



Acknowledgments

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Introduction

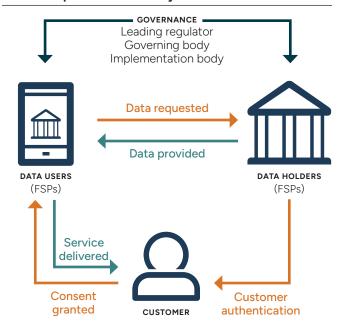
PEN FINANCE ALLOWS FOR THE sharing of customer data across financial service providers. It aims to give more control over personal data to the data subjects i.e., individual customers. Early evidence shows that open finance can play a significant role in advancing financial inclusion (for a more detailed definition, see Jeník, Mazer, and Vidal 2024).

In an open finance regime, different players, infrastructure, and policies facilitate data exchange (see Figure 1). The key players are:

- Policy makers who build foundations of the inclusive data ecosystem and strengthen data protection regimes. They often introduce standards for open finance and monitor their implementation.¹
- Data users and data holders (such as financial services providers - FSPs) that comply with open finance requirements, including (where applicable) those related to data quality and structure. Importantly, data users use data to expand their product offerings and improve customer service and operational efficiency.
- Customers, and those representing their interests, who demand both more control over their data and more benefits from the data they share with others.

As interest in open finance grows among policy makers globally, this publication offers a practical, easy-to-implement tool to help policy makers make decisions on whether, when, and how to implement an open finance regime. The involvement of policy makers in open finance varies from low to high degrees of intervention, illustrated by examples such as Switzerland with their industry-led open finance market to Brazil with the central bank playing a decisive role in setting

FIGURE 1. Open finance ecosystem



¹ In this publication, the term "policy makers" collectively refers to financial sector policy makers, regulators, supervisors, and other public governing bodies, unless stated otherwise.

and implementing standards. The degree of intervention depends on factors such as regulatory mandate and discretions, market structure, customer demand, and political will. As those factors change, so may the position of the regulator on the intervention spectrum.

Regardless of where policy makers find themselves on the intervention spectrum, they should consider open finance as an enabler of innovation, financial inclusion, and market development. As they consider open finance, they should ask themselves how their market could benefit from open finance, what the main pain points are for providers, how financial inclusion can be advanced, and what needs to be done for such benefits to materialize.

In our work, we have observed that providers may face a series of challenges throughout open finance implementation that policy makers need to be aware of, including:

- 1. High costs of implementation, compliance, and maintenance. There are various costs related to open finance. Most significant are the cost of building reliable application programming interface (API)² connections and enhancing the capacity to respond to API calls. Investment in new technology is a part of that cost, along with human resources. High costs may create entry barriers for thin-resourced players, often smaller institutions and newcomers. Lowering the cost and ensuring fair cost coverage are among the key goals that policy makers have.
- 2. Lack of incentives for providers to participate.

 Strong incentives for providers to participate are essential for open finance to succeed, even if it is a mandatory one. Besides negative incentives such as increased competition, positive ones should also be considered for instance, tax incentives.
- 3. Lack of incentives for providers to go down the market. There is a risk that providers will concentrate

their efforts on targeting more affluent customer segments, using open finance data to better serve them and extract more value from those segments. This risk is aggravated by the fact that more affluent customers are a significant portion of the early adopters, and, therefore, their data becomes available for innovation first. Making underserved segments' data available may help overcome the challenge (for example, through the inclusion of inclusive finance providers or by creating synthetic data lakes that emulate low-income customer data trails).

This publication presents two tools for policy makers to identify (1) how and under what circumstances their financial sector could benefit from open finance, and (2) what needs to be done to implement it. The first tool is a self-assessment, and the second one is an associated development roadmap template to help policy makers articulate an end-objective for open finance implementation and outlines the approach to developing open finance considering the context. The two tools do not substitute for an in-depth context analysis and diagnostic-based advice but serve as guidance that such analysis and advice can build on. While the tools have been designed with a focus on financial inclusion, they can be adapted for broader purposes.

This publication is based on desk research and application of the tool to the following economies: Australia, Bahrain, Brazil, Canada, Côte d'Ivoire, Hong Kong SAR, China, India, Indonesia, Japan, Kenya, Malaysia, Mali, Mexico, Mozambique, Nigeria, Pakistan, the Philippines, Senegal, Singapore, South Africa, and the United Kingdom. While some of these economies do not have an active open finance regime, we were able to apply the tool and analyze its output using publicly available data and CGAP's local experts to gauge the countries' open finance readiness and outline a way forward. We have applied the tool in the listed economies on an experimental basis and not in collaboration with local policy makers or to inform their decisions.

^{2 &}quot;An application programming interface (API) allows one software program to "talk" with another. APIs enable a wide range of innovative products and services that millions of people use every day." For more information visit: https://www.cgap.org/topics/collections/open-apis.

Self-Assessment Tool

very market can benefit from open finance—it is not a matter of whether, but rather when and how to make it happen, accounting for the unique context of each market defined by factors such as legal and regulatory framework, provider ecosystem, and opportunities for the underserved population. In the context of this publication, the essential questions are how open finance might advance the depth, breadth, and utility of financial inclusion in the given context and which interventions policy makers should prioritize.

CGAP has identified the most frequently asked questions from policy makers and organized them along a stylized timeline for open finance implementation (Figure 2).

The self-assessment tool provides a simple, structured, and fast way to answer some of these questions and help policy makers advance discussions on open finance. Most importantly, the tool helps answer the question of whether open finance is a suitable pathway

for advancing financial inclusion in a given country under the present conditions.

The tool helps evaluate three aspects of the country's readiness that are critical for open finance success and that we combined into two dimensions. The first aspect concerns the digital and financial footprints of customers. Without digital data, open finance does not make a difference. Therefore, the tool helps assess the current level of access and usage of traditional financial services and digital financial services across customer segments (such as women, customers in rural areas, and small and medium enterprises) and the overall data footprints of the underserved population. The second aspect concerns the legal and regulatory framework. The framework defines implementation instruments (for example, regulatory discretion to impose API standards) and critical safeguards to ensure data security and customer protection. The third aspect concerns providers ecosystem—the maturity, technology capabilities, and strength of the supporting

FIGURE 2. Open finance implementation timeline

Monitoring and **Impact** Market context Regulatory priorities **Design choices** measurement enforcement Is the market ready Are there (financial What design of What are indicators What impact of for open finance? inclusion) issues open finance is of success and how open finance (on that could be solved most conducive to to track them? financial inclusion) Are there other through open financial inclusion? can we reasonably What changes are priorities more finance? expect and when? relevant than open Are there limitations necessary to keep Do we understand imposed on the on track to success? How do we measure those issues and design choices that impact? (e.g., legal) and do their root causes Is the impact well? they need to be changed?

infrastructure. In our model, we have combined the legal framework and the providers' ecosystem in a single dimension mainly to keep the tool simple and visually intuitive as a two-dimensional matrix. However, the tool output does analyze these two aspects separately and provides an assessment of which of these two is stronger in comparison to the other.

You can access the self-assessment tool <u>here</u>. The self-assessment tool is a spreadsheet (Figure 3) that has the following tabs:

General tabs:

- About the tool. Contains a brief description of the tool, its purpose, and user guidance.
- **Definitions and Links.** Contains a glossary of terms and links to important resources.

 Financial Inclusion Data. Contains several indicators pre-populated from public sources, including the World Bank Findex Database of 2021.

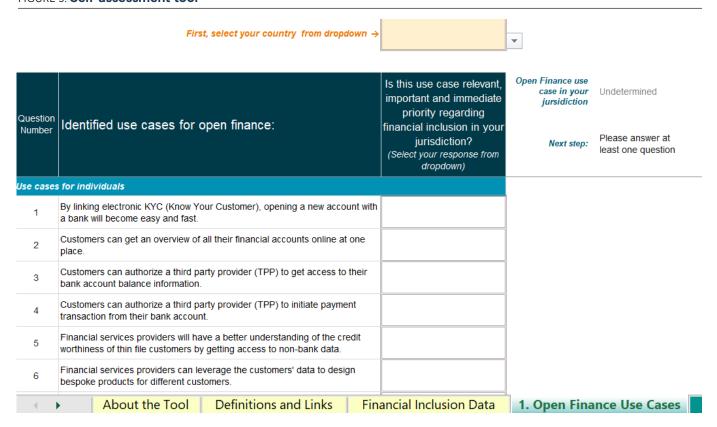
Input tabs:

- Open Finance Use Cases. Lists common use cases that bear relevance to expand the depth, breadth, and utility of financial inclusion.
- Digital Financial Footprints. Describes the footprints of lower-income customer segments.
- 3. **Ecosystem.** Combines the assessment of legal and regulatory framework with providers' ecosystem and infrastructure.

Output tab:

• **OUTPUT.** Provides a results grid showing the results of the assessment (Figure 4).

FIGURE 3. Self-assessment tool



To use the tool, policy makers go through the list of statements pertaining to the data footprints of the underserved segments, on the one hand, and regulatory and providers ecosystem, on the other. Both dimensions are scored against a three-degree spectrum from "weak" to "intermediate" to "strong." Policy makers are required to provide their own assessment of each statement in the context of their country. The tool then synthesizes those answers to generate an output as a visual depiction of the country's readiness to launch open finance.

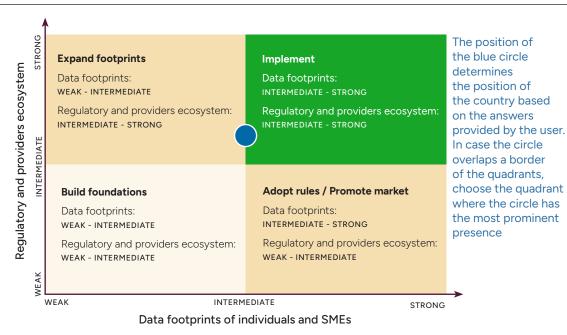
The self-assessment can be done in three simple steps:

• **Step 1:** Go through all the statements on the three input tabs ("Open finance use cases," "Digital financial footprints," and "Ecosystem") and evaluate each statement. If you are unsure, you are encouraged to invite colleagues with relevant experience to answer

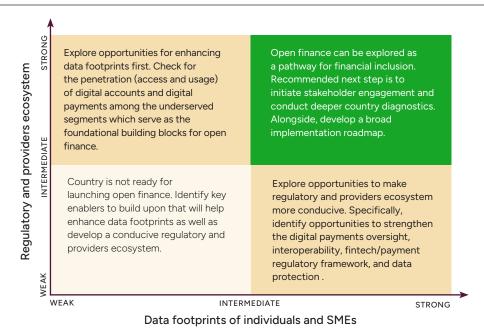
- together. The tool contains key definitions and links to useful resources regarding open finance. The tool also contains key indicators from the World Bank's Findex 2021 database on the access and usage of financial services for your reference.
- Step 2: Review the output matrix and your country's position on it. CGAP recommends specific actions based on the position of the country on the matrix (see Figure 5). If the country is found to be ready to launch open finance, use the development roadmap template provided in the next section to put together a high-level staged plan and identify key regulatory priorities for each stage of implementation.
- Step 3: When the output indicates weakness in the data footprints or regulatory and providers ecosystem, a deeper review of the key enablers is recommended to understand key enablers that must

FIGURE 4. Self-assessment results

Weak - Intermediate regulatory and providers ecosystem suggest that the policy and providers are not ready and there is a limited capacity to process data, innovate and compete. In such instances, policymakers should focus on promoting competition (e.g., new licenses), incentivizing modernization (e.g., tax), promoting upskilling (e.g., capacity building).



Weak-Intermediate data footprints indicate the possibility of a low level of digitization (low smartphone penetration, limited connectivity) that can be addressed through subsidies, tax incentives, promoting competition, building digital public infrastructure. There may be instances where data footprints exist, but not in a digital or easy-to-access form (e.g., government data). In such cases, digitization of data is important.



Source: Authors.

be established as the foundational building blocks for open finance (see Jenik, Mazer, and Vidal 2024). To identify potential gaps and opportunities, go back to your answers and review them. Your answers are color-coded in the tool for your easy reference.

Development Roadmap

HE SELF-ASSESSMENT TOOL IS MEANT to surface critical pieces of information to gauge country's readiness for open finance and provide input into a high-level development roadmap. The development roadmap template provided below (Figure 6) is particularly useful for policy makers whose jurisdictions are ready to move ahead with open finance implementation. At that point, it is easier to fill in many details across the development stages, even if some details may be missing. The roadmap, however, is a useful tool at any stage of market readiness and can serve as a baseline document that policy makers build on as they ready their market for open finance implementation.

The importance of having such a roadmap (or even a more granular version) is that it guides the implementation of open finance, helps in its monitoring, and informs decisions to make changes when necessary.

The roadmap is organized around three main development stages of open finance implementation: (1) early stage, (2) growth stage, and (3) maturity stage. These stages occur in every open finance implementation, although they differ in how early they appear, how long they last, and how much they overlap. Each stage is characterized by a different level of maturity, stakeholder actions, and customer uptake. Understanding those stages, their characteristics, and expected developments is critical for setting the right expectations and defining corrective measures where early signs of divergence appear to ensure that there is progress in the right direction. This stage-focused development helps policy makers prioritize key actions,

adapt to changing circumstances, and be agile—all important factors when implementing innovative initiatives such as open finance.

As illustrated in Figure 6, the early stage is characterized by a focus on developing the foundations for an open finance system. This would typically involve building API connections, building interfaces for consent collection, creating a directory of participants to ensure trust in the system, and testing initial use cases. On the customer side, uptake at this stage is typically led by early adopters who are less risk-averse (often young, educated men in urban areas). The growth stage is characterized by shifting focus toward the development of use cases, increasing customer awareness, and improving system reliability. On the customer side, uptake is driven by more diverse customer segments, each finding benefits from diversifying use cases. Finally, the *maturity stage* is characterized by innovation in business models, where the experience with data sharing translates into operational efficiencies and business growth. On the customer side, open finance becomes an enabling layer that drives different use cases, including mass-market solutions. At this point, most customers understand well the concept of data sharing and the benefits that accompany it.

The three development stages are not to be confused with the implementation phases toward open finance and the development roadmap with a detailed implementation plan. Given the high level of complexity, stakeholders' mobilization, and resource intensiveness of building open finance, it is recommended to develop the open finance ecosystem in a phased manner that allows the

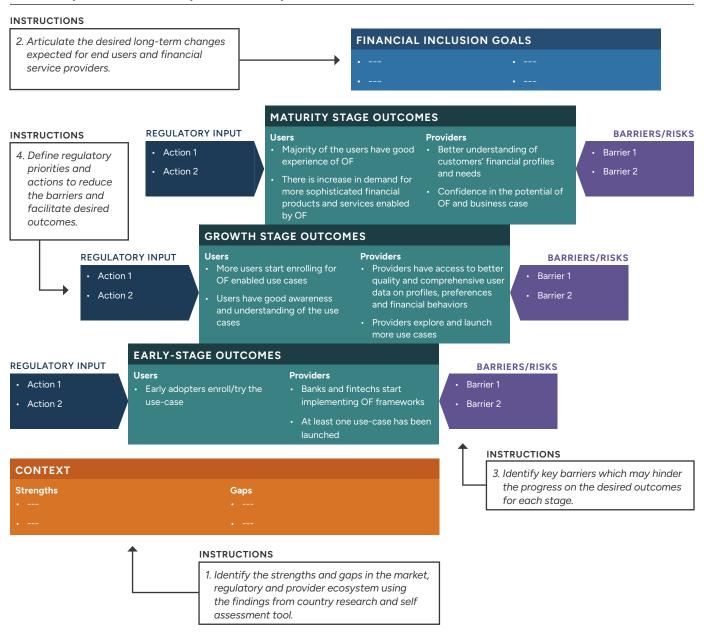
stakeholders to take time to collect evidence, reflect, and course correct along the journey. Those phases could be defined by the types of data shared, types of participants allowed to join open finance, or types of services covered. For instance, the open finance journey in Brazil has been implemented through four overlapping phases, combining all the factors mentioned. The phases define the timeline on which the regime becomes fully operating. The stages (in the

roadmap template) define how the regime matures and scales.

The development roadmap template can be filled out in four simple steps:

 Define the country context. Using the self-assessment tool, policy makers can list the strengths and weaknesses of their country's

FIGURE 6. Open finance development roadmap



- data footprints, market maturity, and the legal framework. Understanding the context well is critical for setting the right objectives, choosing the right design, and defining the implementation journey through relevant actions and success indicators.
- 2. Define the **end goals**. It is useful to define the end goals in terms of customer and provider outcomes resulting from long-term changes effected through open finance development. It is those outcomes that should be eventually looked at and measured when evaluating open finance success. In the financial inclusion context, an example of such outcomes could include X percent of microentrepreneurs without credit history newly getting access to credit.
- 3. Define **key barriers** that may hinder progress on the desired outcomes across stages of the development journey. Examples of demand-side barriers include low customer awareness, low customer trust, low smartphone penetration, low uptake among lower-income segments, and lack of perceived benefits. Examples of supply-side barriers include high implementation and compliance costs, low technological readiness, lack of incentives, small fintech presence, concentration of use cases and their targeting, and weak data protection framework.
- 4. Define **regulatory priorities and actions needed** to reduce the barriers and facilitate desired outcomes. Examples include mandating the participation of large data holders, defining the scope of data shared, defining the cost-recovery structure, setting standards for data access and format, setting up a participant directory, and implementing oversight and enforcement actions.

The development roadmap is not static; rather, it is a live document that can be shared with stakeholders and modified as more information and experience becomes available.

Conclusion

HE SELF-ASSESSMENT TOOL complements our work on open finance and gives readers—the policy makers considering open finance—a way to structure their discussion and research into the topic. We argue that in most jurisdictions, policy makers play an active role in setting up and implementing open finance, though the level of their intervention will vary. Particularly smaller, highly consolidated markets with a limited number of incumbents and newcomers are likely to benefit from a more interventionist approach. Efforts of such policy makers should be guided by an overall vision of what financial market they want to promote and how it should serve the lower-income segments. This publication is meant to help with that. Once moving ahead, our open finance development roadmap can help set the direction of the effort.

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Jeník, Ivo, Rafe Mazer, and Maria Fernandez Vidal. 2024. "The Building Blocks Supporting Open Finance." Working Paper. Washington, D.C.: CGAP. https://www.cgap.org/research/publication/building-blocks-supporting-open-finance















































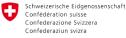




























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