Committee on
Payments and Market
Infrastructures

World Bank Group

Payment aspects of financial inclusion: application tools

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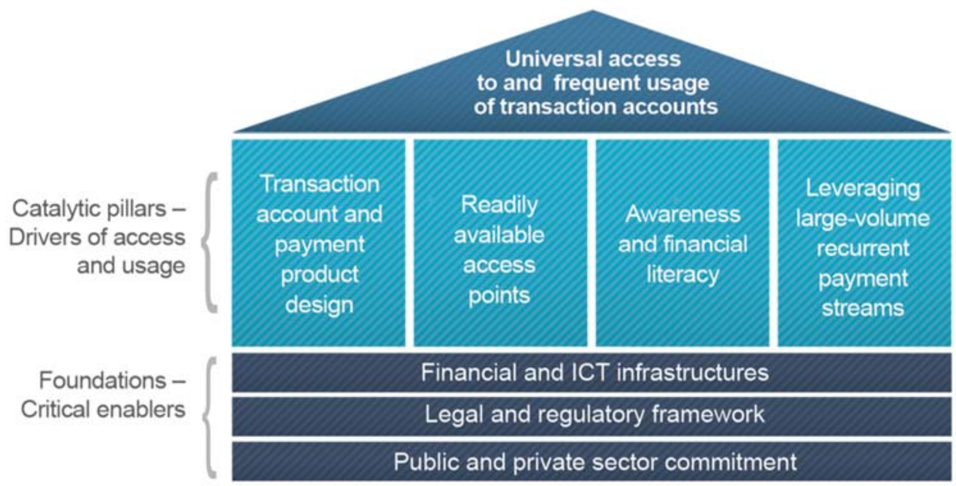
1. Introduction

1. In 2016, the Committee on Payments and Market Infrastructures (CPMI) and the World Bank published a report on payment aspects of financial inclusion (hereafter "PAFI report") that looked for the first time at financial inclusion from a payments perspective. The PAFI report envisages that all individuals and businesses have access to and use at least one transaction account[1] operated by a regulated payment service provider (i) to perform most, if not all, of their payment needs; (ii) to safely store some value; and (iii) to serve as a gateway to other financial services. However, a number of barriers affect transaction account access and usage. To address these barriers, the PAFI report outlines a framework (the "PAFI house"; Figure 1) comprising foundations, ie the critical enablers for the provision of payment systems and services, and catalytic pillars, ie the drivers of access and usage. Both foundations and pillars contribute to the end objective of achieving universal access to and usage of transaction accounts. The PAFI report analyses each component of this framework and provides suggestions in the form of guiding principles and key actions for consideration (hereafter collectively "PAFI guidance"). The PAFI framework has since been used as a basis for the design and implementation of global initiatives and country-level reforms and for the development of surveys and measurement tools to track progress on access to and usage of transaction accounts.

Framework for the guidance on payment aspects of financial inclusion — Figure 1



Source: CPMI and World Bank (2016).

2. In October 2018, the CPMI and the World Bank reconvened the Task Force on Payment Aspects of Financial Inclusion to (i) produce tools to facilitate the application of the PAFI guidance; (ii) develop a measurement framework and other tools to assist countries in tracking their progress on improving access to and usage of transaction accounts; and (iii) provide additional guidance on recent fintech developments that have relevant implications for PAFI's underlying objectives. This report is a response

[1] A transaction account is broadly defined as an account held with a bank or other authorised and/or regulated service provider (including a non-bank) which can be used to make and receive payments. Transaction accounts can be further differentiated into deposit transaction accounts and e-money accounts.

to the first and second item. The report *Payment aspects of financial inclusion in the fintech era* (hereafter "PAFI fintech report"), responding to the third item, was published in April 2020, and included a number of additional key actions for consideration (KACs) with focus on fintech.[2]

3. This report contains several tools designed to assist national authorities by (i) supporting country diagnostics,[3] with particular regard to a thorough collection of information to ensure a consistent application of the PAFI guidance; (ii) proposing core indicators for each of the guiding principles to measure and track progress in enhancing access to and usage of transaction accounts; (iii) enabling comparisons with international benchmarks and/or with a jurisdiction's own situation over time; and (iv) facilitating internal follow-up and reporting of actual reform efforts in the area of financial inclusion from a payments perspective. In addition to these tools, where relevant, national authorities may also wish to review the many examples that were provided in the PAFI report and the PAFI fintech report of successful country experiences or approaches in addressing problems that are encountered in the areas covered by the guiding principles.

4. Some national authorities may already be using their own tools for evaluating, measuring and reporting progress achieved in advancing ownership and usage of transaction accounts. In such cases, these authorities may consider using the tools presented in this report as references to make sure that they are covering all the aspects considered in the PAFI guiding principles. Furthermore, regardless of the tools that they use, national authorities carrying out these efforts should bear in mind that the results are primarily intended for their own internal purposes. Some national authorities may nevertheless decide to make these results publicly available or share them with other parties.

5. This report is structured into five brief explanatory sections followed by coverage of the actual tools, which are a core part of this report, in the annexes. Section 2 gives an overview of the main challenges regarding country diagnostics and for applying the PAFI guidance. Section 3 introduces tools to assist authorities in evaluating the current situation in their jurisdiction with regard to the PAFI guidance. Section 4 presents tools to measure, monitor and report progress in the application of the PAFI guidance and in achieving the PAFI objectives. Section 5 draws the main conclusions. The tools themselves are presented in Annexes 3–7 with the exception of the "PAFI radar", which is an interactive tool that will be made available on the World Bank Group's website.

[2] The PAFI guiding principles and KACs, enhanced with fintech-focused actions for consideration, can be found in Section 5 of the PAFI fintech report.

[3] National authorities working on promoting financial inclusion often undertake a detailed review of their country's current situation versus the PAFI guidance. Authorities can perform these reviews themselves or with external assistance (eg from the World Bank).

2. Application of the PAFI guidance: challenges and lessons learned

6. Since the publication of the PAFI report in 2016, the PAFI guidance has been applied by many national authorities aiming at advancing financial inclusion in their jurisdiction and by the World Bank Group (WBG) as part of its country-level work. The PAFI guidance helped fill the previous void where, due to the absence of a holistic and comprehensive framework, some relevant aspects were not being captured by national authorities engaging in financial inclusion efforts. Moreover, in the absence of clearly defined guidance, authorities and other stakeholders were also facing difficulties in establishing effective courses of action.

7. Overall, based on the outcomes of the efforts undertaken since the publication of the report, the PAFI guidance has proven valid for capturing the key aspects that have a bearing on the adoption and usage of transaction accounts. It has also proven effective in identifying the areas that need to be reformed and in designing the basic elements of such reforms.[4] Nevertheless, some challenges have been encountered when applying the PAFI guidance in practice. This section of the report discusses the main challenges met and the key lessons learned.

2.1 Consistent interpretation of the PAFI guidance

8. The PAFI guiding principles were purposely written in a general manner in order to ensure their broad applicability and adoption on a global level. In this regard, the PAFI report clarifies that the guiding principles are not intended to be prescriptive, but rather are intended to provide broad-based guidance on the issues considered to be highly relevant. KACs were included for each of the guiding principles to indicate more specific actionable measures based on proven experiences and evidence from around the world. However, experience in applying the PAFI guidance in practice shows that the interpretation of the guiding principles and the KACs has not necessarily been consistent across countries.

2.2 Heterogeneity in the scope of country diagnostics and in the overall application of the PAFI guidance

9. The PAFI framework considers the foundations, catalytic pillars and effective usage of transaction accounts to be interrelated (Figure 1). This reflects the notion that, as a general rule, advancing access to and usage of transaction accounts requires a holistic approach.

10. Very often, however, the scope of country evaluations has been limited to certain foundations and/or catalytic pillars, rather than the PAFI framework in its entirety.[5] In other cases, only some of the specific issues that are discussed within each of the guiding principles are covered. In this regard, it is not uncommon for national authorities to cover in their diagnostics exercises only those areas in which they have a direct responsibility. Furthermore, the scope of evaluations is more likely to be limited if not all relevant authorities within a country are involved and/or cooperation between relevant authorities is insufficient.

11. Regarding the application of the PAFI guidance, this has not always been done holistically either. This outcome had nevertheless been foreseen in the PAFI report: while the adoption of a holistic approach is recommended, it is also recognised that the degree of financial inclusion varies from country to country and, as a result, the approach to be followed needs to be customised. Further, some countries

[4] The tools presented in this report cover both the PAFI guidance issued in the PAFI report and the fintech-focused actions added in the PAFI fintech report.

[5] Many of these self-evaluations have been carried out as part of an overarching national programme or initiative to advance access to and usage of transaction accounts. For additional insights, see Section 3.

with low levels of adoption and usage of transaction accounts are very often unable to apply the PAFI guidance holistically for other reasons, a prominent one being limited human and financial resources.

2.3 Challenges in evaluating and applying specific guiding principles

12. In general, experience with applying the guiding principles indicates that national authorities typically encounter fewer difficulties in evaluating and taking corrective action when it comes to the PAFI foundations than for the catalytic pillars.

13. In this regard, limited availability of data and of certain other relevant information tends to be problematic when evaluating guiding principles 4, 5 and 6. For example, in the case of guiding principle 4, it is difficult to collect a representative sample of the transaction account and payment products currently being offered in a country by the various types of payment service providers (PSPs). For guiding principle 5, data on access points has in general improved in recent years, although many authorities still find it difficult to keep track of less traditional types of access points (eg e-merchants, physical merchants accepting payments using quick response (QR) codes). Moreover, in many jurisdictions, only aggregate data on access points is available, which might mask internal disparities, such as between urban and rural areas. Regarding guiding principle 6, very often there are no baseline data to measure effectiveness of financial literacy efforts. It is also difficult to find a structured, comprehensive mapping of all financial education programmes in a country.

14. For guiding principles 4 and 5, national authorities can find it difficult to induce change, as the elements underlying these two guiding principles are very closely interrelated with the strategic business decisions of PSPs.

15. Guiding principle 7 covers many critical topics such as government social assistance programmes that involve payments to beneficiaries, other payments from and to the government, public and private sector payrolls, remittances and transit fare payments. Each of these topics could well deserve a specific in-depth review to fully understand the existing conditions, determine the need for reforms and the main elements of such reforms. Except for the Inter Agency Social Protection Assessments (ISPA) tools,[6] which are designed specifically for government social assistance programmes and the CPMI-World Bank *General principles for international remittance services*,[7] national authorities do not have at their disposal tools to guide them in undertaking a detailed review of other types of large-volume payment programmes.

2.4 Measuring, monitoring and reporting progress in the application of the PAFI guidance and in achieving the PAFI objectives

16. Some national authorities have been working on developing indicators to measure progress in enhancing financial inclusion in their jurisdictions, including with regard to the adoption and usage of transaction accounts. However, many countries are still lagging behind in this area and are only able to consistently track a few basic indicators. Moreover, some national authorities seek to compare their

[6] ISPA tools are the result of a multi-agency initiative, including the WBG, that aims to put forth a unified set of definitions, assessment tools and outcome metrics to provide systematic information for a country to evaluate its social protection system, schemes, programmes and implementation arrangements. The actual ISPA tool that focuses on the payment aspects of social protection programmes is the Social Protection Payment Delivery Mechanisms tool. It provides guidance on how to evaluate a payment mechanism for the delivery of cash or near-cash social protection transfers primarily targeted at poor and vulnerable populations.

[7] The CPMI-World Bank *General principles for international remittance services* were published in January 2007. This report was later complemented by the World Bank's *Guidance report for the implementation of the CPMI-World Bank "General principles for international remittance services"*, published in October 2012.

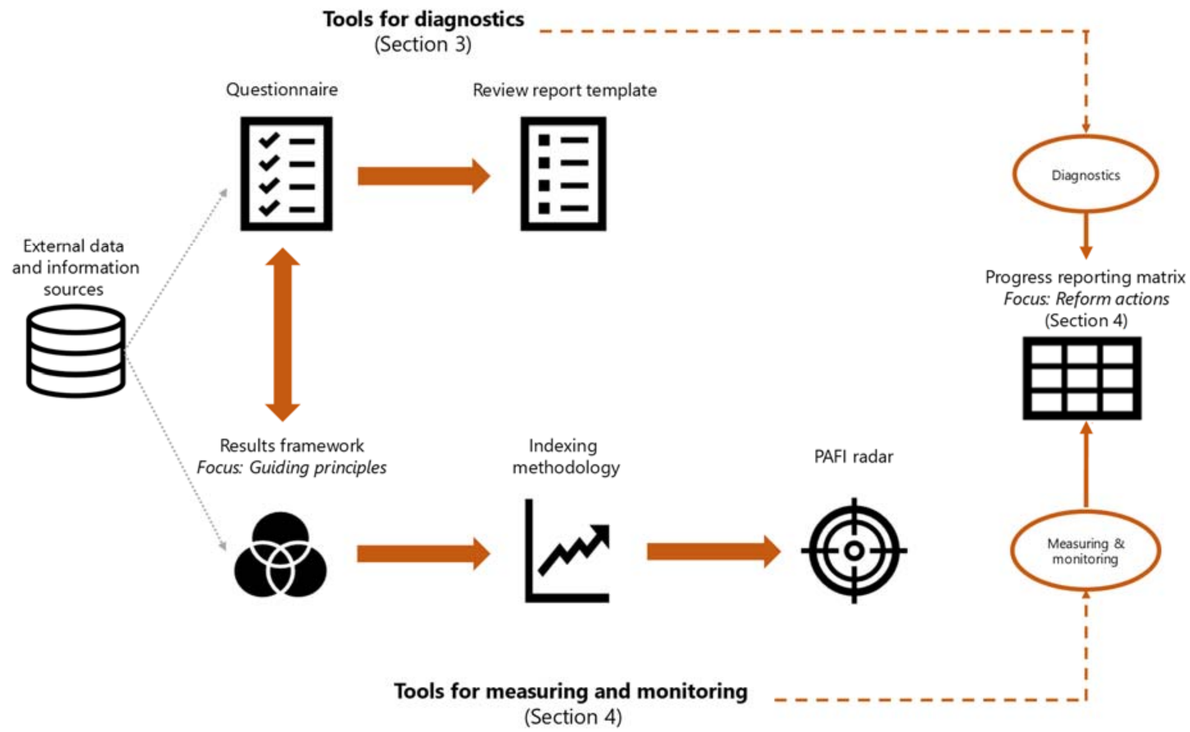
situation and the improvements in their country with those of other jurisdictions but often find it difficult to ensure that these comparisons are meaningful and technically robust.

17. With respect to monitoring and reporting progress on the application of the PAFI guidance, the reports documenting the findings and actions taken as a result of a self-evaluation or a similar exercise are generally very technical, tend to be structured in narrative form and have a static nature. Therefore, for progress monitoring and for communication on actions implemented and results achieved, these evaluation reports have their limitations, so that different tools are required. Effective monitoring and communication are especially important when action by government entities other than financial authorities (eg Ministry of Education) or by other bodies (eg National Payments Council) is required to advance the reform plan.

2.5 Tools to address these challenges

18. A total of six tools have been developed to address some of the challenges discussed in this section. These are the PAFI questionnaire, the review report template, the results framework, the indexing methodology, the PAFI radar and the progress-reporting matrix. Figure 2 depicts these tools and shows the relationships and interactions between them. Each of the tools is described briefly in the next two sections.

Relationships between the PAFI application tools	Figure 2



3. Tools to assist in carrying out diagnostics exercises under the PAFI guidance

19. As mentioned in Section 2, many countries have applied the PAFI guidance since the publication of the report. In many cases these efforts have involved undertaking a detailed review of the country's current situation versus the guiding principles to analyse areas of opportunity and to help guide policy and regulatory initiatives to address the identified gaps and shortcomings. Many authorities have performed these reviews themselves. Others have requested the WBG to assist them in this exercise.

20. The tools described in this section have been designed primarily for authorities that are interested in carrying out a self-evaluation exercise. The first of these tools is the PAFI questionnaire, which is briefly introduced below and is then presented in its entirety in Annex 3. The next section also describes some general considerations for undertaking a review of this kind and for organising the information derived from it.

3.1 The PAFI questionnaire

21. The PAFI questionnaire draws on the collective experience in evaluating and applying the PAFI guidance over the last few years. Its main purpose is to assist authorities with the process of collecting information. In this regard, a series of questions has been developed at the level of each of the KACs to help identify the specific aspects that need to be looked at and to gather sufficient facts on those aspects. This tool is therefore expected to promote uniformity and consistency in PAFI country diagnostics. At the same time, the questionnaire does not supersede or modify the guiding principles or the KACs.

3.2 Considerations for preparing and conducting a review

3.2.1 General

22. Access to relevant information and stakeholders is critical throughout the review exercise. The PAFI questionnaire can be a helpful tool to determine information needs, which typically include factual information of a qualitative nature and other inputs (eg expert opinions and insights) from a variety of public and private sector stakeholders, as well as data. The questionnaire is also useful for interviewing stakeholders in a structured manner and as comprehensively as possible for the PAFI areas or elements in which they are involved. The more questions for each of the KACs can be answered, the better the current situation for that KAC can be evaluated and, consequently, also for the relevant guiding principle.

23. Collating data and analysing metrics are other key elements of a review of the PAFI guidance. The data collection can focus on the proposed "core indicators" for each of the guiding principles of the PAFI results framework (Section 4 and Annex 5).

3.2.2 Scope of the review

24. In view of the interrelation between the foundations and catalytic pillars, only a review against all guiding principles will provide a comprehensive overview of the current situation. For practical reasons, reviews might, however, be focused on selected guiding principles. For example, if the time to carry out a review is limited or insufficient resources are available, authorities may wish to focus on those areas that, according to some of the core indicators, appear to have the most significant gaps. Furthermore, if authorities have already launched reforms, they may wish to look at those guiding principles that have been more directly impacted by the reforms. The eventual need for subsequent or

periodic diagnostic exercises can also influence the decision whether to review all guiding principles comprehensively or focus on specific ones.

3.2.3 Fact gathering and analysis

25. To be able to achieve a thorough understanding of the current status for each guiding principle and the gaps or shortcomings, if any, sufficient facts need to be gathered. The questions included in the PAFI questionnaire are designed to help in this fact-gathering process by drilling down at the level of each of the KACs. Nevertheless, the questionnaire is not considered to be prescriptive, and additional or different questions can be included as needed. Moreover, independently of the individual answers to each of the specific questions, the goal is to obtain a clear overall picture of each of the guiding principles under review and the implications on the overarching PAFI objectives of any shortfalls or relevant achievements.

26. As mentioned earlier, analysing metrics is very often necessary for reaching robust and objective conclusions. In some cases, however, it may not be possible to obtain the necessary data for all the proposed core indicators for a guiding principle because of limitations in data sources or other reasons. In any case, it is of utmost importance that conclusions be underpinned with fact-based arguments.

3.2.4 Producing the review report

27. It is recommended that a review report include, at a minimum, the following elements:

- A summary of the current situation.
- Identification of any gaps or shortcomings based on the facts gathered, and description of the implications of such gaps or shortcomings for the application of each guiding principle in particular and for the broader PAFI objectives more generally.
- Where appropriate, reviewers should also provide recommendations that serve to rectify or mitigate any gaps or shortcomings. To the extent possible, recommendations should be prioritised based on criteria such as the expected impact of a reform or other action on the application of the relevant guiding principle – and on the achievement of the overarching PAFI objectives – and/or the expected time it would take for authorities and other stakeholders to implement the reform/action.

28. A template for a review report based on these elements is provided in Annex 4.

4. Tools to assist in measuring, monitoring and reporting progress in the application of the PAFI guidance and in achieving the PAFI objectives

29. Keeping track of financial inclusion efforts is essential to determine whether the actions adopted are effective in helping achieve the underlying objectives. While the PAFI report discusses general considerations for developing a results framework, it does not include an actual results framework.[8]

30. This section introduces a PAFI results framework that leverages the experience gained by putting the PAFI guidance into practice, intended as advice for national authorities carrying out these reforms for their own internal monitoring efforts. It also introduces two closely related tools which are meant to facilitate additional analysis of the results framework: (i) an indexing methodology and (ii) the PAFI radar. The actual results framework is presented in Annex 5. The indexing methodology is presented in Annex 6 together with a general explanation of the PAFI radar (see also the box below). A progress-reporting matrix to assist authorities in monitoring reform actions and reporting progress is also briefly described in this section and presented in Annex 7.

4.1 The PAFI results framework, indexing methodology and the PAFI radar

31. The main objective of the PAFI results framework is to provide advice to authorities for compiling indicators to quantitatively track progress in the application of the PAFI guidance and achievement of the PAFI overarching objectives. This is usually done on the basis of calculating a domestic baseline scenario[9] and then measuring improvements deriving from the application of reforms and other actions. It should be noted that many countries have engaged in numerous efforts in the area of financial inclusion measurement for several years. Therefore, the proposed results framework should generally be seen as a tool that complements these ongoing measurement efforts.

32. The PAFI results framework consists of a list of core indicators for each of the seven guiding principles and for each of the PAFI overarching objectives. The core indicators catalogue the data proposed for measuring the central elements of these principles and objectives. Some of the core indicators are publicly available and are directly accessible through databases maintained primarily by international institutions such as the WBG and the International Monetary Fund (IMF). However, other indicators have been developed specifically for PAFI (eg core indicators addressing qualitative aspects such as relevant laws, regulations and oversight frameworks). In these cases, the core indicators are generated from existing policy surveys, such as the WBG's Global Payment Systems Survey (GPSS) or the WBG's Global Financial Inclusion and Consumer Protection (FICP) survey.[10] Parts I and II of Annex 5 contain the core indicators proposed for measuring the guiding principles and overarching objectives, respectively. Part III of Annex 5 details the proposed scoring approaches for the qualitative policy-oriented core indicators.

33. Moreover, the PAFI results framework has some relevant links with the PAFI questionnaire and with diagnostics tools more generally. As mentioned in Section 3.2, metrics are an important input in

[8] The relevance of a results framework is discussed in Section 5 ("Measuring the effectiveness of financial inclusion efforts: a payments perspective") of the PAFI report.

[9] A baseline scenario in this context refers to a country's situation vis-à-vis the guiding principles at a particular date. Once a domestic baseline scenario is defined, a country can track and measure progress against itself over time.

[10] As more policy surveys emerge and/or the contents of the existing ones are expanded, new core indicators may be added. Furthermore, it should be noted that many core indicators of the PAFI results framework or variables underlying those core indicators are collected and released on a biennial or triennial basis.

understanding the extent to which a jurisdiction applies the guiding principles and, over time, the progress achieved in implementing reforms.

34. The core indicators are diverse in terms of form and unit of measurement. For example, some are quantitative in nature, while others represent qualitative data that have been turned into binary indicators or ordinal scales. Likewise, in terms of units, the core indicators are reported as percentages, on a per capita basis or as composite scores. Combining related indicators into measurement metrics requires the indicators to be transformed into a common unit before being aggregated, ie requires normalisation. Once normalised, the indicators can be aggregated into a measurement index. This is further detailed in Annex 6.

35. The indexing methodology presented in Annex 6 provides guidance on normalising the core indicators and aggregating them into composite indices measuring each of the seven guiding principles. The indexing methodology employs a common "min-max normalisation" approach, whereby each observation is transformed into a value between 0 and 1, which represents its relative distance from the observed minimum and maximum values. Once normalised, the indexing methodology proposes aggregating the indicators using an approach that rewards balanced progress across all dimensions underlying the index (the so-called Sarma method).

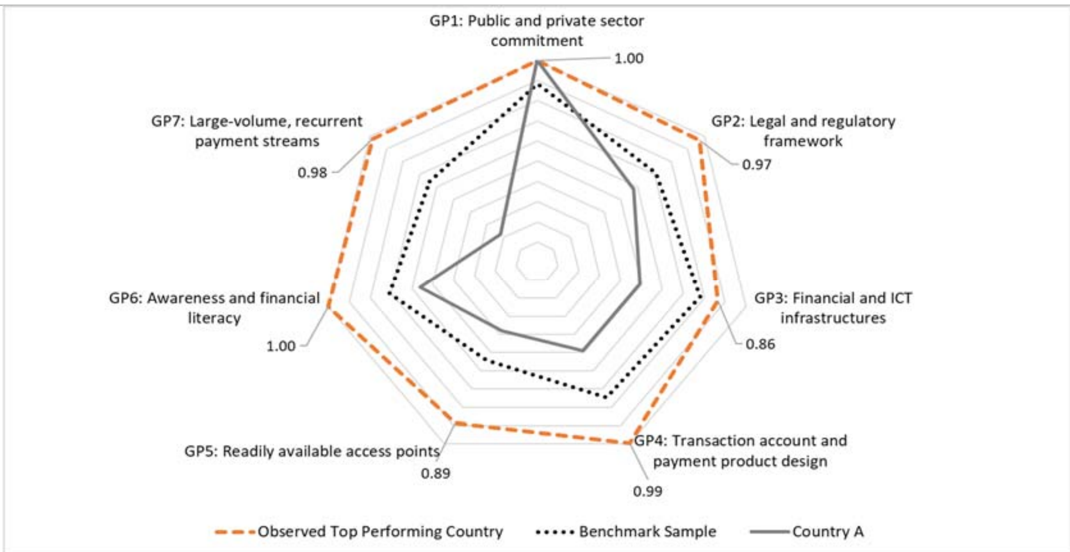
36. Another useful tool is the so-called PAFI radar. The PAFI radar utilises the core indicators of the PAFI results framework and the indexing methodology to visually depict a given country's status on the guiding principles. More specifically, it shows a country's status on each of the seven guiding principles relative to several benchmarks (ie other countries or cohort of countries). Nevertheless, the PAFI radar also allows to track country-level progress over time (ie against that country's own baseline scenario). The PAFI radar is described in the box below and discussed more fully in Annex 6. The actual tool is interactive and will be made available on the WBG website together with a detailed technical note explaining the construct behind it.

The PAFI radar

The PAFI radar assists authorities in plotting and visualising their country's status on each of the seven guiding principles relative to several benchmarks (average of G20 countries, average of best performing countries or top performing country). For this purpose, each of the guiding principles is represented by an individual index. To visualise multidimensional data, a radar chart is used. Authorities can also use the PAFI radar to track country-level progress on the guiding principles over time.

A hypothetical radar is depicted below for illustrative purposes. It shows the performance of an anonymised country ("Country A"), a specially constructed benchmark sample of countries that are advanced in terms of financial inclusion, and the top performing country for each guiding principle as potential comparators.

It should be noted that, in order to enable comparisons, the PAFI radar tool comprises only the core indicators that are publicly available. Nevertheless, individual authorities may choose to input local data if they believe that these are more accurate than data captured in publicly available cross-country data sets.



Tracking progress over time on the basis of an indicator (or a group of indicators) constructed via an indexing methodology as described in Annex 6 requires some caution, as the sample values used for constructing an index will keep on changing. On the one hand, this means that the data underlying the PAFI radar tool will need to be updated periodically. On the other hand, there are two options to track progress, each with its own merits:

- A static comparator: The static comparator option implies monitoring a country's progress over time relative to its own standing at the baseline, without considering what may have happened to the rest of the world in terms of progress. If a country's goal is to improve its fundamentals over time, the static comparator option would be useful for it.

- A dynamic comparator: The dynamic comparator option implies monitoring a country's standing against the rest of the world at a certain date, with that country's relative standing against the rest of the world at the next evaluation period or date. If a country's goal is to pursue reforms to catch up with the frontier, the dynamic comparator option would then be more useful.

In any case, using these two options simultaneously can help to fully understand the progress over time. Both options are further detailed in Annex 6.

4.2 Progress reporting matrix

37. The progress-reporting matrix has been designed to identify key aspects to be looked at from a project management perspective when engaging in a reform effort. These key aspects are elements or features that are relevant at the reform inception stage or that need to be evaluated periodically once the reform has been launched.[11] This tool is therefore aimed at identifying the extent to which each of the topics covered by the guiding principles is considered a priority in a country given its particular situation, the degree to which the relevant elements underlying those topics have been implemented, and whether it is the central bank or another party that has direct responsibility for them. For an ongoing reform, the progress-reporting matrix is intended to periodically capture aspects such as the specific

[11] While periodicity may differ from one jurisdiction to another depending on the type of reforms, actions and monitoring needs, authorities may consider monitoring progress at least once a year.

measures that have been initiated to address the identified gaps, the public and private sector parties involved, the expected outcomes and the associated challenges.

38. Apart from its basic purpose, the progress-reporting matrix presented in Annex 7 could also become a tool through which authorities in different countries can share their practical experiences in reforming the various topics covered by the guiding principles.[12]

5. Conclusions

39. The PAFI guidance is a valid and effective framework that captures the key aspects affecting the adoption and usage of transaction accounts. It is also useful for identifying the areas that need to be reformed to advance these objectives.

40. The tools presented in this report supplement the PAFI guidance and are aimed at further supporting countries in applying this guidance. Figure 2 in Section 2.5 depicts the different tools presented in this report and shows the relationships and interactions between them.

41. Some of the tools presented in this report are of a dynamic nature and will evolve and/or need to be updated over time. For example, the data underlying the PAFI radar will be updated periodically[13] so that jurisdictions are able to measure progress against themselves over time and against the new frontiers for each guiding principle. The PAFI questionnaire and the PAFI results framework could also usefully undergo periodical reviews to accommodate emerging market practices and other relevant innovations.

[12] Information-sharing through tools very similar to the progress-reporting matrix has already taken place in various regions and subregions – for example, across the member countries of the Center for Latin American Monetary Studies (CEMLA) and of the Southern Africa Development Community (SADC), and in some southeastern European countries.

[13] Updates depend on the frequency with which the underlying publicly available data are published by the relevant source, which in most cases is biennial or even triennial.

Annex 1: Members of the Task Force

Co-Chairs of the Task Force

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Significant contributions were also made by Jeffrey Allen and Ana Georgina Marín Espinosa (World Bank Group).

Annex 2: Acronyms and abbreviations

ACH	automated clearing house
AML	anti-money laundering
ATM	automated teller machine
B2G	business-to-government
BIS	Bank for International Settlements
CFT	combating the financing of terrorism
CPMI	Committee on Payments and Market Infrastructures
e-KYC	electronic KYC
FAS	Financial Access Survey
FICP	Financial Inclusion and Consumer Protection survey
G2B	government-to-business
G2P	government-to-person
GPSS	Global Payment Systems Survey
ICT	information and communication technologies
IMF	International Monetary Fund
ISPA	Inter-Agency Social Protection Assessments
ITU	International Telecommunication Union
KAC	key action for consideration
KYC	know your customer
NFIS	national financial inclusion strategy
NPC	National Payments Council
P2G	person-to-government
PAFI	payment aspects of financial inclusion
PIN	personal identification number
POS	point-of-sale terminal
PSO	payment system operator
PSP	payment service provider
QR	quick response
RPS	retail payments strategy
RTGS	real-time gross settlement
WBG	World Bank Group

Annex 3: PAFI questionnaire

Guiding principle 1	Key actions for consideration	Questions
GP 1: Public and private sector commitment: Commitment from public and private sector organisations to broaden financial inclusion is explicit, strong and sustained over time.	**KAC 1:** All relevant public and private sector stakeholders support the objective that all eligible individuals – regardless of culture, gender or religion – and businesses should be able to have and use at least one transaction account, and develop an explicit strategy with measurable milestones to that end. *Fintech focus: All relevant fintech stakeholders are enlisted in support of this objective.*	Q.1.1.1: Is there a formal policy/strategy/initiative at the national level related to financial inclusion (including a national payments strategy or a fintech strategy with financial inclusion objectives)? Q.1.1.2: How does the policy/strategy encourage expanding the availability of retail payment services to promote access to formal financial services for the unserved or underserved? Q.1.1.3: As part of the national policy/strategy, is there any document formalising the collective private sector commitment towards the national vision? If so, please share the reference. Q.1.1.4: Do you have a national monitoring and evaluation framework related to financial inclusion? If so, does it include indicators related to payments? Q.1.1.5: Where a national financial inclusion policy/strategy (or equivalent) is less explicit, describe the efforts to broaden financial inclusion being undertaken by the relevant stakeholders, including fintech players.
	KAC 2: All relevant public and private sector stakeholders allocate the appropriate human and financial resources to support financial inclusion efforts. *Fintech focus: Financial inclusion efforts seek to leverage fintech expertise among all relevant public and private sector stakeholders.*	Q.1.2.1: Who are the stakeholders that can drive changes in payment systems and services? Q.1.2.2: What role do think tanks, private sector coalitions, non-government organisations, policymakers, regulatory authorities and regional organisations play in supporting research and fact-finding related to payments for financial inclusion? Q.1.2.3: Are there sufficient human and financial resources among public and private sector stakeholders allocated to support research in this area, including on fintech issues? What additional resources would be required to generate a greater impact? Q. 1.2.4: What additional resources can be mobilised through other groups or stakeholders (eg community development organisations) to support/promote financial inclusion objectives?

	KAC 3: Central banks, financial supervisors, regulators and policymakers effectively coordinate their efforts with regard to financial inclusion. *Fintech focus: These coordination efforts take the cross-sectoral and cross-border nature of fintech developments into consideration.*	Q.1.3.1: How do central banks, financial supervisors, regulators and policymakers coordinate their efforts with regard to financial inclusion? For example, is there a specific body designed for inter-authority coordination in financial inclusion matters (eg a committee or council, or a subcommittee within the National Payments Council or equivalent)? Q.1.3.2: How are cross-sectoral and cross-border aspects taken into consideration, including for fintech matters?
	KAC 4: Private sector stakeholders engage with relevant public sector counterparts on initiatives that promote the adoption and usage of transaction accounts, and financial inclusion more broadly.	Q.1.4.1: How do private sector stakeholders engage with relevant public sector counterparts on initiatives for financial inclusion? Do the latter encourage private sector stakeholders to share their ideas/problems? Is there a formal plan through which collaboration occurs? Q.1.4.2: What specific initiatives are private sector stakeholders taking in collaboration with their relevant public sector counterparts to promote financial inclusion?
	KAC 5: Private sector stakeholders cooperate constructively and meaningfully with each other to discuss and find solutions to issues that are best addressed by the industry as a whole.	Q.1.5.1: How do private sector stakeholders cooperate among themselves to discuss and find solutions to issues that are best addressed by the industry as a whole? Q.1.5.2: In what ways do cooperation and collaboration between banks and the most relevant types of non-banks occur? Q.1.5.3: What are the main issues on which the private sector stakeholders cooperate among themselves?
	KAC 6: Central banks, in line with their roles, responsibilities and interests in fostering the safety and efficiency of the payments system, leverage their catalyst, oversight, supervisory and other powers as relevant and appropriate to promote financial inclusion.	Q.1.6.1: How is enhanced financial inclusion incorporated into the central bank's payment systems objectives and overall strategy? Q.1.6.2: Please enumerate specific actions in which the central bank has been leveraging its catalyst, oversight and supervisory powers to promote financial inclusion.

Guiding principle 2	Key actions for consideration	Questions
GP2: Legal and regulatory framework: The legal and regulatory framework underpins financial inclusion by effectively addressing all relevant risks and by protecting consumers, while at the same time fostering innovation and competition.	**KAC 1:** A robust framework is established to foster sound risk management practices in the payments industry, including through the supervision/oversight of PSPs and PSOs by regulatory authorities. *Fintech focus: Where appropriate, relevant authorities leverage new technologies for supervision/oversight and foster their adoption by the private sector for risk management and compliance.*	Q.2.1.1: Does the legal and regulatory framework cover the following key aspects: Regulatory proportionality, neutrality and predictability, risk management, protection of deposits and e-money customer funds, financial customer protection and financial integrity? Especially for countries with a low share of individuals with a transaction account, does the framework cover simplified know-your-customer (KYC) procedures and electronic KYC (eKYC)? Q.2.1.2: Does the framework cover PSPs' access to payment infrastructures and other payment networks? Does the framework promote the interoperability of these payment infrastructures and networks? Q.2.1.3: What authorities participate in defining the legal and regulatory framework for retail payment services? Q.2.1.4: Are PSPs and PSOs overseen/supervised? If so, by whom? Are e-money issuers prudentially supervised? If so, by whom? Q.2.1.5: What supervision/oversight is in place governing the approval and appropriateness of a PSP's/PSO's rules, procedures and contracts? For example, must these be approved by the central bank or any other financial sector regulator before coming into effect? If not, how do PSPs/PSOs demonstrate that their rules, procedures and contracts are clear and understandable? Q.2.1.6: Are financial sector authorities using new technologies for supervision and/or oversight? If so, which ones and for what tasks? If not, are there plans in place for their adoption in the near future? Q.2.1.7: Are private sector stakeholders already using new technologies for risk management and compliance?
	KAC 2: The framework requires PSPs and PSOs to develop and implement risk management measures that correspond to the nature of their activities and their risk profile.	Q.2.2.1: What types of risks arise from or are borne by PSPs and PSOs? Are these risks being effectively identified and documented? Q.2.2.2: Does the framework require PSPs to develop and implement risk management measures? Q.2.2.3: Does the framework require PSOs to develop and implement risk management measures to manage risks related to the access of PSPs to the payment infrastructure or network managed by it?

		Q.2.2.4: What are the PSPs' and PSOs' policies, procedures and controls to help identify, measure, monitor and manage risks? Q.2.2.5: What risk management systems are used by PSPs and PSOs to help identify, measure, monitor and manage its range of risks? Q.2.2.6: How do PSPs and PSOs assess the effectiveness of risk management policies, procedures and systems? Q.2.2.7: How are these risks measured and monitored? How frequently do PSPs and PSOs review these risks?
	KAC 3: The framework aims to promote the use of transaction accounts in which customer funds are adequately protected through appropriate design and risk management measures, such as deposit insurance or functionally equivalent mechanisms as well as through preventive measures (eg supervision, placement of customer funds held by non-deposit-taking PSPs in high-quality and liquid assets, and, depending on the legal regime, specially protected accounts at banks and possibly trust accounts). *Fintech focus: Any new or innovative forms of transaction accounts or payment products protect customer funds through appropriate design and risk management measures that are functionally equivalent to those that protect customer funds in "traditional" deposit transaction accounts.*	Q.2.3.1: What protections and provisions does the legal and regulatory framework provide for customer funds? Do these protections and provisions also cover new or innovative forms of transaction accounts or payment products? Q.2.3.2: What products, if any, are covered by a deposit insurance mechanism? Q.2.3.3: Other than deposit insurance, what specific protections have been implemented and are offered for new or innovative products? In cases where deposit insurance is not provided for e-money accounts, how do alternative mechanisms protect customers from the potential bankruptcy of the e-money issuer/provider? What is the legal enforceability of these protections? Q.2.3.4: Through which mechanism do PSPs manage the risks related to the potential loss of customer funds they deposit or place with banks or other institutions? Is there any mechanism for ring-fencing or otherwise protecting customer funds held by non-bank PSPs at banks or other institutions? Q.2.3.5: Describe the procedures for customers to seek legal recourse in the recovery of their funds in the event of a loss.
	KAC 4: The framework requires PSPs to clearly disclose, using comparable methodologies, all of the various fees they charge as part of their service, along with the applicable terms and conditions including liability and use of customer data. *Fintech focus: The framework requires PSPs to clearly disclose the credit and liquidity risks*	Q.2.4.1: Does the framework require PSPs to disclose all relevant information on charges and fees using a comparable methodology? Q.2.4.2: Is there any overarching policy or law that influences or determines the fee structure that PSPs may charge? For example, by specifying services that may not be subject to a fee or by specifying caps. Q.2.4.3: Are PSPs' services based on a contract with customers which discloses applicable terms and conditions? Are the key risks of products, including those

	that users face when storing funds in new or innovative forms of transaction accounts. *Fintech focus: The framework requires PSPs to clearly disclose how customer data are safeguarded and how data privacy is protected, along with customer rights regarding the use of their data.*	of new or innovative forms of transaction accounts, also disclosed in this contract and/or in other document(s)? Q.2.4.4: How are personal data used in financial services/transactions protected within the legal and regulatory framework? Q.2.4.5: Does the framework (or any other regulation issued by the central bank or other financial sector regulator) require PSPs to protect privacy of customer transactional and/or personal data and to safeguard customer data? Q.2.4.6: What do PSPs need to do to comply with this framework? For example, do consumers have to be informed of their rights regarding use of their data and on how their data are safeguarded and how their privacy is protected by PSPs? How are these expectations upheld?
	KAC 5: The framework requires PSPs to implement a transparent, user-friendly and effective recourse and dispute resolution mechanism to address consumer claims and complaints.	Q.2.5.1: Does the regulatory framework require a PSP to have a dispute resolution mechanism to deal with consumer complaints? Q.2.5.2: Have PSPs actually implemented mechanisms to resolve consumer complaints? Which are these mechanisms? Q.2.5.3: Is there specific guidance from financial authorities to ensure that these mechanisms are user-friendly and effective?
	KAC 6: The framework preserves the integrity of the financial system, while not unnecessarily inhibiting access of eligible individuals and businesses to well regulated financial services.	Q.2.6.1: What protections are in place to ensure the safety and integrity of the financial system? Q.2.6.2: Is there any flexibility in the application of certain elements of the AML/CFT framework for the opening of accounts? Is this flexibility risk-based (eg proportional to the risk posed by the PSP)?
	KAC 7: The framework promotes competition in the marketplace by providing clarity on the criteria that must be met to offer specific types of service, and by setting functional requirements that are applied consistently to all PSPs.	Q.2.7.1: What are key elements in the framework that promote competition in the marketplace of payments? Q.2.7.2: What have been the main efforts of the central bank and/or other financial sector regulators to encourage competition in the marketplace of payments? Q.2.7.3: What are the functional requirements that must be met to offer payment services? Are these requirements the same for all PSPs? Q.2.7.4: How does the central bank or other regulator ensure that functional requirements are applied consistently to all PSPs?

	KAC 8: The framework promotes innovation and competition by not hindering the entry of new types of PSP, new instruments and products, new business models or channels – as long as these are sufficiently safe and robust. *Fintech focus: The framework aims to be technology-neutral by setting functional and safety requirements that are applied consistently to all PSPs.*	Q.2.8.1: How does the framework promote innovation? How does the framework facilitate that new types of PSPs, new instruments and products, and new business models or channels can enter the market? Were the relevant legal or regulatory provisions addressed in consultation with stakeholders, including with fintechs? Q.2.8.2: What criteria do the central bank or other financial sector regulators use to evaluate and ultimately approve innovations? Q.2.8.3: How do regulators assess the safety and robustness of new instruments, new products and new business models of PSPs? Q.2.8.4: What is the regulatory approach for ensuring technology neutrality?

Guiding principle 3	Key actions for consideration	Questions
GP3: Financial and ICT infrastructures: Robust, safe, efficient and widely reachable financial and ICT infrastructures are effective for the provision of transaction accounts services, and also support the provision of broader financial services.	**KAC 1:** Key payments infrastructures are built, upgraded or leveraged as needed to facilitate the effective usage of transaction accounts. *Fintech focus: The design of key payment infrastructures takes into account innovative technologies, products and access modes.*	Q.3.1.1: What are the existing payment infrastructures in the country (RTGS system, ACH, payment card switch(es), Fast/Instant Payments system, etc)? Q.3.1.2: What are the main payment projects launched/implemented in recent years within the country? Q.3.1.3: What are the main actions planned to enhance/improve retail payment systems? For example, is promoting innovation and competition one of the development policy actions for retail payment systems?
	KAC 2: Additional infrastructures are appropriately designed and operate effectively to support financial inclusion efforts by providing critical information to financial service providers, including an effective and efficient identification infrastructure, a credit reporting system and other data-sharing platforms. *Fintech focus: Public and private sector stakeholders support the establishment of a digital ID infrastructure for customers to digitally identify, authenticate and provide consent.*	Q.3.2.1: What additional infrastructures currently exist to support financial inclusion efforts? For example, is there any modern (eg digital) and robust ID system for individuals within the country that supports e-KYC procedures? Q.3.2.2: Is there a credit reporting system that supports decision-making or the ongoing operation of PSPs (eg to facilitate access to credit or other financial products to holders of transaction accounts, to support KYC procedures, etc)? Are there other types of data-sharing platforms that can be leveraged by PSPs for other types of decision-making? Q.3.2.3: Are the criteria for accessing the underlying ID and credit reporting services fair for all PSPs irrespective of their institutional standing?

	KAC 3: The geographical coverage of ICT infrastructures and the overall quality of the service provided by those infrastructures are enhanced as necessary by their owners/operators so as to not constitute a barrier for the provision of transaction account services in remote locations.	Q.3.3.1: What is the coverage rate of the power supply (electricity) network within the country? Describe the main disparities between regions (or rural vs urban). Q.3.3.2: What is the coverage rate of the mobile phone network within the country (voice and data)? Describe the main disparities between regions (or rural vs urban). Q.3.3.3: What are the barriers to full penetration of mobile phone or internet services? For example, are costs associated with providing or subscribing to these services a barrier to access? Q.3.3.4: Are ICT services affordable for the vast majority of the population? If not, is there a plan to achieve lower prices?
	KAC 4: Increased interoperability of and access to infrastructures supporting the switching, processing, clearing and settlement of payment instruments of the same kind are promoted, where this could lead to material reductions in cost and to broader availability consistent with the local regulatory regime, in order to leverage the positive network externalities of transaction accounts.	Q.3.4.1: Describe the level of interoperability of the retail payment systems and the main payment instruments in the country. Q.3.4.2: If applicable, what have been the consequences of the current level of interoperability for financial inclusion efforts? Are changes required that would promote greater inclusion?
	KAC 5: Payment infrastructures, including those operated by central banks, have objective, risk-based participation requirements that permit fair and open access to their services.	Q.3.5.1: What are the criteria and requirements for direct participation in each key payment infrastructure (such as operational, financial and legal requirements)? Q.3.5.2: How do these criteria and requirements allow for fair and open access to the services provided through the payment infrastructure for all PSPs irrespective of their institutional standing (eg their type of licence or authorisation)? For example, are these criteria and requirements proportionate and risk-related? Are they reasonable in view of the systemic risk presented by the infrastructure and the PSPs participating in it?
	KAC 6: Financial and ICT infrastructures leverage the broad usage of open/non-proprietary technical standards, harmonised procedures and business rules to enhance their efficiency and therefore their ability to support transaction accounts at low costs.	Q.3.6.1: To what extent are the financial and ICT infrastructures leveraging the use of international standards and harmonised rules and procedures to improve their efficiency (eg ISO 20022)?

	KAC 7: The safety and reliability of financial and ICT infrastructures, including their resilience against fraud, are tested on an ongoing basis and are enhanced as necessary to keep up with all emerging threats for holders of transaction accounts, PSPs and PSOs.	Q.3.7.1: How do the operators of financial and ICT infrastructures monitor and manage the identified operational risks and threats such as fraud detection/prevention? Q.3.7.2: Have these operators established specific objectives in these fields and do these objectives ensure a high degree of operational safety and reliability? Q.3.7.3: Is there a focus on cyber risk? Is there a specific cyber resilience framework?

Guiding principle 4	Key actions for consideration	Questions
GP4: Transaction account and payment product design: The transaction account and payment product offerings effectively meet a broad range of transaction needs of the target population, at little or no cost.	**KAC 1:** Where reasonable and appropriate, PSPs provide a basic transaction account at little or no cost to all individuals and businesses that do not hold such an account and that wish to open such an account.	Q.4.1.1: What kind of obstacles prevent individuals wishing to open a transaction account from having one? Q.4.1.2: Do PSPs provide, in practice, a basic transaction account at little or no cost to consumers who do not yet hold an account? Q.4.1.3: Do PSPs assess and identify customer needs and measure effective adoption of transaction accounts? If so, cite specific examples. Q.4.1.4. Are there legal and/or regulatory provisions in place for the provision of basic transaction accounts by banks and other PSPs?
	KAC 2: PSPs offer transaction accounts with functionalities that, at a minimum, make it possible to electronically send and receive payments at little or no cost, and to store value safely. *Fintech focus: PSPs leverage new technologies and access modes to improve the design of transaction accounts and payment products for the benefit of all their customer segments.*	Q.4.2.1: Do PSPs offer transaction accounts with functionalities that, at a minimum, make it possible to electronically send and receive payments? What is the cost structure associated with opening or maintaining a transaction account? Is there a fee for sending or receiving payments electronically? Q.4.2.2: What kind of services do PSPs offer to consumers as part of their transaction account offering? Do PSPs offer some payment services free of charge? Do PSPs make use of new technologies and access modes to improve their product offering to customers, including by making their products more affordable? Q.4.2.3: In addition to any legal provisions on basic transaction accounts, has the central bank taken action to further clarify what the free-of-charge payment services should be in connection with basic transaction accounts (or other types of transaction accounts)?
	KAC 3: PSPs leverage efficient and creative approaches and effective management practices in their efforts to offer transaction accounts and	Q.4.3.1: What approaches and management practices do PSPs adopt to offer efficient and innovative payment services in a commercially sustainable way?

	functionalities in a commercially viable and sustainable way.	Q.4.3.2: How do the central bank or other financial authorities assess the approaches and practices adopted by PSPs to offer payment services? Q.4.3.3: How does the central bank consider the commercial viability of products and services in its policies and regulations?
	KAC 4: The payment services industry, operators of large-volume payment programmes and other stakeholders recognise that the payment habits and needs of currently unserved and underserved customers are likely to differ, and therefore engage in market research and/or other similar efforts to identify and address those payment habits and needs. *Fintech focus: The development and adoption of new technologies, products and access modes avoids the exclusion of customer segments due to factors such as age, culture, gender, religion and financial literacy.*	Q.4.4.1: Are there studies by industry stakeholders which assess the payment habits and needs of currently unserved and underserved customers? Are there similar studies by the central bank or other authorities? If so, what are the main conclusions? If not, is there any intention to conduct such a study? Q.4.4.2. How are the needs of the unserved or underserved addressed otherwise? For example, are there any measures to avoid these customer segments remaining excluded or becoming excluded due to a general migration of the payments industry to new technologies, products and access modes?
	KAC 5: PSPs work to ensure that the payment needs of the private and public sector entities with whom holders of transaction accounts regularly conduct payments are met as well.	Q.4.5.1: Do PSPs assess the payment needs of the private and public sector entities that interact with account holders regularly? Q.4.5.2: Do PSPs design specific products and services for the public sector acting as a payer and as a payee vis-à-vis the general public? Q.4.5.3: What are the efforts of the public sector to encourage the adoption of PSP payment products?
	KAC 6: PSPs work to ensure that the products that target unserved or underserved population segments are easy to use.	Q.4.6.1: What existing barriers to ease of use have been detected by the central bank and/or other financial authorities throughout the unserved and underserved population? Q.4.6.2: Are PSPs taking steps to make their product offerings easy to use for each of these population segments? For example, what are PSPs doing to make it easier to use payment services or methods that require memorisation of certain information (eg PIN, password, account number)? Q.4.6.3: Are there any special considerations for citizens (eg older/senior citizens) who currently have a transaction account but could

		become excluded in the future due to not being able to adapt to new technology-intensive products and services?
	KAC 7: PSP efforts to continuously improve their transaction account offering include both traditional and innovative payment products and instruments.	Q.4.7.1: To what extent are PSPs continuously improving their services, including both traditional and innovative payment products and instruments? Q.4.7.2: What are the main trends impacting products that PSPs offer? Q.4.7.3: Does the mix of traditional and innovative payment products and instruments take into account that many citizens may not be able to adapt to new products and instruments that are technology-intensive?

Guiding principle 5	Key action	Questions
GP5: Readily available access points: The usefulness of transaction accounts is augmented with a broad network of access points that also achieves wide geographical coverage, and by offering a variety of interoperable access channels.	**KAC 1:** PSPs provide convenient access to transaction accounts and services by offering an effective combination of own and third-party-owned physical access points (eg branches, ATMs, POS terminal networks and PSP agent locations) and of remote/electronic access channels (mobile phones, internet banking, etc). *Fintech focus: PSPs seek to leverage the potential of new technologies, products and access modes to offer low-cost, easy-to-use access points and channels to expand reach and acceptance of electronic payment instruments, while ensuring that a basic level of physical access points is maintained.*	Q.5.1.1: Are all the basic types of physical access points widely available (ie branches, ATMs, POS terminals and agents)? If not, describe why. Q.5.1.2: Does the central bank or another authority collect statistics on the number of access points by type of access channel? What trends have been identified in the last few years? Q.5.1.3: Are there any statistics on payments processed by type of access points/channels for retail payments (ATM, POS terminals and any other payment transaction-accepting devices (eg mobile phones via QR codes or other forms, internet payment gateways), post office, bank branch, mobile banking, internet banking, other agents, etc)? Q.5.1.4: What are the main drivers behind the usage of various types of access points? Describe the main disparities in the coverage/density of the various types of access points between regions (or rural vs urban). Q.5.1.5: Are remote/electronic access channels such as mobile banking and internet banking widely available and widely used? If not, what are the main obstacles?

	KAC 2: PSPs work to provide service levels at various access points and channels that are reliable and of high quality (PSP agents have the necessary liquidity and are equipped with effective tools to service transaction account users reliably and in an efficient manner, ATMs are highly reliable, etc) and to ensure that opening hours are broadly aligned with customers' transacting needs.	Q.5.2.1: How does the central bank ensure that service levels provided by PSPs at various access points and channels are reliable and of high quality? Q.5.2.2: How do PSPs ensure the adequacy of the services offered at the various access points and channels in view of the real needs of citizens/consumers? Q.5.2.3: What are the opening hours of the various access points? Are operating hours sufficiently long through a combination of the various access channels? Q.5.2.4: When service is disrupted or an access point is unavailable, are there viable alternative options? How long are customers left without a viable means to access services?
	KAC 3: The payments industry works on ensuring that access points and channels are appropriately interoperable, further contributing to expanding the reach of available service access points and the overall convenience to holders of transaction accounts.	Q.5.3.1: Is there interoperability between or across the various types of access points/channels belonging to banks (eg non-exclusivity of agents, interoperable ATMs)? Q.5.3.2: Are the access points/channels belonging to different types of PSPs (eg bank and non-banks) interoperable so that accounts at banks and non-banks are also interoperable between them?
	KAC 4: PSPs adequately train their own front office staff and their agents to understand and appropriately address cultural, gender and religious diversity when servicing holders of transaction accounts.	Q.5.4.1: Do PSPs develop a training plan for their own front office staff and their agents? Does this plan include awareness of how to address cultural, gender and religious diversity when servicing holders of transaction accounts? Q.5.4.2: As part of this training, how do PSPs handle issues that may pose special challenges due to cultural, gender and religion diversity (eg banking/payment interface design, customer onboarding and initial training)?
	KAC 5: The payments industry and authorities monitor access channels and access points and their usage to obtain an accurate picture of the availability and proximity of service points to the different population segments. *Fintech focus: The payments industry and authorities consider the impact of the continued decline in the use of cash and the reduction in the availability and proximity of cash access points.*	Q.5.5.1: Is there geospatial mapping of coverage of financial services in the country (eg ATM, bank branches, POS terminals, agents) showing how easy it is for individuals in different parts of the country to access their transaction account? If not, is there any other type of database and/or tool built with the same purpose? Q.5.5.2: How are access points monitored to ensure proper function and availability for use? Q.5.5.3: Do stakeholders monitor whether the availability and proximity of cash access points is declining? Is there an explicit intention to avoid this outcome?

Guiding principle 6	Key actions for consideration	Questions
GP6: Awareness and financial literacy: Individuals gain knowledge, through awareness and financial literacy efforts, of the benefits of adopting transaction accounts, how to use those accounts effectively for payment and store-of-value purposes, and how to access other financial services.	**KAC 1:** All relevant public and private sector stakeholders engage in ongoing and effective educational and outreach to support awareness and financial literacy with an appropriate degree of coordination. *Fintech focus: Educational and outreach efforts support awareness and financial literacy with respect to new technologies, products and access modes, using both traditional and digital communication means.*	Q.6.1.1: How do relevant public and private sector stakeholders engage in ongoing and effective education and outreach to support awareness and financial literacy with an appropriate degree of coordination? Do you have a national definition of financial literacy? Q.6.1.2: Are financial institutions committed to including financial literacy programmes in their strategic plan? How are individuals made aware of these programmes? Q.6.1.3: Does your country have a dedicated institution for coordinating financial education efforts at the national level? Q.6.1.4: Do financial literacy efforts cover new technologies, products and access modes? Q.6.1.5: Are public and private sector stakeholders taking advantage of digital learning tools and/or other modern technologies for their financial literacy efforts? Q.6.1.6: Do you have a monitoring and evaluation framework for financial literacy achievements per institution delivering financial literacy programmes?
	KAC 2: Awareness and financial literacy efforts specifically address how payment and store-of-value needs can be met through the usage of transaction accounts. In this context, individuals that do not have a transaction account and those that obtained one only recently are a primary target of these financial literacy efforts.	Q.6.2.1: How do financial literacy programmes enable informed decision-making with respect to financial services and payment instruments for individuals and enterprises? Q.6.2.2: Has a specific financial literacy toolkit to enable individuals to choose and use electronic transaction services been developed by either the authorities or the private sector?
	KAC 3: Awareness and financial literacy efforts make it possible to easily obtain clear and accurate information on the various types of accounts that are available in the market, on the general account opening requirements, and on the types of account and service fee that may be encountered.	Q.6.3.1: How is the full product and service offering and information about the various types of transaction accounts made available? Does the public sector maintain a repository of such information? Q.6.3.2: How do awareness and financial literacy efforts help consumers easily obtain clear and accurate information on the various types of account that are available on the market, on the general account opening requirements, and on the types of account and service fees that may be encountered?

	KAC 4: Awareness, financial literacy and financial transparency programmes make it possible for transaction account users to easily obtain clear and accurate information on the risks embedded in the usage of these accounts.	Q.6.4.1: Do awareness and financial literacy focus on the risks associated with the usage of these accounts? Q.6.4.2: How are the obligations and rights of users guaranteed? Who guarantees consumer protection? Q.6.4.3 How is information related to complaints or any claim process made available to account holders?
	KAC 5: PSPs provide hands-on training where needed as part of a product rollout, particularly for users with limited first-hand exposure to electronic payment services and the associated technologies.	Q.6.5.1: Do PSPs prepare training programmes for their staff to assist existing and new customers specifically in new product rollouts? Q.6.5.2: What kind of support materials do PSPs produce to further illustrate the features of transaction accounts and electronic payment services to first-time users? Q.6.5.3 Are there any hands-on training efforts in place that specifically target older/senior citizens to show them how to use technology-intensive products, services and channels?

Guiding principle 7	Key actions for consideration	Questions
GP7: Large-volume, recurrent payment streams: Large-volume and recurrent payment streams, including remittances, are leveraged to advance financial inclusion objectives, namely by increasing the number of transaction accounts and stimulating the frequent usage of these accounts.	**KAC 1:** Ad hoc incentives are considered, where appropriate, to foster adoption and usage of transaction accounts for large-volume and recurrent payments, including not only government payment programmes but also government collections and utility bill payments, transit fare payments, employer payrolls and, where relevant, remittances. *Fintech focus: New technologies, products and access modes that facilitate the use of account-based, open-loop payment methods for large-volume and recurrent payments are considered.*	Q.7.1.1: Are there incentives or measures to foster adoption and usage of transaction accounts in connection with large-volume and recurrent payments (eg VAT rebates, discounts for adopting direct debit of recurrent payment)? If not, are there any plans to devise and implement them soon? Q7.1.2: If incentives such as those described in the previous question are in place, are they applied to all types of transaction accounts, including new products and access modes?
	KAC 2: PSOs and PSPs take into consideration the needs and requirements of the key counterparties involved in large-volume payment streams, such as employers, large-volume billers, the national	Q.7.2.1: How do PSOs and PSPs consider the needs and requirements of large-volume payment stream issuers (national treasury, utility operators and other large billers, mass transit system operators, etc)? Provide specific examples.

	treasury and others in the design and provision of the related payment services.	
	KAC 3: The government considers making its G2P and G2B payments through a choice of competitively offered transaction accounts that meet the payment and store-of-value needs of the recipients so that these accounts are useful to them.	Q.7.3.1: Does the government consider making its G2P and G2B payments through a choice of competitively offered transaction accounts (eg making them solely through one or more state-owned banks or other similar arrangements)? If so, what is the result? Q.7.3.2: What is the share of government payments G2P/G2B delivered through individualised transaction accounts (belonging to the final beneficiaries of these payments)?
	KAC 4: The government enables and encourages individuals and businesses to make their P2G and B2G payments through electronic means in order to, among other objectives, increase the overall usefulness of transaction accounts.	Q.7.4.1: With respect to government collections, what incentives are provided by the government/government agencies to individuals and businesses to adopt and regularly use electronic payments?
	KAC 5: Medium-sized and large firms, along with government entities, consider disbursing salaries and other payments to employees via transaction accounts at the PSP of the employees' choice.	Q.7.5.1: What is the share of medium-sized and large firms, along with government entities, that are already disbursing wages/salaries directly to the transaction accounts of the final beneficiaries?
	KAC 6: The payments industry proactively seeks new ways to make transaction accounts a competitive and convenient option for usage in connection with all large-volume payment streams. *Fintech focus: All relevant stakeholders take into consideration the potential of new technologies, products and access channels to improve the current offerings of cross-border retail payment services with a view to making transaction accounts more attractive for sending and receiving international payments, including remittances.*	Q.7.6.1: How does the payment industry seek to improve their transaction account offering to encourage the use of these accounts in connection with large-volume payment streams, including G2P payments, salary payments, domestic and international remittances? Q.7.6.2: How do the relevant stakeholders use new technologies, products and access modes to underpin the use of transaction accounts for cross-border payments? How do these practices contribute to increasing the competitiveness and convenience of transaction accounts for sending and receiving remittances and other cross-border payments?

Annex 4: PAFI review report template

I. Executive summary

This section highlights the key findings of the review. It is recommended that the main elements of the table with prioritised recommendations prepared in Section V also be included in the executive summary.

II. Introduction

This section introduces the report and includes the following key information regarding the review:

- Objective of the review: Identify the objective and context of the review.
- Reviewer: Identify the entity and the reviewer(s) conducting the review.
- Scope of the review: If not all guiding principles were reviewed, provide an explanation of why certain principles were not reviewed.
- Methodology of the review and sources of information: Identify the process followed in conducting the review. Identify the main sources of information, which may include written documentation (eg other reviews and reports, surveys, data for the core indicators proposed in the PAFI results framework and other statistics, relevant laws and regulations) and conversations with authorities and relevant industry stakeholders.

III. General overview of access to and usage of transaction accounts and summary of key findings

This section provides general information on financial inclusion in the country, with a focus on access to transaction accounts by individuals and, if possible, by micro and small enterprises, and also on the extent to which those accounts are used in practice. Including data and statistics specifically related to these issues is recommended in order to understand their evolution in recent years and the current status. Comparisons with other countries at a similar or more advanced stage of development are also desirable.

This section also summarises the main findings and conclusions of the detailed review, highlighting the key identified gaps or shortcomings for each of the guiding principles and the recommended actions to address them.

IV. Detailed review report

This is the core section of the report. For each of the guiding principles, it is recommended to include the following three subsections:

- Context subsection: This is a standard text that is essentially derived from the PAFI report and is provided to give a specific context to the discussion of the issues under each guiding principle.
- Status in the country: This subsection includes a detailed description of the current situation of the issues underlying each guiding principle, including achievements, gaps and shortcomings. To the extent possible, data and statistics related to these issues to be included.
- Recommendations: These are the suggested steps for authorities and other stakeholders to deal with the identified gaps and shortcomings.

An example of these three subsections for each of the guiding principles is shown below. It is based on the template used by the WBG in its country diagnostics exercises.

Guiding principle 1: Public and private sector commitment

Context

Financial inclusion requires a well functioning retail payments ecosystem, which is characterised by a complicated balance between cooperation and competition, safety and efficiency issues, as well as specific regulations for innovative and inclusive payment schemes. Fostering change in such an environment requires the ability to bring together diverse interests, launch policy research and development, change laws, mobilise funding to modernise financial infrastructures, and other similar requirements. Explicit, strong and sustained commitment from public and private sector organisations to broadening financial inclusion is indispensable if this agenda is to be effectively advanced.

Public sector authorities play a key role in creating an adequate enabling environment for financial inclusion in their respective jurisdictions. For example, many central banks are already working to better leverage the various roles they play in the retail payments space for this purpose.

Strong commitment from the private sector has also proved valuable in efforts to further the reach of transaction accounts that meet the needs of the unserved or underserved. In several cases, the industry has led the effort to provide basic accounts in their respective jurisdictions.

Status in the country

Gather facts on the basis of the questions included in the PAFI questionnaire and any other questions the reviewer(s) may deem relevant.

Recommendations

Include recommendations for authorities and/or for other relevant stakeholders.

Guiding principle 2: Legal and regulatory framework

Context

As recognised in the PAFI report, the legal and regulatory framework of a country plays a critical role in creating an enabling environment for inclusive payment services. Retail payment services involve a complicated mix of infrastructures, networks and services with both public and private sector investment, and benefit from varying degrees of competition and collaboration, as well as standardisation and innovation. In addition, adequate risk management, mitigation of fraud, abuse and protection of consumer interests are key supervisory and oversight considerations.

The following five key aspects of the legal and regulatory framework are analysed in detail as key elements for evaluating financial inclusion: (i) regulatory proportionality, neutrality and predictability; (ii) risk management; (iii) protection of customer funds (including both deposits and e-money customer funds); (iv) financial customer protection and transparency; and (v) financial integrity.

Status in the country[14]

Gather facts on the basis of the questions included in the PAFI questionnaire and any other questions the reviewer(s) may deem relevant.

[14] To ensure that all five key aspects of the legal and regulatory framework are given due attention, consider having a separate subsection for each of them.

Recommendations

Include recommendations for authorities and/or for other relevant stakeholders.

Guiding principle 3: Financial and ICT infrastructures

Context

Reliable financial, communications and other types of infrastructure are widely recognised as critical to the provision of efficient and cost-effective payment services, and, in this sense, are a fundamental foundation for financial access and inclusion.

Analysis of guiding principle 3 begins with a discussion of the core payment systems in the country. Service point and access channel networks (eg branches, third-party agents and ATMs) are discussed separately under guiding principle 5.

This is followed by a discussion of the other infrastructures that, while not being part of the national payment system, are also of major relevance for financial inclusion, as they provide critical information to payment service providers and other financial service providers. These include credit reporting and other data-sharing platforms, national ID systems and ICT more broadly.

Status in the country[15]

Gather facts on the basis of the questions included in the PAFI questionnaire and any other questions the reviewer(s) may deem relevant.

Recommendations

Include recommendations for authorities and/or for other relevant stakeholders.

Guiding principle 4: Transaction account and payment product design

Context

The PAFI report defines a transaction account as an account held with banks or other authorised and/or regulated service providers which can be used to store some value and make and receive payments.

Transaction accounts can be differentiated into deposit transaction accounts and e-money accounts. Both types of accounts need to be analysed in detail as part of guiding principle 4 together with the associated payment product offering (including pricing) from the perspective of payers and of payees.

Only if the transaction account and payment product offerings effectively meet a broad range of the transaction needs of the target population will end customers be willing to open a transaction account, adopt payment instruments and make use of their transaction account and associated payment instruments on an ongoing basis. To effectively design transaction account and payment products, the supply side needs to identify end customer needs and provide a mix of product features that offer the potential to meet those needs at a reasonable cost. These product-specific features, in combination with broader market practices (eg consumer protection), affect the attractiveness of the respective product for customers. Product-specific features also impact the cost for PSPs of providing the payment service.

[15] To ensure that all the various infrastructures covered by this principle are given due attention, consider having separate subsections at least for (i) core payment infrastructures and (ii) other infrastructures.

Status in the country[16]

Gather facts on the basis of the questions included in the PAFI questionnaire and any other questions the reviewer(s) may deem relevant.

Recommendations

Include recommendations for authorities and/or for other relevant stakeholders.

Guiding principle 5: Readily available access points

Context

Access points include ATM networks, POS and other digital payment point networks, physical branches and agent locations as well as purely digital access channels such as internet or mobile banking.

The success of retail payment services depends critically on the availability (including physical proximity), quality and reliability of these access points. Customer payment behaviour is especially sensitive to the density of access points in close proximity to their home or workplace. Limited access to physical access points may reduce the probability that a transaction account or a payment instrument are adopted.

From a customer perspective, it is important to differentiate between those access points to be visited for the initial opening of a transaction account and/or the acquiring of specific payment instruments, and those access points that are utilised thereafter to service active accounts.

Status in the country

Gather facts on the basis of the questions included in the PAFI questionnaire and any other questions the reviewer(s) may deem relevant.

Recommendations

Include recommendations for authorities and/or for other relevant stakeholders.

Guiding principle 6: Awareness and financial literacy

Context

Educational and outreach efforts are often needed to enable new and even existing account holders to effectively make use of their account and the payments instruments that come with it.

In the payments context, some of the key efforts in this regard include demonstration of the advantages of using the electronic payment services – ie the safety, protections, recourse mechanisms, speed and convenience – learning how to use specific payment instruments, such as a debit card or an electronic funds transfer, and building the trust and comfort with a transaction account and its use. Information on the reliability of ATMs, POS devices and other channels and services can also help address potential customer concerns regarding the accessibility of their funds.

Another relevant aspect in this context is the level to which end users are aware, or could become aware, of the financial product and service options available to them. End users, even knowledgeable ones, may not have easy access to, or be familiar with, certain tools that can assist them in obtaining useful, trustable and updated information on such options. Suboptimal choices are frequent under such circumstances.

[16] To ensure that all the different types of accounts and innovative products are given due attention, consider having separate subsections at least for (i) deposit transaction accounts and (ii) e-money accounts and innovative payment product offerings.

Status in the country

Gather facts on the basis of the questions included in the PAFI questionnaire and any other questions the reviewer(s) may deem relevant.

Recommendations

Include recommendations for authorities and/or for other relevant stakeholders.

Guiding principle 7: Large-volume, recurrent payment streams

Context

Large-volume, recurrent payment streams can be leveraged to advance financial inclusion objectives through various channels. The most obvious one is by directly providing transaction accounts to unserved and underserved end users, mainly individuals. In addition, these payment streams can be leveraged to drive investment in core retail payments infrastructure as well as in distribution channels and in the development of new payment products and services.

Several government payment operations consist of large-volume recurrent payment streams, such as the payment of social benefits, wages, pensions, and other social security payments and contributions. Mass transport payment systems are another case of large-volume payments that are usually operated by the public sector. In the private sector, large-volume payment streams include employer payrolls and others.

Migrants and their families are among those less likely to be financial included. Given the volume of domestic and international remittances, there would appear to be space to leverage the periodic and ongoing use of remittances to foster financial inclusion, at least among these population groups.

Status in the country[17]

Gather facts on the basis of the questions included in the PAFI questionnaire and any other questions the reviewer(s) may deem relevant.

Recommendations

Include recommendations for authorities and/or for other relevant stakeholders.

[17] To ensure that all the aspects covered by this principle are given due attention, consider having separate subsections for: (i) government disbursements and collections; (ii) utilities and other large-volume P2B payments; (iii) public transit fare systems; (iv) private sector employer payroll programmes; and (v) domestic and international remittances.

V. Prioritised list of recommendations

Guiding principle	Recommendation	Priority (eg high/medium-term or immediate/medium-term)	Parties involved in implementation	How will relevant authorities measure progress?[18]

[18] In this column, the relevant authority (or authorities) should include the indicators that it (they) will use to measure progress in the implementation of each recommendation.

Annex 5: PAFI results framework

Part I: Proposed core indicators for the guiding principles[19]

Guiding principle	Proposed core indicators	Source/reference (as applicable)[20]	Frequency[21]
GP1: Public and private sector commitment Commitment from public and private sector organisations to broaden financial inclusion is explicit, strong and sustained over time.	Existence of a well articulated strategy, roadmap or initiative to advance access to and usage of transaction accounts (all options below are valid): – National financial inclusion strategy (NFIS) or equivalent (eg National Payments Strategy addressing financial inclusion) → 0/1 binary indicator – National Payments Council (NPC) or National Financial Inclusion Council → 0/1 binary indicator – Existence of a retail payments strategy (RPS) → 0/1 binary indicator – Account ownership > 90% → 0/1 binary indicator	 WB FICP survey WB GPSS None WB Global Findex	 Every 3 years Every 3 years Not applicable Every 3 years
	Existence of a legal requirement for PSPs to offer transaction accounts with a minimum set of services (binary variable 0/1)	WB GPSS	Every 3 years
	Private sector commitment to financial inclusion through dedicated products and services targeting the unbanked: – Representation of relevant fintech or non-bank actors in the NPC → 0/1 binary indicator – Percentage of PSPs offering transaction accounts with functionalities that, at a minimum, make it possible to electronically send and receive payments at little or no cost, and to store value safely	 None None	
GP2: Legal and regulatory framework	Risk Management – Oversight: A composite indicator can be built for each of the following aspects (a specific proposal is presented in Part 3 of this annex):	WB GPSS	Every 3 years

19 The list of proposed indicators presented in Annex 5 includes those that are commonly collected by a large number of countries or otherwise have global data sources. Authorities could add other indicators for each guiding principle beyond those listed in this table that are considered appropriate to achieve the intended outcomes.

20 The PAFI radar tool comprises only the core indicators that are publicly available.

21 "Frequency" refers to the frequency at which data are made available from the publicly available global databases that are cited in this table.

Guiding principle	Proposed core indicators	Source/reference (as applicable)	Frequency
The legal and regulatory framework underpins financial inclusion by effectively addressing all relevant risks and by protecting consumers, while at the same time fostering innovation and competition.	– Central bank legal powers – Organisational arrangements – Objectives of oversight – Cooperation with other authorities and stakeholders – Scope of oversight		
	Risk Management – Regulatory and Supervisory Technology: – Where appropriate, relevant authorities leverage new technologies for supervision/oversight and foster their adoption by the private sector for risk management and compliance → 0/1 binary indicator	None	
	Neutrality and Proportionality: A composite indicator can be built for each of the following aspects (a specific proposal is presented in Part 3 of this annex): – Legal provisions cover fair and competitive practices and e-money – Regulation allows non-bank payment service models and agent-based models – Non-bank PSPs permitted to engage in a range of payment service-related activities	WB GPSS	Every 3 years
	Existence of deposit insurance → 0/1 binary indicator	WB GPSS for basic bank accounts and e-money accounts WB Bank Regulation and Supervision Survey for commercial bank deposit accounts	Every 3 years
	Safeguarding customer e-money funds: A composite indicator may be built using the following variables: – 100% of customers' funds must be kept in an account at a prudentially regulated financial institutions (may include the central bank); or – 100% of the customers' funds must be kept in accounts at more than one prudentially regulated financial institutions (may include the central bank); or – the fraction of the money that corresponds to the e-money issued must be kept in one or more prudentially regulated financial institutions (may include the central bank); and	WB Global FICP survey	Every 2-3 years

Guiding principle	Proposed core indicators	Source/reference (as applicable)	Frequency
	– the type of account is specified in the legal framework: trust account; escrow account; regular account; account at the central bank; account not specified; other type. *Additional indicators (forthcoming, GPSS 6th iteration):* – non-bank e-money issuers/providers are prudentially supervised (0/1); – depositors are explicitly protected from the potential bankruptcy of the e-money issuer/provider; and – depositors are explicitly protected from the potential bankruptcy of any bank or other institution in which the customers' funds are deposited/placed by the e-money issuer/provider.	WB GPSS	Every 3 years
	Disclosure requirements: Index combining existence of a variety of disclosure requirements: – Plain language requirement (eg understandable, prohibition of hidden clauses) – Local language requirement – Prescribed standardised disclosure format – Recourse rights and processes – Total rate to be paid for a credit (basic costs plus commission rates, fees, insurance, taxes)	WB Global FICP survey	Every 2-3 years
	Dispute resolution index: Index reflecting the existence of formal internal and external dispute resolution mechanisms: – Internal dispute resolution mechanism indicator: law or regulation setting standards for complaints resolution and handling by financial institutions (including timeliness, accessibility, requirements to implement complaints handling procedures) – External dispute resolution mechanism indicator: System in place that allows a customer to seek affordable and efficient recourse with a third party (supervisory agency, a financial ombudsman or equivalent institution)	WB Global FICP survey	Every 2-3 years
	Simplified due diligence: For different types of financial service providers: – Acceptance of non-standard ID docs – Non face-to-face customer due diligence – Allowing for simplified transaction monitoring – Other	WB Global FICP survey	Every 2-3 years

Guiding principle	Proposed core indicators	Source/reference (as applicable)	Frequency
GP3: Financial and ICT infrastructures Robust, safe, efficient and widely reachable financial and ICT infrastructures are effective for the provision of transaction accounts services, and also support the provision of broader financial services.	GSMA Mobile Connectivity Index for coverage and quality of ICT infrastructure.	GSMA	Annual
	ICT Development Index: access and use subsets.	ITU ICT Statistics	Annual
	Interoperability: Indices can be built for each of the elements below: – ATMs: Index from 0 to 1. Top performance when ATM transactions processed in the country and most or all ATM networks are interconnected and ATMs have good or full interoperability. – POS: Index from 0 to 1. Top performance when POS transactions processed in the country and most or all POS networks are interconnected and POS terminals have good or full interoperability. – Mobile Money: Index from 0 to 1. Top performance when mobile money has very good or full interoperability. – Instant/Fast Payments System: Index from 0 to 1. Top performance when Instant/Fast Payments System has very good or full interoperability.	WB GPSS None for (4), currently	Every 3 years
	Quality of Retail Payment Systems*:* A composite indicator can be built for each of the following aspects (a specific proposal is presented in Part 3 of same annex): – ACH – Card switch [shorter distances between items here than below] – RTGS system – Instant/Fast Payments System	WB GPSS	Every 3 years
	Existence of unique electronic identification	WB ID4D Database	Annual
GP4: Transaction account and payment product design	Product design (barriers): Reasons for not having an account with a financial institution:[22] – Financial services are too expensive – Insufficient funds	WB Global Findex	Every 3 years

[22] These cited reasons for not having an account can be addressed by product design. Lower values are more desirable.

Guiding principle	Proposed core indicators	Source/reference (as applicable)	Frequency
The transaction account and payment product offerings effectively meet a broad range of transaction needs of the target population, at little or no cost.	– No need for financial services – Religious reasons		
	Product design (access): Account ownership among women, low income, and rural segments. All three variables are used as a proxy for strong product design, with a focus on access: – Account, female (% age 15+) – Account, income, poorest 40% (% ages 15+) – Account, rural (% age 15+)	WB Global Findex / Central Banks	Every 3 years
	Product design (usage): Digital payment usage among women, low income, and rural segments. All three variables are used as a proxy for strong product design, with a focus on usage: – Made digital payments in the past year, female (% age 15+) – Made digital payments in the past year, income, poorest 40% (% age 15+) – Made digital payments in the past year, rural (% age 15+)	WB Global Findex	Every 3 years
GP5: Readily available access points The usefulness of transaction accounts is augmented with a broad network of access points that also achieves wide geographical coverage, and by offering a variety	Points of service (demand side):[23]	WB Global Findex	Every 3 years
	– Share of total adults without transaction accounts who cite distance as a barrier – Used a mobile phone or internet to access an account (% age 15+)		
	Points of service (supply side): – ATMs per 100,000 adults – Mobile money agents per 100,000 adults[24] – Branches per 100,000 adults	 IMF FAS IMF FAS IMF FAS	 Annual Annual Annual

[23] For the "distance" indicator, lower values are more desirable.

[24] Although the more general indicator "agents of PSPs" represents the ideal measurement for agents, reporting for the mobile money agents indicator in the IMF FAS is more consistent and more representative for the economies where agents play a significant role.

Guiding principle	Proposed core indicators	Source/reference (as applicable)	Frequency
of interoperable access channels	– POS terminals per 100,000 adults – Merchants accepting payments through QR Code per 100,000 adults – Percent of PSPs offering mobile/internet account access	WB GPSS WB GPSS None	Every 3 years Every 3 years
GP6: Awareness and financial literary Individuals gain knowledge, through awareness and financial literacy efforts, of the benefits of adopting transaction accounts, how to use those accounts effectively for payment and store-of-value purposes, and how to access other financial services.	Financial Capability Commitment: – Financial Capability Strategy → 0/1 binary indicator – Dedicated coordination structure to promote and coordinate financial education → 0/1 binary indicator	WB Global FICP survey	Every 2-3 years
	% of adults who are financially literate[25]	Standard & Poor's Financial Literacy Survey	One off
	Digital Literacy: Composite indicator can be built using average of underlying components of: – Skills for a digital world (% of youth and adults)	UNESCO Institute for Statistics, Sustainable Development Goal on education 4, Indicator 4.4.1	Annual (Note: methodology still in development)
GP7: Large-volume, recurrent payment streams Large-volume and recurrent payment streams, including remittances, are leveraged to advance financial inclusion objectives, namely by	Large value payments receipt usage: – Received wages or government transfers into an account (% age 15+)	WB Global Findex / Central Banks	Every 3 years
	Large value payments usage:[26] – Paid utility bills: using cash only (% paying utility bills, age 15+)	WB Global Findex / Central Banks	Every 3 years
	Share of government-to-person payments that are effectuated using electronic means of payment: – Share of public sector pay roll	WB GPSS	Every 3 years

[25] For 140 countries; as an add-on module to Gallup World Poll; on questions related to risk diversification; numeracy; inflation; interest compounding.

[26] Lower values are more desirable.

Guiding principle	Proposed core indicators	Source/reference (as applicable)	Frequency
increasing the number of transaction accounts and stimulating the frequent usage of these accounts.	– Share of pensions – Share of cash transfers and social benefits		
	Share of person-to-government payments that are effectuated using electronic means of payment: – Taxes – Utility payments (Electricity, water or trash collection, etc) – Payments for services (driving licence, parking fees, fines, etc)	WB GPSS	Every 3 years
	Share of government-to-business payments that are effectuated using electronic means of payment: – Procurement of goods and services – Tax refunds – Subsidies	WB GPSS	Every 3 years
	Share of business-to-government payments that are effectuated using electronic means of payment: – Taxes – Utility payments (electricity, water or refuse collection, etc) – Payments for services (like fees for services like business registration, social security contributions etc)	WB GPSS	Every 3 years
	Payment instrument most used for remittances is not cash → 0/1 binary indicator	WB GPSS	Every 3 years

Part II: Proposed core indicators for the PAFI objectives

PAFI objective	Proposed core indicators	Source / Reference (as applicable)[27]	Frequency
Access to at least one transaction account operated by a regulated PSP	Adults with an account (% age 15+): Reflects the percentage of adults who report having an account (by themselves or together with someone else) with a formal financial institution or a mobile money provider	WB Global Findex / Central Banks	Every 3 years
	Number of accounts: Deposit accounts per 1,000 adults	IMF FAS	Annual
	Number of accounts: E-money accounts per 1,000 adults	WB GPSS	Every 3 years on an annual frequency
That allows for: **(i) performing most, if not all, of one's payment needs**	Made digital payments in the past year (% age 15+): Reflects the percentage of respondents to the Findex survey who report using mobile money, a debit or credit card, or a mobile phone to make a payment from an account, or report using the internet to pay bills or to buy something online, in the past 12 months. It also includes respondents who report paying bills or sending remittances directly from a financial institution account or through a mobile money account in the past 12 months	WB Global Findex	Every 3 years
	Electronic transactions per capita: includes credit transfers, direct debits, payment card transactions (debit cards, credit cards), and payments by e-money instruments (card-based e-money instruments, mobile money products, and online money products)	WB GPSS	Every 3 years on an annual frequency
	Number of mobile money transactions per 1,000 (people aged 15+)	IMF FAS	Annual
(ii) safely storing some value	Saving propensity: Saved at a financial institution (% age 15+). Represents the percentage of adults that saved at a bank or other regulated financial institution in the past year	WB Global Findex	Every 3 years

[27] Those indicators for which there is no source/reference have not been included in the PAFI Radar.

PAFI objective	Proposed core indicators	Source / Reference (as applicable)	Frequency
	Outstanding deposits of the household sector – Data from the IMF FAS refer to the total amount (in millions of domestic currency) of all types of outstanding deposits (including accrued interest) of resident individuals from the household sector. – As % of the country's gross domestic product: World Bank data refers to outstanding deposits of the household sector.	IMF FAS for the number of outstanding deposits of the household sector World Bank Data for the population aged 15+ and for GDP data	Annual
	Existence of deposit insurance – same indicator as the one proposed for this aspect in general principle 2.	WB GPSS for basic accounts WB Bank Regulation and Supervision Survey for commercial bank deposit accounts	Every 3 years
	Safeguarding customer e-money funds – same indicator as the one proposed for this aspect in general principle 2.	WB Global FICP WB GPSS	Every 2-3 years Every 3 years
(iii) serving as a gateway to other financial services	Borrowed from a financial institution in the past year (% age 15+): Reflects the percentage of adults with at least one loan outstanding from a bank or other formal financial institution.	WB Global Findex / Central Banks	Every 3 years
	Number of loan accounts held by the household sector per 1,000 people aged 15+: Reflects the actual number of loans that individuals (household sector) have received from the reporting institutions of the IMF FAS.	IMF FAS for the number of loan accounts World Bank Data for population aged 15+	Annual
	Number of credit cards per 1,000 people aged 15+: Reflects the total number of credit cards of all financial institutions in circulation in the reporting jurisdiction	IMF FAS for the number of credit cards World Bank Data for population aged 15+	Annual
	Number of life insurance policy holders per 1,000 people aged 15+: Reflects the number of life insurance policy holders from resident individuals of the household sector. An individual holding more than one (life or non-life) insurance policy should be counted as one policy holder	IMF FAS for the number of life insurance policy holders World Bank Data for population aged 15+	Annual

PAFI objective	Proposed core indicators	Source / Reference (as applicable)	Frequency
	Number of non-life insurance policy holders per 1,000 people aged 15+: Reflects the number of non-life insurance policy holders from resident non-financial corporations and individuals of the household sector. A customer holding more than one non-life insurance policy should be counted as only one non-life insurance policy holder	IMF FAS for the number of non-life insurance policy holders World Bank Data for population aged 15+	Annual

Part III: Methodology for proposed composite indicators

Guiding Principle	Proposed composite "core indicator"	Criteria	Points (To be summed up)

2	Risk Management: Oversight:
	[a] Central bank legal powers
	(Range of values: 0–3)
		a.i) Central bank has formal powers to perform payment oversight.
		a.ii) Empowerment is general, in the context of "ensuring the adequate and safe functioning of payment systems" in the country.
		a.iii) Empowerment is explicit, granting it powers to operate, regulate, and oversee payment systems.
			If (i), 1 total point
			If (ii), 2 total points
			If (iii), 3 total points

2	Risk Management: Oversight: [b] Organisational arrangements (Range of values: 0–4)	b.i) The central bank's payment system oversight function has been established and this is performed regularly and in an ongoing basis. b.ii) There is a specific unit or department within the central bank responsible for payment system oversight. b.iii) The payment system oversight function is segregated from payment system operational tasks either through organisational means or via independent reporting lines.	2 1 1
2	Risk Management: Oversight [c] Objectives of oversight (Range of values: 0–2)	c.i) The central bank has set down its objectives in carrying out the payment system oversight function in a regulatory or policy document. c.ii) The regulatory or policy is publicly available.	1 1
2	Risk Management: Oversight	d.1.i) Cooperation with other relevant authorities occurs mostly in an informal/ad hoc basis.	If (i) and (iii), 0.5 total points

Guiding Principle	Proposed composite "core indicator"	Criteria	Points (To be summed up)

	[d.1] Cooperation with other authorities
	(Range of values: 0–2)
		d.1.ii) Cooperation with other relevant authorities is ensured through a formal mechanism, such as a memorandum of understanding (MOU) or is required by law.
		d.1.iii) Cooperation involves mostly regular meetings and exchange of opinions and views.
		d.1.iv) Besides regular meetings and exchange of opinions and views, cooperation also involves regular information exchanges, prior notice of regulatory action, joint inspection.
			If (i) and (iv), 1 total point
			If (ii) and (iii), 1.5 total points
			If (ii) and (iv), 2 total points

2	Risk Management: Oversight [d.2] Cooperation with other stakeholders (Range of values: 0–2)	d.2.i) A formal National Payments Council is in place. d.2.ii) Although not formalised, the Central Bank holds regular meetings with stakeholders to discuss strategic issues for the payment system. d.3.iii) The Central Bank consults stakeholders only at the operational level (ie on particular operational issues). These consultations are regular and sometimes include the creation of an ad hoc task force.	If (i) or (ii), 2 total points If (iii), 1 total point
2	Risk Management: Oversight [e] Scope of oversight (Range of values: 0–5)	e.i) Payment system oversight is performed over retail payment systems. e.ii) Payment system oversight is performed over payment services and instruments. e.iii) Payment system oversight is performed over payment instruments. e.iv) Payment system oversight is performed over commercial bank operated payment systems and services. e.v) Payment system oversight is performed over all relevant payment systems and services in the country even if the operator is a non-bank (eg card network operators, money transfer operators).	1 1 1 1 1
2	Neutrality and Proportionality (Range of values: 0–7)	Legal provisions cover fair and competitive practices in the provision of payment services. Legal provisions cover electronic money. Regulation allows non-bank direct provision of payment services and holding customer funds. Regulation allows agent-based models.	1 1 1 1

Guiding Principle	Proposed composite "core indicator"	Criteria	Points (To be summed up)
		Non-bank PSPs (MTOs) permitted by licensing regimes to transfer international remittances AND contract agents.	1
		Non-bank PSPs (Supervised NBFIs) permitted by licensing regimes to issue payment cards OR issue e-money AND contract agents OR act as agents of banks.	1
		Non-bank PSPs (MNOs) permitted by licensing regimes to issue payment cards OR issue e-money AND contract agents OR act as agents of banks.	1
3	Quality of Retail Payment Systems [a] ACH (Range of values: 0–5)	a.i) ACH for credit transfers and/or direct debits is available.	1
		a.ii) Net balances are calculated and settled multiple times a day.	1
		a.iii) Final settlement takes place through RTGS system or central bank money if there is no RTGS system.	1
		a.iv) ACH has a settlement risk management framework.	1
		a.v) Diversified set of actors have direct/indirect access to ACH services (Other banks, supervised NBFIs, MNOs, MTOs).	If 1 type, (0.5) If > 1 (1)
3	Quality of Retail Payment Systems [b] Card switch (Range of values: 0–5)	b.i) Wide range of transactions supported by local payment card switch.	1
		b.ii) Settlement of net positions takes place through RTGS system or central bank money if there is no RTGS system.	1
		b.iii) Pricing policy: partial recovery OR full recovery OR full recovery + surplus.	1
		b.iv) Diversified set of participants are allowed to access (directly/indirectly) local payment card switch (eg Supervised NBFIs, MNOs).	1
		b.v) Card fraud prevention: 1) industry-led standards; 2) common efforts by the banking industry and merchants' associations; 3) legal requirements applicable to payment service providers/users.	If > 1 and #3 is included (1)
3	Quality of Retail Payment Systems [c] RTGS system (Range of values: 0–2)	c.i) The percentage of total volume of large-value payments channelled through the RTGS system is more than 80%.	1
		c.ii) Access to the RTGS system is granted on the basis of the fulfilment of a set of objective criteria to ensure a safe and sound operation of the system (eg capital requirements, technological capacity, internal risk controls, appropriate management).	1

Guiding Principle	Proposed composite "core indicator"	Criteria	Points (To be summed up)
3	Quality of Retail Payment Systems [d] Faster Payments System (Range of values: 0–4)	d.i) A faster payments system for retail payments has been developed in the country and is operational.	1
		d.ii) The faster payments system is available on a 24/7 basis.	1
		d.iii) The faster payments system supports multiple payment instruments (eg cards, credit transfer, direct debit).	1
		d.iv) The faster payments system supports multiple channels (eg internet, mobile, ATM, POS).	1

Annex 6: Indexing methodology for the core indicators and the PAFI radar

1. Introduction

This annex lays out an indexing methodology for the PAFI core indicators, which are catalogued in Annex 5. The methodology provides guidance to national authorities for compiling the core indicators into indices to track progress in applying the various key actions for consideration under the PAFI guiding principles (GPs). Additionally, this annex discusses the PAFI radar tool, which is introduced in Section 4 and the box in the main body of this report. The methodology shows how the GP indices can be plotted on the PAFI radar to measure performance in relation to relevant benchmarks and track progress over time.

Sections 2–4 of this annex discuss the three key elements of the methodology: (i) core indicators; (ii) index calculations; and (iii) PAFI radar. The interactive PAFI radar tool facilitates execution of the indexing methodology on a local level. The PAFI radar tool includes publicly available country data for the core indicators, the calculation approaches for generating the individual GP indices, and the PAFI radar, which populates once the required data have been captured.

The PAFI Radar template will be available on the World Bank website, with the benchmark indicators pre-populated. The World Bank will endeavour to maintain the compilation of the referenced publicly available data (Annex 5) and make them available at the request of public authorities in the specific jurisdiction. Public authorities can request data relevant for their jurisdiction from the World Bank and/or consolidate relevant data pertaining to their respective jurisdiction from other sources to use the template to input the data and visualise their relative status against the benchmark indicators.

2. Core indicators

The core indicators, which are presented in Annex 5, are used to measure the seven GPs. Many core indicators are publicly available and accessible through databases maintained by international organisations, such as the WBG and the IMF. However, many others have been developed for the PAFI results framework. This is particularly true for the core indicators addressing PAFI-relevant laws, regulations and oversight frameworks. In these cases, core indicators are generated from existing policy surveys, such as the WBG's GPSS and Global FICP survey. Additionally, the core indicators take on a variety of forms, in terms of data type and units of measurement. Aggregating diverse forms of data to produce composite indices requires normalisation, which is discussed in Section 3.1 below.

The PAFI radar tool includes the core indicators that are publicly available. Reporting gaps are significant for many of the core indicators. Therefore, authorities will need to collect or estimate core indicators where data gaps exist. Authorities may also choose to input local data if they believe that local data are more accurate than data captured in publicly available cross-country data sets.

3. Index calculations

Each of the seven PAFI GPs is represented by an individual index. An index allows for several dimensions containing multiple indicators to be aggregated into a single scalar, which is aimed at describing a multidimensional phenomenon. To achieve this, most indices follow a two-step approach: normalisation and aggregation. Sections 3.1 and 3.2 lay out the normalisation and aggregation methodology used in generating the PAFI GP indices.

3.1 Normalisation

The core indicators underlying GP measurement are diverse in terms of form and units. Some are quantitative in nature, while others represent qualitative data that have been turned into binary indicators or ordinal scales. In terms of units, the core indicators are reported as percentages, on a per capita basis, and as composite scores. Due to these various forms, the core indicators must be transformed into a common unit before being aggregated.

The indexing methodology employs a common “min-max normalisation” approach. This approach uses the observed maximum and minimum value for a given indicator to transform the indicator to a range between 0 and 1. The underlying idea is to use the sample information to do some relative benchmarking. While this transformation is frequently used in similar empirical studies, it is important to note that the transformation is sensitive to the choice of maxima and minima, and the presence of outliers.

Despite these drawbacks, the indexing methodology utilises the observed global maxima and minima that are publicly available for each of the core indicators. This is the most practical approach. The maxima and minima employed in normalisation should not be confused with the reference groups on the PAFI radar.

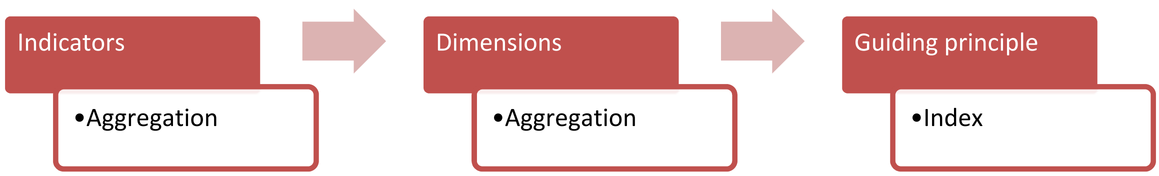
Normalisation is also sensitive to outliers. Extreme outliers represent unrealistic normalisation frontiers. Within the core indicators, positive outliers – those existing at the upper end of the distribution – are problematic. When extreme positive outliers are unaddressed, the outliers take on a high value within the 0–1 range, while the preponderance of observations cluster around the lower bound of the range. This obfuscates variation in the bulk of observations.

The indexing methodology identifies positive outliers as those observations that eclipse the common positive outlier threshold of +3 standard deviations from the mean. For core indicators that contain outliers, the indexing methodology replaces the outlier(s) with the indicator’s 95th percentile observation. In these cases, the outlier(s) and the 95th percentile are normalised to a value of 1.

3.2 Aggregation

After normalisation, indicators can be aggregated. Figure 3 summarises the aggregation layers for the PAFI GPs. In principle, indicators are used to measure dimensions, which make up an index. In practice, a single core indicator often serves as the dimension. In these cases, there is only one layer of aggregation. However, in five of the seven GPs, multiple core indicators make up separate dimensions. These indicators must first be aggregated into a single dimension before being aggregated with other dimensions to produce the GP index.

Figure 3. Aggregation layers for the PAFI guiding principles



As an example of multiple aggregation levels, consider GP 2, “Legal and Regulatory Framework”. GP 2 contains several core indicators that make up a higher-level “Risk Management: Oversight” dimension. These indicators must be aggregated into the Risk Management: Oversight dimension before aggregation with the rest of the GP 2 core indicators.

There are a variety of common approaches one can employ to aggregate normalised indicators, including an arithmetic mean, a geometric mean and a weighted mean. The indexing methodology utilises a more tailored aggregation strategy proposed by Sarma (2008), which represents the normalised inverse Euclidean distance to the best possible normalised indicator. This “distance to the displaced ideal” method satisfies a series of axiomatic characteristics desirable in an index, summarised in Table 1. Although the Sarma method seems the most appropriate for the PAFI context, countries could implement an alternative approach, examples of which are referenced above.

Axiomatic characteristics satisfied by distance to displaced ideal aggregation

Table 1

Axiom	Description
Normalisation	Lower bound zero (0) and upper bound one (1) are achieved if and only if all dimensions are equal to the minimum value or the maximum value, respectively.
Anonymity	The value of the index should be indifferent to swapping values between dimensions. In other words, all dimensions have equal weight.
Monotonicity	The value of the index must increase (decrease) if the value in one dimension increases (decreases) and everything else remains constant.
Uniformity	Given a mean value for the dimensions, greater (lower) dispersion of the individual dimensions' values should correspond to a lower (higher) index value.
Proximity	The value of the index should increase (decrease) when a country is closer to (further from) the ideal scenario.
Signalling	The index indicates a unique optimal route to reach the ideal.
Lower difference in gain at higher levels of attainment difference	The index has decreasing marginal returns to increases in a dimension.

4. PAFI radar

The PAFI radar, which is illustrated in the box in the main body of the report, depicts the seven GP indices produced by the indexing methodology for a given country, along with chosen benchmarks. The Excel-based PAFI radar tool assists countries in collecting data and plotting their status on the PAFI radar relative to the top performing country and additional reference groups. The top performing country and reference groups are complementary and communicate useful information. Countries can determine which benchmark is more informative for their local circumstances.

The PAFI radar will not precisely reflect every country's GP status because the core indicators are not equally relevant in all countries. For example, certain access points measured in GP 5 may not be important for certain countries' payment ecosystems. Therefore, countries are encouraged to review the underlying indicators for each GP and judge their status in concert with knowledge of local circumstances.

4.1 Radar frontiers

The vertices of the PAFI radar, which are equal to a distance of 1 from the origin, are the "theoretical" top performers for each PAFI GP. The observed top performing country can only achieve a value of 1, and be equivalent to the theoretical top performer, if it has the highest value for all indicators underlying a GP. The theoretical top performer and observed top performing country are equivalent for GP 1 and GP 6. For these GPs, the top performer coincides for the two core indicators underlying each GP. For five of seven GPs, the theoretical top performer and observed top performing country are not equivalent. The observed top performing country need not have the highest values for any of the individual core indicators, as long as it performs at a high enough level across all core indicators underlying a given GP index to achieve the highest overall GP result.

4.2 Additional reference groups

As additional points of reference, the PAFI radar displays the status of a benchmark sample of countries or the G20 countries, depending on user preference. The benchmark sample is a constructed observation derived from the average indicators of a group of countries that are highly developed in terms of financial inclusion. Similarly, the G20 group is a constructed observation derived from the average indicators of the

G20 countries. Once constructed, the reference groups go through the GP measurement process detailed in Sections 1 and 2. The reference groups represent more attainable targets than the top performer.

Members of the benchmark sample are those eclipsing the 85th percentile in terms of performance on four indicators proposed for the PAFI objectives. The four indicators address account access, digital payments, saving propensity and access to credit. The indicators were chosen because they have wide coverage among global economies and represent a range of financial inclusion considerations.

4.3 Radar updates and measuring progress

It is currently anticipated that the PAFI radar tool will need to be updated every three years. Many core indicators underlying the PAFI results framework are collected and released on biennial and triennial bases, which prohibits annual updates. PAFI radar updates will enable countries to examine their position relative to the new frontier. This approach presents the countries that adopt this framework with different options to monitor progress over time, due to the nature of the calculations that are used to form the indices for each GP.

Over time, the maximum values for each indicator are expected to improve as the empirical frontier for payment systems and financial services continues to develop. This implies that the maximum-minimum range used to estimate the distance to the frontier for each indicator will change over time, and so will the top performers and the benchmark sample. Hence, when a country uses this approach in the baseline scenario, the maximum attainable values for the country, as well as those for the top performers and benchmarks calculated for each PAFI GP, are likely to change in a few years. This results in the consideration of two options to monitor progress over time, each with its own merits:

- Static comparator

The static comparator option implies the use of the same maximum-minimum sample range values for the estimation of each GP index for both the baseline and the next period for which the country would like to evaluate its progress. This would essentially show the country's progress over time relative to its own standing at the baseline, without considering what may have happened to the rest of the world in terms of progress.

- Dynamic comparator

The dynamic comparator option implies the use of each period's maximum-minimum sample for the baseline and the next evaluation period. With this approach, the country would be able to compare its relative standing against the rest of the world at the baseline, with its relative standing against the rest of the world at the next evaluation period.

It is recommended to use these two options simultaneously in order to fully understand the progress over time, as each has different interpretations and value. For example, if the goal is to improve the fundamentals over time, the static comparator option would be useful. If the goal is to pursue reforms to catch up with the frontier, the dynamic comparator option would be useful. The combination of the two would give a clearer and better picture of the progress over time.

Annex 7: Progress-reporting matrix

(Example for PAFI guiding principle 4)

GP4: Transaction account and payment product design	Current status			Reforms launched					Additional comments
	Priority for central bank	Status of implementation	Central bank responsibility	Type of reform initiated	Institutions involved in the reform	Expected outcome and impact	Time frame	Challenges for the success of the reform	
KAC 1: Where reasonable and appropriate, PSPs provide a basic transaction account at little or no cost to all individuals and businesses that do not hold such an account and that wish to open such an account.	1. High 2. Medium 3. Low	1. Implemented 2. Partially implemented 3. Ongoing implementation 4. Plans for implementation developed 5. No plan for implementation	1. Direct 2. Indirect	Describe reform 1, reform 2, up to reform "n". Columns to the right should be completed *per each reform.*	Include all public sector authorities or institutions. Include all relevant private sector entities, bodies and organisations.	Describe outcome. Evaluate impact (high or medium).	1. Short term or within 1 year 2. Medium term or 1 to 3 years. 3. Long term	1. Technological 2. Regulatory 3. Market 4. Human resources 5. Other	Describe
KAC 2: PSPs offer transaction accounts with functionalities that, at a minimum, make it possible to electronically send and receive payments at little or no cost, and to store value safely.	1. High 2. Medium 3. Low	1. Implemented 2. Partially implemented 3. Ongoing implementation 4. Plans for implementation developed 5. No plan for implementation	1. Direct 2. Indirect	Describe reform 1, reform 2, up to reform "n". Columns to the right should be completed *per each reform.*	Include all public sector authorities or institutions. Include all relevant private sector entities, bodies and organisations.	Describe outcome. Evaluate impact (high or medium).	1. Short term or within 1 year 2. Medium term or 1 to 3 years. 3. Long term	1. Technological 2. Regulatory 3. Market 4. Human resources 5. Other	Describe
KAC 3									
…									
…									
KAC 7									

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