

Field Note 10

# WOMEN AND DIGITAL FINANCIAL SERVICES IN SUB-SAHARAN AFRICA:

UNDERSTANDING THE CHALLENGES AND HARNESSING THE OPPORTUNITIES





#### **EXECUTIVE SUMMARY**

Economies achieve their highest potential when all citizens can participate fully and without discrimination. Economic exclusion means lost opportunities, with significant negative consequences for individuals and families, as well as the broader economy. In Sub-Saharan Africa, despite the great efforts made to advance economic opportunity and equality for women, especially with the advent of digital financial services (DFS), gender differences in financial inclusion persist. Understanding women's needs, their DFS use cases; the drivers and uptake of DFS among women; and the extent, nature and pattern of DFS usage; is essential to designing products that meet women's needs and facilitate their participation in the formal economy.

This study shows that there are pronounced differences in the way men and women engage financial services in Sub-Saharan Africa. This is reflected by the differences in the types of products men and women engage, with men more likely to use DFS than women. Women are more likely to use informal services, suggesting that informal services continue to provide value unavailable from other channels. Data shows that men use mobile money more frequently than women and send money as well as buy airtime more than women. On the other hand, women use mobile money more to receive money and store value than men. Equally important, many factors continue to hinder women from enjoying equal access to DFS the same way as men. These include limited access to phones and connectivity, lack of information, limited participation of women in the salaried labor force, and lower social-economic status.

It is therefore recommended that financial service providers (FSPs) invest in gender-lensed data analytics (where gender data is available), as this is key to including women in the formal financial system. Understanding women's needs or uses cases and financial services usage patterns is essential to ensure that innovation and the provisioning of DFS is enhanced to meet these needs. To bridge literacy issues, the designing and provisioning of DFS—especially for women—should be simplified to ensure that the less literate are able to engage, and the technology should be simple enough (but safe) to allow compatibility with simple phones. In addition, FSPs should consider replicating or adapting some of the features of informal services to attract women.

Also, products that allow women to earmark funds for future aspirations should be considered and in doing so, flexibility should be prioritized, given that women emphasize the need for flexibility to allow them to access funds in emergency situations. Furthermore, providers who market and promote DFS products could consider better engaging social networks, through referrals, testimonials or ratings to onboard women more effectively. Lastly, the study reveals that there is limited use of mobile money to make merchant payments and bill payments; and this stands out as a growth opportunity for mobile money, especially for bills such as electricity and water, which are recurring.

#### INTRODUCTION

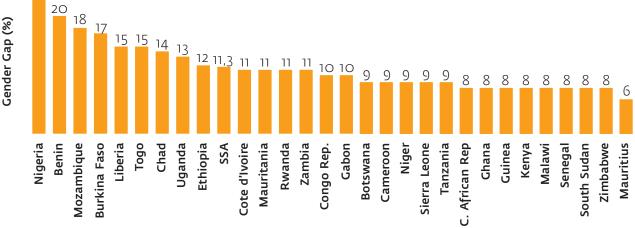
Access to formal financial services means access to secure and efficient means of transferring money; secure and productive means of saving; regulated credit; and ways of insuring against costly unexpected events. A burgeoning body of literature shows that access to finance and the use of DFS among women is yielding significant results. A recently conducted study demonstrated that access to mobile money services helped women-headed households in Kenya to reduce extreme poverty and provided opportunities to change livelihoods from farming to other business services (Suri and Jack, 2016). Similarly, Doepke and Tertilt (2011) demonstrated that with improved access to finance, women are more likely than men to spend on education, food and health care, resulting in improved welfare and productivity of their families.

There has been a commendable increase in the use of DFS globally, especially digital payments with the fastest growth coming from developing countries. According to the 2017 Findex report, the proportion of people using digital payments rose by 12 percentage points (to 44 percent) between 2014 and 2017 in developing countries. Given that financial institutions and access points are not always available in all areas of developing countries, the use of DFS eliminate the effort of long distance travel to access financial services, while lowering operational costs for FSPs.

Despite a remarkable growth in financial inclusion rates in Sub-Saharan Africa, the gender gap remains. The financial inclusion gender gap in Sub-Saharan Africa is on average 11.3 percent, ranging from as high as 24 percent in Nigeria to a low of 6 percent in Mauritius (see Figure 1). This underlines the necessity of a concerted effort to ensure that the designing and provisioning of financial products and services is tailored to meet the needs of marginalized groups, including women.

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Figure 1: Gender gap in financial inclusion in Sub-Saharan Africa



Source: Global Findex 2017

Importantly, providers must understand women's financial needs, and get to the root of what drives or hinders them from taking up and using DFS. Understanding customer segments is what enables providers to optimally tailor products and services that serve the broadest customer base of both women and men. Drawing from survey and transactional data from seven countries in Sub-Saharan Africa, this study explores gender differences with respect to: (1) account ownership; (2) financial service needs and use cases; (3) the extent to which DFS is used; and (4) drivers for uptake and use or non-use of DFS.

This synthesis note mainly comprises insights gleaned from IFC research conducted in Sub-Saharan Africa under the Partnership for Financial Inclusion, a \$37.4 million joint initiative of IFC and the Mastercard Foundation to advance financial inclusion in Sub-Saharan Africa, between 2014 and 2018. The studies were conducted in DRC, Ghana, Kenya, Senegal, Tanzania, Uganda, and Zambia using various research approaches including qualitative and ethnographic research, quantitative surveys, and the analyses of large consumer datasets in financial institutions (big data analysis). Additional analysis drawing from datasets collected by the partnership was conducted to help weave together themes discussed herein.

The studies reviewed to produce this note were selected because they addressed one or more of the research questions outlined above. It should be noted that the quantitative surveys were not specifically designed as gender financial inclusion surveys; they were designed for research studies focused on other DFS questions but included gender-disaggregated data that now serve this synthesis study. Because the studies focused on their respective questions, the gender data offer limited overlap in terms of questions, issues addressed, sampling methodology and target population across the countries. As such, the analysis from a gender perspective does not necessarily use similar questions from the different countries and surveys. Nevertheless, we can identify several clear patterns that hold true across the countries and data included in this analysis.

#### **KEY FINDINGS AND DISCUSSION**

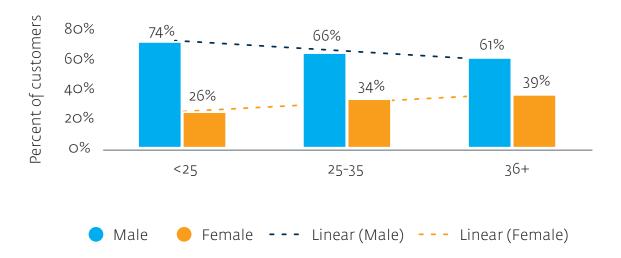
#### The gender gap persists for the take-up of financial services

Taking up or signing up for a financial product is the first step towards meaningful use. In the case of mobile money, having an account in one's own name results in different usage than using someone else's account. As highlighted above, the gap on account ownership is biased toward men. An inspection of selected mobile money portfolios across the region also show that most of the mobile money clients are men. For instance, research with IFC client FINCA DRC found that the ratio of active male versus female users was 65 percent to 35 percent, respectively, in the FINCA mobile money portfolio-with an even bigger gap among youths. As depicted in Figure 2, only 26 percent of the under 25 age group were women; women constituted 34 percent and 39 percent of customers in age groups 25 to 35, and 36 years and above, respectively.

There is a clear age gradient on mobile money ownership, gradually reducing with increasing age. If one were to take these three age groups as cohorts and assume that this gender gap on mobile money ownership will remain constant over time, it would suggest that the gap between men and women will continue to grow. On the other hand, our research shows that younger men tend to adopt technology and mobile money earlier, as compared to younger women. Therefore, as population demographics age, the comparative female age cohort might be expected to adopt later, seeing this gender adoption gap close somewhat over time. What is not yet clear is how gender-biased predilection to early technology adoption naturally closes over time. For providers, understanding these patterns may help to re-tune products to align with the needs of particular segments at the appropriate time.

# Distinct transacting customers

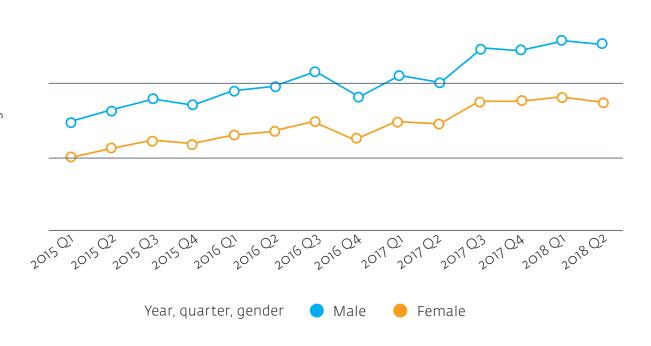
Figure 2: FINCA accounts distribution by gender and age



The gender gap on mobile money ownership among youths in DRC mentioned above is also affirmed by the findings from the Young Ennovators Account (YEA) at Cooperative Bank in Kenya. As can be seen in Figure 3, the gap between men and women aged 35 years or below has widened between January 2015 and January 2018.

Although, as compared to DRC data that looks at different age cohorts at an instance in time, the Kenya data looks at the same age cohort over time (under 35 is the eligibility criteria for the product). If the hypothesis of early adoption holds, this widening gap seen in Kenya will be expected to close as this cohort ages.

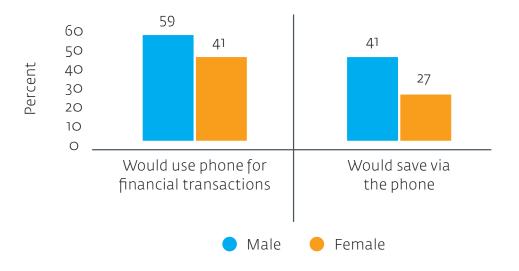
Figure 3: Growth of accounts by gender (Cooperative Bank in Kenya)



In examining Uganda, it is evident from survey data that men exhibited higher appetite for mobile money for both saving and other financial transactions than women (Figure 4).

About 59 percent of men, in comparison to 41 percent of women, reported that they used phones to perform financial transactions, while 41 percent of men compared to 27 percent of women reported that they would save via their phones.

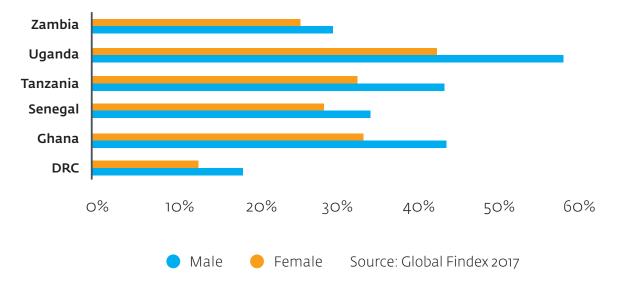
Figure 4: Appetite for mobile money for saving and transactions in Uganda



The gender disparities on mobile money ownership are also supported by the Findex (2017) data across Sub-Saharan Africa.

As depicted in Figure 5, it was shown that mobile money ownership in DRC, Ghana, Senegal, Tanzania, Uganda, and Zambia is skewed in favor of men.

Figure 5: Mobile Money Account ownership in selected SSA countries



The above discussion shows an inescapable picture of a gender gap in financial inclusion globally and in selected Sub-Saharan Africa countries.

It is against this backdrop that the following section explores some of the factors driving the observed differences in the uptake and use of digital financial services.

#### Drivers and barriers of DFS uptake and use among women

### Access to phones and connectivity remain a challenge for women in SSA

Mobile phones, mobile apps and websites are increasingly being used to access financial services in Sub-Saharan Africa, especially to make payments. This has been made possible by the rapid growth of phone ownership and connectivity, as well as the penetration of DFS. As such, access to a cellphone has become a key driver of financial inclusion. Despite the rapid growth in mobile ownership, women are left behind. IFC research from Senegal, Uganda and Zambia shows that men are 5-7 percentage points more likely to own a smartphone than women; and when women do own a mobile phone, their handsets tend to be older and cheaper than those used by men. Similarly, IFC research in Ghana shows that male mobile users are twice as likely as female users to have two mobile phones. This finding also means that women tend to use only one mobile provider, while men are more likely to own several SIM cards and diversify their usage of mobile providers (Harten et al, 2014). In Uganda, while the gender gap in mobile ownership tends to hover around 7-8 percent in urban areas, data shows that women in rural areas are 15 percentage points less likely than men to own a mobile phone. These results are supported by the GSMA Mobile Gender Gap report of 2018, pointing to a 10 percent mobile ownership gender gap worldwide and a 13 percent gap in Sub-Saharan Africa.

Women's access to and use of mobile phones hold an important lesson for financial providers seeking to include women: the services offered need to be tailored to the type of handsets women are more likely to own and use. Additionally, dedicated services training and marketing information tailored to raising awareness about how to use them can be helpful to women.

Beyond simple mobile ownership, across the board, our data shows that women in Senegal, Uganda and Zambia are less likely than men to use the Internet—be it at work, at home, or on their phones. This finding was echoed by the GSMA 2018 report, which shows that the mobile Internet use gap between men and women stands at 34 percent in Sub-Saharan Africa. It is therefore important to stress that these structural issues of mobile hardware and connectivity in the region deter women from accessing financial services in the same way men do.

#### Women are less aware of DFS than men and rely more on social networks for financial information

Men and women rely on different information sources regarding the existence and functioning of financial products. These differences between the various types of media men and women are exposed to, and how they engage with them, are important as financial providers need to understand which mediums can be used to reach women and tailor their advertisements or educational campaigns to be delivered via these media platforms.

Evidence from Senegal, Uganda and Zambia point to the fact that men are more likely to be informed about DFS than women. In Zambia, it was found that knowledge about usage of mobile money is negatively correlated with being a woman, with 33 percent of women having little or no knowledge about how to use mobile money, compared to 14 percent of men. Similarly, in Uganda, men were more familiar with both the general concept of mobile money and with particular services offered by mobile providers (64 percent and 52 percent for men and women respectively). In Uganda, women tend to rely more on friends and family for information about mobile money—39 percent compared to 25 percent for men—and are less likely to get that information from radio or TV; 54 percent women, to 64 percent men.

### Ease of access and confidentiality matter for women

Women prefer to save in places where they can easily access their savings, especially during emergency situations. Across countries, it emerged that access to emergency funds is a consistent reason why women diversify their saving sources by saving with friends, family or neighbors. In addition, women also seek confidentiality to better accommodate known and unknown future needs. By design, mobile money provides both confidentiality and ease of access to funds, thus these features should be emphasized when promoting mobile money services to women.

### Socio-economic status remains low among women

Education and income, which serve as indicators for socio-economic status, remain important drivers of financial services use. Those with better education, income or assets are more likely to have the right information and sufficient money to meaningfully engage financial services. IFC research in Ghana shows that there was a 30-percentage point gap in

the usage of mobile money services between men and women, and when non-users were asked why they were not using mobile money services, women overwhelmingly stated lack of money as the primary reason. In Tanzania, male borrowers had higher values of total and fixed assets than female borrowers, and resultantly, male borrowers on average had higher loan sizes (Harten & Buri, 2015).

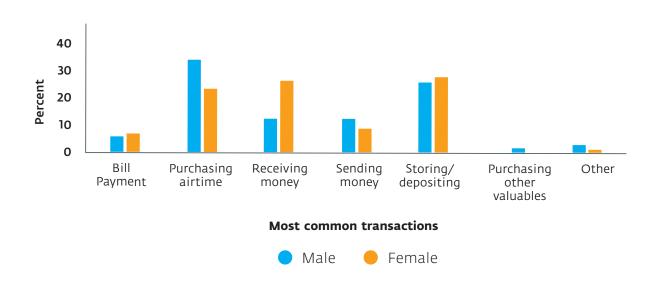
The level of education or literacy and technological appropriation may also impact the ability and level of comfort when engaging DFS. In Senegal, older women were more likely to indicate that they feel the need for assistance when they use mobile money. Data from Senegal also indicates that women who use their phones to download apps tend to be younger and more educated than the average women in the sample. While this is expected, it emphasizes the fact that including older and less educated women would require USSD or SMS-based financial transaction services and not app-based ones.

In Uganda, women lacked information on the sources of credit. When asked why they borrowed from a particular source, the most quoted reason by women was that it was the only available option, and always by a higher percentage than men. It is unclear why women felt they had no other options. When asked why they didn't use a financial institution, 35 percent of women indicated that they didn't know about it – 10 percentage points more than men. This finding points to financial education and informational campaigns about financial options as a fundamental way to drive up the level of financial inclusion for women, at least in the case of Uganda.

#### The needs and use cases of women are different from those of men

To meaningfully tailor products and services and successfully onboard women into formal financial services, it is important to understand what needs financial services address for women and how these differ from those of men. As depicted in Figure 6, there were variances in the patterns of usage for different mobile money services among male and female users in Zambia.

Figure 6: Most common transactions performed using mobile money in Zambia



Across the board, the most common use cases for mobile money were purchasing airtime, receiving money, storing or depositing money, and sending money, as self-reported by clients in Zambia. The most common transaction performed by men was purchasing airtime (35) percent) and this was 10 percentage points higher than for women (25 percent). For women, the most common transaction was receiving money (28 percent—double that of men at 14 percent). Men and women exhibited almost the same level of transactions related to depositing money or storing value (29 percent female versus 27 percent male). On sending money, these transactions were slightly higher for men (13 percent) than women (9 percent). This finding was reinforced in Ghana where only 29 percent of women had sent money in the previous year, compared to 59 percent of men. Considering the limited participation of women in the salaried labor force across Sub-Saharan Africa, it is not surprising that women are mostly on the receiving end, and men sending money outnumber women. Furthermore, in many African settings, men seasonally migrate to urban areas or mining towns for work. For example, in Zambia, there is considerable internal migration by men leaving wives and children in their home villages to work in mines (Koblanck, Heitmann & Davico, 2017).

It is worth noting that there was not much of a difference observed between men and women on the use of mobile money for bill payments in Zambia. It can be seen in Figure 6 that the proportion of men and women using mobile money for bill payments was almost the same—and below 10 percent. This is potentially a growth opportunity for mobile money providers, as more can be done to facilitate the payment of bills, particularly for routine household bills such as electricity, TV and water.

## The extent and patterns of digital financial services usage differ between men and women

By exploring the type of financial instruments used, the regularity of use, the amounts transacted and how recently they were used, we find interesting patterns differentiating women from men in the use of DFS. Understanding these differences provides a wealth of information that can guide the design or redesign of products and services to match the financial behavior and needs of women or to introduce interventions that better support women to engage financial services.

### Women save more in informal financial services than men

Savings are an important gateway for most lowincome clients into the world of formal financial services. From Findex data, we can tell that women already save at similar rates to men. Therefore, it's not necessarily about women clients saving more, but keeping their savings safe while also having access to funds in case of emergency. Across our research countries, evidence shows that women save in informal financial services more than men. As shown in Figure 7, about 81 percent of the savings for women in Senegal were managed by informal services, with saving groups (such as merry-gorounds) holding a significant share (25 percent). Understanding the benefits women get from these informal financial services, especially saving clubs, may help DFS providers to emulate or adapt those benefits within formal digital financial services to strengthen engagement of this market segment through a recognized value proposition.

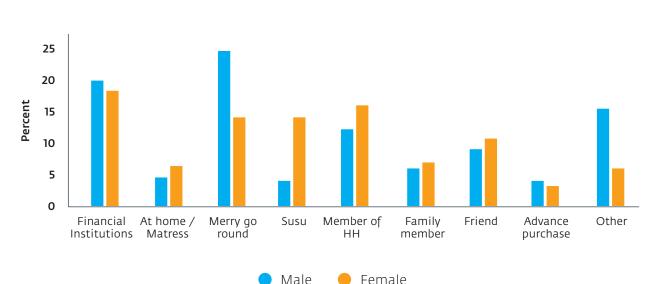


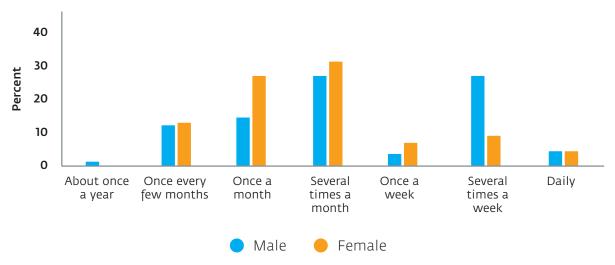
Figure 7: Proportion of total savings by type of institution - Senegal

### Women use mobile money less frequently than men

Besides having low account ownership, it was found that when women sign up for mobile money services, they use these services less frequently than men. In the case of Zambia, Figure 8 shows that, cumulatively, fewer women indicated that they used mobile money several times a month, once a week, several times a

week and daily compared to men (49 percent versus 68 percent). Thus, women were more likely to use it once a month than men (26 percent versus 15 percent). In Uganda, among those that have used mobile money services, more men have consistently used them more recently than women, regardless of provider.

Figure 8: Regularity of mobile money use in Zambia



As stated above, on the FINCA mobile money portfolio in DRC, it was found that the ratio of male to female users was 65 percent to 35 percent, respectively. From the fraction of women constituting this portfolio, women contributed 24 percent of the transactions, suggesting that they performed fewer transactions than men.

### Women save more with mobile money than men

Figure 9 shows that women at FINCA DRC saved more with mobile money than men. By examining the account balances since the last quarter of 2017 through to the second quarter of 2018, it was shown that women's balances continued to be substantially higher than those of men.

Figure 9: Value of saving for men and women at FINCA DRC



Using the same portfolio of mobile money users from FINCA in the DRC, it was revealed that the most common transactions on the mobile money platform were cash withdrawals (63 percent) and cash deposits (36 percent), and all other transactions were very insignificant—see Figure 10. What is important to highlight is the difference in the transaction patterns for men and women. It is evident that women deposited money into

mobile money more than men (46 percent versus 33 percent). On the other hand, men performed more withdrawals than women (67 percent versus 53 percent). Recognizing that women were more likely to make deposits into their mobile money accounts than men, possibly to save, is an important finding given that women typically save using informal mechanisms.

70 Percent of transactions 60 50 40 30 20 10 0 School fees Tax Payment TV subscription Cash Cash Fund payment Withdrawal deposit transfer payment 63,10% 36,10% 0,64% 0,02% 0,02% 0,06% All ( Female 53,00% 46,00% 0,80% 0,02% 0,02% 0,05% Male 66,70% 32,70% 0,58% 0,02% 0,16% 0,07%

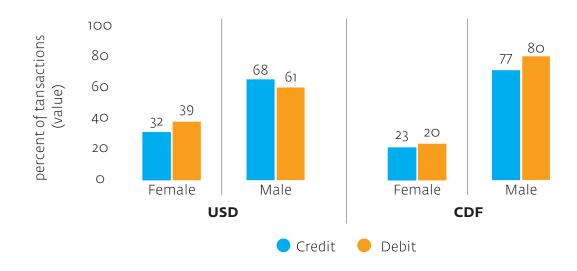
Figure 10: Value of transactions performed by mobile money users at FINCA DRC.

### Women are equally high value mobile money clients

Consistent with the findings on savings above, we can observe that women are equally high value mobile money clients as men (Figure 11). At FINCA, clients can have accounts and transact in both USD or in the Congolese franc.

Given that women constituted 35 percent of the FINCA mobile money portfolio, we observed that about 39 percent of debit transactions and 32 percent of credit transactions in USD were performed by women. However, in the Congolese franc, women contributed 23 percent of credit transactions and 20 percent of debit transactions.



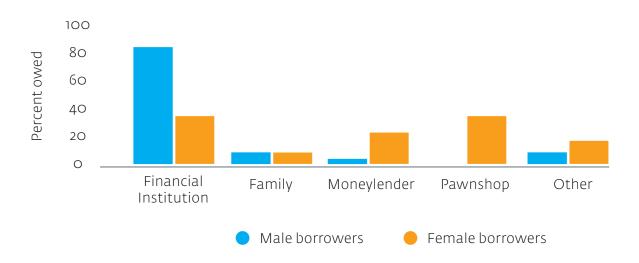


### Women borrow from informal sources more than men

As with savings, women are more likely to borrow from informal sources than men. As depicted in Figure 12, there was a huge gap between men and women borrowing in Senegal with 87 percent of men borrowing from a formal institution in comparison to 38 percent of women.

About 18 percent of women's loans were from money lenders compared to only 1.6 percent for men. Again, close to 24 percent of women's loans were from pawn shops. This shows that the real competition for digital loans among women lies in informal lending products.

Figure 12: Credit owed by source of loan - Senegal



#### Women experience more difficult loan conditions than men

As shown in Figure 12, women borrowed less from formal financial institutions than men. For those who borrowed from such institutions, due to a low asset base for collateral, on average, they experienced more difficult loan conditions than men. For example, IFC research in Tanzania indicates that female borrowers had less favorable credit conditions than male borrowers, including shorter terms, smaller loan sizes and high interest rates, yet they presented less risk than men (Harten & Buri, 2015).

This is consistent with research from other countries in the region, which shows women to be less risky borrowers than men (Chamboko & Bravo, 2016). This finding is a strong message to lenders not to neglect opportunities to offer women credit, despite having a lower asset base or income on average.

### KEY TAKEAWAYS AND IMPLICATIONS OF THE FINDINGS

From the findings discussed above, the following key takeaway and implications can be made:

- The means to access DFS remain low among women because of limited access to mobile phones (or smart phones), Internet connectivity, limited participation in the salaried labor force, and lower social economic status (income and education). As such, the designing and provisioning of DFS—especially for women—should be simplified to ensure that the less literate are able to engage, and the technology should be simple enough (but safe) to allow compatibility with basic phones.
- Women place importance on social networks and are more likely to rely on them for information. As such, marketing and promotional programs for DFS should consider capitalizing and exploiting these networks, through referrals, testimonials or ratings to onboard women more.
- Women use informal financial services more than men—be it for saving or borrowing suggesting that informal services continue to provide value unavailable from other channels. One of the reasons is that some of such products (for example, merry-goround) are multi-purpose and flexible, as they serve as a saving mechanism, credit source and insurance mechanism. In designing DFS products, FSPs should therefore consider replicating or adapting some of the features of the informal services to attract women.
- In some markets such as DRC and Zambia, findings showed that women use mobile money for storing value or depositing funds more than men and withdraw less than men, which provides women with a safe way to build reserves to pursue foreseeable financial goals. This finding is very important given that women consider safety and confidentiality as key in the use of financial services. Building on this, DFS providers should consider introducing products that allow women to earmark funds for future aspirations. However, flexibility should be key if this is to be successful, given that women emphasized the need for flexibility to allow them to access funds in emergency situations.

- The needs and use cases of men and women in Sub-Saharan Africa are not the same. The study findings suggest that women are more likely than men to use mobile money to receive money and to deposit or store value. On the other hand, men are more likely to use mobile money to send money and buy airtime more than women. Understanding these needs or uses cases and patterns is essential to ensure that innovation and the provisioning of DFS is enhanced to meet these needs.
- There is limited use of mobile money to make merchant payments and bill payments. This is a growth opportunity for mobile money, especially for bills such as electricity and water, which are recurring.
- There was a clear age gradient on mobile money ownership with the greatest gap being among those less than 25 years, and it gradually reduces with increasing age. What is not clear is whether these gender disparities will reverse course as a given cohort matures, or at which age marks the inflection point? Investments in understanding these patterns may help to re-tune products to align with the needs of particular segments at the appropriate time.
- Addressing gender bias is fundamental to close the financial inclusion gender gap. One way for institutions to do so is to rely on data. Gender-lensed insights provide understanding into how and who is using financial products and make the case for customized products for women. Gender-lensed data analytics, where gender data is available, is key to including women in the formal financial system.

#### CONCLUSION

Addressing gender bias is fundamental to close the financial inclusion gender gap—doing so is not only a social good, but a good practice and responsible finance. Gender lensed insights shed light into the needs of women, women's mobile money use cases, women's financial behaviors, as well as barriers and facilitators of mobile money use, which providers can take into account when designing and providing services.

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