



Are the effects of mobile money regulation gender neutral?

Policy note

By Mariana Lopez
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GSMA Connected Women

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Author: Mariana Lopez
Analysis by: Calvin Bahia
Contributors: Dominica Lindsey, Genaro Cruz

Introduction

According to the latest Global Findex data (2017), there are 1.7 billion 'unbanked' people in the world, the majority of whom are women. With 290 live deployments in 95 countries, mobile money has laid a firm footprint in many low- and middle-income countries and is an available option for many unbanked individuals to access financial services (Bazarbash et al., 2020; GSMA, 2020).¹ Mobile money can also help reduce the gender gap in financial inclusion. For example, in Côte d'Ivoire, Kenya, Mali, Malawi, Uganda, and Zimbabwe, the reduction in the gender gap in overall account ownership (across both financial institutions and mobile money) between 2014 and 2017 can mainly be attributed to the simultaneous growth of mobile money (GSMA, 2019).

In light of the COVID-19 pandemic and in recognition of the potential of mobile money to enable widespread and remote financial service provision, several countries have adopted measures to support the use of these services. These policy measures include cuts in fees related to person-to-person (P2P) transactions; relaxation of balance and transaction limits; and easing of know your customer (KYC) requirements.² Whilst evidence on the impact of these measures is limited, there appears to be a rise in the number of users and payments compared to a pre-pandemic scenario (The Economist, 2020). This evidence also suggests the importance of an enabling regulatory environment in accelerating the use of mobile money services.

Enabling regulation and mobile money usage are strongly linked

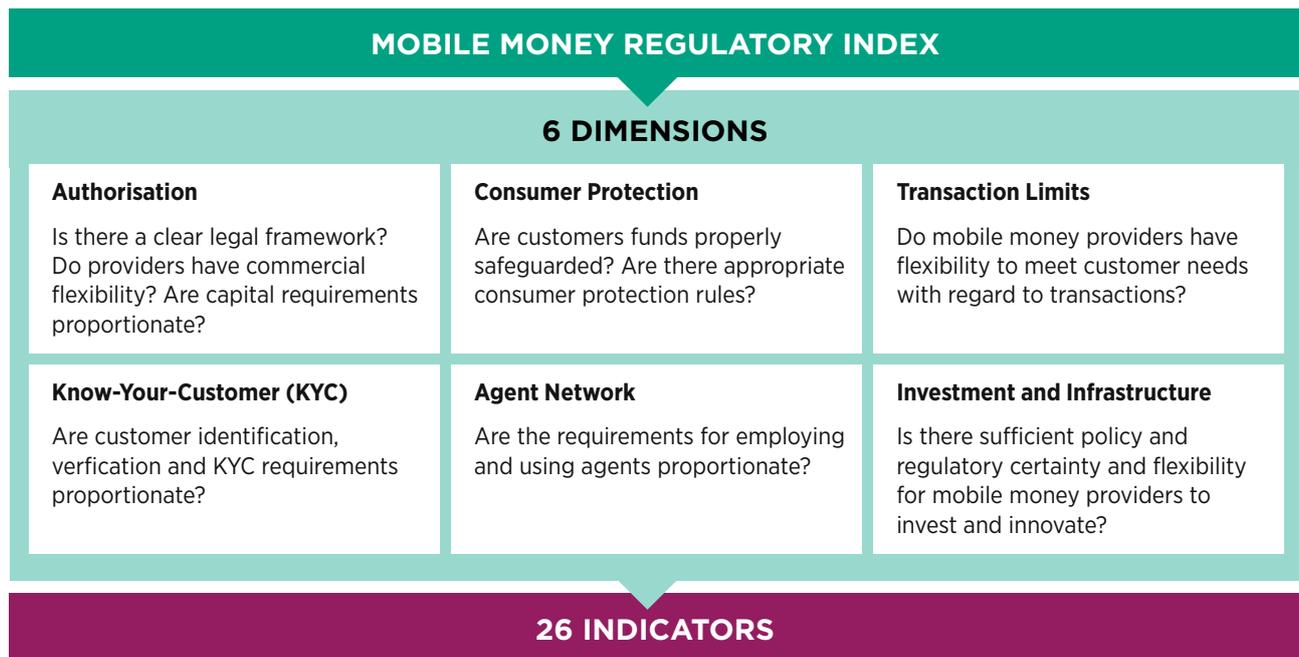
Regulation can be a catalyst for increased financial inclusion when it improves the ease with which customers can access mobile money services and the range of products that are available to them, e.g. merchant payments, international remittances, digital credit, etc. ([Evans and Pirchio, 2015](#); [GSMA, 2016](#); [Gutierrez and Singh, 2013](#)). Previous studies have found that enabling regulatory frameworks are associated with successful mobile money markets ([Allen et al., 2016](#); [Evans and Pirchio, 2015](#); [Pelletier et al., 2019](#)). Poorly crafted or overly restrictive regulation can hinder access to mobile money by disincentivising investors or restricting the breadth and scope of prospective services. Regulation also affects the commercial and operating environment, for instance, onerous enrolment requirements can slow the pace of customer acquisition and may result in prohibitive cost barriers for providers. An uncertain legal framework and a lack of consumer protection rules can also deter individuals from using mobile money if they do not have complete confidence and trust in the service.



The GSMA [Mobile Money Regulatory Index](#) (MMRI) is the most comprehensive assessment of mobile money regulation developed so far. It benchmarks mobile money regulation using 26 individual indicators and covers 90 countries (see Figure 1 below). In 2018, GSMA research found that, on average, countries that scored well on this Index were more likely to have higher rates of mobile money adoption ([GSMA, 2018](#)).

Figure 1

GSMA Mobile Money Regulatory Index



Source: GSMA Intelligence, 2020

Methodology

To better understand the association between mobile money regulation and use, GSMA Intelligence recently carried out an econometric analysis that leverages the MMRI in combination with data from the 2017 World Bank Findex survey. The analysis, which covers almost 50,000 individuals across 46 countries, assesses the relationship between mobile money use and the MMRI after controlling for individual and country-level control variables.³ One of the main objectives was to investigate whether the impact of regulation on mobile money use was different for men compared to women. This analysis also explores how different regulatory factors impact mobile money adoption among women.

There is a statistical relationship between different aspects of regulation and mobile money use

The results from this analysis show evidence that an enabling regulatory framework, as measured by the MMRI, is strongly associated with higher mobile money usage. On average, when a country's Index score increases by 10 points, the probability of using mobile money increases by 3.2 percentage points.⁴ Moreover, by breaking down the Index into its individual indicators, we were able to identify the components that have a significant positive impact on the probability of using mobile money.⁵ These include:

- **Eligibility:** allowing non-banks to issue mobile money;
- **International Money Transfers:** permitting international money transfers;
- **Consumer Protection:** a comprehensive consumer protection framework;
- **Agent authorisation:** giving mobile money providers flexibility on the regulatory process they follow to appoint individual agents;
- **Affordability:** not imposing strict transaction limits, taxes or price controls on mobile money transactions;
- **Settlement access:** allowing non-banks to have direct access to retail payment settlement infrastructure; And
- **Interest payments:** allowing providers to distribute interest earnings on trust accounts.





Women are more likely to benefit from enabling regulation than men

We also found that a more enabling regulatory framework has an even stronger association with mobile money use among women compared to men. In other words, an increase in a country’s MMRI score is likely to result in a greater increase in mobile money use among women. Results suggest that when a country’s Index score increases by 10 points, the probability of women’s using mobile money increases between 3.5 and 4.5 percentage points. This probability is statistically significant and greater than that for men.

When looking at the individual indicators of the MMRI, we found that some indicators appear to have a particularly strong association with the probability of using mobile money among women. These include: regulations that permit agents to register customers and carry out other activities (i.e. not just cash-in and cash-out) and less strict KYC requirements, where prospective users can access entry-level mobile money accounts with just an ID and where alternative documents to Government issued IDs can be used. Figure 2 shows the four indicators that appear to have a significant positive association with mobile money use among women. It is notable that three of the indicators (all except Eligibility) were not found to have a significant association with mobile money use in general, but they do when focusing on women. This suggests that certain aspects of mobile money regulation may be more relevant to drive use among certain segments of the population.⁶ Further research is needed to reach conclusive evidence on the specific factors that are important to drive usage amongst underserved populations.

Figure 2

MMRI indicators that appear to be positively associated with mobile money use among women

Eligibility



Where non-banks can offer mobile money

KYC Requirements



Where a user can access an entry-level mobile money account with just an ID and mobile number (and any additional requested information need not be verified)

Agent eligibility



Where regulations are not prescriptive on who can be an agent⁷

Agent activities



Where regulations permit agents to register customers and possibly carry out other mobile money related activities (rather than just being restricted to cash-in and cash-out)

Source: GSMA Intelligence, 2020

Conclusion

While preliminary, these results have important implications. They suggest that enabling mobile money regulation can increase mobile money use, especially among women and other underserved groups, which need to be reached to bridge the financial inclusion gap in low- and middle-income countries.

Encouragingly, many of the regulatory responses adopted by governments to support the use of mobile money during the COVID-19 pandemic are in line with the regulatory components that appear to have a significant positive impact on the use of mobile money. These include relaxing transaction and balance limits; reducing price controls on mobile money transactions; and having more flexible KYC requirements. This last one is strongly linked to mobile money use among women.

This research underscores the potential of strengthening these and other regulatory components to help women and underserved groups of the population gain access to financial services. An enabling regulatory environment is pivotal to support mobile operators to launch and scale the full breadth of mobile money services, including those that most readily address women's needs, circumstances, capabilities, and preferences. More research is needed on the regulatory barriers to mobile money adoption to inform policies and commercial strategies that leverage these services to close the gender gap in financial inclusion and drive resilience and socio-economic growth.





Endnotes

- 1 Originally a product for a few select markets, with over a billion registered accounts and close to \$2 billion in daily transactions, mobile money is now reaching a broad range of customers, especially in emerging markets. See the State of the Mobile Industry Report ([GSMA, 2020](#)).
- 2 See the [GSMA COVID-19 Response Tracker](#) that monitors mobile money-specific regulatory, policy, government and provider interventions globally, collated using both primary and secondary sources. “Know Your Customer” or KYC refers to the various approaches to conducting customer identification, verification, and due diligence before providing a mobile money service.
- 3 The results were obtained by using regression analysis to see if there is a relationship between the probability of an individual using mobile money and the MMRI score of that person’s country. The objective was not to find a causal link but to explore the correlation between these two variables when other relevant factors are controlled for. A working paper is available from [GSMA Intelligence](#).
- 4 This relationship also becomes stronger as the Index score increases. For example, an increase from 80 to 90 points is associated with a larger increase in mobile money usage than an increase from 50 to 60 points
- 5 Please see the working paper from [GSMA Intelligence](#) for the complete results of this analysis and for the detailed description of the Index indicators.
- 6 When looking at the average effect of the MM Regulatory Index on the probability of using mobile money, we noted that certain individual characteristics are associated with a higher likelihood of using mobile money. For example, women are less likely to use mobile money even when factors such as income and education are controlled for. As a result, in the analysis of the differential effects of regulation for women we controlled for these two factors, as well as other variables that capture a variety of characteristics at the individual level. In addition, evidence suggests that enabling regulation (particularly the four indicators highlighted in Figure 3) is more strongly linked to mobile money use among the poorest population segments.
- 7 ‘Agent eligibility’ is different from ‘Agent authorisation mentioned previously.’ ‘Agent eligibility’ refers to who an agent can be (the identity of an agent). For example, some countries are relatively prescriptive and only allow bank agents. In contrast, ‘Agent authorisation’ refers to the regulatory process needed that mobile money providers follow to appoint individual agents. Please see the [MMRI methodology](#) for a detailed description of all indicators.

References

- Allen, F., Demirguc-Kunt, A., Klapper, L., & Martinez Peria, M. S. (2016). The foundations of financial inclusion: Understanding ownership and use of formal accounts. *Journal of Financial Intermediation*, 27, 1–30.
<https://doi.org/10.1016/j.jfi.2015.12.003>
- Bazarbash, M., Moeller, J. and Nakaguchi Griffin, N., Carcel Villanova, H., Chhabra, E., Fan, Y. and Shirono, K. (2020). Mobile Money in the COVID-19 Pandemic. *International Monetary Fund. Special Series on COVID-19*.
- Davidovic, Sonja, Prady, Delphine, and Tourpe, Herve. 2020. “You’ve Got Money: Mobile Payments Help People During the Pandemic.” IMF Blog. June 22, 2020.
- Evans, D. & Pirchio, A. (2015). An Empirical Examination of Why Mobile Money Schemes Ignite in Some Developing Countries but Flounder in Most. *Coase-Sandor Working Paper Series in Law and Economics*, No. 723
- GSMA (2020b). Mobile Money Regulatory Index: Methodology.
- GSMA (2020a). State of the Industry Report on Mobile Money.
- GSMA (2019). The promise of mobile money for further advancing women’s financial inclusion.
- GSMA (2018). The Mobile Money Regulatory Index.
- GSMA (2016). Success factors for mobile money services.
- Gutiérrez, E., & Singh, S. (2013). What Regulatory Frameworks are More Conducive to Mobile Banking? Empirical Evidence from Findex Data. *IO: Regulation*.
- Pelletier, A., Khavul, S. and Estrin, S. (2020). Innovations in emerging markets: the case of mobile money. *Industrial and Corporate Change*, 29(2), 395–421
- The Economist. 2020. “The COVID-19 crisis is boosting mobile money.” Middle East & Africa, May 28th 2020 Edition.
- The World Bank. (2017). 2017 Global Findex Questionnaire. Retrieved from https://globalfindex.worldbank.org/sites/globalfindex/files/databank/2017_Findex_questionnaire.pdf