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Statistics Department

Measuring Financial Access

10 Years of the IMF Financial Access Survey

Prepared by an IMF team led by Marco Espinosa-Vega and Kazuko Shirono, with Hector Carcel Villanova, Esha Chhabra, Bidisha Das, and Yingjie Fan

No. 20/08

SPECIAL NOTE

The COVID-19 pandemic has severely disrupted people's lives worldwide and is likely to have a disproportionate negative impact on the unbanked and underbanked populations, stressing the need to monitor financial access. The IMF's Financial Access Survey (FAS) collects granular data on access to and use of financial services, including microfinance, SME lending, gender-disaggregated data, and digital finance such as mobile money and internet banking.

This departmental paper, marking the 10th anniversary of the FAS, provides a comprehensive guide to the FAS database, recent trends as well as some reflections on future directions. The FAS can help inform a policy response through relevant data on financial access, including mobile money.

Disclaimer:
This document was prepared before COVID-19 became a global pandemic and resulted in unprecedented economic strains. It, therefore, does not reflect the implications of these developments and related policy priorities. We direct you to the **IMF Covid-19 page** that includes staff recommendations with regard to the COVID-19 global outbreak.

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Executive Summary

This departmental paper marks the 10th anniversary of the IMF Financial Access Survey (FAS). It offers a retrospective of the FAS database, along with some reflections as to its future directions.

Since its 2009 launch, the FAS has provided granular data on access to and use of financial services. It is a supply-side database with annual global coverage based on data sourced directly from financial service providers—aimed at supporting policymakers to target and evaluate financial inclusion policies. Its data collection has kept pace with financial innovation, such as the rise of mobile money and growing demand for gender-disaggregated data—and the FAS must continue to evolve.

FAS indicators suggest that financial access is advancing globally but at different speeds and that modes of access to finance are shifting beyond traditional bank branches. In high-income countries, the number of bank branches is declining while internet banking is gaining ground. Agent banking, based on retail agent outlets such as small retailers acting on behalf of banks to carry out financial transactions, has gained popularity in Asia and Latin America while mobile money has changed the way people access finance in Africa and other parts of the world.

This paper illustrates the value of FAS data granularity in better understanding financial access. It shows that deposit takers other than commercial banks (e.g., microfinance institutions or savings banks) play an important role in providing financial services in some economies although commercial banks are the main player in many economies. FAS data also suggest that in many economies, financial access and use gaps persist in some segments of the population, including women and small and medium-sized enterprises (SMEs).

These findings highlight a need to close the gaps in FAS data collection, carefully consider cross-country differences in financial intermediation structures, and keep pace with innovations, such as digital finance—to better track enablers of financial inclusion across the globe.

As different modalities of financial access gain traction, policymakers will face new challenges—such as consumer protection and financial stability considerations associated with these innovations.

Looking forward, goals for the FAS include continuing to encourage countries to strengthen FAS data reporting and to enhance its fintech data collection.

CHAPTER

1 Introduction

Financial inclusion is a priority in many economies and, increasingly, at the global level. A number of countries have implemented or are in the process of implementing financial inclusion policies. So far, more than 50 countries have adopted a National Financial Inclusion Strategy, and more are likely to follow suit. The United Nations Sustainable Development Goals (SDGs) also consider financial inclusion as a key factor in the drive to end poverty by 2030.

The proper targeting and evaluation of financial inclusion policies require granular data on financial access and use—exactly what the IMF Financial Access Survey (FAS) provides. The FAS is a supply-side database, containing annual data on access to and use of financial services with near-global coverage. It aims at supporting policymakers as they measure and monitor financial inclusion, with high-quality, internationally comparable data. The FAS contains country time series and indicators tracking the availability and use of financial products such as deposit accounts, loans, and insurance policies, based on administrative data collected by central banks and financial regulators.

The FAS was launched in 2009 at the IMF–World Bank Annual Meetings in Istanbul to meet the demand for data on financial inclusion to support evidence-based policymaking. The FAS has evolved over time to keep pace with changing data needs and the financial sector landscape.

This 10th anniversary of the FAS presents an opportunity to take stock of its achievements to date and to reflect on the next generation of the FAS database.

The annual frequency and granularity of the FAS data allow for tracking the latest trends of financial access and use. FAS indicators reveal much progress

in advancing financial access and use across the globe, but gaps persist for segments of the population, including women and small and medium-sized enterprises (SMEs). FAS indicators also show that the mode of accessing financial services varies by country and is changing. Countries are moving away from traditional banking with brick-and-mortar branches and shifting toward branchless banking such as mobile and internet banking. In low- and middle-income countries, banks have adopted "agent banking" based on retail agent outlets to carry out basic financial transactions, especially in Latin America. And mobile money has changed the way people access financial services in sub-Saharan Africa. These innovations have helped broaden access in countries where traditional banking services have limited reach.

The paper also highlights the need to close FAS data collection gaps, including those of advanced economies, and the importance of differences in financial intermediation structures, including digital finance. The paper's analysis suggests that in countries where mobile money or mobile and internet banking is widely used to access financial services, focusing on traditional banking may not fully capture the true progress on the financial inclusion front.

The rest of the paper is organized as follows. Chapter 2 reviews the definitions of financial inclusion used in the literature, followed by a discussion on the current landscape for measuring financial access and use, including available data sources. Chapter 3 features the FAS database, providing details on different components of the FAS, its evolution over the past decade, and data reporting by countries over time. Chapter 4 is a deep dive into the recent trends and developments in access to and use of financial services, using several FAS indicators on traditional banking, digital finance, and beyond. Chapter 5 zooms into the state of financial access of women and SMEs—highlighting the need for FAS data granularity. Chapter 6 concludes with a discussion on a possible way forward to further improve the FAS database—including closing data gaps by helping build statistical capacity in countries that report limited data series—and provides a blueprint for future directions of the FAS.

The FAS has been made possible by generous financial support by a range of donors, including the Netherland's Ministry of Foreign Affairs, the Bill & Melinda Gates Foundation, and more recently those sponsoring the Data for Decisions (D4D) Fund, launched in June 2018.[1]

[1]The D4D Fund donor partners include China, European Union, Germany, Japan, Korea, Luxembourg, The Netherlands, Norway, and Switzerland, as of end 2019 (https://www.imf.org/en/Capacity-Development/D4D).

CHAPTER

2 Financial Inclusion and Its Measurement

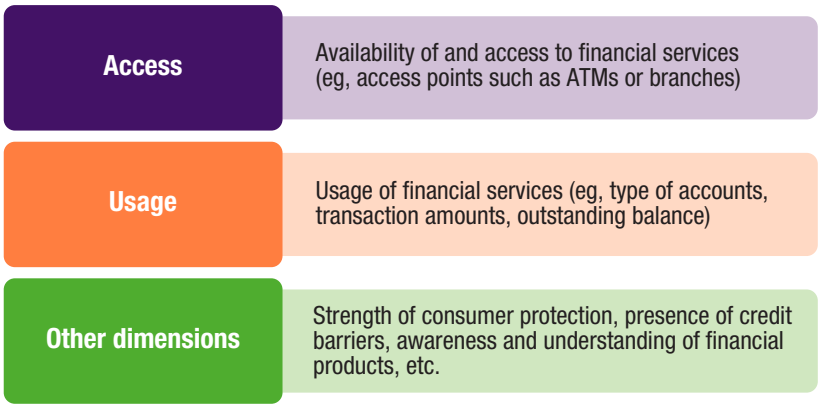
What is financial inclusion, how do we measure it, and why does it matter? Drawing on the existing literature, this chapter starts by defining financial inclusion, followed by a brief overview of its macroeconomic importance and measurement issues.

Financial Inclusion: What It Entails and Why It Matters

Broad consensus in the literature reveals that financial inclusion is a multifaceted concept, encompassing various dimensions, including access to and use of financial services as well as other aspects such as affordability, usefulness, quality, and awareness of financial services and products (Figure 1). Sahay and others (2015a) define financial inclusion simply as "the access to and use of formal financial services by households and firms." Jahan and others (2019) adopt the same definition with a focus on the following three dimensions: (1) access to financial services, (2) usage of financial services, and (3) the quality of financial products and service delivery.

Several national authorities have also defined financial inclusion in order to map out their specific financial inclusion goals and set a framework to achieve them. For example, the National Strategy for Financial Inclusion of the Philippines defines financial inclusion as a state wherein there is effective access to a wide range of financial products and services by all (BSP 2015). In Peru, financial inclusion is defined as the access to and usage of appropriate financial services for all segments of the population (SBS 2014). Paraguay's National Financial Inclusion Strategy 2014–2018 emphasizes affordability and consumer protection in addition to financial access and usage for all (Grace, Hwang, and Mora 2014).

Figure 1. Different Dimensions of Financial Inclusion



Source: IMF staff.

The World Bank offers a multifaceted conceptual definition—financial inclusion entails individuals and businesses having access to useful and affordable financial products and services that meet their needs for transactions, payments, savings, credit, and insurance and are delivered in a responsible and sustainable way (World Bank 2018).

Financial inclusion is considered a key vehicle to promote inclusive growth and reduce poverty by facilitating savings, efficient allocation of capital, and diversification of risks (Dabla-Norris and others 2015; Sahay and others 2015b). Greater financial inclusion can also enhance financial stability, with a broader base of depositors and more diversified loan portfolios of banks (Mehrotra and Yetman 2015). An increased and more diversified depositor base can be particularly important during periods of economic crisis—greater access to bank deposits can make the deposit funding base more resilient in times of financial stress (Han and Melecky 2013). At the same time, a rapid increase in access to financial services could lead to financial instability if greater financial inclusion results from rapid credit growth or the expansion of unregulated parts of the financial sector (Mehrotra and Yetman 2015).[1]

Measures of Financial Inclusion

As a multidimensional concept, measuring financial inclusion requires of several metrics. Economies need to consider data concerning access to financial services; usage of financial products; other dimensions such as affordability,

[1]Financial inclusion can also be seen as part of a broader concept of financial development. See, for example, Čihák and others (2012) and Svirydzenka (2016).

quality, range of options, and level of financial knowledge about financial services and products (GPFI 2012 and 2016, Jahan and others 2019, Loukoianova and others 2018). In practice, some components, especially access and usage, are more easily measured than others as they are more readily observable (eg, ATMs and bank branches for access points or the value of deposits to capture usage). Access and usage dimensions are thus most commonly used as proxies to measure financial inclusion.[2] A survey of 47 countries conducted by the Bank for International Settlements (BIS) in 2016 shows that access to and use of financial services are mentioned in nearly all reported definitions of financial inclusion (Gadanecz and Tissot 2016).

As the two dimensions—financial access and use—are the main pillars of financial inclusion, this paper focuses on their measurement.

Sources of Financial Inclusion Data: Supply-Side vs. Demand-Side

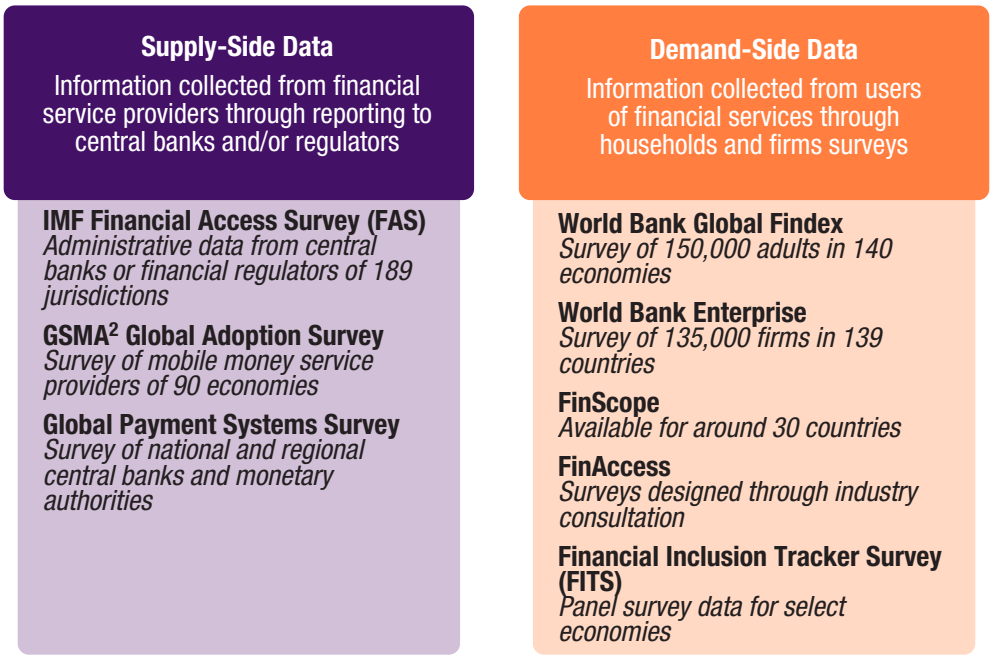
Financial access data are usually collected from either financial services providers (FSPs) or users (Figure 2). When financial access data are collected from FSPs, these are known as supply-side data. Supply-side data are collected through administrative reporting to central banks or financial regulators. On the other hand, when gathered from sample surveys of users of financial services such as households and firms, financial access statistics are referred to as demand-side data. These surveys can also include information on financial inclusion such as barriers to financial services (World Bank 2015).

Because supply-side data may be collected at relatively low cost from administrative sources, they tend to be of higher frequency than demand-side data, which allows for regular monitoring of financial access.[3] The FAS is based on administrative data collected by central banks or financial regulators from financial institutions and service providers, and the data are updated annually. As part of their oversight mandates, central banks and supervisory authorities have access to a wide range of information on FSPs including information on services to specific segments of the population like SMEs. Moreover, as overseers/operators of national payment systems, central banks, or the main financial regulators also have payments data at their disposal (Gadanecz and Tissot 2016).

[2]The Group of Twenty (G20) endorsed 38 indicators as the G20 Financial Inclusion Indicators in 2012: these indicators measure usage (21), access (11), and quality of products and delivery of services (6). Indicators on quality of financial services include financial knowledge scores and a consumer protection index reflecting the existence of dispute resolution mechanisms.

[3]Data from financial institutions are not only of higher frequency but also tend to be of higher quality compared to demand-side surveys.

Figure 2. Select Data Sources on Financial Access[1]



Sources: IMF, Financial Access Survey (FAS); GSMA, Global Adoption Survey and Global Payment Systems Survey; World Bank, Global Findex; World Bank Enterprise, FinScope, FinAccess, and Financial Inclusion Tracker Survey (FITS).
[1]This figure lists select data sources on financial inclusion, both supply-side and demand-side data.
[2]Global System of Mobile Communications Association (GSMA).

Demand-side data, comparatively costly, with potentially low response incentives/rates, are gathered infrequently. Data collection through surveys of nationally representative samples of households and firms is both resource-intensive and time-consuming (Gadanecz and Tissot 2016). However, demand-side sources make it possible to customize the data collection efforts to ask for detailed information and/or identify segments of the population excluded from the formal financial sector, enabling policymakers to prioritize reforms accordingly (Demirgüç-Kunt and Klapper 2012).

For a comprehensive picture of financial access, supply-side data and demand-side information can usefully complement each other.

Financial Access Databases

Driven by the growing importance of financial inclusion in the policy agenda, financial inclusion statistics have been on the rise during the past decade (Figure 2). The most prominent supply-side data source is the IMF

FAS, which has been collecting annual data on financial access and use since 2009, covering 189 jurisdictions with data spanning 15 years. Other supply-side data sources include the Global System of Mobile Communications Association's (GSMA) annual Global Adoption Survey, which collects data from mobile money service providers and presents a set of mobile money metrics at the aggregated level for six geographical regions.[4] The World Bank's Global Payment Systems Survey (GPSS) periodically surveys national and regional central banks and monetary authorities on the states of payment systems. MIX is a hybrid database, leveraging user surveys in addition to supply-side data to make financial inclusion data available in emerging market economies.

Demand-side data sources include the World Bank Global Findex and Enterprise Survey, both based on sample surveys.[5] FinAccess, the Financial Inclusion Tracker Survey (FITS), and FinScope are other demand-side surveys conducted at the country level with FinScope having so far been conducted in more than 30 countries.

[4]GSMA does not release data at an individual country level.

[5]Global Findex, first released in 2012 and updated triennially, covers 140 economies with data collected through sample surveys of roughly 1,000 people in each. The Enterprise Survey is based on a firm-level survey of topics including access to finance, covering close to 140 economies over different years.

CHAPTER

3 Financial Access Survey: An Overview

This chapter provides an overview of the FAS, its components, and enhancements over the past decade, as well as trends in coverage and reporting of different indicators.

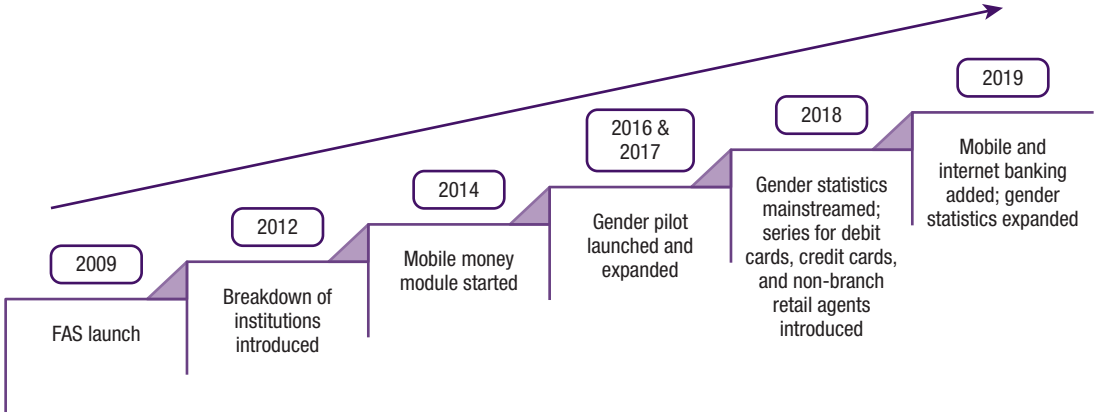
Supply-Side Data Source with Global Coverage

The FAS is the sole source of supply-side annual data on financial access and use with near-global reach. The FAS currently covers 189 jurisdictions, including 40 fragile states, and contains 121 different series on financial access and use spanning 15 years (2004–18).

The FAS provides granular data on traditional financial services and digital finance. It covers information such as the number of institutions for different types of financial service providers as well as information on accounts such as the number of account holders and the outstanding balance. The FAS also contains information on different segments of financial service users, such as households, SMEs, and women. To facilitate analysis, the FAS provides 64 indicators, normalized relative to the size of adult population, land area, and GDP (Appendix I). These indicators are aimed at capturing financial access and use for a variety of financial institutions and products by various types of financial service users.

Despite the near-global coverage, the number of reporters to the FAS varies widely across series due to lack of source data and statistical capacity constraints, resulting in data gaps. Chapter 6 discusses some of the initiatives underway to reduce these gaps.

Figure 3. Evolution of the FAS, 2009–19



Source: IMF staff.

The FAS data are cross-country comparable because countries follow common methodological and conceptual guidelines in reporting their data.[1] The latest data are posted at the FAS data portal (http://data.IMF.org/FAS), which is updated on a rolling basis as data become available. Users can access the preceding year's FAS data as early as May of the current year.

The FAS has evolved since its 2009 launch, adapting to the changing landscape of financial services and growing demand for more granular data (see Figure 3 and Box 1). First, in addition to traditional banking services, the FAS expanded its coverage to include data on *mobile money* in 2014. Second, the FAS introduced new series on different forms of *branchless banking*—non-branch retail agent outlets and the number of debit and credit cards in circulation in 2018, and mobile and internet banking in 2019. Third, after two successful pilots in 2016 and 2017, *gender-disaggregated data* were made part of the main survey in the 2018 round of the FAS. In the FAS 2019 round, gender breakdowns have been expanded to cover not just commercial banks and non-deposit-taking microfinance institutions but also deposit-taking microfinance institutions.[2]

[1]Definitions and concepts used in the FAS are included in the *IMF's Financial Access Survey Guidelines and Manual*. The document is available in three languages—English, Spanish, and French and can be accessed at http://data.IMF.org/FAS.

[2]Both deposit-taking and non-deposit-taking microfinance institutions offer small-scale loans to self-employed or informally employed low-income individuals and microenterprises. The key difference between the two is how these loans are financed. As their names suggest, deposit-taking microfinance institutions finance their activities through deposits, while non-deposit-taking microfinance institutions use sources other than deposits (IMF 2016).

FAS Indicators

The FAS contains 64 indicators derived from the underlying data series to facilitate cross-country comparison and analysis (Appendix I). These indicators—normalized relative to the size of adult population, land area, and GDP—broadly capture two aspects of financial inclusion: (1) geographical outreach (namely, access points) and (2) use of financial services.

FAS indicators that capture geographical outreach include the number of financial institutions by type (commercial banks, credit unions, microfinance institutions, and insurance corporations), branchless banking (ATMs and non-branch retail agent outlets), and mobile money (registered and active mobile money agent outlets). All are intended to measure access points to financial services via various modes. Larger values in these indicators suggest a higher degree of financial access.

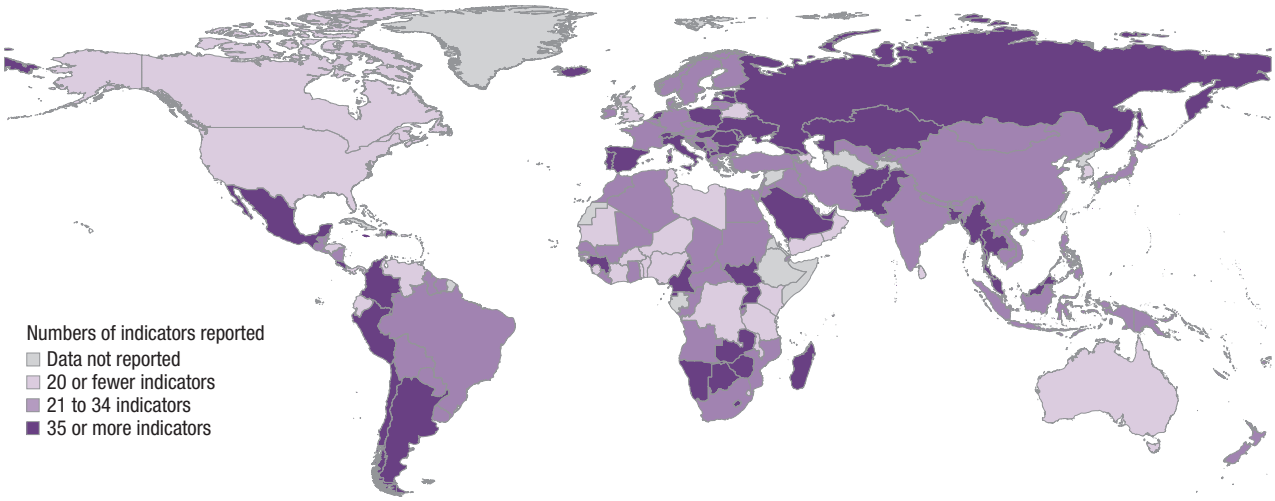
FAS indicators for usage of financial services cover a wide spectrum—from different types of financial service providers (FSPs), instruments, and users—to gender disaggregation. FAS usage indicators for commercial banks contain information on deposit and loan accounts, both for households and SMEs, including gender-disaggregated data for households. Similar indicators are available for credit unions and credit cooperatives, but gender-disaggregated data are not available for these types of FSPs. For microfinance institutions, indicators on borrowers, loan accounts, and outstanding loans are available, including gender-disaggregated data. There is currently one FAS indicator on insurance usage (life insurance).

FAS usage indicators also cover branchless banking such as credit and debit cards, and mobile and internet banking transactions. Finally, FAS usage indicators for mobile money include registered and active mobile money accounts, mobile money transactions, and balances. Currently, there is no gender-disaggregation for branchless banking and mobile money in the FAS.

FAS Coverage and Reporting

Among countries reporting data for the 2019 FAS round, the average number of reported series and indicators is 65 (out of 121) and 32 (out of 64), respectively. The number of indicators reported ranges between 7 and 64, highlighting the potential to further improve reporting (Figure 4). The top five countries that report the largest number of indicators and series are Pakistan, Myanmar, Bangladesh, Guinea, and Samoa, all low- and middle-income countries. Many of these reporters either have or are currently developing a National Financial Inclusion Strategy, suggesting that the need for financial access data in these countries is high.

Figure 4. FAS Indicator Reporters, 2019[1]



Sources: IMF, Financial Access Survey; and IMF staff calculations.
[1]The number of indicators reported by countries in 2019 or the most recent year in the preceding 5-year period.

Some highlights of the reporting status of selected key series in the FAS are as follows (Table 1):

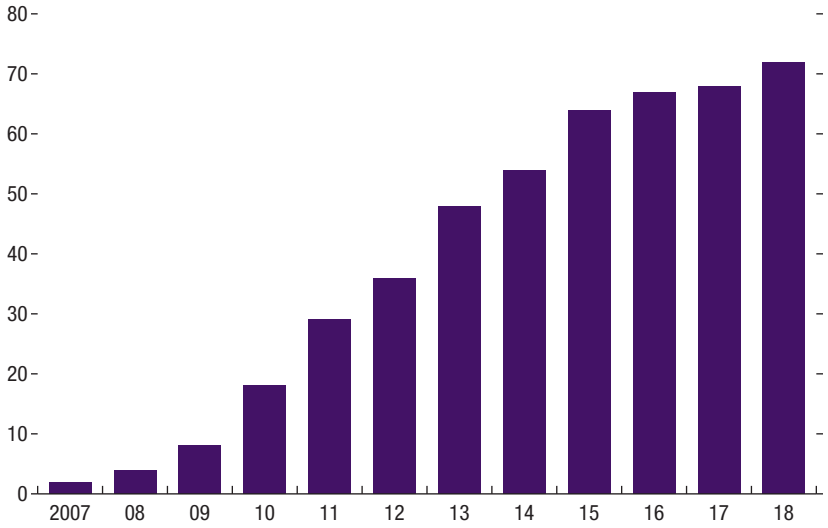
- ***Granular data on FSPs*:** The FAS has data on access to and use of financial services, including through commercial banks and their ATMs, credit unions and credit cooperatives, microfinance institutions, and insurance corporations. The FAS also provides data on depositors, borrowers, deposit accounts, loan accounts, and outstanding loans and deposits, disaggregated by the type of FSPs.

Table 1. Number of Reporters for Selected FAS Series

	Low income	Middle income	High income	Total
Mobile money	18	51	4	73
Gender	5	34	10	49
Insurance	18	87	52	157
Small and medium-sized enterprises	18	61	25	104
Credit unions and credit cooperatives	14	46	26	86
Microfinance institutions				
Non-deposit-taking	10	49	9	68
Deposit-taking	22	38	5	65
Branchless banking				
Non-branch retail agents	4	26	7	37
Mobile and internet banking	3	42	23	68
Debit cards	8	65	40	113
Credit cards	7	62	44	113

Sources: IMF, Financial Access Survey; and IMF staff calculations.

Figure 5. Steady Increase in the Number of Mobile Money Reporters, 2007–18



Sources: IMF, Financial Access Survey; and IMF staff calculations.

- ***Insurance corporations:*** The FAS collects some data on insurance corporations, including the number of policy holders for both life and non-life insurance, and the number of insurance policies for both life and non-life insurance. Close to 160 countries report these data.
- ***Branchless banking:*** As noted earlier, the FAS collects data on retail agent outlets or banking agents, debit cards, credit cards, and mobile and internet banking—all different forms of branchless banking. More than 100 countries report data on debit and credit cards. Compared with other indicators, the number of reporters for non-branch retail agents is relatively low since not all countries have this form of banking.
- ***Mobile money:*** To complement the data from traditional FSPs, the FAS also provides data on mobile money with seven different series covering its availability (number of registered/active mobile money agents), adoption (number of registered/active mobile money accounts), and usage (value/volume of mobile money transactions and outstanding balance). Among more than 90 countries where mobile money services are available, 73 report the data to the FAS, with an increasing number over time (Figure 5).
- ***Gender statistics:*** Gender-disaggregated supply-side data for financial inclusion can offer new insights for bridging the gender gap in financial inclusion. As of 2019, gender data are available for 49 countries. Close to half of the gender data reporters in the FAS are low- and lower middle-income countries, including 11 fragile states.

- ***Small and medium-sized enterprises (SMEs):*** SME financing is an important policy issue with significant macroeconomic implications. The FAS data set provides a breakdown of usage indicators for SMEs. While SME data reporting by low-income countries is relatively limited, this breakdown is available for roughly 60 middle-income countries.

The FAS in the Global Context

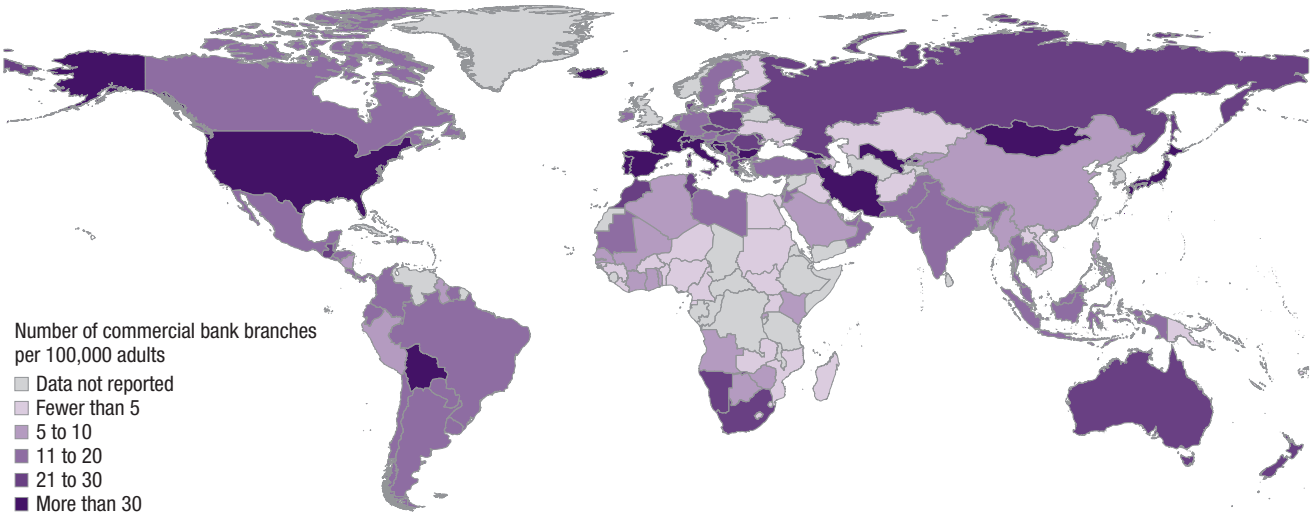
Given its near-global coverage, the FAS has become the official custodian for data used to monitor the relevant UN SDGs. In 2016, two FAS indicators were adopted to monitor Target 8.10, the goal of which is to strengthen the capacity of domestic financial institutions to expand access to banking, financial services, and insurance for all. These two FAS indicators are (1) the number of commercial bank branches per 100,000 adults and (2) the number of automated teller machines (ATMs) per 100,000 adults (Figure 6).

The FAS is an officially recognized data source for the Group of Twenty (G20) Financial Inclusion Indicators. At the Los Cabos Summit in June 2012, G20 leaders endorsed the G20 Basic Set of Financial Inclusion Indicators and the IMF FAS as a data source for some of these indicators. This set of indicators has been expanded subsequently to include indicators on digital finance—currently nine FAS indicators are included in the G20 Financial Inclusion Indicators (Figure 7).

In summary, the FAS provides a wide range of series and indicators that can be used for cross-country comparison of financial access and usage trends as well as calibration of targeted financial inclusion policies.

Figure 6. FAS Indicators to Monitor Sustainable Development Goals Target 8.10

1. Number of commercial bank branches per 100,000 adults



2. Number of ATMs per 100,000 adults

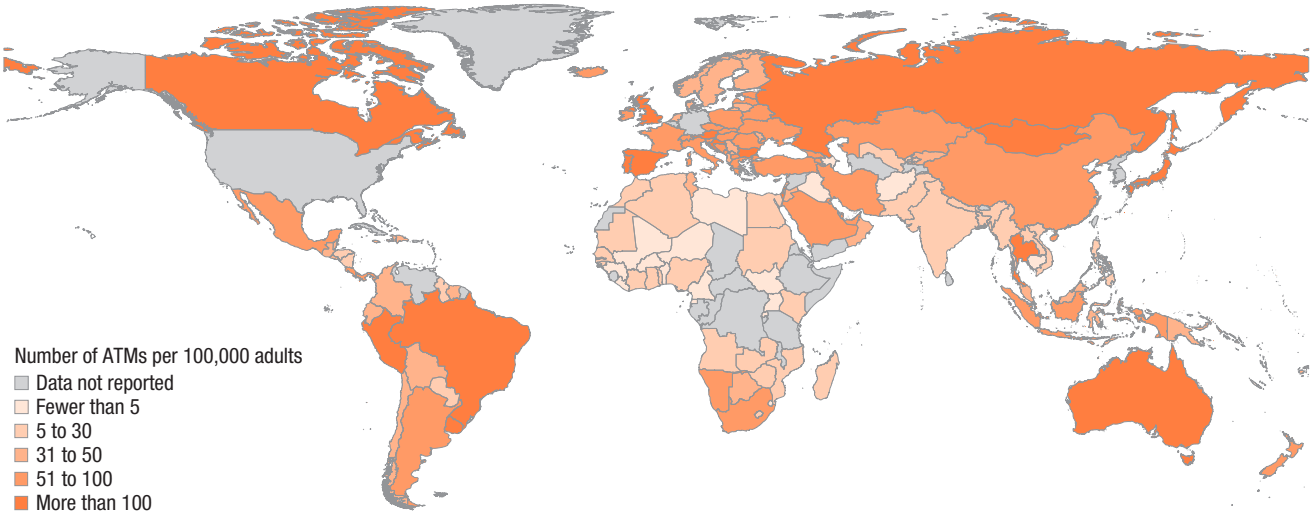


Figure 7. G20-Endorsed Financial Inclusion Indicators from the FAS

Usage Indicators: Adults

1. Number of mobile money transactions per 100,000 adults
2. Number of deposit accounts at commercial banks per 1,000 adults

3.1 Number of life insurance policy holders per 1,000 adults
3.2 Number of non-life insurance policy holders per 1,000 adults

4. Number of loan accounts with commercial banks per 1,000 adults

Usage Indicators: Enterprises

1. Number of deposit accounts of SMEs at commercial banks (as percent of nonfinancial corporations)

Access Indicators: Physical Points of Service

1. Number of commercial bank branches per 100,000 adults
2. Number of ATMs per 100,000 adults
3. Number of registered mobile money agent outlets per 100,000 adults

Sources: IMF, Financial Access Survey; and IMF staff.

Box 1. New Modes of Accessing Financial Services—Definitions

Access to traditional financial services tends to be relatively limited in low- and middle-income countries, partly because of poor infrastructure. New modes of accessing financial services—mobile money and agent banking—have emerged to cater to the needs of the unbanked and underbanked population. Many countries have also seen a move toward mobile and internet banking, another form of a low-cost model. In collecting data on these new modes of financial access, the FAS applies specific definitions. The following text presents these definitions and related concepts.

Mobile money is a pay-as-you-go digital medium of exchange and store of value, facilitated by a network of *mobile money agents*. It is a financial service offered by a mobile network operator or another entity that partners with other mobile network operators, independent of the traditional banking network. A bank account is not required to use mobile money services—the only pre-requisite is a basic mobile phone. A mobile money agent can be a person, quasi-corporation, corporation, or a machine that facilitates mobile money account registration, cash-in/cash-out transactions, and customer support. Small retail shops and other retailers typically serve as agents in low-income and emerging market economies.

Mobile and internet banking is the use of an application on a mobile device to access and execute banking services, such as check deposits, balance inquiry, and payment transfers. The services that use mobile phones as merely another channel for accessing a traditional banking product are considered mobile banking, not mobile money.

A related but distinct product is a **mobile wallet**, which is primarily an application installed on a mobile device, such as a smart phone. It can store credit or debit card information, coupons, or bank account information and enables customers to make in-store purchases, online payments, peer-to-peer transfers, etc. The FAS currently does not collect data on mobile wallets.

There is an important distinction between mobile money and other digital financial services such as mobile and internet banking or even mobile wallets. Mobile money does not require traditional bank accounts while the others are linked to them.

Agent banking is based on *retail agent outlets*, which typically include retail stores, post offices, and small businesses acting on behalf of the banks to carry out financial transactions. The range of financial services provided by agents is generally limited, often including account opening, and cash-in/cash-out transactions. These retail agent outlets are also known as "business correspondents."

CHAPTER

4 Recent Financial Access Trends

This chapter sheds light on the latest developments in financial access and use. FAS indicators reveal the changing modes of financial access and the importance of considering recent innovations in the financial landscape to have a holistic view of financial access across the globe.

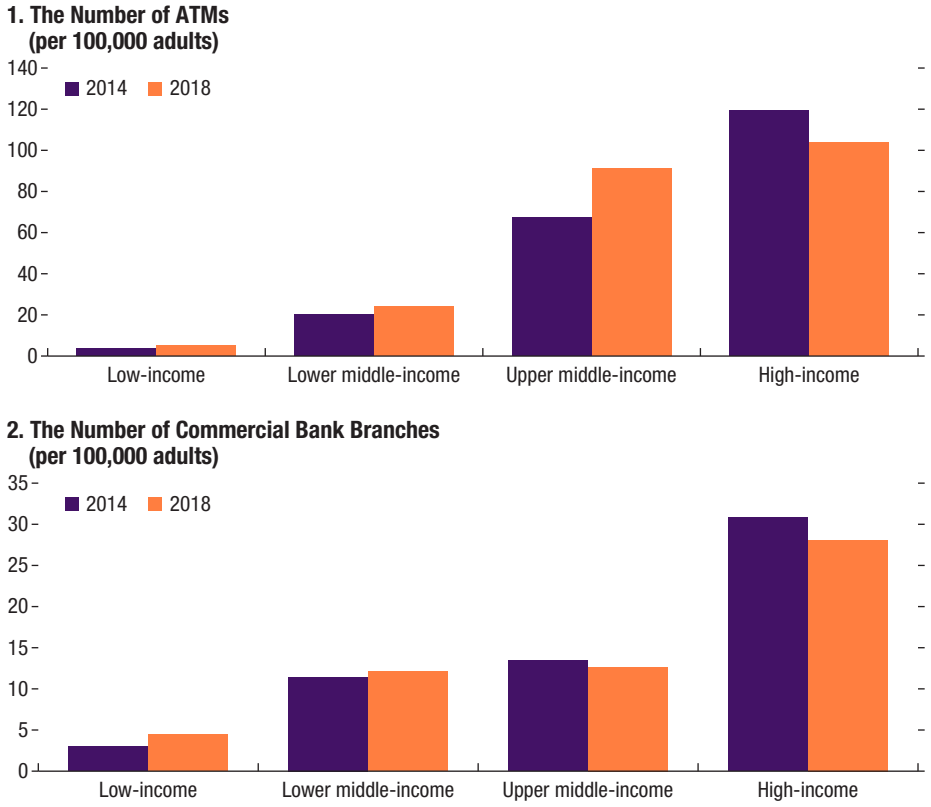
Global Trend: Changing Modes of Access to Finance

In some parts of the world, in addition to traditional financial service providers (FSPs)—commercial banks, credit unions or microfinance institutions—mobile network operators (MNOs) have started offering financial services known as mobile money. Traditional FSPs have also innovated to offer new ways of accessing finance, such as agent banking or mobile and internet banking.

As discussed in Chapter 3, indicators related to the penetration of ATMs and bank branches have been commonly used as a measure of financial access. According to the FAS data, the number of commercial bank branches per 100,000 adults aggregated for the whole world has remained stagnant for the past five years. The growth in the availability of ATMs globally has also remained rather subdued during the same period—the world growth of ATMs per 100,000 adults in 2018 was less than 1 percent.

The global figures for these two indicators, however, do not fully capture the underlying developments in financial access. Access to banks, both in terms of ATMs and bank branches, has actually grown between 2014 and 2018 in countries that have the greatest need—namely, in low and lower middle-income countries where there is unmet demand for banking services (Figure 8). The trend in upper middle-income countries is rather mixed—while ATMs have increased in the last five years, bank branches have slightly

Figure 8. Access to Traditional Banking Services Varies across Different Income Levels



Sources: IMF, Financial Access Survey; and IMF staff calculations.

decreased. In high-income countries, both ATMs and bank branches indicators have declined over the last five years.

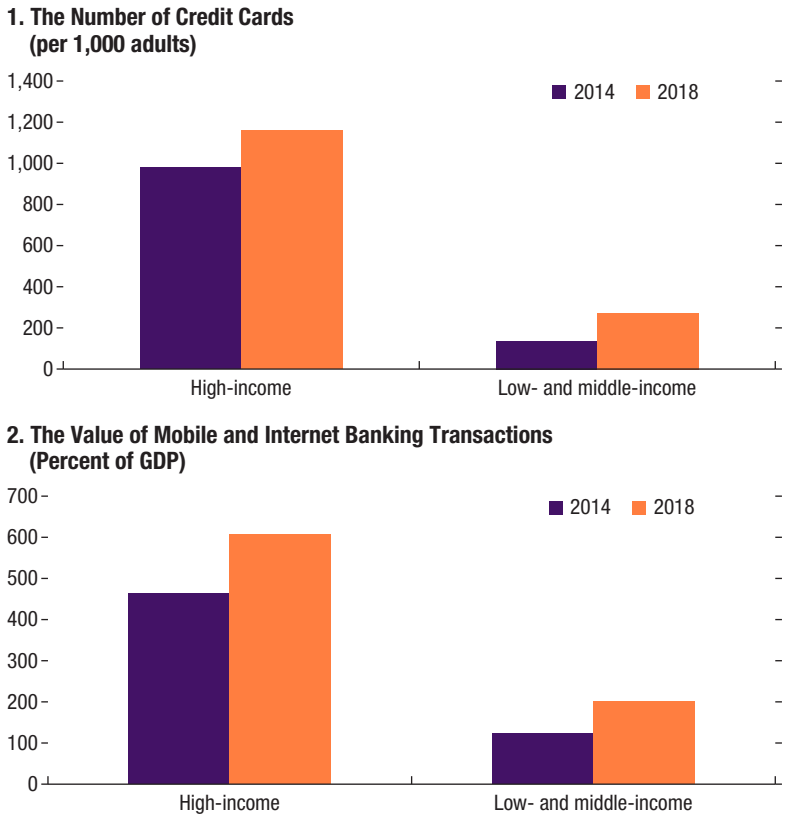
This decline in the number of ATMs and branches does not necessarily imply reduced access to finance as other modes of accessing finance have emerged in recent times, including digital banking solutions such as mobile and internet banking or using banking agents to reach last-mile customers.[1]

High-Income Countries Are Leading the Shift Toward Mobile and Internet Banking

The slowdown in the growth of bank branches can be explained partly by branch closings as a cost-cutting measure in some economies. The FAS indi-

[1]Indicators using ATMs and bank branches need to be interpreted with caution for some countries. For example, IMF (2019c) uses the FAS indicator of bank branches to show that San Marino is overbanked with the number of branches per 100,000 adults being the highest in Europe, which might suggest efficiency issues.

Figure 9. Growing Usage of Credit Cards and Mobile and Internet Banking

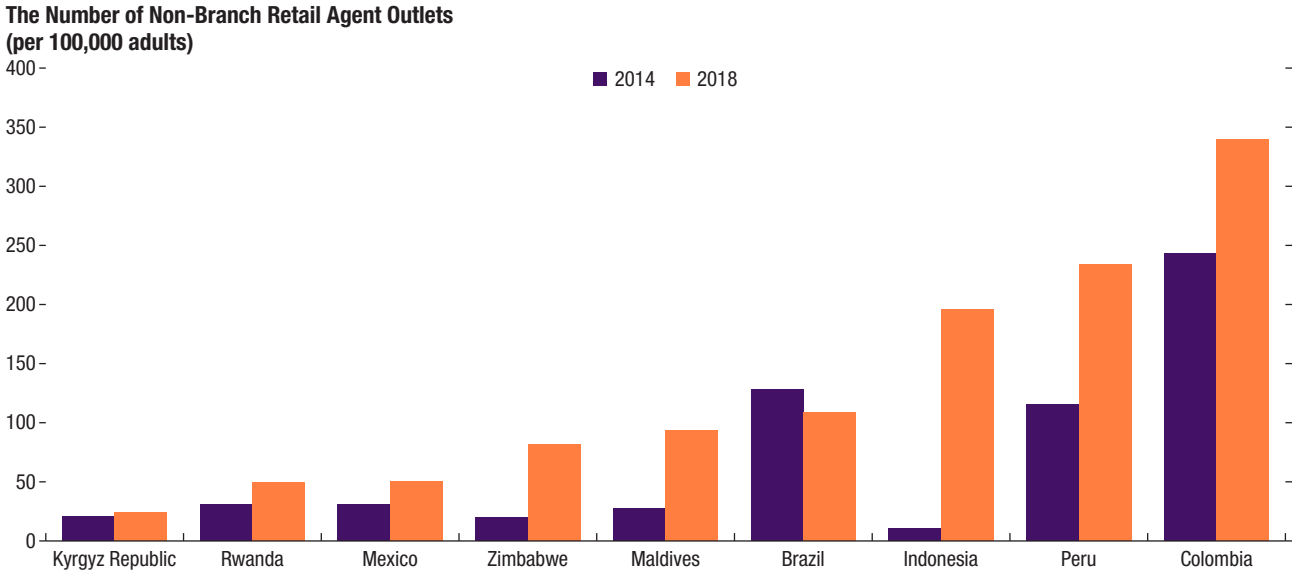


Sources: IMF, Financial Access Survey; and IMF staff calculations.

cators of branchless banking point to increasing use of debit and credit cards as well as digital modes such as mobile and internet banking in high-income countries (Figure 9). More customers in advanced economies are using these banking solutions rather than visiting their local bank branches. Mobile and internet banking and debit/credit cards are also growing in low- and middle-income countries—while the level of usage is much lower than in high-income countries, it is growing much more rapidly in low- and middle-income countries.

Digital modes of accessing financial services lower barriers of financial access, such as travel time and transaction costs such as fees (Dupas and others 2018). In a natural experiment in Mexico, where debit cards were rolled out to beneficiaries of a cash transfer program, decreased transaction costs led to increased account usage and savings (Bachas and others 2017). Digital modes of financial access have the potential to grow further, deepening financial access in the developing world.

Figure 10. Retail Agent Outlets Are Widespread in Asia and Latin America[1]



Sources: IMF, Financial Access Survey; and IMF staff calculations.
[1]The non-branch retail agent outlets considered here are agents of commercial banks only.

Low- and Middle-Income Economies Adopting Agent Banking to Deepen Access

Banks in many low- and middle-income countries have also turned to low-cost business models, such as retail agent outlets or banking agents, to broaden financial access in geographical areas not reached by bank branch networks. Retail agent outlets or agent banking—including retail stores, post offices, and small businesses acting on behalf of the banks—is a relatively recent innovation in branchless banking (see Box 1). For banks, agent banking is less costly than maintaining full-fledged branches, facilitating penetration to areas not reached otherwise by bank branch networks (Ivatury and Mas 2008, CGAP 2010). For customers, this model facilitates access by lowering costs, including travel time.

According to the FAS data, retail agent outlets have made substantial inroads in South Asia, East Asia Pacific, and Latin America (Figure 10). These developments have been, in part, supported by public policies. For instance, in Peru, the government not only allowed the use of retail agent outlets but also streamlined account opening requirements, enabling previously unbanked customers to open accounts through these agents (World Bank 2014). The growth of retail agents in East Asia is driven primarily by Indonesia, where the *Laku Pandai* regulations passed in 2014 by the Financial Services Authority allowed banks to use agents for branchless banking services (OJK 2016).

On the other hand, the number of retail agent outlets in countries that were early adopters of this model, like Brazil, seems to have plateaued or even fallen in recent years. A possible explanation could be that banks have shifted focus to other forms of branchless banking such as mobile and internet banking as discussed above (Ivatury and Mas 2008).

Mobile Money: A Viable Alternative to Traditional FSPs In Low- And Middle-Income Countries

In addition to the traditional financial service providers such as banks and microfinance institutions, technology diffusion has led to the proliferation of a new class of payment services, known as mobile money, to reach populations that were previously excluded (Box 1). Mobile money has had a profound impact on the way people access finance, particularly in countries with limited banking penetration and poor infrastructure.

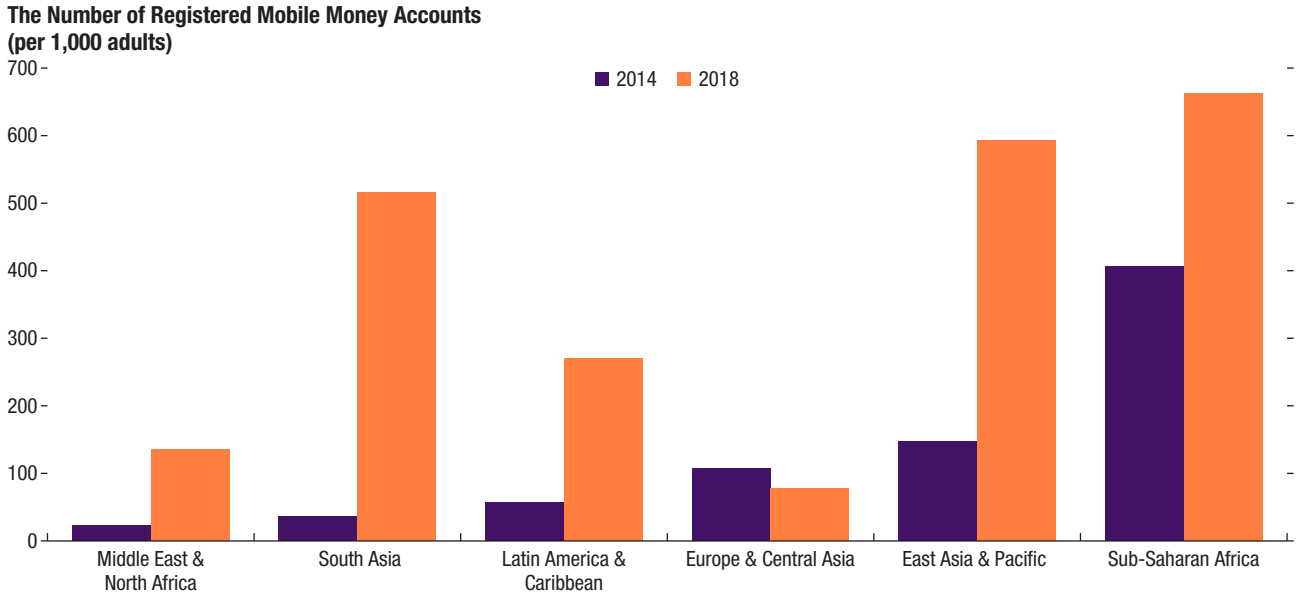
Mobile money offers a novel way to access financial services, especially for individuals who do not have access to traditional banking services, as the only requirement is a basic mobile phone. Customers need to register with a mobile money agent to obtain an individual virtual account linked to their mobile phone number and accessible through a SIM card. Users can carry out financial transactions—including making peer-to-peer transfers, bill payments, in-store purchases, remittances, and savings—across mobile money accounts through the data messaging channel.

Africa is often considered the epicenter of mobile money. After initial success in Kenya, Tanzania, and Uganda, mobile money has spread beyond East Africa. M-Pesa, which was launched in Kenya in March 2007 by Safaricom, now has nearly 32 million users in 10 countries (Monks 2017, Safaricom 2019). One of the biggest drivers of mobile money in West Africa is Ghana, where the value of mobile money transactions has increased from 8 percent of GDP in 2014 to 74 percent of GDP in 2018 (IMF 2019a).

Mobile money growth, which shows no sign of ebbing in sub-Saharan Africa, has gained popularity in other regions of the world (Figure 11). Over the past five years, mobile money has gained traction in South Asia, which is experiencing an average annual growth rate of 52 percent in the number of mobile money transactions per 1,000 adults—the highest across all regions. Afghanistan, Bangladesh, Indonesia, and Pakistan are a few examples of countries experiencing high mobile money growth in Asia (see also Box 2).

Part of the appeal of mobile money is that it can be contracted through agents, often situated at small and local retail stores, in remote areas with limited-to-nonexistent ATMs or brick-and-mortar branches of financial

Figure 11. Asia Has Seen Remarkable Growth in Mobile Money

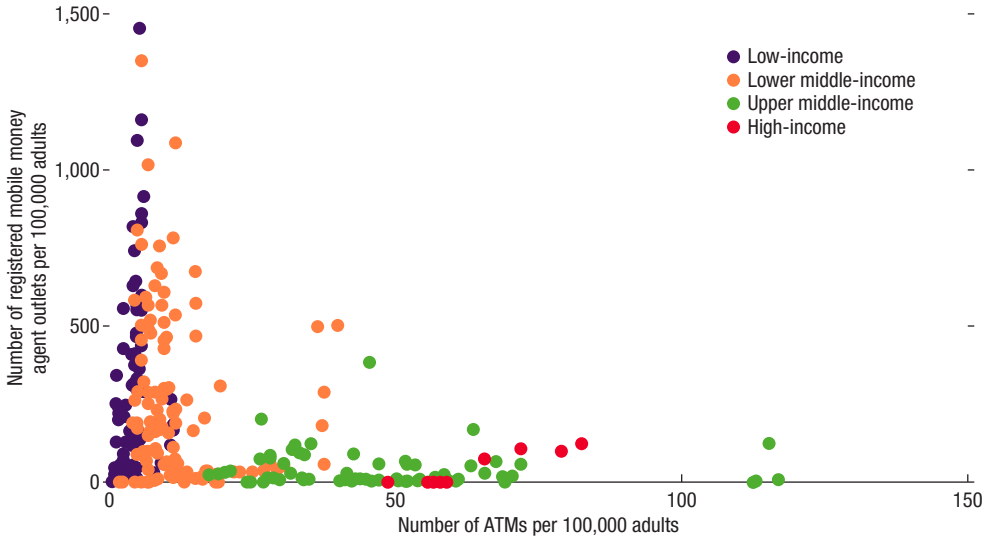


Sources: IMF, Financial Access Survey; and IMF staff calculations.

institutions. To see the relationship between traditional banking and mobile money, Figure 12 plots the FAS data on mobile money agents against the number of ATMs for countries that report data on mobile money to the FAS for 2018. It shows an inverse relationship between registered mobile money agents and ATMs. This suggests that the shallower the banking system, the greater the opportunities for mobile money. In sub-Saharan Africa and South Asia, where ATM penetration is low, mobile money agents are widespread. The extreme opposite are economies with robust digital banking systems, such as the United States, where mobile money is virtually nonexistent.

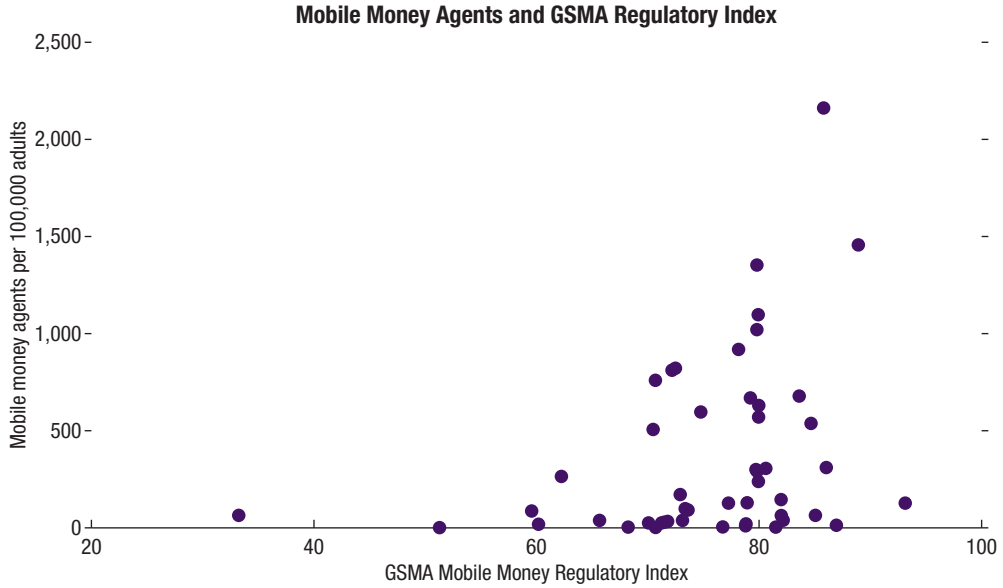
In addition, countries with extensive mobile money agent networks—an important prerequisite for mobile money use—tend to have more enabling mobile money regulation (Figure 13). The growth of mobile money and associated innovations call for closer monitoring and, in some cases, regulations of depositors' exposure to default and liquidity risks —loss of stored funds and inability of the service providers to return funds on demand (Grossman 2016, Adrian and Mancini-Griffoli 2019).

Figure 12. Mobile Money Agents Are More Prevalent in Countries with Lower Access to Traditional Banking Services[1]



Sources: IMF, Financial Access Survey; and IMF staff calculations.
[1]This figure plots the number of registered mobile money agent outlets per 100,000 adults against the number of ATMs per 100,000 adults to show the inverse relationship between mobile money agents and access points to traditional banking services.

Figure 13. Positive Correlation between Mobile Money Access Points and an Enabling Regulatory Environment[1]



Sources: GSMA Mobile Money Regulatory Index; IMF, Financial Access Survey; and IMF staff calculations.
Note: GSMA = Global System of Mobile Communications Association.
[1]This figure shows the relationship between the number of mobile money agents per 100,000 adults and the GSMA mobile money regulatory index—comprising six dimensions: authorization, know your customer, consumer protection, agent networks, transaction limits, and investment and infrastructure—with higher score indicating more enabling regulation (Bahia and Muthiora 2019).

Box 2. Growing Importance of Mobile Money in Fragile States

Mobile money has proven to be a viable alternative to formal financial services in fragile states —where achieving financial inclusion is particularly challenging. Currently, more than 20 fragile states have mobile money services. In these states, on average, for every commercial bank branch, there are close to 47 mobile money agents, providing an additional way to access finance.

The Ratio of Mobile Money Agents to Commercial Bank Branches[1]
(Select fragile states)

Country	Ratio
Guinea	174
Papua New Guinea	131
Zimbabwe	116
Mali	95
Guinea Bissau	64
Togo	59

Source: Financial Access Survey and IMF staff calculations.
[1]Data for Papua New Guinea is from 2015, the rest from 2017.

Moreover, mobile money agents are growing more rapidly than traditional financial access points, such as bank branches, in fragile states. Between 2015 and 2017, while the number of commercial bank branches per square kilometer remained fewer than two, the number of mobile money agents per square kilometer increased from 18 to 27, a 50 percent increase. In comparison, the number of mobile money agents grew by 16 percent in non-fragile states.

CHAPTER

5 Financial Access for Women and Small and Medium-Sized Enterprises (SMEs)

This chapter describes stylized facts about financial access for women and SMEs, through the FAS prism—highlighting the need for data granularity.

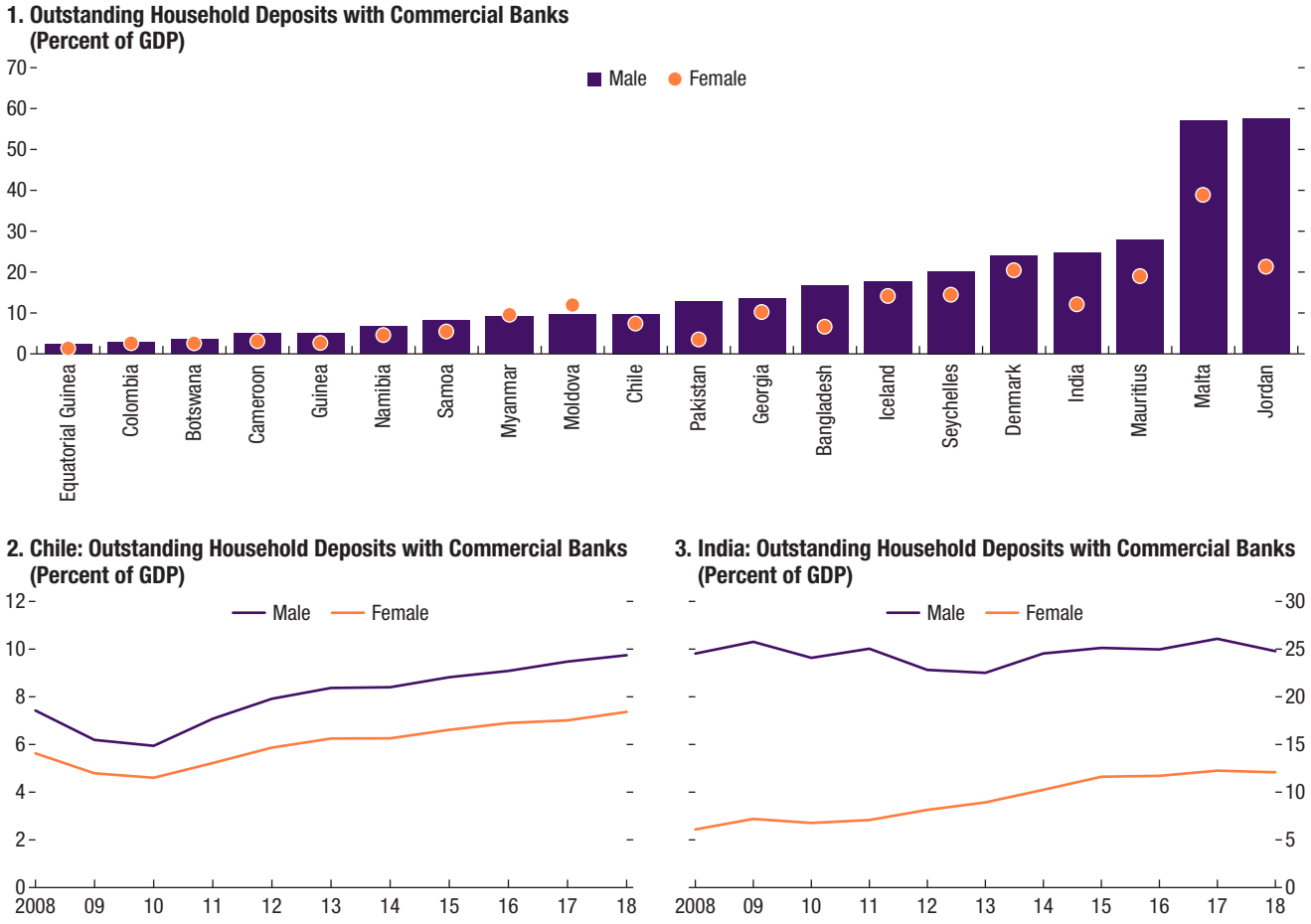
Women's Financial Inclusion

Financial inclusion of women is key for boosting inclusive economic growth and reducing income inequality. Inclusive financial systems can also increase the effectiveness of fiscal and monetary policies by broadening financial markets and the tax base (Čihák and Sahay 2018).

Most countries for which FAS gender disaggregated data are available have made significant progress toward furthering women's financial inclusion. However, progress in bridging the financial inclusion gender gap varies across countries (Figure 14, panel 1). In Chile, for instance, the FAS data show that the gender gap measured by account ownership has been reversed, with the number of deposit accounts held by women at commercial banks per 1,000 female adults exceeding those for men. BancoEstado's (Chile's only public bank) initiative, Cuenta RUT—a simplified deposit account with a debit card that can be opened using a national ID card—seems to have helped in this respect (Data2X 2016). However, the value of outstanding deposits held by women has grown at a slower pace than that for men in recent years, suggesting a persisting gender gap in this area (Figure 14, panel 2).

The granularity of the FAS data contributes to our nuanced understanding of financial access in different countries. For example, in India, deposit accounts have increased in recent years, in part due to the government led initiatives such as *Pradhan Mantri Jan Dhan Yojana* (PMJDY)—requiring state-owned banks to open at least one full-service, no-frills account for each unbanked

Figure 14. Wide Variation in the Financial Inclusion Gender Gap[1]



Sources: IMF, Financial Access Survey; and IMF staff calculations.
[1]These graphs show the financial inclusion gender gap (difference between male and female indicators) measured by FAS indicators for selected countries. Panel 1 in the figure gives data for 2018, except Denmark for which the latest reported data are for 2017. In the FAS, for gender-disaggregated data on outstanding deposits, joint accounts are not included.

household.[1] Indeed, the FAS data show that the number of *deposit accounts* with commercial banks per 1,000 adults has grown at 11 percent on average for the past five years. Notwithstanding, the increase in *outstanding deposits* has been more subdued and the gender gap, by this metric remains substantial (Figure 14, panel 3).

[1]The initiative was launched in 2014.

Microfinance Institutions Satisfy Unmet Demand for Financial Services for Women

According to the FAS data, in countries such as Pakistan, South Sudan, and Uganda, less than 30 percent of borrowers at commercial banks are women while in high-income countries in Europe, including Denmark and Poland, the share of women borrowers stands at close to 50 percent. Although several underlying reasons explain women's exclusion from the financial system, such as women's limited labor market participation, studies suggest that discriminatory laws can be a factor (Iqbal 2018, IMF 2019b).

At the same time, the FAS data also suggest that nonbank institutions such as microfinance institutions, are filling the gap to meet the need for access to finance among women in some countries. Among countries for which gender disaggregated data are available for both commercial banks and microfinance institutions, women borrow at disproportionally higher rates from microfinance institutions. For example, in Bangladesh, only 10 percent of the borrowers at commercial banks are women. However, at deposit-taking microfinance institutions, 91 percent of the borrowers are women. Bangladesh is a pioneer of microfinance, but this phenomenon holds true for other Asian as well as African and Latin American countries (Figure 15).[2]

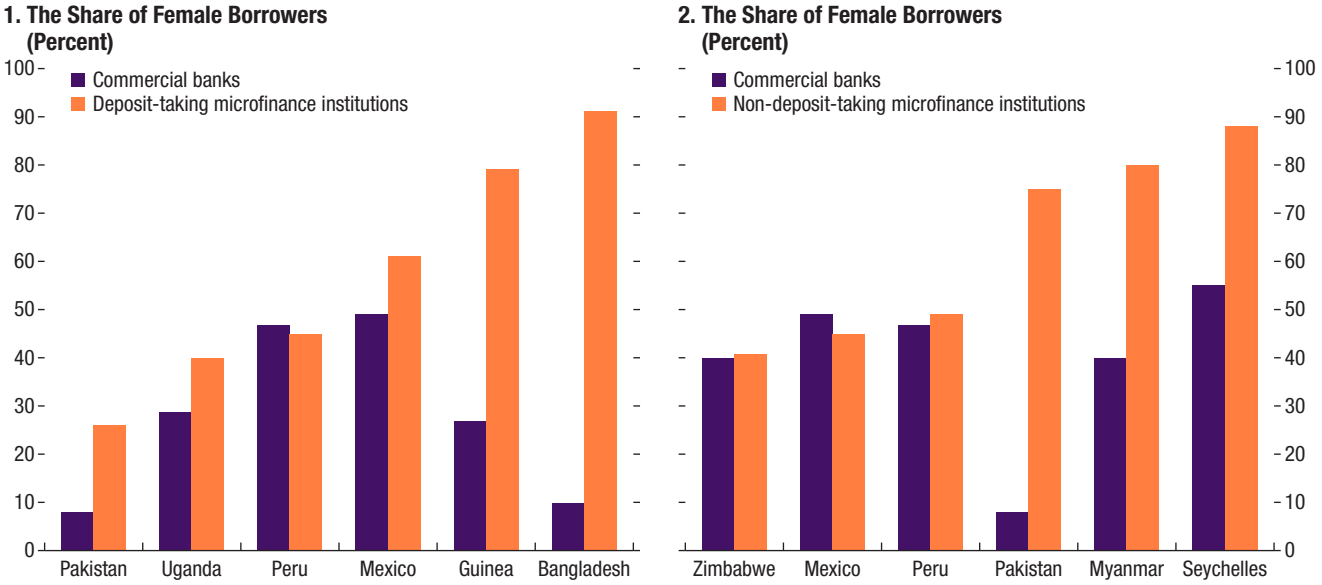
Although not a complete substitute for the range of services offered by commercial banks, the uptake of financial products offered by microfinance institutions in low- and middle-income countries is increasing. In Bangladesh, the outstanding deposits and loans from deposit-taking microfinance institutions have grown at an average annual rate of 20 percent during the last five years. Also, in Myanmar and Pakistan more than 70 percent of the value of the loans extended by non-deposit-taking microfinance institutions are to women. However, high credit growth could come with inherent risks, including credit risk, as seen in the microfinance crisis in the Indian state of Andhra Pradesh, which highlights the need for supervision and regulation of the sector (Saxena 2014).

Financial Inclusion of SMEs

SMEs contribute up to 45 percent of employment and 33 percent of GDP in developing countries, but they face greater constraints accessing finance than larger firms (Teima and others 2010). The FAS data also suggest that

[2]In Figure 15, deposit-taking and non-deposit-taking microfinance institutions are shown separately. Countries do not necessarily report both types of microfinance institutions to the FAS.

Figure 15. Microfinance Institutions Provide Financial Services for Women[1]



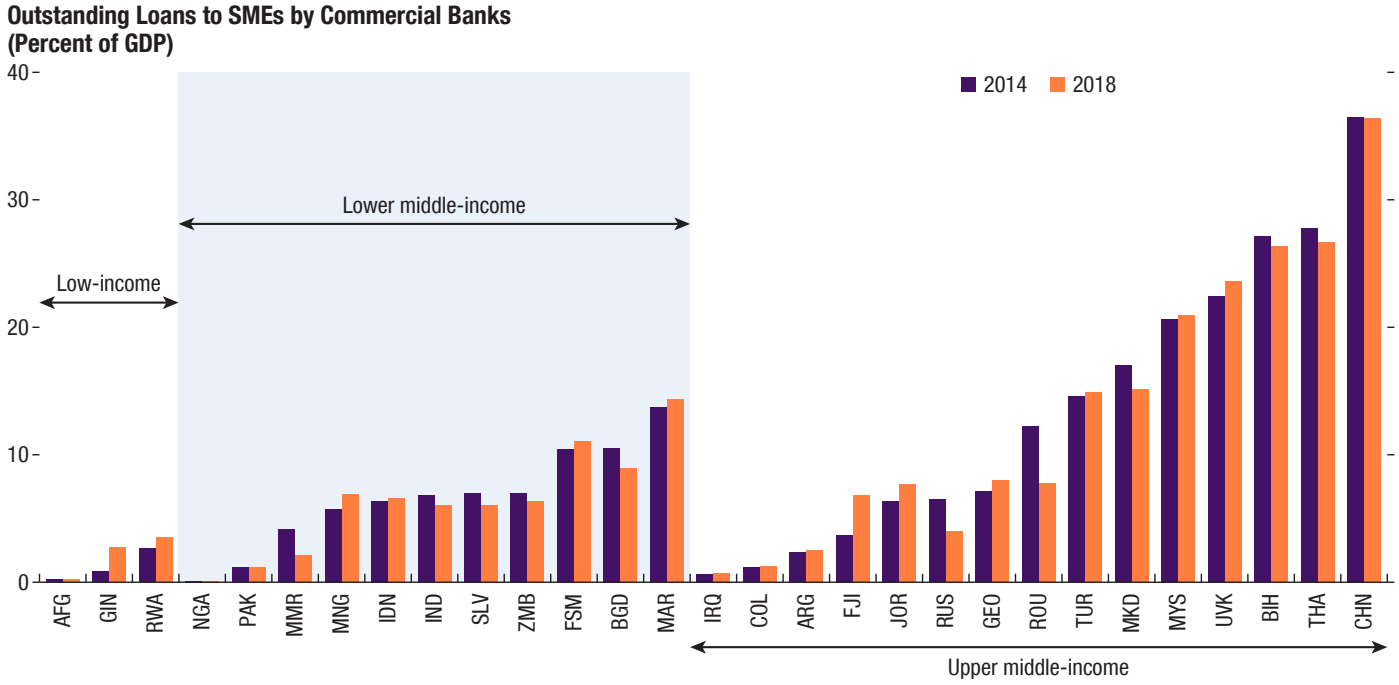
Sources: IMF, Financial Access Survey; and IMF staff calculations.
[1]The panels in the figure show the percentage of female borrowers at commercial banks and microfinance institutions (deposit-taking and non-deposit-taking microfinance institutions, respectively) for selected countries in 2018. Both deposit-taking and non-deposit-taking microfinance institutions offer small-scale loans to self-employed or informally employed low-income individuals and microenterprises. The key difference between the two is how they finance these loans. While the former finances their activities through deposits, the latter use sources other than deposits (IMF 2016).

bank lending to SMEs has remained stagnant in low- and middle-income countries—at about 6 percent of GDP over the past five years.

There are also large cross-country variations in the growth of SME lending (Figure 16). The improvement in SME financing in countries such as Fiji, Georgia, and Mongolia may in part be due to policies aimed at promoting SME lending. These include Georgia's 2016–20 SME Development Strategy and the SME Credit Guarantee Scheme Guidelines in Fiji under which the Fijian government guaranteed 50 percent of the principal of outstanding SME loans (Government of Georgia 2015, Reserve Bank of Fiji 2016). International development agencies have also been instrumental—in Mongolia, USAID's Reach Project partnered with the government to provide credit guarantees of up to 60 percent of SME loan amounts (USAID 2016).

An extensive economic development literature links improvement in financial depth to economic growth. Given the importance of SMEs, a relevant question emerges: can one expect the same impact on economic growth from increased SME lending across all countries? The granularity of the FAS data can help answer this question and, in turn, help in the calibration of targeted SME policy design. Preliminary results from panel regressions using

Figure 16. Growth of SME Lending Varies across Low- and Middle-Income Countries



Sources: IMF, Financial Access Survey; and IMF staff calculations.
Note: Data labels use International Organization for Standardization (ISO) country codes.

FAS indicators for SMEs suggest that increased financial access by SMEs has a positive correlation with growth with varying degrees across different income groups (Box 3). These findings point to the importance of drawing on the granularity of the FAS data to study the impact of alternative financial access policies.

Box 3. Economic Growth and SME Financial Access

To examine whether the link between increased economic growth and improved financial access holds for SMEs for different income groups, the granularity of the FAS data was deployed to estimate a generalized method of moments (GMM) panel regression with country fixed effects for 2004–18 with the sample of 40 observations for upper middle-income countries, 52 for lower middle-income countries, and 50 for low-income countries. The dependent variable GDP per capita in logs was regressed in an unbalanced panel setting on the regressor variable of loans to SMEs in logs using a battery of SME instrumental variables—the number of SME borrowers with commercial banks, the number of SME loan accounts with commercial banks, the number of SME depositors with commercial banks, and the number of SME deposit accounts with commercial banks.

Regressor Variable	Coefficient	Standard Error	R^2	t-Statistic	Probability
Low-income group loans to SMEs	0.26	0.07	0.83	3.82	0.00
Lower middle-income group loans to SMEs	0.51	0.18	0.96	2.80	0.01
Upper middle-income group loans to SMEs	0.21	0.09	0.64	2.38	0.02

Estimated coefficients are statistically significant and suggest that increased financial access to SMEs has a differentiated impact on GDP growth across different income groups. This analysis also illustrates how the granularity of the FAS data can be applied in a broader macroeconomic context.

CHAPTER

6 Conclusion

Looking Forward: Next Decade of the FAS

Since 2019, the FAS has collected financial access and use data annually. This data collection has kept pace with financial innovation such as the rise of mobile money and growing demand for gender-disaggregated data.

This paper showcases how the FAS database can help measure and track financial inclusion around the globe. FAS indicators suggest that financial access is advancing globally but at different speeds and the modes of access to finance are also changing beyond traditional branch-based banking. Agent banking has gained popularity in Asia and Latin America while mobile money has changed the way people access finance in Africa and other parts of the world. In high-income countries, bank branches are in a declining trend while mobile and internet banking is gaining ground. The FAS data also suggest that in many countries, the financial inclusion gaps persist for some segments of the population—including women and SMEs.

The paper illustrates the value of FAS data granularity to better target financial inclusion policies. It also highlights the need to close FAS data gaps and the importance of different financial intermediation structures, including digital finance. The paper shows that deposit takers other than commercial banks (eg, microfinance institutions or savings banks) play an important role in providing financial services in some economies although commercial banks are the main player in many economies. At the same time, in countries where mobile money or mobile and internet banking is gaining popularity, focusing only on traditional banking may not fully capture the true state of financial inclusion. These findings point to the importance of keeping up with developments of digital finance in assessing financial inclusion.

Although the FAS offers these useful insights into the current state of play for financial access and use, it does have limitations, including some data gaps and coverage issues beyond financial access and use. Looking forward, several directions can be considered to further enhance the FAS database, particularly to support its use for financial stability purposes.

- ***Closing data gaps***: Despite its global coverage, not all 189 jurisdictions, including advanced economies, report all series to the FAS. For low- and middle-income economies, this is in part due to statistical capacity constraints as well as lack of appropriate source data. To improve the reporting to the FAS and assist countries to build capacity in data collection for financial access and use, the IMF started organizing regional workshops on financial access data collection in 2018. So far, workshops have taken place in Asia and Africa for country authorities in these regions.[1] Partly as a result of these workshops, the data reporting for the 2019 FAS round has improved for the first time in six years (171 countries reported in 2019 compared to 168 in 2018). These workshops have proved to be a useful vehicle to facilitate peer learning, and the next workshop is planned to take place for the Middle East and Central Asia region in 2020. More broadly, the global community's support is crucial to further improve the FAS data collection and the provision of this global public good.
- ***More effective use of FAS indicators***: The FAS currently has 64 indicators, but new indicators could be considered using the currently available underlying series to further facilitate analysis on financial access and use. For example, using the data on mobile money accounts and the value of mobile money transactions, a new indicator on the value of mobile money transaction per account could be considered. FAS indicators could be also used as a tool to improve data reporting. For example, a subset of FAS indicators could be designated as "basic indicators" on which countries with limited statistical capacity can focus their initial data collection effort.
- ***More granular data on fintech***: Chapter 4 notes the importance of mobile money and mobile and internet banking to more accurately capture the state of play for financial access. More generally, fintech is changing the landscape of financial inclusion, and more granular data on fintech (including the number of new companies providing fintech services, the number of loans conducted through them, or the reduced costs related to its transactions) would help more correctly measure financial access and use.
- ***Data collection on "other dimensions"***: As noted in earlier chapters, financial inclusion is a multifaceted concept, but the FAS currently only collects data on access and use. Information on other dimensions of financial inclusion is important to further advance evidence-based policymaking on financial inclusion. For example, currently there is no systematic way to

[1]Reports summarizing the issues discussed during the workshop can be found on the IMF FAS data portal.

collect data on costs of and barriers to financial access such as fees, interest charges and minimum balance requirements, or national financial inclusion policies. In addition, information on peer-to-peer lending or inclusive informal access to finance (eg, "lending club") would be useful to capture financial access in a more comprehensive way.

- ***Knowledge sharing of financial inclusion policies***: There is a growing interest among policymakers in better understanding the financial inclusion policy initiatives adopted by selected countries. A catalog of polices with information on what works and how will help countries further advance financial inclusion by learning from peers. A survey of policy initiatives could be used to gather relevant information, including on objectives of national financial inclusion strategy, and any policy initiatives related to women's financial inclusion, SMEs, consumer protection, and financial literacy.

The near-term goal of the FAS is to improve data reporting and coverage with possible enhancement by reassessing the list of FAS indicators. In the medium term, the need to improve the FAS by further disaggregating data as well as addressing other data needs must be balanced against the reality of statistical capacity constraints. Alternatively, innovative methods of collecting data efficiently could be explored, including using publicly available data (eg, websites) or big data in collaboration with financial service providers or BigTech companies.

Finally, this paper has focused on how the FAS can help track financial inclusion developments and their growth impact. As different modalities of financial access gain traction, policymakers will also have to grapple with associated consumer protection and financial stability considerations.

Appendix I. FAS Indicators

This appendix lists 64 FAS indicators, which are derived based on 121 underlying time series submitted by country authorities to the FAS database.

Geographical Outreach

Number of Institutions

- Branches of all microfinance institutions per 1,000 km²
- Branches of all microfinance institutions per 100,000 adults
- Branches of commercial banks per 1,000 km²
- Branches of commercial banks per 100,000 adults
- Branches of credit unions and credit cooperatives per 1,000 km²
- Branches of credit unions and credit cooperatives per 100,000 adults
- Insurance corporations per 100,000 adults

Branchless Banking

- Automated Teller Machines per 1,000 km²
- Automated Teller Machines per 100,000 adults
- Non-branch retail agent outlets of commercial banks per 1000 km²
- Non-branch retail agent outlets of commercial banks per 100,000 adults

Mobile Money

- Registered mobile money agent outlets per 1,000 km²
- Registered mobile money agent outlets per 100,000 adults
- Active mobile money agent outlets per 1,000 km²
- Active mobile money agent outlets per 100,000 adults

Use of Financial Services

Commercial Banks

- Deposit accounts with commercial banks per 1,000 adults
  - SME deposit accounts with commercial banks (percentage of nonfinancial corporations)
  - Household sector deposit accounts with commercial banks per 1,000 adults
    - Men-owned deposit accounts with commercial banks per 1,000 male adults
    - Women-owned deposit accounts with commercial banks per 1,000 female adults
- Depositors with commercial banks per 1,000 adults
  - SME depositors with commercial banks (percentage of nonfinancial corporations)
  - Household sector depositors with commercial banks per 1,000 adults
    - Male depositors with commercial banks per 1,000 male adults
    - Female depositors with commercial banks per 1,000 female adults
- Loan accounts with commercial banks per 1,000 adults
  - SME loan accounts with commercial banks (percentage of nonfinancial corporations)
  - Household sector loan accounts with commercial banks per 1,000 adults
    - Men-owned loan accounts with commercial banks per 1,000 male adults
    - Women-owned loan accounts with commercial banks per 1,000 female adults
- Borrowers at commercial banks per 1,000 adults
  - SME borrowers at commercial banks (percentage of nonfinancial corporations)
  - Household sector borrowers at commercial banks per 1,000 adults
    - Male borrowers from commercial banks per 1,000 male adults
    - Female borrowers from commercial banks per 1,000 female adults
- Outstanding deposits with commercial banks (percentage of GDP)
  - Outstanding SME deposits with commercial banks (percentage of GDP)
  - Outstanding household sector deposits with commercial banks (percentage of GDP)

- Outstanding loans with commercial banks (percentage of GDP)
  - Outstanding SME loans with commercial banks (percentage of GDP)
  - Outstanding loans to the household sector with commercial banks (percentage of GDP)
  - Credit Unions and Credit Cooperatives
- Deposit accounts with credit unions and credit cooperatives per 1,000 adults
- Depositors with credit unions and credit cooperatives per 1,000 adults
- Loan accounts with credit unions and credit cooperatives per 1,000 adults
- Borrowers at credit unions and credit cooperatives per 1,000 adults
- Outstanding deposits with credit unions and credit cooperatives (percentage of GDP)
- Outstanding loans with credit unions and credit cooperatives (percentage of GDP)

Microfinance Institutions

- Borrowers at all microfinance institutions per 1,000 adults
  - Male borrowers from all microfinance institutions per 1,000 male adults
  - Female borrowers from all microfinance institutions per 1,000 female adults
- Loan accounts with all microfinance institutions per 1,000 adults
  - Men-owned loan accounts with all microfinance institutions per 1,000 male adults
  - Women-owned loan accounts with all microfinance institutions per 1,000 female adults
- Outstanding loans with all microfinance institutions (percentage of GDP)

Insurance

- Life insurance policies per 1,000 adults

Branchless Banking

- Credit cards per 1,000 adults
- Debit cards per 1,000 adults
- Number of mobile and internet banking transactions per 1,000 adults
- Value of mobile and internet banking transactions (percentage of GDP)

Mobile Money

- Registered mobile money accounts per 1,000 adults
- Active mobile money accounts per 1,000 adults

- Number of mobile money transactions per 1,000 adults
- Outstanding mobile money balance on active accounts (percentage of GDP)
- Value of mobile money transactions (percentage of GDP)

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