CHAPTER 12

Effects of Mobile Banking on the Savings Practices of Low-Income Users

The Indian Experience

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Introduction

Recent research into the economics of the poor demonstrates that low-income households manage to save money in one form or another, even if the amounts saved are small (Collins et al. 2009; Banerjee and Duflo 2011). A survey conducted by the National Council of Applied Economic Research (NCAER) and Max New York Life Inc. (Shukla 2007) found that over 81 percent of the Indian households save part of their earnings. Further, the survey indicated that over a third of the 205.9 million households still prefer to stash cash at home, even though this does not earn them any interest in return. Just as importantly, the survey found that poor households save about 40 percent of their annual income despite being in debt.[1]

The burgeoning mobile-money models in India target precisely this widespread demand for alternative forms of savings for people who are unbanked and financially underserved. Among such initiatives is one offered by EKO – a first mover in mobile banking platforms – that provides a pure cell phone–based model on a core banking platform called SimpliBank.[2] EKO's mobile-money campaign started in partnership with the State Bank of India (SBI) by launching the "SBI Mini Savings Bank Account" as a pilot in February 2009 in Delhi, Bihar, and Jharkhand.[3] EKO partners with a network of retailers – chemists, grocers, airtime vendors – known as customer service points (CSPs). In EKO's model, the mobile number is the bank account number of the customer, allowing individuals to trans-

act in their No-Frills Accounts or NFAs (accounts that allow customers to have a zero minimum balance) by simply dialing numbers on their mobiles. The money a customer deposits remains with the bank and not with EKO, and the account holder gains a 3.5 percent interest per annum. The key advantage of using the EKO accounts as opposed to banks is the significantly lower transaction costs and the ease of access. By comparison to the average SBI branch transaction cost of INR 68 (US$1.45), EKO'S average transaction cost is only INR 10 (US$0.21) (Malhotra 2010).[4]

The booming success of M-PESA in Kenya has shown that mobile technology offers considerable potential for lowering transaction costs and providing secure banking services to vast numbers of poor people in the developing world. Given that large segments of the urban poor in India are financially excluded, EKO's SimpliBank mobile money may play a significant role in delivering cost-effective financial services to the poor. EKO's vision for building a low-cost financial services infrastructure for the unbanked depends on its outcomes. The full extent of these outcomes should be measured with respect to two sides of the same coin—that of the provider and that of the end user (customer). For the provider, the success of mobile money focuses on a macro perspective (namely, EKO's outreach, coverage, and customer base); for the end user, the impact of EKO's mobile money centers on the micro unit (that is, access, safety, and cost of transaction).

While EKO's mobile money serves as a phone cum savings account, thus enabling people without a formal bank account to engage in safer and more efficient savings mechanisms, it also becomes a medium of transaction in everyday economic life. Focusing on low-income EKO customers in Delhi, this chapter looks at the effects of mobile banking on their saving behavior and other informal savings practices. By way of example, the chapter also reflects on how efforts to financially integrate migrant rickshaw pullers using an innovative hand-holding support to get them mobile banked raised concerns that need to be addressed by the mobile banking industry.

Setting the Scene

India is a microcosm of a growing global phenomenon: the disproportionate ratio between the number of people with access to financial services versus that of people with access to mobile phones. As of 2010, 30 percent of India's population lived below the poverty line (World Bank 2011), and while bank account penetration is still relatively low in India,

mobile phone usage is on the rise; recent estimates by the Group Special Mobile Association (GSMA) placed India as the second largest mobile broadband market (GSMA 2012b, 2016). India has attained near universal telecom access and has one of the lowest-cost retail distribution networks in the world. In this context, mobile money constitutes an opportunity for the financial inclusion of the poor. This is important because a prerequisite for poverty reduction and inclusive growth efforts in India rests on enabling the poor and underprivileged groups' access to formal financial services.

India has the second highest number of financially excluded households in the world—more than half of India's population is financially underserved.[5] A study on improving access to India's rural poor found that some 87 percent of the poorest households surveyed do not have access to credit and 71 percent do not have access to savings from a formal source. Among those with bank accounts, over 72 percent of rural households reported safekeeping of monetary assets as the primary use of the account, with little use for payments or checking services; further, there is limited demand for the use of these accounts to transact everyday spending because most transactions are cash based (Basu 2006). The Financial Sector Reforms Committee in 2008 indicated that 40 percent of India's earning population had no savings, with only 34 percent of the lowest income quartile having savings, and only 18 percent had a bank account. Data on the status of financial inclusion in India from the Global Findex 2014 indicates that while 53 percent of adults held an account at a formal institution, just 14 percent had savings at a formal financial institution in 2014 (World Bank 2014). More recently, the Indian credit agency CRISIL's Inclusix index (2015) evaluated India's progress on financial inclusion and described the country's performance as having improved with a score of 50.1 out of 100, indicating that there is underpenetration of formal banking services in most parts of India. While the Inclusix score has improved to 50.1 out of 100 at the end of Fiscal 2015 it also reflects that a large part of India's population remains outside banking network. One in three Indians still do not have a bank savings account; and with just one in seven having access to credit, the credit penetration (CP) score continues to be low.

In India, then, as in much of the developing world, "the financial markets are quite simply failing to meet the needs of a vast swath of society—those who are poor, and especially the poor living in rural areas—in a way that is affordable, convenient, and safe" (Mas 2009: 57). Banks shun the poor because they have unstable livelihoods; besides, they have unpredictable as well as low and uneven income flows. In short, the poor lack

the means for achieving financial discipline in the eyes of the bankers. Consequently, the poor rely on a number of informal mechanisms and social arrangements that are costly (in both financial and social terms) but more convenient. The fact that the poor do save by relying on informal sources such as saving at home, ROSCAs, "money guards,"[6] or saving clubs is well documented (Rutherford 2000 and Collins et al. 2009). The financial ingenuity of the poor's saving and storing practices (against all odds) is documented in a recent study of cycle rickshaw pullers who form a sizeable segment of urban poor living on Delhi streets, in public spaces, and in slum settlements (Nandhi 2010). These include keeping cash on their person, where they stay, with neighborhood shopkeepers, with relatives or rickshaw contractors, and/or in concealed locations. The study also notes that these practices are found to be strong despite unstable local living conditions, fear of risk of losses, and an uncertain level of trust and availability in getting back the deposited money when needed. Similarly, Orlanda Ruthven's (2002) research among dwellers in Kalibasti, a squatter settlement in West Delhi, suggests that networks of relations are crucial to the financial security of the urban poor. The study found that, despite the lack of access to formal financial services, most respondents were regularly leaning on friends and neighbors to cover deficits and bridge cash flow; these respondents were saving by hiding money at home, they were giving interest-free loans, and/or they were taking private loans with interest or a wage advance. A valid question here is whether the use of mobile banking would benefit the poor. In particular, what are the effects of EKO's mobile banking on the savings behaviors and practices of low-income households?

To answer this question, the chapter draws on a survey of 160 customers/users who were interviewed in 2011 in three districts of Delhi (West, South, and East).[7] Also interviewed were key officials and field managers of EKO, seventeen retail agents or CSPs to cross-validate the information gathered from EKO customers. This was supplemented by focus-group discussions with non-users of mobile banking and case studies of EKO customers.

Users of EKO

The users of EKO's M-Banking include migrant workers (auto drivers, rickshaw pullers, handcart vendors, shop assistants), small business entrepreneurs (for instance, beauty parlour owners), street hawkers, daily wage labourers, vegetable/fruit sellers, petty traders, housewives, and

students. EKO's potential target market includes cycle rickshaw pullers, as nearly a quarter of the sample (Nandhi 2010) was found to possess a mobile phone. Starting with an initial pool of five thousand customers and a network of two hundred agents, EKO has grown exponentially over time. As of 2014, it had served over 3 million customers through its three thousand customer service points (CSPs) across ten states (Joseph and Mazotta 2014; Mas and McCaffrey 2015). EKO has also launched a number of new initiatives. It has partnered with ICICI Bank, India's second largest private-sector bank, launching the "Apna Savings Account" scheme—rural savings accounts with a zero balance and no deposit requirement. Further, it has now moved beyond the No-Frills Account to the large domestic remittances market in north India by adopting *Tatkal,* a remittance facility introduced by SBI in mid-2010. According to Greg Chen, CGAP regional representative for South Asia, SBI-EKO *Tatkal* service had conducted 1.1 million transactions valued at over $800,000 within a time frame of nine months (Chen 2012).

From the wide pool of EKO customers, we interviewed 160—122 men and 38 women. The majority (54 percent) had attended up to middle school and 12 percent had no schooling. Of the group, 31 percent worked as daily wage/casual labor, factory workers, and domestic and professional workers; 19 percent were shopkeepers/petty traders; followed by sales assistants, housewives, and others. Nearly the entire sample owned a mobile phone. EKO users who were permanent residents numbered 78 percent, while 22 percent were migrants or temporary residents. At the time of the survey, the sample respondents had been EKO customers for an average of sixteen months. Of the EKO users in the study, 61 percent had a bank account and 39 percent had no bank account.

Users in the study had access to some form of financial services (formal or informal) before opening an EKO mobile account. Among the sizeable portion (61 percent) of the sample that had a bank account, 6 percent had not been using the bank account for various reasons, including inadequate ability to save because of low income. Further, 48 percent of the respondents had a Life Insurance Corporation (LIC) policy, while 19 percent were members of a "committee" or "kitty."[8] Among the non-users with bank accounts, three had a joint account with their spouses, three had an account in their village, and two rarely used their bank accounts.

EKO customers surveyed in the study were classified in three income brackets: 26 percent earned less than INR 5,000 (US$100) per month; 48 percent had incomes between INR 5,000 and 8,000 (US$100 and US$160); and 26 percent earned more than INR 8,000 (US$160). It should be noted that, assuming a household size of four members and an average infla-

tion rate of 9 percent (and food inflation hovering around 11 to 12 percent by the end of October 2011), the first two income quartiles can safely be considered low-income consumers. While the sample mean and median income lies between INR 8,089 and INR 6,000, the range of minimum and maximum stood at INR 6,000 and 50,000.

Prior to opening their EKO mobile banking accounts,[9] 54 percent of the respondents were saving in formal institutions (banks, post office, and LIC), 81 percent were using informal savings mechanisms (hoarding at home, keeping with self or a money guard, contributing to a committee/kitty), and 11 percent of the sample had no savings.[10]

Findings

Four key findings emerged from the field survey:

1. Mobile banking improved the ability to save for a majority of our respondents, particularly by comparison to earlier practices such as keeping cash on hand. These informal forms of savings were seen as susceptible to unnecessary and trivial expenditures or claimable by friends/relatives.[11]
2. EKO mobile banking services have become a very effective, safe, and trustworthy savings instrument for its users; importantly, dependence on risky informal methods had decreased for a large percentage of customers who previously relied on these practices for lack of affordable and safe savings options.
3. Mobile banking is perceived as a good substitute to both traditional banking and informal forms of savings; however, it has not dispelled the need for these existing savings mechanisms. EKO mobile services were used as one among many other savings mechanisms – including informal methods – by a sizeable percentage of customers.
4. Users have diverging views regarding the preference of EKO mobile banking over other forms of savings. The majority consider EKO mobile-money accounts to be a preferred alternative for small savings. At the same time, in spite of an expressed preference for EKO mobile money, one-third of users became inactive[12] following the introduction of transaction charges for deposits and withdrawals.[13] In fact, a considerable minority of customers had concerns about a possible increase in the cost of EKO transactions. This would potentially make the service less attractive to those who are looking to save in small amounts.

EKO Mobile Banking Has Increased the Capacity of Low-Income Users to Save

The survey indicated that 90 percent of users (N=144) found their "ability to save" has been improved by the mobile banking services of EKO. In response to a query about the extent of this improvement, 57 percent of users stated their ability to save had "definitely improved," and 41 percent noted that it had become "somewhat better" after opening an EKO account.

Users gave three important reasons for this positive effect from EKO mobile accounts on their overall savings behavior.[14] First, keeping money in the EKO mobile accounts is much safer than keeping cash on hand (84 percent). Second, having a mobile account enables users to avoid wasteful expenses and to save rather than spend, thus inculcating better saving habits. For instance, 66 percent of the users claimed that their EKO accounts had provided an incentive to deposit rather than spend their small amounts of extra cash. Third, their ability to save money frequently and in small amounts – as small as INR 10 (US$0.20) – has become more feasible with the No-Frills savings accounts offered on the EKO mobile platform. This finding was endorsed by 73 percent of the users in the study.[15] Similarly, Garg and Mehta (2010) found that the EKO clients reported more frequent savings, especially when people had extra cash that they deposited to their EKO savings accounts. Both EKO and M-PESA, which rely on a large number of small "corner shops," seem to encourage both deposits and withdrawals – as frequently as five times per week (Medhi et al. 2009).

Our users indicated that they were happy to use an EKO mobile banking account for a number of reasons. The top four reasons were as follows: it was "easy and convenient" (75 percent),[16] it was "easy to withdraw anytime" (69 percent), users "found a safe place to save" (65 percent),[17] and users could "avoid unnecessary spending" (63 percent).[18] A non-negligible number of users (22 percent – especially women) emphasized that EKO mobile money has been instrumental in keeping hidden their carefully saved money, thus giving them a "sense of financial control" (see case study 1).

Case Study 1

Saving in Mobile Money: Secrecy and Route to Freedom

Leela, a graduate housewife, gets a monthly allowance for running her household and has a joint bank account with her husband. She

opened an EKO account in 2009 (unbeknownst to her husband) and started to save between INR 1,000 and INR 2,000 regularly by managing her household expenses carefully. Around the same time she started a recurring deposit with the Indian post office for her children's future, and from what she saves in EKO she can withdraw some amount to deposit in the post office. She told us that her freedom to spend money or decide on her own about managing her savings has been a new experience. For instance, in May 2011 her brother asked her to get him a loan of INR 10,000 from her husband; instead she surprised him by withdrawing the money from her mobile account and lent it to him instead. She felt really good that she could help her brother on her own without her husband's aid or his having to know about her secret savings.

Source: Field notes of interview held on 28 September 2011.

EKO Mobile Account Is a Safe, Trustworthy and Useful Savings Mechanism

Three noteworthy findings emerged about the savings behavior of low-income users since opening their EKO accounts: First, EKO customers consider the services safe and trustworthy because their savings are securely deposited with the State Bank of India, whose brand name as a leading public-sector commercial bank in India lends credibility to the activities of their business correspondent, EKO. Second, after becoming EKO mobile banking customers, users were able to reduce their dependence on risky and costly alternatives in informal savings practices (keeping cash at home, under the mattress, or on their person) because their EKO mobile account became a safe saving option. For instance, dependence on informal savings practices such as "home savings" and "keeping cash on person" decreased by 54 percent; likewise, savings in committees and kitties dropped from 13 to 6 percent. Third, 11 percent of the respondents who had "no savings" were able to save after they opened their EKO accounts because it created an incentive to do so.

While all users in the study stated that they found a new saving mechanism in the EKO accounts, more than 10 percent of the users with bank accounts found it a better alternative and shifted to saving in mobile-money accounts. This was attributed to EKO mobile accounts having a dual benefit – that of a safe, reliable, and accessible savings option and its ability to keep money at arms' length to reduce temptation spending (see case study 2).

Case Study 2

EKO Helps to Reduce Wastage of Money

Naresh has a small shop and repairs electrical items. In the past he kept his daily income at home and deposited a bulk amount in the bank once in a while. The downside to this was that many times the cash earnings were used up at home, making deposits into his bank account an irregular practice. However, an EKO mobile banking account changed this situation. He began to regularly deposit part of his earnings on his way home, keeping some cash on hand for routine expenses. EKO mobile banking enabled him to save by avoiding temptation expenses, and when his EKO savings accumulated, he transferred a lump sum to his bank account for converting to a fixed deposit mode.

Source: Field notes from interview held on 16 August 2011.

Of the users without bank accounts, 39 percent felt that they finally found a safe saving medium in EKO-SBI's mobile accounts. This savings mechanism improved their confidence in saving and managing money. For those users with bank accounts, EKO mobile banking offered a far more convenient method of saving, enabling them to save time, energy, and cost of transacting in a brick-and-mortar bank branch. Undoubtedly, speed of transaction and time saved at an m-banking agent store location (cash in/cash out stores for EKO, GCASH, and M-PESA) were important reasons for mentioning the convenience of these services (see Medhi et al. 2009). By comparison, non-users had not heard about saving through EKO mobile banking accounts; besides, they considered themselves ineligible for bank accounts either due to lack of sufficient "know your customer" (KYC) proof or a limited ability to save in a bank account.[19] Hence, they were dependent on informal social saving practices such as hiding money under the mattress or in a *gulak*.[20]

EKO Mobile Money Is a Good Substitute to Informal Savings Methods

The majority of low-income users in the study (95 percent) perceived an EKO mobile banking account as a good substitute for informal savings practices such as saving at home, cash on hand, or saving with a money guard (friends/relatives). Additionally, many remarked that an EKO mobile account was a good substitute for a bank account.[21] In effect,

convenience, security of savings, efficiency of transactions, reliability, flexibility, safety, secrecy, and promptness of agent servicing were some of the main reasons why EKO mobile banking was considered a good substitute.

However, there was also a counterview to this dominant assessment: one-third of the users had negative perceptions about the prospects of EKO mobile money replacing existing savings mechanisms.[22] The two top reasons for dissatisfaction with EKO mobile banking accounts were the deduction of charges (33 percent) and server problems (18 percent).[23] The users (N=53) who expressed their unease about transaction charges included both active users (N=21) and inactive users (N=32). Delays in withdrawals, especially when needed immediately, as well as the loss of valuable time in transacting due to "server down" or "server not working" were also considered to be irritants in using EKO mobile banking service.

Coexistence of EKO Mobile Banking with Other Savings Practices

Mobile money was used by many of our interviewees alongside existing savings. One key feature of this ecosystem is the practice of earmarking specific types of savings for specific investments. For instance, "cash at home" and "cash on person" are used for everyday expenses on food, daily transportation, and other basic needs; committee/kitty contributions are used for buying assets or to cover "festival or ceremonial expenses"; finally, "money at home" and "EKO savings" are generally spent on recurring educational expenses.[24] Unsurprisingly, non-users in the study also exhibited similar behavior. In addition to educational expenditures, EKO savings were used extensively for emergencies or unexpected expenses—especially covering medical expenses or expenses related to death (N=87/120) as well for buying assets (for example, consumer durables).[25]

Interestingly, users also developed new applications of mobile money in their everyday transactions, including employing it as a complementary tool to existing savings practices. For instance, in order to make monthly savings contributions (payments to committee, kitty, or insurance premiums) in a timely manner, some users first made a deposit into their EKO accounts and subsequently made due payments from EKO savings. Some other users emphasized that, prior to their EKO accounts, when they set aside (as "cash at home") a part of their money for meeting these monthly

contributions to other savings practices, they often failed to meet their due dates because the cash at home was easily spent on other purposes. However, when they started to save through their EKO accounts, they could ensure timely payment without a late fee. This finding runs against conventional views that easier forms of savings/payments (think, for instance, Paypal) generally lead to a decrease in individual control over expenditures and savings. The case of Neelam (see case study 3) amplifies how users hoard money informally before moving the built-up sums to an EKO account.

Case Study 3

Hoard Informally and Save Formally

Neelam is an apprentice at a beauty parlor earning INR 3,000 monthly. She tries to store her money in various ways by tucking it among her clothes, storing it in a *gulak,* keeping it on her person, or by giving it to a money guard. Her intention is to convert small sums into a big amount. With an EKO account (opened in January 2011) she had found a safe way to ensure her small savings can grow into a sizeable amount. Despite occasional hiccups in her informal storing practices, she finds it is easier to put small-denomination coins in a *gulak* till it fills or store money with a friend, because money on hand gets spent. At the end of each month, she deposits her informally stored amounts in the EKO account. She finds EKO is the best and most secure mechanism among her saving practices and is confident that she can build a large enough sum to be useful in the future.

Source: Field notes from interview held on 27 August 2011

EKO Mobile Banking Is a Preferred Alternative for Small Savers

Asked about their preference for saving in small lump sums of INR 1,000 to 2,000 (US$20 to US$40), 79 percent of the users in the study preferred EKO mobile banking accounts, while 26 percent preferred "saving at home." This number includes the 20 percent of EKO users who became inactive due to rising transaction charges. The study found that 31 percent of the overall users became inactive subsequent to the introduction of transaction charges by EKO on the grounds that the "sudden introduction of flat fee based transaction charges" was a disincentive to save.

They felt that the uniqueness of EKO mobile banking rested on the ability to make small deposits frequently and conveniently. However, a large percentage of this subsegment (thirty-two out of forty-nine) expressed their keenness to revert back to using the EKO mobile banking service if the transaction charges on deposits could be eliminated.[26] Their positive perception after using EKO mobile banking has been a binding factor in their desire to continue using the services in the future. Unlike former users who became inactive but are keen to restart saving in EKO mobile banking account, non-users did not think that mobile banking would help them save given their inadequate income.

Mobile Banking Initiatives: Catalyst in Financial Practices for the Poor?

In order to contextualize these findings and the use of mobile money, this section offers one case study from a recently concluded empirical study (Nandhi and Deepti 2013) in which a small group of fifty rickshaw pullers were helped to acquire both a personal identification card on the Aadhar platform and a mobile banking account. They were then monitored to observe the changes in behaviour around their financial practices. Based on personal narratives that chronicle their migratory lifestyles, Nandhi and Deepti (2013) illustrate the financial choices the migrant rickshaw pullers are forced to make or unable to make, enabling an understanding of their socioeconomic compulsions, needs, desires, and wants that define this marginalized group. These are illustrated in case study 4.

Case Study 4

Vinod and His Travails

Vinod Yadav, a rickshaw puller, attempted to open a bank account in his village by providing the necessary documentation (e.g., voter's ID, ration card), but his application was rejected because the fellow villager who signed his application form was not deemed eligible. Vinod could not find another person who could introduce him to the bank. When he learned about mobile banking, he was happy that he could open an account because he owned a mobile phone. On 26 October 2012 his ICICI-EKO mobile banking account was opened when he deposited INR 600 (about US$10). But he did not use the account

subsequently because he lost his phone. Despite knowing that he had to get a duplicate SIM card to access his mobile banking account, he made a lot of excuses for not applying for it. After he ran out of excuses, it became clear that there was more to the story than met the eye. Over the course of a number of small personal meetings, the pieces of the jigsaw puzzle fell into place and we learned what kept him from using the eagerly opened mobile banking account.

Two months after *Deepawali* (a major Indian festival), Vinod had accumulated a total debt of INR 1,15000 (US$2,300) which he owed to many – his *tekedar* (ricksaw contractor) and a few fellow pullers – the result of playing *juwa* (gambling). To a query on how he would repay such a large amount, he said that while small amounts are taken on a reciprocal basis, larger amounts of money lent by a *tekedar* are repayable with an interest. For instance, a loan of INR 1,000 (US$20) would have to be repaid in a week's time with a high interest amount of INR 250 (US$5). His net earnings normally were about INR 500 per day (after basic expenses and rent for his rickshaw). So that would mean repaying the debt in seven to eight months. When asked if he was frightened about such a huge debt, he shot back: "Why would I be scared? I know I will have to earn and repay if I lose, but if I win I will be able to clear off some debts."

Vinod has regularly been depositing daily earnings with his *tekedar,* who treats the deposited earnings and the loans separately. The earnings deposited are also treated as collateral when a puller borrows from the *tekedar.* Of the eight *tekedars* in the slum settlement where he stays, three are frequent lenders. Vinod noted that they are happy to lend when the *juwa* is on, but rarely for other purposes. He said that in one of the games he won INR 40,000 (US$800). The stake was doubled in the next game by his *tekedar,* who encouraged him to gamble, and, unable to resist the temptation, Vinod played and lost INR 80,000 (US$1,600). Vinod explained that many pullers are tempted into playing cards and thus fall into a debt trap. Normally debts are squared between winners and losers when small sums are involved. If a friend wins big one week, he will lend to his friends who have lost and borrow from them the next, "like a moving wheel."

Though he was pressured by the *tekedar* to repay in ten days' time, Vinod explained that this was just one of a number of debts that would need to be settled at the same time: "I will repay each lender alternately because if I repay one and not bother about repaying another, I will face the wrath of the lender who is not getting back the loan from me." However, the challenge for pullers like Vinod is

that when the stakes are high, they tend to borrow from sources with vested interests. This seems to reinforce their dependence on a "*tekedar* cum lender" pattern in their economic lives. And life goes on "by getting by" for many a puller like Vinod. Vinod has aspirations, but when gently reminded about saving in his newly opened mobile banking account, he simply replied, "How can I think of saving or bother about Rs.600 savings in my mobile banking account when my mind is concerned now only about returning the huge amount I owe people? Such things are far away in my mind." His answer echoed his life situation that dangles between desires and actual choices made under harsh circumstances.

Source: Based on field interviews from Nandhi and Deepti (2013).

Conclusions

Based on the sample, what can be concluded about the effects of EKO mobile banking on the savings behavior and practices of low-income users in the metropolis of Delhi? EKO mobile banking has improved the capacity of low-income users to save, particularly when compared to keeping cash-based savings; indeed, a majority of users rated the service as bringing about a definite degree of improvement in their saving ability. The EKO mobile banking service is considered a boon because of its safety, trustworthiness, and effectiveness for small savers and users who earlier depended on risky informal savings practices. These findings corroborate evidence from South Africa and Kenya, which showed that low-income customers positively value the mobile banking services for their convenience, safety, ease of use, and speed (Ivatuary 2006; Stuart and Cohen 2011; CGAP Brief 2009).

Notably, dependence on risky informal methods diminished for a large percentage of users, who were earlier dependent on them for lack of a safe saving option. In a related vein, a CGAP study in 2009 demonstrated how unbanked poor use M-PESA as a substitute for informal savings methods, especially keeping money at home—a practice that is notoriously susceptible to theft or claims made by family.

In addition, EKO mobile bank accounts have become a storage device for both unbanked and banked users, which resonates with a similar finding about M-PESA serving as a place to hold capital (Jack and Suri 2011). More importantly, it is considered as a healthy substitute to many informal savings mechanisms as well as a bank account. Yet, the savings behavior of users indicated that EKO mobile banking accounts have not

eliminated the need for some of the traditional savings mechanisms because different savings methods were perceived as having their own usefulness and purpose.

Another aspect of EKO mobile banking accounts is that a high percentage of users utilized it to save for emergencies. In a related vein, Stuart and Cohen (2011) argue that the successful M-PESA in Kenya does not appear to be a tool that low-income people use to accumulate savings; however, they do use it as one among numerous tools to patch the holes that routinely spring open in their regular cash flow. More critically, their findings underscore that M-PESA is a valuable tool for these households in meeting emergency expenses, especially hospital bills. This finding is corroborated in other studies of M-PESA users who were found to be keeping money for an "emergency" or unexpected event/expense such as a funeral (see, e.g., CGAP Brief 2009; Zollmann and Collins 2010).

Contrary to expectations, EKO mobile money accounts also seem to improve efficiency and regularity of other savings mechanisms, in addition to making payments and deposits easier and more accessible. For instance, an interesting aspect of EKO mobile banking is that it has become a convenient "fit-in" instrument among other savings devices, including both informal and formal mechanisms–depending on the purpose and nature of saving goals (short term or long term). In fact, EKO mobile banking is being blended with other savings methods as well as being adapted as a complementary tool for an existing saving practice, thus increasing the self-discipline of users in their savings efforts. Such behavior is an indicator of a shift in the savings patterns to minimize the risk of savings failures (for example, if carefully built-up "home savings" are depleted due to its exposure to demanding relatives). Given that the users were intermixing EKO mobile banking in their existing assortment of informal savings methods and bank accounts, a key insight here is that there is need for savings products that incorporate design principles based on informal mechanisms (for example, like *gulaks*) to suit the needs of low-income users who have low, irregular income streams and low levels of savings.

Overall, the positive perceptions of mobile banking in the daily lives of EKO account holders represent an encouraging sign of the potential of mobile money for expanding the financial inclusion of large numbers of low-income households in India. The negative perceptions that non-users hold with regard to their savings capacity speak, on the one hand, to their irregular income and, on the other, to their lack of awareness of the potential of mobile banking for improving their financial opportunities. This lack of awareness raises the need for more creative strategies for

reaching out to the poor in India and elsewhere. The lack of awareness about the benefits of saving in mobile banking is reinforced by Vinod's narratives in case study 4, which highlight that getting a mobile banking account is only the first step. Pullers new to banking need support to create a banking habit capable of overcoming all barriers to adopting the service. It is critical to show them how to translate the idea of having a bank account into practical ways of realizing their desires to save in a formal account through financial discipline. Toward this end, financial education has to be an essential component of a mobile bank account offered to disadvantaged populations; and more importantly, the "poor" need to be treated as "customers" with products that are designed with empathy and creativity. This alone will ensure their financial inclusion.

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NOTES

1. This behavior is in consonant with findings in other studies, which indicate that households often prefer borrowing—especially from informal sources like friends and relatives—over using savings, which is earmarked for specific needs. As Jonathan Morduch (2010) argues, while the phenomenon of "borrowing in order to save" is puzzling from the standpoint of traditional economics, it is a regular feature in the financial practices of the poor (see also Collins et al 2009).
2. Operated by EKO Aspire foundation/EKO India Financial Services Pvt. Ltd, New Delhi. EKO's SimpliBank is the application or the server that captures all mobile transactions, processes them, and then reconciles the same with the core banking systems. This middleware understands transactions done by customers at a retail point, and it is designed with the mobile phone as its primary transaction interface.
3. The State Bank of India (SBI) is the largest and most trusted public-sector bank in India with the greatest number of branches and accounts across the country.
4. The exchange rate of 1 USD is equal to INR 50 in the study.

5. "Underserved" broadly includes those who get partially some kind of financial service (one might have a no-frills account but no access to credit). "Unbanked" refers more narrowly to people without a bank account.
6. Friends or acquaintances who will take care of small amounts of money either for free or for a fee.
7. I used a structured schedule. The questionnaire included some open-ended questions that encouraged customers to respond freely. The terms "customers" and "users" are used interchangeably throughout the chapter.
8. A kitty is a group of members, usually women, pooling a certain amount of money every month, which is auctioned or is given in full to members in turn through a draw of lots. Kitties are also known as "kitty parties" based on their form of organization as social gatherings. These are popular among the middle-income urban women who join specific kitties based on their social networks. Regular meetings take place on a rotational basis and are hosted by the member that "wins" the lottery of contributions by all other members. Similar institutions are also common among working-class women in India. Similarly, "committee" is a popular method of saving among small/tiny business owners and is also known as a "lottery" system. Both fall in the purview of informal savings mechanisms. For a discussion of the similarities and differences among committees and kitties, see also Raj Mohan Sethi's (1995) seminal article "Women's ROSCAs in Contemporary Indian Society," as well as other chapters in this book.
9. This figure relates to the specific question: "Before opening the EKO account, where did you keep your savings/money?" It refers only to savings (both formal and informal). The cumulative is >100 percent due to multiple options.
10. Non-users were randomly selected and included three categories: those who had access to a mobile bank but no bank account, those who had both, and those who had neither. The non-user sample has an inherent limitation because the number of non-users does not proportionately match either the users sample or the non-users in the areas covered. In other words, it is not truly representative of non-users among low-income households in the sampled areas, and the researcher's bias both in the selection of non-users as well as in limiting their numbers is undeniable. Within a limited time frame, the intention was to capture the essence of perceptions of non-users about mobile banking and its use and related issues in order to get a comparative perspective.
11. In the Indian context and especially that of low-income households, "cash on hand" can often be used up either because it is claimable by demanding relatives (like husbands), children (emotional blackmail), or friends (who may justifiably expect [demand] a return favour for earlier money lent). Hence, the expression "claimable is situation specific."
12. Those users who stopped depositing completely for three or more months and withdrew most of their savings, leaving a nominal balance, were treated as inactive customers in the study.
13. EKO mobile banking service was initially offered free, but deposit as well as withdrawal transactions began to be charged a year after the service started. This led to users withdrawing from it, as the service proved too costly due to a

flat-fee-based pricing structure. However, these inactive users expressed their keenness to restart using the service subject to a reasonable pricing policy by the mobile banking provider or the business correspondent (in this case, EKO).

14. In a CGAP study of nearly two thousand branchless banking customers in Pakistan (Easypaisa), India (EKO), and Mali (Orange Money), about three-fourths of poor users reported that the services had a positive impact on their lives and that the services were highly effective (McKay 2012).
15. This consisted of users with both bank accounts (61 percent) and no bank accounts (32 percent). By contrast, non-users of EKO showed a limited capacity to save either due to insufficient income or because the little that was kept on hand was spent and difficult to retain as savings.
16. A CGAP survey (Bold 2011) assessing whether branchless banking is reaching poor people found that 37 percent of the 814 EKO customers surveyed (especially the poor) used the service for savings primarily because of its ease of use; and, over three-quarters described the EKO service on a scale from 1 (not easy at all) to 10 (very easy) as an 8. Another study that explored how EKO's services have impacted its clients' saving practices (see Garg and Mehta 2010) found that convenience, ease of use, and trust in the nearby merchant were all reasons for preferring EKO's mobile banking service. Additionally, for a large portion of the low-income clients who were migrants with no or negligible documentation, the relaxed "know your customer" (KYC) norms gave an opportunity for opening an m-banking account, thus enabling them to start saving in a bank, a privilege they did not have earlier.
17. "Safekeeping of money" was the second most common reason for using EKO service in the CGAP 2011 survey.
18. The cumulative percentage is >100 percent due to the given choice of multiple answers.
19. Ivatuary (2006) similarly found low-income respondents in South Africa citing the lack of regular income as a main reason for not having a bank account.
20. *Gulaks* are piggy banks made of clay and commonly used in India among low-income households to save cash at home.
21. Garg and Mehta's (2010) study also indicates that those EKO clients with bank accounts have started to save smaller amounts in their EKO accounts as and when they have extra cash (as low as fifty rupees). Besides, those who were saving at home are now saving more frequently and in a more regular manner in their EKO accounts, which is also reinforced by the CGAP 2011 survey of EKO users.
22. Figures total to more than 100 percent due to multiple responses.
23. It is to be noted that the number of users who were "happy but not comfortable" (N=53) was analyzed as a percentage of all the users (N=160) in the study.
24. However, 10 percent of the users depended on "savings in a bank account" for meeting school fees in particular. Aligned with these results, M-PESA users were found to be integrating M-PESA into their savings portfolios (including informal and bank savings accounts) to decrease the risk of money being "wiped out" (see CGAP Brief 2009).
25. The two other key sources of funding for these same forms of investment are "borrowing from lender" followed by "insurance policy."

26. The fact that 74 percent of EKO and Easypaisa customers were apprehensive that losing access to the service would have a negative impact on their lives corroborates this view (see CGAP Brief 2009).

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