



Towards Women's Financial Inclusion: A Gender Data Diagnostic of Bangladesh

Prepared by the WFID Partnership
2022

data2x^o

FINANCIAL
ALLIANCE
FOR
WOMEN



ACKNOWLEDGEMENTS

This publication was prepared by the Women's Financial Inclusion Data (WFID) Partnership. The Partnership thanks the following individuals for their work on this report: Anna Gincherma, István Szepes, Benedikt Wahler, and Dóra Ayumi Solymos of the Consumer Centrix (CCX) Inclusive Business Team who conducted the research and provided sectorial insights, and the WFID team who worked on this study: Mayra Buvinic, María Dolores Vallenilla, and Neeraja Penumetcha of Data2X, and Inez Murray, Rebecca Ruf, and Tessa Ruben from the Financial Alliance for Women. We also acknowledge Ann Moline and Ernie Agtarap for their role in the production of this report.

This diagnostic was made possible thanks to the generous financial support and cooperation from The Bill & Melinda Gates Foundation.



CONTENTS

ACKNOWLEDGEMENTS	2
ABOUT WOMEN'S FINANCIAL INCLUSION AND THE WFID PARTNERSHIP	6
ABOUT THE GENDER DATA DIAGNOSTIC	8
EXECUTIVE SUMMARY: BANGLADESH	9
OVERVIEW: WOMEN'S FINANCIAL INCLUSION IN BANGLADESH	12
BARRIERS TO WOMEN'S ACCESS TO FINANCIAL SERVICES	14
THE ROLE OF MOBILE MONEY	15
ENABLING POLICY ENVIRONMENT ON WFI	15
SIZE OF THE MARKET OPPORTUNITY	16
BANGLADESH'S FINANCIAL SERVICE PROVIDERS AND WFI	16
ROLE OF RESEARCH INSTITUTES, DONORS, AND DEVELOPMENT FINANCE INSTITUTIONS	18
MAPPING BANGLADESH'S SUPPLY-SIDE DATA ECOSYSTEM	20
DIGGING DEEPER: GAPS AND OPPORTUNITIES IN SUPPLY-SIDE DATA COLLECTION AND USE	21
DATA PRODUCERS	21
DATA AGGREGATORS	23
OPPORTUNITIES: IMPROVING THE USE OF AVAILABLE DATA	24
LESSONS LEARNED FROM BANGLADESH'S EXPERIENCE	26
RECOMMENDATIONS	26
APPENDIX A. FORECASTING MODEL DESCRIPTION	31
APPENDIX B. WOMEN'S MARKET OPPORTUNITY CALCULATIONS	35
REFERENCES	38



List of boxes

Box 1.	BANGLADESH AT A GLANCE
Box 2.	HOW COVID-19 ACCELERATED WFI FOR GARMENT INDUSTRY WORKERS
Box 3.	EXAMPLES OF COMPREHENSIVE WOMEN'S PROPOSITIONS IN THE BANGLADESH MARKET

List of figures

Figure 1.	Stakeholder pathway to champion women's financial inclusion
Figure 2.	The untapped opportunity for Bangladesh's FSPs in the women's market
Figure 3.	The gender gap in access to and use of financial services in Bangladesh 2011–2017
Figure 4.	Projected gender gap in access to finance in Bangladesh, 2017–2030
Figure 5.	How Bangladesh's FSPs perceive the women's market opportunity
Figure 6.	Bangladesh's formal supply-side data ecosystem
Figure 7.	Types of gender data collected by Bangladesh's FSPs

List of tables

Table 1.	Opportunities to be leveraged
Table 2.	Connecting the findings from the Bangladesh Gender Data Diagnostic to data gaps and interventions

List of acronyms

A2i	Aspire to Innovate
BB	Bangladesh Bank
BBS	Bangladesh Bureau of Statistics
BDT	Bangladeshi Taka
CCX	ConsumerCentriX
CGAP	Consultative Group to Assist the Poor
DFI	Development finance institution
FCB	Foreign Commercial Bank
FSP	Financial service provider
GDP	Gross domestic product
GSMA	GSM Association
IFC	International Finance Corporation
IMF	International Monetary Fund
KPI	Key performance indicator
MFI	Microfinance institution
MFS	Mobile financial services
MRA	Microcredit Regulatory Agency
MSME	Micro-, small-, and medium-sized enterprises
NFIS	National Financial Inclusion Strategy
NPL	Non-Performing Loan
OECD	Organisation for Economic Cooperation and Development
PCB	Private Commercial Bank
SDB	Specialized Development Banks
SoCB	State-owned commercial banks
UNCDF	United Nations Capital Development Fund
WFI	Women's Financial Inclusion
WFID	Women's Financial Inclusion Data
WSME	Women-owned and /women-led small and medium-sized enterprises



ABOUT WOMEN'S FINANCIAL INCLUSION AND THE WFID PARTNERSHIP

Global awareness and political will around women's financial inclusion (WFI) are at an all-time high, yet the gender gap in financial inclusion persists. Women remain both unserved and underserved compared to men in all segments, from bottom-of-the-pyramid to high-net-worth. These gaps continue because of a widespread lack of awareness of the multi-trillion-dollar opportunity to serve the women's market. Gaps in the collection, quality, and usage of gender data pose a major barrier to growing awareness and developing strategies that tap into it.

Gender data is key for financial service providers (FSPs) to understand the nature of the gender financial inclusion gap and the women's market opportunity and to create tailored solutions for women. It is also a critical input for policymakers to design and monitor policy interventions that increase women's financial inclusion.

In 2014, against this backdrop, leading proponents of women's financial inclusion formed a coalition to increase the availability and use of sex-disaggregated financial data. The Women's Financial Inclusion Data (WFID) Partnership includes the Alliance for Financial Inclusion (AFI), Data2X, the European Bank for Reconstruction and Development (EBRD), the Financial Alliance for Women, the Inter-American Development Bank (IDB), IDB Invest, the International Finance Corporation (IFC), the International Monetary Fund (IMF), the World Bank Group (WBG), the Organisation for Economic Cooperation and Development (OECD), and the United Nations Capital Development Fund (UNCDF).

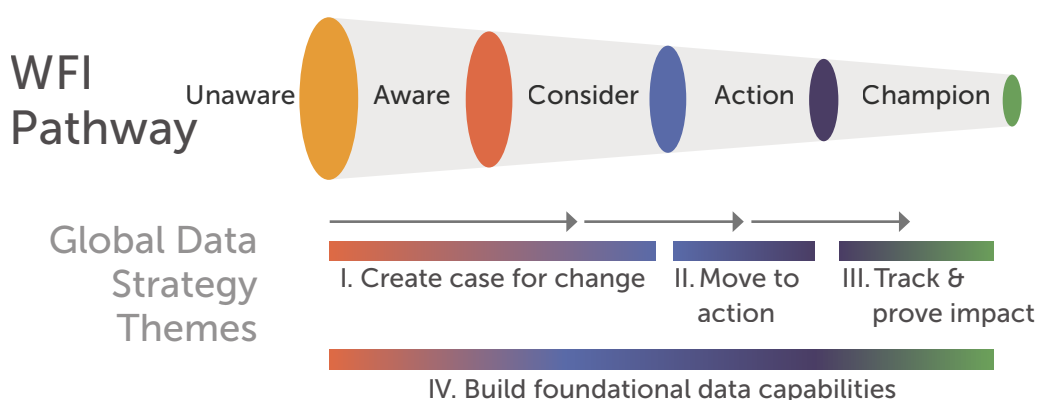
The WFID Partnership is coordinated by Data2X, a United Nations Foundation initiative. The Financial Alliance for Women is its technical lead.

THE WFID PARTNERSHIP'S THEORY OF CHANGE

In 2017, the WFID Partnership developed a global gender data strategy with the support of McKinsey & Company. The strategy included the WFID Partnership's theory of change. This theory of change holds that the production, availability, and use of sex-disaggregated data on the demand for and supply of financial services will enable FSPs and policymakers to take action toward closing the financial inclusion gender gap.

Data helps actors move through the WFI pathway by increasing awareness, catalyzing action, and ultimately leading to the development of WFI champions—stakeholders who have had an impact on WFI through either policy action or serving the market. These WFI champions are the final stage of the funnel framework shown in Figure 1 on the next page. FSPs and policymakers move through a WFI pathway¹ with five stages: from being simply unaware of the relevance of WFI; to becoming aware of the gaps; to considering action in response to the knowledge they have attained; to implementing strategies to close gaps; and finally, to demonstrating impact and becoming champions of WFI.

Figure 1. Stakeholder Pathway to Champion Women's Financial Inclusion



The WFID Partnership's theory of change is based on the significant role that data can play in moving actors and organizations along this pathway. With more and improved sex-disaggregated financial data, policymakers can design and monitor WFI interventions, and FSPs can both see the market opportunity and build a business case for targeting women as clients.

The strategy also found that many of the global and national-level data gaps are on the supply-side versus the demand-side. In addition, the strategy stressed that the development of gender data is most effective in improving WFI if efforts are at the national level versus the international level, as the process of creating awareness encourages local players to act and move through the pathway.

From 2020–2022, WFID is working in six countries (Bangladesh, Honduras, Kenya, Nigeria, Pakistan, and Turkey) to test its theory of change and develop gender data supply-side interventions to increase women's financial inclusion in partnership with the public and private sectors.



ABOUT THE GENDER DATA DIAGNOSTIC

Before designing interventions to support the development of national-level gender data diagnostics, WFID undertook diagnostics of all six pilot countries to understand the state of gender data at the national level. This diagnostic includes mapping the data value chain, understanding what is being tracked and by whom, identifying gaps and opportunities in gender data collection, and developing recommendations for areas of intervention. This entailed the following activities:

- Reviewing existing literature;
- Conducting an online survey of a majority of FSPs in each nation's financial sector;
- Interviewing public, private, and nongovernmental stakeholders;
- Conducting comprehensive modeling to estimate the women's market opportunity in each country (see Appendix A); and
- Conducting predictive modeling to estimate the WFI gap in the future (see Appendix B).

Although the diagnostics were developed as part of WFID's intervention plans, they can also become a blueprint for governments, FSPs, and other stakeholders that are interested in improving their own gender data ecosystems.

EXECUTIVE SUMMARY: BANGLADESH

This diagnostic highlights gaps and opportunities in sex-disaggregating financial services data in Bangladesh. A key takeaway from the diagnostic is that there is a strong business incentive for Bangladeshi FSPs to access the women's market.

A modeling exercise revealed the potential for nearly USD 1 billion (BDT 84.5 billion) in additional annual revenue by expanding women's market offerings and increasing women's use of financial services (Figure 2).

In this populous South Asian nation, overall financial inclusion is on the rise, driven by a strong government commitment and the introduction of mobile financial services. As of 2017, about 50 percent of the adult population held formal accounts. **But even as overall inclusion increased, the gender gap widened, from 9 percent in 2014 to 29 percent in 2017.** The research uncovered several reasons for this negative trend, including large gender gaps in mobile phone ownership and use of mobile financial services (MFS), as well as in digital and financial literacy.²

More recent data indicates progress in agent banking and rapid advancement towards gender parity in MFS. The overall gender gap in access to finance is expected to narrow, dropping to about 15 percent by 2030. However, WSME lending remains limited, with a major gender gap in the number of enterprises accessing loans.

The government and the central bank, Bangladesh Bank (BB), have taken specific actions to advance women's financial inclusion. The National Financial Inclusion Strategy, approved in 2019, features concrete measures to promote WFI. In the past three years, social safety net payments and remittances were digitized, increasing financial access for more than 33 million women.³ A similar strategic digitization process in Bangladesh's critically important garment industry—responsible for 80 percent of the country's export income—has resulted in increasing workers' access to formal financial accounts from 20 percent to 98 percent. Encouraged by the government, this private sector effort has primarily benefited women, since they represent most of the nation's 4.4 million garment workers.⁴ In addition, BB has mandated loan set-asides and incentives for women-owned and -led small and medium enterprises (WSMEs). For instance, women entrepreneurs can access loans at a lower-than-market fixed interest rate, and 15 percent of all SME loans must be targeted to women.

**By the numbers:
The untapped opportunity
in women's financial
services in Bangladesh**

74%

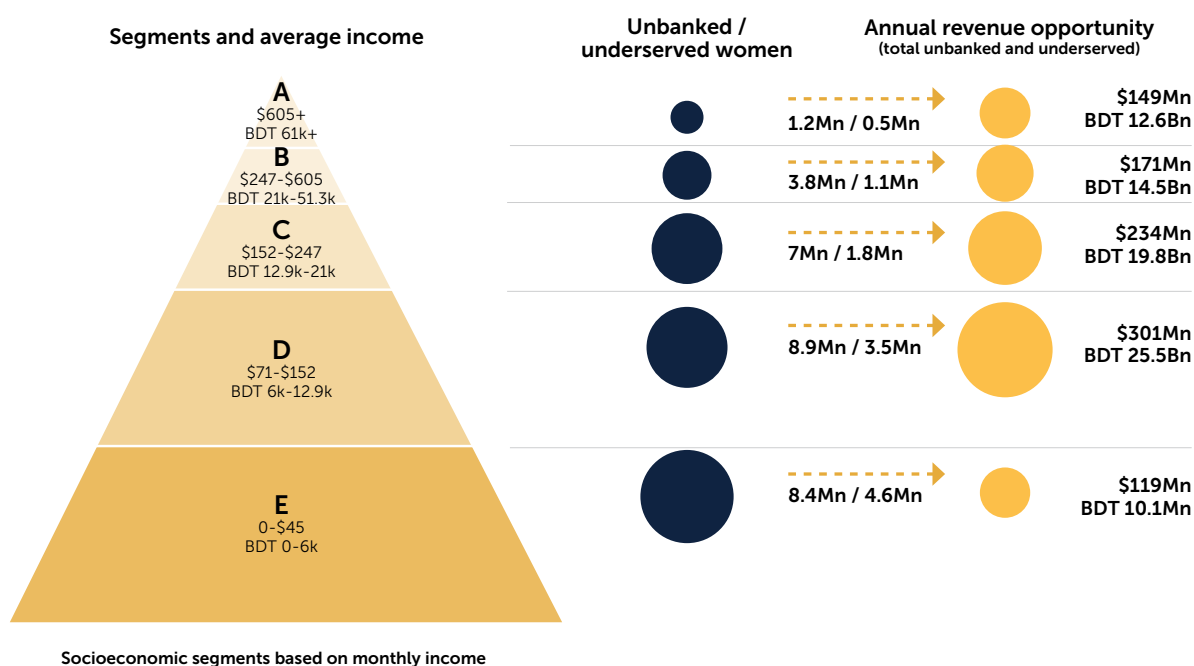
Of Bangladeshi women remain
unbanked or underserved by
financial services

US\$973M / BDT 84.5B

Potential annual banking revenue
from expanding financial services
offerings for unbanked and
underserved women customers
across segments

This commitment extends to the collection of sex-disaggregated data. All regulated FSPs are required to report some gender data. This requirement, in place since 2019, has yielded an extensive body of supply-side data. **However, staffing, skills, and technology gaps are impacting both the quality of the data and the ability to analyze it for industry trends and insights.**

Figure 2 - The untapped opportunity for Bangladesh's FSPs in the women's market



Source: CCX calculations based on BBS 2017, Findex 2017, Bangladesh Bank 2020



The microfinance industry's regulator, Microcredit Regulatory Agency (MRA), also gathers account ownership data disaggregated by sex, although there is limited focus on analysis.

A survey of banks—representing two-thirds of the total banking market—revealed growing interest in the women's market. Several banks stand out for their comprehensive approach, as characterized by the strategic integration of women's offerings into their product portfolios and management buy-in. At these banks, the tone is set by C-level executives and extends throughout these institutions. Others have launched stand-alone products aimed at a specific female customer segment, mainly WSMEs. As a result of this analysis, the majority of FSPs were placed in the consider/action phase of the WFI Pathway shown in Figure 1, and a smaller number of FSPs were identified as WFI "champions" that are in the process of developing holistic, women-centric solutions.

While all FSPs collect sex-disaggregated data—in some cases with a deep level of detail that includes transaction activity and profitability metrics—there is a lack of awareness about its importance. With limited internal capacity, FSPs typically undertake very little data interpretation or analysis. With evidence from the Financial Alliance for Women indicating a usage gap, specifically in digital financial services, this could represent a significant lost opportunity.⁵ Increased use of already available information could help identify ways to increase women's use of existing offerings and uncover hidden revenue potential in the women's market.

With growing awareness and some banks well into the "action" phase of the WFI pathway, priority efforts should focus on several recommendations, including:

- Standardizing reporting templates for ease of consolidation, to allow for more detailed tracking of women customer behaviors and aggregating of supply-side gender data on a regular basis.
- Encouraging increased use of available data by FSPs, including showcasing the value of data insights to understand more about women customer behaviors, inform new product design, and refine existing women's market offerings.
- Creating an electronic WFI dashboard that is accessible to FSPs, as a central clearinghouse for gender data analysis and benchmarking, with data flows from across the financial services ecosystem.
- Maximizing FSPs' use of the standardized WSME definition provided by the government.
- Showcasing FSP leaders who have a demonstrated commitment to WFI and highlighting FSP successes with women's propositions through peer-to-peer knowledge sharing.
- Pursuing other interventions to move FSPs and other stakeholders forward along the WFI pathway, such as building data analysis capacity for industry players and regulators.



OVERVIEW: WOMEN'S FINANCIAL INCLUSION IN BANGLADESH

Box 1. BANGLADESH AT A GLANCE

ECONOMY

- \$302.6 billion GDP (2020)
- Remittances accounted for 6.1% of GDP (2018)
- Garment industry accounts for 11% of GDP (2020)
- 6.8% GDP growth in 2020; 10.1% in 2021

SOCIOECONOMIC STATUS

- 163 million people; 49.4% female, 27.2% younger than 15 years of age
- 14.8% of people live below the international poverty line of \$1.90/day (2020, pre-COVID-19)
- 79% of women live below \$2.50/day
- 61.8% of people live in rural areas
- 71.2% overall literacy rate for women; 76.7% for men
- 38% of women are in the labor force
- 72.3% of girls enrolled in secondary school; 61.1% of boys
- Ranked 65th among the 156 indexed countries in the WEF Global Gender Gap report, Bangladesh holds the highest rank in South Asia for progress on closing its overall gender gap

WOMEN IN BUSINESS AND THE WORKFORCE

- 12.7% of firms have majority female ownership
- 4.8% of Bangladesh companies have top female managers
- 96.6% of working women in the informal sector
- 6.8% unemployment rate for women; 3.9% for men
- World Economic Forum rank for women's economic participation and opportunity: 147 out of 156 countries


FINANCIAL INCLUSION

- 50% of Bangladeshis hold formal bank accounts
- 28.7% gender gap in account ownership
- 48 million female mobile financial services accounts, of which about 1/3 are active (2021)
- 9.6% of Bangladeshi women have saved and 7.9% have borrowed from financial institutions
- 71% of surveyed commercial banks reported having women-focused products and services

WOMEN'S VOICE & PARTICIPATION

- Women have held head-of-state office for 27 of the last 50 years
- 20.9 % of Bangladesh's parliamentarians are women
- 7.7% of government ministers are women

(Sources for statistics IFC, Global Findex 2017, GSM Association (GSMA), World Bank, WEF Global Gender Gap Report 2021, BB 2021, WB Enterprise Survey 2017)



Bangladesh, one of the world's most populous nations, has experienced strong economic growth in recent years, driven largely by the garment industry, which accounts for nearly 80 percent of its exports. Other major economic drivers include remittances and agriculture.⁶ Despite this growth, poverty remains prevalent, with 79 percent of women living below \$2.50/day.⁷

Overall financial inclusion is on the rise, with an increase of nearly 20 percentage points in the number of adults with access to formal financial services between the years 2011 and 2017.

The advent of mobile financial services (MFS) and the digitization of both government social safety net payments to beneficiaries and garment industry wage payments all contributed to these improvements.

Despite this progress, the gender gap in financial inclusion nearly tripled, from 11 percent in 2011 to 29 percent in 2017 (Figure 3).

A combination of factors contributed to this situation, including a gender gap in mobile phone ownership—estimated at about 20 percentage points. In addition, many MFS offerings have not been designed with women in mind, limiting uptake.

The most recent data, along with future modeling, suggests that **these issues are starting to be addressed and that the gender gap in access to financial services is beginning to narrow** (Figure 4; for the forecasting model's description, please see Appendix A).

Making greater use of readily available supply-side data could play an important role in accelerating the pace at which women are accessing financial services in Bangladesh.

KEY TAKEAWAYS

- Bangladesh's gender gap in access to finance widened by 2017, even as overall financial inclusion has increased; however, recently the gap has started to narrow.
- The introduction of mobile financial services and government actions such as the digitization of government social payments to beneficiaries, remittance flows, and garment industry wage have contributed significantly to WFI.
- The regulator requires sex-disaggregated reporting.
- FSPs collect sex-disaggregated data but some manual recording impacts quality.
- Most FSPs acknowledge the importance of serving women and several have taken market-leading stances with holistic women's propositions.
- FSPs and regulators do not use available data to yield insights into women customer behaviors or market trends.
- There is also a gender gap in usage of financial services which can be further explored with increased use of sex-disaggregated data.

Figure 3 - The gender gap in access to and use of financial services in Bangladesh 2011–2017

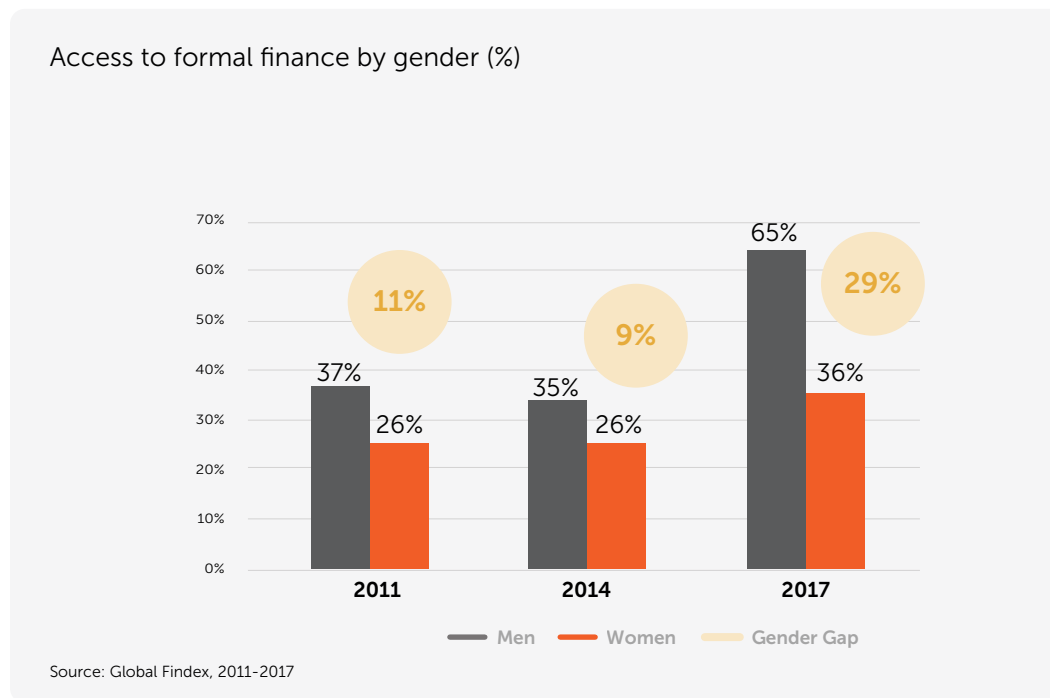
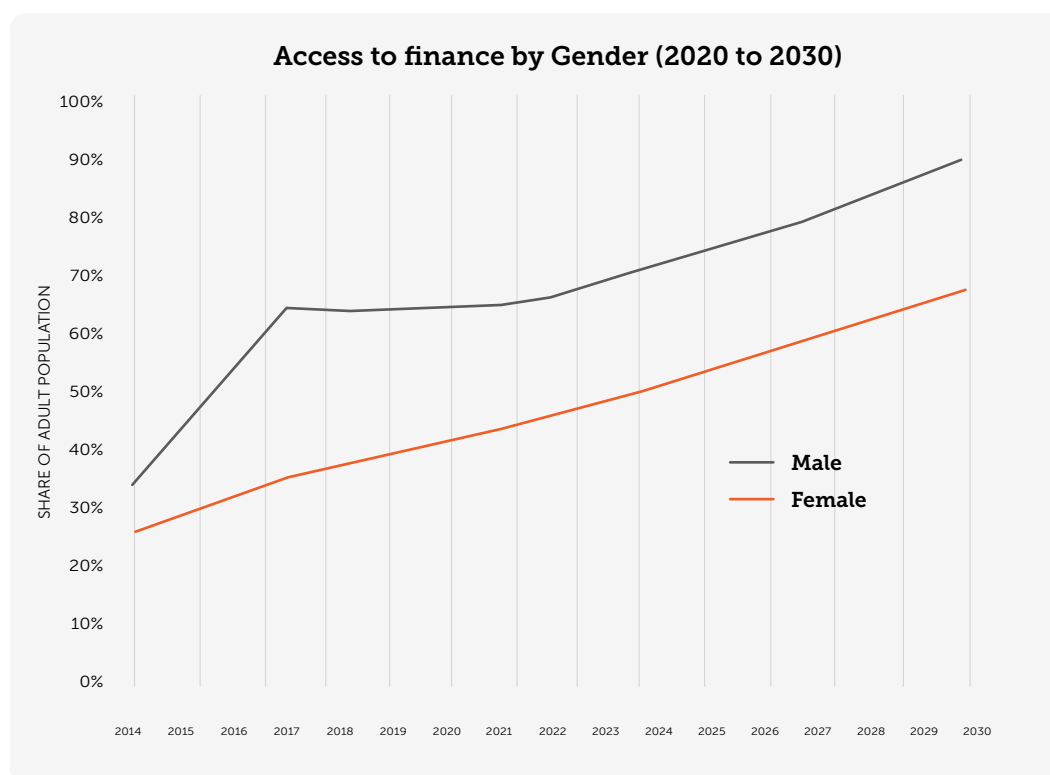


Figure 4 - Projected gender gap in access to finance in Bangladesh, 2017–2030





BARRIERS TO WOMEN'S ACCESS TO FINANCIAL SERVICES

Poverty and limited economic opportunity represent obstacles to financial inclusion. Women are less likely to own businesses in Bangladesh than men, with one of the lowest rates of female entrepreneurship in the region. About 10 percent of the country's registered micro-, small-, and medium- enterprises (MSMEs) are women-owned or -led, most of which are microbusinesses. Access to finance remains a significant challenge; less than 20 percent of women-owned/led MSMEs use formal financial services.

Lack of overall financial knowledge and low levels of digital literacy also prevent more women from accessing formal financial services. For example, while awareness of the mobile internet has increased significantly, only 19 percent of women reported using it.¹⁰ In addition, women may hesitate to open their own formal bank accounts, due to cultural norms.¹¹



THE ROLE OF MOBILE MONEY

The massive digital transformation that has taken place in the last decade is the single most important contributor to WFI in Bangladesh. With over 70 percent of Bangladesh's adult population (and 64 percent of women) having access to mobile phones¹² and the emergence of MFS, financial inclusion has increased rapidly. For instance, MFS provider bKash entered the market in 2011, and by the end of 2017, the company had registered 29 million users.

The government has leveraged these technologies with its transition to digital social safety net payments. This has accelerated the pace with which women access formal financial services, since beneficiaries are required to set up accounts to access their funds. Remittance flows, too, have largely gone digital. So, **even though women's participation in the labor force is low, the digitization of social payments to beneficiaries and remittance flows has brought many millions of women into the formal financial services realm.**

Private industry is moving towards electronic payments as well, with assistance from donor organizations. For example, from 2015 to 2019, the Digital Wages Program, supported by the Bill & Melinda Gates Foundation and three implementing partners (Change Associates, Mamata and Young Power in Social Action), helped 64 garment factories and more than 100,000 workers transition to digital wages, most of whom are women.¹³ More recently, government actions to shore up the garment industry during the COVID-19 pandemic catalyzed further digitization and increased women's account ownership (see Box 2). Such efforts have yielded bottom-line benefits for the companies themselves. The evidence suggests that wage digitization leads to increased account use and savings, and greater financial capability.¹⁴

Box 2. HOW COVID-19 ACCELERATED WFI FOR GARMENT INDUSTRY WORKERS²²

In March 2020, at the onset of the COVID-19 pandemic, the government of Bangladesh set up a \$590 bail-out package to shore up the economically critical garment industry. The package covered three months' worth of workers' wages. To qualify for these payments, workers—more than 95 percent of whom were female—had to set up MFS or bank accounts. This resulted in over one million new accounts being opened after a few weeks.

However, account holding does not always translate to active account usage. Globally, there are significant gender gaps in women's usage of digital financial services, according to research from the Financial Alliance for Women. The study shows that **if digital FSPs want to maximize women's uptake, they need to design a comprehensive gender-intelligent approach that includes collecting and analyzing sex-disaggregated performance metrics.**¹⁵ This represents an important use case for supply-side data.

ENABLING POLICY ENVIRONMENT ON WFI

Over the last few years, Bangladesh has taken strides towards bridging the gender gap in financial access. Approved in 2019, the National Financial Inclusion Strategy (NFIS) stipulates WFI as one of its goals. It includes concrete measures to advance WFI, such as extending agent banking to rural areas for ease of access and supporting the creation of financial services that meet the needs of women customer segments.¹⁶ The government has also placed a focus on women's businesses. Among the regulatory guidelines and mandates in support of WSMEs:

- Capping interest for WSMEs at lower-than-market rates¹⁷
- Setting aside 15 percent of loans for women entrepreneurs
- Creating a dedicated women's entrepreneurship desk at bank branches
- Allowing for collateral-free loans of up to \$30,000 for women entrepreneurs, against personal guarantee
- Establishing a \$178 million refinancing facility for women entrepreneurs

As noted, the government's decision to digitize government social benefits and remittance payments pushed many women into the formal financial services sector for the first time. To date, about 37 million Bangladeshi women access these funds through their accounts.

BB has mandated sex-disaggregated account ownership reporting since 2019. The regulator routinely publishes aggregated data, although analysis for trends and opportunities and consolidation of the different reports remains limited.

"We have the capacity to segregate our data but have not analyzed it yet or announced any products for women segments this year."

– FSP representative

SIZE OF THE MARKET OPPORTUNITY

The availability of robust demand-side data has enabled a scoping of the untapped market opportunity in women's financial services—estimated at nearly \$1 billion (84.5 billion Bangladeshi taka¹⁸) in potential annual FSP revenue.¹⁹ Calculations show that the greatest opportunity lies in the segment of the female population with monthly earnings between \$71 and \$152—30 percent of all women. This segment represents a \$301 million (25.5 billion BDT) annual revenue opportunity for FSPs, with 8.9 million women completely unbanked and 3.5 million underserved.²⁰

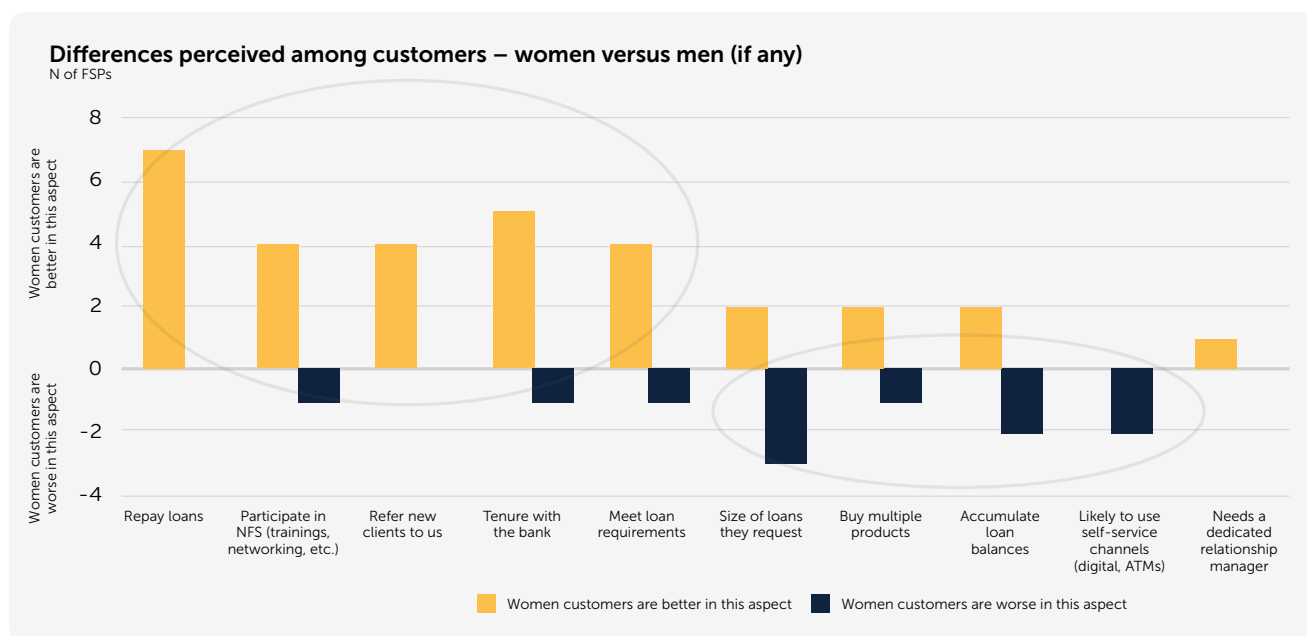
BANGLADESH'S FINANCIAL SERVICE PROVIDERS AND WFI

Several of Bangladesh's FSPs have progressed along the WFI pathway to the point where they are becoming champions, with holistic women's market propositions that are integrated and mainstreamed into their portfolios. This focus is set by the tone at the top, as C-level executives articulate a holistic vision that includes internal diversity and inclusion as well as solutions designed to meet the needs of women customer segments. Led by these champions, other banks have either recently launched women's market offerings or have started to explore them.

Nearly all FSPs indicated strong interest in the women's market, including banks, MFS providers, and MFIs, based on the responses of our online industry survey. Among the FSPs surveyed, most indicated that women represent a core element of their strategy, and several are actively pursuing a dedicated women's market approach. Many of the women's offerings currently on the market focus on WSMEs—a result of the central bank's mandate to increase loans for WSMEs. Survey responses suggest willingness to leverage data and develop more comprehensive women propositions; however, capacity constraints and lack of management buy-in represent limiting factors.

FSPs reported that growing their customer base and differentiating from the competition are driving their women's market strategies. They consider women customers as better credit risks, more loyal, and more likely to refer others if they are satisfied. Women are also perceived as less likely to request large loans, purchase multiple products, or use self-service channels (Figure 5).

Figure 5. How Bangladesh's FSPs perceive the women's market opportunity



Availability of women-focused offerings

Three commercial banks have launched a comprehensive suite of products for women customers (see Box 3), while the majority of other banks have introduced WSME loan products in recent years, following the regulatory mandate.

Banks have the tools and systems to collect and analyze sex-disaggregated data—albeit with some manual recording—and many submit the data as part of their regular internal reporting to management. However, they do not make use of the data to inform their women’s market strategy or products offered. They are beginning to recognize the need for such analysis to identify untapped opportunities in the women’s market, measure the success of their women’s market offerings, and design new products to meet women’s needs.

MFS providers have not launched products that specifically target women. Even though MFS account ownership has reached near gender parity, interviews with MFS providers revealed less product usage by female account holders than male account holders.

This represents an opportunity: **Increased use of available sex-disaggregated data could yield insights into the reasons for the gender gap in usage and highlight the types of financial services of interest to women customer segments.**

Box 3. EXAMPLES OF COMPREHENSIVE WOMEN’S PROPOSITIONS IN THE BANGLADESH MARKET²³

BRAC Bank launched TARA in 2017 to meet the needs of various women customer segments, including savings and lending products for retail and business customers. The value-added services include: health insurance benefits, a special TARA counter at branches, dedicated help line, mobile banking apps, and a networking platform to empower women entrepreneurs. The approach has helped BRAC Bank attract more than 200,000 female customers and 3,200 WSMEs as clients.

City Bank introduced City Alo in 2019 as the dedicated women’s division of the bank. With a focus on four women customer segments—entrepreneurs, homemakers, salaried workers, and professionals—City Alo provides tailored financial and non-financial offerings for each group, including Islamic finance services, and advice and training for entrepreneurs. City Alo has its own flagship branch plus service centers located inside City Bank branches.

Prime Bank launched Neera in 2020 as a complete suite of specialized banking products for women, with a particular focus on the unbanked, including financial and non-financial services plus value-added services such as self-care and wellness.



ROLE OF RESEARCH INSTITUTES, DONORS, AND DEVELOPMENT FINANCE INSTITUTIONS

Local and international organizations, donors, and development finance institutions are playing an important role in advancing WFI in Bangladesh and increasing gender data collection and use. They provide significant levels of funding and expertise. And they support FSPs in developing women-focused financial solutions. The activities making a difference include:

- **Capacity building for FSPs:** IFC is supporting mobile banking and digital payment programs; Women's World Banking is assisting with wage and social benefits digitization; Financial Alliance for Women continues to support its members in Bangladesh in the development of women-centered strategies; and FMO and CDC are assisting BRAC Bank with the development of its women's market offerings.
- **Regulatory support:** Aspire to Innovate (A2i), a special program of the government's Digital Bangladesh agenda is advising on policies associated with government services digitization and disaggregated data collection; other support is coming from the Bill & Melinda Gates Foundation and the Alliance for Financial Inclusion.
- **Research and knowledge generation:** HERproject undertook research on wage digitization; other organizations conducting research include the SME Foundation, Bangladesh Institute of Development Studies, the Better Than Cash Alliance, Innovations for Poverty Action Bangladesh, Institute for Inclusive Finance and Development, and MicroSave Consulting.



MAPPING BANGLADESH'S SUPPLY-SIDE DATA ECOSYSTEM

The primary stakeholders in Bangladesh's financial services sector include:

Data producers/financial service providers

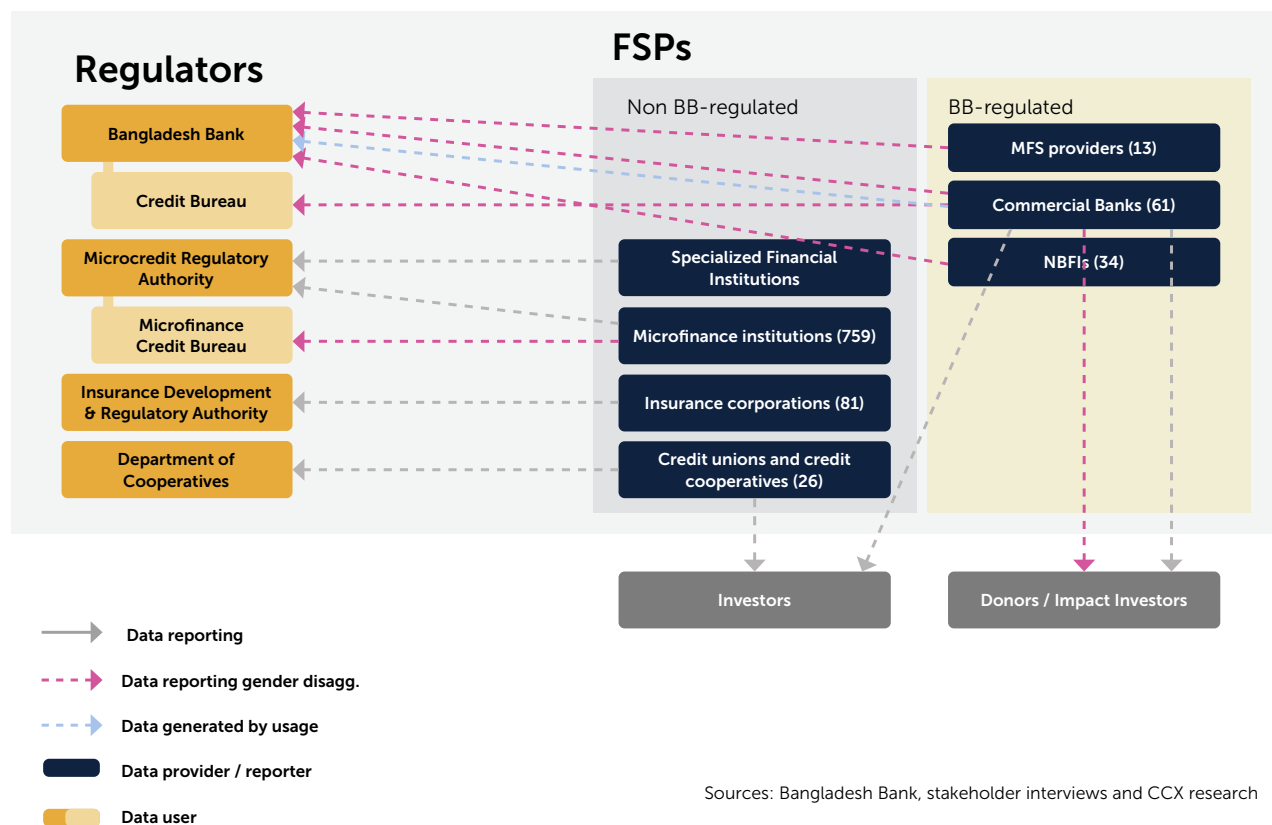
- Commercial banks
- State-owned commercial banks (SoCB)
- Private Commercial Bank (PCB)
- Specialized Development Banks (SDB)
- Foreign Commercial Bank (FCB)
- Mobile financial services (MFS) providers
- Non-bank financial institutions
- Specialized financial institutions
- Microfinance institutions (MFIs)
- Insurance companies
- Credit unions and credit cooperatives

Data aggregators and potential aggregators

- Bangladesh Bank: Regulates commercial banks, MFS providers, and non-bank financial institutions
- Credit bureaus (operated under the regulators)
- Microcredit Regulatory Authority: Regulates specialized financial institutions and MFIs
- Microfinance Credit Information Bureau (planned but not yet launched)
- Insurance Development & Regulatory Authority
- Department of Cooperatives

This diagnostic focused primarily on commercial banks, MFS providers, and MFIs. The informal financial services sector holds only a small share of the market. Figure 6 provides an overview of the data flow between these two groups of stakeholders. The pink arrows indicate where the data reported is disaggregated by sex.

Figure 6. Bangladesh's formal supply-side data ecosystem



DIGGING DEEPER: GAPS AND OPPORTUNITIES IN SUPPLY-SIDE DATA COLLECTION AND USE

This section drills down into the state of supply-side data collection and use in Bangladesh. It highlights gaps and uncovers opportunities to optimize the potential of the data to provide insights on female customer behavior.

DATA PRODUCERS

Interviews and an online industry survey drew input from over two-thirds of the commercial banks, MFS providers, and MFIs. Survey respondents included:

- Seven commercial banks, with some offering mobile apps
- Three MFIs
- Three MFS providers

Banks

All commercial banks collect gender data on retail customers. They are required to report this data to Bangladesh Bank. They also provide outstanding loan gender data to the regulator's credit bureau department, which does not produce aggregate reports. Five out of seven bank respondents said that they track the gender of retail customers for all products, while the other two track gender for some products. Some banks also track transactional data and profitability variables such as customer lifetime value, net interest margin, and revenue. Universal tracking of such advanced metrics would enhance data analysis, yielding more sophisticated insights that could translate into stronger customer propositions.

KEY TAKEAWAYS

DATA PRODUCERS:

- All Bangladeshi FSPs generate account-level sex-disaggregated data on retail customers and sole proprietors; some generate WSME data.
- Some FSPs track transactional data and profitability variables; however, they typically do not use the data to inform product design or women's market strategy.
- For some FSPs, manual entry reduces data reliability.
- All FSPs try to use the data they generate as part of regular internal reporting, although staffing and technology limitations impede use.

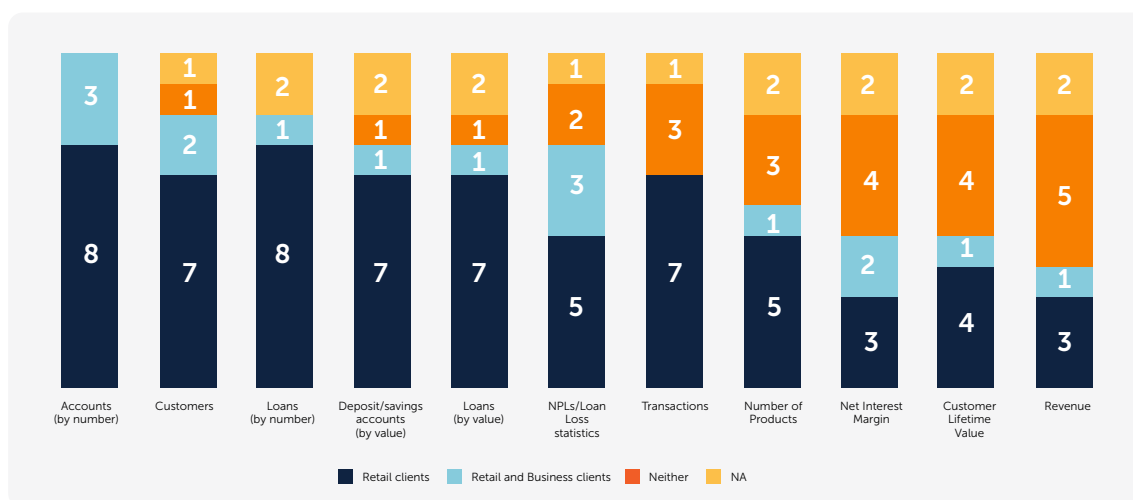
DATA AGGREGATORS:

- Sex-disaggregated reporting is mandated; Bangladesh Bank makes limited use of the collected data beyond publishing monthly, aggregate-level account ownership statistics.
- Different reporting templates, manual data entry, and late submissions affect data quality and Bangladesh Bank's ability to accurately assess market trends.

OVERALL:

- There are significant opportunities to use existing data in analysis that could yield actionable insights for FSPs and the regulators.

Figure 7 - Types of gender data collected by Bangladesh's FSPs



Most FSPs collect some gender data on business customers, primarily on sole proprietors. A standardized definition of WSMEs exists and is the basis for the banks' reporting to the BB, but it is not universally deployed in identifying such businesses. For example, several survey respondents indicated that they only track the sex of sole proprietors who run the business in their own names. One respondent said they track the sex of business customers based on a 50 percent ownership threshold, while another said that their determinant was based on the gender balance in ownership and management.

Of the banks surveyed, the majority include sex-disaggregated data in their regular, automated management reporting, with the remainder including it occasionally. However, respondents said that they do not use the data to inform decisions on women's market offerings—due in part to staffing and technology limitations. For the types of gender data collected by Bangladesh's FSPs, see Figure 7.

"We focus on serving SMEs' financial needs, we do not relate it with the gender. Their needs are based on their size, on their industry, on their market—just like any other SME."

– FSP representative

Uneven data quality, analytical and technical capacity issues

Some banks have the systems capabilities for automated internal reporting; others rely on manual data entry. This increases the risk of errors and affects quality and reliability. Manual entry is typical for external reporting to the regulator, even for those banks that automate their internal reporting.

Significant management support for developing women's market propositions is evident at some banks, but others lack management buy-in on the business case. In general, bank decision makers have limited understanding about the value of sex-disaggregated data and how it could help quantify the business case or inform product design. And since gender targets are not built into key performance indicators (KPIs), managers have little incentive to act.

Bank representatives interviewed said they would like to learn more about how data insights could contribute to refining their women's market strategies and ensure that product offerings align precisely with what women customers want.

Mobile financial service providers

As with commercial banks, Bangladesh's MFS providers track the gender of retail customers, although WSME data is limited to sole proprietorships. They have the capacity to generate detailed, sex-disaggregated information including the value of deposits and loans, loan loss statistics, transaction activity, product usage, net interest margin, customer lifetime value, and revenue. **However, this information is not typically included as part of regular internal management reporting. Increased use of such data could shed more light on women's uptake of various financial products and help refine offerings.**

Microfinance institutions

Bangladesh's MFIs track aggregate-level account ownership data, such as the total number of male and female borrowers and depositors. They also track sex of sole proprietor business customers whose companies are in their own name. All include this information at least on an occasional basis for internal reporting purposes. However, the data is not a part of the regular reporting template. While WFI is built into the mission of many MFIs, there is a general lack of awareness about the importance of gender data to inform product design or overall strategy.



DATA AGGREGATORS

In Bangladesh, gender data aggregation occurs regularly, as it is mandated by BB. This represents a strong foundation on which to build.

Bangladesh Bank

BB, the nation's central bank, is responsible for the significant progress achieved to date on increasing availability of good-quality supply-side gender data. Banks are required to provide sex-disaggregated account data to various central bank departments—including payment systems, the SME and Special Programmes Department, the Financial Inclusion Department, and the Statistics Department—on a monthly/quarterly basis. Departments publish summaries on diverse aspects of financial inclusion on a monthly/quarterly basis, providing aggregate-level detail on the ownership of accounts and agents by gender. Optimizing data remains a challenge, since there is no centralized unit charged with compiling all the information, and BB does not publish consolidated analysis.

In addition, the current approach to data collection could have an impact on data quality. For example, there is a risk of double-counting, since FSPs do not provide unique ID-linked retail customer data. Similarly, the potential for double-counting is an issue with WSME data, since FSPs only report on the total number of loans. This means that the data collected would not reflect instances where a single entrepreneur takes several loans, potentially inflating the actual number of entrepreneurs reached. The lack of harmonized data requirements across the various BB departments could also be affecting data quality, making it difficult to compare or cross-check for accuracy. In addition, Bangladesh does not currently have a comprehensive, stand-alone credit registry, so loan data is limited to the numbers of outstanding loans, as collected by the BB's Credit Information Bureau. Such challenges limit BB's ability to accurately measure financial inclusion or paint a holistic picture of women's access to and usage of various financial services. As part of its NFIS, Bangladesh has indicated a strong commitment to enhancing the quality of data collected, including plans to establish a full-fledged credit registry.

Microcredit Regulatory Authority

All microfinance institutions report sex-disaggregated total account ownership data to their regulator, the Microcredit Regulatory Authority (MRA). The MRA was established in 2006 to ensure transparency, accountability, and efficiency in the country's microfinance sector. MRA gathers aggregate-level data from the institutions it regulates. It does not collect client-level data, although MFIs do have such information.

MRA publishes general MFI sector data annually, without sex-disaggregation. Indicators include the number of MFIs, clients, and accounts. The microfinance sector currently does not have a credit bureau, but this is about to change. A joint initiative by MRA and Bangladesh Bank will result in the creation of the Microfinance Credit Information Bureau, to be supervised by MRA. Once launched, the bureau will increase capabilities for collecting more granular, customer-level, sex-disaggregated data.

With a customer base that is more than 90 percent female, the microfinance sector can play a vital role in reducing gender gaps in financial inclusion. A heightened focus on the collection and analysis of sex-disaggregated data will enhance MRA's efforts, enabling the use of data insights to inform policies that will further drive WFI.

OPPORTUNITIES: IMPROVING THE USE OF AVAILABLE DATA

Bangladesh's FSPs and regulators have an immediate opportunity to make better use of the large amount of data that has become available because of the move to electronic payments, the regulatory push, and FSPs' growing focus on the women's market. The information that is already being generated could feed into a highly detailed, market-wide analysis of women customer behaviors. This analysis could reveal trends and business opportunities that would prove useful for FSPs as they refine their women's market propositions. It also could support future policy interventions and refinements to the National Financial Inclusion Strategy that will further advance WFI. Table 1 presents an overview of these opportunities.

Table 1. Opportunities to be leveraged

	OPPORTUNITIES TO BE LEVERAGED
COMMERCIAL BANKS/ DATA PRODUCERS	<ul style="list-style-type: none"> • Awareness of the growing importance of the women's market • Widespread availability of granular data on some women customer segments • Some data included in internal reporting • Strong examples of successful women's propositions from leading banks
MOBILE FINANCIAL SERVICE PROVIDERS/ DATA PRODUCERS	<ul style="list-style-type: none"> • Availability of granular sex-disaggregated data on retail customers and sole proprietors • Strong potential to advance WFI through digitization of government programs and wage payments
MICROFINANCE INSTITUTIONS/ DATA PRODUCERS	<ul style="list-style-type: none"> • Mission-central commitment to women • Existing customer base that is more than 90 percent female • Availability of basic data on some women customer segments
BANGLADESH BANK DATA AGGREGATOR	<ul style="list-style-type: none"> • Political will and commitment to WFI • Mandated sex-disaggregated reporting • Development of financial inclusion policies
MICROCREDIT REGULATORY AUTHORITY/ DATA AGGREGATOR	<ul style="list-style-type: none"> • Commitment to women's market • Collection of basic sex-disaggregated data



LESSONS LEARNED FROM BANGLADESH'S EXPERIENCE

The information uncovered in the diagnostic has yielded insights that offer lessons for Bangladesh, as well as for other countries. Bangladesh has made notable progress on WFI, and all indications are that this trend will continue. It is hoped that the lessons and recommendations presented here can assist in advancing WFI even further. These lessons include:

- **A standardized WSME definition is only the start for gathering comprehensive WSME data; the next step is consistent application.** Bangladesh's national SME policy clearly defines WSMEs, but FSPs do not make consistent use of the definition in gathering data. For a country that is working towards boosting women's entrepreneurship, it will be important to raise awareness about the value of comparable supply-side WSME data in identifying gaps and designing effective solutions.
- **WSME lending mandates for banks do not necessarily translate into results on the ground.** Banks need more awareness building around the business case for serving the WSME market.
- **Just because the data is available doesn't mean it's being used.** While some FSPs incorporate gender data into their regular management reporting, they are not optimizing use of the granular information available to them. Similarly, regulators could be doing more to optimize the use of this information to give FSPs access to data-driven market perspectives and intelligence on women customer behaviors and performance. These insights could then help FSPs better target their women's market offerings.
- **The digitization of government social welfare payments and industry wages can catalyze WFI progress by including marginalized groups, which in turn leads to expanded data sets and understanding of how these groups access and use financial services.** These technology-driven shifts are responsible for a marked increase in the number of women who now have access to formal financial services, regardless of income or socioeconomic status.

RECOMMENDATIONS

The recommendations that follow are aimed at increasing the use of supply-side sex-disaggregated financial data in Bangladesh to close the financial inclusion gap in access and usage. For a summary connecting the diagnostic's findings to the challenges identified and recommended interventions, please reference Table 2.

Table 2. Connecting the findings from the Bangladesh Gender Data Diagnostic to data gaps and interventions

	DATA GAPS				POTENTIAL INTERVENTIONS
	AWARENESS	AVAILABILITY	QUALITY	USAGE	
COMM. BANKS / Data Producers	Uneven awareness on value of sex-disaggregated data for business decision making	Inconsistent application of the WSME definition: makes standardized WSME data collection and analysis difficult	Lack of quality control in recording client gender	Limited sex-disaggregated internal management reporting	Awareness building on ways to use supply-side data in defining women's market strategy and determining product offers
	At some banks: lack of management buy-in on business case for serving the women's market	Gaps in WSME data	Manual, branch-level data collection for external reporting/ limited automation increases the risk of errors Banks typically do not apply the standard WSME/SME definitions into their reporting on WSME loans	Limited data usage Limited analytics capacity	Awareness building through dissemination of outreach materials related to the diagnostic report, highlighting market-sizing data
	Gender targets not built into management KPIs: no incentive to act				Capacity building on how to use gender data to generate insights
					Guidance on automating reporting - Sharing of best practices and cases - Knowledge and skills building through participation in capacity building programs such as Financial Alliance for Women All-Stars Academy
					Stakeholder events to encourage an increased use of a standardized WSME definition
MFIs / Data Producers	No data gaps identified	Lack of WSME data	No data gaps identified	Limited in-house data collection and analytics capacity	Awareness building through industry events on use cases of supply-side data
					Awareness building through dissemination of outreach materials related to the diagnostic report, highlighting market sizing data for women
					Capacity building on gender data analysis and reporting
					Training on women's market modeling and business case analysis
MFS / Data producers	Low levels of awareness on the importance of sex-disaggregated data collection and analysis	Lack of data on WSME companies: businesses are not a core target group for MFS	No data gap identified	Sex-disaggregated data is not used for business decision making	Awareness building through industry events on use cases for better collection and analysis/use of supply-side data
				Collected gender data is not included in regular management reporting	Awareness building through sharing of highlights from the diagnostic, highlighting market- sizing data
					Capacity building on decision-driven analysis and reporting
Data users / Bangladesh Bank	No data gaps identified	Fragmented gender data collection / reporting	Only aggregated data is available from banks	Issues in consolidating data: limits analytics capabilities	Knowledge sharing from other countries' regulators on how to use sex-disaggregated data: - collection, use, analysis of data - best practice approaches on making the collected data available for the industry
		Non-standardized templates across departments	Cannot consolidate for unique clients		Capacity building on the value of sex-disaggregated data reporting
		Systems don't support automated data aggregation across departments	Data issues caused by proxy use	Data is not being aggregated and/ or used to produce market-level insights	Improve leadership on internal gender diversity policies and championing the use of sex-disaggregated data
		Reporting templates request sex-disaggregated account data rather than unique ID-linked customer data, causing double counting at the aggregate level	The quality of WSME / data collected is questionable due to inconsistencies in applying standard definitions		Mainstream gender data usage through, for instance, a WFI dashboard showing key WFI performance indicators over time, including digital government payments data
		The availability of gender data is currently limited to aggregate data (not on individual customer-level), and on access only			Support for creating a standardized gender data template
Data users / Microcredit Regulatory Agency	No data gaps identified	Collection of aggregate- level data only, even though client-level data is available	No data gap identified	Limited use of data analysis in decision making	Showcasing ways of catalyzing the increased use of sex-disaggregated data
					Leveraging the capabilities of the MRA credit bureau to publish sex-disaggregated data.
					Development of a standardized gender data template
					Development and integration of a WFI dashboard, showing key WFI performance indicators over time



Ecosystem recommendations

There is general awareness about the importance of the women's market across Bangladesh's financial ecosystem. But this broad awareness decreases when it comes to the value of sex-disaggregated data to create solutions for this market. Recommendations to bridge this disconnect include:

- Raise awareness on how data insights can help guide market actions in ways that can benefit all stakeholders through the sharing of use cases and capacity-building know-how.
- Promote alignment and encourage action across the ecosystem, among all players, for example by encouraging concrete commitments or implementing a code, such as the United Kingdom's Investing in Women code.
- Work with stakeholders on increased use of the already-established, standardized WSME definition to further develop WSME datasets.
- Work with local stakeholders to understand FSPs' digital priorities and FSP-driven use cases for expanded digital financial services.

Industry recommendations

Increased use of the gender data already available could help FSPs fine tune their existing women's market offerings and tailor future offerings to optimize returns on their investment in new products and services. Recommendations for FSPs include:

- Increase awareness on the rationale for using data insights to inform new product development and refine women's market offerings.
- Strengthen internal capacity on sex-disaggregated data analysis and internal management reporting.
- Create opportunities for peer learning from leading banks that are role models on holistic women's propositions, leveraging for instance, the Financial Alliance for Women's All-Stars Academy.



Regulatory recommendations

The regulator has clearly articulated the importance of increasing WFI and taken concrete actions towards advancing the goal, yet there remains a lack of understanding about the role that sex-disaggregated data could play in accelerating progress, and certain systems challenges also hinder the use of the data it is collecting. Here are some recommendations for actions that BB can take to build on the progress already happening:

- Standardize data collection by creating a gender data template for universal use and mainstream diagnostic results across stakeholders.
- Build the capacity of internal teams on sex-disaggregated data analysis to generate actionable insights—and on the rationale for doing so.
- Improve access to available data through, for instance, the development of a WFI dashboard that also includes MFS provider data on government beneficiaries, for greater visibility on the current state of women's access to finance in the country.
- Publish regular updates on WFI progress, highlighting key WFI performance indicators.
- Offer opportunities for interaction and knowledge sharing with regulatory counterparts in other countries on best practices in sex-disaggregated data collection, use, analysis, and publication of insights for industry.

Here are recommendations for MRA, the microfinance regulator:

- Expand data collection to include client-level data.
- Leverage capabilities of new credit bureau to enable deeper sex-disaggregated data analysis and identify policy prescriptions that could further drive WFI.
- Share findings with industry players for use identifying data-driven women's market solutions.

Through 2022, WFID will be working on prioritizing and piloting interventions. We welcome input from and collaboration with partners from stakeholder groups. Please feel free to contact us: info@data2x.org.

APPENDIX A. FORECASTING MODEL DESCRIPTION

The logistic regression assumes a linear relationship between a set of explanatory variables and the log-odds of a given event:

$$\ln\left(\frac{P}{1-P}\right) = \beta_0 + \beta_1 x_1 + \dots + \beta_n x_n$$

The probability of the event (e.g., the likelihood of an individual being banked), is therefore given by the non-linear relationship:

$$P = \frac{\exp(\beta_0 + \beta_1 x_1 + \dots + \beta_n x_n)}{1 + \exp(\beta_0 + \beta_1 x_1 + \dots + \beta_n x_n)}$$

The mean value of the event for a group within the dataset (for example, the average probability of an individual being banked, or the average probability of females being banked) is the average of the individual probabilities for each individual, weighted by the survey probability weights. This sum can differ from the probability assessed at the average value for each of the explanatory variables, assessed at the mean, due to the functional form. Thus, for N households, with average values of explanatory values given by \bar{x} :

$$\frac{1}{N} \sum_{i=1}^N \frac{\exp(\beta_0 + \beta_1 x_{i1} + \dots + \beta_n x_{in})}{1 + \exp(\beta_0 + \beta_1 x_{i1} + \dots + \beta_n x_{in})} \neq \frac{\exp(\beta_0 + \beta_1 \bar{x}_1 + \dots + \beta_n \bar{x}_n)}{1 + \exp(\beta_0 + \beta_1 \bar{x}_1 + \dots + \beta_n \bar{x}_n)}$$

This differs from a linear model, where:

$$\frac{1}{N} \sum_{i=1}^N \beta_0 + \beta_1 x_{i1} + \dots + \beta_n x_{in} = \beta_0 + \beta_1 \bar{x}_1 + \dots + \beta_n \bar{x}_n$$

Model projections are made at the mean value for each variable, instead of simulations for every household. Simulations would be challenging and somewhat ad-hoc for variables such as increase in school completion rates or mobile phone ownership, where ownership status would have to change for individual households to match the projected growth rate. Consequently, the non-linear nature of the model implies that the model evaluated at the mean value for each variable will be different from the average of the values for each individual.



Data

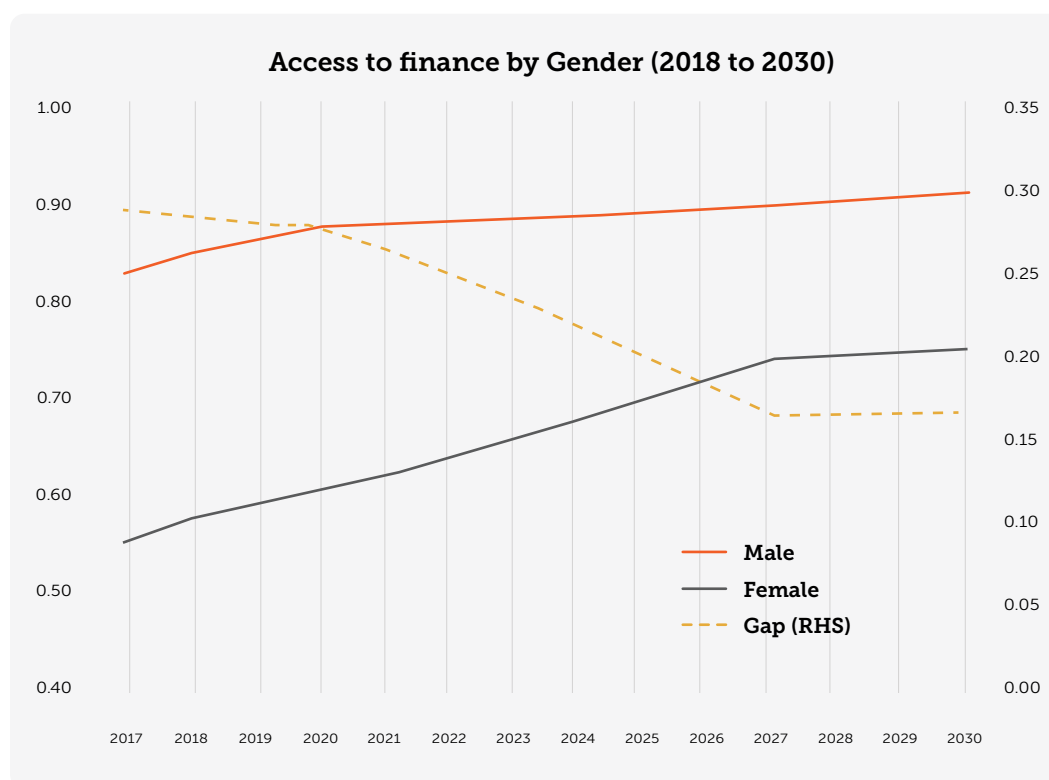
- Baseline data is Global Findex 2017 microdata that is published every three years since 2011. The data are collected by the World Bank in partnership with Gallup, Inc., through nationally representative surveys of more than 150,000 adults in over 140 economies.
- Microdata were obtained for the 2017 survey, which consists of 1000 observations, collected between April 18, 2017 and May 4, 2017. For the purposes of security, the survey excluded three districts in Chittagong (Bandarban, Khagrachori, and Rangamati). The excluded areas represent about 1 percent of the population. The analysis is restricted to adult individuals aged 18 and above.
- Data collected within the survey include usage of banking services, including payments, savings, credit, and transfers. In addition, data on household and individual characteristics are collected.
- For the purpose of the analysis, “financially included” is defined as whether the respondent, either personally or together with someone else, has an account at a bank or another type of financial institution, such as a credit union, microfinance institution, cooperative, or the post office; has a debit card connected to an account at a financial institution with their name on it; received wages, government transfers, public sector pension, or payments for agricultural products directly into an account at a financial institution in the past year; or personally paid utility bills or school fees from an account at a financial institution in the past year.

Model estimates by gender

Variables	Male	Female
Income class		
(Mid)	0.1743	0.7978 **
(High)	1.0894 ***	0.7127 **
Secondary education	0.7820 ***	0.2291
Completed tertiary or more	1.4917	1.8540 **
Age	0.0180 **	-0.0035
Income from salary or wage	0.2338	0.6174
Income from farming	0.5333 **	0.4939 *
Income from business	-0.0210	0.0592
Owns mobile phone	0.9760 ***	1.7624 ***
Constant	(2.0303) ***	(2.6375) ***
Number of observations	477	523
Pseudo R-squared	0.1084	0.1477

- Overall estimates show similar patterns between men and women, with the most important determinants of access to finance for both men and women identified as education completion rate, income levels, and mobile phone ownership. An additional determinant across gender is income from farming.
- However, in the case of education, while tertiary school completion is the most significant determinant in the case of women, secondary school completion is more significant in the case of men.
- Level of income is the most important determinant of access to finance in the case of men. While income is also an important determinant in the case of women, mid-income women are as likely to have access to finance as high-income women.
- Mobile phone ownership differences are striking. While mobile phone ownership is a significant determinant across gender, it has significantly higher explanatory power in the case of women.

Access to finance projections



- The modeling of access to finance indicators is dependent on modeling of underlying changes in the key explanatory variables. Model forecasts of key variables are dependent on projections obtained from reputable and widely cited sources, including the World Bank, IMF, and Shared Socio-Economic Pathways (SSP) data, in addition to trend projections from time series data.
- Projections indicate an increase in access to finance of 3.6 percentage points for men, and 15.1 percentage points for women between 2020 and 2030.
- Projections indicate a narrowing of the access gap with a likelihood of convergence in levels of access by gender in the years ahead of our forecast period. The access gap closes from 28 percentage points in 2020 to 16 percentage points by 2030.
- The projections are made based on a marginal analysis at mean values, due to the non-linear nature of the logit model. The graph is rebased from mean values to actual values in 2020.

APPENDIX B. WOMEN'S MARKET OPPORTUNITY CALCULATIONS

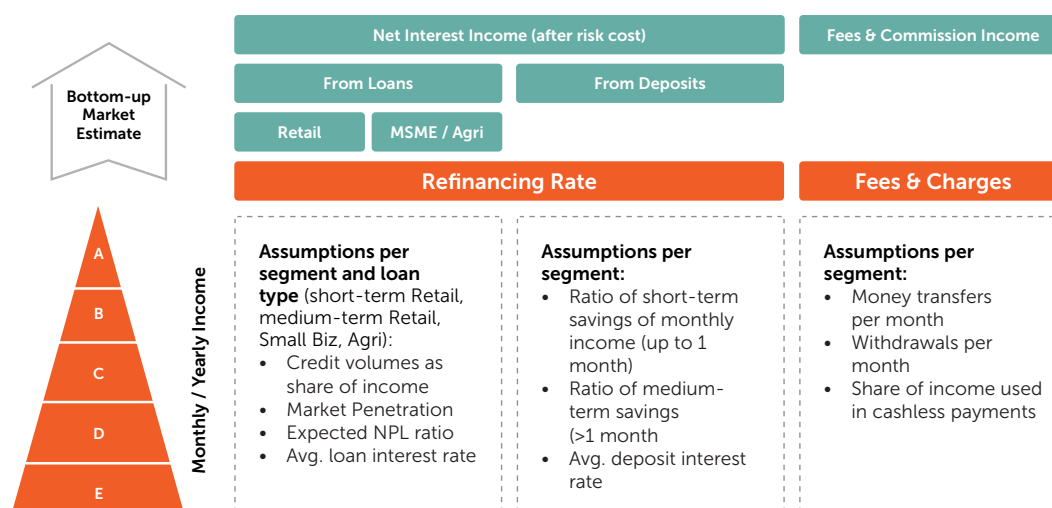
The high-level logic of the model can be described through the following key steps:

1. **Determining socioeconomic segments** (on the base of monthly income, occupation, and by gender)
2. **Determining % of unbanked**
3. **Determining % of underbanked***
4. **Assumptions on potential revenue per segment** (net interest income and fee & commission income)

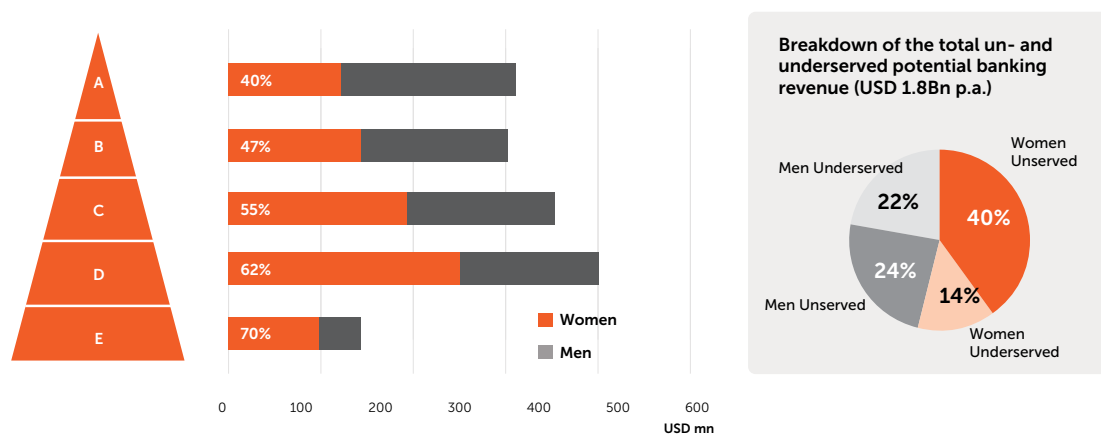
The assumptions used for the model were based on the following data sources:

Area	Assumption	Source(s)
Population	Sociodemographic-economic	Global Findex 2017 Survey, BBS 2021 mean income, BBS - Primary report on household and income survey 2016, GNI, Atlas method (current US\$); assumptions based on the Nigeria market opportunity model
	Economic activity	
	Access to finance / banked	
	Usage/degree of being underserved	CCX assumptions based on experience – validated by local market participants
Products	Deposits/savings	Banks' and MFIs' terms and conditions sheets
	Loans	
	Payments	

Revenue source assumptions used for the modeling



The untapped potential banking revenues of women and men in Bangladesh (in \$ millions and by %)



An overview of the assumptions deployed in the model can be found below:

	Segment E (\$36 avg. /mo)		Segment D (\$93 avg. /mo)		Segment C (\$150 avg. /mo)		Segment B (\$246 avg. /mo)		Segment A (\$724 avg. /mo)	
	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN
Deposits and Savings										
Short term savings (...)	35%	35%	35%	35%	40%	40%	40%	40%	40%	40%
Long term savings (...)	8%	8%	10%	10%	12%	12%	15%	15%	15%	15%
Transactions & Payments										
Money transfers per month	0.5	0.25	0.5	0.25	1.5	1	2	1.5	2	2
Withdrawals per month	1	1	1	1	1	1	3	3	4	4
% of income used in cashless payments	8%	3%	10%	5%	13%	8%	15%	10%	20%	15%
Loans Retail, (very) short-term liquidity mgmt										
Credit Volume (%f MONTHLY income)	100%	100%	100%	100%	150%	150%	200%	200%	200%	200%
Credit Penetration (% of client)	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Expected Loan Losses (net of recovery)	3%	2%	3%	2%	2%	1%	2%	1%	1%	1%
Loans Retail, medium-term										
Credit Volume (% of ANNUAL income)	40%	40%	60%	60%	80%	80%	100%	100%	100%	100%
Credit Penetration (% of clients)	8%	8%	8%	8%	10%	10%	10%	10%	15%	15%
Expected Loan Losses (net of recovery)	4%	2%	4%	2%	3%	1%	3%	1%	3%	1%
Loans Small Business, e.g. inventory finance										
Credit Volume (%of MONTHLY income)	40%	40%	35%	35%	30%	30%	20%	20%	20%	20%
% of Segment small business owners	10%	3%	15%	3%	35%	7%	30%	6%	30%	6%
Credit Penetration (% of clients)	90%	90%	80%	80%	70%	70%	50%	50%	50%	50%
Expected Loan Losses (net of recovery)	5%	3%	5%	3%	4%	2%	4%	2%	4%	2%
Loans Agri-Finance										
Credit Volume (%of ANNUAL income)	40%	40%	40%	40%	30%	30%	20%	20%	20%	20%
Share of Segment active in agriculture	32%	33%	28%	27%	24%	18%	6%	5%	4%	4%
Credit Penetration (% of clients)	60%	60%	80%	80%	60%	60%	30%	30%	30%	30%
Expected Loan Losses (net of recovery)	5%	3%	5%	3%	4%	2%	4%	2%	4%	2%
RATES										
Borrowing rate	22%	22%	18%	18%	14%	14%	11%	11%	9%	9%
Deposit rate	1%	1%	2%	2%	2%	2%	3%	3%	3%	3%
Refinancing rate	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Money transfer fee, US\$	0.06	0.06	0.07	0.07	0.08	0.08	0.10	0.10	0.12	0.12
Withdrawal fee, US\$	0.01	0.01	0.32	0.32	0.10	0.10	0.10	0.10	0.10	0.10
Fee for cashless payments (% of value of transactions, banks' share)	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015

REFERENCES

- Bangladesh Bank. 2020. "[Overview of Financial System of Bangladesh](#)."
- Bangladesh Bank. 2021a. "[Agent Banking Summary Statement](#)."
- Bangladesh Bank. 2021b. "[Mobile Financial Services Summary Statement](#)."
- Bangladesh Bank Financial Inclusion Department. 2019. "[National Financial Inclusion Strategy-Bangladesh](#)."
- Bangladesh Bureau of Statistics. 2013. "[Economic Census](#)".
- Bangladesh Bureau of Statistics. 2016. "[Household Income and Expenditure Survey 2016](#)"
- Bangladesh Bureau of Statistics. 2017. "[Labor Force Survey](#)".
- Breza, E., Kanz, M., and Klapper, L. 2020. "[Learning to Navigate a New Financial Technology: Evidence from Payroll Accounts](#)." Policy Research Working Paper. December 2020. World Bank Group.
- Consultative Group to Assist the Poor. 2014. "[Annual Report](#)."
- Dhaka Tribune. 2021. "[Extreme Poverty Trebled in 2020](#)." January 24, 2021.
- Fathi, N. 2019. "[Safety First: Bangladesh Garment Industry Rebounds](#)." IFC Insights.
- Financial Alliance for Women. 2021. "[Gender-Intelligent Fintech Design: How Fintechs Can Capture the Female Economy](#)."
- GSMA. 2020. "[Mobile Gender Gap Report](#)."
- GSMA. 2021. "[Connected Women—The Mobile Gender Gap Report 2021](#)."
- Loreto, I.; Nimilita, S. and Witten, J. (HERproject) 2020a. "[Rapid Wage Digitization in Bangladesh: Implications for Women in the Era of COVID-19](#)" HERproject blog.
- HERproject, 2020b. "[Digital Wages: Positive Impact for Women and Business](#)".
- Somani, A. 2021. "[Poverty in Bangladesh](#)." The Borgen Project.
- United Nations Capital Development Fund. 2018. "[Shaping Inclusive Finance Transformations in the South Asian Association for Regional Cooperation Program Mid-Term Evaluation Deck](#)".
- WFID Partnership. 2018. "[The Way Forward: How Data Can Propel Full Financial Inclusion for Women](#)."
- Women's World Banking. 2019. "[Women's Financial Inclusion. Country Snapshots-Bangladesh](#)."
- The World Bank. "[Enterprise Surveys, The World Bank](#)". Database.
- World Bank. April 2020. "[Poverty Data: Bangladesh](#)."
- World Bank. 2017. "[Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution](#)."
- World Economic Forum. "[Global Gender Gap Report 2021](#)." March, 2021.

END NOTES

1. WFID Partnership. 2018.
2. Global Findex. 2017.
3. CCX estimation based on information from stakeholder interviews.
4. Fathi, N. 2019.
5. Financial Alliance for Women. 2021.
6. Somani, A. .2021
7. Women's World Banking. 2019.
8. Global Findex 2011-2017
9. Global Findex. 2011-2017.
10. GSMA. 2021.
11. HERproject, 2020a.
12. GSMA. 2021..
13. HERproject, 2020b.
14. Breza, E., Kanz, M. and Klapper, L.. 2020.
15. Financial Alliance for Women. 2021.
16. Bangladesh Bank Financial Inclusion Department. 2019.
17. Anecdotaly, some banks have reported abuse of this program, with some male business owners encouraging their wives to apply for the loans as a way to lower the cost of capital for their businesses.
18. Based on Bangladesh Bank BDT/USD exchange rate of 84.802/1 as of December 31, 2020.
19. Recurring and one-time surveys include those conducted by the World Bank, Kantar, GSMA, Bangladesh Bureau of Statistics (BBS), Bangladesh Bank, Institute of Microfinance, Consultative Group to Assist the Poor (CGAP), HERproject, Asia Foundation and Centre on Budget and Policy, IFC, Women's World Banking, Bangladesh Integrated Household Survey, Innovations for Poverty Action Bangladesh, and UNCDF.
20. CCX calculations based on BBS 2016 and Findex 2017, Bangladesh Bank 2020, World Bank 2020
21. The Investing in Women Code is a commitment by financial services firms to improve female entrepreneurs' access to tools, resources, and finance, initiated by the U.K. Treasury. For more see: <https://www.gov.uk/government/publications/investing-in-women-code>
22. Source: HERproject, 2020a.
23. Sources: banks' websites, stakeholder interviews



Towards Women's Financial Inclusion: A Gender Data Diagnostic of Bangladesh

Prepared by the WFID Partnership
April 2022

data2x^o

FINANCIAL
ALLIANCE
FOR
WOMEN