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FINANCIAL INCLUSION DATA
(FID) WORKING GROUP

ALLIANCE FOR FINANCIAL INCLUSION POLICY MODEL:
AFI CORE SET OF FINANCIAL INCLUSION INDICATORS

POLICY MODEL

CONTENTS

CONTEXT

In recent years, AFI members have been confronted with policy implementation challenges that require systematic guidance from the AFI network. For example, how to comply with international standards without reversing the gains of financial inclusion, balance public objectives of financial stability and financial inclusion, and apply tested, high-impact policy solutions from the network effectively.

On different occasions, members began expressing support for AFI's role in issuing policy guidance and policy models,[1] including at international forums such as the Phase III Strategic Review process. At AFI's 2017 Annual General Meeting (AGM), it was given a mandate to systematically issue guidance on financial inclusion policies and regulations under the Phase III Strategy.[2] The deliberations at the AGM emphasized that the issuance of guidance should be consistent with AFI's cooperation model, which is based on peer learning and collaboration with financial inclusion stakeholders, including Standard-Setting Bodies (SSBs), with which the network would share experiences with international standards compliance.[3]

Evidence-based policymaking and the critical role of data in the policymaking process have been cornerstones of financial inclusion since the concept first emerged. Measuring financial inclusion was AFI's original policy focus area and the Financial Inclusion Data (FID) Working Group was the first working group to be formed. The main purpose of the FID WG was to develop a common framework for measuring financial inclusion, and one of its first activities was the development of a set of indicators – the AFI Core Set. The original Core Set measured two key aspects of financial inclusion — access and usage of financial services — and has since expanded to include the quality dimension of financial inclusion in response to AFI member institution needs.

The AFI Core Set has been widely used to measure and monitor financial inclusion, and provides a framework for policymakers in the AFI network to structure their financial inclusion data collection efforts. The impact and usefulness of the indicators, not only for measuring the various dimensions of financial inclusion, but also for supporting the pursuit of financial well-being, prompted the decision to include the Core Set as part of an AFI Policy Model.

OBJECTIVE

The Policy Model on the AFI Core Set aims to provide evidence and guidance to members on the development of a framework for measuring financial inclusion. The AFI Core Set is a limited set of quantitative indicators that capture the state of financial inclusion in a country.

The Policy Model on the AFI Core Set will further advance and promote data collection to measure and track the progress of financial inclusion.

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1   The global conference, Maximizing the Power of Financial Access: Finding an Optimal Balance Between Financial Inclusion and Financial Stability, was co-hosted by AFI and Bank Indonesia on 30 November 2016. At the conference, members expressed demand for AFI to develop guidance in the form of indicators to measure financial inclusion and financial stability, and to provide practical examples and case studies of successful applications of proportionality in practice in the implementation of global standards for financial stability, to complement guidance from the SSBs.

2   At AFI's 2017 AGM, the Membership Council approved the AFI Phase III Strategy (2019-2023) with three broad strategic objectives: (i) guidance for devising financial policies and regulations; (ii) enhanced implementation of evidence-based financial inclusion policies; and (iii) agenda-setting on the global financial inclusion discourse.

3   See AFI, 2017, Minutes of the AGM, Agenda No. 4, p. 4.

EXECUTIVE SUMMARY

The AFI Core Set of Financial Inclusion Indicators (the "AFI Core Set") was developed to provide regulators and policymakers from across the AFI network a shared starting point from which to collect data on the main dimensions of financial inclusion and develop national policies. Defining the five original core indicators was just the first step in creating a common data measurement framework for the AFI network. Since then, the AFI Financial Inclusion Data (FID) Working Group and other working groups have collaborated to complement and enrich this framework.

Different national and international institutions, including the GPFI, IMF and World Bank, have recognized the AFI Core Set as an important effort by financial regulators and policymakers to define a shared framework, and have contributed to these efforts with complementary data collection initiatives and measurement methodologies. What is significant about the AFI Core Set is that it has built-in flexibility, allowing policymakers to adapt the indicators to their unique policy interests, needs and resources.

Evidence from some AFI member institutions, combined with data collected through the annual AFI member survey on the use of the AFI Core Set, show that it is a valuable tool for guiding the different phases of the policymaking process, enabling policymakers to identify financial inclusion needs, define measurable targets, benchmark efforts against other countries and track progress within their jurisdictions. The objective of this policy model is to encourage institutions new to financial inclusion data collection to use the AFI Core Set and the array of AFI knowledge products and resources available to measure and track the financial inclusion policies they have implemented.

PART I
SCOPE AND DEFINITIONS OF THE AFI CORE SET

From the beginning, one of AFI's main principles was that policies should be developed based on evidence and that data plays a critical role in the policymaking process, from design and implementation to monitoring and evaluation. With rigorous, objective and reliable data, policymakers can accurately diagnose the state of financial inclusion in their countries, set judicious targets, identify barriers, craft effective policies and monitor and assess the impact of their policies.

Formulating, testing and validating the AFI Core Set of Financial Inclusion Indicators, or the "AFI Core Set", was the network's first effort to establish a common framework for measuring financial inclusion based on commonly accepted key dimensions of financial inclusion: access, usage and quality of financial services and products for all individuals (Table 1). Even though the AFI Core Set does not include the quality dimension, it was envisioned from the beginning and planned to be developed in the near future.

TABLE 1: KEY DIMENSIONS OF FINANCIAL INCLUSION

DIMENSION	CONCEPT
Access	"Ability to use the services and products offered by formal financial institutions. Determining levels of access may require identifying and analyzing potential barriers to opening and using a bank account, such as cost or physical proximity of bank service points (branches, ATMs, etc.)."
Usage	"Depth or extent of financial services and product use. Determining usage requires gathering details about the regularity, frequency and duration of use over time."
Quality	Although conceived as a "...more complex topic both conceptually and in terms of measurement", quality can be defined as a dimension that evaluates how financial services fulfill the needs of its users from different angles, including affordability, convenience, fair treatment, choice and other aspects related to consumer protection, financial education and other areas.

Sources: AFI, Guideline Note 4 and Guideline Note 22

From 2010 to 2011, the AFI Financial Inclusion Data (FID) Working Group formulated the AFI Core Set to address the need for a common measurement framework and a basic set of financial inclusion data. The AFI Core Set was conceived as "… a limited set of quantitative indicators that captures the status of financial inclusion in a country. The indicators are meant to measure the most basic and fundamental aspects of financial inclusion in a way that is as standardized as possible while remaining relevant to individual countries. The AFI Core Set is a tool for guiding quantitative data collection and measurement that is intended to ultimately help policymakers develop appropriate financial inclusion policies and monitor progress over time."[4]

GUIDING PRINCIPLES OF THE AFI CORE SET

The AFI Core Set was anchored on six principles (Table 2) that would guide country-level data collection while providing flexibility to adapt the indicators to the context and needs of different countries or jurisdictions.[5]

AFI CORE SET OF INDICATORS

The AFI Core Set addresses the two basic dimensions of financial inclusion: access and usage of financial services.[6] From the beginning, it was acknowledged that it was important to include an effort to measure the quality dimension of financial inclusion. As this third dimension is broader in nature, it was decided that it would be addressed as part of a broader measurement framework published in a complementary guideline note in 2016. This AFI Policy Model focuses on the original dimensions of access and usage.

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4   AFI Financial Inclusion Data (FID) Working Group, 2011, Measuring Financial Inclusion: Core Set of Financial Inclusion Indicators.

5   Similar principles have been followed by the FID WG and other AFI working groups in the definition of second tier financial inclusion indicators, including indicators of the quality dimension of financial inclusion, the SME Financial Inclusion Indicators Base Set and, more recently, the Digital Financial Services Financial Inclusion Indicators, which are defined based on the Mobile Financial Services Indicators.

6   According to the first two meetings of the Financial Inclusion Data (FID) Working Group in September 2011 and March 2012.

TABLE 2: GUIDING PRINCIPLES OF THE AFI CORE SET

GUIDING PRINCIPLE	DEFINITION
Usefulness and relevance	The primary consideration for selecting the AFI Core Set is the usefulness and relevance of the indicators as a foundation for domestic policymaking.
Pragmatism	The collection of data for the AFI Core Set should be realistically achievable within a reasonable timeline. The AFI Core Set was designed to leverage existing and available data to the extent possible to minimize cost and effort.
Consistency	Given the lack of a uniform, internationally accepted definition of financial inclusion, the AFI Core Set offers standard definitions to provide consistency in measurement and enable comparisons across time and countries. To the extent possible, the AFI Core Set is aligned with financial access surveys and data collection projects of international and multilateral organizations to avoid overburdening countries.
Flexibility	The AFI Core Set recognizes that a country's data initiatives are largely driven by its rationale for pursuing greater financial inclusion, and are shaped by its unique economic, geographic, social and cultural context. Considering that circumstances and resources vary greatly across countries, the AFI Core Set provides scope for flexibility. Countries can adjust certain definitions in the AFI Core Set and/or use suggested proxy indicators. Transparency is critical, and countries will disclose variations appropriately to uphold the principle of consistency.
Balance	The AFI Core Set represents a balanced data set that addresses two important dimensions of financial inclusion – access and usage – and leverages both supply- and demand-side data.
Aspiration	The AFI Core Set strives to define a set of indicators that accurately reflect financial inclusion. To meet this objective, measurement of some of the indicators may require additional effort and resources. Countries should aspire to collect the AFI Core Set as it is defined. However, in the spirit of flexibility and pragmatism, certain modifications are accepted and proxy indicators are provided when this is not possible. Finally, the aspiration principle implies that the AFI Core Set is dynamic and improved indicators may be introduced later.

Source: AFI, 2013, Guideline Note 4. Measuring Financial Inclusion Core Set of Financial Inclusion Indicators

The AFI Core Set includes five core indicators, three under the access dimension[7] and two under the usage dimension (Table 3).

Access indicators were conceived to be collected from the supply side (i.e. financial institutions) although some would draw on national statistics as well (i.e. indicator 1.3, which incorporates population data). Usage indicators were primarily conceived to be collected from demand-side survey data or in jurisdictions where the number of deposit accounts and credits could be determined by individual (enabled by the presence of ID-based registries). Given the initial difficulties AFI member institutions experienced collecting demand-side data, especially before the development of the World Bank Global Findex and the prevalence of national demand-side surveys, the AFI Core Set allowed for flexibility in estimating usage with alternative 'proxy' indicators (Table 4). These were designed to allow countries to begin measuring the usage dimension from regulated financial institutions by considering the number of deposit accounts and the number of credit or loan accounts in formal financial institutions.

THE AFI CORE SET'S DEFINITION OF FORMALITY

The level of formality of regulated financial institutions is one of the main sources of data for the AFI Core Set and is based on one of three levels outlined in Table 5 oposite. Each has implications for measuring financial inclusion. The core indicators use level 2 and above as a baseline for measuring formal financial inclusion, although in certain circumstances countries may introduce exceptions.

SECOND TIER OF FINANCIAL INCLUSION INDICATORS

The AFI Core Set was developed as a basic or core framework for the initial collection of financial inclusion data. After testing the AFI Core Set, the FID WG continued to develop the framework by defining a "second tier" set of indicators. This broader group of indicators allows AFI members to explore their national data initiatives in more detail and apply other lenses of measurement. This, in turn, allows policymakers to select the most useful indicators for their country context and level of development. The second tier indicators initially included digital financial services (including mobile financial services), small and medium-sized enterprises (SMEs) and quality indicators to measure the main barriers to consumer empowerment and market conduct.[8]

Since then, second tier indicators have become more granular and segmented, and can be used to measure the financial inclusion gap between women and men (the gender gap),[9] as well as use cases for financial services and the financial needs of users. The FID WG is currently looking at how to measure access more

precisely, exploring methodologies such as mapping using geographic information systems (GIS),[10] supply-side data collection, segmentation and demand-side surveys.[11]

The usage dimension has also expanded in scope to include not only deposit and credit accounts, but also transaction services (including different types of payments and remittances) and other financial services like insurance and pensions. It has also evolved from measuring uptake in the use of financial services, such as the proportion of the population "holding" passive or active financial products, to identifying indicators that measure the frequency, volume and value of transactions.

The original goal to include the quality dimension of financial services in the AFI Core Set has also been achieved. The quality set of financial inclusion indicators was developed and tested by AFI member institutions and eventually by other international organizations. Finally, the collection of the AFI Core Set and second tier indicators has allowed AFI members to study, develop and use measurement methodologies, capture these indicators in a single dimension, and track and report the progress of financial inclusion through tailored financial inclusion indexes.[12]

The scope of the AFI Policy Model is the original AFI Core Set. Figure 1 illustrates the financial inclusion data framework as initially conceived by the FID WG. For reference, Annex 3 includes the complete list of indicators in the AFI Core Set as well as the second tier of financial inclusion indicators.

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7   The access dimension of the AFI Core Set is generally the physical ability to use available financial services and products.

8   AFI, 2013, Guideline Note 22: Indicators of the Quality Dimension of Financial Inclusion.

9   AFI, 2016, Guideline Note 25: Sex-Disaggregated Data Case Study; AFI Guideline Note 26: Sex-Disaggregated Data Toolkit – How to Leverage Sex-Disaggregated Financial Inclusion Data to Accelerate Women's Financial Inclusion.

10 AFI, 2016, Guideline Note 24: Financial Inclusion Data Tracking and Measurement – GIS Mapping to Inform Policymaking.

11 AFI, 2013, Guideline Note 10: Financial Inclusion Data Tracking and Measurement – Demand-Side Surveys to Inform Policymaking.

12 AFI, 2016, Guideline Note 18: An Index to Measure the Progress of Financial Inclusion

TABLE 3: AFI CORE SET – ACCESS AND USAGE INDICATORS

AFI CORE SET	FORMULA	DIMENSION
1.1 Number of access points per 10,000 adults	$\left(\dfrac{\textit{Total number of access points}}{\textit{Total number of adults}}\right) \textit{x 10,000}$	Access
1.2 Percentage of administrative units with at least one access point	$\left(\dfrac{\textit{Number of adminsitrative units with at least one access point}}{\textit{Total number of administrative units}}\right) \textit{x 100}$	Access
1.3 Percentage of total population living in administrative units with at least one access point	$\left(\dfrac{\textit{Total number of adults in administrative units with 1+ access points}}{\textit{Total number of adultss}}\right) \textit{x 100}$	Access
2.1 Percentage of adults with at least one type of regulated deposit account	$\left(\dfrac{\textit{Total number of adults with at least one regulated deposit account}}{\textit{Total number of adults}}\right) \textit{x 100}$	Usage
2.2 Percentage of adults with at least one type of regulated credit account	$\left(\dfrac{\textit{Total number of adults with at least one regulated credit account}}{\textit{Total number of adults}}\right) \textit{x 100}$	Usage

Source: AFI, 2013, Guideline Note 4. Measuring Financial Inclusion Core Set of Financial Inclusion Indicators.

TABLE 4: PROXY USAGE INDICATORS FOR THE AFI CORE SET

AFI CORE SET PROXY INDICATORS	FORMULA	DIMENSION
2.1x Number of deposit accounts per 10,000 adults	$\left(\dfrac{\textit{Total number of regulated deposit accounts}}{\textit{Total number of adults}}\right) \textit{x 10,000}$	Access
2.2x Number of loan accounts per 10,000 adults	$\left(\dfrac{\textit{Total number of regulated outstanding credit accounts}}{\textit{Total number of adults}}\right) \textit{x 10,000}$	Usage

Source: AFI, 2013, Guideline Note 4: Core Set of Financial Inclusion Indicators.

TABLE 5: DEFINITION OF FORMALITY IN THE AFI CORE SET

LEVEL OF FORMALITY	IMPLICATIONS FOR MEASUREMENT
1. All registered institutions offering financial services	This level may include large numbers of corporate entities that offer financial services, but are not specifically authorized to provide financial services and are therefore not required to provide information to any regulator. As a result, the service provided can only be measured from the demand (user) side. An example in some countries would be cooperatives or loan companies.
2. All institutions authorized (or licensed) to offer financial services but not actively supervised	This level would include entities that are subject to specific authorization, but over which the regulator has limited oversight. These entities may have limited or no reporting obligations. An example is remittance agents.
3. All institutions authorized and supervised on an ongoing basis	At this level, the provider is subject to direct and ongoing monitoring and supervision, which is likely to include reporting of data. This is the most restrictive definition, but is also the level at which financial regulators have the most influence.

Source: AFI Financial Inclusion Data Working Group, 2011, Measuring Financial Inclusion: AFI Core Set.

FIGURE 1: THE EVOLUTION OF INDICATORS IN THE AFI CORE SET

SECOND TIER

Menu of recommended
indicators to complement
the Core Set

AFI CORE
Basic and minimum
set of indicators
that all countries
should aspire
to collect

CATALOGUE

Full menu of "road-tested"
indicators '(e.g. indicators
that have been used by
FID WG members)

Source: AFI Mobile Financial Services (MFS) and Financial Inclusion Data (FID) working groups, August 2013, AFI Guideline Note 11: Mobile Financial Services Indicators for Measuring Access and Usage.

BOX 1: QUALITY DIMENSION OF FINANCIAL INCLUSION INDICATORS

From the early stages of developing the AFI Core Set to measuring and tracking the progress of financial inclusion, the dimension of quality was considered critical. However, given the complexity of conceptualizing quality and the measurement tools required, the quality dimension was established in a later stage and included in a broader measurement framework.[A]

In 2013, the FID WG published a guideline note defining the quality dimension of financial inclusion indicators.[B] It was conceptualized in a similar way to other dimensions in the AFI Core Set, using the guiding principles of usefulness and relevance, client perspective, conciseness, specificity, simplicity and improvement.

> **Usefulness and relevance** – When selecting indicators of quality, the most important consideration is whether they are useful and relevant for domestic policymaking.

> **Client perspective** – Data should gauge the real situation customers face, not capture broad characteristics assumed to be helpful from the regulator's perspective.

> Conciseness – A small set of indicators should cover all the important dimensions of quality.

> **Specificity** – Indicators should be directly linked to financial inclusion.

> **Simplicity** – If two indicators are similar, the simpler one should be selected.

> **Improvement** – Unbiased indicators should be selected even if they cast the country in a negative light.

Eight main categories were identified to capture the quality dimension of financial inclusion indicators:

1. **Affordability** – How expensive it is to keep an account, particularly for low-income earners.

2. **Transparency** – Access to all relevant information on financial products and services.

3. **Convenience** – Client perspective on the ease and comfort of accessing and using financial services.

4. **Fair treatment** – Clients' perceptions of fair treatment at financial institutions.

5. **Consumer protection** – Laws and regulations designed to ensure the rights of consumers are protected and prevent businesses from gaining an unfair advantage over competitors through fraud or unfair practices.

6. **Financial education** – Knowledge of basic financial terms and the ability of users to plan and budget their income.

7. **Indebtedness** – The number of borrowers who have made a late debt payment within a certain period.

8. **Choice** – Ability to choose (financial) services or products from a range of options.

A   AFI, 2013, Guideline Note 4: Core Set of Financial Inclusion Indicators.

B   AFI, 2013, Guideline Note 22: Indicators of the Quality Dimension of Financial Inclusion.

PART II
MEASUREMENT METHODOLOGIES AND COMPONENTS OF THE AFI CORE SET

Two main data sources were used in the design of the AFI Core Set: supply-side and demand-side. Supply-side data includes financial inclusion data collected by financial regulators and supervisors, credit registers and other regulatory institutions. It is typically structured data reported by regulated financial services providers, collected on a regular and systematic basis and held in public records. Demand-side data includes quantitative and qualitative financial inclusion data collected through demand-side surveys, focus groups and structured and semi-structured interviews with users of financial services, including individuals, households and businesses.[13]

When the AFI Core Set was first developed, it was considered important to include a socio-demographic component to help assess whether financial inclusion policies were increasing access and use. Today, all indicators in the Core Set capture data on population, actual and potential users of financial services, administrative units where target populations live, and other socio-demographic factors. Over time, this has allowed national regulators to develop indicators that collect more granular and segmented data and respond to policymaking needs and questions more effectively.

ACCESS DIMENSION: METHODOLOGY AND EVOLUTION

The financial inclusion indicators in the AFI Core Set related to access are collected mainly through data from administrative records that are reported on a regular basis by regulated financial institutions and linked to socio-demographic data (i.e. total adult population) from different administrative units.

The access dimension indicators — 1.1 Number of access points per 10,000 adults; 1.2 Percentage of administrative units with at least one access point;

and 1.3 Percentage of total population living in administrative units with at least one access point — are intended to provide regulators and policymakers with ways to measure the outreach of financial service channels and the proportion of administrative units and populations covered by these channels.

For indicators 1.2 and 1.3, the granularity and usefulness of information increases as the level of administrative units increase, from tier 1 (national) to tier 2 (country/regional) and tier 3 (municipality or locality).[14] From the national to the village level, increasingly granular data provides a more precise picture of the geographical accessibility of financial services and the corresponding increase in data requirements. Many countries have been interested in digging deeper into geographical accessibility with techniques such as GIS mapping.[15]

USAGE DIMENSION

The AFI Core Set's usage dimension allows policymakers to measure the uptake of the most basic financial services, represented by the percentage of individual adults holding one or more deposit accounts in a formal financial institution (indicator 2.1) and the percentage of adults holding one or more credit or loan account (indicator 2.2.) in a formal financial institution.

In principle, this data can be estimated using supply-side data from administrative data records submitted by regulated financial institutions. However, the FSPs reporting the data need to be able to separate individual accounts from enterprise-related accounts, and use a unique national identification number for every individual holding an account. This allows the regulator to identify individuals with one or more financial accounts, even if they are held at different financial institutions.

The methodology for estimating both indicators was based on using a nationally representative, probability-based demand-side survey of adults. This was due to the lack of an acceptable unique national identification to identify account holders with assets and liabilities at different financial institutions, in addition to data privacy concerns and the statistical complexity involved.

13 AFI, 2013, Guideline Note 10: Financial Inclusion Data Tracking and Measurement – Demand-Side Surveys to Inform Policymaking.

14 AFI, Guideline Note 4, Op. cit.

15 AFI, Guideline Note 24, Op. cit.

The advantages of a demand-side survey are that it can provide more granular data on users of financial services at non-regulated institutions or those who use informal mechanisms, and help to identify barriers to usage and quality. Increasingly, AFI members are investing time and resources in national demand-side surveys to measure the financial inclusion dimensions of access, usage and quality, and estimate the AFI Core Set and other indicators. The results of these surveys are used as a baseline to assess the status of financial inclusion more accurately and to measure the progress of a medium-term policy or strategy after three to five years of implementation. The AFI network has developed guideline notes and toolkits that share members' experience in designing and implementing demand-side surveys[16] to collect access, usage and quality financial inclusion indicators.

In the absence of demand-side survey data, the AFI Core Set includes two main alternative or "proxy" indicators that use supply-side data sources to measure the approximate proportion of deposit and credit account holders at a financial institution. These indicators should be carefully tailored and defined using available data in each jurisdiction to avoid overestimating or underestimating actual usage or uptake of financial services. Estimates should consider the possibility of double counting, the potential overrepresentation of inactive accounts and the definitions and uses of those accounts, including the possibility that they could be corporate accounts. If filtered carefully, these proxy indicators are useful for tracking progress in the uptake of deposit and credit accounts by administrative location tier.

As mentioned in Guideline Note 4, the usage dimension also involves "details about the regularity, frequency and duration of use over time."[17] Therefore, the access and usage dimensions of the AFI Core Set should be considered the starting point for further conceptualization, testing and adoption of a common framework for financial inclusion indicators.

GENDER COMPONENT OF THE AFI CORE SET AND SEX-DISAGGREGATED DATA MEASUREMENT

As part of the usage dimension of financial inclusion indicators, the FID WG established a work stream to segment financial inclusion data by gender, even before the Denarau Action Plan was launched at the 2016 AFI Global Policy Forum. Some AFI members are now reporting sex-disaggregated data, especially in the usage dimension. The FID WG has developed case studies,[18] a toolkit[19] and supply-side templates to provide guidance on collecting sex-disaggregated or segmented data for both the AFI Core Set and second tier indicators. To gain support and buy-in for this important policy task, the AFI Data Portal has been designed to allow AFI members to report the AFI Core Set and additional indicators segregated by sex (see Tables B and C in Annex 2).

BOX 2: SEX-DISAGGREGATED DATA TOOLKIT – HOW TO LEVERAGE SEX-DISAGGREGATED FINANCIAL INCLUSION DATA TO ACCELERATE WOMEN'S FINANCIAL INCLUSION

This FID WG Guideline Note outlines the steps in using supply- and demand-side sex-disaggregated data to close the financial inclusion gender gap, based on the experiences of AFI member institutions. According to the Women's Financial Inclusion Data Partnership (WFIDP), sex-disaggregated data is defined as data collected separately for males and females. Data is disaggregated by sex and not by gender because it is the biological sex of a person that is captured. In the context of financial inclusion policymaking, sex-disaggregated data can refer to either supply-side data collected from financial services providers (FSPs) or demand-side data, such as that collected through national financial inclusion surveys.

Most AFI members are collecting some form of sex-disaggregated data, either on the supply or demand side, or both. However, having the data is just the first step; the real value comes from using it. If insights from this data are applied, sex-disaggregated data can support AFI's objective to close the financial inclusion gender gap and contribute to the broader goal of full financial inclusion.

The following are recommended steps in developing and using financial inclusion sex-disaggregated data:

Establish data objectives	It is essential to establish objectives for the data on women's financial inclusion, i.e. what you want to know about the differences and similarities in women's and men's access, usage and quality of financial services.
Define approach	Define the institutional approach to collecting sex-disaggregated data. This may involve designing new financial inclusion indicators or adjusting existing ones to obtain sex disaggregation of demand and supply-side data.
Consult and sensitize	Once the indicators to be collected have been defined, consult with and sensitize data reporting institutions (FSPs) and other relevant institutions.
Adapt systems	Consider what reporting systems, processes and templates, as well as surveys and databases, may need to be revised to enable sex-disaggregated data from financial institutions to be submitted and stored.
Collect data	Once the indicators have been designed or modified and the necessary systems are in place, the data can be collected from FSPs and other sources.
Analyze and use data	Analyzing data is an essential step in understanding the needs and behaviors driving the gender dimensions of access, usage and quality of financial services.

Source: AFI, 2016, Guideline Note 26: Sex-Disaggregated Data Toolkit – How to Leverage Sex-Disaggregated Financial Inclusion Data to Accelerate Women's Financial Inclusion.

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16 AFI, August 2013, Guideline Note 10: Financial Inclusion Data Tracking and Measurement – Demand-Side Surveys to Inform Policymaking.

17 AFI, Guideline Note 4, Op.Cit.

18 AFI, 2016, Guideline Note 25: Leveraging Sex-Disaggregated Data to Accelerate Progress Towards Women's Financial Inclusion.

19 AFI, 2016, Guideline Note 26: Sex-Disaggregated Data Toolkit – How to Leverage Sex-Disaggregated Financial Inclusion Data to Accelerate Women's Financial Inclusion.

PART III: APPLYING THE AFI CORE SET TO SUPPORT FINANCIAL INCLUSION POLICIES AND REGULATIONS

In June and July 2019, the FID WG conducted an AFI member survey to find out how many regulators have actively collected the AFI Core Set in the last 36 months. Of AFI's 89 member institutions, 39 responded to the survey.

It was found that most AFI member institutions use different methodologies to collect data, but use the AFI Core Set as a starting point to measure and assess the various dimensions of financial inclusion. Since the Core Set was launched, approximately half of AFI members have developed data measurement policies[20] that incorporate the Core Set indicators. Currently, the AFI Core Set is being reported in whole or in part in the AFI Data Portal (ADP) by 44 AFI member institutions (Figure 2).

In addition to reporting the AFI Core Set in the ADP, the survey also identified members that collect and use the indicators for policymaking purposes, even if they do not upload data to the ADP. The results of the AFI Member Survey show that the AFI Core Set has been adopted and is being collected, in many cases by adapting the original indicators developed by the FID WG.

Based on the survey responses, 30 AFI member countries are actively collecting or have recently collected one or more AFI Core Set indicators in the last 36 months. Of these, seven collect the entire AFI Core Set as well as other indicators, while the rest collect, on average, three AFI Core Set indicators, primarily one access indicator (1.1) and two usage indicators (2.1 and 2.2).

Most AFI members that collect the AFI Core Set disseminate the data for internal reporting and to inform their respective national financial inclusion strategies (NFIS) (Figure 3). Only three members reported that they do not currently disseminate AFI Core Set data. Almost half of respondents — 14 institutions — have included the AFI Core Set in their financial inclusion reports and/or released them on their website or to the media. Just 11 member institutions report their data on the ADP. Six share their indicators directly with FSPs and other data reporters as feedback.

FIGURE 2: NUMBER OF AFI MEMBER INSTITUTIONS REPORTING THE AFI CORE SET IN THE ADP

CORE-1.1	CORE-1.2	CORE-1.3	CORE-2.1	CORE-2.1x	CORE-2.2	CORE-2.2x
29	18	16	22	25	22	19

AFI CORE SET INDICATORS

Source: AFI Member Survey, May 2019
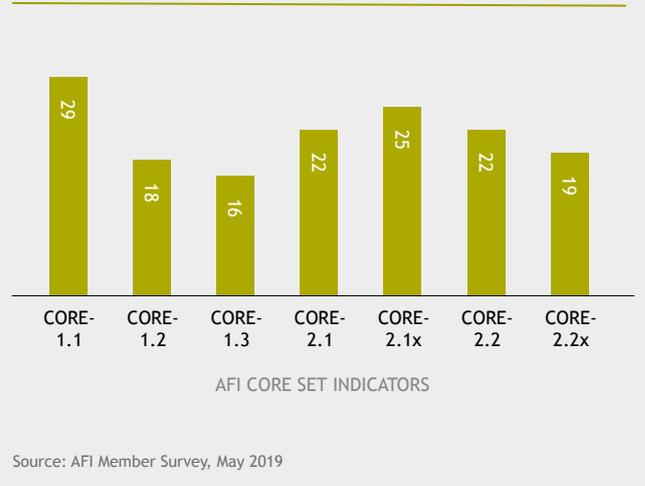
FIGURE 3: NUMBER OF AFI INSTITUTIONS THAT DISSEMINATE DATA COLLECTED THROUGH THE AFI CORE SET

TYPE OF DISSEMINATION

Type	Count
Internal reports within my institutions (e.g.board reporting, technical, staffing etc.)	21
National Financial Inclusion Strategy / Action Plan document(s)	16
Special reports /financial inclusion reports (publicy available)	15
Institution website and / or to the media	13
AFI Data Portal (ADP)	11
Financial services providers or other data reporters	5
My institution does not disseminate the data collected for AFI Core Set	3

Source: AFI Member Survey, May 2019

20 Of the 68 AFI Maya Declaration Commitments, 52 include specific data targets.

When asked how the AFI Core Set indicators are used in policymaking, 23 of 30 members mentioned their role as a diagnostic tool for capturing progress in financial inclusion; 20 use them as measurable national targets for financial inclusion; 16 use them to benchmark progress with other jurisdictions; and 14 use them as basic indicators to collect additional indicators. More than half that responded positively about their use of the AFI Core Set shared the policy documents they had developed.

Since the launch of the AFI Core Set, AFI members have been interested in developing their data frameworks to enable evidence-based policies. Of the 68 AFI Maya Declaration Commitments, 52 include specific targets for financial inclusion data, and 19 member institutions specifically reference the AFI Core Set in their commitments.

In terms of data collection challenges, five members identified availability of data as a main concern, as their institution does not collect the necessary data from regulated institutions. Other challenges included the lack of unique national identification number in financial institution reports, which can lead to overstating the number of account holders (e.g. double counting accounts); a lack of systematic reporting systems to collect the indicators; and high costs of data collection. However, of the nine member institutions not currently collecting the AFI Core Set, six reported that they planned to start soon. There is, therefore, a genuine interest among AFI members in developing and enhancing financial inclusion data frameworks, including with the AFI Core Set.

INTERNATIONAL RECOGNITION OF THE AFI CORE SET

After the AFI Core Set was published and began to be tested and used by several AFI members, additional indicators were formulated, collected and used to complement the Core Set, both inside and outside the AFI network.

For instance, the G-20 Global Partnership for Financial Inclusion (GPFI) Sub-Group on Data and Measurement recognized the AFI Core Set "… as a central component in its strategy to measure global progress and to set country-driven targets as a part of its activities to define the components and key performance indicators (KPIs) for financial inclusion." In the same document, the GPFI recognizes the AFI Core Set for striking a balance between standardization and flexibility, its focus on financial inclusion policymaking and broad support from financial sector policymakers, as it was developed as a collaborative effort.

FIGURE 4: NUMBER OF AFI MEMBER INSTITUTIONS USING THE AFI CORE SET FOR POLICYMAKING

TYPE OF USAGE

Type of usage	Value
To reflect our country's progress / achievement	24
Used as measurable national targets for financial inclusion	21
To compare our country's progress with outher countries	17
Established as basic indicators and expanded to collect other secondary indicators	13
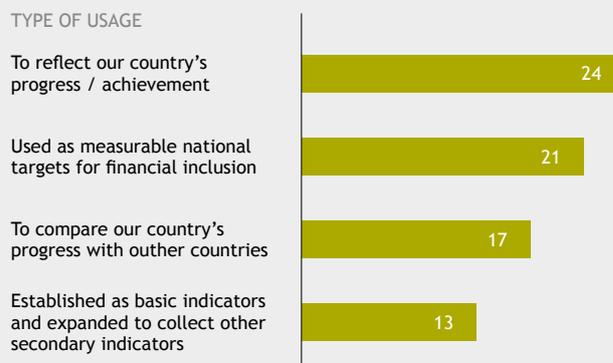
Source: AFI Member Survey, May 2019

BOX 3: INTERNATIONAL EFFORTS TO COLLECT FINANCIAL INCLUSION INDICATORS

A variety of international organizations, in partnership with the G-20 Global Partnership for Financial Inclusion (GPFI), have recognized the importance of data collection for policymaking purposes. Multilateral organizations, including the International Monetary Fund (IMF) and The World Bank, have recognized the contribution of the AFI network and built on this work by developing frameworks to define and collect global benchmark indicators for financial inclusion. Some of these indicators are systematically collected by the IMF and The World Bank.

The IMF Financial Access Survey (FAS) is an international effort to collect financial inclusion data from administrative data provided annually by central banks and other regulators. Launched in 2009, the FAS has helped to define and collect a global dataset that mainly includes supply-side data from IMF member countries (reported by regulated financial institutions and collected by financial regulators). The FAS includes similar indicators as AFI Core Set indicator 1.1 and alternative usage indicators from the AFI Core Set 2.1x and 2.2x.

The World Bank Global Findex is an international effort financed by The Bill & Melinda Gates Foundation and implemented by Gallup Inc. under the guidance of The World Bank. The Global Findex measures national financial inclusion levels using demand-side data collected by the Global Findex Survey, conducted in more than 144 countries every three years since 2011. Among others, the Survey tracks indicators similar to 2.1 and 2.2 from the AFI Core Set.

Sources: GPFI, G-20 Financial Inclusion Indicators; IMF, Financial Access Survey; The World Bank, Global Findex.

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21 See Annex 1.

22 G-20, Global Partnership for Financial Inclusion (GPFI), 2011, "Chapter 3, Implementing a common data framework for measuring financial inclusion" in Financial Inclusion Data, Assessing the Landscape and Country-level Target Approaches.

ANNEX 1: AFI CORE SET COLLECTION PRACTICES IN AFI MEMBER COUNTRIES

Several AFI member countries have voluntarily reported policy changes they attribute to AFI services and platforms, such as the working groups and regional initiatives. They have also pointed to knowledge products, such as guideline notes, case studies, reports and policy frameworks, as key resources referenced during and after the development of the AFI Core Set framework. Finally, they credit other AFI services, including knowledge exchanges, peer learning/ reviews, capacity building and grants, as contributing immensely to policy changes and policy development in their countries.

Knowledge products and services from the AFI network have been used to expand the AFI Core Set with second tier indicators that focus on key policy areas of financial inclusion, such as digital financial services and SME finance.

The AFI network has also identified and shared key lessons and knowledge in a set of measurement methodologies that have expanded data collection to the following indicators:

1. Working groups and grants
2. Capacity building – Financial Inclusion Strategies and Data Member Training, BNM-AFI (five programs)
3. Guideline Note 10: Financial Inclusion Data Tracking and Measurement – Demand-Side Surveys to Inform Policymaking
4. Guideline Note 11: Mobile Financial Services Indicators for Measuring Access and Usage
5. Guideline Note 16: SME Financial Inclusion Indicators Base Set (SME Finance Base Set)
6. Guideline Note 18: Index to Measure the Progress of Financial Inclusion
7. Guideline Note 22: Indicators of the Quality Dimension of Financial Inclusion
8. Guideline Note 24: Financial Inclusion Data Tracking and Measurement – GIS Mapping to Inform Policymaking
9. Guideline Note 25: Leveraging Sex-Disaggregated Data to Accelerate Progress Towards Women's Financial Inclusion
10. Guideline Note 26: Sex-Disaggregated Data Toolkit – How to Leverage Sex-Disaggregated Financial Inclusion Data to Accelerate Women's Financial Inclusion
11. Guideline Note 33: Digital Financial Services Indicators

ACTIONS RELATED TO THE COLLECTION AND USE OF THE AFI CORE SET

COUNTRY	REPORTED POLICY AND REGULATORY CHANGE	POLICY DATE
Argentina	Development of an NFIS, which includes a diagnosis of Financial Inclusion in Argentina (Core Set indicators 1.1, 2.1 and 2.2. and other indicators) (Link). Currently working on a financial inclusion report (all Core Set indicators and others)	2019
Bangladesh	Development of a financial inclusion data framework for Bangladesh, including the supply data framework.	2013
BCEAO	Every year, the BCEAO publishes some of the AFI Core Set for its member countries as part of its financial inclusion report. These indicators are also published in its database.	2016
Bhutan	The Bhutan Economic Forum for Innovative Transformation (BEFIT) began collecting the AFI Core Set following the launch of their first survey of the financial inclusion landscape.	2013
Brazil	Banco Central do Brasil developed the collection of the AFI Core Set, which enabled it to produce a regular national financial inclusion report that evolved into the concept of financial citizenship.	2010-2017
Burundi	Banque de la République du Burundi conducted a national demand-side survey that allowed it to define a financial inclusion data framework and baseline diagnostic for its NFIS.	2012

ACTIONS RELATED TO THE COLLECTION AND USE OF THE AFI CORE SET

COUNTRY	REPORTED POLICY AND REGULATORY CHANGE	POLICY DATE
Colombia	Consolidation of financial inclusion indicators by Banca de las Oportunidades and launch of the first Report of Financial Inclusion.	2011
	Launch of the first demand study of financial inclusion through two demand-side surveys, one of individuals and households and the other of businesses, including SMEs.	2015
	Launch of the second series of the demand study of financial inclusion to support the financial inclusion strategy.	2018
Egypt	Development of the Financial Inclusion Measurement Framework, including a dedicated data unit.	2015
El Salvador	A demand-side financial inclusion survey of individuals and a demand-side survey of enterprises were conducted to estimate some of the AFI Core Set.	2017
Fiji	Development of a financial inclusion data framework based on the AFI Core Set and the country's first demand-side survey. The Reserve Bank of Fiji included some of the AFI Core Set indicators in its NFIS.	2013 2016
Ghana	Development of the Data Framework for Guidelines on E-money Issuers.	2015
	Bank of Ghana has also released various financial sector reports including the AFI Core Set to inform the evolution and track the changes, including sex-disaggregated data of e-money services.	2017
Guatemala	Development of a financial inclusion data framework based on the AFI Core Set and publication of a financial inclusion report through the Superintendencia de Bancos.	2014
Haiti	Banque de la République d'Haiti is currently using AFI Core Set indicators to update its NFIS.	2019
Honduras	Consolidation of a data hub based on the AFI Core Set to inform the NFIS.	2018
Jordan	Development of a financial inclusion data framework based initially on the AFI Core Set and complemented with indicators specific to Jordan's national policy requirements.	2017
	Central Bank of Jordan launched the NFIS, which includes a diagnostic tool that uses some of the AFI Core Set.	
Kenya	Central Bank of Kenya, in collaboration with the Kenya National Bureau of Statistics (KNBS) and Financial Sector Deepening Trust (FSD Kenya), conducts FinAccess surveys to measure and better understand four dimensions of financial inclusion: access, usage, quality and impact.	2009 & 2016
Malaysia	Bank Negara Malaysia recently released a fact sheet on agent banking, including some of the access and usage dimensions of the AFI Core Set.	2019
Mexico	Development of the CNBV Core Set framework and publication of the first financial inclusion report, now in its 10th edition. The first National Financial Inclusion Survey was launched and consolidation of a complete set of financial inclusion statistics, including supply- and demand-side indicators.	2010 & 2012
Mongolia	The Financial Regulatory Commission updates its Core Set of Indicators in a quarterly financial sector report.	2018
Namibia	Development of a monitoring and evaluation framework to monitor progress on financial inclusion indicators. A FINSCOPE Survey was conducted in 2007 and 2012, and the first local Financial Inclusion Survey was conducted through the National Statistics Agency in 2007.	2012
Palestine	The Palestine Monetary Authority included estimates from the AFI Core Set in its NFIS.	2018
Paraguay	Banco Central de Paraguay releases financial inclusion indicators for Paraguay on a regular basis.	2014
Peru	Consolidation of a financial inclusion data framework inspired by the AFI Core Set. Superintendencia de Banca, Seguros y AFP (SBS) periodically reports financial inclusion indicators, some of them based on the AFI Core Set.	2012 2012-2019
Philippines	One of Bangko Sentral ng Pilipinas' (BSP) main Maya Declaration commitments is related to the creation of a financial inclusion data framework.	2011
	BSP regularly publishes a financial inclusion report that includes the AFI Core Set and other complementary indicators.	2013-2017
Russia	The Bank of Russia (BoR) conducts annual monitoring of financial inclusion. The BoR publishes annual financial inclusion measurements based on data from financial institutions and surveys of the population and SMEs since 2015. It has also published the annually Financial Inclusion Landscape report since 2015.	2015

ACTIONS RELATED TO THE COLLECTION AND USE OF THE AFI CORE SET

COUNTRY	REPORTED POLICY AND REGULATORY CHANGE	POLICY DATE
Senegal	Demand-side survey of financial inclusion in Senegal.	2017
South Africa	Development of the Mzansi account achieved through a robust data collection process.	2012
Tanzania	Collection of the AFI Core Set as the first step in the development of Tanzania's NFIS.	2012
	Tanzania 2013 FinScope report.	2013
Thailand	Thailand's 2013 survey on Financial Access of Thai Households.	2013
The Gambia	The Central Bank of Gambia included the usage dimension of the AFI Core Set indicators in its NFIS Concept Paper.	2018
Tunisia	Tunisia included the usage dimension of the AFI Core Set in a recent financial inclusion study.	2018
Uganda	Demand-side survey methodology and findings and the Uganda 2013 FinScope report.	2013
	2017 FinScope demand-side survey and financial inclusion key indicators.	2017
	Bank of Uganda included the AFI Core Set in diagnostics and used it to define some NFIS indicators.	
Zambia	Launch of a FinScope financial inclusion demand-side survey following the requirement to establish a baseline data collection to inform the NFIS.	2009

Source: Information reported by AFI member institutions

ANNEX 2: AFI CORE SET DATA REPORTING IN THE AFI DATA PORTAL

1.1 NUMBER OF ACCESS POINTS PER 10,000 ADULTS AT A NATIONAL LEVEL AND SEGMENTED BY TYPE AND BY RELEVANT ADMINISTRATIVE UNITS

Formula:	$$\left(\frac{Total\ number\ of\ access\ points}{Total\ number\ of\ adults} \right) x\ 10{,}000$$
Data requirements:	> Number of various access points > Number of adults
Formula per administrative unit:	$$\left(\frac{\begin{array}{c}Total\ number\ of\ access\ points\\ in\ each\ adminisrative\ unit\end{array}}{\begin{array}{c}Total\ number\ of\ adults\ in\ each\\ administrative\ unit\end{array}} \right) x\ 10{,}000$$
Data requirements:	> Number of access points by type and administrative unit > Number of adults by administrative unit

FIGURE A: AFI CORE SET INDICATOR 1.1 – DATA REPORTING

■ Median AP/10,000 adults   ■ Average AP/10,000 adults

CORE 1.1 - Total number of access points per 10,000 adults
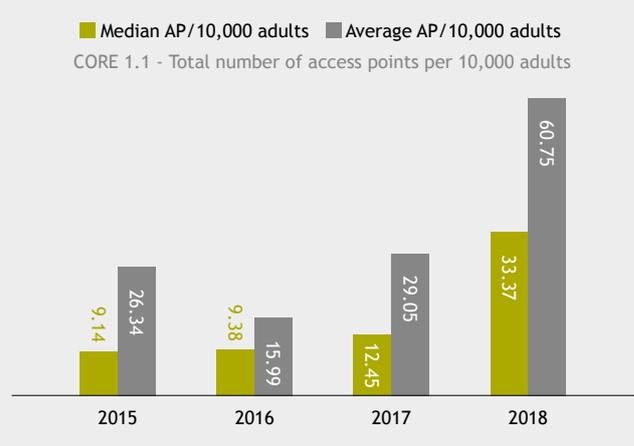
TABLE A: AFI CORE SET INDICATOR 1.1 – AVERAGE STATISTICS REPORTED TO THE AFI DATA PORTAL

YEAR REPORTED	1.1 ACCESS POINTS / 10,000 ADULTS	1.1 A. BRANCHES / 10,000 ADULTS	1.1 B. ATMS / 10,000 ADULTS	1.1 C. AGENTS / 10,000 ADULTS
2015	26.34	1.55	4.51	6.33
2016	15.99	1.47	4.20	7.84
2017	29.05	1.39	3.95	15.63
2018	60.75	2.45	4.01	31.05

Source: AFI Data Portal, July 2019

1.2 PERCENTAGE OF ADMINISTRATIVE UNITS WITH AT LEAST ONE ACCESS POINT

Formula:	$$\left(\frac{\begin{array}{c}Number\ of\ administrative\\ units\ with\ at\ least\ one\ access\ point\end{array}}{Total\ number\ of\ administrative\ units} \right) x\ 100$$
Data requirements:	> Catalogue of administrative units > Number of administrative units identified with at least one access point

FIGURE B: AFI CORE SET INDICATOR 1.2 – DATA REPORTING

■ Median % province with >=1AP   ■ Average % province with >=1AP

CORE 1.2 - Percentage of administrative units with at least one access point
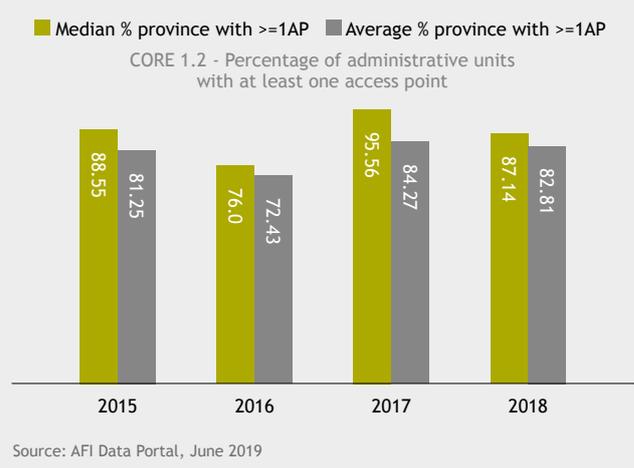
Source: AFI Data Portal, June 2019

1.3 PERCENTAGE OF TOTAL POPULATION LIVING IN ADMINISTRATIVE UNITS WITH AT LEAST ONE ACCESS POINT

Formula:	$\left(\dfrac{\textit{Total number of adults in adminisrative units with 1+ access points}}{\textit{Total number of adults}} \right) \times 100$
Data requirements:	> Number of adults by administrative unit > Administrative units identified with at least one access point > Total number of adults in the population

FIGURE C: AFI CORE SET INDICATOR 1.3 – DATA REPORTING

■ Median ■ Average

CORE 1.3 - Percentage of adult population living in administrative units with 1+ access points

	2015	2016	2017	2018
Median	97.05	97.1	99.91	98.22
Average	88.98	84.23	96.59	96.38

Source: AFI Data Portal, June 2019
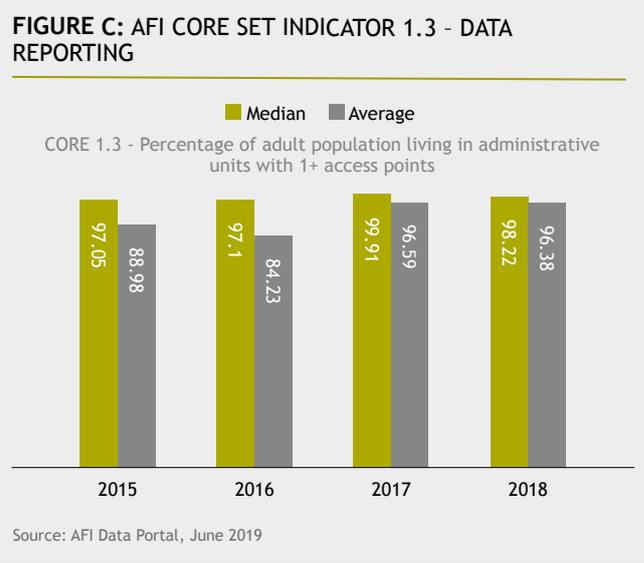
2.1 PERCENTAGE OF ADULTS WITH AT LEAST ONE TYPE OF REGULATED DEPOSIT ACCOUNT

Formula:	$\left(\dfrac{\textit{Total number of adults with at leaast one regulated deposit acount}}{\textit{Total number of adults}} \right) \times 100$
Data requirements:	> Number of adults with at least one regulated deposit account > Total number of adults

2.1x NUMBER OF REGULATED DEPOSIT ACCOUNTS PER 10,000 ADULTS (ALTERNATIVE INDICATOR FOR 2.1)

Formula:	$\left(\dfrac{\textit{Total number of regulated deposit accounts}}{\textit{Total number of adults}} \right) \times 10{,}000$
Data requirements:	> Number of regulated deposit accounts of natural individuals (supply-side data) > Total number of adults in the population

FIGURE D: AFI CORE SET INDICATOR 2.1 – DATA REPORTING

■ Median ■ Average

CORE 2.1 – Percentage of adults with at least one type of regulated deposit account

	2015	2016	2017	2018
Median	39.8	40.5	48.1	47.9
Average	50.3	41.6	51.0	54.3

Source: AFI Data Portal, July 2019
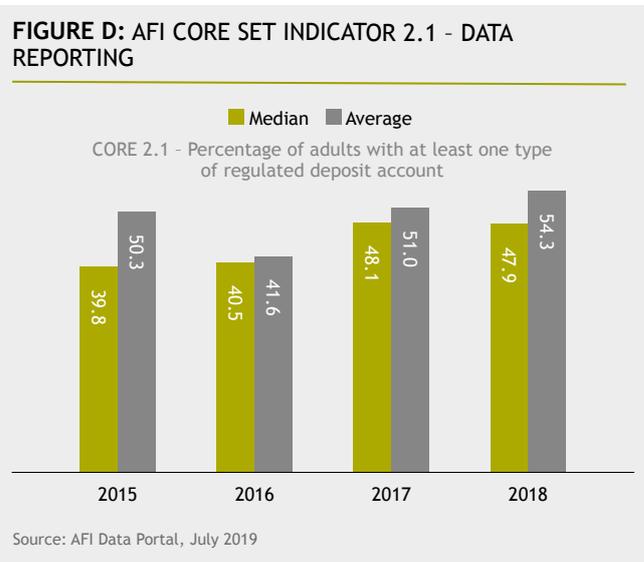
2.1 *continued*

TABLE B: AFI CORE SET INDICATOR 2.1 – AVERAGE STATISTICS REPORTED TO THE AFI DATA PORTAL

YEAR REPORTED	2.1 PERCENTAGE OF ADULTS WITH AT LEAST ONE DEPOSIT ACCOUNT	2.1-A PERCENTAGE OF ADULT FEMALES WITH AT LEAST ONE DEPOSIT ACCOUNT	2.1-B PERCENTAGE OF ADULT MALES WITH AT LEAST ONE DEPOSIT ACCOUNT	2.1 X. DEPOSIT ACCOUNTS / 10,000 ADULTS
2015	50.3%	42.0%	46.3%	18,583
2016	41.6%	43.3%	44.9%	12,608
2017	51.0%	51.8%	54.3%	15,392
2018	54.3%	50.8%	60.5%	13,926

Source: AFI Data Portal, July 2019

2.2 PERCENTAGE OF ADULTS WITH AT LEAST ONE TYPE OF REGULATED CREDIT ACCOUNT

Formula:	$\left(\dfrac{\text{Total number of adults with at least one regulated credit acount}}{\text{Total number of adults}} \right) \times 100$
Data requirements:	> Number of adults with at least one regulated credit account > Total number of adults

2.2x NUMBER OF REGULATED CREDIT ACCOUNTS PER 10,000 ADULTS (ALTERNATIVE INDICATOR FOR 2.2)

Formula:	$\left(\dfrac{\text{Total number of regulated outstanding credit accounts}}{\text{Total number of adults}} \right) \times 10{,}000$
Data requirements:	> Number of regulated outstanding credit accounts to individuals (supply-side data) > Total number of adults in the population

FIGURE E: AFI CORE SET INDICATOR 2.1 – DATA REPORTING

■ Median ■ Average

CORE 2.2 - Percentage of adults with at least one type of regulated credit account

	2015	2016	2017	2018
Median	20.7	16.8	29.1	28.98
Average	22.14	19.48	26.77	23.45
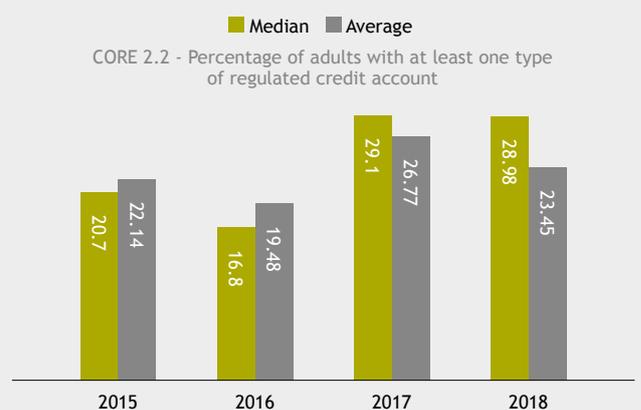
Source: AFI Data Portal, July 2019

TABLE C: AFI CORE SET INDICATOR 2.2 – AVERAGE STATISTICS REPORTED TO THE AFI DATA PORTAL

YEAR REPORTED	2.2. PERCENTAGE OF ADULTS WITH AT LEAST ONE CREDIT ACCOUNT	2.2-A PERCENTAGE OF ADULT FEMALES WITH AT LEAST ONE CREDIT ACCOUNT	2.2-B PERCENTAGE OF ADULT MALES WITH AT LEAST ONE CREDIT ACCOUNT	2.2-X CREDIT ACCOUNTS / 10,000 ADULTS
2015	22.1%	35.9%	40.1%	3,311
2016	19.5%	25.7%	28.9%	3,251
2017	26.7%	29.4%	32.5 %	4.037
2018	23.5%	28.64%	29.0%	3,239

Source: AFI Data Portal, July 2019

ANNEX 3: SECOND TIER FINANCIAL INCLUSION INDICATORS

AFI FINANCIAL INCLUSION QUALITY DIMENSION INDICATORS

SUB-CATEGORY	#	INDICATOR	OBSERVATION
1. AFFORDABILITY	1.1	**Average monthly cost to have a basic account, based on the official minimum wage.**	$$\frac{(X_1 \times W_1 + X_2 \times W_2 + X_3 \times W_3 + \cdots + X_n \times W_n)}{\bar{\imath} \sum_1^n W_i}$$ **Where:** x is the monthly cost to keep a basic deposit account in the financial institution 1, w_1 is the numbers of accounts in the financial institution 1, n is the number of institutions and $\bar{\imath}$ is the official minimum wage. $x_1 = i_1 - (M_1 + w_1 + A_1)$ i_1 is the monthly interest from a basic deposit account with \$100 in in the financial institution 1, M_1 is the monthly maintenance fee in charged by the financial institution 1, w_1 is the monthly withdrawal fee in the charged by financial institution 1, A_1 is the monthly ATM fees charged by financial institution 1.
	1.2	**Percentage of clients who stated that the fees and charges for financial transactions are expensive.**	$$\frac{\textit{The number of clients who stated that the fees and charges for financial transactions are expensive}}{\textit{The number of clients who made a financial transaction}}$$
2. TRANSPARENCY	2.1.	**Percentage of clients who believe they have received clear and sufficient information about financial services at the start of the loan contract.**	$$\frac{\textit{The number of clients who received clear and sufficient information}}{\textit{The number of clients with a loan from a financial institution}}$$
3. CONVENIENCE	3.1	**Percentage of people who are not comfortable with the average time spent waiting in a queue at financial institution branches (and/or bank and non-bank agent).**	$$\frac{X}{Y}$$ **Where:** X is the number of people who are not comfortable with the time they spent queuing at a financial institution branch for their last transaction; Y is the number of people who went to a financial institution branch (and/or bank and non-bank agent).
	3.2	**Average time spent queuing at a branch of a financial institution and/or bank and non-bank agent.**	$$\frac{(X_1 \times W_1 + X_2 \times W_2 + X_3 \times W_3 + \cdots + X_n \times W_n)}{\sum_1^n W_i}$$ **Where:** x_n is the average time spent queuing (in minutes) per person at the institution n, and w_1 is the average number of people who go to one financial institutions once per day. n is the number of financial institutions.
4. FAIR TREATMENT	4.1	**Percentage of users who have felt mistreated by the staff of a financial institution.**	$$\frac{X}{Y}$$ **Where:** X is the number of clients who have felt mistreated by the staff of a financial institution and, Y is the number of the financial institution's clients.

QUALITY DIMENSION INDICATORS *continued*

SUB-CATEGORY	#	INDICATOR	OBSERVATION
5. CONSUMER PROTECTION	5.1	Percentage of consumers who have contacted a consumer protection authority to solve a problem regarding financial services within the last three to six months and had their problem resolved within two months.	$$\frac{X}{Y}$$ **Where:** X is the number of consumers who have contacted a consumer protection authority within the last three to six months and their problem was resolved within two months of reporting; Y is the number of consumers who have contacted the consumer protection authority to solve a problem regarding financial services within the last three to six months.
	5.2	Percentage of clients whose deposits are covered by a deposit insurance fund (DIF).	$$\frac{\textit{Number of clients who are completely covered by a DIF}}{\textit{The number of clients with deposits}}$$
6. FINANCIAL EDUCATION	6.1	Percentage of adults who know the definitions of these basic financial terms: rate, risk, inflation and diversification.	$$\frac{\textit{Percentage of people who answer all four questions correctly}}{\textit{Number of respondents}}$$ For this indicator, at least 4 questions on financial literacy must be included on the demand-side survey. **1** Suppose you had USD 100 in a savings account and the interest rate was 2% per year. After one year, how much do you think you would have in the account? Correct answer: USD 102 **2** Do you think if someone offers you the chance to win a lot of money, it also means you may lose a lot of money? a. Yes b. No c. Don't know **3** Do you think high inflation means that it would more difficult to meet your daily life expenditures? a. Yes b. No c. Don't know **4** In which case is it more likely that you would lose all your money? a. If you invest it in one business b. If you invest it in one or more businesses c. It's the same d. Don't know
	6.2	Percentage of adults who prepare a budget each month.	$$\frac{\textit{Number of adults who prepare their budgets each month}}{\textit{Number of respondents}}$$
7. INDEBTEDNESS	7.1	Percentage of borrowers who are more than 30 days late with a loan payment.	$$\frac{\textit{Number of borrowers with more than a 30 - day delay in making a loan payment}}{\textit{Number of borrowers in the financial system}}$$
8. CHOICE	8.1	Percentage of administrative units with at least three different branches of formal financial institutions, in areas with more than 10,000 inhabitants)	$$\frac{X}{Y}$$ **Where:** X is the number of urban administrative units with branches or agents of three different institutions and, Y is the number of urban administrative units.
	8.2	Percentage of administrative units with at least three different branches of formal financial institutions)	$$\frac{\textit{Number of administrative units with branches or agents of 3 different institutions}}{\textit{Total number of administrative units by country}}$$

Source: AFI, Guideline Note 22. Indicators of the Quality Dimension of Financial Inclusion, 2016.

AFI SME FINANCIAL INCLUSION INDICATORS BASE SET

DIMENSION	CATEGORY	#	INDICATOR	MEASUREMENT	NOTE
ACCESS	Digital financial access	4	Percentage of enterprises with access to digital financial services	Extent of access to digital financial services	
		4.1x	Percentage of population with access to digital financial services		
	Credit access	5	Percentage of SMEs required to provide collateral on any existing loan	Tightness of credit conditions	This indicator is based on an OECD indicator
USAGE	Formally banked enterprises	1	Percentage of SMEs with a deposit account at a regulated financial institution	Usage of deposit accounts	GPFI indicator
		1.1x	$\dfrac{\text{Number of SMEs with deposit accounts}}{\text{Number of deposits accounts}}$		
		1.2x	$\dfrac{\text{Number of SMEs depositors}}{\text{Number of depositors}}$		
	Enterprises with outstanding loan or line of credit facilities	2	Percentage of SMEs with an out-standing loan or line of credit at a regulated financial institution	Usage of loan facilities	GPFI indicator
		2.1x	$\dfrac{\text{Number of SMEs with outstanding loans}}{\text{Number of outstanding loans}}$		
		2.2x	$\dfrac{\text{Number of SMEs with outstanding loans}}{\text{Number of outstanding loans}}$		
QUALITY	SME loan guarantees	1	SME loan guarantees as a percentage of SME loan (in terms of value)	Extend of public support for SME	OECD indicator
		1.1x	$\dfrac{\text{Number of SME loans with guarantees}}{\text{Number SME loans}}$		

Source: AFI, Guideline Note 16 SME Financial Inclusion Indicators Base Set, 2015.

AFI SME FINANCIAL INCLUSION INDICATORS BASE SET

CATEGORY	#	INDICATOR	MEASUREMENT	NOTE
Relative cost of credit	2	Difference between the average SME loan rate and average corporate loan rate	Risk premium charged on SMEs loans	Based on OECD indicator
Women-owned SME accounts	3	Percentage of women-owned SMEs with a deposit account at a regulated institution	Gender equality in SME access to financial services	
	3.1x	$\dfrac{\textit{Number of women-owned SMEs with deposit accounts}}{\textit{Number of deposit accounts}}$		
Women-owned SME loans	4	Percentage of women-owned SMEs with an outstanding loan or line of credit at a regulated institution	Gender equality in SME access to financial services	
	4.1x	$\dfrac{\textit{Number of women - owned SMEs with outstanding loans}}{\textit{Number of outstanding loans}}$		
Non-performing loans	5	Percentage of non-performing loans: to total loans to SME loans		Based on OECD indicator

Source: AFI, Guideline Note 16 SME Financial Inclusion Indicators Base Set, 2015.

AFI DIGITAL FINANCIAL SERVICE INDICATORS – ACCESS DIMENSION

#	INDICATOR	HOW TO CALCULATE
1	Percentage of administrative units with agent outlet	Percentage of administrative units (province, local government or municipality level) with at least one registered agent outlet: $$\dfrac{\textit{Number of administrative units with at least one agent}}{\textit{Total number of administrative units}} \times 100$$
2	Number of agents per 10,000 adults This can be disaggregated based on: - Male/female - Urban/rural	Registered DFS agents per 10,000 adults: $$\dfrac{\textit{Number of registered DFS agents}}{\textit{Total number of adults}} \times 10{,}000$$
3	Number of active DFS agents per 10,000 adults This can be disaggregated based on: - Male/female - Urban/rural	Active DFS agents per 10,000 adults: $$\dfrac{\textit{Number of active agents}}{\textit{Total number of adults}} \times 10{,}000$$
4	Number of merchant payment points per 10,000 adults: This can be disaggregated based on: - Male/female - Urban/rural	Number of merchant payment points per 10,000 adults: $$\dfrac{\textit{Number of merchant payment points}}{\textit{Total number of adults}} \times 10{,}000$$
5	Percentage of adult population with registered DFS accounts This can be disaggregated based on: - Male/female - Urban / rural	Percentage of adult population with registered DFS accounts: $$\dfrac{\textit{Number of adults reporting a registered DFS account or number of registered DFS accounts}}{\textit{Total number of adults}} \times 100$$

Source: AFI, Guideline Note 33. Digital Financial Service Indicators, 2019.

AFI DIGITAL FINANCIAL SERVICE INDICATORS – USAGE DIMENSION

#	INDICATOR	HOW TO CALCULATE
1	**Percentage of active DFS account holders:** - Male/female - Urban/rural	Percentage of active DFS accounts (accounts that have been used at least once in the last 90 days) $$\left\{ \frac{\Sigma(\text{Weighted average of all active DFS account holders})}{\text{Total number of DFS registered account holders}} \right\} X\ 100$$ **Where;** Σ (Weighted average of all active DFS accounts) = $X_1 + X_2 + X_3 + ... + X_n$ X_1 = {Number of active mobile money (MM) wallets x Weight of MM wallets (%)} X_2 = {Number of active e-Wallets x Weight of e-Wallet (%)} X_n = {Number of active DFS account types x Weight of DFS account type (%)} **Example:**

	WEIGHT (%)	NUMBER OF DFS ACCOUNT TYPES (IN MILLIONS)	WEIGHTED AVERAGE OF DFS ACCOUNT TYPES
DFS ACCOUNT TYPE			
Mobile Money Wallet	40	89	35.6
e-Wallet	25	82	20.5
Branchless Bank Account	35	90	31.5
Total	**100**	**-**	**87.6**

If total registered DFS accounts = 140 million
Therefore, percentage of active DFS accounts = (87.6/140) x 100% = 62.6%

Proxy. If there is no data about active and registered account holders (individuals) and only the number of accounts, then an alternative or proxy indicator is:

$$\frac{\Sigma(\text{Weighted average of all active DFS accounts})}{\text{Total number of adults}}\ X\ 10{,}000$$

#	INDICATOR	HOW TO CALCULATE
2	**DFS transactions (by volume) per registered account** This can be disaggregated based on: - Male/female - Urban/rural And based on DFS transaction type as required by the jurisdiction or availability of data: - Total transactions - Cash-in/cash-out - Bill payments - Merchant payments - P2P transfers - Disbursement and repayment of loans (microfinance loans) - G2P payments - Salary payments - Value chain payments - E-commerce payments - Cash transfers - Airtime top-ups - Etc.	Total number of transactions classified by type of DFS service over a given period (e.g. a month) performed by the number of registered active DFS account holders reported within the same period. Average monthly DFS transactions = $$\left(\frac{1}{Z}\ (X1+X2+\cdots X12) \right)$$ Where $$Xi = \frac{\text{Total number of DFS transactions in month i}}{\text{Total number of DFS active account holders in month i}}\ X\ 100$$ Z = Period i.e. January, ... December (i.e. 12 for a full year)

USAGE DIMENSION *continued*

3	**Value of DFS transactions,** including:	Total value of transactions in domestic currency classified by type of DFS service in each month, and number of DFS account holders reported in each month.
	- Total - Cash-in/cash-out - Bill payments - Merchant payments - P2P transfers - Disbursement and repayment of loans (microfinance loans) - G2P payments - Salary payments - Value chain payments - E-commerce payments - Cash transfers - Airtime top-ups	Alternatively, average value of DFS transactions in a year in terms of domestic currency classified by type of transactions estimated on a monthly basis. Average = $$\left(\frac{1}{Z}\ (X1+X2+\cdots X12\right)$$ Where $$Xi = \frac{\text{Total number of DFS transactions in month } i}{\text{Total number of DFS active account holders in month } i} \times 100$$ Z = Period i.e. January, … December

Source: AFI, Guideline Note 33. Digital Financial Service Indicators, 2019.

AFI DIGITAL FINANCIAL SERVICE INDICATORS – QUALITY DIMENSION

#	INDICATOR	HOW TO CALCULATE
1	**Disclosure requirement**	This indicator evaluates the compliance of financial services providers to provide clear, concise and accurate disclosure of terms, conditions and requirements to customers in a bid to ensure responsible practice. **Measure:** Per identified element: Take the value of "1" for fully represented element and "0" for absence of element Examples of elements to be measured are: > Plain language requirement e.g. clear language, easily understandable, exclusion of hidden clauses > Adapted to local context and language requirement > Prescribed standardized disclosure template/format including layout, fonts size and readability > Rights to redress and associated processes > Visible total cost of service, associated charge, tax, commission or fees disclosure
2	**Number of complaints per 10,000 active users**	Cumulative complaints to the central bank, ombudsman and financial services providers during the last 12 months. 1) Total number of complaints accumulated in a year by type of complaint 2) Number of complaints in terms of 10,000 active DFS accounts $$\frac{\text{Number of cumulative complaints}}{\text{Total number of active DFS account holders}} \times 10{,}000$$
3	**Percentage of complaints resolved**	Percentage of DFS service complaints resolved (for or against the customer) during the last year in terms of total number of complaints $$\frac{\text{Number of cumulative complaints resolved}}{\text{Total number of cumulative complaints}} \times 100$$
4	**Transaction failures**	Classification of types of DFS failures in the form of system failure and network failure. For each type of failure estimate the indicator. Annual average of the percentage of failed DFS transactions per month: Average = $$\frac{1}{12}\ (X1+X2+\cdots X12)$$ Where i = January, … December $$Xi = \frac{\text{Number of failed transactions in month } i}{\text{Total number of transactions in month } i} \times 100$$

USAGE DIMENSION *continued*

5	**Dispute resolution**	This indicator evaluates the provision and existence of formal internal and external dispute resolution mechanisms: **Measure:** Per identified element: Take the value of "1" for fully represented element and "0" for absence of element Examples of elements to be measured are: **a.** Internal dispute resolution mechanism: These are policies and processes adopted or ratified by the service provider's board or executive management setting the standards for dispute resolution and handling based on tiered severity or priority. Sub-indicators for this element include: - Timelines - Accessibility - Clear escalation path and requirements to engage complaints-handling procedure **b.** External dispute resolution mechanism: This refers to the system or process in place that allows a customer to seek affordable and efficient recourse with a third party, such as a supervisory agency, a financial ombudsman or equivalent institution.
6	**Financial literacy**	This indicator evaluates the provision and existence of formal financial literacy and education policy, program or process, both internally for service providers and externally for regulatory agency, to ensure customer awareness, knowledge and capability to use basic financial services. **Measure:** Per identified element: Take the value of "1" for fully represented element and "0" for absence of element Examples of elements to be measured are: > Awareness > Guidance: "How it Works", demos, tips, instructions about use, etc. > Education: Financial literacy curriculum for elementary, high school, etc.

Source: AFI, Guideline Note 33. Digital Financial Service Indicators, 2019.

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