FOCUS NOTE

CGAP

EMERGING EVIDENCE ON FINANCIAL INCLUSION

Moving from Black and White to Color

July 2019

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Cover photo by Phyu Aye Pwint, Myanmar.

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Executive Summary

Recent research on the impact of financial services on the lives of low-income people provides valuable insights. However, these studies tend to focus on microcredit or a single financial product, such as savings or mobile money. As a result, an overly simplistic and product-focused story has emerged. Recognizing the need for a more nuanced and clearer impact narrative, this Focus Note synthesizes evidence since 2014 and highlights three overarching insights:

1. Financial services improve resilience by facilitating recovery from shocks and encouraging investments that are riskier but potentially more profitable in the longer term.
2. Women's control and ownership of financial services can improve their bargaining power in the household and enable positive outcomes, such as increasing their participation in the labor force.
3. Emerging evidence suggests that financial inclusion can contribute to increased economic growth and reduced poverty.

Other findings demonstrate that expanding access to basic accounts alone is unlikely to result in detectable welfare benefits, while digitizing financial services shows promising effects on poverty but also introduces potential risks (e.g., weakening of social networks). Going forward, more information is needed on context and customer demographics to better understand who benefits from certain financial services and how; further research is also required on the circumstances in which financial inclusion may not be beneficial.

WHETHER AND HOW FINANCIAL SERVICES IMPROVE THE LIVES of low-income people remains the subject of intense debate despite decades of evidence gathering. Different groups in the international development community argue strenuously either for or against prioritizing the expansion of financial services among poor people—with both sides citing evidence to support their positions.

CGAP has monitored and analyzed the global evidence for many years and is currently making a dedicated effort to take stock of it, as are many other organizations, including 3iE, Innovations for Poverty Action (IPA), and Abdel Latif Jameel Poverty Action Lab (JPAL). Many earlier synthesis efforts, including CGAP's papers on impact evidence (Box 1), viewed the evidence through a product lens—and sometimes focused on only one product category, such as savings or mobile money. While this approach can be informative, it does not lead to a clear narrative with policy implications. Furthermore, syntheses are often limited to studies conducted

with a certain methodology (e.g., randomized controlled trials [RCTs]) that complies with academic standards of rigor.[1]

These approaches give us only a small snapshot of the role financial services play in the lives of poor people. As a result, an overly simplistic interpretation of the evidence to date has emerged: credit does not work; savings are good; insurance is good, but low take-up means it can't be commercialized; and payments have promise. We are missing out on understanding the bigger picture and the ways financial inclusion connects and interacts with broader development goals to impact the lives of poor people.

BOX 1. **Evidence by product, as of 2014**

Credit. Small businesses do benefit from access to credit; however, the link to broader welfare is less clear.

Savings. Savings help households manage cash-flow spikes, smooth consumption, and build working capital. Poor households without access to a savings mechanism find it harder to resist immediate spending temptations, than do other households.

Insurance. Insurance can help poor households mitigate risk and manage shocks.

Payments and mobile money. Mobile money reduces households' transaction costs and seems to improve their ability to share risk.

Source: Cull, Ehrbeck, and Holle (2014).

In our latest efforts to analyze the evidence, CGAP has taken a markedly different approach. In a comprehensive literature review, we have intentionally chosen to apply a wide and inclusive lens that spans all product categories and research methodologies. We are reviewing household-level impact evaluations as well as studies looking at the link between financial inclusion and macroeconomic outcomes, such as poverty and inequality.

We have identified more than 250 publications that look at the impact of financial inclusion. Focusing on the nearly 100 new studies conducted since 2014, we have discovered key impact themes emerging from the evidence that either reinforce takeaways from earlier synthesis efforts or help to evolve our understanding of them. This Focus Note highlights the key themes that emerge from this vast literature review. Because 17 of the papers are not about impact per se, but touch on issues linked to product design, take-up, and use, they are not featured in the main body of the research but are highlighted in Box 2. Furthermore, we highlight studies with negative or no impact in Box 4. Three themes emerged from our analysis of the literature of the past five years. They shed light on the growing body of publications that look at whether and how financial services improve well-being and work toward a coherent narrative around the main findings of the literature.

This paper is framed around the following themes:

- The links between financial services, resilience, and investments.
- Women's empowerment (measurement and synthesis of differentiated impacts between men and women).
- Impact beyond users (general equilibrium effects and macroeconomic impacts).

1 RCTs are a type of experiment in which people (or households or villages, in some cases) are randomly assigned to one of two or more groups (usually a treatment and control group, although the study design may include several treatment groups used to compare different forms of a similar intervention). The use of a control group aims to mimic a counterfactual (the unobservable outcome of the treatment group not having received the treatment).

Links Between Financial Services, Resilience, and Investments

Early financial inclusion rhetoric tended to emphasize poverty reduction, in part as a holdover from claims made by microcredit proponents. Over the past decade, however, two trends have contributed to a retreat from these bold promises. First, experimental studies have repeatedly demonstrated that financial inclusion does not offer a simple "escape from poverty" (indeed, it is hard to imagine any single intervention that could achieve this feat). Instead, research continues to point to resilience—the ability to maintain consumption after a shock without imperiling longer-term household stability—as a critical and potentially more achievable objective that is strongly supported by evidence.

Second, demand-side research—financial diaries,[2] in particular—has delivered detailed transaction-level evidence that demonstrates the fundamental role of financial services in basic liquidity management and consumption smoothing for households across many countries. Emphasizing this function of financial services helps reset the narrative of financial services in the lives of poor people and broadens expectations beyond the more ambitious goal of poverty reduction. At the same time, this demand-side research confirms what many have long intuited: the distinctions among types of financial products and among their intended use cases often break down in the eyes of consumers.[3]

People seem to use credit as a savings commitment device, insurance to help with investments, mobile payments to act as an informal insurance mechanism, and so on. Impact evaluations confirm this interchangeability and further indicate that preconceptions about the types of impacts we should expect from different products should be updated (e.g., credit should lead to more investment, insurance should help with resilience, etc.). Credit also has a role to play in resilience, and insurance may have significant impact on business decisions.

An expanding body of literature demonstrates how financial services allow individuals and households to cope with shocks without reducing consumption. Suffering negative shocks is common for people living in or near poverty. Bharadwaj et al. (2019) reported that nearly 90 percent of households in their study sample reported experiencing some form of negative shock in the prior six months. The frequency and severity of these shocks are often compounded by a lack of robust social safety nets and the fact that, by definition, vulnerable individuals are less equipped to recover from what might otherwise be a minor hurdle. Further, in areas where communities share livelihood strategies (e.g., smallholder farmers), shocks can affect most members of a community simultaneously and therefore the effectiveness of informal risk-sharing mechanisms.

Access to an expanded array of financial services, offered at reasonable prices and on fair terms, can help vulnerable households recover from shocks and maintain consumption levels after adverse events. Beyond their role in facilitating recovery, financial services that provide households flexibility in responding to shocks may also encourage productive

2 Financial diaries are a longitudinal research methodology that tracks with high frequency all transactions and balances within a household.

3 See, e.g., Rutherford (2000).

investments that are riskier but potentially more profitable. In this section, we look at recent evidence supporting these two related hypotheses.

Evidence on mobile money, particularly in Sub-Saharan Africa and South Asia, suggests that it can play a critical role in supporting resilience. Within mobile money literature, one of the most well-known examples is a pair of papers showing how access to M-PESA in Kenya allowed families to better self-insure by receiving a greater volume of remittances from a wider range of senders in response to shocks. In subsequent research, the same authors demonstrated how mobile money also improved long-term outcomes, including increased per capita consumption levels and reduced poverty (Jack and Suri 2014; Suri and Jack 2016).

Research from Rwanda supports the notion that individuals share risk by making transfers to people who have suffered a negative shock (in this case, a natural disaster). Compared to other options, mobile transfers facilitate sending money faster and over farther distances (Blumenstock et al. 2016). Analysis of panel data from Tanzania confirms that mobile money users can maintain consumption after a rainfall shock (e.g., flood or drought), in contrast with nonusers who, when faced with a similar shock, cut back consumption by up to 6 percent (Riley 2018b).

Evidence from an RCT in rural areas of southern and central Mozambique similarly demonstrates that mobile money can increase remittances received by rural households (Batista and Vicente 2016), which also reduced the vulnerability of rural households to negative shocks. Finally, an RCT from Bangladesh that matched urban migrants with their relatives in rural regions reinforces the evidence on mobile money, demonstrating that active mobile money users in rural areas increased consumption by 7.5 percent and the incidence of extreme poverty decreased (Lee et al. 2018). The rural households were also able to save more, which led to a decreased need to borrow and higher caloric intake during the lean season. In addition, the RCT showed that urban migrants described deteriorating physical and mental health.

Savings products can also help individuals and households maintain consumption levels without resorting to coping strategies that threaten future welfare. Indeed, a recent systematic review and meta-analysis of experimental literature on savings promotion, which includes financial literacy interventions and access to savings, found that interventions improved household consumption and food security (Steinert et al. 2018). Of note, programs that targeted supply-side barriers to savings were more effective than financial literacy interventions.

Two studies are emblematic of this general finding. First, an RCT in Nepal offered low-fee bank accounts and, despite imprecise estimates of impacts on income, assets, and aggregate spending, found that households in the treatment group were better able to cope with health shocks (Prina 2015). Specifically, the income of members of the treatment group fell by a smaller amount than that of the control group in response to a shock (approximately 15 percent versus 40 percent). Prina infers that, because households with savings accounts purchased more meat and fish, their “health capital” increased, which allowed them to recover more quickly and miss fewer days of work. She also hypothesizes that the savings account allowed households to access more effective health treatment, which also accelerated their recoveries.

A similar finding emerged from an RCT in Chile, which found that free savings accounts lowered debt levels of clients and led to significantly smaller reductions in consumption after suffering economic shocks (Kast and Pomeranz 2018). Kast and Pomeranz conclude that credit and savings act as substitutes in households' efforts to self-insure, explaining that "in principle, credit is simply a form of negative savings." The easing of savings constraints led participants to shift from borrowing to building precautionary savings, and thus the authors conclude that barriers to saving lead people to borrow more than they otherwise would. Nonetheless, questions remain regarding the savings literature since, in general, the amounts saved are not large enough to explain the changes in consumption.

Access to consumer credit may also help build resilience for individuals and households, provided that the repayment obligations do not threaten an individual's long-term economic condition. Evidence from South Africa suggests that consumer credit, even at very high prices, can improve food security and economic self-sufficiency (Karlan and Zinman 2010). More recent research in Kenya demonstrates that access to a digital credit product, M-Shwari, can improve household resilience (Bharadwaj et al. 2019). Households with access to M-Shwari are 6.3 percentage points less likely to report having sacrificed any expense after a negative shock.

At the same time, the dangers of easily accessible high-cost credit are well documented in several markets. For example, recent research by CGAP, FSD Tanzania, and FSD Kenya revealed that about half of digital credit borrowers in Kenya and Tanzania report having repaid loans late and up to one-third report having defaulted on a digital loan (Kaffenberger et al. 2018). Thus, enthusiasm for credit's potential role in supporting resilience should be tempered by a recognition of the well-known consumer protection risks it poses. Future experimentation can help strengthen our understanding of the most effective ways to mitigate potential harms and maximize benefits for consumers.

Beyond the direct consequences of a negative shock, the threat of a potential future shock can make households forgo potential investments that could ultimately improve welfare. Financial services that contribute to risk management could help mitigate this. An expansive literature documents how vulnerable households, when exposed to potential shocks, will often prioritize liquidity over returns and stability over profit, which creates a negative effect of a shock before it even occurs. In the absence of robust social safety nets, better risk management tools—including savings and insurance—allow individuals to put less emphasis on avoiding risks and maximizing liquidity, strategies that may lead to underinvestment. Thus, strengthened risk management provides a link to greater opportunities.

Karlan et al.'s (2014) frequently cited experiment in Ghana compared cash and insurance grants to farmers and found that insurance had a significant impact on increased and riskier investments. Similar results were found in Ethiopia, where randomized access to rainfall index insurance increased productive investments among farmers (Berhane et al. 2015), and in Mali, where randomized insurance contracts led to larger and more intensive investments among cotton farmers (Elabed and Carter 2014).

In a different context—China—and focusing on a different livelihood—raising sows—insurance also led to increased production (Cai et al. 2015). Evidence from India further

supports the strong role of risk management in investment decisions, finding that index insurance facilitates a shift from subsistence farming to riskier cash crops (Cole et al. 2017). Another study from Bangladesh demonstrated that farmers who were pre-approved for a loan (that would be disbursed in the event of a flood) increased productive and risky investments (Lane 2018). However, one RCT in Mozambique showed that the expansion of mobile money, which increased remittances (a form of informal insurance), reduced investments in agriculture and business (Batista and Vicente 2016).

Business-oriented credit can have substantial impact on existing enterprises, but small average effect on "reluctant entrepreneurs." However, tweaking this model holds promise. Heterogeneity in the effects of the traditional microcredit model reveals important insights for thinking about and planning for impact. While most clients who participated the six microcredit RCTs reviewed by Banerjee, Karlan, and Zinman (2015) did not display major gains, a small minority showed substantial effects.[4] In general, research suggests that borrowers who had started a business before gaining access to microcredit are more likely to see significant benefits from taking out loans, whereas those who went into business only after the introduction of microcredit are less likely to see any benefits (Banerjee et al. 2017; Meager 2019). Furthermore, several studies suggest that changes to the standard microcredit model may strengthen the likelihood of positive impacts. One experiment, for example, offered borrowers a grace period before repayments began, which led to higher risk taking, more new businesses, and larger profits and income (Field et al. 2013). Despite these promising results, the modification also led to higher defaults due to greater risk taking, which would require microfinance institutions to raise interest rates to compensate for the increased likelihood of default that would accompany the introduction of grace periods.

See Box 2 for more on what current literature says about take-up and use.

Women's Empowerment: Impact by Design

Given women's greater levels of exclusion and constrained access to credit, many stakeholders supporting financial inclusion anticipated that financial services would lead to greater impact for women than for men on outcomes such as business profits, income, decision-making power, and household consumption. Yet much of the evidence in the early wave of literature on financial services reported weak or inconclusive findings on women's empowerment. Of the six early microcredit randomized evaluations conducted by Banerjee, Karlan, and Zinman (2015), four studies covered empowerment and three found no evidence of women's empowerment. Only one of the studies (on Compartamos) showed an increase in decision-making power for women (JPAL 2015).

The findings on entrepreneurship and business profits were similarly muted. For example, a study on business credit in Uganda found that microcredit and business training were effective

4 The RCTs were conducted in Bosnia and Herzegovina, Ethiopia, India, Mexico, Mongolia, and Morocco.

BOX 2. **Emerging evidence on increasing take-up and use**

The impact of financial inclusion is usually measured only by the changes for people who gain access to a new service. Because low take-up and use have been a problem for many of the earlier research studies on financial services, impact research has focused not only on the welfare effects of financial services but also on its prerequisite—the actual take-up and use of these services by customers. The following is an overview of the emerging research on take-up and use while acknowledging the different natures of these concepts. It is also important to highlight that use is not a proxy for welfare benefits. Financial services can harm users, not just benefit them.

Many past interventions have aimed at reducing transaction costs to incentivize take-up and use. While lowering transaction costs is an important mechanism in increasing take-up and use with digitization as a key channel, recent research also underlines the importance of information and trust.

In El Salvador and Guatemala, for example, researchers studied temporary discounts in remittance fees, which led to substantial increases in the number of transactions and total amounts remitted (Ambler et al. 2014). A study in Mali looked at ways to increase efficiency and lower costs of savings and loans in savings groups, finding improvements in food security and consumption smoothing (Beaman et. al 2014).

Another example of lowering transaction costs is reducing the distance to the nearest bank branch or mobile money agent, hence saving customers time and travel costs. Studies show that such service offerings lead to more financial activity, including more savings. Examples include the opening of rural bank branches (Burgess and Pande 2005), expanding access to simple bank accounts (Dupas et al. 2018), the introduction of debit cards (Bachas et al. 2018a and 2018b), and the increase of mobile money agents (Jack and Suri 2014; Suri and Jack 2016).

The literature increasingly confirms that the proliferation of digital financial services is one of the most efficient ways to lower transaction costs for customers.

When it comes to savings, however, research increasingly finds a gender-based difference. A recent study in Kenya showed that the introduction of ATM cards with an associated 50 percent reduction in withdrawal fees increased overall account use (Schaner 2017). However, the effect was entirely driven by joint and male-owned accounts. The findings suggest that women might prefer high-cost saving solutions to protect resources from others, especially family members.

However, lower transaction costs alone are not enough to incentivize take-up and use. Recent studies show that information, training, and trust are also important.

Periodic information visits to a village in Malawi increased take-up and use of savings accounts (Flory 2016). In Tanzania, agent training in person and via daily text message helped agents rebalance and prevent stock outages (Acimovic et al. 2018). Business counseling for women in India increased immediate business activity, but only if they were trained in the presence of a friend (Field 2016b).

Another critical factor in increasing take-up and use, especially when it comes to savings, is trust (Karlan et al. 2014). A recent study showed that the use of digital financial services can help to create trust. In Mexico, beneficiaries of a cash transfer program monitored their savings account by frequently checking their balances and, as a result, slowly increased their savings over time once trust increased (Bachas et al. 2018b).

Transaction costs, lack of information, and lack of trust are cited as key reasons why take-up of insurance is still low despite promising impacts (Dercon et al. 2019; Cole 2015). Trust in insurance institutions and financial literacy seems to be a barrier, especially for women (Akter et al. 2016).

for men but did not affect the profits of women's enterprises (Fiala 2018). A paper on savings groups, which predominantly serve women, found that of seven RCTs, households participating in these groups had increased savings and credit use but limited additional welfare benefits (Gash and Odell 2013). The increase in savings did not come at the expense of reductions in consumption, but the studies did not sufficiently capture income, so the source of the increased savings is unknown. As to business impact, the results were mixed with some evidence of increases in business-related spending, profits, and women's business ownership, but this was not consistent across the studies. See Box 3.

While we do not yet have a set of impact studies that sufficiently embeds robust questions that capture empowerment, several recent publications help unpack the differences in outcomes between men and women. The evolving picture clarifies that when women's needs and societal norms are understood and financial services are designed and delivered in ways that enable changes in household power dynamics, we are more likely to observe meaningful impact for women.

Women are more likely to use transaction accounts than other formal financial services tailored for asset accumulation. A study in South Africa (Nanziri 2016) looking at welfare, assets, and use of financial services finds that men and women use different formal products, with women using transaction accounts as the main formal financial instrument and men using a broader suite of formal financial products, including credit, savings, and insurance. A large welfare difference emerges between women who use formal services and women who use informal services. The significant profile difference between these two groups partially explains this finding, with included women being more urban and older and from less marginalized ethnic segments. The study finds that the main driver for welfare is accumulation of durable assets, which transaction accounts do not facilitate. The fact that most women use only transaction accounts implies that they are less likely to use formal finance to acquire durable assets.

BOX 3. Evolution of the measurement of women's empowerment

In this paper, "empowerment" means the "ability to define one's goals and act on them" (Kabeer 1999). The concept extends beyond agency to include the outcomes that one can achieve when one exercises agency and choice. And yet, decision-making in the household has been the main proxy for understanding empowerment in the earlier set of impact studies on financial services for the poor.

Recently, researchers have expanded on empowerment measurement practices to capture three interconnected components: resources (access to resources that enhance choice), agency (participation in making important life decisions), and achievement or outcomes (improvements in well-being) (Glennerster et al. 2017).

The World Bank's Gender Innovation Lab has identified important research and measurement challenges when capturing resources and agency-related differences between men and women (Donald et al. 2017; Doss 2017). Guidelines include using individual surveys rather than household surveys and ensuring that questions cover ownership and use of assets. For example, survey enumerators should inquire about an individual's ownership of a bank or transaction account as well as the individual's access to accounts of other household members.

While financial inclusion researchers have begun to use these expanded empowerment concepts and measurement guidelines, much more is needed to support a more robust understanding of the impact of financial services on women's empowerment.

Women are more likely to achieve business outcomes when they control funds or can limit diversion of the funds to their spouses. A study in Pakistan (Said et al. 2017) finds that, while credit is effective at encouraging women's start-up businesses, the results do not persist over time. Even this muted effect, however, is not evident for women with husbands who own an enterprise; these women are 17 percent less likely to start a business than women whose husbands do not own an enterprise. This suggests that women's access to credit is often diverted to other uses when she has limited control or agency over the use of the funds. A study in India, Sri Lanka, and Ghana (Bernhardt et al. 2017) similarly documents the diversion of women's resources to their husband's enterprise, further finding that much of the gender gap in performance of firms is not linked to the aptitude of the entrepreneur, whether male or female. The study finds that household-level income gains are consistent regardless of the gender of the individual receiving a grant or a loan. Another paper covering Uganda (Fiala 2018) finds that when women are given the chance to hide funds from their spouse, whether a loan or grant, they achieve better business outcomes. Interestingly, the opposite was true for men: they achieve better business outcomes when their wives are aware of the loan or grant. Clearly in contexts where women have limited agency, credit alone will be insufficient to alter the dynamics and the constraints on her ability to use the resources for her own enterprise.

Privacy by design can support women's control of resources. A study in Tanzania (Bastian and Goldstein 2018) finds that digital accounts increase women's savings and enable greater access to credit. Bastian and Goldstein note that the results of the study are consistent with the hypothesis that women seek privacy as a way to reduce pressure from family and friends because this ultimately gives them more control and autonomy over how they allocate resources. Another study (Riley 2018a) looks at using mobile money to disburse loans with greater privacy in receipt of funds and compares this to traditional cash-based loan disbursement. The results show material differences to women's businesses when funds are disbursed using mobile money, with a 16 percent increase in business profits and an 18 percent increase in level of business assets, but no increase in savings. The results were also stronger for women who reported being pressured to share their money with family members. Commitment savings accounts can serve a similar function to reducing household pressures on women. A study in the Philippines (Ashraf 2010) finds that commitment savings devices enabled women to increase their expenditures on "female-oriented" assets such as sewing machines and kitchen appliances. Access to digital channels is often cited as a way for women to achieve greater privacy, but access and use of a phone is highly contextual and is not always accompanied by greater privacy. In many South Asian countries, where shared phones are the norm, mobile money has had low take-up by women for a variety of reasons, including the need for privacy.

Women's control of financial services improves their household bargaining power and labor outcomes. A study in South Africa (Biljon 2018) used the roll-out of banking cards for government transfers directly to women's accounts to test if greater control of resources influenced women's participation in the labor force. The study found that, by transferring funds directly to women, the program was able to redistribute bargaining power in the household. This in turn appears to increase women's labor force

participation. The study finds that the program shifts the decision-making to women and in turn improves the likelihood that women join the labor market. These results link account ownership with household power dynamics. A recent study in India (Field et al. 2016a) analyzed government transfer programs and the effects of transferring funds into women's accounts instead of those belonging to male household heads. The study found that transferring funds into women's accounts increased the number of women working, particularly for two groups of women: those who had not previously worked and those whose husbands disapprove of women working.

Emerging evidence suggests that financial services can influence social norms around women's work. Researchers in India (Bernhardt et al. 2018) expanded on Field et al.'s (2016a) study of government transfers by probing the social norms that influence women's labor participation. The research found that men and women have different beliefs about women's work and the community perceptions of the norms around it. Many men believe that allowing their wives to work would result in community sanctions against them, even if they themselves don't hold these views. They fear that the community would disrespect them if they are unable to care for their family as the main provider. Bernhardt et al. found that the higher the husband's perception of the social sanctions against him, the less likely his wife would work outside the home. The research also finds that social norms and social sanctions are thought to be more restrictive about women's work than they actually are, thus presenting an opportunity to influence women's economic participation through smartly designed financial services that correct for misperceptions of social norms. Additional research is needed to inform product design and messaging. See Box 4.

IMPACTS BEYOND USERS: GENERAL EQUILIBRIUM EFFECTS AND MACROECONOMIC IMPACTS

When the financial system works well, finance can spur shared economic prosperity. How the financial sector affects the overall economy depends on, for example, how it mobilizes and allocates savings, how it pools and diversifies risk, and how it facilitates the trade of goods and services (Levine 2011).

Long before the rise of the concept of financial inclusion, economists have studied the nexus between finance and economic growth, poverty, inequality, and stability, resulting in extensive literature on the macroeconomic effects of financial development. While the previous sections of this paper looked at household-level impact measured mainly through RCTs, the literature on the macroeconomic level relies on different methodologies such as cross-country comparisons. Until recently, this line of research has primarily focused on financial development measured as financial deepening (the ratio of private credit to gross domestic product). The results were consistent: financial deepening is crucial for the overall development of a country (Ayyagari, Beck, and Hoseini 2013).[5]

More recent studies, however, have looked at the macroeconomic impact of financial inclusion more directly. This research takes advantage of the increase in available financial

5 See Levine (2005) and Beck et al. (2007) for an overview.

BOX 4. **Unpacking findings with negative or null impact**

Since the early RCTs, critics have pointed to the fact that microcredit on average doesn't increase income or decrease poverty (Roodman 2011; Duvendack 2011). Recent studies have shed light on how the same financial service can have a different effect depending on the individual customer—called heterogeneous treatment effects—adding much needed nuance to the debate (Banerjee et al. 2017; Meager 2019). A growing consensus affirms that context and segments matter substantially. While microcredit benefits microentrepreneurs with pre-existing businesses (Banerjee et al. 2017), the impact on other customer segments is less clear. Negative and null findings can help us understand further where and for whom specific services are not beneficial, increase our awareness of emerging risks, and identify research gaps.

One important evolution based on past research is greater acceptance of the idea that expanding access to basic accounts alone is unlikely to improve average welfare. A recent study in Uganda, Malawi, and Chile further strengthens this notion by reporting zero effects of the expansion of basic bank accounts on savings or any downstream outcomes, in large part because almost no one in the study used the accounts (Dupas et al. 2018). Uganda and Malawi households reported that they did not use the accounts because they were too poor.

Another area of interest is the impact of digital financial services on social networks. A recent study in India showed that the introduction of microfinance changed the networks of interaction. Participants of microfinance programs in the study showed material declines in engagement with social networks, relying less on their networks for credit as well as other engagements. This effect was not only for microfinance clients; it affected broader social networks in communities where microfinance was prevalent (Banerjee et al. 2018).

Additionally, a recent study in the Philippines indicates that digitization may weaken the social fabric of a community. For microfinance groups, the lack of discipline of regular group engagement led to deposits declining by 20 percent over two years. The researchers postulate that this is a result of weakened peer pressure and enforcement of savings groups as well as the additional transaction costs associated with digital channels. Furthermore, the study finds that the decline in savings balances continues after two-and-half years, with overall lower household savings balances. More worryingly, the study also finds an increase in the use of informal loans for members who live near banking locations (Harigaya 2017).

The digitization of payments for the poorest has increased interest in consumer protection issues. Many poor consumers live precarious lives where one additional shock, delay in receipt of funds, or unexpected penalty payment can have a marked impact on their ability to maintain their levels of consumption. While digital payments may help with consumption smoothing, they can add to a poor person's precarious living situation if there is an error in the transmission and the individual is unaware of the recourse mechanisms or does not know how to solve the issue unaided (McKee, Zimmerman, and Kaffenberger 2015). This is especially true for digital credit where millions of customers can obtain almost instantaneous access with just a click or a tap on their phone without fully understanding the costs and risks. Digital credit raises serious consumer protection concerns such as high interest rates and excessive borrowing (e.g., in Kenya [Kaffenberger, Totolo, and Soursourian 2018]) calling for more transparency and minimum standards in consumer protection for digital credit (McKee and Mazer 2017).

Going forward, research geared to understanding the unintended consequences and risks of financial services (and particularly digital financial services and new technologies) and shedding light on heterogeneity—who benefits, how, and when and who doesn't—will play an even more important role in designing beneficial financial services.

inclusion data. However, it is still nascent, and few studies are available. Further, these studies use varying definitions of financial inclusion because there is no universally accepted standard measure of the concept (Park and Mercado 2015). While studies find impact in varying degrees—from large to medium to no impact—the results are promising. Research shows that, under the right conditions, financial inclusion can foster economic growth and financial stability and decrease inequality and poverty.

ECONOMIC GROWTH AND GENERAL EQUILIBRIUM EFFECTS

Financial inclusion can spur economic growth but its impacts vary greatly. The direction of causality regarding financial services and economic growth is a topic of debate. Does finance spur growth? Or does economic growth increase financial inclusion? While it seems intuitive that economic growth leads to financial inclusion (and there is supporting evidence of this), early research provided little evidence on whether financial inclusion can lead to economic growth. However, recent studies that use different measures of financial inclusion in different geographic areas and contexts find that financial inclusion can causally effect growth (e.g., Inoue and Hamori 2016; Rasheed et al. 2016; Kim and Hassan 2018; Kim 2015).

In India, for example, researchers found that various dimensions of financial inclusion (such as banking penetration, deposits, and availability and use of banking services) promoted economic growth between 2004 and 2013 (Sharma 2016). Another study in India found that financial inclusion also had a positive effect on economic growth in the short and long run between 1980 and 2014 (Lenka and Sharma 2017). Kim, Yu, and Hassan (2018) find a similar effect in Organization of Islamic Cooperation (OIC) countries between 1990 and 2013. And in Kenya, researchers estimate that the expansion of M-PESA accounts for 10 percent of per capita income growth between 2007 and 2013 (Beck et al. 2018a).

Studying equilibrium effects can improve understanding of the many pathways through which financial services impact the poor. In 2010, the microcredit crisis in Andhra Pradesh in India raised serious concerns about over-borrowing and suicides. The state government issued an emergency ordinance, which curtailed all microfinance activities in the state, taking around a billion dollars off of lenders' balance sheets. As a result, microfinance institutions were no longer able to provide credit in other Indian states as before, leading to a decrease in wages, earnings, and consumption. This research points to important spillover effects, showing that microfinance can have important impacts on rural economies despite its small loan sizes (Breza and Kinnan 2018).

Burke et al. (2017) point out that neglecting general equilibrium effects can lead to underestimating the welfare benefits of microcredit. In their study in Kenya, they found that well-timed access to credit enabled farmers to exploit the significant seasonal price fluctuations in local grain markets and to buy grain when prices are low and sell grain when prices are high. As a result, farmers' revenues and return on investment increased. When investigating the general equilibrium effects, the authors found a significant impact on grain price fluctuation, with the majority of benefits accruing to nonborrowers who faced lower food prices in the lean seasons.

While previous studies narrowly evaluated the direct impact of microcredit on borrowers, measuring general equilibrium effects sheds light on the larger role credit plays in creating,

shaping, and increasing the effectiveness of local markets, benefitting a much wider range of people than just borrowers. It is unclear, however, whether spillover effects extend beyond credit. A study in Tanzania tests the hypothesis that nonusers of mobile money benefit from living in the same village as mobile money users, since those households will receive inward remittances after a village-level shock, and those transfers could be shared with nonmobile money users in the same village (Riley 2018b). In fact, the research found no evidence in support of spillover effects and, instead, showed that only users benefit.

POVERTY AND INEQUALITY

Influential earlier studies have found a link between financial development and lower levels and faster reductions in income inequality and poverty rates (Beck, Demirgüç-Kunt, and Levine 2007; Clarke et al. 2006). Research also showed that bank branch extension and financial sector development can reduce rural poverty (Burgess and Pande 2005; Ayyagari, Beck, and Hoseini 2013). The more recent literature detailed below also shows promising results regarding the reduction of inequality, while the impact on poverty alleviation is more mixed.

The link between financial inclusion and poverty is still unclear. While some studies fail to find any effects of financial inclusion on poverty (Seven and Coskun 2016; Neaime and Gaysset 2018), other studies do. Researchers found positive effects of financial inclusion on inclusive growth measures such as poverty and real per capita consumption in OIC countries (Kim, Yu, and Hassan 2018). A study of 37 developing Asian economies found a strong correlation between financial access and declining poverty rates (Park and Mercado 2015). However, in a later study, Park and Mercado (2018) found that these results depend on a country's income group. While financial inclusion appeared to have a significant and positive impact on poverty rates in high- and upper-middle-income economies, this wasn't true for middle-low- and low-income economies.

Using a sample of 143 countries from 1961 to 2011, researchers at the International Monetary Fund looked at financial development rather than financial inclusion, focusing on five dimensions: access, deepening, efficiency, stability, and liberalization. They found that the first four dimensions significantly reduce inequality and poverty, while financial liberalization tends to exacerbate them (Naceur and Zhang 2016).

Financial inclusion can decrease inequality. Several recent studies have established a link between financial inclusion and a reduction in inequality—again, in varying degrees. Neaime and Gaysset (2018) found a decrease in income inequality through financial inclusion in MENA, as did another study of 48 African countries (Agyemang-Badu et al. 2018). And in China, financial inclusion increased household income, particularly among low-income households, hence reducing income inequality (Zhang and Posso 2017). However, similar to the nexus between financial inclusion and poverty, the inequality reducing effect did not hold true in lower-income countries in the 2018 study by Park and Mercado. On a global level, Naceur and Zhang (2016) found that four dimensions of financial development, including access and deepening, could significantly reduce income inequality (again, except liberalization, which had the opposite effect).

FINANCIAL STABILITY

Deposits can help stabilize the financial sector in times of crisis. Research has shown that financial inclusion can foster financial system stability. In times of crisis, deposits from retail clients serve as a more stable funding source for banks compared to wholesale funding sources, which tend to dry up. In a study looking at banks in 86 countries over 2004–2012, higher levels of financial inclusion were associated with greater bank stability (Ahamed and Mallick 2017). This was especially true for banks operating in countries with better institutional quality. Neaime and Gaysset (2018) found that financial inclusion boosted banking sector resilience by stabilizing the deposit funding base in the region. Another study using panel data from 97 countries showed a positive influence of financial inclusion on financial development, which correlates with broader economic development (Rasheed et al. 2016).

Too much too fast. However, the global financial crisis and the microcredit crisis in India in 2010 have revealed a potential negative effect of financial inclusion. A growing body of research suggests that "too much" or "too fast" finance (Beck et al. 2018b) can set the stage for and exacerbate future financial crises (Arcand et al. 2015; Gourinchas and Obstfeld 2012; Mian and Sufi 2014; Schularick and Taylor 2012). India's Pradhan Mantri Jan Dhan Yoina program is the world's largest financial inclusion program. It launched in 2014 and resulted in 225 million new accounts. An assessment of the program showed an increase in loan defaults in areas more exposed to the program, pointing to a trade-off between inclusion and stability (Agarwal et al. 2018). However, while it is important to be aware of potential dangers and trade-offs, rapid financial growth seems to be especially an issue for stability and inequality in countries with a financial system that is already large and deep.

Conclusion

The abundance of evidence on financial services and the poor has been a positive trend over the past decade. While early synthesis efforts focused heavily on the impact of microcredit, the growing body of literature on different products, over different time horizons, and including a broader array of methodologies paints a much more colorful picture than the earlier binary story that asked whether microcredit was either good or bad.

While a detailed accounting of the evidence lies beyond the scope of this paper, those seeking more in-depth views can access an increasing number of evidence gaps maps.[6] CGAP's review of the evidence has pursued a different focus: identifying the connective tissue between the research and building toward a refined narrative on the channels and mechanisms by which financial services can lead to welfare outcomes for poor people. The research by itself will often appear as disconnected data points and requires industry organizations and thought leaders to help weave it together. In this paper, we have highlighted three distinct themes that paint a more nuanced picture of the role of financial services in the lives of poor people:

6 See "Evidence Gap Maps (EGM) Are Systematic Representation of Publicly Available Evidence on a Specific Theme or Topic," Dvara Research, https://www.dvara.com/research/evidencegapmap/, and "Evidence Gap Map," Finance in a Digital Africa, https://www.financedigitalafrica.org/evidence-gap-map/.

- The evidence strongly supports that financial services improve people's resilience. Beyond their role in facilitating recovery from shocks, the risk management dimension of financial services may also encourage investments that are riskier but potentially more profitable in the longer term. Thus, the assumption that insurance is only for resilience and that credit is only for investment requires greater nuance.
- Narrowly defined measurement tools have limited our understanding of women's empowerment. Financial services that enable privacy will more likely lead to direct positive outcomes for women because this enables greater control. Promoting access to financial services that are fully controlled and owned by women will help change women's bargaining position.
- New methodologies and datasets enable researchers to capture impact beyond direct users and to analyze how financial inclusion contributes to growth. Some evidence suggests that financial inclusion can contribute to economic growth under certain circumstances and augment aggregate demand, thereby improving consumption, earnings, and employment for the general population. The evidence is also positive on financial inclusion's contribution toward reducing inequality.

The emerging picture also shows what financial inclusion does not do, including:

- Expanding access to basic accounts alone is unlikely to result in detectable welfare benefits given likely small effects on welfare and general equilibrium effects.
- Heterogeneous effects appear across many studies, especially those involving credit. To better understand for whom and how financial services can be welfare enhancing, we need better information on the contextual and demographic differences among samples studied in the different research settings.
- Digitization of financial services has had mixed impact. On the one hand, mobile money has had demonstrable effects on poverty, while in other cases, it has led to weakening social networks.

What's Next?

This new body of evidence challenges existing narratives in financial inclusion, which are built on a product-focused understanding of the impact evidence. To fully understand how improvements in well-being happen for poor people, we need to update the theory of change for financial inclusion reflecting this new evidence.

An updated theory of change would help to identify priorities for future experimentation. In collaboration with industry stakeholders and the research community, CGAP has begun this exercise and a forthcoming publication will share the results of this effort. Combined, an updated understanding of the evidence base complemented by greater clarity on the theory of change will contribute to:

- Setting more realistic expectations of the changes that result from using financial services.
- Facilitating better decision making by policy makers and donors.
- Supporting a concise and comprehensive narrative that accurately reflects how safe, affordable, and responsibly provided financial services can positively affect the lives of poor people.

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