G20 Policy Options to Improve Last Mile Access and Quality of Inclusion

Through Digital Infrastructure, Including Digital Public Infrastructure (DPI), Consumer Protection, and Other FIAP Objectives

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CONSTRUINDO UM MUNDO JUSTO E UM PLANETA SUSTENTÁVEL

GPFI Global Partnership for Financial Inclusion

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CGAP

1818 H Street, NW, MSN F3K-306
Washington, DC 20433
Website: www.cgap.org
Email: cgap@worldbank.org
Telephone: +1 202 473 9594

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Acronyms

AFI	Alliance for Financial Inclusion
AI	artificial intelligence
API	application programming interface
ARS	Agent Registry System
BISP	Benazir Income Support Program
BSP	Bangko Sentral ng Pilipinas
BTCA	Better Than Cash Alliance
CBA	Central Bank of Armenia
CBDC	central bank digital currency
CDD	customer due diligence
CICO	cash-in cash-out
CNBV	National Banking and Securities Commission (Mexico)
CONDUSEF	National Commission for the Protection and Defense of Users of Financial Services (Mexico)
DFS	digital financial services
DIP	digitally included poor
DLT	distributed ledger technology
DPI	digital public infrastructure
ENSAFI	National Survey on Financial Health (Mexico)
FBDC	Financial Big Data Cluster
FCP	financial consumer protection
FCS	fragile and conflict-affected situations
FSB	Financial Stability Board
FSP	financial services provider
GPFI	Global Partnership for Financial Inclusion
G2P	government to person
HLPs	High-Level Principles (G20)
ICT	information and communications technology
IDB	Inter-American Development Bank
ID4D	Identification for Development
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
ILO	International Labour Organization
INEGI	National Institute of Statistics and Geography (Mexico)
ISAS	Integrated Social Assistance System (Türkiye)
LMICs	low- and middle-income countries
MCDSS	Ministry of Community Development and Social Services (Zambia)
MNO	mobile network operator
MSMEs	micro, small, and medium enterprises

NIMC	Nigerian Identity Management Commission
NIN	National Identification Number
OECD	Organisation for Economic Co-operation and Development
R&D	research and development
safeFBDC	safe Financial Big Data Cluster
SASSA	South African Social Security Agency
SDGs	Sustainable Development Goals
SMEs	small and medium enterprises
SWL	Support to Women's Livelihoods
UAE	United Arab Emirates
UNCDF	United Nations Capital Development Fund
UNSGSA	United Nations Secretary-General's Special Advocate for Inclusive Finance for Development
UPI	Unified Payments Interface
WBL	Women, Business and the Law
WEE	Women's Economic Empowerment
WE GAIN	Women Entrepreneurs in Northern Ghana Gain Access to Integrated Services via Agent Networks

Executive Summary

THE WORLD HAS WITNESSED REMARKABLE progress in financial inclusion over the past decade. The increase in account ownership from 2011 to 2021 is an indication of that progress, having risen by 25 percentage points from 51 to 76 percent. The percentage of people who use formal credit, savings, and payment services also increased during that period. This GPFI Guidance Note celebrates the extraordinary journey of millions of individuals toward financial inclusion and acknowledges the enablers and innovations that have contributed to these positive results.

This Note focuses on describing the individuals who continue to be financially excluded and their unique characteristics. This heterogenous population represents the "last mile" for financial inclusion and continues to be a priority for development efforts, given that financial inclusion at the last mile is shown to be one of the necessary conditions to accelerate progress toward achieving the most pressing development outcomes of our time, such as building resilience to climate change, promoting greater gender equality, and improving food security, among other goals.

The Note identifies the specific barriers faced by the last mile population segments in aggregate that prevent their financial inclusion. It then moves on to offer public policy and public investment options that can reduce those barriers that are common to the last mile population segments described in the Note and enable scalable financial inclusion at the last mile.

The options offered are presented in two categories. The first refers to public policies and investments that have whole-of-market effects, allowing financial systems to reduce costs and enhance the viability of (i) reaching last mile populations, (ii) understanding their financial needs, and (iii) reducing information asymmetries in a way that allows financial services providers (FSPs) to tailor services that meet those needs. All these effects are enabled by policy and regulatory frameworks that promote scale and competition. The discussion identifies those key enablers, or foundational building blocks, of inclusive financial systems that have proven necessary to further financial inclusion at the last mile, given their ability to help address some, but not all, of the barriers faced by last mile population segments.

The second category of options refers to public policies and investments that address the remaining identified barriers to last mile financial inclusion. They are nonfinancial in nature and closely related to prevailing social norms and fragile governance at the country level. The conditions set by the social norms and fragile governance discussed in this Note unintentionally limit the relative access last mile population segments have to education, health, infrastructure services, legal rights, and overall economic inclusion. These conditions, in turn, limit the value these segments can draw from financial services, effectively reducing their demand for such services while limiting their access to key enablers for owning and using an account (i.e., access to IDs, phones, and internet; exposure to FSPs).

The latter category of public policy and investment options is intentional in targeting financial inclusion interventions to the specific last mile population

segments prioritized by each country (e.g., women, migrants, indigenous populations, other groups). It also targets the subset of context-specific FSPs with comparative advantages in serving those segments. These financial inclusion interventions are carefully coordinated and co-designed with other public investments and relevant private sector partners to reduce the nonfinancial constraints that indirectly limit financial inclusion at the last mile (i.e., gaps in education, health, infrastructure, etc.).

The approach described in this Note to well-coordinated and co-designed public interventions across several sectors implies a whole-of-government approach to policy implementation that reduces policy silos across different government authorities and agencies, for example, those authorities governing finance, education, agriculture, social protection, and humanitarian aid, among others.

The Note acknowledges that access to financial services is just the first step in people's financial inclusion journeys. Therefore, it synthesizes the progress made to measure the quality of financial services, identifies persistent knowledge gaps on how to measure quality, and provides ideas on how to track the ways last mile populations can benefit once they begin using financial services.

A range of possible quality indicators is proposed, with a focus on the quality of design and the delivery of products from a supply-side perspective. Measuring these indicators matters because access and usage alone are insufficient if products are not designed and delivered in ways that are safe and suitable for last mile customers. The focus is on three products relevant to last-mile consumers: payments, deposits, and loans. The proposed indicators are not intended to be a definitive list, but rather a set of indicators that can inform a learning agenda to adapt measurements of quality in financial inclusion to each country context.

The Note compiles the most relevant references and resources available so readers can explore in further detail the topics presented. It also showcases successful country interventions coming from G20 countries as well as others, including those in fragile and conflict-affected situations. Each public policy and investment option presented is voluntary and nonbinding and is relevant to all remaining financially excluded populations, even those in high- and upper-middle-income countries.

Ensuring financial inclusion at the last mile is fundamental to accelerating the achievement of the Sustainable Development Goals (SDGs). The last mile populations described in this Note significantly overlap with the most vulnerable population segments targeted by the SDGs. Evidence suggests that enabling digital financial inclusion at the last mile can accelerate 13 of the 17 SDGs. Inclusive and responsible financial systems not only accelerate the achievement of the SDGs but also reverse the trend of the widening digital, economic, and well-being gaps.

CHAPTER 1

Introduction[1]

1.1 Financial inclusion progress over the past decade

Over the past ten years, substantial progress has been made in advancing financial inclusion.[2] As of 2021, 76 percent of adults worldwide had access to a transaction account,[3] up from 62 percent in 2014 and 51 percent in 2011.[4] The use of financial services has also become more widespread. By 2021, 62 percent of adults worldwide made or received a digital payment, 28 percent saved, and 27 percent borrowed from a formal financial services provider (FSP)—up from 2014 rates of 44 percent, 27 percent, and 22 percent, respectively.

This Guidance Note acknowledges this remarkable achievement yet focuses on ways to reach those who remain financially excluded. The term "last mile" refers to all population segments around the world that remain financially excluded despite the progress made to date to include them. Most individuals in these segments live in low- and middle-income countries (LMICs). They are more likely to be poor and/or women, live in rural areas, work in informal jobs or be unemployed, and face higher risks from conflict and climate change. As these individuals represent most of the vulnerable population segments targeted by the Sustainable Development Goals (SDGs), addressing the last mile to serve them remains a priority for financial inclusion efforts.

The report shares known insights on how to enable financial inclusion at the last mile by using digital financial systems, among other building blocks that enable inclusion at scale, while fostering the provision of financial services that better meet customer needs and translate into better quality services. In addition, the report offers public policy and public investment options that can reduce the unique constraints last mile population segments face and ensure they are not left behind. Finally, it discusses progress in the measurement of the quality of financial services, identifies persistent knowledge gaps in the quality of financial services, and provides ideas on how to track whether (and how) last mile populations benefit once they start using adequate financial services in ways that translate into improvements in their well-being. The policy and regulatory options mentioned throughout are voluntary and nonbinding and are relevant for all those financially excluded groups that remain, even those in high- and upper-middle-income countries.

1 Unless otherwise noted, this chapter uses the Global Findex Database 2021 (Demirgüç-Kunt et al., 2022) as its main source of information.

2 Where financial inclusion refers to individuals and businesses having access to useful and affordable financial products and services that meet their needs—transactions, payments, savings, credit, and insurance—delivered in a responsible and sustainable way.

3 A "transaction account" refers to a financial account that can be used for deposits and withdrawals from a variety of services related to payments, savings, credit, and insurance.

4 The Global Findex 2021 database includes 13 countries collected in early 2022. Data for all countries is available at: https://globalfindex.worldbank.org.

The lessons in this report come from global examples of financial inclusion progress, particularly lessons involving the strategic use of digital technology—whether used to improve the front-end customer experience through digital delivery channels or to enhance efficiency at the back end to reduce costs along the value chain.[5] The report also presents implementation considerations with the potential to translate into digital financial systems that more adequately serve last mile communities.

1.2 Bright spots in financial inclusion through digital innovation

Overall progress in financial inclusion was consistent between 2011 and 2021 although uneven across geographies and customer segments. Efforts to reduce disparities in financial inclusion have also had positive average effects. According to the Global Findex Database, financial inclusion gender gaps and income gaps[6] in LMICs have decreased from 10 to 6 percentage points and from 20 to 9 percentage points, respectively. The Global Findex shows that the expansion of digital finance contributed to much of this progress. However, Figure 1 illustrates how uneven that progress has been since a significant gender gap remains in all regions, despite account ownership for both women and men having increased everywhere. In India, for example, considerable growth in access to transaction accounts and the rollout of digital public infrastructure such as the Unified Payments Interface (UPI), an instant payment platform, completely closed the gap in account ownership by 2022, although a gender gap in the use of those accounts remains.[7]

Digital financial services (DFS) have helped to break barriers in unserved and underserved markets as the adoption of technology transformed the way banks and nonbanks interact with end users. Thanks to online banking, mobile apps, contactless payments, electronic signatures, and digitally enabled ID systems, newer approaches to financial inclusion have opened up. In Sub-Saharan Africa, for example, DFS adoption was driven by mobile money, which helped to increase account ownership by allowing adults to access financial services through mobile phones. Between 2014 and 2021[8], account ownership among women rose 13 percentage points from 30 percent to 43 percent (Figure 2).

The value of DFS in LMICs became particularly evident during the COVID-19 pandemic. Lockdowns and social distancing led to a significant increase in the use of DFS. For example, governments worldwide used digital payment systems to distribute social assistance transfers and emergency relief funds directly into accounts for those in need. By 2021, among the 22 percent of adults receiving government payments in developing economies, 66 percent received them digitally.

Despite the trend toward digital innovation and the narrowing of gender and income gaps in access to financial services, disparities still exist and must be addressed as part of ongoing financial inclusion initiatives. To better understand these disparities and why they persist, more granular analysis is warranted to gather details on populations that have remained financially excluded and explore their specific constraints.

5 Denyes et al., 2020.

6 The financial inclusion gender gap, as measured by the Global Findex, refers to the difference between the percentage of men and the percentage of women who own an account. The financial inclusion income gap refers to the difference between the percentage of adults who own an account in the richest 60 percent of households and the percentage of adults who own an account in the poorest 40 percent of households.

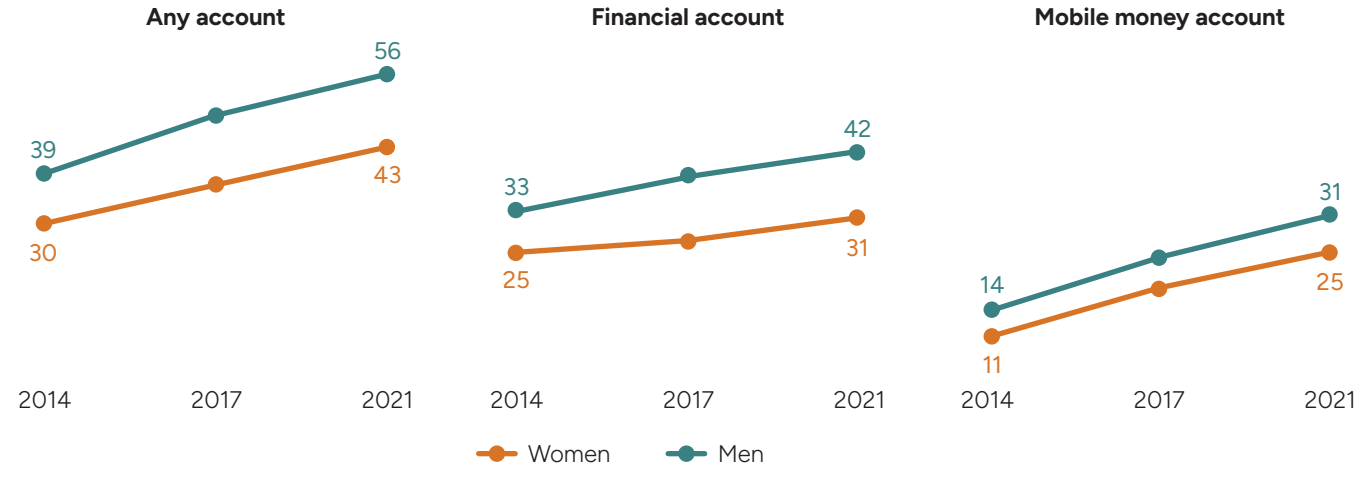
7 Duvendack et al., 2023.

8 Global Findex data introduced indicators of mobile money ownership and use in 2014.

FIGURE 1. **Gender gaps in account ownership by region and year**

Source: Global Findex 2021.

FIGURE 2. **Gender gaps in account ownership in Sub-Sahara Africa, by account and year**



Source: Global Findex 2021.

1.3 Who must last mile financial inclusion initiatives reach?

Global Findex 2021 data finds that 1.5 billion adults in LMICs remain financially excluded. These individuals are referred to as last mile population segments and are the focus of this report. They face several individual or overlapping factors that affect their interest and ability to open and use a transaction account (see Figure 3). These include but are not limited to large-scale factors related to where they live, their gender, income, rural residency, and workforce participation, as well as granular factors such as being a member of an indigenous group, a migrant, a smallholder farmer, or a person with a disability, among others. Some of these topics are explored below.

GEOGRAPHY

Virtually all last mile population segments live in LMICs, with slightly more than half concentrated in just seven countries: India (230 million), China (130 million), Pakistan (115 million), Indonesia (100 million), Nigeria (64 million), Bangladesh (57 million), and the Arab Republic of Egypt (50 million).

These countries are among the world's most populous nations, creating added challenges for national financial inclusion programs. For example, although China and India have successfully promoted transaction account ownership, their populations are so large and spread over such broad geographic areas that their 89 percent and 78 percent financial inclusion rates, respectively, still leave tens of millions excluded from the formal financial system.

Beyond prioritizing countries with the highest number of financially excluded adults, financial inclusion efforts should also consider countries with a high relative proportion of financially excluded individuals, like those in fragile and conflict-affected situations (FCS) and Small Island Developing States. Climate-vulnerable LMICs also experience lower-than-average account ownership rates. Yet more than four out of five of the world's financially excluded individuals—more than 1 billion people—reside in the most climate-vulnerable countries.[9] When disaster strikes, these populations are at particular risk of losing income or assets.[10] They could greatly benefit from secure, affordable, and convenient financial services.

GENDER, INCOME, RURAL RESIDENCY, EMPLOYMENT, AND AGE

Within countries, divisions exist between those with financial access and those without. Regression analysis finds that financially excluded adults are significantly more likely to be women than men, more likely to live in the lowest 40 percent of households by income versus in the wealthiest 60 percent, more likely to be out of the workforce, and more likely to be younger than 24 years of age than older.

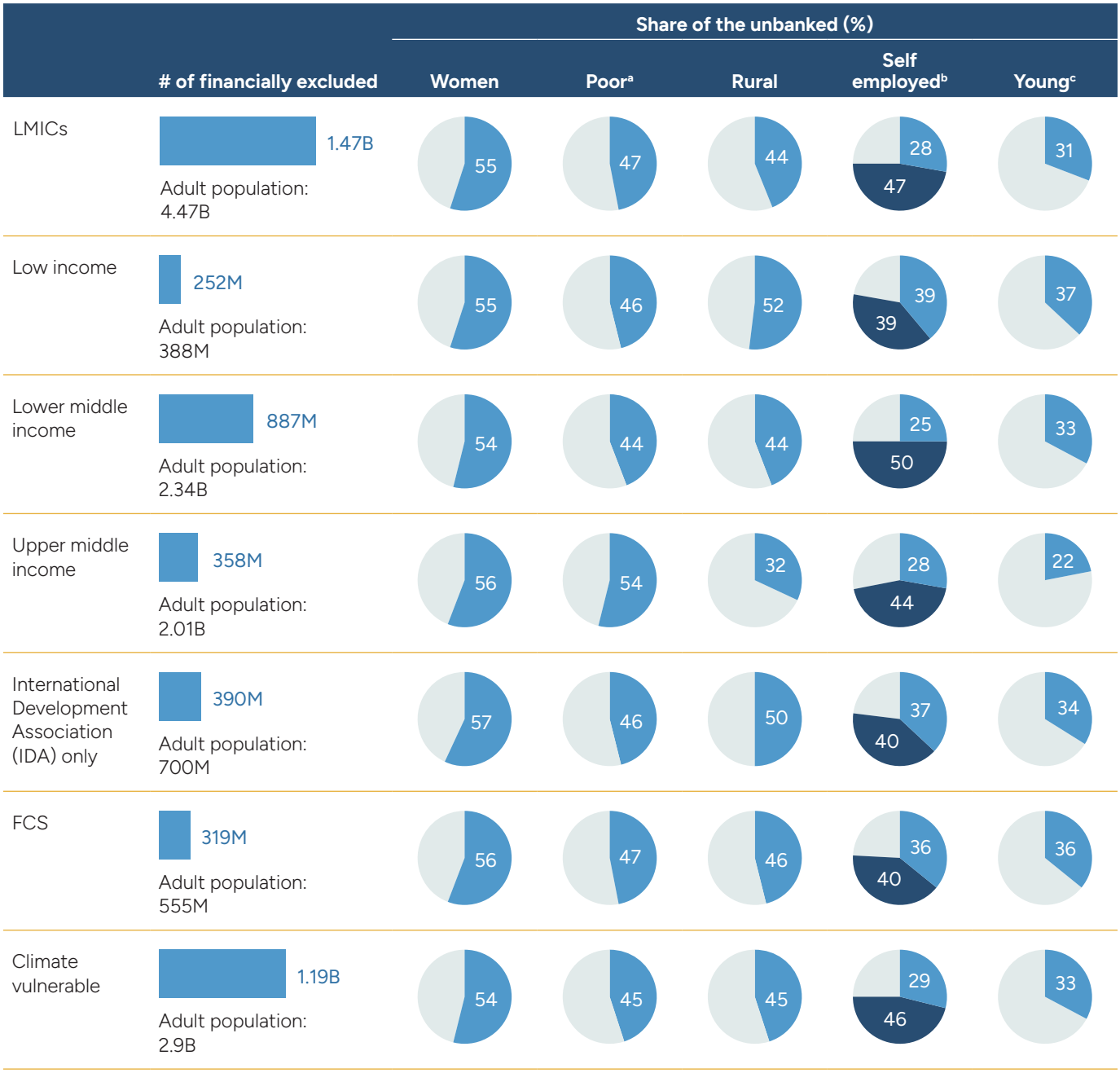
Specific to gender, over 800 million of the more than 1.5 billion unbanked adults in LMICs—or 55 percent—are women. A significant gender gap in account ownership persists even in developing economies with high account ownership rates.

Women's lower financial inclusion rates are likely due to specific barriers to inclusion, including discriminatory or unintentionally biased gender norms such as legal and regulatory barriers and systematic underrepresentation in economic and financial activities. Women also have less access to inclusion enablers such as IDs, mobile phones, education, and formal employment, which makes it challenging for them to engage with the formal financial sector and to gain digital and financial literacy. Social norms related to mobility, time

9 UNSGSA, 2023.

10 Hallegatte et al., 2020.

FIGURE 3. **Percentage of people without a transaction account, by region and individual characteristics**



Note: Numbers within shaded pie graphs indicate the prevalence of the column group among the unbanked. For row group estimates of the number of unbanked individuals who are members of each column group, multiply the percentage by the total number of unbanked in the row group.

Excluded (gray) groups include, respectively: 'unbanked men'; 'unbanked adults in the richest 60% of households in a country'; 'unbanked urban residents'; 'unbanked adults who are wage employed (or a small number who are unemployed)', and 'unbanked adults are are aged 25+'.

a 'Poor' denotes adults in the poorest 40% of households in a country.
b Light blue shading represents self-employed adults, dark blue denotes those out of the workforce.
c Adults aged 15-24 are classified as 'young'.

Source: Global Findex 2021.

constraints, and agency also create obstacles that result in limited livelihood opportunities.[11]

Women's lack of inclusion becomes self-reinforcing in a digitalizing economy because women lack transaction histories that could allow financial institutions to identify their needs and calculate risk profiles. Where data is available it is not always disaggregated by sex, making it difficult to understand the specific issues women face. Finally, FSPs may show biased attitudes and lack sensitivity in developing products, user experiences, and channels for women.[12]

Specific to income level and rural residency, according to the Global Findex, almost 700 million individuals across all last mile population segments (47 percent) live in the poorest 40 percent of households and 650 million (44 percent) are rural dwellers. This latter percentage is higher in regions with great reliance on agriculture, such as in Sub-Saharan Africa where 55 percent of unbanked adults are rural dwellers. Low rural inclusion rates are due in part to low levels of financial services availability in those areas. Poor infrastructure—including telecommunications networks, reliable electricity grids, and roads—and low population density increase the costs to serve rural customers, who are also less likely to have high levels of financial and digital literacy. These conditions give FSPs few incentives to emphasize rural areas, resulting in low-end user trust in and awareness of financial providers.

Age also plays a role. The Global Findex shows that 66 percent of youth between 15 and 24 years of age do not own a transaction account, and variations exist by region. For example, the lowest account ownership rates among youth persist in Latin America and the Caribbean (39 percent), Middle East and North Africa (32 percent), and Sub-Saharan Africa (44 percent). Various factors contribute to young people's financial exclusion, including poverty and education levels, legal age restrictions in financial regulation, and financial inclusion gaps related to gender and rurality.

There are also challenges for the elderly—a population segment that is expected to grow across all geographic regions (see the G20 Fukuoka Policy Priorities on Aging and Financial Inclusion[13]). Account ownership starts to decrease for adults in their mid-60s, and a correlation emerges between their financial exclusion and their access and use of technology. As older adults have relatively lower levels of account ownership, they also show lower levels of phone use and internet access. However, barriers to the use of financial services among older adults, such as low financial literacy, mobility, and memory, can be overcome by leveraging digital technology to offer more adequate services.[14]

Finally, low workforce participation is associated with unbanked status. Over 400 million unbanked adults in LMICs are self-employed (28 percent of the unbanked globally), whereas nearly 700 million unbanked adults in LMICs are out of the workforce (47 percent of the unbanked globally). However, regular employment does not guarantee financial inclusion: a full 250 million unbanked adults (17 percent of the unbanked globally) are wage workers who likely receive wage payments in cash.

SMALLHOLDER FARMERS

Smallholder farmers contribute to more than 30 percent of the world's food supply and support nearly 500 million households globally.[15] Despite their crucial role, nationally representative surveys conducted by CGAP in six African and Asian countries suggest that

11 Klapper et al., 2021.

12 Alonso and Dezso, 2024.

13 GPFI and OECD, 2019.

14 Klapper and Hess, 2019.

15 Olson Onyango, 2024.

only 35 percent of smallholders own an account.[16] And although 76 percent of smallholders use mobile phones, they may face other barriers to financial access, such as a lack of formal identification and required documentation to open an account.

Global Findex 2021 data similarly shows that whether banked or not, three-quarters of agricultural payment recipients—many of whom are smallholder farmers—are paid only in cash. In other words, more than 140 million adults (66 million of them women) receive cash payments, leaving them vulnerable to loss or theft and requiring travel in order to collect their money.

CUSTOMIZING APPROACHES FOR MSMES, INDIGENOUS POPULATIONS, MIGRANT POPULATIONS, AND PEOPLE WITH DISABILITIES

While broad characteristics such as geography and gender provide some idea of the challenges and needs of last mile population segments, the tools required to reach them depend on context, especially for underserved populations such as micro, small, and medium enterprises (MSMEs), indigenous populations, migrant populations, and people with disabilities. As such:

- **MSMEs**[17] represent around 90 percent of businesses worldwide and their employees constitute more than 70 percent of the labor force. In developing economies, about 70 percent of all MSMEs are informal firms operating outside the legal and regulatory system.[18] Research finds that about 40 percent of MSMEs in developing countries have unmet financial needs and face a finance gap of about US$5 trillion. Regionally, the largest shares of this global finance gap are in East Asia and the Pacific (46 percent), followed by Latin America and the Caribbean (23 percent), and Europe and Central Asia (15 percent).[19] One reason for this mismatch is because traditional FSPs lack sufficient information on MSME cash flows to assess risk. As a result, FSPs require higher value collateral and charge higher interest rates, which dissuades MSMEs from taking loans.[20] Women-owned firms account for a third of all MSMEs worldwide and face an estimated financing gap of US$1.4 to US$1.7 trillion. The digitization of MSME payment transactions offers lenders real-time visibility into their economic activity and opportunities to collateralize future cash flow with embedded financial products.[21]

While broad characteristics such as geography and gender provide some idea of the challenges and needs of last mile population segments, the tools required to reach them depend on context.

- **Indigenous populations** likewise require particular attention. While an estimated 470 million indigenous people make up approximately 6 percent of the global population, they also comprise 19 percent of the world's extremely poor population.[22] Although governments have made progress in recognizing the land ownership rights of indigenous people, they nonetheless face insecure land tenure, which correlates with a high incidence of conflict, environmental degradation, and weak economic and social development. These conditions contribute to the financial exclusion

16 Anderson et al., 2019.

17 For a more complete discussion on this please also see forthcoming GPFI's G20 MSME Finance Action Plan 2.0

18 Ohnsorge and Yu, 2022.

19 IFC, 2019.

20 Chhabra and Sankaranarayanan, 2019; Istuk, 2023.

21 World Bank, 2022c.

22 Dhir et al., 2020.

of indigenous communities and their reliance on limited informal financial mechanisms.[23]

- **Migrants** also deserve special mention. Globally, there are an estimated 281 million international migrants, defined as people born abroad or those who hold foreign citizenship in their host country.[24] About 60 percent of global migrants moved voluntarily for work while 42 percent were forcefully displaced by conflict, climate change, or another factor. [25] Regardless of their origin or destination, affordable financial services are key tools in ensuring that migrants can economically integrate into their host countries and achieve financial security. Remittances are one of the most relevant financial use cases for migrant populations and sometimes constitute a first step into the regulated financial sector for these individuals and their families.[26] According to World Bank data, remittance flows to LMICs reached US$656 billion in 2023.[27] Yet discriminatory or unintentionally biased practices, language barriers, and lack of appropriate documentation often prevent migrants from accessing financial services and force them to rely on informal financial mechanisms with higher costs and lower security.[28] Digitalization of remittances between transaction accounts presents a unique opportunity to reduce costs and accelerate access to and usage of financial services for migrant populations. While the costs of remittances have been declining, they remain high. In Q1 2024, the average cost of sending US$200 was 6.35 percent—3.35 percentage points above the target of 3 percent established in SDG 10.c. However, it should be noted that the global average for digital remittances was much lower (4.96 percent in Q1 2024).[29] Despite this observation, cash-based remittances remain prevalent around the world. In fact, 2022 research indicated that only 53 percent of remittance users leveraged digital means to send money[30] for several reasons, including low financial and digital literacy, a lack of readily available digital channels, and challenges in terms of exchange controls in some markets, among others.[31]
- **People with disabilities** comprise more than one billion members of the global population. Of that number, approximately 80 percent live in developing countries. In addition, 20 percent of the world's poorest people live with a disability. Most people with disabilities in developing countries work in the informal sector and approximately 80 percent are self-employed. They may therefore suffer barriers to financial inclusion not only due to disability but also due to being part of another vulnerable group (e.g., poor, unemployed, living in remote communities). While financial inclusion is critical to enhancing personal and economic empowerment, people with disabilities may face specific barriers in access to formal financial services, including discrimination, challenges in obtaining assistive devices, lack of appropriately trained staff at financial institutions, low levels of education, and lack of data to identify their needs. AFI identified three areas financial regulators may consider to advance financial inclusion among people with disabilities: adaptive fintech as a tool for financial institution access; national financial inclusion strategies focused

23 Barron et al., 2023; BIS, 2023c.

24 UNDESA, 2020.

25 UNHCR, 2023.

26 Ardic et al., 2022.

27 World Bank, 2023a.

28 UNCDF, 2022.

29 World Bank Remittance Prices Worldwide database.

30 Visa, 2023.

31 Ardic et al., 2022.

on access, use, and quality of financial services; and collection of data disaggregated by type of disability, age, and sex.[32]

The G20 High-Level Policy Guidelines on Digital Financial Inclusion for Youth, Women, and SMEs, presented under the Saudi Arabia G20 Presidency, provide policy options to target financial inclusion gaps for these groups, as discussed above.[33]

1.4 Barriers that prevent FSPs from serving the last mile

DEMAND-SIDE BARRIERS

Last mile population segments often lack access to some of the essential enablers of transaction account ownership, including access to an ID and the additional documentation FSPs require to fulfill customer due diligence (CDD) during account opening; access to a mobile phone, which is an increasingly effective financial delivery channel for low-income customers; and access to the internet (or, to a lesser extent, mobile USSD connectivity), which is increasingly used to offer a more diverse set of valuable financial services use cases (see Figure 4). From the perspective of MSMEs, informality, lack of business registration, and lack of adequate formal credit histories and financial statements can constitute a hurdle to financial inclusion.

According to the Global Findex 2021, of the 1.5 billion people financially excluded in LMICs, 16 percent have no ID, 33 percent have no mobile phone, and 67 percent have no internet access. These constraints vary in severity from one region to another. For example, lack of ID and other required documentation is more prevalent in Sub-Saharan Africa, affecting 31 percent of financially excluded individuals. Lack of a mobile phone is most prevalent in Sub-Saharan Africa (51 percent of those excluded), South Asia (44 percent of those excluded), and Latin America and the Caribbean (25 percent of those excluded). The lack of internet access is prevalent across all regions.

Another barrier relates to an individual's distance from and trust in financial institutions, as well as their personal financial literacy. According to the Global Findex 2021, 32 percent of adults who do not have a bank account say the closest bank is too far away while 23 percent say they do not trust formal financial institutions. As for financial literacy, 63 percent of those financially excluded in LMICs would need help from a family member or an agent to use a transaction account.

The barriers to financial inclusion of last mile populations described above have their root causes in (i) sociocultural norms that discriminate or show unintentional bias against them, and (ii) infrastructure gaps and the geographic remoteness of where they live, which complicates the viability of FSP operations. Both of these factors can induce gaps between last mile populations and the rest of the population regarding education, health, income, assets, infrastructure, and individual agency.[34] These gaps make it difficult for last mile population segments to acquire the enablers of account ownership (i.e., IDs, phones, internet; exposure to financial institutions). Furthermore, these gaps reduce the value of financial services for last mile population segments even if they have access to an account, given the limited livelihood opportunities they have access to.

For example, sociocultural norms that lead parents and caregivers to deprioritize girls in acquiring skills and education relative to boys can later result in gender gaps in economic inclusion levels among last mile communities. And with less economic inclusion, women find it harder to acquire the essential enablers of account ownership mentioned above and find less value in financial services that may help develop their

32 AFI, 2023a.

33 GPFI, 2020.

34 See Encinas-Martin and Cherain, 2023; Arnold et al., 2021.

FIGURE 4. **Access to ID and connectivity by region**

	# of financially excluded	Share of the unbanked (%)		
		No ID	No phone	No internet
East Asia & Pacific	341M (20%) Adult population: 1.68B	14	15	50
Europe & Central Asia	76M (23%) Adult population: 331M	7	13	35
Latin America & Caribbean	149M (33%) Adult population: 453M	6	25	48
Middle East & North Africa	149M (54%) Adult population: 273M	12	19	48
South Asia	432M (32%) Adult population: 1.34B	14	44	82
Sub-Saharan Africa	333M (51%) Adult population: 659M	31	51	88

Note: Excluded groups include, respectively: 'unbanked adults with ID'; 'unbanked adults with a phone'; and 'unbanked adults with internet access'; 'unbanked adults who did not receive a G2P payment'.

Source: Global Findex, 2021.

livelihoods. This is because they face gaps in education and skills that reduce their likelihood of pursuing livelihood-enhancing opportunities like starting a micro enterprise or pursuing an academic degree, for which an account that enables access to financial services would be useful.[35]

Similarly, the geographic remoteness of some last mile communities can contribute to their lack of political representation in local and national governments. This, in turn, can lead to a deprioritization of public investments in education, health, and infrastructure in last mile communities, which contributes to their lower economic inclusion rates relative to more urban

35 See Encinas-Martin and Cherain, 2023; Arnold et al., 2021.

communities. Lower economic inclusion also leads to last mile population segments not having the essential enablers to account ownership and not finding significant use for many of the types of financial services FSPs may offer.[36]

SUPPLY-SIDE BARRIERS

FSPs also face supply-side barriers that add to the challenges of serving last mile population segments (see Figure 5). Low population density in the places where underserved groups tend to live (e.g., rural and peri-urban areas) is one barrier. Here, the costs of setting up financial services points like branches, agents, and ATMs are higher and more challenging to recover as there are fewer customers from which to generate business revenue. Since the customers also tend to be lower income, the profit potential from serving them is also lower relative to customers in more urban settings. Furthermore, when FSPs enjoy high profitability from serving wealthier customers, the incentive to invest in developing financial solutions for last mile segments is low—especially in uncompetitive financial market environments where new entrants find it difficult to compete for customers. The challenges of developing viable financial business models that make it worthwhile to build financial infrastructure along the last mile have prevented many FSPs from serving these vulnerable segments.[37]

Poor infrastructure (e.g., roads, electricity, mobile networks, internet) also affects the ability of FSPs to serve these communities. Higher operational costs translate into higher customer service fees, which affects financial services affordability. In fact, 36 percent of adults who lack a bank account say they do not have one because financial services are too expensive.

Discriminatory or unintentionally biased social and cultural norms are supply-side barriers that have also influenced FSP product offerings and customer support processes such that they are insensitive to the needs of last mile populations. This can lead to a lack of investment in capturing data on underserved customer groups to identify ways to make products and processes that address their needs, as previously mentioned in the sections on gender and people with disabilities, for example. FSPs may also choose not to develop service lines for last mile population segments as new customers based on the presumption that these segments will not be profitable.[38]

Another barrier that makes it difficult in practice to tailor financial services to the needs of last mile customers relates to the relatively high investment costs FSPs may face when they need to change their legacy business models to better serve last mile customers. Legacy business models built with the intent to serve more affluent customer segments in a business's earlier growth phase sometimes require adaptation to better serve lower-income customers. Furthermore, the incentives to make such investments and change legacy business models to be more inclusive are low when there is little competition in financial markets.[39] A lack of competition may also be associated with a concentration of market power among a few FSPs and higher costs for all customer types.

Prevalent norms can also influence financial regulation and policies in ways that add supply-side barriers. For example, research attributes social or cultural norms rather than considerations of risk or stability to the origins of financial regulation and policies that define due diligence processes requiring women to have a male family member's permission before entering a legal contract.[40] Such regulatory measures

36 OECD, 2024; Conning and Udry, 2007.

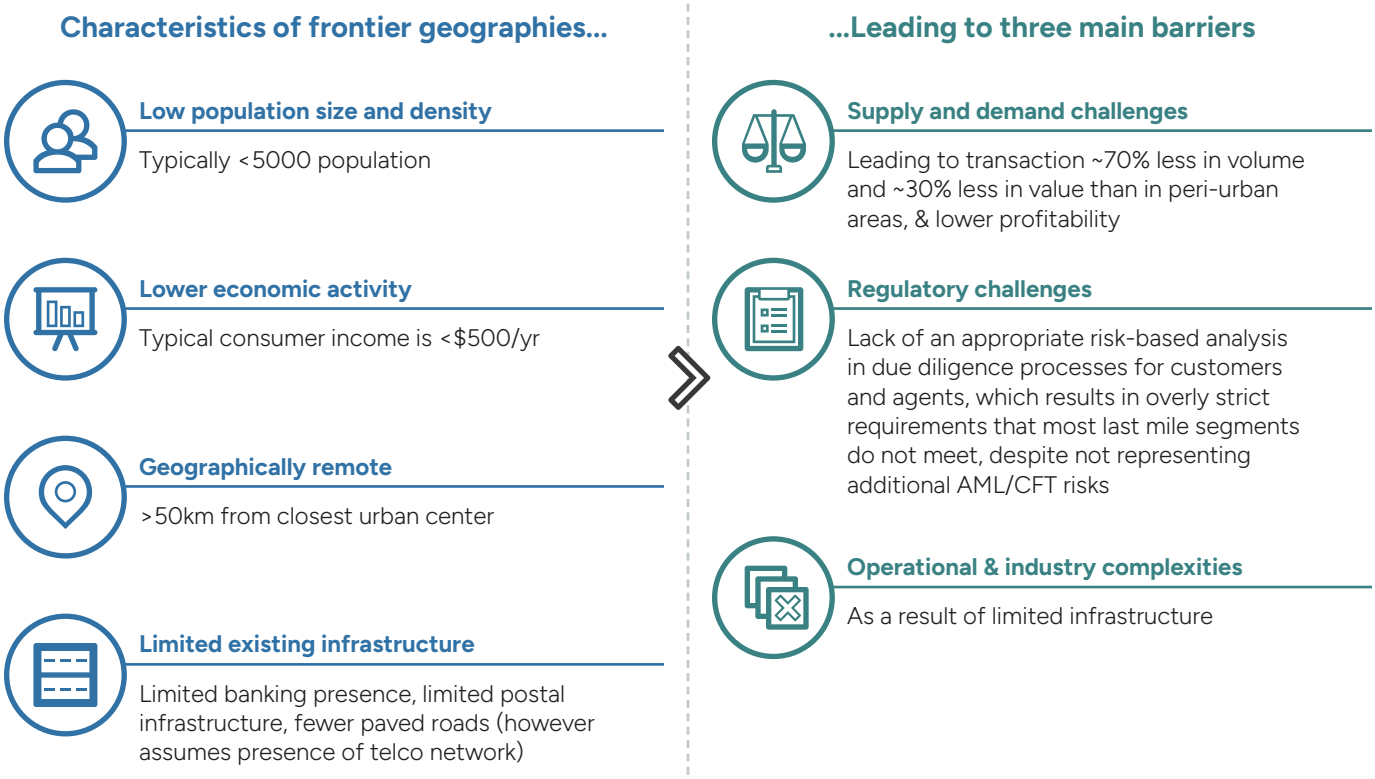
37 Hernandez et al., 2020.

38 See Koning et al., 2021; Alonso and Dezso, 2024.

39 Feyen et al., 2021.

40 See Perrin and Hyland, 2023.

FIGURE 5. **Barriers preventing FSPs from establishing viable financial service points**



Source: Adapted from Hernandez and Blackburn, 2022a.

make it harder and more cumbersome for FSPs to onboard women customers. These types of regulatory requirements also reduce women's access to financial services by limiting their agency.[41] Chapter 3 presents more examples of regulatory constraints faced by last mile population segments.

Solving supply-side barriers can help overcome some demand-side barriers. For example, with adequate agent regulation in place, FSPs can properly train and monitor financial agents to serve as connections along the last mile in communities with low financial inclusion rates. Agent network expansion correlates with an increase in active accounts in the communities where they operate.[42] Agents can help explain financial services features and functionality and direct customers to FSP support systems. Since financial agents tend to come from within the local community, they also tend to be more trusted by first-time customers who may be unfamiliar with financial institutions.[43]

Based on this understanding of unbanked populations and the barriers they face, the following chapters discuss lessons that can inform public policy and public investment options for reducing these demand and supply constraints for last mile segments. These policy and investment options simultaneously affect many of the constraints described.

41 See World Bank, 2024e.

42 See CNBV, 2018; Garcia Arabehety et al., 2018.

43 Hernandez, 2019a.

RECOMMENDED RESOURCES

- The Global Findex 2021 (World Bank, 2022)
- The Future of Financial Inclusion (CGAP, 2023)
- Igniting SDG Progress through Digital Financial Inclusion (UNSGSA, BTCA, UNCDF, CGAP, and World Bank, 2023)

1.5 Why does financial inclusion matter at the last mile?

The financially excluded groups described above represent a large portion of the world's poor people, with most being women, living in rural areas, working in informal jobs associated with MSMEs or unemployed, and facing higher risks from conflict and climate change (see Figure 3). They also represent the most vulnerable population segments targeted by the 17 SDGs.

Evidence suggests that 13 of the 17 SDGs can be accelerated by enabling digital financial inclusion at the last mile.[44] This is particularly important as recent assessments of SDG progress estimate that only 15 percent of goals are on track.[45] Therefore, efforts to promote financial inclusion are an essential contribution to accelerating progress toward the SDGs.

It is essential for governments, policy makers, regulators, FSPs, and civil society to reinforce efforts to ensure that high quality and responsible financial services reach remaining financially excluded population segments. Inclusive financial systems not only accelerate SDGs achievement but can prevent a widening digital, economic, and well-being divide between excluded and included population segments around the globe.[46] Furthermore, the monitoring of efforts to include last mile population segments should align with the timeframe of important broader development efforts at the country level and track progress of global initiatives like the SDGs.

The following chapters discuss lessons that can inform public policy options and public investments that reduce demand and supply constraints for last mile population segments.

44 UNSGSA, BTCA, UNCDF, CGAP, and World Bank, 2023.

45 United Nations, 2023.

46 GPFI, 2023.

CHAPTER 2

Foundational policy interventions and regulatory enablers necessary for financial inclusion at the last mile

2.1 Background

This chapter synthesizes lessons from the global experience to identify the key enablers—the "building blocks"—financial ecosystems should have in place to further financial inclusion at the last mile. The proposed key enablers address whole-of-market system constraints that have prevented the financial sector from reaching last mile population segments *at scale*. Absent these enablers, it is more challenging to serve the last mile as FSPs will find it harder to lower service costs and innovate with business models that are more conducive to valuable and responsible financial services for these segments.

These enablers are the foundational building blocks to the inclusion of the millions who joined the formal financial system over the past decade. The discussion below centers on why certain enablers remain necessary for last mile populations and underscores the crucial role of public policy in their implementation. Overcoming barriers to financial inclusion at the last mile requires strategic public policy consideration to promote the enablers in markets where they have yet to be effectively implemented.

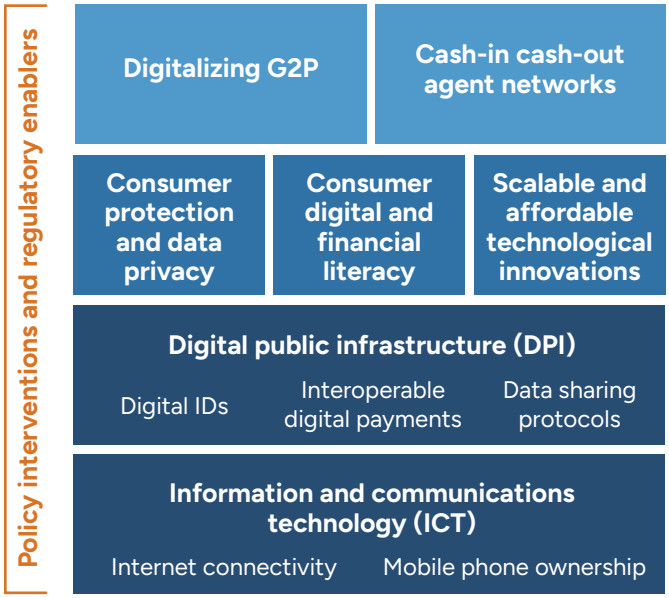
However, more recent global efforts suggest these building blocks are not sufficient. In addition to the whole-of-market enablers presented in this chapter, there is a clear need for tailored public policies and public investments focused on reducing the gaps in knowledge, resources, and capabilities only experienced by most last mile populations and the FSPs aspiring to serve them. The following chapter introduces suggested public policies and public investments to highlight the necessity of individualized approaches.

BUILDING ON THE G20 HIGH-LEVEL PRINCIPLES FOR DIGITAL FINANCIAL INCLUSION TO IDENTIFY KEY ENABLERS FOR REACHING THE LAST MILE

The key enablers for inclusive digital finance systems are derived from the G20 high-level principles (HLPs) for digital financial inclusion the GPFI presented in 2016 (see Annex A) and the guidelines for their implementation presented in 2022. Based on this analysis, the building blocks represent the market elements that should be in place once the HLPs are implemented.[47] The enablers are also consistent with the more focused Payment Aspects of Financial

47 See GPFI, 2016a; GPFI, 2022.

FIGURE 6. **Key enablers necessary to advance financial inclusion of last mile population segments at scale**



Source: Authors' analysis.

Inclusion proposed in 2017.[48] Figure 6 lays out the key proposed enablers.

Figure 6 presents the enablers in layers that ideally build on each other—from foundational layers like information and communications technology (ICT) and digital public infrastructure (DPI) to customer-facing service layers like digitalizing government-to-person (G2P) transfers and agent networks. It also includes the cross-cutting regulatory and supervisory layers in between that enable consumer protection and data privacy, customer digital and financial literacy, and the development of new scalable and affordable technological innovations.

Each enabler is discussed below, with an emphasis on why it matters for financial inclusion at the last mile.

Implementation considerations are also offered for relevant public policies and public investments that ensure benefits to last mile population segments. Throughout, gender-intentional approaches to designing the policy options offered are needed to remove biases that prevent serving the needs of women and other last mile population segments.

2.2 Ensuring affordable access to information and communications technology and digital public infrastructure

INFORMATION AND COMMUNICATIONS TECHNOLOGY

The reach and affordability of ICT at the last mile is critical for financial inclusion. From a geographical standpoint, the ability to remotely connect with customers living in more rural areas through internet and mobile connectivity has revolutionized service delivery channels for those residents.[49] For this reason, although many relevant policy and regulatory frameworks for ICT may fall outside the mandate of financial sector authorities, the increasing overlap of ICT and financial industry players should encourage financial policy makers and regulators to explore coordination and collaboration with their ICT-sector counterparts. Coordination should aim to define joint implementation strategies that encompass the financial inclusion of last mile populations as one objective.[50]

KEY LAST MILE IMPLEMENTATION CONSIDERATIONS

The main goal should be to enable public or private mobile networks and internet connectivity providers to viably offer services where last mile population

48 World Bank and BIS, 2017.

49 Highet et al., 2021.

50 GPFI, 2017a.

segments live.[51] More successful strategies tend to involve public-private partnerships where providers are offered targeted public subsidies to serve last mile communities (e.g., public credit guarantees, debt or equity funding, small grants, leverage public schools or health clinics as service points). On their side, providers invest in a cooperative model of sharing common infrastructure in these areas (e.g., mobile network towers, fiber networks).[52] In addition and just as importantly, targeted public subsidies can be directly offered to vulnerable last mile individuals for acquiring mobile phones or purchasing data, accompanied by efforts to develop their digital and financial literacy to increase the value of owning a mobile phone.[53]

POLICY AND REGULATORY OPTIONS FOCUSED ON THE LAST MILE

1. Promote a dialogue between financial and communications authorities to identify ways mobile and internet connectivity reaches everyone, including those currently inadequately serviced.
2. Pursue and encourage cooperation among digital service providers to share the costs of building the infrastructure required to provide last mile communities with such services.
3. Enable vulnerable populations with the minimum devices required to access and use digital services, such as low-cost feature phones or smartphones, and/or subsidize the cost of data.
4. Consider specifying a social purpose spectrum of licenses for providers servicing last mile areas.[54]

EXAMPLE: ICT INFRASTRUCTURE SHARING APPROACHES FOR VIABLE SERVICE PROVISION AT THE LAST MILE

The European Union's experience demonstrates one of several ways to promote public-private partnerships for ICT at the last mile. For the past 20 years, the EU has expanded its mobile networks through tower-sharing schemes. The initiative has reduced unit costs, produced higher returns on investment, and increased competition, resulting in lower prices and improved reach and quality of coverage in rural areas.[55] Similarly, infrastructure sharing approaches in developing countries have had positive effects. According to the IFC,[56] the cost of mobile phone calls in Colombia was rising by 0.15 percentage points until 2011 when the two largest MNOs transferred a large portion of their tower portfolio to an independent company that managed them as shared infrastructure. The price of calls as a percentage of income per capita declined by 1.5 percentage points per year, and the price of mobile broadband fell by 3.3 percentage points per year between 2012 and 2017. In Nigeria, once the country's three largest mobile network operators (MNOs) transferred their assets to independent tower companies, the price of mobile internet access as a percentage of gross national income per capita declined by 3 percentage points per year compared to just 0.4 percentage points the year prior.

RECOMMENDED RESOURCES

- Development of National Broadband Plans in Latin America and the Caribbean (IDB, 2021)
- Affordable Devices for All: Innovative Financing Solutions and Policy Options to Bridge Global Digital Divides (World Bank, 2023)

51 GSMA, 2024.

52 See Amin and Gallegos, 2023; Gallegos et al., 2018.

53 Highet et al., 2021.

54 Garcia-Zaballos et al., 2021.

55 Koutroumpis et al., 2023.

56 Strusani and Houngbonon, 2020.

- Network Adoption Subsidies: A Digital Evaluation of a Rural Mobile Phone Program in Rwanda (Björkegren and Karaca, 2022)

DIGITAL PUBLIC INFRASTRUCTURE

DPI is defined as "interoperable, open, and inclusive infrastructure supported by technology to provide essential, society-wide, public and private services digitally."[57] *Digital IDs, digital payments,* and *data sharing protocols* are the key components of DPI for financial inclusion. As discussed below, they can improve DFS access, affordability, and innovation by lowering costs and enabling competition, particularly in last mile areas.[58]

Furthermore, considering the diverse approaches of G20 members to digital transformation as per the August 2023 G20 Digital Economy Ministers Meeting Outcome Document,[59] it is recognized that DPI is an evolving concept that may not be limited to sets of digital systems with these characteristics and could be tailored to specific country contexts and referred to using different terminologies.

The role of DPI in financial inclusion is discussed in detail in the 2023 G20 Policy Recommendations for Advancing Financial Inclusion and Productivity Gains through Digital Public Infrastructure.[60] The analysis offered here, therefore, focuses on the relevance of DPI for last mile population segments and shares important implementation considerations for overcoming the barriers faced by these excluded segments.

The analysis offered here, therefore, focuses on the relevance of DPI for last mile population segments and shares important implementation considerations for overcoming the barriers faced by these excluded segments.

Digital IDs

As countries increasingly rely on digital networks to deliver public and private services, digital ID systems offer great potential in supporting identity verification while reducing FSP costs to conduct adequate CDD to securely authenticate customers and obtain e-signatures and remote customer consent. This is in comparison to the more traditional paper-based ID systems.

The enhanced accuracy and significant cost reductions digital ID systems can potentially provide are particularly relevant to reaching last mile population segments. Good practices to implement digital IDs have been well documented, including the FIGI toolkit for regulatory authorities on digital IDs for financial inclusion[61] and the G20 Digital Identity Onboarding report.[62] Digital ID systems should continue to be pursued in markets where they have yet to be fully implemented to enable financial inclusion at the last mile.

57 Alper et al., 2023.

58 GPFI and BTCA, 2018.

59 G20, 2023.

60 Alper et al., 2023.

61 World Bank, 2021b.

62 GPFI and World Bank Group, 2018.

KEY LAST MILE IMPLEMENTATION CONSIDERATIONS

Recent lessons on how digital ID initiatives are inclusive of last mile populations focus on three main aspects:

1. Since these vulnerable groups are heterogeneous and tend to be excluded from a wide array of services, scant information about them is usually available. Ideally in such cases a local assessment is conducted in collaboration with community organizations to identify the constraints they face when participating in ID initiatives (e.g., assessing available documentation, alternative ways to verify identities through community groups).[63] Insights collected can inform more effective ID system implementation strategies and enable more valued ID use cases.[64]
2. The development of feasible offline solutions in the identification process should be prioritized, considering how most last mile populations have limited mobile and internet connectivity. Recent developments include the use of IDs with QR codes that are digitally signed by the issuing authority and verifiable in offline settings, such that identity proofing and authentication can be performed in offline settings. Another potential solution includes smart cards that store information for offline verification while requiring that devices are read off line.[65]
3. Governments should proactively track the proportion of last mile population segments that have acquired IDs to inform the need for additional interventions which further increase adoption of IDs among such segments.[66]

POLICY AND REGULATORY OPTIONS

1. Promote a dialogue between financial and identification authorities to enable simplified and risk-based identification and verification requirements that can be met by all population segments.
2. Assure that identification issuance and verification processes are viable in offline settings.

EXAMPLE: STREAMLINING IDENTITY SYSTEMS IN NIGERIA

The Nigerian Identity Management Commission (NIMC) created a new National Identity Database built around the issuance of unique National Identification Numbers (NINs) and a multipurpose smartcard with offline verification capabilities. The goal was to streamline the country's existing ecosystem of multiple identity systems. To stimulate use of the ID card, NIMC began to offer networked financial services as one application on its smartcard. Since 2013, it has partnered with MasterCard, Visa, and Verve, a local payment network. NIMC also works with local banks to link cards to prepaid bank accounts so they can be used to pay for goods and services. By 2023, 104 million people had NINs, well on track toward the country's targets.[67]

RECOMMENDED RESOURCES

- G20 Policy Recommendations for Advancing Financial Inclusion and Productivity Gains through Digital Public Infrastructure (GPFI, 2023)
- Digital ID to Enhance Financial Inclusion: A Toolkit for Regulatory Authorities (World Bank, 2021b)
- ID4D Practitioner's Guide (World Bank, 2019)

63 World Bank Group, 2022.

64 World Bank, 2024b.

65 See MOSIP, 2024; World Bank ID4D, 2023.

66 Women's World Banking, 2023a.

67 World Bank, 2024d.

- Principles on Identification for Sustainable Development: Toward the Digital Age (World Bank, 2021d)

Interoperable Digital Payments

Digital payments delivered through transaction accounts serve as the primary gateway for accessing other financial services in many LMICs. However, the customer experience is often fragmented due to closed-loop solutions[68] among network operators, financial institutions, and third-party providers. Fragmentation results in higher operational costs for providers, limited value for customers, and inconsistent customer experience and service offerings. Last mile populations are susceptible to such frictions, given the high costs associated with services and the distrust in FSPs often exhibited by first-time users.

Interoperable payment systems that include a diversity of FSPs can help address frictions by reducing barriers for customers to use DFS beyond their providers' networks, removing barriers to market entry for smaller FSPs, and creating economies of scale that reduce operational costs through shared systems and infrastructure.[69]

KEY LAST MILE IMPLEMENTATION CONSIDERATIONS

Emerging considerations suggest the importance of monitoring industry responses to interoperable and inclusive payment systems in last mile communities, given that results may vary depending on dominant market dynamics. Based on recent analysis,[70] consistently introducing payments with adequate governance was shown to bring lower customer fees and more diverse financial offers over time. However, FSPs should share processes and infrastructure (e.g., agent networks, AML/CFT) in order for these benefits to be felt in last mile communities. Without such industry collaboration, the benefits of interoperability may not automatically transfer to remote communities. The results could be lower customer fees and slimmer FSP margins, which may discourage the maintenance of ICT and financial infrastructure in areas where return on investment tends to be lower. In such cases, good practices involve public subsidies targeted to maintain ICT and financial infrastructure in remote areas (as exemplified in the earlier discussion of ICT and in the section below on agent networks), together with policies promoting interoperable and inclusive payment systems.

POLICY AND REGULATORY OPTIONS

1. Interoperable and inclusive payment systems are in place across all FSPs and third-party providers while monitoring and evaluating their effects on last mile population segments to be ready to support in case there is unintended service coverage contraction.
2. In the event of a contraction in the provision of services in last mile communities, pursue and encourage cooperation among digital service providers to share the costs of building the required infrastructure in remote communities.
3. Interoperable payment systems are transparent and equitable across all participants.

EXAMPLE: INCLUSIVE AND INTEROPERABLE PAYMENT SYSTEMS THAT FAVOR FINANCIAL INCLUSION AT THE LAST MILE

Brazil's Pix is an interoperable instant payment system that facilitates quick, cost-effective, and secure payments and transfers for customers and businesses. By promoting fair and open access to all financial sector players, Pix enables financial

68 Closed-loop operations refer to accounts or wallets that can only be used for transactions related to services only offered by a single service provider and its commercial partners.

69 See Negre and Cook, 2021; Cook et al., 2021; World Bank, 2021c.

70 See research from NBER and BIS: Brunnermeier et al., 2023; Bianchi et al., 2023.

inclusion and encourages competition, reducing costs and supporting diverse participants and innovative solutions. Features like alias systems, payment notifications, and QR code utilization have been particularly beneficial in attracting lower-income and underserved populations.[71] As of 2023, two years after its launch, approximately 86 percent of individuals 16 years of age and older used Pix and almost half of Brazil's population accessed DFS for the first time.[72]

RECOMMENDED RESOURCES

- Fast Payments Toolkit (World Bank, n.d.)
- Fast Payments: Design and Adoption (Frost et al., 2024)
- Starting the Transaction: Payment Initiation and Customer Experience (CGAP, 2023)
- Mobile Money, Interoperability, and Financial Inclusion (NBER, 2023)
- UN Principles for Responsible Payments (Better Than Cash Alliance, n.d.)

Data Sharing Protocols

The increasing digital trails among low-income customers, paired with enhanced data analytics capabilities, offer new opportunities to advance financial inclusion at the last mile by reducing information asymmetries between customers, FSPs, and other third-party providers. These elements can facilitate seamless CDD and onboarding, enhance pricing transparency for customers, and enable the development of innovative products and services that better meet the needs of increasing and diverse customer segments.[73] Data sharing protocols are needed to safely and transparently capture this potential while ensuring customer data privacy rights. Protocols can help standardize how data is shared and ensure its wide availability by relying on, for example, open APIs, open banking, open finance, or open data.[74]

Beyond data sharing protocols, infrastructure such as credit reporting systems, collateral registries, and fraud reporting systems can be creatively leveraged to reduce information asymmetries between FSPs and last mile customers.[75] Coupled together, these arrangements have the potential to lower the cost of credit for last mile populations and reduce the incidence of fraud, thus relieving a constraint for FSPs.

Strategies that explore how to materialize the potential of data sharing protocols for financial inclusion at the last mile could begin by assessing the percentage of people financially excluded (i.e., last mile populations) yet digitally included through their mobile phones. The 2021 Global Findex finds that in Latin America, East Asia and Pacific, Middle East and Northern Africa, and East Europe and Central Asia, 75 percent or more of those financially excluded own a phone. These individuals are mainly concentrated in India, China, Indonesia, Nigeria, and Bangladesh. Nascent research explores the types of data trails created by these digitally included vulnerable groups and how those trails may be leveraged to promote their financial inclusion. Alternative data from airtime top-ups, messaging, and social media can help FSPs design more valuable financial services for these vulnerable customers.[76] Likewise, services providers outside the financial sector in areas such as fast-moving consumer goods, utilities, and agribusinesses are also collecting data from these individuals in order to offer better products, including financial services. As more

71 World Bank, 2022b.

72 Feliba, 2023; Frost et al., 2024.

73 Plaitakis and Stachen, 2020.

74 Jenik et al., 2024; Alonso et al., 2023; OECD 2023.

75 See Women's World Banking, 2022; GPFI, 2018.

76 See Fernandez Vidal and Salman, 2023; Fernandez Vidal and Caire, 2024.

> Nascent research explores the types of data trails created by these digitally included vulnerable groups and how those trails may be leveraged to promote their financial inclusion

providers both inside and outside the financial sector leverage data to analyze customer behavior and needs and create more valuable services, it is imperative to have robust guardrails in place for the responsible use of such data.[77]

KEY LAST MILE IMPLEMENTATION CONSIDERATIONS

Building inclusive and responsible data sharing protocols through transparent participation, governance, and standards should be agreed upon in collaboration with services providers within and outside the financial sector who may hold valuable data and insights related to last mile populations.[78] Governments can facilitate public-private dialogue to design data sharing protocols that keep prices low for customers while trying to define provider interchange fees that are viable for services providers, based on new commercial partnerships that may emerge from data sharing.[79] As data sharing protocols are implemented and new provider partnerships emerge, regulators themselves need to build their own capacities as the mandate of data sharing agreements may broaden and the diversity of providers expand.

POLICY AND REGULATORY OPTIONS

1. Data sharing regulatory regimes should enable relevant products and services for last mile users based on identified needs.
2. Data sharing protocols should enable participation in a level playing field of all classes of FSPs and other relevant nonfinancial services providers to enable appropriate service provisioning.
3. Regulators and supervisors should have adequate capacity to oversee data sharing protocols with increasingly broader mandates and diverse participants.

EXAMPLE: COLOMBIA'S STRATEGY TO PROMOTE SECURE DATA EXCHANGE BETWEEN PUBLIC ENTITIES

Colombia's eGovernment strategy was introduced to improve procedures and digital public services for firms and households. The Digital Citizen Services initiative is one key element, facilitating and simplifying the citizens' process of filing and accessing key documents such as birth certificates and medical records. Reliability and security are ensured by an electronic authentication system, along with the "carpeta ciudadana" data exchange. The initiative seeks to ensure secure and seamless data exchange between public entities and enable the verification of citizen information. The eGovernment strategy also includes the Datos Abiertos (Open Data) initiative, which makes government data publicly available and encourages the development of apps that use it.[80]

RECOMMENDED RESOURCES

- The Building Blocks Supporting Open Finance (CGAP, 2024)
- Data-sharing Practices (BIS, 2023b)
- Unraveling Data's Gordian Knot: Enablers and Safeguards for Trusted Data Sharing in the New Economy (World Bank, 2020)

77 Salazar and Monteverde, 2019.

78 Jenik et al., 2024; Plaitakis and Staschen, 2020.

79 Boyd and Vaughan, 2018.

80 Alper et al., 2023.

- Framework for Financial Data Access (European Commission, n.d.)
- Proposal for a Regulation of the European Parliament and of the Council on a Framework for Financial Data Access and Amending Regulations (European Commission, 2023)

2.3 Ensuring adequate financial consumer protection, data privacy and security, and digital and financial literacy

FINANCIAL CONSUMER PROTECTION

The G20/OECD High-Level Principles on Financial Consumer Protection, updated and endorsed by G20 Leaders and OECD Governments in 2022, are the international standard for effective and comprehensive financial consumer protection frameworks.[81] The Principles are applicable to governments, public authorities and financial services providers in any country regardless of development status and to all sectors. The Principles provide a financial consumer protection framework including the legal and supervisory framework, the role of oversight authorities, competition, disclosure and transparency, fair treatment (with special attention to consumers who may be vulnerable)and responsible business conduct, data protection and privacy, and dispute resolution.[82] The impact, opportunities and risks of digitalisation is specifically identified as a cross-cutting theme in the Principles. Good practices that support implementation have also emerged like the World Bank's 2017 good practices for financial consumer protection[83].

As anticipated by the Principles,[84] a number of countries are increasingly adopting a customer-centric or customer-outcomes approach for consumer protection, focused on fostering financial products and services that meet customer needs, enhance financial control, help manage economic shocks, build resilience, and support long-term financial goals[85].

FCP frameworks are increasingly relevant as the financial ecosystem grows more complex and thereby poses greater risk, including cybersecurity, fraud or over indebtedness, especially to last mile population segments that tend to have lower levels of digital and financial literacy.[86] The 2022 Global Financial Inclusion and Consumer Protection Survey suggests that most countries have FCP regulations in place, although implementation lags. While 97 percent of responding jurisdictions reported FCP regulations in place, just 75 percent reported engaging in any supervisory and enforcement activities such as data collection and complaints analysis.[87] These enforcement rates highlight the relevance of supervisors in ensuring effective regulation implementation. SupTech may also enhance supervisory viability.[88]

Good practices have emerged on how to design FCP regulation, such as the Updated G20/OECD High-Level Principles on Financial Consumer Protection[89] and

81 OECD, 2022

82 Idem

83 World Bank, 2017

84 Principle 1 of the G20/OECD FCP Principle identifies the role of legal, regulatory and supervisory frameworks to promote "appropriate outcomes for consumers to contribute to their financial well-being".

85 Koning, A., et al., 2022.

86 See Women's World Banking, 2024; Garz et al., 2020.

87 World Bank, 2023b.

88 Cambridge SupTech Lab, 2023.

89 OECD, 2022b.

the World Bank's 2017 Good Practices for Financial Consumer Protection.[90] The following considerations are relevant, based on the implementation of these good practices and the challenges observed in effectively reaching last mile populations.

KEY LAST MILE IMPLEMENTATION CONSIDERATIONS

In LMICs, the increasingly diverse types of FSPs in operation may be regulated and supervised by different financial and data authorities with uneven enforcement of FCP rules. Within the financial sector, for example, some regulators and supervisors oversee big banks and other insurance companies. In contrast, others only regulate certain FSPs that are closer to last mile communities, such as financial cooperatives, credit-focused nonbank financial institutions, and digital payment and credit companies. Likewise, fintechs and cryptos are outside the purview of regulators and supervisors in some contexts. Regulators overseeing the financial and data landscape should coordinate to apply consistent and proportional consumer protection frameworks to the increasingly diverse types of FSPs and use cases, especially as they progress toward serving low-income customers with more diverse services.[91]

POLICY AND REGULATORY OPTIONS

1. The various financial and data protection authorities should coordinate to develop FCP legal frameworks with focused supervision and enforcement protocols.
2. FCP frameworks should be informed by assessments of potential overlaps and ambiguities between the rules, mandates, and supervisory requirements of different financial and data protection authorities, especially providers that serve last mile communities.

EXAMPLE: EXPLORING A CUSTOMER OUTCOMES APPROACH TO FINANCIAL CONSUMER PROTECTION IN SOUTH AFRICA

In 2021, South Africa's Central Bank piloted a customer outcomes approach to financial consumer protection. Together with FSPs, market conduct authorities, customer representatives, and experts on data and customer experience, it first assessed the roles each stakeholder could play in enforcing the country's FCP regulation. These stakeholders also determined the intermediate customer outcomes that could be achieved with adequate FCP; refined and translated desired outcomes into quantifiable variables; identified, pre-tested, and prioritized indicators based on the data that could be collected from FSPs; and, finally, analyzed results and iterated on the process and the indicators.[92]

RECOMMENDED RESOURCES

- Digital Finance Toolkit: Consumer Protection (World Bank, 2024)
- Make Recourse Clear, Quick and Responsive (Better Than Cash Alliance, 2024)
- Customer Outcomes-Based Approach to Consumer Protection: A Guide to Measuring Outcomes (CGAP, 2022)
- Global Financial Inclusion and Consumer Protection (FICP) Survey (World Bank, n.d.)
- The Case for Gender-Intentional Consumer Protection (Women's World Banking, 2024a)
- Empowering Women on a Journey towards Digital Financial Capability (Women's World Banking, 2021)
- How Policymakers Can Leverage Digital Financial Capability for Inclusion (Women's World Banking, 2024b)

90 World Bank Group, 2017.

91 See Duflos and Coetzee, 2022; Hernandez and Faz, 2022.

92 Koning et al., 2022.

DATA PRIVACY AND SECURITY

As technologies rapidly spread, richer data trails are being created by digitally included individuals, including last mile segments. However, generating and processing vast amounts of personal data involves risk. Data can be lost, stolen, disclosed without consent, or misused, leading to identity theft, embarrassing disclosures, loss of important information, and unwelcome marketing or solicitation. Personal data can also be used for government or corporate surveillance and discriminatory or unintentionally biased treatment of vulnerable individuals and communities.[93]

It is generally essential to put in place legislation for data privacy and supervision mechanisms for its enforcement. Legislation should require FSPs to define redressal mechanisms for customers to report any abuse and make FSPs responsible for any data breaches. This remains true for last mile populations. However, data protection regimes heavily rely on individual customer consent and place an unreasonable burden on customers—especially those who have less experience with or less general knowledge of DFS. These customers may not fully understand what they are consenting to or may feel they have no choice but to consent. Further challenges exist in countries with multiple languages, where last mile customers may not speak the national language in which consent and disclosure forms tend to be written. In addition, these individuals typically access financial services via small or poor-quality devices that render communications challenging to read and store.[94]

Cybersecurity is another integral component of customer protections and data privacy efforts that remains important for last mile customers.[95]

It is essential to prioritize data privacy for women due to their increased vulnerability and the potential for reputational harm implied by social norms. Women are more conscious of the risks of location tracking, sexual harassment, and mobile number sharing, given the consequences misuse may render. As a result, women are more cautious when considering DFS use and quicker to cease use when they feel uncomfortable or unsafe.[96]

KEY LAST MILE IMPLEMENTATION CONSIDERATIONS

To better accommodate the needs of last mile communities, next generation data privacy and protection initiatives can consider shifting the burden of responsibility from customers to data collectors and users (e.g., FSPs, public agencies). This can be achieved by making FSPs responsible for developing (and revoking) consent and disclosures that are more user-friendly, adaptable to multiple languages and literacy levels, and considerate of the different devices individuals may use. Additionally, offline solutions should be offered for those who prefer to read and save information on paper and those without internet or mobile phone access.

POLICY AND REGULATORY OPTIONS

1. Customer consent should always be clearly requested, informed, and detailed. Customers should be able to revoke consent as seamlessly as they provide it—and at any time.
2. Data privacy and protection frameworks should require data collectors and users to follow guidelines on the clarity and accessibility of all disclosures they use.

93 Macmillan Keck et al., 2022; OECD, 2022a.

94 Medine and Plaitakis, 2023.

95 NCS, 2021.

96 Macmillan Keck et al., 2022.

3. Guidelines on adequate disclosures should be designed keeping in mind the constraints faced by last mile population segments.

EXAMPLE: DATA PRIVACY AND SECURITY IN INDIA'S ACCOUNT AGGREGATOR SYSTEM

India has established a data sharing framework as a part of India Stack—the country's open API system that connects many public services. Within this, the Account Aggregator framework allows FSPs to share financial data securely with the explicit consent of their customers, facilitated through third-party Account Aggregators registered with RBI and open APIs. It is an ongoing endeavor to ensure that the user experience would remain simple, transparent, and easy to understand, including for customers with low financial literacy, by clearly indicating which data will be shared, between which institutions, for what purpose, and for how long. The system intends to give customers greater control over their financial data by its consolidation which are otherwise available in silos and resultantly improving access to financial products and services thus benefitting the last mile populations.[97]

RECOMMENDED RESOURCES

- Inclusive Digital Financial Services: Data Protection and Privacy (World Bank, n.d.)
- Data-Driven Financial Services: Data Privacy and Protection (CGAP, n.d.)
- Combining Open Finance and Data Protection for Low-Income Customers (CGAP, 2023)

CUSTOMER DIGITAL AND FINANCIAL LITERACY

As highlighted by the OECD Recommendation on Financial Literacy, which was welcomed by G20 Finance Ministers and Central Bank Governors in 2021, financial literacy policies are important in facilitating informed and responsible use of financial products and services, including digital ones. In supporting effective financial inclusion of last-mile groups, governments should promote awareness and understanding of the characteristics of traditional and innovative financial products and services, including digital ones, and of the financial risks associated with them; take into account the needs of specific groups, including people with low digital skills and limited access to digital technologies; and ensure the effective delivery of financial literacy programs, including through digital tools.[98]

Recent evidence suggests that behavioral tools such as simplifying education into actionable steps, personalizing content, delivering concise and timely messages, and ensuring easy access are more effective in changing people's financial and digital behaviors. This is relative to more traditional classroom delivery methods where results have been disappointing. Good practices include establishing tools that allow customers to compare products and services and mitigating information asymmetries. Recent developments also include more effective delivery methods for financial literacy programs that meet customers where they are by using, for example, digital and audiovisual tools through social media.[99]

The various norms-induced gaps experienced by last mile communities in relation to education, income, and assets also include gaps in financial and digital literacy. As such, any approach to enable their financial inclusion should consider a holistic approach to delivering digital and financial literacy training. Creating effective training requires local assessment of the unique needs and constraints of target last mile communities. Successful programs can also increase confidence in using DFS and reduce the fear of making mistakes.

97 Datwani and Raman, 2020.

98 OECD, 2020

99 World Bank, 2021a.

KEY LAST MILE IMPLEMENTATION CONSIDERATIONS

Lessons have emerged on creating more effective digital and financial literacy trainings for last mile communities. Suggestions include conducting periodic assessments with customers and FSPs such that government financial programs can identify new risks and potential gaps to be addressed by relevant trainings. A deep understanding of specific last mile customer segments should be sought, such that educational content is sensitive, localized, and culturally appropriate. Trainings should consider the target population's various languages and dialects since most interfaces and communications in the delivery of DFS are only available in national languages.[100] Programs should be periodically evaluated to validate their effectiveness and relevance.

POLICY AND REGULATORY OPTIONS

1. Digital and financial education programs should be sensitive, localized, and culturally appropriate for target last mile population segments.
2. Digital and financial training content should be evidence-based, informed by local assessments, and improved using results from periodic evaluations.

EXAMPLE: EFFECTIVE NUDGES IN FINANCIAL LITERACY APPROACHES USED IN PAKISTAN

Pakistan's Benazir Income Support Program (BISP) was launched in 2008. In 2013, the program began to digitalize payments to women via debit cards and ATM transfers to improve efficiency and cut costs. However, some women were charged fees to cash out by unauthorized "ATM attendants" (i.e., individuals offering to help beneficiaries withdraw funds for a fee). Security issues arose. Among its many attempts to resolve the situation, BISP posted photographs next to ATMs, with graphic illustrations designed to consider prevailing literacy levels. An evaluation found that this simple education method significantly boosted women's confidence and enabled them to use ATMs unassisted.[101]

RECOMMENDED RESOURCES

- Building a Financial Education Approach: A Starting Point for Financial Sector Authorities (World Bank, 2021a)
- G20/OECD-INFE Report on Supporting Financial Resilience and Transformation through Digital Financial Literacy (OECD, 2021a)

2.4 Digitalizing government-to-person payments

G2P payments are an essential ramp for the progress of financial inclusion in last mile population segments. Among G2P payments, social safety net program payments that distribute subsidies are the G2P transfer type with the greatest overlap with last mile population segments. Although digitalizing large payment flows (e.g., salaries from public and private employers, collection of payments for public services) is important for financial inclusion in general, these types of flows often do not reach last mile population segments who are, for the most part, excluded from the formal economy.

The digitization of social payments tends to have the greatest potential to enable financial inclusion at the last mile given that government subsidy programs explicitly target many of those last mile segments (e.g., poor individuals, women).[102] Further targeting G2P programs to more vulnerable groups (for the most part women) increases the opportunity to leverage these programs to enable financial inclusion at the last

100 See Zia, 2017; OECD, 2022c.

101 World Bank, 2021a.

102 Chen and May, 2021.

mile. According to the Global Findex 2021, 865 million adults opened an account for the first time in order to receive a government payment. However, room for further progress exists as 87 million financially excluded adults in LMICs, mostly those living in East Asia and the Pacific or Europe and Central Asia, still receive social assistance transfers in cash.

KEY LAST MILE IMPLEMENTATION CONSIDERATIONS

The following three points are highlighted:

1. Enabling G2P procurement rules that allow a wide diversity of FSPs to distribute social assistance payments increases the likelihood of customers finding more convenient and less costly ways to use their accounts. As minimum eligibility requirements are being set, it is important to weigh in those decisions the existing proximity of FSP service points to beneficiaries, in addition to legal and operational requirements.[103]
2. When prioritizing reaching beneficiaries in last mile communities (e.g., women, rural individuals, indigenous populations), it is common to find no FSPs present. G2P programs can be leveraged to mobilize joint public-private investments to establish new service points in these communities and experiment with new service bundles that make accounts more valuable to beneficiaries and more viable for providers.[104]
3. Centralizing all G2P payments, including social assistance, by integrating them into the national payment system and the government's single public financial management system enhances the likelihood of more efficient administrative and digital systems relative to individually digitalizing each G2P program.[105] However, the centralized approach may carry significant obstacles regarding public sector reforms and coordination that is not always viable in the short term. G2P program implementers should assess how close they can realistically get to the ideal and work to move closer over time.[106]

POLICY AND REGULATORY OPTIONS

1. Centralize all G2P payment issuance and extend service provisioning to all FSPs.
2. Social assistance distribution fees set by the government should consider the accurate costs FSPs face in delivering these payments in last mile communities.
3. Prioritize women in social assistance transfers.[107]

EXAMPLE: ZAMBIA'S APPROACH TO ENABLE BENEFICIARY CHOICE BY OPENING G2P TRANSFERS TO MANY FSPS

The Zambian Ministry of Community Development and Social Services (MCDSS) took a novel approach to designing its new G2P payments system. Participants in its Support to Women's Livelihoods (SWL) initiative could decide for themselves at which FSP and in what kind of account they wanted to receive their social protection grant. MCDSS launched the effort in late 2016 since no single FSP could service all targeted

> Further targeting G2P programs to more vulnerable groups (for the most part women) increases the opportunity to leverage these programs to enable financial inclusion at the last mile.

103 Cook and Lennox, 2023.

104 Ibid.

105 World Bank, 2020.

106 Wallace et al., 2022.

107 Mehta and McGuinness, 2023.

communities. By the end of 2017, the first round of payments was transferred to commercial bank accounts, mobile wallets, ATM cards, and post office accounts. By the end of 2018, a total of 12,748 women were enrolled and 12,084 received grant payments through the new multiprovider payment system.[108]

RECOMMENDED RESOURCES

- Next Generation G2P Payments: Building Blocks of a Modern G2P Architecture (G2Px, CGAP, World Bank, 2022)
- Digital Cash Transfers in the Time of COVID 19: Opportunities and Considerations for Women's Inclusion and Empowerment (BMGF, CGAP, World Bank, and Women's World Banking, 2020)
- Let Her Choose: Supercharging G2P for Women (CGAP, 2021)
- The Power of Jan Dhan: Making Finance Work for Women in India (Women's World Banking, 2021)

2.5 Cash-in and Cash-out agent networks

Extensive and inclusive cash-in cash-out (CICO) agent networks are fundamental for transitioning from cash-based to digital financial systems—particularly in developing countries with large informal labor markets that employ the most financially excluded segments and pay salaries in cash.

In addition to the CICO functions that enables customers to convert their cash into electronic balances so that they can start transacting digitally, agents play a key role in facilitating the growing suite of digital finance services offered by FSPs and, given that these agents tend to belong to the customers' communities, they help build trust in DFS, especially among first-time users. Evidence shows a notable correlation between digital financial inclusion and the proximity of agents to customers as these ensure convenient and reliable support services.[109]

However, agent network expansion into rural communities has been relatively limited given that the dominant agent management business models FSPs use are not viable in low population density settings and given the higher costs associated with serving rural customers (see barriers described in Chapter 1). Nevertheless, digital technology is enabling new agent management business models that can aggregate various services to a single agent outlet. This allows for the offer of valued service bundles while enabling economies of scale and scope in service delivery that significantly lower operational costs and progressively increase viability for providers to operate in remote communities.[110]

Reaching these populations at scale, however, requires public-private investment partnerships that help rural agents overcome systemic gaps in income and education relative to their urban counterparts, making larger numbers of rural entrepreneurs eligible to become agents.[111]

> Agents play a key role in facilitating the growing suite of digital finance services offered by FSPs and, given that these agents tend to belong to the customers' communities, they help build trust in DFS.

108 Baur-Yazbeck et al., 2021.

109 See CNBV, 2018; Hernandez, 2019b; Hernandez et al., 2020.

110 See GSMA, 2018; Hernandez and Blackburn, 2022b.

111 Hernandez and Martinez, 2023.

KEY LAST MILE IMPLEMENTATION CONSIDERATIONS

Two main action points are highlighted:

1. Training costs required to onboard rural agents at scale are the largest cost category for FSPs aiming to expand their agent network coverage to last mile communities. These costs discourage investments to acquire agents, even when FSPs see the long-term strategic benefits. Successful rural agent network expansion at scale has occurred when governments jointly invested with FSPs in time-bound rural agent training programs, co-creating a training curriculum designed for agents to meet market requirements.
2. The minimum due diligence requirements agents need in order to operate commonly do not meet the realities of most rural candidates. Regulators should conduct local assessments to understand agent constraints and capacities. Assessment can inform simplified, risk-based know-your-agent requirements that most rural entrepreneurs can meet. Requirements should promote a level playing field by applying to agents from all provider types.

POLICY AND REGULATORY OPTIONS

1. Government and FSPs should cooperate to develop rural entrepreneur capacity to act as responsible agents in last mile communities (e.g., train women to become agents).
2. Agent regulatory requirements should consider the constraints rural entrepreneurs face in last mile communities.

EXAMPLE: PROMOTING AGENT NETWORK COVERAGE IN LAST MILE COMMUNITIES THROUGH FEMALE AGENTS

In 2016, India's National Rural Livelihood Mission began implementing the Bank Sakhi program in the state of Bihar. The program supported rural women in becoming banking agents for public and private banks, expanding the provision of doorstep financial services in rural communities. Bank Sakhi recognized the larger investment required to train rural women, who tended to show norms-induced income and education gaps relative to rural men. The program covered the cost of training and certifying eligible rural women, provided grants to cover initial working capital and loans to acquire agent devices, and linked trained agents (i.e., Bank Sakhis) to public and private banks that recruited them. By 2022, 110,000 Bank Sakhis were active across rural communities in 20 states. An evaluation of the program revealed that Bank Sakhis reached more vulnerable customers with DFS than traditional agents.[112]

RECOMMENDED RESOURCES

- Global Case Studies of Economic Incentives for CICO Agent Networks (BCG, 2019)
- Agent Networks at the Last Mile: Implications for Financial Regulators (CGAP, 2022a)
- Digital Finance Toolkit: Agents (World Bank, 2024)
- Why Advocate for More Women Banking Agents? (Women's World Banking, 2023b)

2.6 Promoting policy interventions and regulatory enablers to ensure financial services delivery at the last mile

Regulation should enable all types of FSPs to participate in the digital finance market to advance financial inclusion at the last mile, as stated in the G20/OECD High-Level Principles on Financial Consumer Protection.[113] A clear vision to achieve this goal and an internal champion within the government driving the vision significantly increases the likelihood of measures

112 Hernandez et al., 2023.

113 OECD, 2022b.

being adopted, implemented, and monitored to achieve maximum impact in supporting last mile segments.

As new technologies emerge to enable new business and operating models, they increasingly involve a wide range of providers. This dynamic environment calls for a holistic approach that considers whether the legal framework, institutional structures, supervisory approach, and organizational culture are adequate and flexible enough to accommodate a range of current and future disruptive innovations, with financial inclusion as a primary policy objective.[114]

KEY LAST MILE IMPLEMENTATION CONSIDERATIONS

Global evidence suggests that the regulatory frameworks most conducive to financial inclusion at the last mile ensure a level playing field among FSPs while allowing various classes of providers to offer solutions, including those community-based financial organizations that tend to have more presence in last mile communities. Having such regulatory frameworks allows for adequate monitoring of the performance of various types of FSPs, like their credit history and ratings.

Regulation by service type rather than provider type is complemented by risk-based, tiered due diligence processes for customers and agents where the simplified processes of lower tiers match participant realities on the ground. Regulation should also enable viable processes to test new products and business models and identify the tradeoffs between benefits and risks through approaches such as test-and-learn, innovation hubs, and regulatory sandboxes. These learnings can inform regulatory revisions and allow for a constant evolution of regulation and supervision as the financial sector innovates.[115] Authorities themselves can leverage innovation to create efficiencies and improve their regulatory and supervisory approach through RegTech and SupTech, for example.

POLICY AND REGULATORY OPTIONS

1. Financial regulation should be risk-based, technology neutral, and proportional, enabling the participation of different classes of FSPs, including community based financial organizations like Self Help Groups, agricultural cooperatives, or credit and savings associations, among others.
2. Financial supervision should be risk-based and informed by a locally developed risk assessment methodology.
3. Supervisory approaches should find context-relevant ways to allow FSPs to test innovative ideas and identify risks.

EXAMPLE: ADAPTING A FINANCIAL REGULATORY FRAMEWORK TO THE LOCAL CONTEXT ENABLES FINANCIAL INNOVATION

Over the last two decades, the Central Bank of the People's Republic of China has taken a comprehensive, risk-based approach described as "test, learn, and adjust." The approach has led to a remarkable expansion of DFS, including to most of the country's rural population. As a first step, it built an e-services ecosystem that allowed new payment competitors to enter the market, establishing the foundations and safeguards for digital wallets and data protection. In 2016, the regulator created a coordinating mechanism to develop consistent rules to mitigate risks observed as the e-payment market developed. Among others, it required a new license for nonbank payment companies with greater oversight, created a central public clearinghouse, and established a national credit information system that included bank and nonbank players.[116]

114 Dias et al., 2023.

115 Staschen and Meagher, 2018.

116 Meagher, 2019.

RECOMMENDED RESOURCES

- Inclusive Digital Financial Services: DFS Regulation and Supervision (World Bank, n.d.)
- Regulation for Inclusive Digital Finance (CGAP, n.d.)
- Basic Regulatory Enablers for Digital Financial Services (CGAP, 2018)

2.7 Encouraging responsible, scalable, and affordable technological innovations to rapidly advance financial inclusion for individuals and MSMEs

New technologies such as distributed ledger technology (DLT), artificial intelligence (AI), and cloud computing are fueling a significant amount of innovation in DFS business models, including digital banking, mobile-first approaches, and embedded finance. Product and service innovations like crypto assets and central bank digital currencies (CBDCs) are also in the mix. Analyzing how these innovations affect financial inclusion is in its early stages and motivated by the prospect of potential gains in financial inclusion at the last mile. However, assessments so far show no evidence of the impact of innovations currently being applied to serve last mile populations.[117]

Likewise, the complexity and interconnectedness of these business models, products and services, and new technologies creates unprecedented consumer protection and financial inclusion risk. Risks include data misuse, high risk of financial losses given market volatility, service mis-selling and fraud, and theft, among others.[118] Choices on how to regulate and supervise innovations will determine their relevance for financial inclusion at the last mile.

Policy options cannot be confidently formulated given the nascence of these technologies in use cases for last mile customer segments. Table 1 instead provides suggestions related to how policy makers and regulators can proactively monitor disruptive technologies in general and more intentionally assess policy and regulatory implications for financial inclusion at the last mile.

RECOMMENDED RESOURCES

- Disruptive Innovations or Enhancing Financial Inclusion: What Does Fintech Mean for Africa? (Alade and Kavame Eroglu, 2022)
- The EU AI Act (European Commission)
- Equitable AI for Inclusive Finance (CFI, 2023)

117 See Cook et al., 2023; Nelson, 2021.

118 See Brix Newbury and Kerse, 2023; BIS, 2023a.

TABLE 1. **Some considerations to monitor and assess the potential of emerging technologies on financial inclusion**

1. Constantly reassess the financial sector policy and regulatory perimeter	Policy makers, regulators, and supervisors may need to reassess the policy and regulatory perimeter considering the emergence of disruptive innovations that increasingly involve nonbanks and new players coming from the nonfinancial sector. These innovations also imply regulating new products, services, and technologies.
2. Manage relationships between different types of authorities	Policy and regulatory authorities for different economic sectors should consider updating and mainstreaming their approach to coordination and collaboration among themselves and with new players, such as the fintech sector, since disruptive innovations often have cross-border or cross-sector effects.
3. Balance different policy objectives	Policy makers and regulators should systematically explore strategies to identify tradeoffs between financial inclusion and the benefits disruptive innovation may bring for broader non-poor customer segments. This should help preempt social interventions that protect vulnerable groups and allow other members of society to benefit from financial innovation.
4. Be mindful of evolving policy tradeoffs as innovations scale	Regulators can better balance the tradeoffs between stability, competition, concentration, efficiency, and inclusion through actions including: Formulating data collection principles and proactively monitoring market conduct Establishing frameworks for open banking and data ownership Revisiting restrictions on product tying and linkages between banking and commerce
5. Monitor market structure and conduct to maintain competition	Innovations in financial markets may move toward concentration of players and platforms. This may deliver inclusion and efficiency, particularly in developing economies that may lack a robust, competitive, and inclusive banking sector. However, regulators will need to proactively monitor markets and dynamically balance tradeoffs between competition, concentration, efficiency, data protection, and inclusion.

Sources: Kerse et al., 2024; World Bank, 2024c.

CHAPTER 3

Tailoring public policies and public investments to reduce financial inclusion barriers specific to various excluded groups

THE PREVIOUS CHAPTER ARGUED FOR whole-of-market enablers for digital finance systems to reduce costs and enhance the viability of reaching last mile population segments at scale. This chapter introduces additional public policy and public investment options shown to complement those whole-of-market enablers. It centers on nonfinancial demand-side barriers not addressed by the previously presented whole-of-market enablers. The additional options focus on three main aspects:

1. Reducing norms-induced capability gaps specific to many customers who belong to last mile segments.
2. Reducing capability gaps among leadership and staff of FSPs that target these last mile segments.
3. Reducing legal rights gaps faced by last mile segments that limit their ability to develop their livelihoods and find value in financial services.

These additional options are necessary as they indirectly impact last mile financial inclusion, even when the previously discussed whole-of-market enablers are in place. And although last mile population segments are very diverse, as Chapter 1 explained, the policy and investment options described below address common challenges identified across all last mile segments, as evidenced by the literature.

Implementation of the public policies and public investments noted in this chapter requires coordination and collaboration between authorities and across sectors like finance, social assistance, education, health, and agriculture, among others. Coordination and collaboration should lead to financial inclusion interventions that are co-designed with other nonfinancial sector interventions in a way that reinforces each individual intervention's objectives.

With this type of cross-sectoral coordination and intervention co-design, financial inclusion at the last mile becomes more viable for FSPs that can leverage the capacities of public and private actors partnering with relevant public interventions. In addition, the coordination and co-design of public interventions should raise the financial inclusion value proposition for last mile populations segments. In other words, the value of an account and the financial services on offer are greater when they make it easier for last mile populations to benefit from public services or subsidies, for example,

to improve their microbusinesses; to educate and keep their children healthy; to improve their farm productivity; or to gain agency.

Examples discussed below illustrate good practices on coordinating and co-designing cross-sectorial interventions to enable the financial inclusion of last mile population segments, specifically women, people living in fragile and conflict-affected situations, and migrants.

3.1 Targeted public policy initiatives and public investments to address the financial inclusion constraints specific to last mile population segments

Review of the evidence suggests that relative to the rest of the population, last mile population segments and the FSPs that aspire to serve them have common capability gaps that prevent further financial inclusion. As Chapter 1 explained, these capability gaps are a consequence of social norms that (often inadvertently) limit relative access to education and health services, economic opportunities, or ICT infrastructure, among other key services.

The capability gaps in question relate to the relative lack of necessary skills among last mile individuals that would enable them to benefit from the use of financial services and, consequently, the use of an account. For example, a lack of skills or agency to develop a livelihood could result in financial services not being as useful given the relative lack of economic or human development opportunities. Gaps may also relate to the relative lack of skills required for members of last mile populations to become a part of the financial services supply chain in their communities (e.g., the skills required for employment as a DFS agent or to help manage a customer service point). The lack of eligible candidates for agent and service point manager roles in last mile communities also makes it harder for FSPs to offer services to these communities.

FSPs aspiring to serve last mile communities may have capability gaps that prevent them from understanding the financial needs of last mile customers and thus designing adequate products and processes to meet those needs. Gaps may relate to their lack of data and knowledge related to the financial needs of last mile customers, resulting in FSPs that are unable to offer adequate financial services and customer support processes that respond to such needs. Lack of knowledge about last mile customers and the largely informal economies they work in also prevents FSPs from innovating new business models that could bring viable service delivery to those communities.

The review of the evidence also points to gaps in legal frameworks at the country level that may unintentionally limit the specific legal rights of last mile population segments. These legal rights gaps create friction when formalizing commercial arrangements involving last mile population segments. For example, unfeasible requirements to open accounts, sign credit contracts, or pledge personal guarantees may prevent last mile customers from using financial services. Legal rights gaps can prevent the commercial arrangements last mile individuals require to develop microenterprises or to gain formal employment, or reduce their enrollment in education programs—all of which can limit their livelihood opportunities and reduce their demand for financial services.

Figure 7 summarizes the key public policy and investment work areas and their objectives in reducing the aforementioned constraints across all last mile population segments.

FIGURE 7. **Key targeted public policy and investment work areas to accelerate financial inclusion at the last mile**

Reduce norms-induced skills gaps among **target last mile individuals**

Financial policy makers explore **joint implementation strategies** with public or private initiatives outside the financial sector (e.g. humanitarian, education, agriculture) that make financial inclusion **more valuable** and motivate **effective development** of individual capacities.

Reduce norms-induced skills gaps among **FSPs with potential to reach last mile population segments**

Financial policy makers explore ways to support specific FSP types to:

- Remove biases in internal processes and products
- Access R&D funding mechanisms to ideate and scale solutions for the last mile

Increase coordination between **policy authorities across sectors** to identify key policy reforms that remove gaps in legal rights

Financial authorities support a whole-of-government assessment and dialogue that **inform how gaps in legal rights may limit last mile financial inclusion** and explore adequate reforms by the relevant authorities.

Source: Authors' analysis.

REDUCE NORMS-INDUCED SKILLS GAPS AMONG TARGET LAST MILE INDIVIDUALS

This objective guides the implementation of public policies and public investments that aim to reduce norms-induced skills gaps among target last mile individuals who are under consideration as first-time customers of FSPs or participants in the financial service supply chain in last mile communities. These investments relate to financial inclusion interventions that promote specific skills among target last mile customers to use financial services or distribute these services in their community. These financial inclusion interventions are also jointly co-designed and implemented with other public investments related to social protection and training programs, providing last mile population segments the stability and key skills they need to develop livelihoods and build demand for financial services.

Recent evidence suggests good practices on how to effectively implement these types of interventions. Some examples include:[119]

- **Enabling stability through social protection interventions to then focus on developing last mile livelihoods.** Last mile population segments are often the most vulnerable. Stabilized livelihoods are first required before they can focus on livelihood development. Implementing interventions that provide social protection programs to address immediate basic needs (e.g., food security, health services) is key to providing stability for these segments. Only then can they focus on developing their own capacities and make investments that will generate income and further develop their livelihoods.
- **Developing capacity through trainings that enable last mile population segments to generate additional income.** The key to developing new income-generating activities among last mile population segments includes interventions that provide trainings to build the skills required to take advantage of local economic opportunities. Examples of these types of skills include farming practices, accounting skills, and business management. The most vulnerable last mile segments may additionally need subsidies in the

119 The approach to reducing skills gaps and building demand for financial services described here is effectively illustrated by the Graduation Approach, initially developed by BRAC in Bangladesh. The approach has since been adapted and applied across LMICs, as show in Gollin et al., 2023 and Hashemi at al., 2016.

form of asset transfers to initiate income-generating activities (e.g., livestock, equipment).

- **Coaching and empowerment.** Interventions that facilitate coaching, mentorship, and peer-to-peer learning for last mile population segments are key to developing the self-confidence and general life skills needed to develop livelihoods. Given the chronic relative skills gaps these communities tend to face, confidence building is required to promote the adoption of new livelihood opportunities. Furthermore, life skills such as making improvements in household nutrition or preventing gender-based violence are shown to be key to the effective adoption of skills that improve livelihoods and incomes.
- **Connecting to financial services**. The previous three types of interventions are not related to financial services but rather to developing livelihoods that progressively build demand for financial services. This fourth type of skills-development intervention—connecting to financial services—focuses on introducing financial services to the last mile population livelihoods being promoted. This is where the financial and digital literacy interventions mentioned in Chapter 2 play a role. The types of financial trainings delivered here focus on allowing customers to appreciate how financial services can help their consumption, working capital, or investment needs, as well as how they could operate agent or financial service points in their community. Trainings also introduce customers to the types of FSPs that deliver adequate financial services (e.g., community savings and loans groups, microfinance institutions, financial cooperatives, digital payment companies, etc.).

Evidence suggests that good practices to implement those key whole-of-market enablers—the foundational building blocks noted in Chapter 2—are more effective when implemented in the context of collaborative agreements with wider socioeconomic development initiatives that create interventions like the four described above. Initiatives can include humanitarian assistance, education, and agriculture, for example. Collaboration across sectors can increase the incentives and value perceived by last mile individuals when acquiring IDs, opening accounts, learning how to use DFS, or engaging as CICO agent businesses.[120]

EXAMPLE: COLLABORATION BETWEEN FINANCIAL INCLUSION, HUMANITARIAN ASSISTANCE, AND AGRICULTURAL INITIATIVES TO ENABLE FINANCIAL INCLUSION AT THE LAST MILE IN SOMALIA

In 2019, Somalia's Ministry of Labor and Social Affairs implemented Baxnaano, a national social safety net program. Its objective was to provide social assistance to 200,000 poor rural households (over 1 million people) facing food insecurity after several years of drought. In coordination with the Ministry of Agriculture, Baxnaano mobilized support from international development stakeholders in the humanitarian, finance, and agriculture space, including the Office for the Coordination of Humanitarian Affairs, the World Bank, the World Food Program, and the Food and Agriculture Organization. The complementary nature of support from these partners enabled the success of interventions related to enabling financial inclusion. Partners made key nonfinancial interventions that provided stability and built skills to develop livelihoods among target last mile segments (i.e., poor rural women). Interventions included nutrition-linked money transfers and agronomic support to protect crops in locust-prone areas. These interventions complemented those that aimed to promote financial inclusion, such as the delivery of digital and financial literacy trainings and support to acquire SIM-based phones and mobile wallets to receive electronic transfers. The coordination and co-design of these cross-sectoral interventions raised the value of phone and wallet accounts for beneficiaries. All individual recipient rural household beneficiaries were women,

120 See UNCDF, 2023; CGAP, forthcoming.

40 percent of whom accessed a phone and a mobile wallet for the first time. Given its early progress and positive early results, the program is being scaled.[121]

PUBLIC POLICY AND PUBLIC INVESTMENT IMPLICATIONS

1. Financial policy makers coordinate last mile financial inclusion initiatives with cross-sectoral partners that help to more effectively reach these segments.
2. The effectiveness of financial inclusion interventions for last mile population segments improves when the value of financial services on offer is enhanced by additional nonfinancial benefits offered by nonfinancial sector partners.
3. Account access is easier for new last mile customers when nonfinancial partners in their communities support customer onboarding.

REDUCE NORMS-INDUCED SKILLS GAPS AMONG FSPS WITH THE POTENTIAL TO REACH LAST MILE POPULATION SEGMENTS

This section provides guidance for the implementation of public policies and public investments that aim to reduce norms-induced skills gaps among specific financial institutions with greater potential to reach target last mile population segments. The objective of supporting individual FSPs implies that initiatives to promote financial inclusion at the last mile must conduct country-specific assessments or public bids to identify which financial institutions are willing and able to serve these segments.

Examples of such institutions include community-based savings and credit organizations, agricultural credit cooperatives and associations, digital payment companies, and microfinance institutions. An important enabler is the establishment of regulatory and policy frameworks that define the legal status, promote good governance, and enable the provision of institutional support to these types of FSPs.[122]

Even with whole-of-market enablers in place, public and private FSPs that are willing to develop and deliver last mile financial solutions may need capacity-building support. This may be the case when FSP leadership and staff are influenced by prevailing social and cultural norms that discriminate against or show unintentional bias toward certain segments. For example, gender norms may prevent FSP leaders from thinking about tracking customer behavior in a sex-disaggregated manner.

Furthermore, FSPs may suffer from market failure if investments needed to conduct market analysis and research and development (R&D) to effectively serve last mile populations are considered too risky. For example, an FSP's last mile solution could be copied by the competition, preventing return on investment made to generate that solution. Or the FSP's investors could consider timelines to R&D investment recovery too long—thus forcing a focus on more profitable customer segments.[123]

Given these common market scenarios in LMICs, the need arises for public policies and public investments that provide direct support to FSPs aiming to deliver responsible DFS for last mile population segments. Recent evidence suggests examples of the types of support FSPs may need to reach the last mile:

- **Developing staff capacity** to apply a last mile lens to all internal processes and products that are part of the customer journey and identifying areas where undue discrimination occurs (e.g. women, migrants, smallholder farmers, people with disabilities, others). Support can include incentive mechanisms for staff to reach last mile customer targets. The goal is

121 World Bank, 2022a.

122 World Bank, 2018.

123 European Commission, 2002.

> Even with whole-of-market enablers in place, public and private FSPs that are willing to develop and deliver last mile financial solutions may need capacity-building support

sensitized staff, clear guidelines on how to onboard and serve target segments, adequate and culturally appropriate marketing materials with accessible language, and valuable financial services.

- **Developing partial subsidy mechanisms** (e.g., matching grants, challenge funds) focused on conducting market assessments and R&D to deepen FSP understanding of the financial needs of target last mile segments and the viability of potential product offerings for them. Support also includes exploring partnerships with other private sectors actors that can help serve last mile communities (e.g., agribusinesses, fast moving consumer goods, transport and logistics), and sensitizing them to modifying discriminatory norms.
- **Supporting the formalization and professionalization of semiformal or informal FSPs** that may have a strong comparative advantage in serving last mile population segments (e.g., agriculture credit cooperatives, community-based savings and loans organizations, businesses providing value chain finance).
- **Establishing second-tier financial mechanisms** wholly dedicated to enabling financial inclusion for last mile segments (e.g., women-owned SMEs, young rural women, migrants and refugees, elderly individuals). These mechanisms may provide credit lines, partial guarantee funds, social bonds, and technical assistance to FSPs exploring ways to serve these segments. Mechanisms may also evaluate FSP pilot tests to identify those that are most successful and continue support to scale them.

EXAMPLE: ENABLING FINANCIAL SERVICES TAILORED TO THE NEEDS OF MIGRANTS IN THE UNITED ARAB EMIRATES

In 2018, the UN Capital Development Fund (UNCDF) and the Government of the United Arab Emirates (UAE) partnered to implement a financial inclusion initiative focused on lowering the costs of remittances for low-income migrants in the country. Approximately 88 percent of the UAE's population of almost 10 million is migrant, with approximately 60 percent of migrants estimated to be low-income. UNCDF conducted a country assessment to identify FSPs already serving low-income migrants and, based on results, partnered with the retail bank Rakbank and the payment company Edenred. UNCDF provided support so partners could scale their reach to low-income migrants through market research, business strategy development, transactional data analysis, and migrant-centric and gender-smart product design testing. Since its inception, partners have added over 200,000 customers to the international remittance product and sent approximately US$272 million to home countries. The number of women eligible to make digital remittances through the remittance app has also doubled.[124]

PUBLIC POLICY AND PUBLIC INVESTMENT IMPLICATIONS

1. Financial inclusion initiatives targeting last mile population segments consider components that identify FSPs with the potential to reach target segments and provide support to innovate adequate processes and services.
2. Initiatives include support to evaluate previous FSP pilots with solutions at the last mile, identifying the most successful innovation attempts and providing support to scale them.

124 Wachira et al., 2022.

INCREASE COORDINATION BETWEEN POLICY AUTHORITIES ACROSS SECTORS TO IDENTIFY KEY REFORMS THAT REMOVE GAPS IN LEGAL RIGHTS FOR LAST MILE POPULATION SEGMENTS

This section provides guidance for implementing public policies and public investments aimed at removing the legal rights gaps faced by last mile population segments that may prevent their financial inclusion.

The recognition of gaps in legal rights for vulnerable groups has motivated a growing number of governments to systematically collect evidence on the severity of those gaps and their implications across numerous aspects, including financial inclusion. An example of these efforts includes the World Bank's Women, Business and the Law (WBL) project, a collaboration with World Bank Member States to collect data on the laws and policy mechanisms that measure an enabling environment for women's economic opportunity. The relevance of this type of initiative for financial policy makers and regulators supporting financial inclusion at the last mile is how the evidence generated may inform coordination and collaboration with authorities in other sectors to remove the legal right gaps specifically preventing financial inclusion at the last mile.

Legal rights restrictions may affect financial inclusion at the last mile in different ways. For example, due diligence requirements that ask for another party's approval so a customer can open a bank account or sign a commercial contract limits the customer's agency to open and use the account in their business activities. Such is the case with regulations that require permission from a woman's husband or a male family member so she can open an account or engage in commercial contracts. Such requirements also limit her economic opportunities. In addition, when legal rights gaps result in last mile segments being paid less than others for equivalent jobs, their opportunities for further livelihood development are limited. This, in turn, limits the value last mile segments can draw from financial services such as credit or savings. It may also change the risk profiles FSPs assign to last mile segments (e.g., considering them less creditworthy).

Progress in reducing legal rights gaps has been achieved where relevant public authorities make a concerted effort to identify and measure gaps, then reflect on context-specific ways to collaborate and reduce them . From a financial inclusion perspective, it is important for financial authorities to be aware of the impact pathways through which legal rights gaps systematically prevent last mile segments from opening transaction accounts and benefiting from the use of financial services.

EXAMPLE: LEGAL RIGHTS GAPS WOMEN FACE AND THE IMPLICATIONS ON THEIR FINANCIAL INCLUSION

The World Bank's 2024 Women, Business and the Law report estimates that globally, only 44 percent of the legal provisions supporting women's entrepreneurship are in place. Women also earn just 77 percent of what men earn in equivalent jobs. And although written laws imply that women experience approximately 64 percent of the same legal rights as men, countries have, on average, established less than 40 percent of the systems needed for full law implementation.

Gender gaps in legal rights represent systemic barriers for women in meeting requirements to open financial accounts; in eligibility to receive certain financial services, like credit requiring asset ownership as collateral; and in appreciating the value of such financial services, given the limited livelihood opportunities they face as a result of such policy environments. Policy reform options to explore include accelerating efforts to reform laws and enacting public policies that empower women to work and start businesses.[125]

125 World Bank, 2024e.

PUBLIC POLICY AND PUBLIC INVESTMENT IMPLICATIONS

Financial policy makers and regulators may support a whole-of-government[126] dialogue that (i) informs how gaps in legal rights may limit last mile financial inclusion and (ii) explores adequate reforms by relevant authorities. Initiatives like Mexico's Inter-Institutional Committee for Gender Equity in Financial Institutions exemplifies such dialogue, convening public and private entities to identify policy reform opportunities to enable women's financial and economic inclusion. Another example is Indonesia's Women's Digital Financial Inclusion Coalition (IKDP), a public-private dialogue on how to define effective strategies for women's financial inclusion.

RECOMMENDED RESOURCES

- Empowering Women on a Journey towards Digital Financial Capability (Women's World Banking, 2021)
- Sex-disaggregated Data Toolkit: How to Leverage Sex-disaggregated Financial Inclusion Data to Accelerate Women's Financial Inclusion (AFI, 2017)
- Five Principles for Building Women's Capacity for Digital Financial Services (Women's World Banking and Fundación Capital, 2019)
- Building Women's Financial Capability: A Path toward Transformation (CFI, 2021)

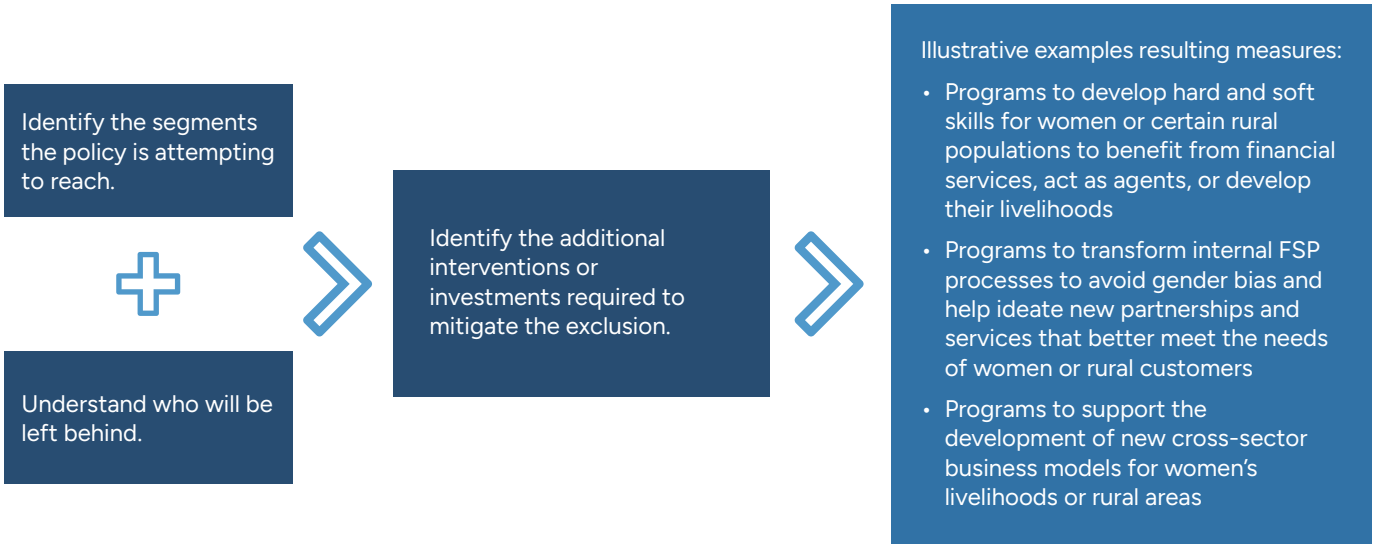
3.2 Considerations for creating more inclusive access for last mile segments

The targeted public policy and investment options described above aim to address common challenges across a diversity of last mile population segments. It is important that implementation strategies for these interventions are informed by an in-depth investigation of the specific constraints preventing each segment's financial inclusion. These context- and segment-specific constraints should inform the implementation of public policy and investment initiatives by identifying, for example, which specific public authorities and private actors are relevant in efforts to promote financial inclusion at the last mile.

Granular mapping by FSPs and policy makers of the potential customer journey for each last mile customer segment can reveal constraints that prevent these segments from opening accounts and using and drawing value from DFS. Mapping can also help identify which relevant public authorities and private actors can influence those constraints. Figure 8 illustrates the general approach suggested.

126 Whole-of-government dialogue refers to dialogue between authorities from various government agencies that is focused on identifying collaboration between public and private sector initiatives. This dialogue reinforces the value financial inclusion can bring to last mile population segments, as exemplified in this chapter.

FIGURE 8. **Process for formulating tailored policies and public investments that promote financial inclusion at the last mile**



Source: Adapted from Hernandez and Martinez, 2023.

CHAPTER 4

Quality financial inclusion: Relevant aspects, potential priorities, and measurement approaches

4.1 Quality of financial inclusion to support last mile policy implementation

The previous chapters clarified the essential role of policy building blocks to enable financial inclusion at scale and reduce the constraints faced by last mile populations. If successfully implemented, these policy building blocks should expand access to and usage of financial services for millions without access or currently with limited access. However, financial inclusion does not simply ensure access and usage in absolute terms. GPFI has noted that "financial inclusion generally refers to the effective and quality access to and usage of—at a cost affordable to the customers and sustainable for the providers—financial services provided by formal institutions."[127] For the World Bank, "financial inclusion means that individuals and businesses have access to useful and affordable financial products and services that meet their needs— transactions, payments, savings, credit, and insurance—delivered in a responsible and sustainable way."[128]

The financial inclusion process and its impact is qualified by aspects such as effectiveness, quality, affordability, and usefulness. These qualifiers affect experience and outcomes for financial consumers and are important to measure and monitor as progress is made in last mile inclusion. Practitioners should therefore consider the following question: How can the effectiveness of the policy goals discussed in the previous chapters be assessed without considering the quality, affordability, and usefulness of the very products and services these policies are designed to promote?

GPFI considered the quality dimension of financial inclusion as part of its 2016 Financial Inclusion Indicators,[129] which contains a subset of metrics on quality focused on financial literacy, consumer protection policy analysis, and barriers to credit access. On the topic of quality, the 2016 indicators specifically proposed the following: a financial knowledge score; a metric related to use of emergency funds to recover

127 GPFI, 2017b.

128 World Bank. Financial Inclusion Overview.

129 GPFI, 2016.

from shocks; measures of disclosure requirements and dispute resolution policies; credit barriers for SMEs; and the performance of credit reporting systems and of collateral and bankruptcy laws.

Beyond GPFI, research performed since 2016 has expanded to cover a broader set of quality dimensions. The research tends to use one of four main approaches to measuring quality: (i) policy themes-based quality indicators;[130] (ii) barriers to access as a determinant of quality;[131] (iii) outcomes measurement-focused assessments of quality;[132] and (iv) mixed-methods measurement of quality-relevant indicators.[133] One approach to measuring quality of financial inclusion is to measure quality within the process of delivering financial products and services. This approach can help to identify ex-ante where products and services are well-designed, especially to the context of last mile populations, and where they can be improved upon to be better adapted to these populations and contexts. It is an approach that does not consider ex-post outcomes for consumers, which are covered in other complementary work such as financial well-being research. This approach focuses on the supply-side of financial inclusion. Demand-side aspects, such as financial and digital literacy, are also important for quality of financial inclusion and a rich body of research already exists covering these aspects, which will not be included in this work.

There is increasing appreciation of the role good culture within firms and financial product governance play to contribute to the provision of financial products that are appropriate for consumers and support consumer centric systems, processes and outcomes. In particular, FinCoNet, an international network of market conduct supervisory authorities, have identified a strong link between good organisational culture and financial product governance. FinCoNet's analysis considers consumer harms, policy and supervisory approaches, challenges for regulators and supervisory authorities, and the impact of organisational culture on product governance within the financial services industry.[134]

As Figure 9 shows, quality of supply is intended to measure what happens between the uptake of products and the outcomes of financial inclusion.

Measuring the quality of product supply can be applied to evaluate whether policies and other initiatives are producing the desired outputs (e.g., private sector responses through better products and services) which are, in turn, expected to contribute to outcomes such as financial resilience or well-being.

The way products are designed and delivered and how that impacts the effectiveness of a higher-level financial inclusion policy goal, or how it can influence more outcomes-based measurements like financial well-being, is largely absent from current discussions on financial inclusion measurement. Product design and delivery considerations are more advanced in other topics, such as financial consumer protection and market conduct supervision, which have helped consumer protection frameworks evolve from "buyer-beware", disclosure-focused approaches to more sophisticated frameworks such as product suitability and consumer outcomes measurement. Supply-side analysis can provide answers to questions such as: Have people been included with products that factor in their personal context?; Do services have exorbitant costs or generally affordable ones?; Are products designed for vulnerable audiences or disconnected

130 For example, AFI, 2016.

131 For example, Chauhan, 2022; Camara and Tuesta, 2017; Sharma and Changkakati, 2022.

132 For example, Tissot and Gadanecz, 2017; Koning et al., 2022.

133 For example, UNEP Working Group on Financial Health and Inclusion, 2022. "Core Indicators to Measure Financial Health and Inclusion."

134 "Financial Product Governance and Culture." The International Financial Consumer Protection Organisation (FinCoNet). 2021; "Financial Product Governance and Culture. Annex C: Literature Review." The International Financial Consumer Protection Organisation (FinCoNet). 2021

FIGURE 9. **Financial inclusion measurement: the focus on quality of supply**

Source: Authors' analysis.

from people's realities?; Do providers respect and treat customers fairly or is the market full of aggressive practices?; Does information reach people effectively and clearly or do providers just follow transparency rules formally but not earnestly? Each of these and similar questions can contribute to developing and monitoring policies that support quality financial inclusion in the marketplace.

This report's previous chapters noted several currently available metrics that allow diagnosis of why access and usage are still lacking, and also noted that there is data to help address these challenges and to monitor progress. It is also important to measure whether products and services in the market are designed and delivered in ways that comply with policy objectives. This chapter discusses a range of possible indicators for quality of financial inclusion, focusing on the quality of design and delivery of products.

The focus on quality of product design and delivery reflects increasing global recognition of the importance of supply-side factors in the quality of financial inclusion. For example, the G20/OECD High-Level Principles on Financial Consumer Protection note that "Quality financial products are those that are designed to meet the interests and objectives of the target consumers and to contribute to their financial well-being." Principle 8, Quality of Financial Products, calls for product oversight and governance by financial services providers and intermediaries to ensure quality financial products are designed and distributed. Principle 5, Competition, notes the role market competition plays in the quality of products, and Principle 9, Responsible Business Conduct and Culture of Financial Services Providers and Intermediaries, states that "financial services providers and intermediaries should have as an objective to work in the best interest of consumers and be responsible for upholding financial consumer protection", and should recommend to consumers "suitable products or services that aim to deliver appropriate outcomes and ultimately contribute to their financial well-being."[135] The principles further articulate the role of providers in upholding other key consumer protection objectives, including Disclosure and Transparency (Principle 7) and Complaints Handling & Redress (Principle 12).

In the years since GPFI's 2016 work on Quality of Financial Inclusion Indicators, opportunities to increase quality through policy and product innovations have shifted and expanded, as have the risks that low

135 OECD, 2022b.

quality products can have on financial inclusion. From that perspective, measuring quality on the supply side matters because access and usage of financial products and services alone is insufficient if products are not designed and delivered in ways that are safe, suitable, and simple, especially for last mile consumers. As previously noted, policy measures such as interoperability, data portability, and shared digital public infrastructure can support greater access by improving reliability, interconnectivity, affordability and usefulness of services for day-to-day needs. The measurement of supply-side quality can complement these policy frameworks by providing diagnosis and insights focused on how appropriate the design and delivery of financial products and services within a market are. Measurement can offer insights related to the impact of policies on the quality of goods in the marketplace and provide ex-post analysis to point to areas for further policy development to encourage increasing quality in products and services.

Analysis of quality of products and services has to factor in the interface between product and user, as products that are of quality for one specific group might not be for others. This idea is referred as suitability in consumer protection frameworks and is also explored in Chapter 3 in relation to the importance of FSP to invest in R&D to ideate and scale solutions for the last mile. This chapter considers ways to measure and monitor, over time, the quality of financial inclusion on the design and delivery of products and services. It especially focuses on three products particularly relevant to last mile consumers: payments, deposits, and loan products. The idea is to assess whether our markets are pointing towards the right direction to provide quality financial products and services. To do so, it proposes a series of quality metrics to measure quality of financial inclusion across two supply side-focused categories:

1. Quality of design of products and services
2. Quality of delivery of products and services

From these two categories, a matrix of subcategories and proposed metrics is presented below. These metrics measure how the supply-side is performing on delivering quality of financial inclusion at the national level. Moreover, the list of indicators can also be used to build analysis on different levels, depending on the interest of the user: sectoral, provider or product level. These types of indicators can be used to inform the further development of products and services suited to last-mile populations and others by different sectors of the financial services industry, and to

Complementarities of supply-side and demand-side data for quality financial inclusion focused on supply

Both supply and demand-side data can contribute to the measurement of quality financial inclusion supply, in distinct but complementary ways. Supply-side data can provide verified accounting of how products are designed and delivered in key areas such as cost, reliability of service, and safety and security of the products. Supply-side data can also provide insights on consumer experiences at the product, provider, and market level, such as through complaints data (e.g. volumes, category types, and outcomes of individual cases).

Demand-side data complements supply-side data with deeper insights on consumer experiences, such as problems when using and understanding products and services, and on relevant contextual aspects from consumers lives. Demand-side data also complements supply-side data's focus on provider-consumer interactions, e.g. the portion of consumers who experience issues but do not register formal complaints. These data types are perhaps most powerful when combined. The indicators chosen for this study are primarily derived from supply-side data sources, but do include several demand-side data sources which complement the measurement of quality from the supply side. As these quality indicators are refined, their complementary nature to other demand-side measurement activities should be explored further.

identify areas for improvement in the provision of these products and services to consumers which can inform both private-sector practice and future policymaking. The proposal is not intended to be a definitive list of financial inclusion quality metrics. The prospective research agenda discussed below provides a new set of indicators and metrics that offer insights into the details of actual products in the marketplace. It is essential to understanding how financial inclusion policies to support last mile users and others are having their intended effect, and crucial to identifying possible contributing factors on the supply side when they are not.

4.2 Quality of products and services metrics

The methodological approach to developing this list of metrics started with an examination of previous work on quality of financial inclusion (see Annex B). A list of metrics and indicators were identified from existing surveys and analysis. The list was used to identify subcategories and relevant metrics for the quality of design and delivery of products and services, including by consolidating similar indicators and building new metrics based on common themes from past research. Development of the supply-side quality metrics proposal primarily took a bottom-up approach to support the goal of developing a framework that lends itself to implementation by interested policymakers, researchers, and FSPs. Table 2 presents supply-side quality categories, subcategories, and indicative quality aspects for measurement.

The two supply-side quality categories are summarized below while Annex A includes a detailed list of individual metrics. The metrics are presented with reference to the types/sources of data they rely upon, ranging from consumer surveys to administrative data (i.e., industry data, complaints data, product reviews). The proposed metrics are pragmatic; they are pulled from applied research, mainly focusing on questions and data sources that those responsible for the delivery of financial inclusion and the monitoring its quality should be able to collect and report—and, in some countries, may already be doing.

1. **Quality of design of products and services.** Measurement of quality of design is organized around five subcategories: (i) Ease of use; (ii) Reliability of products and service; (iii) Affordability of services for basic financial needs; (iv) Matching products and services to consumer needs and abilities; and (v) Design of products and services to minimize risks related to security and safety.

   Ease of use focuses on how the barriers faced by consumers with disabilities or vulnerabilities are factored into policy design, which would be reviewed through product descriptions and firm policies. Another ease-of-use dimension is whether consumers report being able to easily use products without assistance across the various devices and interfaces relevant to a country and its last mile populations. Finally, the interconnectivity of similar products (e.g., through interoperability) is not only a policy goal central to DPI and competition but should be considered a key dimension of a financial product's ease of use. Once a product is in use, its reliability can be a benefit or a hindrance to financial inclusion quality, as factors like frequent down time or failed transactions can erode the value of being included and may be particularly important for last mile users (e.g., rural populations). Reliability should be measured through quality of access in different locations and with difference devices, and the rate of success or failure of different basic payment, deposit, and credit transactions. While affordability is somewhat context-dependent upon consumers and local markets, at a minimum, free or low-cost basic payments and deposit accounts should be easy for last mile users to open and designed in a way that users do not incur high fees relative to volumes transacted. Nor should accounts impose high costs for maintenance through minimum balance fees, maintenance fees, etc. Providers should be able to document where within product design

TABLE 2. **Indicator categories for quality of design and delivery of products and services**

	Subcategories	Indicative quality aspects for measurement
Quality of design of products and services	Ease of use	Design of products to consider disabilities and vulnerabilities
		Challenges independently conducting transactions
		Availability of products across different types of interfaces and technologies
		Connectivity to similar products and services
		Reliability of services
	Affordability of services for basic financial needs	Availability of low-cost transaction accounts
		Pricing of mobile payment or deposit accounts
		Pricing of credit products
		True cost of usage of mobile payment or deposit accounts
		True cost of usage of credit products
		Unanticipated product fees and charges
	Matching products and services to the needs and abilities of different user segments	Evidence of consumer needs segmentation in design of products
		Rates of product dormancy
	Design of products and services to minimize risks related to security and safety	Fraud attempts and user victimization rates
		Fraud enabling or limiting practices
		Data privacy and protection policies and practices
Quality of delivery of products and services	Transparency and ease of understanding of products and services	Presentation of information during the sales process
		Availability of product information beyond the sales process
		Proper disclosure of fees and charges
		Consumer understanding of product terms at purchase and during usage
		Opportunity and ability to compare and choose from similar products and services
	Quality of experience during use of financial products and services	Availability of complaints channels
		Use of complaints channels
		Effectiveness of complaints channels
		Staff incentives, knowledge, and "right selling" practices

Source: Authors' analysis.

they have considered the needs of different user segments—of particular relevance to consumer and MSME lending to last mile users. Providers should also report on dormancy rates of payments and deposit accounts as a sign of their value to consumers. Finally, aspects of security and safety are now highly relevant as fraud and data breaches continue to rise in digital financial services. Evidence also shows that in some markets, last mile user populations (e.g., rural, low literacy) may be particularly vulnerable to fraud risks. Fraud and data breach levels and provider data privacy and protection policies should be assessed to measure product- and institution-level fraud and data security risks, and how they currently impact individuals.

2. **Quality of delivery of products and services.** To measure the quality of delivery of products and services, two concepts were prioritized in the indicator subcategories: (i) Transparency and ease of understanding of products and services; and (ii) Quality of experience and fair treatment during use of products and services.

   To achieve **transparency and ease of understanding**, financial products and services should have information that is useful, readily available, and easy to understand by various consumer profiles. They should also lend themselves to comparability with similar products. This can be analyzed by monitoring how consumers are provided with product and service information during the sales process, how that information is designed to support consumer comprehension, and whether it includes all relevant fees and charges. Consumers can also be surveyed on their level of understanding of products and services. Choice and comparability should assess whether similar products are summarized in identical or at least similar formats and whether channels exist for consumers to directly compare product offers. Assessing these subcategories requires a combination of provider key facts statements, contracts, and marketing; self-reported understanding by consumers of the terms and conditions of the products and services they use; and the presence of price comparison tools or other such solutions. Indicators related to a more user-controlled environment, such as the ability to port accounts or operations and to share account data across providers (e.g., open banking), should also be considered as they align with the recommendations for inclusive last mile and DPI policies referenced in the previous chapters.

   For **quality of experience during use**, two categories of metrics are emphasized: (i) complaints handling, and (ii) staff incentives and sales practices. Complaints handling includes the assessment of the availability of redress, such as types of channels, toll-free access, and presence of third-party solutions (e.g., ombuds services); the use of complaints channels, in particular, how many consumers complain; and the effectiveness of complaints channels, particularly the rate and speed of resolution, case outcomes, and functionality of escalation processes. Primary sources for analysis include consumers' reported use of, and relative success with, formal complaints channels, as well as analysis of firm customer complaints records. Documents detailing provider staff incentives and sales staff policies can offer information on whether an FSP has created an environment that lends itself to quality advice and tailored product assessment and recommendations, or if there are risks that consumers can be misled or steered to products that are suboptimal for their needs. Where available, records of reasons for product recommendations can provide further information for measuring the quality-of-experience dimension.

> The focus on quality of product design and delivery reflects increasing global recognition of the importance of supply-side factors in the quality of financial inclusion.

Complaints data can also be used to identify the occurrence of aggressive sales practices and inadequate product offers.

4.3 Testing and refining quality of financial inclusion measurements

This chapter added to in-progress work on financial inclusion within GPFI by introducing a more supply-side-focused consideration: the measurement of the quality of financial product design and delivery toward a responsible supply of inclusive, quality, and needs-informed financial products and services. The proposed matrix is not intended to be a definitive list of financial inclusion quality indicators. As the 2016 G20 Financial Inclusion Indicators proposed, "countries are encouraged to collect their own data and supplement the indicators given in the table below with data on areas of specific relevance to the country context." The approach to quality measurement is similarly open to country-level adaption and selectivity. Countries may also find that some categories or individual indicators are not possible to collect in their market and thus exclude them from their quality measurement activities. The indicators are also a point of departure to inform a future learning agenda. This learning agenda is still in its very early stages and will require further consultation, refinement, and robust testing of indicators by financial sector authorities across a diversity of high-, middle-, and low-income countries. The indicators should eventually improve the ability to identify needed policy reforms that could improve financial inclusion quality. The indicators could also identify where increased efforts to comply with existing quality standards and requirements in the market are needed, including disaggregated analysis of the quality of financial inclusion for different segments of last mile consumers.

Annex A

BOX A.1. **High level principles for financial inclusion**

PRINCIPLE 1: Promote a Digital Approach to Financial Inclusion
Promote digital financial services as a priority to drive development of inclusive financial systems, including through coordinated, monitored, and evaluated national strategies and action plans.

PRINCIPLE 2: Balance Innovation and Risk toAchieve Digital Financial Inclusion
Balance promoting innovation to achieve digital financial inclusion with identifying, assessing, monitoring and managing new risks.

PRINCIPLE 3: Provide an Enabling and Proportionate Legal and Regulatory Framework for Digital Financial Inclusion
Provide an enabling and proportionate legal and regulatory framework for digital financial inclusion, taking into account relevant G20 and international standard setting body standards and guidance.

PRINCIPLE 4: Expand the Digital Financial Services Infrastructure Ecosystem
Expand the digital financial services ecosystem—including financial and information and communications technology infrastructure—for the safe, reliable and low-cost provision of digital financial services to all relevant geographical areas, especially underserved rural areas.

PRINCIPLE 5: Establish Responsible Digital Financial Practices to Protect Consumers
Establish a comprehensive approach to consumer and data protection that focuses on issues of specific relevance to digital financial services.

PRINCIPLE 6: Strengthen Digital and Financial Literacy and Awareness
Support and evaluate programs that enhance digital and financial literacy in light of the unique characteristics, advantages, and risks of digital financial services and channels.

PRINCIPLE 7: Facilitate Customer Identification for Digital Financial Services
Facilitate access to digital financial services by developing, or encouraging the development of, customer identity systems, products and services that are accessible, affordable, and verifiable and accommodate multiple needs and risk levels for a risk-based approach to customer due diligence.

PRINCIPLE 8: Track Digital Financial Inclusion Progress
Track progress on digital financial inclusion through a comprehensive and robust data measurement and evaluation system. This system should leverage new sources of digital data and enable stakeholders to analyze and monitor the supply of—and demand for—digital financial services, as well as assess the impact of key programs and reforms.

Source: GPFI, 2016.

Indicator categories for quality of product and service design and delivery: https://www.cgap.org/sites/default/files/2024-11/Financial%20product%20design%20and%20delivery%20indicators.xlsx

Annex B. Country examples

Innovative financial solutions for MSMEs as a target last mile segment

Afghanistan: Empowering Microfinance and Enterprises for Resilience and Growth (World Bank project P504220). The objective of this project is to support the demand for and supply of finance for micro and small enterprises in Afghanistan, with a focus on women's financial inclusion. The project aims to revitalize microfinance providers (MFPs) in the country through recapitalization support and by offering technical assistance to diversify their products and operational efficiency. The project also focuses on creating a pipeline of bankable micro and small enterprises, including women-led businesses, through business development services and a credit viability fund, connecting them to the formal financial system.

In **Ethiopia,** the Women Entrepreneurship Development Project (WEDP) (World Bank project P122764) provides women with access to business loans through a network of banks and microfinance institutions.[136] With an average loan size of US$10,000, 26,374 women across Ethiopia have secured businesses since 2012. Many beneficiaries have substantially increased their incomes and created jobs. The project targets the "missing middle" of growth-oriented firms: those with financing needs not adequately met by traditional microcredit. An impact evaluation found borrowers grew their profits by 30 percent and employment by 50 percent over five years, compared to a control group. A second phase (WEDP 2.0) builds on the original project's proven infrastructure to scale and expand support for the growth of WSMEs.

Japan has established the Facility for Accelerating Financial Inclusion (FAFI) to provides loans to local financial institutions in **developing countries** that are engaged in projects that contribute to improving access to finance for (i) MSMEs, (ii) low-income groups, or (iii) women, provided they have a certain level of creditworthiness and a certain number of years of experience in the relevant sector. The FAFI is a debt facility of up to US$1.5 billion, established by the Japan International Cooperation Agency (JICA) on May 2022, as part of its private sector investment finance operations. This facility was established as part of Japan's contribution in light of Prime Minister Kishida's statement at the side event on the Partnership for Global Infrastructure and Investment at the G7 Hiroshima Summit in May 2023. Before FAFI, there was the Facility for Accelerating Financial Inclusion in Asia (FAIA) established in March 2020, to improve access to finance and empower women, low-income people, and micro, small, and medium enterprises (MSMEs) in the ASEAN region. JICA expanded in 2023 the FAIA to conform the FAFI facility last year to include developing countries outside Asia[137].

136 For more information, see Ethiopia: Helping Women Entrepreneurs Succeed, One Challenge at a Time.

137 For more information see JICA's announcement.

Ensuring affordable access to information and communications technology and digital public infrastructure

ICT

One of **Mexico's** major mobile network operators, Telefónica Mexico (Movistar), entered a long-term deal with AT&T to use the latter's network infrastructure in the country until 2030.[138] Telefónica returned all of its spectrum licenses upon migrating its services to AT&T.

The business uses AT&T's 3G, 4G, and 5G networks but is an independent operator with complete control over its customer base and operational business functions. The nonexclusive agreement allows Telefónica to significantly reduce costs. Telefónica has also signed a roaming arrangement with Altán Redes, a mobile network capacity provider. The arrangement should expand Telefónica's rural reach.

DPI

Digital IDs

Australia's Digital ID system is a voluntary program enabling citizens to virtually verify their identity in order to use various online services.[139] The country's Department of Finance promotes the system under the Digital ID Bill (2024) to ensure the safe and secure management of information kept by Digital ID services providers.

Users verify their existing ID documents online against official records held by government agencies. No centralized database is used and no additional information is collected. The Digital ID system enables online verification so users can securely access financial systems, government services, disaster recovery schemes, and other online services. The necessity to provide copies of various ID documents is therefore removed, making the process more convenient and secure.

Interoperable and Inclusive Digital Payments

As part of **Indonesia's** Payment Systems Blueprint 2025, Bank Indonesia implemented the National Open Payment Standard (SNAP)[140] to promote interoperability and integration. This ecosystem supports innovation and competition at the service level. SNAP's development was jointly designed with the payments industry to cover technology, security, data standards, and governance guidelines. SNAP implementation is supported by a developer site that publishes all standards and an online sandbox is available for testing. In addition, Bank Indonesia and the payments industry developed the Quick Response Code Indonesia Standard to support digitization in the payments space.

Data Sharing Protocols

Germany launched the Financial Big Data Cluster (FBDC)[141] to establish a decentralized data and infrastructure ecosystem for finance, enabling secure cross-organizational data exchange. The cluster also explores how AI can be leveraged for sustainable finance, supply chain finance, anti-money laundering finance, market integrity, and monetary policy.[142]

Digitalizing G2P Payments

In collaboration with CGAP, the World Bank, and the Bill & Melinda Gates Foundation, **Indonesia** embarked on designing the G2P 4.0 payments roadmap, a new and comprehensive system for social protection

138 Morris, 2024.

139 Australian Government, Department of Finance, 2024.

140 Alper et al., 2023.

141 BIS, 2023b.

142 FS-UNEP Centre, 2024.

distribution.[143] The initiative aimed to improve the beneficiary experience through an inclusive and digitalized social protection framework. The payments roadmap includes several key features:

- Digital integration to streamline payments processes
- Centralized database systems for efficient beneficiary management
- Digital ID implementation to ensure secure and accessible services
- Taking cognizance of beneficiary preferences for the services

Through the program, the Indonesian Government has hoped to achieve efficiency, accountability, transparency, public trust, technology adaptation, and financial inclusion. Its success relies heavily on government commitment, continual collaboration with all stakeholders at all levels, and a country-specific approach. While the approach recognizes learnings from other countries, its priority is to tailor strategies and implementation to Indonesian realities and practices.

Pilot projects have allowed the shift from in-kind delivery to complete digital delivery:

- Food subsidy: From in-kind delivery to e-vouchers
- Conditional Cash Transfer (PKH): From cash to bank savings account
- Kartu Prakerja (pre-employment program for working-age beneficiaries): Now includes online registration, e-KYC, a virtual account, and beneficiary choice for incentives disbursement

In **Türkiye,** trusted data sharing and digital infrastructure enable efficient and comprehensive social assistance payments.[144] The Integrated Social Assistance Information System (ISAS) is an information system used by the Ministry of Family and Social Services for social assistance provided through Social Assistance and Solidarity Foundations. The overall infrastructure is composed of the ISAS, the ID system, the national address system, the payroll management system, the central treasury system, and the national payments system. ISAS facilitates the process and data sharing related to multiple social assistance programs.

Its links to the ID system and the national address system enable ISAS to continuously monitor household profiles for eligibility. The payments module within ISAS manages information processing for payments lists under each social assistance program. Funds are transferred from the Treasury Single Account to a public bank or through the Turkish Post company, which then directs them to recipients. ISAS receives updated payments reconciliation information nightly, allowing complete tracking of recipient fund withdrawals.

Far-reaching and inclusive agent networks

The rise of e-commerce in **China** has led to the establishment of a robust and far-reaching CICO agent network.[145] At the beginning of the millennium, the Chinese Government supported rural agent networks by improving the performance of rural credit cooperatives and village and township banks. Agents were mainly used to distribute social assistance payments and to provide SMEs with microcredit. However, these activities did not generate sufficient revenue and hence required government subsidies.

Retail providers in China created nonbank payments companies that were granted payments licenses. These companies slowly expanded into rural areas and leveraged established rural agents for their operations, including acting as financial agents. By 2018, 97

143 Palaon and Roest, 2024.

144 Ortakaya et al., 2022.

145 Hernandez et al., 2020.

percent of the country's rural villages had access to at least one agent.

Chinese regulators adopted a learn-and-adjust policy, initially allowing DFS delivery without a clearly defined regulatory framework. The policy permitted system monitoring to gain insight into potential risk areas, which led to adjusted and more stringent regulations in 2016. China's current agency model is deemed well-established and mature.

Ensuring adequate financial consumer protection, customer-centricity, data privacy and security, and digital and financial literacy

FINANCIAL CONSUMER PROTECTION

The Central Bank of **Armenia** (CBA), the country's regulator, was concerned that DFS innovations could adversely affect consumer protection and consumer product and service knowledge. CBA decided to create a collaborative Code of Conduct in response.[146] The document focused on adequate disclosure and transparency for financial services provision. CBA and the entire financial services sector (banks, insurance companies, MNOs, and others) reached an agreement on a code all DFS providers are required to sign, with implementation oversight by the CBA. Among other considerations, the code covers oral communications required prior to signing contracts/agreements, availability and use of multiple channels, and detailed information on main content to share with clients (e.g., terms, conditions, prices, clauses in the case of changes in conditions).

Data Privacy and Security

The issue of consent is often defined by law.[147] In the case of the **European Union,** the General Data Protection Regulation, in operation since 2016, very specifically defines consent. Similar arrangements exist in **Peru** and the **Philippines. Malaysia's** Personal Data Protection Act (2010) requires consent as defined in the country's Banking and Financial Sector Code. **South Africa's** Protection of Personal Information Act (2013) requires and defines consent and extends the requirement to direct marketing.

Digital and Financial Literacy

In 2023, **Mexico** launched the National Survey on Financial Health (ENSAFI 2023) to evaluate financial health.[148] The National Commission for the Protection and Defense of Users of Financial Services (CONDUSEF) and the National Institute of Statistics and Geography (INEGI) conducted the survey.

The survey aimed to understand whether financial services met the following characteristics: (i) Security to meet day-to-day expenses; (ii) Resilience to deal with negative variations in revenue streams and unexpected increases in expenses; and (iii) Freedom to reach goals and take advantage of opportunities to achieve well-being and economic mobility.

CONDUSEF used survey results to identify challenges and opportunities to promote public policies and to implement interventions that address financial stress by fostering healthy financial habits and resilience.

To improve financial well-being in **Japan**, the Japan Financial Literacy and Education Cooperation (J-FLEC) organization delivers financial and economic education opportunities to people nationwide to understand the importance of life planning, household management, and asset accumulation. This is done by sending

146 AFI, 2020.

147 AFI, 2021.

148 ENSAFI, 2023.

financial and economic lectures to businesses and schools nationwide, conducting events and seminars, offering free trial experiences for in-person and online one-on-one consultations with J-FLEC certified advisors to create a "J-FLEC First Money Plan" and learn specific actions to take, among other plans. J-FLEC was established in April 2024. In 2022, only 7% of people perceive that they had received financial education, and there were problems such as a lack of awareness of asset formation and investment fraud. J-FLEC is a collaboration of the Government of Japan (Financial Services Agency), financial industrial associations and the Council for Financial Services Information to promote financial education in order to acquire financial and/or economic knowledge that contributes to the appropriate use of financial services, and to develop skills to use such knowledge[149].

In **Portugal**, The Banco de Portugal supervises the commercialization of retail banking products and services, based on three main pillars: regulation, oversight and financial inclusion and literacy. Among key priorities are the promotion of a quality financial inclusion and mitigation of the risk of financial exclusion. As an example, recognizing the benefits, but also the risks of technological innovation in financial services, the Banco de Portugal adopted a multilayered and holistic approach, which includes tracking technological developments, monitoring product and service provision, removing barriers, ensuring technological neutrality, and promoting digital financial literacy. The Banco de Portugal, with the support of the European Commission and the OECD launched the "Digital Financial Literacy: a Strategy for Portugal" to promote the adequate use of digital financial services and to reduce the risk of financial exclusion[150].

PROMOTING A REGULATORY FRAMEWORK THAT ENABLES FINANCIAL SERVICES DELIVERY AT THE LAST MILE

Agents in the **Philippines** have played a significant role in extending DFS to the last mile.[151] Bangko Sentral ng Pilipinas (BSP) identified concerns agency networks had about proper monitoring, lack of public visibility, and inefficient data collection. To address the gaps and facilitate ongoing development of the country's agent network ecosystem, BSP created the Agent Registry System (ARS). The project has been successfully implemented and is expected to increase public trust in agent networks while enabling BSP to effectively oversee the network ecosystem.

The advent of open banking is one of the more promising regulatory developments with the potential to positively impact financial service provisioning at the last mile. Open banking can help increase the number of relevant services and improve their quality for people who already have bank accounts but are underbanked. However, open banking can also bring significant risks, particularly in regard to data security, possible consumer exploitation, and exacerbating rather than reducing the divide. Even so, it has become part of the regulatory framework for many countries. In **Brazil,** for example, Banco Central do Brasil issued a resolution to implement open banking in 2020.[152] The resolution covers all services regulated by the Bank and includes all Bank-authorized services providers. Participation by larger institutions is mandatory but is voluntary for the remainder. The resolution requires participants to adhere to data privacy regulations.

149 For more information see J-FLEC description.

150 For more details on Portugal's digital financial literacy strategy see OECD, 2021b

151 AFI, 2023b.

152 Plaitakis and Stachen, 2020.

ENCOURAGE RESPONSIBLE, SCALABLE, AND AFFORDABLE TECHNOLOGY AND INNOVATIONS FOR RAPIDLY ADVANCING THE FINANCIAL INCLUSION OF INDIVIDUALS AND MSMES

In **Singapore,** the government established the Early-Stage Venture Fund to provide funding to venture capital firms that invest in Singaporean startups. Since the government matches the capital these firms raise, investment is thereby encouraged.

In **Germany,** the government established a state-owned development bank with focused programs for MSMEs, including a range of financing options for MSMEs and innovative tech startups. In **Poland,** bank-securitized portfolios are sold to institutional investors, diversifying funding sources for banks and increasing the availability of MSME financing.

In **Japan,** the Financial Services Agency established a FinTech Support Desk to provide consultation services for business operators.[153] The aim is to clarify how existing regulations are applied to possible business innovation. A FinTech Proof of Concept Hub also supports fintech firms and financial institutions in conducting tests to develop services that address market challenges through digital innovation.

The need for dedicated public policy initiatives and investments wholly focused on reducing financial inclusion gaps among last mile population segments

REDUCE NORMS-INDUCED SKILLS GAPS AMONG TARGET LAST MILE INDIVIDUALS

The **South African** Social Security Agency (SASSA) has followed a sustained policy of extending social assistance cash transfers to economically vulnerable segments, including senior citizens and people with disabilities; child support for low-income families; and, as a result of the COVID-19 pandemic, support for people left destitute as a result of the restrictions imposed.[154] Recipients are provided with a basic transaction account from any bank and receive monthly digital transfers. Those who prefer cash can withdraw their funds from participating retailers and ATMs.

As a result, approximately 40 percent of households have benefited from some social assistance programs. Provision of transaction accounts has increased financial inclusion access to 98 percent of adults. The next policy focal point will be increased use through digitalization efforts, as identified in the country's financial inclusion policy.

In **Spain,** certain vulnerable groups of senior citizens requiring better financial services have been identified.[155] To address the issue, banks are signing up for a protocol that improves access to and ease of use of DFS, inter alia, through the use of appropriate language and visuals.

153 GPFI, 2022.

154 SASSA, 2023.

155 GPFI, 2022.

REDUCE NORMS-INDUCED SKILLS GAPS AMONG FSPS WITH THE POTENTIAL TO REACH LAST MILE POPULATION SEGMENTS

In 2015, the **United Kingdom** reviewed representation of women in senior management roles in financial services, focusing on the executive population below the board level. The review found that women comprised just 14 percent of executive committees in the financial services sector. In response, HM Treasury launched the Women in Finance Charter[156]—an example of an effort to improve the situation and move the industry closer to gender balance.

Four hundred firms with a total of 1.3 million employees signed the Charter, committing to support women reaching senior roles and setting internal targets to achieve that goal. The assumption is that more diverse and inclusive workforce and management teams will result in service offerings in the market that reflect acceptance and support for diversity.

INCREASE COORDINATION BETWEEN POLICY AUTHORITIES ACROSS SECTORS TO IDENTIFY KEY REFORMS THAT REMOVE GAPS IN LEGAL RIGHTS FOR LAST MILE POPULATION SEGMENTS

IFAD launched a program to increase the uptake of digital remittances among **Moroccan** migrants in the EU.[157] The relatively low levels of digital remittances use has been detrimental to recipient families in Morocco and is of concern to the country's regulatory authorities. The Moroccan government has taken several steps to regulate and monitor informal remittances to reduce the risk of money laundering and terrorist financing. However, informal flows remain problematic as they account for approximately 10 percent of remittances.

The program partnered with Moneytrans as payment services provider and AXA SA as insurer to target 18,000 remittances senders in Belgium, France, Germany, Italy, Spain, and the Netherlands, as well as their 31,500 recipients in Morocco. Project activities include:

- Adjusting microinsurance to link to remittances
- Raising awareness of digital remittances among Moroccan migrants
- Enabling Moroccan migrants to receive their salaries in formal accounts
- Expanding Moneytrans customer eligibility policy in compliance with regulatory requirements

The program is expected to reduce costs for remitters, expand financial inclusion for recipients, and increase awareness of digital remittances among Moroccan migrants.

156 HM Treasury, 2024.

157 IFAD, 2023.

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