

Alternative Delivery Channels and Impacts

Agent Banking

Sinja Buri

Robert Cull

Xavier Giné



WORLD BANK GROUP

Development Economics

Development Research Group

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Abstract

This paper reviews evidence on agent networks of micro-finance institutions and other financial services providers, which have expanded rapidly in recent years in some low- and middle-income contexts. There is emerging evidence that clients become more financially active as a result of the convenience and security of transacting with agents, especially with respect to depositing, withdrawing, and transferring funds. Agent networks could also help increase

the savings of low-income clients, although evidence suggests that commitment devices may also be required, and there is little evidence that agents expand credit to clients, although they can facilitate loan repayment. Building on their physical and social proximity to customers, agents can become a potential gateway for expanding and deepening financial inclusion, but the pricing of agent transactions and consumer protection remain important considerations.

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*Alternative Delivery Channels and Impacts: Agent Banking*¹

Sinja Buri, Robert Cull and Xavier Giné

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Introduction

What do microfinance clients want and need from their institutions? The financial services themselves are vital, most notably credit, savings, and payments. But how those services are delivered is also crucial. Convenience is an important attribute for delivering financial services, but lack of nearby branches and time-consuming lending methods pose challenges. For example, group liability lending methods involve meetings for processing loans and repayments that impose costs on borrowers, who may have to travel far and then sit through the settling of others' accounts (see Ahlin and Debrah, forthcoming). The security of financial transactions and account balances is another important concern for clients. Experimental evidence from Kenya, for example, shows that simply providing a safe place to keep money can substantially increase savings (Dupas and Robinson, 2013). Trust in financial services providers and the privacy of transaction details can also be important, and recent evidence suggests that this can have implications for the nature and size of transactions that clients undertake (Buri et al., 2018 a, b; Chamboko, et al., 2020).

By bringing the point of service closer to the client, both literally in terms of physical distance, but also in terms of social proximity, the introduction of agent networks has influenced the provision of microfinance in terms of client convenience, perceived security of their transactions and balances, the cost of providing the services, and trust in their providers, especially with regard to privacy. This paper reviews that evidence. There are also emerging indications that these factors can help deepen clients' experience with financial services and thus improve their financial capabilities, which are also discussed. From the providers' side, agent networks entail costs that must be balanced against the benefits of improved service delivery and greater numbers of clients and financial transactions. The paper therefore closes with a discussion of the business model for agent networks and the factors that support sustainability.

Agents are typically owners of small retail businesses who are trained by a formal financial institution (most often a bank or a microfinance institution) to collect deposits and process payments, including payments on small-scale loans (Lyman et al., 2006; Siedek and Mas, 2008). Microfinance institutions have used agent networks to grow their business in less developed economies, increasing the number and value of transactions that they process. For example, an early review of the Latin American experience provided evidence that, through

increased accessibility and convenience, agents had been effective in reaching the unbanked.² Some of the best evidence comes from Sub-Saharan Africa where agents have expanded financial inclusion to millions of previously unbanked customers.³ In Kenya, for example, Equity Bank moved forcefully into agent banking, expanding its number of agents from under 1,000 in early 2011 to over 6,000 by the end of 2012. By that point, agents accounted for over 30% of Equity Bank's total transactions.⁴ Similarly, in 2016, Finca DRC's over 500 agents handled over 65% of the transactions of one of the largest microfinance institutions in the Democratic Republic of Congo, and regression analysis of agent activity indicates that they were especially successful in reaching the urban poor (Cull et al., 2018).

Convenience and Security

Agents offer clients advantages over branches in terms of convenience while also providing a safe place to store money and conduct financial transactions. Agents enable customers to save the time and cost of traveling to a faraway branch. They can avoid long queues and congestion at branches of microfinance institutions, and they can benefit from the opportunity to deposit even small amounts of money conveniently and often for free.

Evidence from multiple studies shows that microfinance clients conduct more financial transactions when agents are available. Figure 9.1, which is from Buri et al. (2019), shows evidence from Madagascar that the number of transactions performed by clients increased greatly as the agent network of Baobab Madagascar ("BMG"), one of the largest MFIs in the country, was rolled out from 2015 to 2016. From the rollout's inception to its culmination in a 258-agent network in March 2016, the number of transactions grew to over 50,000 per month, nearly on par with the number performed at BMG branches. What is more, the number of transactions performed at agents continued to grow after the network was completely rolled out, climbing to well over 100,000 per month, while the number performed at branches continued to hover near 50,000 per month. A granular analysis of the agent rollout of Baobab Senegal ("BSN") over a similar time frame showed a similar pattern – the number of transactions

² Alliance for Financial Inclusion, 2012.

³ Buri et al., 2019. Suri and Jack, 2016.

⁴ From 2006 to 2009, Equity Bank also increased its number of branches from 44 to 112. While branches tripled, the number of agents increased roughly six-fold shortly after that expansion. Although Equity Bank opened more branches in rural areas than other Kenyan banks, most of these new branches were in urban areas. See Allen et al. (2021) for more details.

performed at agents grew steadily throughout the rollout, while the number performed at branches remained largely unchanged. However, BSN imposed a fee on deposits made at agents just after their rollout was complete, and the number of transactions at agents declined before later leveling off (Buri et al., 2019). The BSN experience, and its contrast with that of BMG, indicates that customers are sensitive to the prices charged on services performed by banking agents, a topic returned to below in discussing the business model underlying agent networks.

Agent networks may affect not only the number of transactions that MFIs process, but also their nature. Figure 9.2 shows how agent transactions increased quickly as a share of total transactions during the rollout of the network for BMG and for several months afterwards before their growth slowed and eventually plateaued at roughly 70 percent. Figure 9.2 also shows that agents handled an increasing share of BMG's total transaction volume, but that share leveled off at only 30 percent. This indicates that the transactions handled by agents tend to be smaller, a pattern which is also found in Senegal (Buri et al., 2018a; Buri et al., 2019) and the DRC (Chamboko et al., 2020). Moreover, these transaction-level analyses show that the differences in transaction size at agents versus branches are not driven solely by different clienteles – clients who transacted at both tended to perform their smaller transactions at agents and larger ones at branches. Below the paper explores potential explanations for these patterns.

The number of transactions can increase because existing clients find it easier to conduct them at agents than in branches, or because agent networks attract a larger number of new clients. In the African examples chronicled in this section, both occurred. After the introduction of agents, existing microfinance customers increased their number of monthly transactions by 32% in Senegal and by 59% in Madagascar, and the average monthly value of those transactions rose by 21% and 62%, respectively (Buri et al., 2019). The convenience of agents in close proximity and the safety of depositing and transferring funds using a formal institution also attracted new customers as reflected in considerable increases in total customers in both cases.

These gains in the number of clients, transactions, and transaction volumes after the introduction of agents are significant, but not necessarily causal. However, in a randomized experiment in which new clients were incentivized to open a no-frills savings account with BSN at either a branch or with one of the network's agents, the new customers incentivized to bank with agents were significantly more active in terms of transaction frequency and volume than

those who were directed to bank at a branch (Buri et al., 2018 a, b). Importantly, study areas were selected so that potential clients were close to, and equidistant from, at least one agent and branch. Visits to the agent, including transport, waiting, and face-to-face time with the agent, were around ten minutes shorter than those at branches. Transactions costs were thus lower when banking with agents. Since both types of customers were offered the same type of account and the distance between clients and agents/branches was identical by experimental design, the results support a causal link between the convenience offered by agent networks and increased transaction activity. That experimental evidence also showed that customers banking with agents did not use branches less than the customers who were incentivized to bank at branches. Because their transactions at agents did not displace those at branches, the two types could be viewed as complementary, in this context at least.

Reduction in the cost of transactions (in terms of transport costs and waiting time) by using agents has increased the frequency of cash-in and cash-out transactions, and facilitated domestic remittances, which has led to more activity but not necessarily to more saving by clients (Buri et al., 2019). In principle, the safety and convenience of depositing funds with agents of a formal financial institution could incentivize greater savings and a shift away from informal savings arrangements. However, that convenience also makes it easier for clients to satisfy short-term transaction needs rather than to save money for the medium or longer term. Evidence on savings in the cases discussed in this section is mixed. Average balances in the savings accounts of BMG clients increased slightly after the introduction of agents, but not in those of BSN clients. In fact, in the experimental study with BSN clients, both those incentivized to bank with agents and those who were incentivized to bank at branches showed declines in account balances two years after opening an account (Buri et al., 2018a).

A tentative conclusion is that agent networks on their own may not be enough to incentivize substantial increases in client savings. This is consistent with the related experimental literature on savings from developing countries, which introduces ordinary savings accounts to poor households (for example, Cole, Sampson, and Zia, 2011; Dupas and Robinson, 2013; Dupas et al. 2016; Schaner, 2018; Prina, 2015 and Brune et al. 2016). Most of these studies subsidize the account opening and maintenance fees (if they exist) and show significant impacts on take-up and usage of accounts, but more muted effects on long-term balances. This literature has

identified the following barriers to savings: transactions costs associated with traveling to the bank (Burgess and Pande 2005; Callen et al. 2018), intra-household disagreements regarding savings (Anderson and Baland 2002; Ashraf 2009; Schaner 2015), the inability to follow through with plans due to dynamic inconsistency (Ashraf, Karlan, and Yin 2006; Karlan et al. 2016; Dupas and Robinson 2013), the consumption of temptation goods (i.e. drugs, alcohol, impulsive purchases, etc. as in Banerjee and Mullainathan 2010; or Schilbach, 2019), and the inability to pay attention to savings as individuals are worried about more pressing matters (Shah, Mullainathan, Shafir 2012; Mani, Mullainathan, Shafir and Zhao, 2013).

In all these papers, in order to save, individuals must make an active decision to save. Blumenstock et al. (2018), in contrast, study default salary contributions that are passive. They work with a sample of employees of a large firm, and once enrolled, contributions to their savings account are automatic and do not require any further action (Chetty et al. 2014). Blumenstock et al. (2018) show that even after default contributions are removed, effects on savings persist. Similarly, Breza, Kanz, and Klapper (2020) study digitized wage payments to garment workers in Bangladesh who were randomly assigned to receive digital or cash wage payments. Those that received digital payments increased their account usage and savings and were better able to cope with economic shocks than subjects who received payments in cash. This was particularly true for women, parents of children, and those with low levels of household resource control and little education or experience with financial products. These studies suggest that individuals have a hard time forming a financial plan (Lusardi and Mitchell 2011; Cole, Sampson, and Zia 2011; Drexler, Fischer, and Schoar 2014) and that this complexity, together with present-biased preferences, can create procrastination. As a result, commitment features and default assignments in financial products can incentivize account usage and bring about persistent behavioral change (Ashraf et al., 2006; Bachas et al., 2017).

While the discussion about the convenience and security of agent networks has focused on making deposits and withdrawals, sending and receiving money, and savings, there is some evidence that agents may also improve credit usage. In a field experiment in two districts of the potato-growing belt in West Bengal, India, researchers tested whether an MFI could select higher-quality borrowers if it delegated borrower selection to an informal trader or lender in the community (Maitra et al. 2016, 2017). Agents were randomly chosen from local informal lenders

and traders who had a substantial number of clients and an established business reputation. These agents were then asked to recommend thirty local clients from households owning less than 1.5 acres of cultivable land. Ten of those recommended clients were then randomly chosen to receive individual liability loans from the MFI. The agents received a commission of 75% of the interest paid by the borrowers they had recommended. Loan size was increased by 33% from one 4-month cycle to the next if previous repayments were made, which provided borrowers with strong incentives to repay, and the interest rate was set at 18%, compared to the 23% average informal interest rate in the sample villages.

In another set of randomly selected villages in the same area, a group-based lending program was introduced in which individuals formed 5-member groups and received joint liability loans, which had the same terms as the individual liability loans. Like most group lending programs, this one required repayment on a regular schedule and that recipients attend group meetings to report how they were using the loans. Loans to borrowers recommended by agents were associated with significant increases in potato production (27%) and farm incomes (22%). There were no significant gains in production or farm incomes among recipients of the group liability loans. The patterns indicate that agents with knowledge of the creditworthiness of local borrowers hold potential for improving the allocation of credit. And the time savings and convenience associated with individual liability loans over group liability loans also can contribute to greater production and income gains.

In the West Bengal example, agent knowledge of local creditworthiness was crucial for improving credit allocation and thus productivity. However, agent networks may be able to improve the flow of credit and its allocation without tapping into local information on borrower creditworthiness. Given their social and physical proximity to clients who lack familiarity with financial services, agents may be the gateway through which clients obtain an account. Data on usage of those accounts may also provide information on creditworthiness, and agents may then become a natural conduit for receiving and repaying loans. For example, BSN rolled out a nano-loan product through its agents in 2016. The so-called “Taka loan” offered clients anywhere from 5,000 to 250,000 FCFA (8–380 euros) for 1 month. A credit scoring model was developed to classify clients into different loan eligibility categories according to their loan repayment and

savings histories.⁵ Eligible clients receive an SMS message letting them know how much they may borrow and that they can obtain the loan through a Baobab agent. If a client pays back the loan within 15 days, she becomes eligible for a larger loan in the next cycle. If a client repays the loan within 16-30 days, she is eligible for the same amount in the next cycle. However, if the client does not repay the loan within 30 days, she is not eligible for another Taka loan in the near future. Because the convenience of agent networks facilitates loan repayment, and because the loan amounts offered are rooted in analysis of account activity, this “accelerator” approach has led to substantial credit growth for BSN (and BMG).⁶

Digital credit, sometimes referred to as mobile credit or nano-credit, is easy to access and can be approved and disbursed very quickly and thus has shown dramatic growth in countries such as Kenya. Using data from Kenya, Bharadwaj, Jack, and Suri (2019) show that digital credit makes households more resilient to negative shocks. But digital credit is also characterized by high default and delinquency rates. Using data from a digital lender in Mexico, Burlando, Kuhn and Prina (2021) exploit quasi-experimental variation in the speed of disbursement to study its impact on repayment. They find that by doubling the delivery time from ten to twenty hours, the likelihood of default is reduced by 21 percent. Besides the speed of delivery, default in digital credit may be brought about by poor business practices and weaknesses in credit reporting.⁷ Digital lenders, which encompass a range of institutions beyond MFIs, such as Fintech companies and cellular providers, do not consult nor report to credit reporting bureaus fully or regularly. In large part, this is because credit reporting bureaus were set up for a pre-digital era. They are not inclusive of all types of lenders and face challenges in the frequency of uploading data (daily uploads are necessary for these short-term loans) and the ease of connection with other players in the credit reporting ecosystem. As a result, many lenders do not ensure that credit bureau information is updated and correct, even when they do consult it prior to lending. Because account activity can be monitored, credit bureau information is not required for nano-

⁵ <https://baobabgroup.com/en/announcement/meeting-a-diversity-of-client-needs-nano-loans-with-potential-for-giga-impact/>

⁶ Buri et al. (2019).

⁷ Center for Financial Inclusion/Accion. “Making Digital Credit Truly Responsible.” September, 2019. Washington, D.C. <https://www.centerforfinancialinclusion.org/making-digital-credit-truly-responsible>. See also Beth Rhyne, “Red Flags in Kenya’s Nano-Credit Market.” <https://www.centerforfinancialinclusion.org/red-flags-in-kenyas-nano-credit-market>

loans through MFI agents based on accelerator models like the one used by Baobab. This approach may hold promise for extending credit more widely, but without spurring defaults and over-indebtedness, though research in this area is limited.

Trust and Privacy

The personnel of a branch of a bank or microfinance institution likely changes from visit to visit for clients, while an agent is usually the same contact. Customers therefore can choose agents based on location, or personal characteristics of the agent such as gender, religion, ethnicity or age. Trust is likely to factor into this choice, and in the nature of the transactions that a client chooses to undertake. For example, evidence from Kenya indicates that respondents do not trust banks, in part due to issues about service reliability that agents may be able to mitigate.⁸ Safeguarding privacy provides another motive for customers to seek out agents whom they trust not to disclose their financial information to others. And indeed, qualitative research in the Democratic Republic of Congo and three other African countries highlights the importance of anonymity and the lack of traceability as an advantage of digital financial services (Butter and de Bruijn, 2017; Beck et al., 2019).

As noted, one pattern that emerges from multiple studies is that customers visit both branches and agents and that transactions conducted at the branch tend to be larger than those conducted with an agent. This pattern begs the question of why clients do not bank exclusively with agents to minimize transaction costs? The experiment with MSN clients described above explored whether, lacking any familiarity with agents, clients may have trusted branch tellers more, at least in the beginning of the agent rollout (Buri et al., 2018a, b). If that were the case, the researchers hypothesized that clients may have started by making small transactions with agents, and as trust developed over time, they may have increased the size of those transactions and relied more heavily on agents. However, they found no positive trend in the number or size of transactions with agents (relative to transactions at the branch) and thus concluded that the lack of trust in agents was not driving the persistent use of branches for larger transactions.⁹

⁸ Dupas et al. (2014).

⁹ Another possibility was that agents were reluctant to handle large transactions because it would empty their float accounts, leaving them unable to serve other customers until they could rebalance their accounts (Buri et al., 2019). Thus, concerns about liquidity, or even fear of robbery, might have been driving the lack of large transactions at

An alternative explanation is that customers may have felt more comfortable doing larger transactions at branches because they perceived a higher level of privacy there. Agents are more physically and socially proximate to clients than bank tellers, but that could raise privacy concerns because an agent may talk to friends and relatives of the client about the transaction, making it harder for the client to fend off cash demands from relatives and friends. In contrast, at the branch, the transaction and its details are known only to the teller, who is highly unlikely to have personal dealings with the client or her social network. This could provide a rationale for why individuals would choose the branch for large transactions and the agent for smaller ones. Focus group interviews and evidence from lab-in-the-field experiments with BSN clients provide support for this hypothesis (Buri et al., 2018b).

Another lens on the importance of privacy for clients comes from an analysis of a large database of transactions from one of the largest microfinance institutions in DRC (Chamboko et al., 2020). A key finding is that clients were significantly more likely to transact with agents of their own gender. Women, in particular, were significantly more likely to transact with female agents, a tendency which increased both with the value of transactions and the customer's balance. These patterns held when controlling for customer characteristics, agent experience, and market-level covariates and when the analysis was restricted to markets with substantial representation of female agents. That pattern was also detected in data from the experiment with BSN clients in Senegal: the probability that female clients used female agents increased with the size of the transaction (Buri et al., 2018a; Chamboko et al., 2020).

Trust and the desire for privacy are factors that could help account for women's transactional behavior with female agents. Since the agents could see not only the amount transacted but also the customer's account balance, women may have preferred to go to a female agent, especially when they had large balances or wanted to make high-value transactions. The salience of trust in explaining the strong tendency of women to seek out female agents is also consistent with the literature showing that women's trust is more context sensitive than men's (Croson and Gneezy, 2009; Eckel and Wilson, 2004; Bohnet 2007; Greig and Bohnet, 2009).

Building Experience and Financial Capability among Clients

agents. While these concerns may be valid in other contexts, liquidity, security, and technological constraints were not reported to be binding by MSN agents, however (Buri et al., 2018a).

Identifying effective ways to build financial capabilities and experience with financial services remains a challenge and an area in need of additional research. As noted above, a pattern of increased usage emerged for existing clients of BSN and BMG when agents were introduced: their number and volume of financial transactions increased, and those increases continued well after the rollout of agents was complete (Buri et al., 2019). Similar increases in transaction activity were also found for new clients over time. Because of their closer physical and social proximity, agents may not only be an easier, more comfortable way for inexperienced clients to enter the formal financial system, but also a way for them to learn about financial products and improve their financial capabilities. For example, agents played an informational role in introducing clients to the nano-credit product offered by BSN and BMG described above.¹⁰

Giné and Goldberg (2020) provide evidence consistent with the fact that individuals that interact more with staff of a financial institution improve their financial capabilities. While half of the subjects who owned a high-fee account with a local bank in Malawi did not switch to a new, lower-fee account when given the choice, holders of the same account that had been induced to make more transactions and thus interact more with the staff were significantly more likely to adopt the new, cheaper account.

But to our knowledge, there are no studies showing that interactions with agents are more effective than those with staff at improving client financial capabilities. The experiment with BSN clients, however, does offer suggestive evidence that agents have an influence on financial behavior that branch personnel do not (Buri et al., 2018a). Recall that the experiment induced exogenous variation in whether subjects performed banking transactions at agents or branches, and those incentivized to bank at agents performed more transactions. There were not, however, strong indications that the number and size of their transactions increased strongly over time, though transaction activity was tracked for only a year. In short, more detailed analysis of changes in the nature and frequency of financial transactions as exposure to agents increases is needed to understand whether and how agents can affect financial capabilities.

Business Model

¹⁰ <https://baobabgroup.com/en/announcement/meeting-a-diversity-of-client-needs-nano-loans-with-potential-for-giga-impact/>

Financial providers face a trade-off between broadening their agent network and effectively training and monitoring their agents (Agent Network Accelerator 2016), leading to growing concerns among regulators about the quality of the service delivered. Low barriers to entry for new agents lead to networks of agents with lower levels of training and accountability when compared to branch staff. Table 9.1 reproduces parts of Appendix Table OA2 from Buri et al. (2018a) and compares the characteristics of BSN banking agents, mobile money agents and branch tellers in the study areas. Mobile money agents are the least educated with 11.7 years, followed by banking agents with 14 years and branch staff with 16.4 years of education. Perhaps as a result, mobile money agents also have lower household income (487.4 USD) than banking agents (767.5 USD) or branch staff (838 USD). BSN branch staff also report higher levels of financial knowledge compared to either banking agents or mobile money agents in the area. It thus appears that agents may not have the same level of training and accountability as traditional financial services staff.

In rural areas, low population density and low transaction volumes cannot support multiple agents located walking distance from each other, and as a result, consumers have limited payment, credit, and savings choices, and local mobile money agents and bank branches may enjoy local monopolies. This market structure has led to policy interventions such as relaxing or outright banning exclusivity clauses in agent-mobile money operator contracts in Kenya and Uganda. Additionally, financial services and especially mobile money tend to be dominated by one or two large firms per country. Even in Kenya and Tanzania, where digital credit startups have proliferated in recent years, the markets are still dominated by just two and three top firms, respectively (Izaguirre, Kaffenberger, and Mazer 2018). This suggests that shared agent networks may create moral hazard for training and responsibility, and they seem to correlate with a worse customer experience at the agent (Agent Network Accelerator 2016b).

Figure 9.3 shows that a majority of customers visiting agents in Kenya, Uganda, and Tanzania had experienced at least one problem during the visit (Kantar InterMedia, 2016). A greater proportion of women than men report issues with agents in India and Pakistan, although more precision in estimates is needed to draw firmer conclusions.

A recent publication from the International Finance Corporation based on its work with nine MFIs in Africa indicates that, to become financially sustainable, agents need to drive

income either through deposit mobilization or directly through fees or through cross-selling of other services. Fortunately, that study also shows that the cost of handling transactions via agents is about 25 percent lower than through branches.¹¹ Deposit mobilization has been influential in decisions about the design and implementation of agent networks as it can be a way for banks to make agent networks viable by lowering their cost of funds.¹² Agent networks can also enable microfinance institutions to benefit from savings mobilization because regular savers are more predictable, which should reduce the volatility of their portfolios. And maintaining deposits in the system brings opportunities to cross-sell products such as insurance and loans.

Regulators often allow agents to set their own fees or do not provide the necessary oversight to prevent agents from doing so. While there is limited evidence for banking agents, in the early days of mobile money, agents in the Philippines and Tanzania were allowed to set their own fees to foster competition. More recently, even mobile money agents who are formally given a tariff structure often informally set their own prices for commissions, as fees are paid in cash and not recorded in the system (Davidson and Leishman 2012). In South Africa and Uganda, network operators set different tariffs for different types of outlets by design (Davidson and Leishman, 2012) while in Nigeria, an estimated 45 percent of mobile money agents decide and set customer prices, ignoring those set by FSPs.

There is ample evidence from a variety of countries that mobile money agents charge extra fees (Annan, 2019; Breza et. al, 2020). In the near-term, extra agent fees may warrant intervention given that they are disproportionately paid by less empowered customers, including women, low-literacy citizens, and individuals living in remote areas (Brown et al. 2019). Over the long term, however, markets may simply mature out of this problem as consumers learn and agents self-regulate in response to more sophisticated consumers. An experiment with garment workers in urban Bangladesh demonstrated that workers who received digitized wage payments were more likely to personally execute transfers through their own phones, avoiding the use of agents altogether, which led agents to change behavior (Breza, Kanz, and Klapper 2020). Notably, this learning by factory workers had spillover effects on non-factory workers as agents

¹¹ <https://www.cgap.org/blog/6-ways-microfinance-institutions-can-adapt-digital-age>

¹² IFC, 2018: Aligning Expectations: The Business Case for Digital Financial Services.

in neighborhoods with higher concentrations of factory workers reduced the practice of overcharging more generally.

Another recent experiment among mobile money customers and agents in Ghana found that simply informing consumers located near an agent about the official fees for common local transactions, and making the agents aware that this was occurring, led to significant reductions in overcharging with respect to fees for treated agents. Importantly, untreated agents in the same village also reduced the fees charged for transactions, reflecting positive community level spillovers similar to the Bangladesh factory worker experiment (Annan, 2019). This spillover effect could in part be driven by the fact documented in Chamboko et al. (2020) that individuals transact with more than one agent, and so if one agent changes price, other agents in the community will follow. In short, spillover effects may help reduce overcharging by agents.

Early evidence on expanding the role of women as agents to reduce the higher incidence of misconduct among female consumers is mixed (Annan, 2019), though more research is needed. If and how downward pressure on extra agent fees affects the sustainability of the agent business model remains an important research question as limitations on incentives to expand the distribution networks can impose social welfare costs by constraining financial inclusion among those still out of reach of formal financial services.

Conclusion

Agent networks of microfinance institutions and other financial services providers have expanded rapidly in recent years in some low- and middle-income contexts. Their physical and social proximity to customers, especially those with low incomes and limited experience with financial services, make agents a potential gateway for expanding and deepening financial inclusion. There is emerging evidence that clients become more financially active as a result of the convenience and security of transacting with agents, especially with respect to depositing, withdrawing and transferring funds. While the convenience of agents could also lead to more client savings, the available evidence suggests that commitment devices may also be required, and there is little evidence that agents expand credit to clients, though they can facilitate loan repayment. There is also limited evidence that clients may have greater trust in agents than other bank staff, especially if agents are of the same gender, though privacy concerns may influence them to continue conducting larger, more sensitive transactions at branches. Emerging evidence

also suggests that consumers are price-sensitive, and that the pricing of agent transactions needs to be an important consideration when planning for customer activity (Buri and Reitzug, 2019). Finally, and more generally, increased access to financial services has brought substantial benefits to households in recent years, but there is also concern that financial intermediaries may take advantage of inexperienced consumers (Campbell et al., 2011), especially in low-income economies (see Conning and Giné, in this volume; Agarwal et al., 2018; Badarinsa et al., 2019).

Table 9.1**Table 1: Agents and branch staff characteristics, BSN**

	Banking Agents (N=6)		MM Agents (N=251)		Branch staff (N=13)	
	Mean	SD	Mean	SD	Mean	SD
Male (1=Yes)	0.83	0.41	0.61	0.49	0.00	0.00
Age	24.50	6.83	31.60	7.22	31.92	5.60
Married (1=Yes)	0.33	0.52	0.45	0.50	0.69	0.48
Household size	7.50	4.23	8.36	3.94	5.83	3.04
Years of education	14.00	3.29	11.68	4.44	16.38	1.26
Monthly household income (USD)	767.53	315.71	487.44	250.06	837.95	300.75
Financial knowledge index (self-reported, 0-3)	1.83	0.75	1.37	1.05	2.38	0.87
Financial knowledge index (questionnaire, 0-3)	1.33	1.03	1.69	0.92	1.85	0.55

Notes: This table reproduces Appendix Table OA2 from Buri (2021). MM agents are mobile money agents. Monthly household income is evaluated in US dollars of January 2015. Household size corresponds to number of people living in the HH where the respondent lives. Self-reported financial knowledge index takes value 0 for no knowledge, 1 for basic knowledge, 2 for medium knowledge and 3 for advanced knowledge. The financial knowledge index based on a questionnaire corresponds to the number of correct answers given by the respondent and varies from 0 to 3.

Figure 9.1. Transactions of clients of Baobab Madagascar

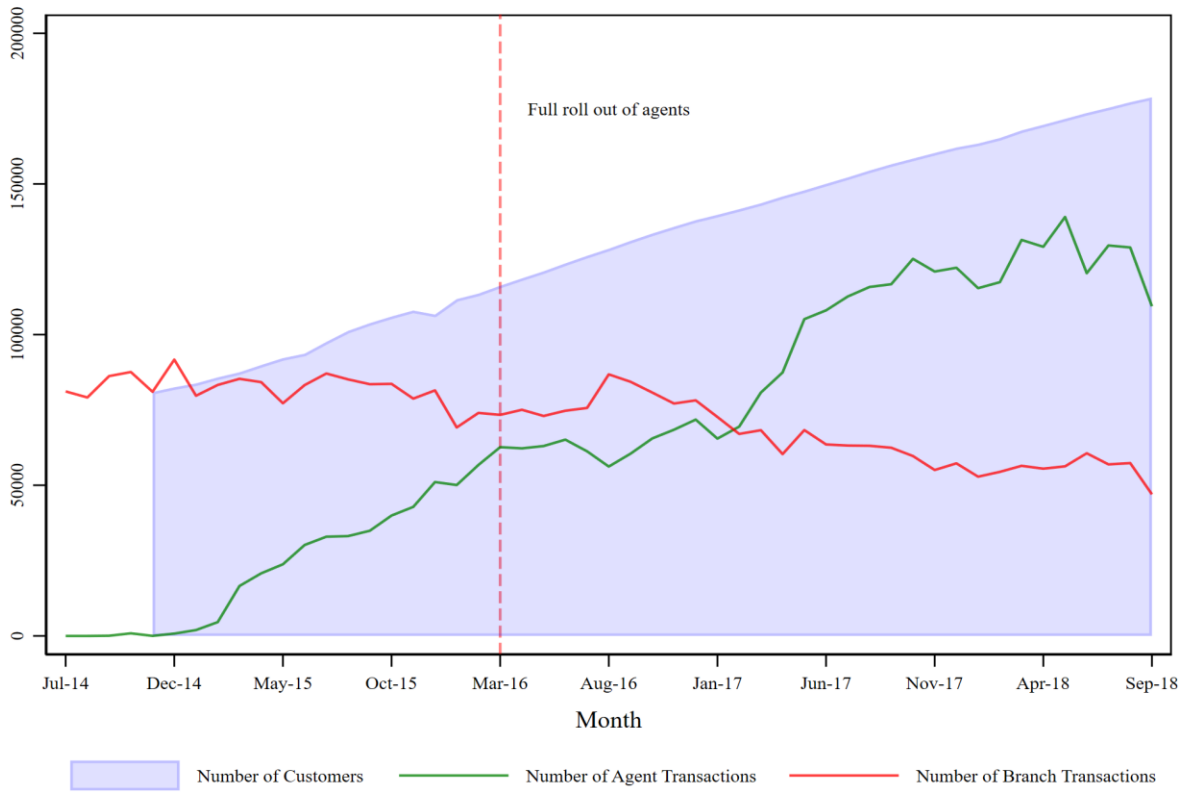
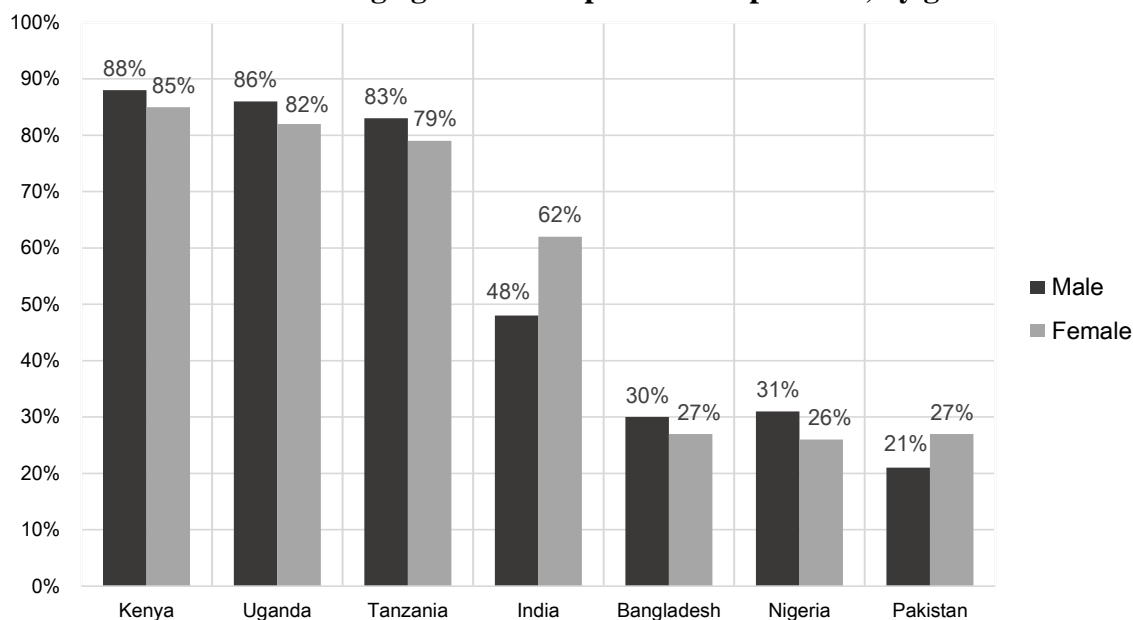


Figure 9.2. Share of Baobab Madagascar client transactions performed at agents



Figure 9.3. Percent of those visiting agents who experienced a problem, by gender



Note: Financial Inclusion Insights data 2016, weighted.

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