%
Viet Nam	56%	21%	11%	46%
West Bank and Gaza	34%	7%	5%	21%
Yemen, Rep.	12%	3%	2%	9%
Zambia	49%	29%	15%	46%
Zimbabwe	60%	12%	7%	58%

Table 2: Individual characteristics associated with account ownership

The source for all data is the Global Findex database 2021. All regressions use individual-level data for adults in 138 economies, including 95 low-and middle-income economies, and are estimated using ordinary least squares with robust standard errors. The dependent variable is equal to one if the respondent has an account at a financial institution or with a mobile money service (and equal to 0 otherwise). Standard errors are shown in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

	<u>Dependent variable = Account ownership</u>	
	All economies	Middle- and low-income economies only
Women	-0.028*** [0.003]	-0.030*** [0.004]
Household income: Bottom 40% of income distribution	-0.064*** [0.003]	-0.082*** [0.004]
Age in years	0.007*** [0.000]	0.010*** [0.001]
Age in years, squared	-0.000*** [0.000]	-0.000*** [0.000]
Primary education only	-0.157*** [0.004]	-0.185*** [0.005]
Unemployed	-0.101*** [0.006]	-0.147*** [0.007]
Out of workforce	-0.134*** [0.004]	-0.193*** [0.005]
Self-employed	-0.069*** [0.004]	-0.106*** [0.005]
Constant	0.205*** [0.015]	0.221*** [0.017]
Observations	139,250	97,044
R-squared	0.368	0.270
Number of economies	138	95