DIGITAL FINANCE

THE CONSUMER EXPERIENCE, 2023

January 2023

CONSUMERS INTERNATIONAL

COMING TOGETHER FOR CHANGE

TABLE OF CONTENTS

List of tables

List of figures

List of boxes

EXECUTIVE SUMMARY

Digital financial services are enabling more consumers to access financial services and are fundamentally changing the way in which consumers engage with financial service providers. This can increase convenience and reduce costs for consumers. However, digitalisation also brings new and heightened risks for consumers. Protecting consumers against risk and making market practices more consumer-centric are imperative in the quest for fair digital finance. For digital finance to be fair, it must be inclusive, safe, data protected and private, and sustainable.

Consumers are often not present in financial sector regulatory decision-making in low and middle-income countries. Nor are their experiences and perceptions directly reflected in reported metrics on consumer protection.

Consumers International's Fair Digital Finance Accelerator ('the Accelerator') brings together consumer associations in low and middle-income countries, builds their capacity to represent the collective consumer voice in fair digital finance, and helps them to build constructive bridges to regulators and financial service providers.

This report develops a fair digital finance index for low and middle-income Accelerator member countries. The index is centred on a baseline survey conducted by the Accelerator, amplified through publicly available datasets. It is set apart from other indices in the financial consumer protection spheres by the breadth of the framework that it covers, as well as the unique consumer outcome vantage point that forms the basis for how the index is compiled. The findings will allow the Accelerator to monitor progress over time and to pinpoint key topics to engage on.

The report findings present a total index score of 40 out of a possible 100. This suggests that financial consumer protection does not pass the test when evaluated from the consumer perspective. The highest scores are achieved in elements which assess digital finance inclusivity elements at 65.2 out of a possible 100 and enabling infrastructure at 53.7 out of a possible 100 and the former driven by indicators on account usage frequency.

Elements that deal with how consumers experience the financial sector have a lower score. Three scores are particularly worrying: the low score of 27.2 out of 100 on status of digital financial services risks indicates a high perception of risk vulnerability (how consumers understand and interpret their exposure to financial risks). This is coupled with a low score of 36.6 out of 100 on consumers' capability to protect themselves against these risks; and a low score of 21.6 out of 100 on the consumer lived experience with digital financial services which indicates remaining user frustrations. Together, these three elements present a market which does not adequately and meaningfully protect consumers.

The index points to an environment where digital financial services risks are rife and many consumer protection needs remain unmet. There are clear gaps in financial consumer protection frameworks – particularly driven by the low levels of customer centricity of financial consumer protection at 37.6 out of 100. Moderate scores of 42.8 out of 100 on the level of engagement between consumers, their advocates, financial service providers and regulators suggest that efforts are being made to improve financial consumer protection frameworks, but this is not yet showing sufficient results.

The results for the fair digital finance ultimate user outcomes pillar of 41.6 out of 100 hold a disconcerting mirror up to the financial community. It suggests that the advances in financial consumer protection frameworks have not yet been translated into improved financial health and sustainability outcomes for consumers – and especially so for vulnerable consumers.

Despite the substantive financial gains on the back of digital financial services, business and regulators alike are not yet doing the right things when viewed through the consumer lens. High incidence of digital financial service risks can undermine the gains of financial inclusion and can erode consumer trust. A concerted effort is needed to build consumer-level and system-level resilience to risk. This requires a principles-based, comprehensive financial consumer protection framework where consumers themselves have a seat around the table. It also calls for inclusive enabling infrastructure and financial services and channels that not only reach but also empower marginalised consumers to actively and effectively use financial services to meet their core financial needs, to improve their financial health and to build sustainability.

1. INTRODUCTION

Digitalisation: changing the game for consumers. The digitalisation of financial services helps individuals around the world to engage with the global economy. Rapid growth in accessible digital financial services has extended the reach and usability of financial services and has fundamentally changed the way in which consumers interact with financial products and services. For example, following the COVID-19 pandemic, 57% of adults in developing economies now make or receive digital payments. This is an increase of 23% from 2014 (World Bank, 2022). Moreover, two-thirds of adults across the globe use digital payments (World Bank, 2022). The benefits that consumers are experiencing from digital financial services include easier access to financial services, more affordability, and an increase in their ability to build livelihoods and cope with financial shocks (Andrianaivo & Kpodar, 2011; Ozili, 2017).

Effective financial consumer protection is required for the delivery of value. With the benefits of digitalisation come new and heightened risks, including the risk of fraud, cybercrime, data breaches, opaque pricing, unfair selling practices, inadequate redress mechanisms, unscrupulous agent conduct and unfair exclusion (CGAP, 2022). Moreover, engagement with financial services can lead to consumer frustrations, notably when network downtime or service interruptions undermine the completion of transactions. Ultimately, these risks and frustrations mean that consumers may not derive optimal value from their financial service usage – or even that their financial service usage may bring them harm. Therefore, to improve customer value and impact in digital financial services, protecting consumers against poor usage outcomes is imperative.

Financial consumer protection refers to the laws, regulations and institutional arrangements that safeguard consumers in the financial marketplace. By building and maintaining consumer confidence and trust, financial consumer protection contributes to the uptake and sustained usage of financial services and, consequently, economic livelihoods (World Bank, 2022).

Bringing the consumer voice into financial consumer protection. Consumer interests are central to financial consumer protection. Yet, in low- and middle-income countries, financial sector regulation typically does not directly incorporate the consumer voice. Reported metrics on consumer protection most often also do not draw on insights directly from the consumer perspective but rely on data reported by financial service providers or regulators. Consumers International, as membership organisation representing more than 200 member associations across more than 100 countries, has built a track record of impactful insights that represent the consumer voice. Its vision for fair digital finance is for it to be inclusive, safe, data protected and private, and sustainable. Fair digital finance, where digital financial services deliver value and foster financial health and resilience among consumers, is key to achieving this vision. Through the launch of the Fair Digital Finance Accelerator, Consumers International has formed a network of consumer associations in low- and middle-income countries to effectively represent the collective consumer voice in topics of fair digital finance, and to build constructive bridges to regulators and financial service providers to shape a digital financial services sector that meets the vision (Consumers International, 2022).

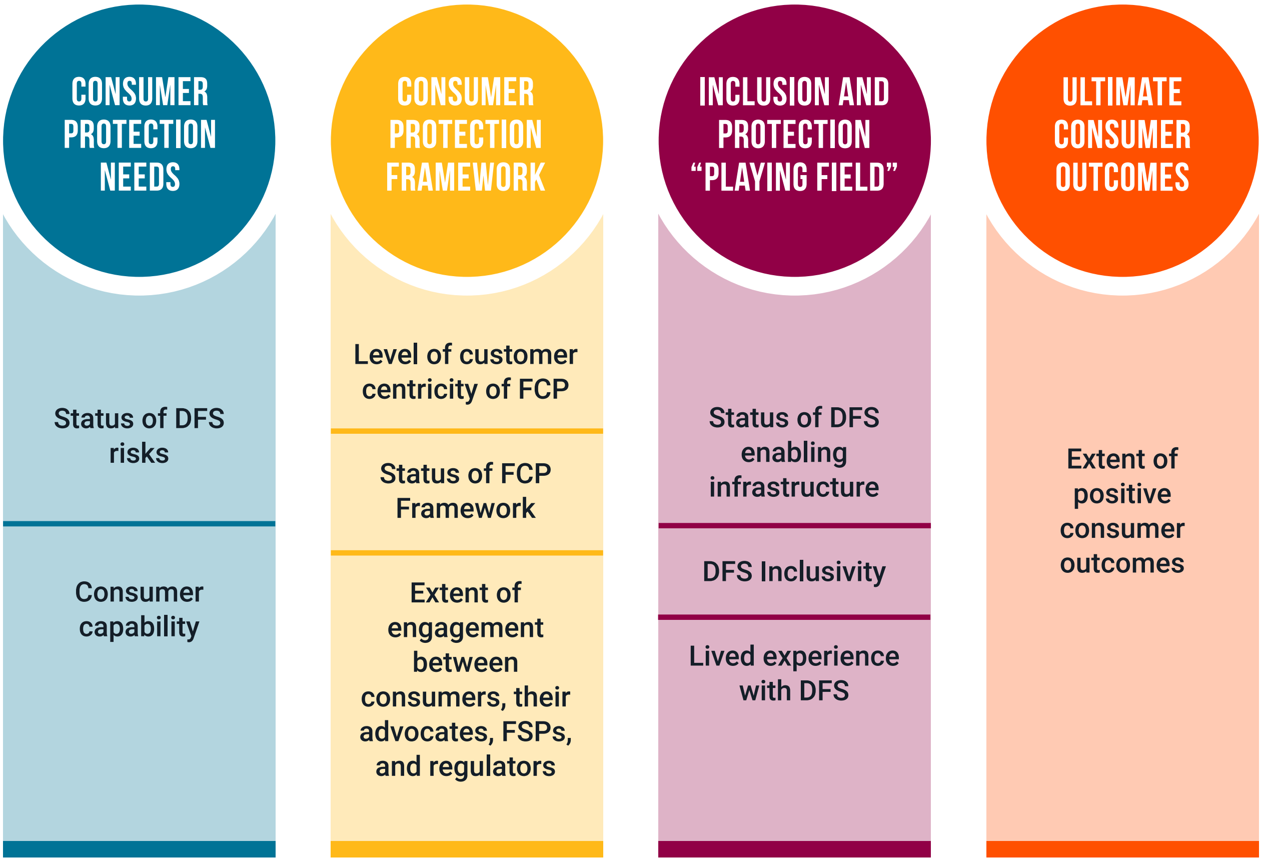
Towards measurement of financial consumer protection from the consumer perspective. This report seeks to summarise the state of financial consumer protection from the consumer perspective and to show cross-country nuance across key elements of financial consumer protection. It does so through a fair digital finance index for the Fair Digital Finance Accelerator members within low and middle-income countries. The index is centred around the baseline survey conducted by the Accelerator, amplified through publicly available datasets. It aims to contribute to Consumers International's global advocacy agenda on fair digital finance and to inform the Accelerator agenda by setting a foundational index to track progress over time and to explore meaningful peer comparisons across countries.

Structure. The next section introduces the pillars of the conceptual framework that serve as the foundation of the fair digital finance index, shows how the framework relates to Consumers International's vision for fair digital finance and sets out the initial expectations on the state of fair digital finance across the pillars. Section 3 then discusses the methodology for calculating the index. Section 4 outlines and discusses the findings from the index and provides case studies from Accelerator member states to highlight learnings and to illustrate the journey in-country for various components of the conceptual framework.

2. PILLARS OF FAIR DIGITAL FINANCE FROM THE CONSUMER PERSPECTIVE

Building blocks: nine elements across four pillars of fair digital finance. Figure 1, below, outlines the conceptual framework that forms the basis for the fair digital finance index. It was developed to encompass elements of interest to the Fair Digital Finance Accelerator and its members, and taking cognisance of the elements and principles of financial consumer protection in the global literature, notably the G20 High-level principles on Financial Consumer Protection[1].

Figure 1: Conceptual Framework: pillars and associated elements



Source: Consumers International

Why these four pillars? Effectively "telling the story" of financial consumer protection to ensure fair digital finance *from the consumer perspective* requires answering four key questions, each comprising a number of angles or elements:

- **Why is there an inherent need for financial consumer protection?** It is imperative that we consider the risks arising in digital financial services to which consumers are vulnerable, and the extent to which consumers are capable and empowered to manage or protect themselves against these risks. The level of consumer financial and digital literacy can provide a proxy for consumer empowerment. In a country with high risks and low financial literacy, there is a clear imperative for financial consumer protection.

[1] These principles include provisions on the role of oversight bodies, equitable and fair treatment of consumers, disclosure and transparency, and consumer data protection and privacy.

- **What frameworks are in place to give effect to this protection need?** All countries have some form of financial consumer protection framework, but how entrenched is financial consumer protection in institutional structures, and does it speak to key elements of the Consumers International fair digital finance vision, such as data protection and sustainability? Apart from considering the completeness of the core financial consumer protection regulatory framework, it is important to specifically consider whether the framework is set up in a consumer-centric way. Is it based on principles formulated for fair-digital-finance outcomes for consumers? Finally, this pillar requires us to consider the extent to which consumers themselves have a voice in financial consumer protection policy and regulation. Is there engagement between consumers, their advocates, financial service providers and regulators in defining the content of financial consumer protection frameworks?

- **How does the protection framework play out in practice?** A framework is only as strong as its implementation. To assess the extent to which the framework is successful in generating fair-digital-finance outcomes, one must form an understanding of the working of the financial services sector for consumers. Is the enabling infrastructure in place to allow for pervasive and affordable access to all? Is the way that digital financial services are taken up and used in practice inclusive, including for marginalised groups? Also importantly, what is the lived experience of consumers with such services? Do they trust that providers act in their best interests and in the safety and security of systems, or are they frustrated by service interruptions or opaque practices?

- **Does it ultimately make a difference to consumers' lives?** The final pillar looks at the effects of financial consumer protection and whether these manifest in fair digital finance results. Specifically, whether financial consumer protection helps people to improve their financial health or withstand financial shocks, and the extent to which environmental impact considerations are taken into account. Even if practices are fair, safe and inclusive, if consumers do not derive benefits that help them to improve their financial health and resilience, the ultimate purpose of financial services for consumers is not met.

Giving effect to the vision. For the index to meaningfully inform the Fair Digital Finance Accelerator agenda, it is crucial that the elements of the conceptual framework contribute to the vision of fair digital finance. Figure 2 shows the various linkages between the fair digital finance vision and the pillars and elements of the conceptual framework:

- **Safe:** Consumers ought to derive the maximum benefit from digital financial services and be confident that their money is secure. It is important that consumers are protected from unsafe, unfair, or unethical practices. Accessible, simple and timely advice is also needed, and when things go wrong, consumers require effective redress systems. The following elements all include components relevant to this part of the vision: the digital financial services risk, the financial consumer protection framework status, financial consumer protection customer centricity, and digital financial service lived experience. For example, the financial consumer protection framework status determines the existence of consumer recourse mechanisms in financial consumer protection regulation, and digital financial services lived experience includes an indicator on the effectiveness of consumer recourse. The risk element speaks to the need to safeguard consumer money.

- **Data protected and private:** The second part of the vision is for digital financial services to equip consumers with real power to control access to, and use of their data. Data protection safeguards should be enforced to effectively protect people from misuse and exploitation. The digital financial services risk element (notably prevalence of fraud, cybercrime and data misuse) also directly feeds into this pillar, as do consumer capability (whether consumers are capable of and confident in controlling their personal data and minimising the risk of being defrauded) and financial consumer protection customer centricity (whether fair consumer outcome principles pertaining to data protection and privacy are entrenched).

- **Inclusive:** For the inclusive vision to be realised, affordable and reliable digital financial services ought to be easily accessible for everyone, including women and consumers who are considered more vulnerable. It also ought to meet consumer needs, promote financial wellbeing, and build financial capability through intuitive and inclusive design that underpins consumer choices. The conceptual framework elements of consumer capability, consumer engagement status, digital financial services enabling infrastructure and digital financial services inclusivity all link to the inclusive vision.

- **Sustainable:** Finally, digital financial services ought to drive climate finance and incorporate environmental impact considerations in all decisions. Additionally, services and products ought to positively impact the long-term financial health of consumers. Again, several elements of the conceptual framework speak to this part of the vision. For example, the digital and financial literacy outcomes under consumer capability determine whether consumers have the necessary financial literacy to make decisions that will benefit their financial health, while digital financial service inclusivity can speak to the extent to which climate-vulnerable groups are included, and consumer outcomes consider resilience to climate change. Sustainability is also a key topic for inter-stakeholder dialogue (consumer engagement status element).

Inclusive:

Everyone, including women and vulnerable consumers, can easily access affordable, reliable digital financial services. Services are designed to meet consumers needs and promote financial wellbeing. Consumer choices are underpinned by intuitive and inclusive design that builds financial capability.

Safe:

Consumers get maximum benefit from digital financial services and are confident that their money is secure. Accessible, simple, timely advice and redress is available when things go wrong.

Data protected and private:

People's identity and rights are respected. Digital financial services genuinely equip people with real power to control access to, and use of, their data. Safeguards and their enforcement protect people effectively from misuse and exploitation.

Sustainable:

Communities have a home to live for and a financial future to save for. Digital financial services drive climate finance and incorporate environmental impact considerations in all decisions. Sustainability impact is communicated to consumers and net zero aligned financial services are the default option offered.

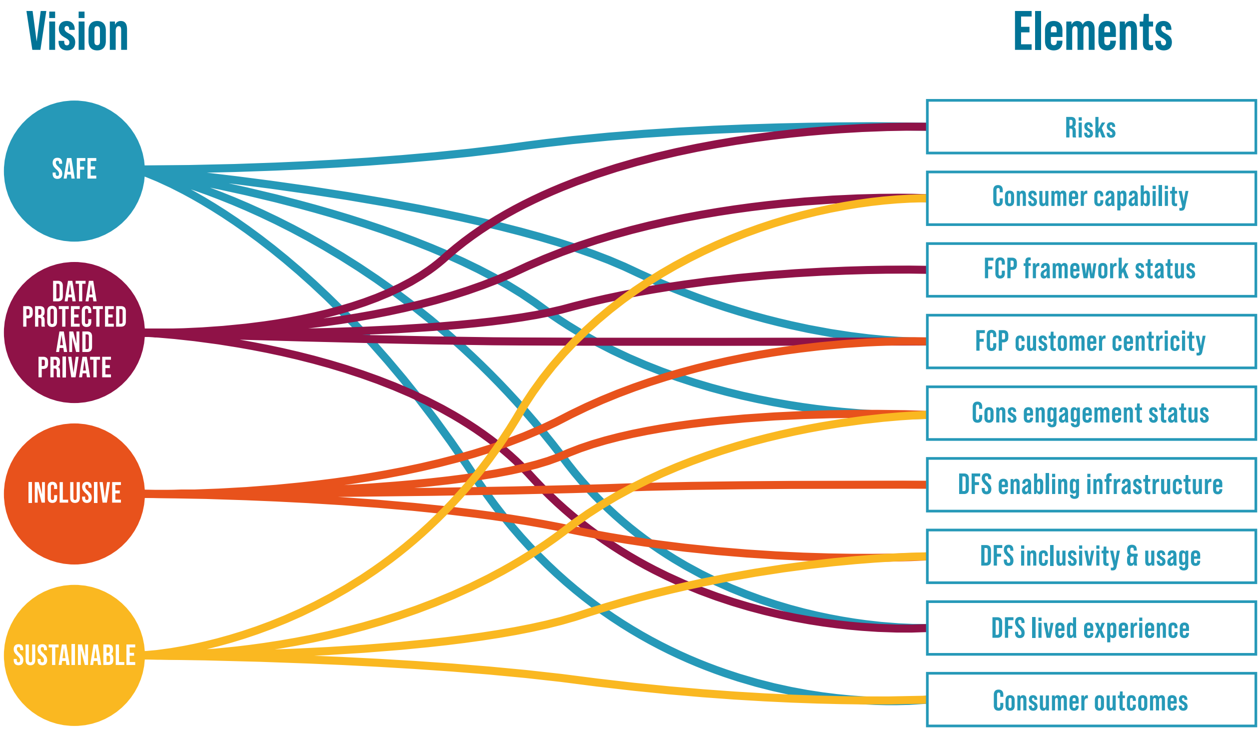


Figure 2: Mapping Consumers International's vision to the conceptual framework elements

Source: Consumers International

3. TOWARDS A FAIR DIGITAL FINANCE INDEX

The fair digital finance index is intended to capture the breadth of the conceptual framework, to allow countries to track their progress per pillar over time and as a basis for meaningful dialogue on financial consumer protection from the consumer perspective. The index developed in the rest of this report shows what can be tracked through current data, which indicators are still aspirational to track in future, and what that means for data gaps to fill in the coming years.

This section sets out the methodology, key indicators and data sources used for compiling the index. See Appendix A for a full list of indicators and associated variables used for each key conceptual element.

OVERVIEW

Drawing on a combination of data sources anchored in the Fair Digital Finance Accelerator baseline survey, a host of data sources were scoped to inform the composition of the index[3]. For the index to be relevant and current, it needs to draw on data with cross-country granularity that is recent enough or is updated frequently enough to be meaningful to track over time. The most comprehensive data source across the various elements of the conceptual framework is the Fair Digital Finance Accelerator baseline survey. In 2022, the Fair Digital Finance Accelerator ran an online survey with member consumer associations. The survey gauged members' views on the state of financial consumer protection in their respective jurisdictions, the key risks or consumer concerns in digital financial services and the extent of engagement of consumer bodies in the local policy dialogue. The findings of the baseline survey form the core of the index. However, as a perception-based survey filled out by consumer associations rather than end-consumers, it does not cover objective or consumer-level data on the financial consumer protection framework or levels of usage or digital financial service infrastructure. Hence, it was amplified with country-level data from the global Findex survey (Demirgüç-Kunt, et al., 2022), the GSMA Mobile Internet Connectivity index (Delaporte & Bahia, 2021) and the GSMA Mobile Money Regulatory index (Chadha, et al., 2021). Where relevant, data was also included from the Global Consumer Protection and Empowerment Survey of 2022 (Consumers International, 2022).

Low- and middle-income-country representation. Given the centrality of the Fair Digital Finance Accelerator baseline survey to the index, the country sample included in the index is also limited to the survey respondents. It comprises 29 low and middle-income countries spread across various geographic regions, as noted in the table below. As such, the findings are indicative of broader low- and middle-income-country trends but are not definitive. Over time, the intention is to grow the country base via broader reach of the survey:

[3] See Appendix B for an overview.

Region	Total lower- and middle-income countries	Fair Digital Finance Accelerator countries	% of low- and middle-income countries in the Fair Digital Finance Accelerator sample
East Asia and Pacific	23	5	21.7%
Europe and Central Asia	20	1	5.0%
Latin America and the Caribbean	25	5	20.0%
Middle East and North Africa	13	3	23.1%
South Asia	8	2	25.0%
Sub-Saharan Africa	47	13	27.7%
Total	**136**	**29**	**21.3%**

Table 1: Country sample overview

Source: Fair Digital Finance Accelerator baseline survey, plus World Bank, n.d for the regional classification and total

Where relevant, the discussion will refer to key themes or observations on the pillar topic from the broader literature when discussing the findings. However, the index itself is a compilation of data sources across the baseline countries; hence it should be interpreted in this context.

SCOPE

Nested structure: pillars, elements, indicators and variables. The four elements of the conceptual framework as outlined in Section 2 form the core scope for the index. Each pillar comprises one or more elements which, in turn, are calculated across one or more indicators, each of which draws on sub-indicators and variables from different data sources. This sub-section provides an overview of the main indicators used for each element across the pillars. Appendix A provides a full overview of the indicators and data variables used for each element.

FAIR DIGITAL FINANCE PROTECTION NEEDS

The first pillar comprises two elements, each consisting of a number of indicators:

- **Element 1 – digital financial services risks:** Conceptually, this element consists of five indicators that represent key digital financial services risks that affect consumers in low- and middle-income countries: fraud, data misuse, inadequate redress mechanisms, institutional and agent-related risks and network downtime. These indicators were adapted from the CGAP (2022) digital financial services risks typology (see Box 1 below for an overview), as well as consideration of the top risks flagged in the Accelerator baseline survey and available data variables across the various sources scoped[4]. Except one indicator on fraud claims incidence, all indicators derive from the Accelerator baseline survey.

Synopsis: Digital financial services risks element

The Fair Digital Finance Accelerator baseline survey provides a comprehensive base for this component. However, as the focus of the baseline survey is intentionally on consumer associations, there is a need to complement it with data that tracks risk incidence at the end-consumer level.

[4] The data scoping exercise revealed that the available data variable on inadequate redress mechanisms overlapped with Element 8: Lived experience. Given the centrality of this indicator to assessing the lived experience of consumers with digital financial services, the decision was made to include it in Element 8 rather than Element 1, due to it being a key measure of whether financial consumer protection is in fact playing an active role in consumers' financial lives. Furthermore, no suitable data variable with cross-country granularity was found for the indicator on network downtime. Hence, this indicator is noted as an aspirational indicator for the future, but it is not included in the current version of the fair digital finance index.

Box 1: Main consumer protection risks in digital financial services

A 2022 publication by the Consultative Group to Assist the Poor (CGAP) identifies 66 risks that consumers face when using digital financial services, classified into four broad risk types and two cross-cutting risk types (Chalwe-Mulenga, et al., 2022):

- **Fraud risks** relate to deceptive malicious activities – such as cybercrime, identity fraud, social engineering, SIM swap fraud, hoaxes and scams – which result in financial loss for consumers. These risks put consumers' financial health at risk and deteriorate trust in financial services. Most new risks emerging in recent years have been related to fraud.

- **Data misuse risks** arise from the unauthorised use of customer data and information for purposes other than that for which it is intended. This can manifest in a number of different ways (including algorithmic bias, unfair sales and marketing practices, privacy intrusions and breaches of personal data – all leading to consumers being afraid to share information even in secure environments), which in turn can prevent the efficient and suitable provision of financial services.

- **Lack of transparency risks** result when the terms, conditions, fees and features of a financial service or product are not communicated to, and understood by, the consumer. Examples of lack of transparency risk are hidden charges, misleading advertisements and complex or confusing interfaces or languages. Where transparency is lacking, consumers do not make decisions in their best interest, and undisclosed financial risk can be easily passed onto them, which results in over-indebtedness and exploitation of vulnerable groups.

- **Inadequate redress risks** arise where there aren't sufficient, accessible and effective channels for consumer complaints. This would mean that there is no feedback loop from consumers to providers to better tailor the provision of services and products and that consumers are not able to hold providers accountable for their actions.

There are also two risk categories that manifest across all of the above categories:

- **Agent-related risks** refer to issues stemming from the interaction between a consumer and the designated agent of a service provider, such as manipulation or unfair treatment of customers, insufficient liquidity and prevailing gender norms that affect customer outcomes.

- **Network downtime risks**, which relate to technological failures that prevent consumers from being able to effectively use products and services, such as power outages, failed transactions, inadequate infrastructure and distributed denial of service attacks.

These cross-cutting risks can exacerbate the other risk types and can undermine the delivery of digital financial services.

These risks align well with the top risks flagged in the Fair Digital Finance Accelerator baseline survey, namely safety, data privacy, redress, protection of disadvantaged groups and lack of digital literacy.

Source: CGAP (Chalwe-Mulenga, et al., 2022)

- **Element 2 – digital financial services consumer capability:** Two indicators make up the second element: digital and financial literacy outcomes, and the presence of digital and financial literacy programmes. One of the central keys to maximising the benefits of digital financial services and increasing uptake is the ability of consumers to use them safely and responsibly; hence, it was important to include an element that tests consumers' capability. These indicators were largely collected from the global Findex survey and the World Bank Global Financial Inclusion and Consumer Protection Survey. One data proxy was collected from the Accelerator baseline survey.

Synopsis: Digital financial services consumer capability element

The absence of specific data on consumer digital literacy and financial literacy means that this has to be proxied by outcomes at the consumer level as well as the prevalence of financial educational programmes.

FINANCIAL CONSUMER PROTECTION FRAMEWORK STATUS

The second pillar consists of several indicators, which together give an indication of the completeness and status of the financial consumer protection framework in the sample countries:

- **Element 3 – financial consumer protection framework status:** This element consists of 10 indicators on the presence and strength of various components that make up a financial consumer protection framework, namely: a financial-services-specific consumer protection law; independent recourse mechanisms and entrenched complaints systems; disclosure and transparency requirements; the presence of inter-regulator coordination on financial consumer protection; the existence of a cybersecurity framework; the existence of a data protection framework; perceived strength of the financial consumer protection framework; and perceived strength of supervision and enforcement. The indicators were collected from a variety of data sources, ranging from the World Bank, the Accelerator baseline survey and Consumers International's Global Consumer Protection and Empowerment surveys, to the International Telecommunication Union's (ITU) global cybersecurity index.

  "Whether there is an explicit market conduct mandate for financial service providers" is noted as an aspirational indicator, since the data source that tracks this variable is currently not publicly available[5]. Two other indicators were categorised as aspirational indicators, namely inter-regulator coordination on financial consumer protection and whether sustainability criteria are incorporated in the financial consumer protection framework. Although the various data sources that the authors scoped did not render any variables with cross-country data available for these two indicators, these indicators play a key role in assessing the rigour of the consumer protection ecosystem and in ensuring that sustainability becomes a priority area in financial services going forward. In future years, it would be worth considering how the aspirational variables could be included in the Accelerator survey or, alternatively, how they could be populated through desktop research for the core set of countries tracked.

Synopsis: Financial consumer protection framework status

A range of indicators – with the majority accurately captured by the available data variables. Three indicators are noted as aspirational, due to data gaps.

[5] This indicator is available in the AFI Consumer protection for DFS policy landscape survey, but the country-level data underlying the AFI publication is not publicly available.

- **Element 4 – financial consumer protection customer centricity:** Fair consumer practices enacted is the only indicator under this element. The implementation of Treating Customers Fairly frameworks ensures an efficient and effective market, thereby helping consumers achieve a fair deal and keeping consumers at the centre of financial consumer protection. The authors did not find any cross-country database on which countries have implemented a Treating Customers Fairly framework. Thus, this was defined as an aspirational indicator. Data proxies on market conduct safeguards from the World Bank global financial inclusion and consumer protection survey were used instead. These proxies look at the prevalence of market conduct provisions that restrict conduct such as unfair practices and practices that limit customer mobility. It also looks at the existence of minimum standards for debt collection practices.

Synopsis: Level of customer centricity of financial consumer protection framework

Data proxies on the existence of market conduct safeguards are used due to the lack of a cross-country database on countries that have Treating Customers Fairly frameworks. Future data gathering would be required.

- **Element 5 – engagement of consumers, their advocates, financial service providers and regulators in financial consumer protection:** Traditionally, the dialogue on financial consumer protection has been between financial service providers and regulators. However, it is vital that consumers' concerns and perspectives be included within the dialogue so that consumer protection regulation is fit for purpose and effective in meeting consumers' needs. Thus, this element consists of three indicators to gauge the extent to which the financial services market and policy dialogue incorporates consumer representation:
  - The extent of consumer engagement within the broader economy
  - The extent and quality of consumer engagement within financial services policy
  - Consumer body specialised knowledge of the digital financial services marketplace.

  Data variables for these indicators were largely collected from the Accelerator baseline survey and as well as Consumers International's Consumer Protection and Empowerment index.

Synopsis: Engagement status of consumers with key stakeholders

A range of indicators, accurately captured by the available data variables.

FAIR DIGITAL FINANCE PLAYING FIELD

The third pillar consists of three elements, each spanning a range of indicators:

- **Element 6 – digital financial services enabling infrastructure:** Uptake and usage of digital financial services cannot be realised without the necessary infrastructure. This element and its indicators test the presence and quality of the infrastructure that enables increased usage of digital financial services in a jurisdiction. The element consists of six indicators, namely:
  - Level of connectivity: network reach
  - Accessibility of digital payment systems
  - Financial service provider footprint
  - Mobile phone penetration
  - Cellular/internet data affordability
  - Network connectivity: reliability

The primary data sources are Findex, GSMA Intelligence and the Accelerator baseline survey.

Synopsis: Digital financial services enabling infrastructure

All indicators are well captured by the data variables included.

- **Element 7 – digital financial service inclusiveness:** Inclusion is a key component of Consumers International's vision for fair digital finance. Fair digital finance cannot be realised if certain population groups are excluded or unable to share in its benefits. Thus, this element covers one main indicator – inclusiveness of digital financial services for vulnerable groups – which assesses the degree of accessibility of digital financial services to all population groups. Primary sources used for this element include the Accelerator baseline survey and Findex. There is a further need for disaggregated, country-level data across a large-enough sample of countries on these key marginalised groups – not only related to access and usage of digital financial services, but also the quality of usage. There is also insufficient country-level data to assess how well products are tailored to the needs of various vulnerable groups (including women, people with disabilities, young consumers, refugees, the elderly and unemployed consumers) and the degree to which usage is impactful, ultimately improving livelihoods.

Synopsis: Digital financial services inclusivity

There is sufficient data to pronounce on this indicator, but there are gaps for specific vulnerable groups.

This indicates a future data gathering need.

- **Element 8 – digital financial services lived experience:** Although entrenching digital financial services across global jurisdictions is important (particularly in an increasingly digitalised global economy), how consumers experience their engagement with digital financial services determines the extent to which digital finance serves consumer interests. This element consists of six indicators:
  - Extent of digital financial service usage (as opposed to just uptake)
  - Extent of engagement with digital channels
  - Common user frustrations and perceptions
  - Reported level of trust in financial service providers
  - Effectiveness of consumer recourse
  - Reported statistics on consumer complaints.

  Data limitations mean that it is not possible to score the common frustration indicator into the index, but insights from this variable will allow us to provide some context to a given country in terms of consumer protection challenges. Moreover, no cross-country data is available on reported statistics on consumer complaints. This is classified as an aspirational indicator. The primary data sources used for this element are Findex and the Accelerator baseline survey.

Synopsis: Consumer lived experience with digital financial services

Findex allows one to paint a picture on actual level of engagement with digital financial services versus just ticking the box on having an account, as an indicator of lived experience. The Accelerator baseline survey adds perception data on trust and user frustrations. Reported statistics on complaints is an aspirational variable.

FAIR DIGITAL FINANCE USER OUTCOMES

The fourth pillar consists of one element, as described here:

- **Element 9 – digital financial services outcomes:** This element consists of three indicators, two of which remain aspirational indicators due to absence of cross-country data: Treating Customers Fairly outcome indicator, financial health and wellbeing; and whether digital financial services support sustainability. The indicators seek to assess whether digital financial services are providing value and fairness to consumers and whether these are contributing to sustainability and consumer resilience. The Treating Customers Fairly outcome indicator is an aspirational indicator, since there was insufficient cross-country data on Treating Customers Fairly outcomes or close proxies. Consumer-level data on the ability to access and leverage digital financial services solutions for resilience in the face of climate induced shocks (such as proportion of adults covered by disaster risk insurance, countries with macro disaster cover in place, or pervasiveness of "green" retail financial service offerings) is also an aspirational indicator. Data sources used for this element are the Accelerator baseline survey and Findex.

Synopsis: Extent of positive consumer protection outcomes

Consumer financial health is well proxied by Findex, but robust measures on climate change resilience are nascent, and no cross-country database in this regard could be found yet.

Box 2: Sustainability indicators as defined by the Alliance for Financial Inclusion (AFI)

In 2022, AFI released a Measuring Inclusive Green Finance report. The report identifies AFI members' priorities pertaining to regulatory reporting of green finance. It also identifies potential indicators that may be used to include green finance within countries' National Financial Inclusion Strategies (AFI, 2022). These indicators include the presence of Central Bank climate refinancing facilities (under the survey's International Green Financing funding theme), whether financial institutions identify, measure, and report on exposure to sectors which are vulnerable to climate risks (under the International Green Financing climate risk management theme), and the presence of financing of climate change mitigation projects (under International Green Financing supply-side products theme) (AFI, 2022).

INDEX CALCULATION METHODOLOGY

The methodology followed for compiling the fair digital finance index follows established best-practice index calculation methodologies. The indices scoped for best-practice methodologies include the GSMA's regulatory and connectivity indices, the financial consumer protection Outcome Index for Kenya published by FSDK, as well as the Consumer International Consumer Protection and Empowerment Index, which drew on the OECD's Handbook for the Construction of Composite Indicators.

Index scoring methodology. As explained above, the index draws on four pillar-based scores, each broken down into its component parts: Protection needs, Protection framework, Inclusion and protection "playing field" and Ultimate user outcomes. While the pillar-level scores are aggregated to a single global index score, interpretation of the results and insights are extracted and described at the indicator, pillar and element level. Presenting the findings in this way allows for a granular picture of the processes involved in ensuring good financial consumer protection outcomes. It allows nuance on each underlying element to be described, as relevant in the context of a particular pillar. The approach to the construction of each indicator, element and pillar is outlined below.

Note on data availability. Some of the variables are only updated every few years (or sometimes longer) – particularly if the variable is not expected to significantly vary year to year and if collecting the data is particularly complex. This applies to all variables used from Findex, which is current for 2022, but will not be renewed in the next three years, and the World Bank Financial Inclusion and Consumer Protection survey. For the latter, the data dates to 2017, and therefore some financial consumer protection framework updates may not be reflected in the index. In future years, a desktop check of regulatory updates in the sample countries will be conducted.

Methodology for dealing with missing data. To ensure that the included variables are as complete as possible, the index leverages proxy data where available. For variables drawn from time-series-related data sources, where data may be missing for a country in its most recent addition, the most recent data available is used as a proxy. This was primarily done for variables drawn from Findex, where several low- and middle-income countries were excluded from the 2022 edition[6]. If data for a given country is missing at the variable level, the indicator is calculated without this value – such that the weight for this variable is equal to zero[7]. However, if a given indicator could not be calculated due to missing data for all variables that make up that indicator, the score would be imputed and replaced by the minimum value for that indicator.

Variable exclusion cut-off. To ensure the integrity of the index after accounting for missing data through proxies or weighting, a threshold was applied whereby each variable included in the index has data on at least two-thirds of countries overall. This ensures that a significant proportion of data for each variable is based on actual data and that the indicator largely comprises data and not missing values. The result is that not all the data variables initially scoped (as reflected in Appendix A) were included in the final calculated index. Overall, the index made use of 86 variables out of the initial list of 104 variables. The overall makeup of the number of variables per element is captured below:

[6] 2017 Findex data was used for The Gambia, Mexico and Chad and 2014 data for Sudan and Yemen.

[7] The caveat of this approach is that, where indicators make use of a limited number of variables and one or more variable is missing, the score(s) drawn on may not be a true reflection of the overall indicator, but rather just of one variable.

Element	Overall	Variables dropped	Variables included
1. Status of digital financial service risks	15	1	14
2. Consumer capability	9	4	5
3. Status of financial consumer protection framework	16	0	16
4. Level of customer centricity of financial consumer protection	4	0	4
5. Extent of engagement between consumers, their advocates, financial service providers and regulators	12	5	7
6. Status of digital financial service enabling infrastructure	21	4	17
7. Digital financial service inclusivity	8	1	7
8. Lived experience with digital financial services	13	3	10
9. Extent of positive consumer outcomes	6	0	6
Overall	**104**	**18**	**85**

Table 2: Number of data variables per element
Source: Fair Digital Finance Accelerator Baseline survey

Element, pillar and indicator weighting. To aggregate indicators into element scores (and element scores to pillar scores and pillar scores to an overall index score), it is necessary to assign a weight to each component of the index. In constructing the weights at the element, pillar and overall index level, these are calculated in a uniform manner. At the indicator level, in circumstances where a single indicator combines data sources that are completely comprised of variables based on perception (from the Accelerator baseline survey), half-weights are assigned for each of the relevant indicators in aggregating scores to the element level.

Normalisation. To meaningfully aggregate up different types of data, it is necessary to apply a standard scoring system to all data sources. To adjust for different units of measurement and different ranges of variation across the indicators, the minimum-maximum approach is leveraged, which transforms all indicators so that they lie within a range between 0 and 100 using the following formula:

$$I_{q,c} = \frac{x_{q,c} - min_c(x_q)}{max_c(x_q) - min_c(x_q)}$$

Where 'I' is the normalised min-max value, 'x' represents the actual value and the subscripts 'q' and 'c' represent the variable and country respectively.

The minimum-maximum approach is selected over alternative approaches such as rankings and categorical scales, since it maintains interval-level information. For example, in the case of ranking usage of financial accounts, Country A might have a 75% usage rate, Country B might have a 70% usage rate, and Country C might have a 60% usage rate. These countries would therefore be ranked in order as 1, 2 and 3 respectively (or they may all be categorised as having the highest score on an ordinal scale). However, this ranking does not consider the differences between countries – specifically the fact that B is much closer to A than it is to C.

Where the data used takes the form of a categorical measure, these variables are ranked and assigned a numerical value between 0 and 100 based on their relative ranking. For example, in the Accelerator baseline survey, where consumer bodies are asked to rank the severity of a given issue as to whether it is “a challenge”, “somewhat of a challenge” or “not a challenge”, depending on the choice of the respondent, these would be assigned scores of 0, 50 and 100 respectively. This is exclusively the case for variables drawn from the Accelerator baseline survey. For variables that are already normalised prior to aggregation, no additional transformation is applied. For example, access to financial accounts (% of adults) is already normalised, with the minimum possible value being 0% and the maximum value being 100%.

Aggregation. Once weights have been assigned to the indicators, elements and pillars, they need to be aggregated to produce the relevant overall scores. This aggregation is conducted via the arithmetic mean drawing on the weighting approach outlined above.

Converting scores to measure positive outcomes. To ensure all scores can be consistently interpreted, all variables are converted to positive values before they are normalised and aggregated. This means that, where variables measure a negative event, such as in the case of a gender gap or the prevalence of a risk, they are inverted to instead measure the absence of the negative event. Where a positive event is measured, scores are left as they are. Doing so ensures that, across all variables, higher scores are better.

Country clusters. The report presents the results for sets of country clusters rather at an individual country score level. This allows for meaningful peer comparison without pronouncing judgement on any particular country, given the need to interpret the findings of the index in the country context. For the purpose of the index, three clusters were defined:

- **Advanced – score above 66.67 on the overall index.** Advanced countries perform well on several pillars and elements and are typically characterised by more developed financial consumer protection frameworks and better consumer outcomes.

- **Transitioner – score above 33.33.** Transitioner countries are marked by intermediate performance on the various pillars and elements but still require improvement in areas such as user outcomes and protection needs.

- **Emerging – score below 33.32.** Emerging countries have significant room for improvement across the board.

Table 3 below shows how the sample countries are spread across the three clusters. Over three-quarters of Accelerator countries are in the advanced (11) and transitioners (12) cluster. Four of the 11 advanced countries are in Latin America and the Caribbean. More than half of transitioner countries are in Sub-Saharan Africa. Emerging countries, which are situated in the Middle East and Africa, make up less than a quarter of the surveyed countries.

Clusters	East Asia and Pacific	Europe and Central Asia	Latin America and the Caribbean	Middle East and North Africa	South Asia	Sub-Saharan Africa	Total
Advanced	Malaysia, Fiji	Russia	Brazil, Costa Rica, Ecuador	Morocco, Algeria	Bangladesh, India	Kenya	11
Transitioner	Indonesia, Myanmar, Philippines		Mexico, Nicaragua	Sudan, Yemen		Rwanda, Senegal, Zimbabwe, Nigeria, Côte d'Ivoire, Chad, Cabo Verde	12
Emerging						Mali, Niger, Gambia, Benin	6
Total	**5**	**1**	**5**	**4**	**2**	**12**	**29**

Table 3: Breakdown by country clusters
Source: Fair Digital Finance Index, based on countries included in the Fair Digital Finance Accelerator baseline survey

Interpretation in context. It is important to interpret the cluster findings within the context of the sample. Thus, "advanced" countries are advanced relative to the low- and middle-income countries included in the sample, rather than in absolute terms. Likewise, each pillar should be interpreted in the context of the indicators and variables in that pillar. This means that cross-pillar comparisons are less meaningful than within-pillar comparisons across clusters or changes over time.

4. FINDINGS

OVERVIEW

Index pointing out gaps in financial consumer protection from the consumer point of view. Figure 3 outlines the scores for the overall index as well as each of the pillars and pillar elements. The total index score of 40 out of a possible 100 suggests there is still much room for improvement in financial consumer protection when it is viewed through a consumer lens. The total score masks some variation across the pillars: the highest scores are achieved in the enabling infrastructure (as proxy for access) and inclusivity elements, the latter driven by indicators on account usage frequency. Elements that deal with how consumers experience the financial sector, score more poorly. Notably, the low score on status of digital financial services risks indicates a high perception of risk vulnerability, with low consumer capability to protect themselves against these risks, while the low score on lived experience with digital financial services shows remaining user frustrations. This represents a fair digital finance market failure.

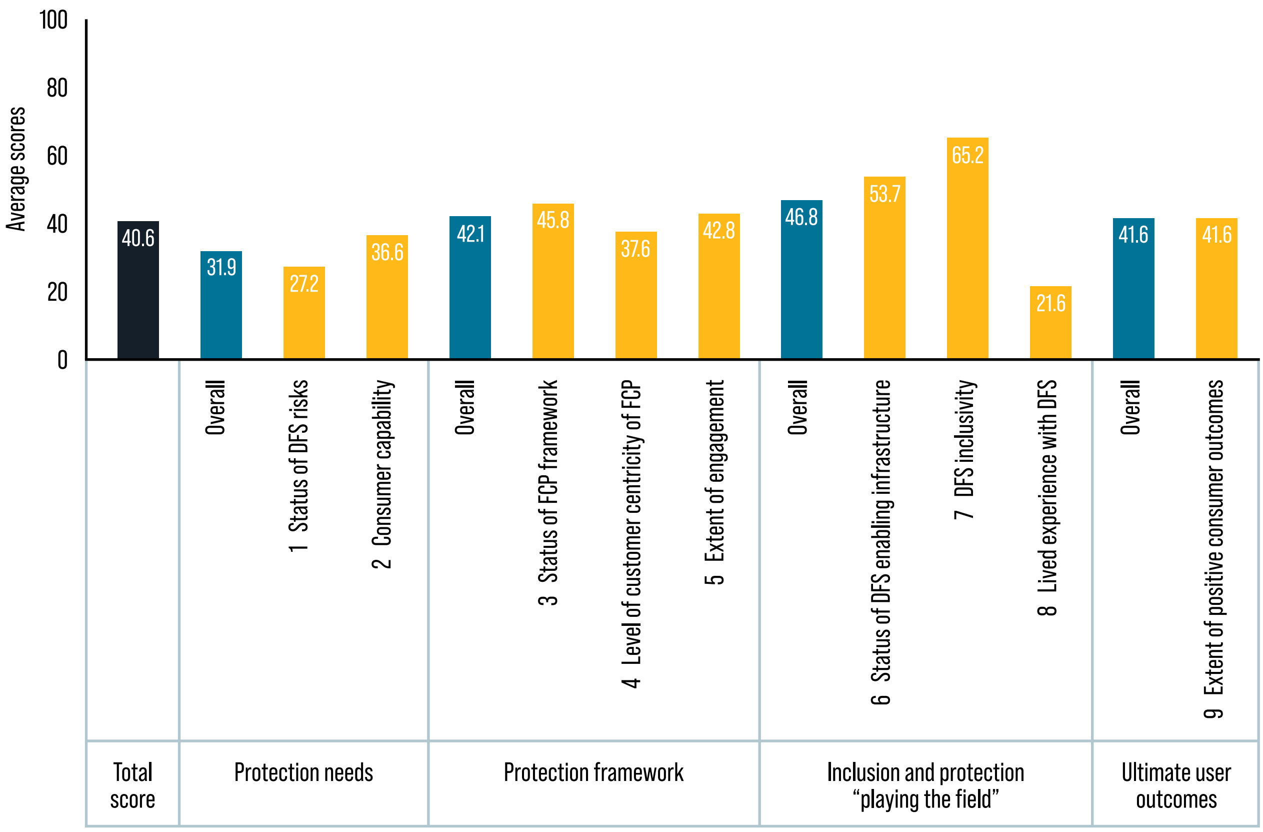


Figure 3: Average index scores across elements and pillars

Source: Fair Digital Finance Index calculation, drawing on (Consumers International , 2022; World Bank, 2017; Demirgüç-Kunt, et al., 2022; AFI, 2019; ITU, 2021; Delaporte & Bahia, 2021; IMF, 2022; Speedtest Intelligence, 2022; Tarifica, n.d.; CGAP, 2022)

Variation across country clusters. Figure 4 shows the difference in the scores of the clusters across the pillars. The relative size of the spread differs between the pillars:

- For the **financial consumer protection needs** pillar, low scores are evident across all country clusters, which suggests that consumer protection needs remain unmet across the board. This is driven by a high sense of digital finance risk among survey respondents, particularly in emerging cluster countries.
- In the **financial consumer protection framework** pillar, there is a clear progression in the development and robustness of frameworks across the country pillars.
- Driven by the uptake in mobile money across low- and middle-income countries, the **inclusion and protection playing field** pillar is characterised by relatively limited variation between clusters, with all clusters performing well near the mean overall score.
- There is a clear gap in terms of the **ultimate consumer outcomes** pillar, with the countries in the Emerging cluster performing disproportionately worse than their counterparts in the other two clusters.

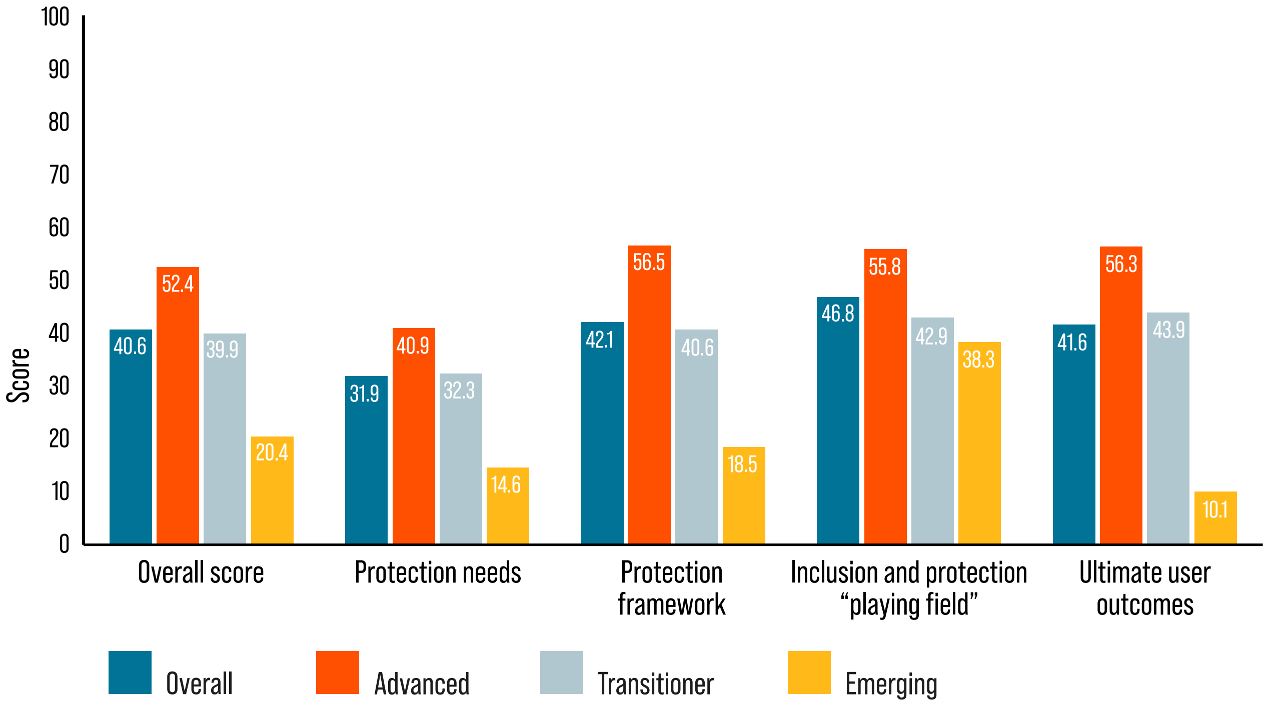


Figure 4: Overview of the scores across clusters per financial consumer protection pillar

Source: Fair Digital Finance Index calculation, drawing on (Consumers International , 2022; World Bank, 2017; Demirgüç-Kunt, et al., 2022; AFI, 2019; ITU, 2021; Delaporte & Bahia, 2021; IMF, 2022; Speedtest Intelligence, 2022; Tarifica, n.d.; CGAP, 2022)

Particular pain points for the emerging cluster. It is also relevant to form an aggregate picture across pillars per cluster:

- For the **emerging cluster**, the playing field score drives up the overall score, but protection needs (high risk and low capability), gaps in the protection framework, and poor ultimate user outcomes (gauged in terms of financial health) underline the vulnerability of consumers in these countries.
- For the **transitioner and advanced clusters**, the picture looks more uniform, with a slightly lower score in protection needs than for the other pillars.

Need for a more nuanced per-pillar view. Each pillar is a function of the indicator and elements that make up that pillar. This means that caution should be taken when comparing total scores across pillars. Rather, it is meaningful to explore the underlying elements and indicators for each pillar to understand what drives the scores and to consider cross-cluster differences for each pillar.

FAIR DIGITAL FINANCE PROTECTION NEEDS

Figure 5 indicates the scores across clusters for the protection needs pillar and its two component elements:

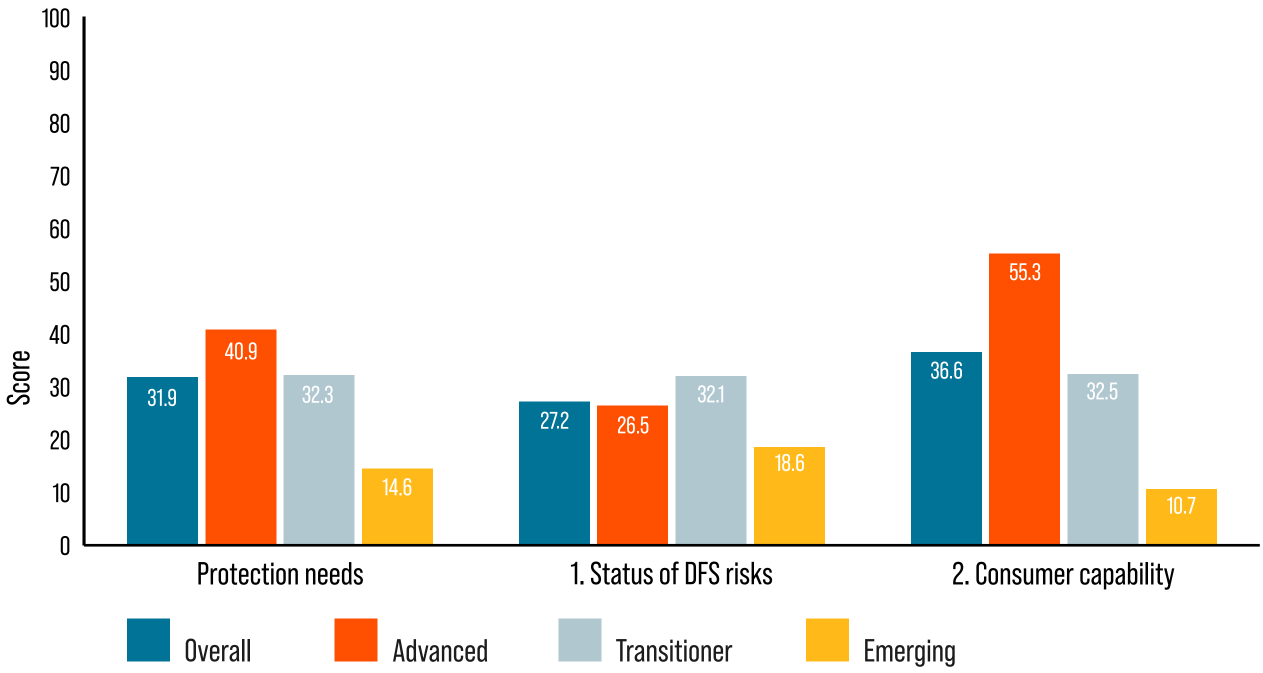


Figure 5: Protection needs total and element scores across clusters
Source: Fair Digital Finance Index calculation, drawing on (Consumers International , 2022; World Bank, 2017; Demirgüç-Kunt, et al., 2022)

Strong concerns around digital financial services risks across all country clusters. The overall score for the protection needs pillar is strongly influenced by the low cross-cluster scores for the status of digital financial service risks element – which is indicative of a *high perceived risk prevalence* among survey respondents. This element is exclusively made up of indicators from the Accelerator baseline survey. The key risks at the forefront of consumers' minds are related to fraud and sensitive data capture by providers.

Box 3: Indonesia case study: bringing an understanding of digital financial services risks to bear

The Republic of Indonesia has the world's fourth-largest population and 10th-largest economy by purchasing power parity (World Bank, 2022), spread across an archipelago of 16,056 verified islands (Cabinet Secretariat of the Republic of Indonesia, 2017).

The population is characterised by socio-economic, geographic, and technological capability gaps across consumers of different age, income and education brackets. It also has significant inequalities between rural and urban areas. Considering the remote nature of many inhabitants, inclusive and safe digital financial services are imperative for ensuring widespread financial inclusion benefit. However, financial consumer protection, particularly in digital financial services, has not been a standalone policy focus area to date (Stakeholder Interviews, 2022).

The rise of digital financial service consumer risks involving fraud, cybersecurity risks as well as a lack of full disclosure underline the need for closer attention to financial consumer protection in digital financial services. Consumers have limited digital and financial literacy, which leaves them unable to effectively manage their own financial data and affairs and vulnerable to unscrupulous conduct by digital financial service providers. This is further exacerbated by the gaps and inequalities among vulnerable communities such as the elderly (Stakeholder Interviews, 2022).

Consumer associations, like Fair Digital Finance Accelerator member the Yogyakarta Consumers Institute, have sought to advocate for consumers' perspectives in financial consumer protection regulation, to ensure consumers are protected, as well as fully aware of their consumer rights. The association focuses on establishing strong links with other consumer groups, influencing policy at the local level, settling consumer disputes and empowering consumers through education. At a national level, the Indonesian Financial Services Authority (OJK) has demonstrated its openness to consultation by allowing consumer associations to engage with them directly in the nation's capital and holding hearings on consumer complaints. However, some gaps remain. Little coordination exists between the OJK and other regulatory bodies, and the regulator follows a reactive approach when issuing financial consumer protection regulations (Stakeholder Interviews, 2022).

The OJK recently issued regulations on Consumer and public Protection in the Financial Services Sector (OJK 6/2022) which emphasise fair treatment, information disclosure, and data protection (Cabinet Secretariat of the Republic of Indonesia, 2022; Nasoetion & Atyanto, 2022). Time will tell whether these regulations will reduce digital financial services risks and lead to improved outcomes for Indonesian consumers.

Clear differences in consumer capabilities across clusters. The large gap between the emerging countries and advanced countries can be explained by the significantly lower digital and financial literacy outcomes as well as the lack of presence of digital and financial literacy programmes among emerging countries. For the former, the emerging and transitioner country clusters perform poorly in quantitative measures, notably the percentage of consumers that can use an account at a bank or financial institution without help if opened, as well as by qualitative measures – where the consumer bodies were asked to rank whether education was seen to be a challenge for consumers to use digital financial services. The emerging cluster scores for the consumer capability element are further undermined by the absence of digital and financial literacy programmes, with a number of these countries lacking institutional arrangements and coordination structures to promote and coordinate financial education. This points to a need for product design that is suitable for less financially or digitally literate consumers, with easier-to-understand terms and conditions.

FINANCIAL CONSUMER PROTECTION FRAMEWORK STATUS

Figure 6 shows the component elements that make up the protection framework pillar and how the scores vary across clusters:

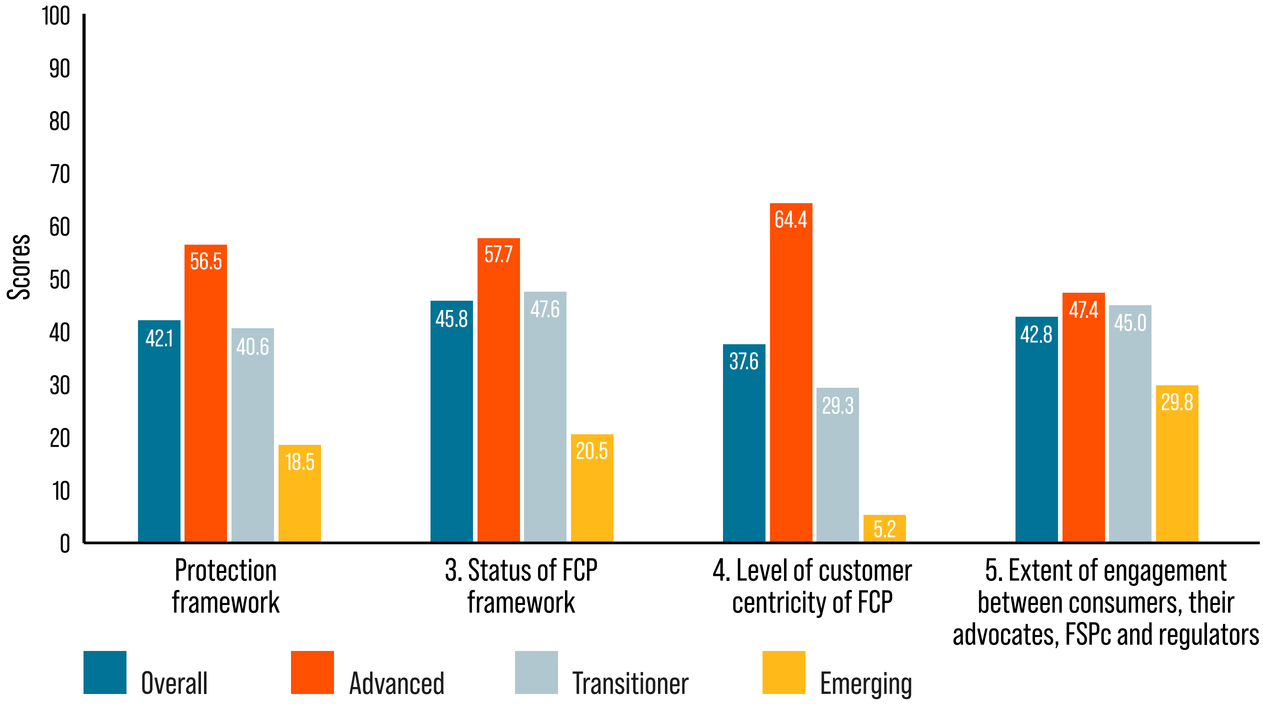


Figure 6: Protection Framework total and element scores across cluster

Source: Fair Digital Finance index calculation, drawing on (World Bank, 2017; Consumers International , 2022; AFI, 2019; ITU, 2021; Consumers International, 2022)

Emerging cluster: lagging on financial consumer protection framework development. The key indicators that drive the high scores of the advanced and transitioner clusters (as depicted in Figure 6) include the presence of independent recourse mechanisms and entrenched complaints systems. These countries also tend to have cybersecurity frameworks in place, which are key to navigating the rapid developments and risks associated with digital financial services, and they score higher in terms of supervision and enforcement strength than emerging countries. Moreover, emerging country scores are compromised by the absence of independent recourse mechanisms and entrenched complaints systems, which are key to ensuring that when an issue arises the customer has a clear, accessible avenue through which to raise the issue with the provider.

Box 4: Insights from the broader literature

AFI's survey on Consumer Protection in Digital Financial Services asked member regulatory institutions about the governance models they employed for consumer protection. The report found that 53% of respondents had a unit/department within the financial sector regulator or a dedicated market conduct unit which provided the majority of oversight in consumer protection for digital financial services (AFI, 2021).

According to the report, 79% of financial regulators viewed low awareness and sensitisation on digital financial services as a top-five concern. The survey results indicated that approximately 37% of respondents had implemented digital financial literacy policies or interventions (AFI, 2021).

The survey report also obtained insights on the prevalence of market conduct provisions across jurisdictions. It found that half of respondents asked digital financial service providers to include non-discriminatory principles in their business practices, such as avoiding the use of procedures or systems that make decisions based on gender, race, or geographical location, among others. Moreover, a third of respondents are reported to have established and enforced industry codes of conduct for fair treatment of consumers (AFI, 2021).

Evident gaps in the consumer centricity of financial consumer protection between advanced countries and the rest. As highlighted in Figure 6, advanced countries tend to perform disproportionately better in terms of the level of centricity of financial consumer protection, and the score is particularly low for the emerging cluster. The scores for this element are driven by the prevalence of fair consumer practices enacted, including the presence of provisions to prohibit and restrict unfair practices. Among other things, this includes using, in a consumer agreement, any term or condition that is unfair, excessively unbalanced or abusive, or bundling and tying services and products in a manner that unduly restricts the choice of consumers. The higher advanced country scores are also driven by well-established provisions in their existing laws and regulations relating to provisions that require minimum standards for debt collection processes. The emerging cluster has made significant gains in ensuring provisions are made that restrict excessive borrowing by individuals to ensure affordability and to avoid over-indebtedness.

Box 5: Entrenching customer centricity in the financial consumer protection framework: the case of South Africa

South Africa is on an ongoing journey to make its financial regulatory framework more customer-centric. In 2011, South Africa's National Treasury released a policy paper called *A Safer Financial Sector to Serve South Africa Better,* known among market players and regulators as "the red book". This policy paper laid the foundation for the country's transition to a twin-peaks model, as first adopted in the UK, whereby market conduct supervision is separated out from prudential supervision in an oversight function that cuts across bank and non-bank financial institutions (National Treasury, 2011; Stakeholder Interviews, 2022).

The result of the restructuring of the financial regulatory architecture was the establishment of the Financial Services Conduct Authority (FSCA) as market conduct authority alongside the Prudential Authority. The FSCA has the mandate to ensure fair treatment of financial customers linked to Treating Customers Fairly principles. The red book also included principles such as being pre-emptive, proactive, principles-based, and outcomes-based, all of which the FSCA would need to embrace. The inclusion of these principles was a deliberate move away from the previous rules-based approach and an acknowledgement of the need to set outcomes *as experienced by consumers themselves* as the ultimate measure of success of the framework (Stakeholder Interviews, 2022).

As part of the evolution of the corresponding market monitoring framework, the FSCA and five South African financial service providers partnered with CGAP in a pilot project that developed an indicator framework for customer outcomes proxies from financial service provider data. This framework would enable the FSCA to adapt its reporting template to include indicators that would allow it to gauge whether consumers are receiving fair customer outcomes from financial service providers.

To enable the FSCA to gain greater insight into consumer perspectives, the FSCA is also soon to pilot the launch of a consumer advocacy panel that represents various consumer groups. This will aim to ensure that there is direct engagement between consumers, financial service providers and the regulator in informing upcoming regulation, and it will create a forum for key consumer risks and concerns to be discussed collaboratively with regulators and the market.

Finally, the FSCA is conducting a study that seeks to understand the full scope of retail financial consumer behaviour, drivers of use, and outcomes of use directly from the consumer perspective. This will include a bespoke consumer behaviour and sentiment survey alongside secondary financial inclusion data analysis, qualitative consumer research and social media sentiment analysis (Stakeholder Interviews, 2022).

These various initiatives demonstrate the dedication of the FSCA to incorporate and centre the consumers' voice within financial consumer protection regulation towards the ultimate achievement of the Treating Customers Fairly objectives.

All countries display similar levels of engagement between consumers, industry and regulators. As depicted in Figure 6, there is limited variation across the various cluster scores within Element 5 (the extent of engagement between consumers, their advocates, financial service providers and regulators). A key indicator in determining the scores of this element is the extent of consumer engagement within the broader economy, which is weighed down by the perception of limited representation and a lack of involvement of consumer associations in policy development across all clusters. The scores related to the extent and quality of consumer engagement within the financial sector are higher. Also encouraging is the perception of consumer body specialised knowledge of the digital financial services marketplace, with the majority of Accelerator baseline survey respondents indicating that a lack of knowledge is not a key reason for not engaging in policy campaigning in digital financial services.

Box 6: Case study: India's system for incorporating the consumer voice in financial policy and regulation

The Republic of India is the world's largest democracy and fifth-largest economy, with a population of over 1.2 billion people (World Bank, 2021). In 2013, India launched the National Mission for Financial Inclusion in a bid to provide universal banking services to every unbanked household (Armstrong, 2022; Department of Financial Services, n.d.). Great strides have been made. According to the Reserve Bank of India (RBI), financial inclusion increased by 24% between Fiscal Years 2017 and 2021, growing from 43.4 to 53.9 on its annual Financial Inclusion Index (Reserve Bank of India, 2021). Moreover, 78% of adults in India have an account to make digital payments (Demirgüç-Kunt, et al., 2022). The scale of the financial sector and the large volume of clients and transactions mean that careful design is needed for the financial consumer protection system to ensure effective protection against digital financial service risks. This design includes deliberate provision for consumer representation in the financial regulatory structure, through consultation of consumer bodies (Stakeholder Interviews, 2022).

Consumer VOICE India is a prominent consumer association in India which has represented consumers and has protected their interests with policymakers, the judiciary, and statutory regulatory bodies for over 40 years. It has operations in 17 of India's 29 states (Stakeholder Interviews, 2022). As a prominent consumer body, Consumer VOICE is consulted by the Reserve Bank of India (RBI) the Securities and Exchange Board of India (SEBI) and the Insurance Regulatory and Development Authority (IRDA) to provide the consumer perspective on forthcoming regulation. It also coordinates with the regulatory authorities on a project basis, such as working with IRDA to promote financial literacy. In practice, the level of collaboration is different between regulatory authorities, and how proactively inputs from the consumer association is sought depends on the corporate culture of the particular regulatory authority (Stakeholder Interviews, 2022).

Apart from institutionalising consumer representation, India provides a valuable demonstration case in how it handles third-party consumer redress. It has a dedicated three-tiered consumer courts system, which consists of district, state, and national courts. Consumers can take their grievances against financial service providers for redress at these courts. These courts operate according to special, streamlined procedures, and cases are expected to be resolved within three months. However, mixed results have been observed, as cases have typically taken up to six months to reach a resolution. Moreover, when advocates are involved in high-value courts, cases can take several years to be resolved.

In summary: the India case study showcases the importance of financial consumer protection design to factor in the consumer perspective in the financial sector. This is not a panacea: in practice, friction is still present in ensuring that consumers receive fair outcomes, and the scale of the financial sector means that it is difficult to control or monitor actual practices and risks experienced by consumers on the ground. However, the design and implementation of the structure is an important step in the journey towards optimal consumer protection at the last mile.

FAIR DIGITAL FINANCE PLAYING FIELD

Figure 7 indicates the four elements that make up the inclusion and protection playing field.

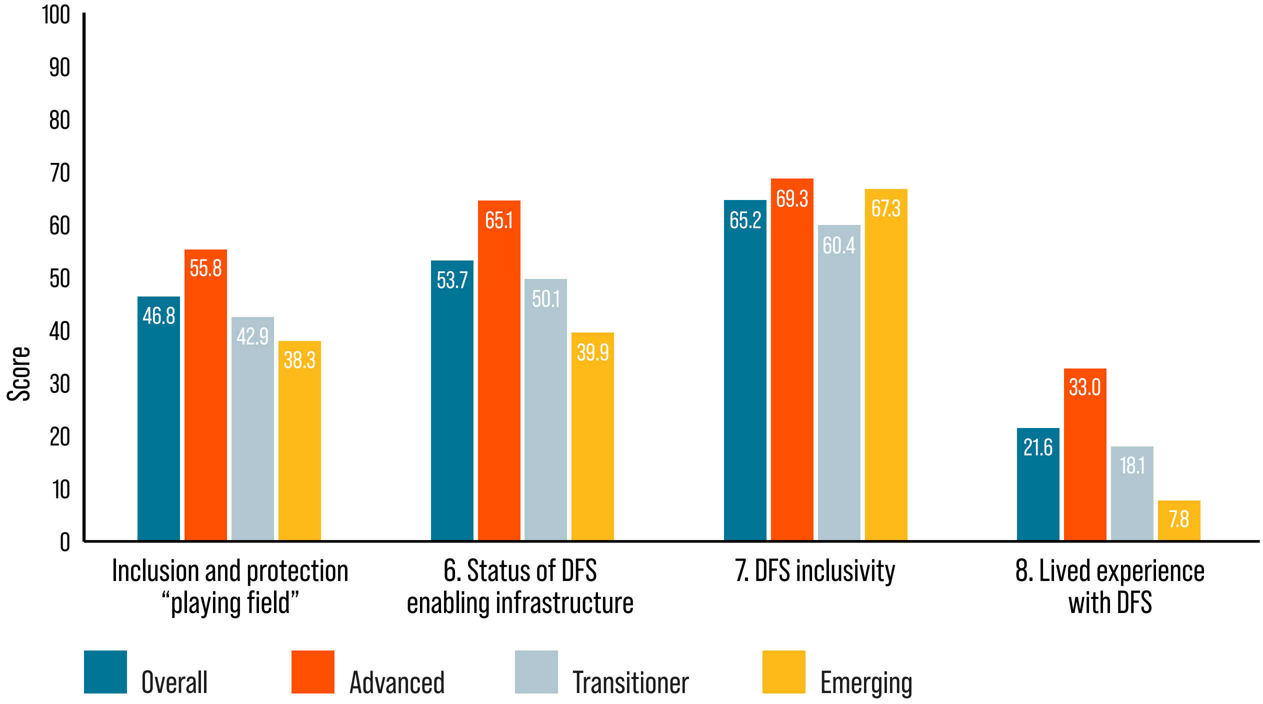


Figure 7: Inclusion and protection playing field total and element scores across clusters

Source: Fair Digital Finance Index calculation, drawing on (Delaporte & Bahia, 2021; Consumers International , 2022; IMF, 2022; Demirgüç-Kunt, et al., 2022; Tarifica, n.d.; Speedtest Intelligence, 2022; Datareportal, n.d.; Consumers International and CGAP, 2021)

The relatively high "inclusion and protection playing field" pillar score in relation to the overall index average is driven by relatively high scores in enabling infrastructure and inclusivity. However, further improvements in the playing field are held back by poor scores in lived experience with digital financial services:

Large strides in improving access to the digital financial services enabling infrastructure, but quality and affordability weighing on scores, especially for the emerging cluster. On the enabling infrastructure element, a key driver of the relatively high scores across clusters is the pervasiveness of the level of network coverage, as proxied by the extent of 2G, 3G and 4G coverage. This is high also for the emerging cluster. All emerging cluster countries have 3G network coverage rates above 65%. Scores are also positively influenced by widespread access to internet-enabled handsets. This suggests that most countries have the basic components of enabling digital financial service infrastructure, which provides a foundation to ensure that consumers can engage and access digital financial services. Where scores diverge on this element, it relates to the quality of network connectivity and the affordability of data. While emerging cluster countries have the basic components of enabling digital financial service infrastructure in place, the cost of cellular data bundles and internet-enabled handsets as well as the reliability of network connectivity, as proxied by upload and download speeds, need to be improved – such that consumers can affordably and seamlessly leverage digital financial services.

Digital financial services inclusivity scores largely positive across countries, but more nuanced measures needed to gauge specific pain points. Most countries in the sample score high on digital financial service inclusivity. The score for this element is driven by quantitative measures such as the marginal gender, educational and income gaps in access to financial accounts. While these quantitative measures suggest that financial inclusion of marginalised groups is growing, there is still a perception across all country clusters that the protection of disadvantaged consumers is a major challenge: 62% of the countries surveyed in the Accelerator baseline survey noted that this remains a major challenge. This suggests that current proxies for inclusivity may not adequately account for the presence of 'tacit' forms of exclusion from financial consumer protection and that the current score may not be truly reflective of the hurdles faced by disadvantaged consumers groups. Future iterations of the index should aim to include more nuanced variables, such as whether recourse mechanisms are effectively available across all consumers or whether financial consumer protection frameworks are tailored to account for risks that affect marginalised groups disproportionately.

Lived experience as red flag, particularly for the emerging and transitioner clusters. All clusters have low scores on lived experience. Moreover, there is a significant gap between advanced countries and the rest in terms of the lived experience with digital financial services. One interpretation for this gap would be that advanced countries stand out on lived experience because of their relatively higher scores on digital financial service capability (Element 2) and financial consumer protection framework customer centricity (Element 4) – with gains in these elements trickling down to better lived experience. A closer look at the underlying data shows that the two indicators driving this divergence are low levels of usage and the limited extent of engagement with digital channels in transitioner and emerging cluster countries. Both these measures are proxied by quantitative variables attained from Findex. A key variable is the percentage of adults that have made or received digital payments. Among advanced countries, this figure is 57%, in contrast to 39% and 22% for the transitionary and emerging groups respectively. While digital payments are increasingly prominent across all countries, its usage for the purchase of goods online remains low. Across all cluster countries, only 13% consumers used a mobile phone or the internet to buy something online.

Box 7: The role of regulation in improving consumer lived experience with mobile money – an example from Uganda

Uganda's adoption of the National Payments Systems Act of 2020 and the corresponding regulations of 2021 introduced several provisions to support the safety and efficiency of Uganda's payment systems (Republic of Uganda, 2020). Section 49(6) of the National Payments Systems Act of 2020 and Regulation 14 of the National Payment System regulations of 2021 called for Mobile Network Operators, such as MTN Mobile Money and Airtel Money, to pay interest earned on trust accounts to consumers. The response from industry has meant that, as of the second quarter of 2022, MTN and Airtel paid out a combined interest of USh9.1 billion (US$2.46 billion) to their customers (The Independent, 2022).

The indicator on the effectiveness of consumer recourse also weighs down the overall element scores across all country clusters. This was measured according to perceptions-based variables from the Accelerator baseline survey, such as whether the availability of effective consumer dispute resolution and redress is a challenge faced by consumers of digital financial services. The low score suggests that consumers do not yet have an appropriate mechanism to know and to assert their rights, or to have their complaints addressed and resolved in a transparent and just way and within a reasonable timeframe.

Safety concerns undermining lived experience of digital financial services. The qualitative nature of the variables captured under the user frustrations indicator meant that it was not meaningful to include these in the overall aggregation of the lived experience element score. The variables included in this indicator nevertheless allow for an interpretation of some of the key frustrations curtailing the lived experience of consumers. The primary challenges faced by consumers of digital financial services as captured by the Accelerator baseline survey are outlined in Table 4 below (overall and per cluster):

- Safety during use of digital financial services is the primary challenge faced by consumers across all clusters, followed by data protection and privacy and the availability of effective consumer dispute resolution and redress. These challenges also hold as the top three challenges for the advanced cluster.
- While safety is also seen to be a challenge among transitioner countries, the primary challenge flagged is consumer education, specifically a lack of, or poor access to, digital literacy programmes.
- Finally, there are three equally ranked key challenges faced by the emerging cluster consumers: data protection and privacy, e-commerce (equal protection on and offline) as well as concerns related to sustainability risks.

The primary challenges faced by digital financial service consumers			
Overall	**Advanced Cluster**	**Transitioner Cluster**	**Emerging Cluster**
1. Safety (e.g. risk of scams and fraud)	1. Safety (e.g. risk of scams and fraud)	1. Education	1. Data Protection and Privacy
2. Data Protection and Privacy	2. Data Protection and Privacy	2. Inclusivity and protection of disadvantaged consumers	1. E-commerce (equal protection on and offline)
3. Availability of effective consumer dispute resolution and redress	3. Availability of effective consumer dispute resolution and redress	2. Safety (e.g. risk of scams and frauds)	1. Sustainability (promotion of sustainable consumption patterns, i.e. environmental, social and governance practices in banking)

Table 4: Top user frustrations overall and by cluster
Source: Fair Digital Finance Accelerator Baseline Survey

FAIR DIGITAL FINANCE USER OUTCOMES

Figure 8 outlines the scores across clusters for the ultimate user outcomes pillar and its only element is – the extent of positive consumer outcomes:

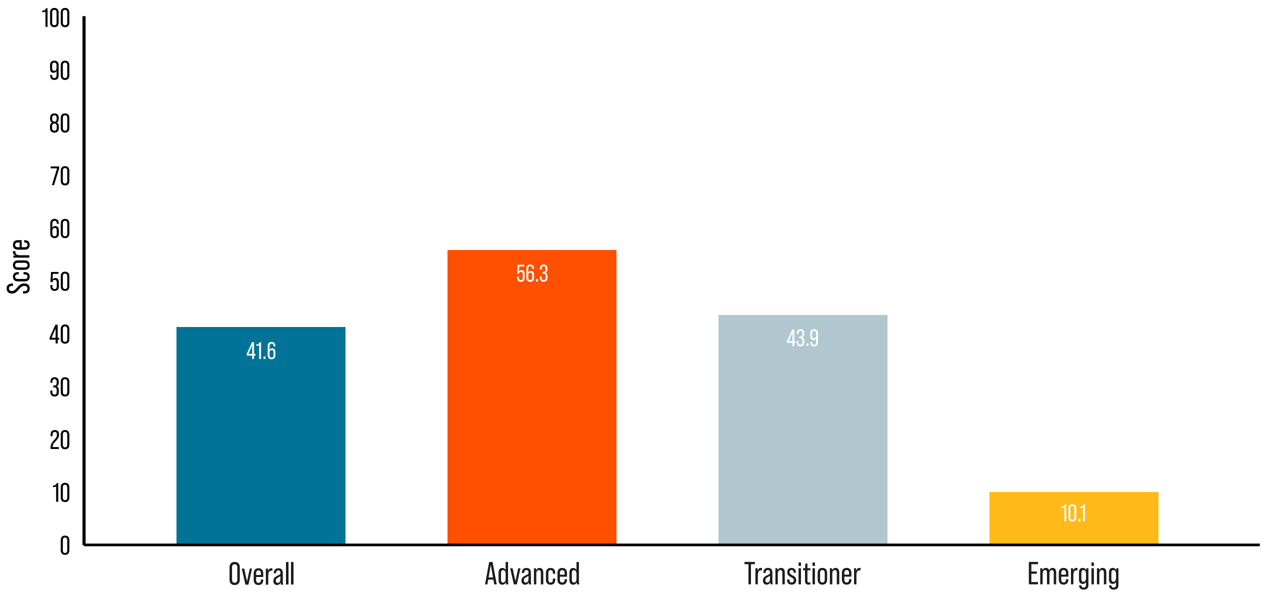


Figure 8: Ultimate user outcomes

Source: Fair Digital Finance index calculation, drawing on (Consumers International , 2022; World Bank, 2017; Demirgüç-Kunt, et al., 2022; AFI, 2019; ITU, 2021; Delaporte & Bahia, 2021; IMF, 2022; Speedtest Intelligence, 2022; Tarifica, n.d.; CGAP, 2022)

Worrying results, especially for the emerging cluster. Financial health and wellbeing form the primary indicator for ultimate user outcomes. Various measures are used in determining overall financial wellbeing, including whether people express concerns about paying for school fees, saving for old age or medical costs and the ability to raise emergency funds within 30 days. The indicator driving the disproportionately low user outcomes among emerging cluster users is the continued financial hardship experienced because of COVID-19: 36% of emerging cluster consumers reported that they continue to experience severe financial hardship as a result. The final indicator for this element is the degree to which sustainability and the promotion of sustainable consumption patterns (such as environmental, social and governance practices in banking) are perceived to be a challenge for digital financial service consumers. This was noted as a particularly significant challenge in the emerging and transitioner clusters.

Box 8: Case study: mitigating consumer sustainability risks in Fiji

The Republic of Fiji is one of many pacific island states that face significant risks due to climate change. These climate risks include sea-level rise, extreme rainfall, increased intensity of tropical cyclones, and droughts. As a result, Fiji faces major threats to infrastructure and the destruction of key natural resources that support livelihoods of thousands of inhabitants on the island (World Bank, 2021).

Cognisant of these risks, the financial regulator, the Reserve Bank of Fiji (RBF), adopted green finance as a focus for the National Financial Inclusion Strategic Plan 2016–2020. Strategic Goal 6.4.6. of the plan states that the RBF would assist in the development of green financial services and products which would be designed to mitigate the negative effects of climate change on individuals, households, and micro, small, and medium-sized enterprises (MSMEs) (AFI, 2018).

Fiji has a built-in mechanism to ensure that the consumer voice is directly represented in the financial sector policymaking and regulation. The RBF involves the Consumer Council of Fiji, as statutory body tasked with consumer advocacy, alongside industry in quarterly meetings to discuss financial sector issues (Stakeholder Interviews, 2022). In the wake of COVID, a new steering committee was formed which advocates and educates the population on digital financial literacy (Stakeholder Interviews, 2022).

Beyond its financial literacy and regulatory inputs, the Consumer Council is working with the United Nations Capital Development Fund (UNCDF) on the Pacific Insurance and Climate Adaptation Programme, which provides parametric disaster risk insurance for low-income consumer groups. The programme is open to all and is meant to provide access to cash when individuals are faced with a climate-related disaster, thereby improving resilience and sustainability. The Consumer Council was instrumental in advocating consumers' views and incorporating their rights and interests during the development phase of the programme (Stakeholder Interviews, 2022). The Consumer Council also launched a nationwide financial literacy campaign to remote communities that included how insurance works and what parametric insurance is (Stakeholder Interviews, 2022).

5. CONCLUSION

The vision for fair digital finance requires digital financial services to be inclusive, safe, data protected and private and sustainable. Rising risks coupled with vulnerable consumers and market and regulatory capacity constraints mean that this is not always the case, especially in low and middle-income countries. But how do consumers themselves experience digital finance?

Gauging the consumer experience. Often, consumer protection frameworks lack direct consumer input. As the only global network of consumer associations representing the consumer voice on fair digital finance and working to build bridges to regulators and financial service providers, the Fair Digital Finance Accelerator is uniquely positioned to rectify this. Understanding what the consumer pain points are is an important first step. The index presented in this report collates publicly available data sources and insights from the inaugural Fair Digital Finance Accelerator member survey to form a view on the extent to which the vision for fair digital finance is realised in low- and middle-income countries from the consumer perspective. It gauges the consumer experience in 2022 across four pillars:

- **Protection needs:** the risks faced by consumers and their ability to manage those risks
- **Protection framework:** the completeness and customer centricity of the protection frameworks in place and the extent of engagement of consumer bodies
- **Protection playing field:** the level of digital finance usage, the inclusiveness of financial services for marginalised groups and how satisfied consumers are with consumer protection outcomes
- **Ultimate user outcomes:** whether financial services ultimately make a difference to consumers' lives and contribute to the sustainability agenda

A disconcerting picture. The findings presented in Section 4 paint a disconcerting picture[8]: though digital finance is broadly available to consumers and the basic elements of financial consumer protection are in place in most countries, business and regulators alike are not yet doing the right things when viewed through the consumer lens. Much work needs to be done to effectively protect and empower consumers against digital finance risks and bring their voice to bear. Specifically, the index shows that:

- **Consumers are vulnerable and exposed to risks.** The index points to an environment where digital financial services risks are rife and many consumer protection needs remain unmet. The protection needs pillar scores consistently low across all country clusters. This shows a high perception of risks amidst low consumer capability, meaning that consumers are not well placed to protect themselves against these risks.
- **Financial consumer protection frameworks need to go further and be more consumer-centric.** There are evident gaps in financial consumer protection frameworks, and few countries have adopted explicitly customer-centric frameworks. Moderate scores on the level of engagement between consumers, their advocates, financial service providers and regulators suggest that efforts are underway to improve financial consumer protection frameworks. It is heartening to see that this holds true across clusters.

[8] Confirming the upfront expectations for each of the pillars as outlined in Section 2

- **The need to go further is evidenced by gaps in how fair digital finance is playing out for consumers.** The sample countries have made significant strides in improving the inclusion and protection playing field. They have made internet access widely available and have increased smartphone penetration. However, the quality and affordability of digital financial services pose a hurdle: low lived-experience scores, especially for emerging cluster countries, are a warning signal.

- **Remaining consumer vulnerability raises a red flag.** Consumer-level outcomes in financial health are mixed for transitioner cluster and advanced cluster countries but are very low for the emerging cluster. This finding suggests that many of the advances in financial consumer protection frameworks and financial inclusion do not yet translate into improved outcomes for consumers – and especially so for vulnerable consumers.

Particular pain points. The lowest-scoring areas in the index are in digital financial service risks (Element 1), consumer capability to reduce vulnerability to risk (Element 2), the lack of customer centricity of financial consumer protection regulatory frameworks (Element 4) and, worryingly, consumers' actual lived experience with digital financial services (Element 8).

A call to action for global and national decision-makers. Where protection frameworks are not able to effectively protect consumers against risks, it can undermine the gains of financial inclusion and erode consumer trust. Addressing this gap requires a concerted effort across regulators, business and consumer representative bodies. Each group of stakeholders can take several practical steps:

- **Consumer associations**
  - Innovatively engage with and educate consumers to ensure that they know and are regularly updated on the risks associated with digital finance and their corresponding rights and responsibilities.
  - Proactively knock on regulators' doors to find appropriate channels for bringing the consumer perspective into digital financial service policy-making and regulation, and to build the bridge from financial consumer protection to sustainability.
  - Work with financial service providers to develop disclosure practices, complaints procedures, infrastructure and systems that meet consumers in their day-to-day realities.

- **Regulators**
  - Establish common language with financial service providers on what customer-centric financial consumer protection would mean in practice and reach out to consumer bodies to make them part of the dialogue.
  - Fill gaps in the existing framework to address front-of-mind risks for consumers as gauged from direct demand-side research.
  - Over time, develop and implement a comprehensive and principles-based financial consumer protection framework, aligned with global principles, where consumers themselves have a seat around the table.
  - Work with consumer associations to educate consumers on their digital finance rights and responsibilities.
  - Initiate dialogue on sustainability in digital financial services, and ensure that regulation is aligned with global principles and guidelines on sustainability.

- **Financial service providers**
  - Design products and services to be more customer centric and think through what sustainability means in the digital finance context.
  - Overhaul disclosure to be customer-centric and in plain language, so that consumers understand the risks that they face and how to be safe and protected users.

- Rethink what the best channels are to reach and empower consumers and provide them with effective recourse.
- Ensure that the enabling infrastructure, financial service offering and distribution channels available to consumers not only reach, but also empower marginalised consumers to actively and effectively use financial services to meet their core financial needs, to improve their financial health and to build sustainability.

Box 9: The role of business – example of Treating Customers Fairly implementation at the corporate level

Standard Chartered Bank is headquartered in the United Kingdom (UK) and has global operations in 16 African countries and several other jurisdictions in Asia, the Middle East, Europe, and the Americas **(Standard Chartered, n.d.)**. Following the UK Financial Conduct Authority's (FCA) mandate on the implementation of Treating Customers Fairly principles by regulated entities[9], Standard Chartered incorporated Treating Customers Fairly into its corporate culture across the various countries where it is present, even if Treating Customers Fairly is not mandated in the local jurisdiction **(FCA, 2015; Standard Chartered, 2016)**. For example, in Malaysia, the bank has a Treat Customers Fairly Charter that lists their commitment to Treating Customers Fairly principles, such as ensuring customers are provided with clear, relevant, and timely information of their financial services and products; and ensuring that customer complaints are handled in a prompt, fair, and effective manner **(Standard Chartered, n.d.)**.

How does the call to action differ across clusters? The imperatives for action are different depending on the country cluster:

- **Emerging:** Countries in the emerging cluster face a bigger task across the board to get the basic building blocks of the financial consumer protection framework in place so that risk incidence does not undermine the gains already made in inclusivity. More is also needed to improve marginalised group inclusion and affordability. Addressing these pain points can help to improve the score on ultimate user outcomes, but socio-economic challenges will continue to put pressure on financial health. This finding emphasises the need to position the dialogue on customer-centric financial consumer protection within the broader social and economic policy agenda in the country context.

- **Transitioner and advanced:** The pain points flagged in the emerging cluster remain of concern for the transitioner and advanced clusters, although some progress is noted. As the agenda evolves from inclusion to quality and value, more emphasis is needed on transitioning to Treating Customers Fairly principles-based financial consumer protection frameworks, coordination across regulatory spheres, and the meaningful inclusion of the consumer voice to inform policy and market practice. Risks remain front of mind, regardless of the level of development of the financial sector. As the policy agenda evolves, so does awareness of the threat of sustainability risks. Hence, it is important to mainstream sustainability in the financial consumer protection dialogue.

[9] The FCA reports that the number of complaints received increased by 1% in 2022, compared to 2021. Moreover, following the mandate of Treating Customers Fairly in the UK and for the first time since the FCA has been collecting complaints data from regulated financial service providers, the FCA reported that 51% of complaints were resolved within three days. They note that current accounts remain the most complained-about financial product (FCA, 2022).

The Fair Digital Finance Accelerator as agent of change. The Accelerator is uniquely positioned to drive the required change. Its core global mandate is to build a network of consumer associations and to bring the consumer into the global dialogue on financial consumer protection. At the country level, it empowers consumer associations by equipping them with digital financial service knowledge and risk-awareness, helping them to build bridges to market players and regulators and to drive the change agenda from the bottom up. The findings from the index pinpoint three strategic priorities for how and where the Accelerator engages:

- Focus on **entrenching local tripartite structures** for consumer associations, regulators and the market to discuss key risks and gaps in the local context and achieve change on the ground. Place specific emphasis on working with emerging cluster countries to help get the basic building blocks for fair digital finance in place.

- Do a **topic deep-dive into new innovations and risks** in digital finance, how best to mitigate those risks at the system level and how to empower consumers to protect themselves, and place specific emphasis on effective protection for marginalised groups.

- Bring **sustainability squarely into the fair digital finance agenda** and demystify what that means on the ground – be it a change in the product or service offering for disaster risk protection, a new look at ways of building financial health and resilience for marginalised consumers in the local context, or a change in mindset for how consumers engage in sustainable financial service consumption.

Future measurement agenda. The scores presented in this index reflect the underlying data proxies and country sample. As such, the findings are indicative rather than definitive and are intended as input to the global fair digital finance dialogue. The following caveats are noted for future refinement of the index:

- The absence of harmonised cross-country data on financial consumer protection-specific outcomes (such as the number of complaints or Treating Customers Fairly outcomes) means that the pillars often capture country-wide trends, as opposed to detailed financial consumer protection outcomes as experienced at the consumer level.

- The strong role of the Accelerator baseline survey in the data proxies means that indicators often reflect perceived strengths and weaknesses as reported by consumer bodies, rather than actual consumer/end-user perceptions. Further iterations of the index should focus on including more nuanced financial consumer protection consumer-level data. Where data is available, it would also be useful to compile country-specific deep-dive financial consumer protection outcomes indices to directly inform the national financial consumer protection dialogue (see Box 7 for an example).

- Finally, it is important to grow the base of the Accelerator survey in future years to cover a larger sample of low- and middle-income countries. Nevertheless, the hope is that the cluster classification developed in this report provides a meaningful framework to input to the global policy dialogue, and for other countries to position themselves against.

Box 10: Using consumer-level data to gauge financial consumer protection from the consumer perspective: the case of Kenya

In countries where in-depth demand-side financial inclusion survey data is available, it is possible to calculate a consumer protection outcomes index that fully comprises the consumer perspective and directly measures how consumers experience the outcomes of financial consumer protection.

For example, Kenya is known worldwide for its success in promoting financial inclusion, largely on the back of the success of mobile money. As of 2021, 83.7% of the Kenyan population has access to formal financial services (FSD Kenya, 2021). However, there was a need for having a deeper understanding of how financial service usage delivers value for consumers, including via fair consumer outcomes. Thus, Financial Sector Deepening Kenya, in collaboration with the Central Bank of Kenya, commissioned the development of an aggregate financial consumer protection outcomes index based on available indicators from the FinAccess nationally representative financial inclusion survey. This index allows for tracking over time of the overall effectiveness of financial consumer protection across the financial sector from the consumer point of view (FSDK and Cenfri, 2022).

An exercise such as this is only useful if it falls on fertile ground. The Central Bank of Kenya takes a proactive leadership role in financial inclusion. There is significant collaboration between the Central Bank of Kenya, other regulatory authorities such as the Insurance Regulatory Authority, the Competition Authority of Kenya, which holds the overall consumer protection mandate, and financial service providers. The Financial Consumer Protection Outcomes Index brings the consumer perspective and voice into this dialogue.

ACKNOWLEDGEMENTS

The ‘Digital finance: The consumer experience in 2022’ index report was developed through a collaborative effort led by Consumers International with the support of the Centre for Financial Regulation and Inclusion (CENFRI). We are enormously grateful to those that have supported this report.

Programme Funder

The Fair Digital Finance Accelerator is funded by the Bill & Melinda Gates Foundation, with support from the Consultative Group to Assist the Poor (CGAP).

Founding Partner

CGAP provided guidance, insights, and support throughout the report development. Their expertise and experience have been instrumental in ensuring the report’s success.

We express our gratitude to the United Nations Capital Development Fund (UNCDF) team on Policy and Regulation for Inclusive Digital Ecosystems, the GSM Association (GSMA), and the Financial Sector Conduct Authority of South Africa for their input and support. Their contributions ensured accuracy, relevancy and shaped the report.

Our thanks to Consumers International Members: Yogyakarta Consumers Institute (Indonesia), Consumer VOICE (India), and Consumer Council of Fiji who contributed their time and expertise to the case studies in this study.

Special thanks to Consumers International Members that took part in the Fair Digital Finance Accelerator baseline survey and the Fair Digital Finance Accelerator Network Members who provided insights during the year:

Consumers International Fair Digital Finance Accelerator Network Members

ADECOR - Angola

Associação Brasileira de Defesa do Consumidor (PROTESTE), Brazil

Association pour la Défense des Droits des Consommateurs (ADC), Chad

Benin Health and Consumers’ Survival (BSSC), Benin

Centre for Consumer Defence (CDC - Centro para la Defensa del Consumidor), El Salvador

Consumer Association of Mauritius (ACIM - Association des Consommateurs de l’Ile Maurice), Mauritius

Consumer Awareness Organisation (CAO), Nigeria

Consumer Council of Fiji (CCF), Fiji

Consumer Council of Zimbabwe (CCZ), Zimbabwe

Consumer Defence Association (ADECO - Associação para Defesa do Consumidor), Cape Verde

Consumer Education and Research Society (CERC), India

Consumer Education Trust (CONSENT), Uganda

Consumer Eye Nepal

Consumer Protection Association of Mercosur (PROCONSUMER - Asociación de Protección de los Consumidores del Mercosur), Argentina

Consumer Unity and Trust Society (CUTS), India

Consumer VOICE, India

Consumers Association of Bangladesh (CAB), Bangladesh

Consumers Association of Penang (CAP), Malaysia

Consumers Forum, India

Consumers Korea (Sobija Siminmoin), South Korea

Consumers Lebanon (Jamyat Almoustahlk-Loubnan), Lebanon

East Timor Consumers Protection Association

Foundation for Consumers (FFC), Thailand

Fundación (AMBIO-ALERTA), Costa Rica

Independent Consumers Union (ICU - Azad Ystehlakvylar Birliyi), Azerbaijan

Instituto Brasileiro de Defesa do Consumidor (IDEC), Brazil

International Confederation of Consumer Societies (Konfop), Russian Federation

Kenya Consumers Organisation (KCO)

Laban Konsyumer, Philippines

Mumbai Grahak Panchayat (MGP) - Bombay Consumer Forum, India

Myanmar Consumers Union, Myanmar

National Association of Consumers (ANNA), Armenia

National Federation of Consumer Associations Morocco (Federation Nationale Des Associations Du Consommateur Maroco), Morocco

National Federation of Consumer Associations of Ivory Coast (FAC-Côte d’Ivoire - Fédération des Associations de Consommateurs de Côte d ‘Ivoire), Cote d’Ivoire

National Union for Consumer Protection (UNPC), Algeria

Rwanda Consumer’s Rights Protection Organization (ADECOR), Rwanda

St. Lucia National Consumers Association

Sudanese Consumers Protection Society (SCPS), Sudan

Tec-Check,Organización de Consumidores en Línea, Mexico

The Swedish Consumers Association (Sveriges Konsumenter), Sweden

Tribuna (Tribuna Ecuatoriana de Consumidores y Usuarios) (Tribune of Consumers and Users of Ecuator), Ecuador

Vía Orgánica, Asociación Civil, Mexico

Vietnam Standards and Consumers Association (VINASTAS - Hoi Tieu chuan va Bao ve Nguoi tieu dung Viet Nam), Vietnam

Voluntary Consumers Training and Awareness Society (VOCTA), Bangladesh

Yemen Association for Consumer Protection (YACP), Yemen

Yogyakarta Consumer Institute (Lembaga Konsumen Yogyakarta), Indonesia

Youth Education Network (YEN), Kenya

Fair Digital Finance Accelerator Advisory Panel 2022

We are grateful to the following individuals from the 2022 Fair Digital Finance Accelerator Advisory Panel for their guidance on the long-term strategic direction of the Accelerator; and leading voices for consumer advocacy and the protection of all consumers; ensuring that consumer advocacy remains at the forefront of thought leadership:

2022 Accelerator Advisory Panel

Anna Wallace – Senior Program Officer, Consumer Protection and RegTech, Bill & Melinda Gates Foundation

Ashley Onyango - Head of Financial Inclusion and AgriTech, Mobile for Development, GSMA

Deon Woods Bell - Senior Advisor, Global Policy, Financial Services for the Poor, Bill & Melinda Gates Foundation

Eric Duflos – Consumer Protection Lead, Senior Financial Sector Specialist, CGAP

Juan Carlos Izaguirre - Senior Financial Sector Specialist, CGAP

Maria Lúcia Leitão - Head of Banking Conduct Supervision Department, Central Bank of Portugal (Banco de Portugal)

Myra Valenzuela - Financial Sector Specialist, CGAP

Njuguna Ndung'u - Cabinet Secretary, National Treasury & Economic Planning.

Rosemary Shumirayi Chikarakara Mpofu - Executive Director, Consumer Council of Zimbabwe

Tamara Cook - CEO, Financial Sector Deepening Kenya

Tidhar Wald - Deputy Managing Director, Better Than Cash Alliance

Youkyung Huh - Director of Digital and Financial Regulatory Policy, Consumers Korea

Fair Digital Finance Accelerator Stakeholders 2022

Much appreciation is due to the Fair Digital Finance Accelerator stakeholders below, who provided their expertise, learnings, insights, connections, time, and platforms for multi-stakeholder dialogue; and collaborated with the Accelerator to propel its vision for a fair, safe and sustainable digital finance marketplace throughout 2022:

2022 stakeholders

Center for Financial Inclusion - Accion

Centre for Financial Regulation and Inclusion (CENFRI)

Consultative Group to Assist the Poor (CGAP)

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Fair Finance Initiative

Financial Consumer Protection Organisation (FinCoNet)

Financial Sector Conduct Authority of South Africa - Kershia Singh -Head of the Policy Support department

Financial Sector Deepening -Kenya

Global Alliance for Legal Aid (GALA)

National Bank of Rwanda - Frank Kajunju-Manager, Financial Sector Conduct and Consumer Protection

Organisation for Economic Cooperation and Development (OECD)

The GSM Association (GSMA)

The Superintendence of Industry and Commerce (SIC) of Colombia

United Nations Capital Development Fund (UNCDF)

Fair Digital Finance Accelerator team

A note of thanks to the wider Consumers International staff, whose contributions to this work have been immensely valuable. A deep gratitute to Consumers International's Director General, Helena Leurent, who despite her very tight schedule, made time to contribute to the development of the project and whose ideas ultimately shaped the report. Thank you to Grace Ramsay and Charlotte Broyd, for their thorough planning and management of communications and messaging. Thank you to Hollie Hamblett for her guidance and technical support. Finally, a deep gratitude to the core FDFA team for their hard work and perseverance throughout the project. Thank you to Assad Umar, PhD for leading the project and for providing thought leadership, Sheila Senfuma for providing strategic leadership, and to Bob Oganga, for providing general project support.

APPENDIX A: Indicator and data variable lists

The tables below include the complete indicator list per element of the conceptual framework, explain the rationale for the selection of these particular indicators, and note the data variables and sources available to calculate that indicator. Variables that were scoped out but dropped from the eventual index calculations due to data limitations are indicated in grey. Indicators for which no cross-country data sources could be found are indicated in green as aspirational indicators, to be explored further in future Accelerator survey years. Note: In these tables, the acronym DFS is used to refer to “digital financial services”, LMIC is used to refer to low- and middle-income countries and FDFA to refer to the Fair Digital Finance Accelerator.

Element 1: Risks

Indicator	Rationale	Variable	Source
Fraud	The prevalence of a number of risks can fundamentally undermine the perceived and actual safety of using DFS	Main challenges faced by consumers of DFS: Safety	Consumers International Fair Digital Finance Accelerator (FDFA) Baseline Survey
		Main challenges faced by financial service providers to advance consumer-centred products: Fraud/theft and scams	
		Main challenges faced by financial service providers to advance consumer-centred products: Perception of lack of transparency due to aggressive but unregulated marketing	
		Prevalence of fraud among the top-most frequent issues complained about	World Bank Global Fin. Inclusion and CP survey
Data misuse		Main challenges faced by consumers of DFS: data protection and privacy	Consumers International FDFA Baseline Survey
		Main challenges faced by regulators to advance consumer-centred regulation: Risk of sensitive data capture by providers, and associated ethics	
		Main challenges faced by financial service providers to advance consumer-centred products: Data breaches	
Inadequate redress mechanisms		Main challenges faced by financial service providers to advance consumer-centred products: Unfair/excessive pricing	
		Main challenges faced by financial service providers to advance consumer-centred products: Products not tailored to clients’ needs	
		Main challenges faced by financial service providers to advance consumer-centred products: Lack of direct input from consumer perspective	
		Main challenges faced by consumers of DFS: E-commerce (equal protection on and offline)	
		Overlaps with Pillar 8 – lived experience, where it is included due to it being a key measure of whether financial consumer protection is playing an active role in consumers’ financial lives.	
		Main challenges faced by regulators to advance consumer-centred regulation: Corruption	
		Main challenges faced by regulators to advance consumer-centred regulation: Inadequate capacity to identify existing and new risks	
		Main challenges faced by financial service providers to advance consumer-centred products: Disproportionately lower-case resolution rates when women use DFS redress mechanisms	

Institutional and agent-related risks (cross-cutting risk)		Main challenges faced by financial service providers to advance consumer-centred products: Algorithms assessing creditworthiness may be biased	
Network downtime (cross-cutting risk)		**Aspirational indicator:** % of failed transactions due to network downtime or technical glitches, which undermine the ability of consumers to access funds	

Element 2: Consumer capability

Indicator	Rationale	Variable	Source
Digital and financial literacy outcomes	Low-income, potential first-time users of formal financial services often lack awareness of financial services, including having the skills required to understand and responsibly use them. A lack of information or knowledge about a financial service or product can have an adverse impact on a potential customer's adoption or use of that service.	Main challenges faced by consumers of DFS: Education	FDFA Baseline Survey
		Can use account at a bank or financial institution without help if opened (% without an account, age 15+)	Findex
		Reason for not using their inactive account: not feeling comfortable using the account by themselves (% age 15+)	
Presence of digital and financial literacy programmes	Provides an overview as to whether CP organisations or the FS regulator have programmes that target the financial education and digital literacy of consumers	Institutional Arrangements for Leading and/or Coordinating Financial Education	World Bank Global Fin. Inclusion and CP survey
		Coordination Structure to Promote and Coordinate Financial Education	
		Govt. explicitly requires provision of financial education	
		Financial Education – G2P programmes	
		Financial Education – Public School Curriculum	
		Govt. maintained website to improve public financial capability	
		Assesses whether regulators and financial service providers have implemented digital financial literacy programmes	AFI CP for DFS: Survey of Policy Landscape

Element 3: Status of financial consumer protection framework

Indicator	Rationale	Variable	Source
DFS-specific consumer protection law	Given the fast changing and innovative nature of today's financial sector – specific consumer protection legislation is needed to ensure consumers are well protected.	Financial consumer protection legal framework present	World Bank Global Fin. Inclusion and CP survey
		Looks at the number of countries that have a consumer protection framework for financial services and DFS	AFI CP for DFS: Survey of Policy Landscape

Independent recourse mechanism and entrenched complaints systems	Ensuring independent recourse mechanisms are in place is a crucial step in ensuring that the consumer's voice is heard. Consumers should have access to both internal (within providers) and external (out-of-court) dispute resolution mechanisms to seek redress, which should be effective, adequate, easy to access, and professional.	Law/regulation set standards for complaints resolution and handling	World Bank Global Fin. Inclusion and CP survey
		Standards of Internal Dispute Resolutions (IDR)	
		Presence of established complaint mechanisms with DFS regulators and providers	Consumers International FDFA Baseline Survey
		Determines whether the country's CP framework has a DFS complaint and redress mechanism provision	AFI CP for DFS: Survey of Policy Landscape
		Indicator evaluates the provision and existence of formal internal and external dispute resolution mechanisms	AFI DFS Indicators
Disclosure and transparency requirements	Used to determine whether there are rules in place for institutions to have adequate materials and procedures aiming to provide consumers with appropriate information on the key features and risks of the relevant financial services/products	Requirements to Provide Customers with Specific Types of Product Information	World Bank Global Fin. Inclusion and CP survey
		Requirements for Manner of Disclosure for Deposit and Credit Products	
		Determines whether the country's CP framework has a disclosure and transparency provision	AFI CP for DFS: Survey of Policy Landscape
Explicit market conduct mandate for financial service providers	Broader than consumer protection; Focus on various aspects of conducting business; and Covers both consumer protection issues and topics such as remuneration schemes, market manipulation, and competition.	Determines the number of countries whose CP for DFS oversight is conducted by a dedicated Market Conduct Unit	AFI CP for DFS: Survey of Policy Landscape
Inter-regulator coordination on financial consumer protection	Inter-government collaboration is integral to ensuring a robust and strong consumer protection ecosystem.	**Aspirational indicator:** A numerical value assigned to the number of times the various financial regulators have engaged, along with a measure that captures the quality and depth of the engagement	
Cybersecurity framework	In today's increasingly digitised world, the amount of data accessed, utilised and shared across complex networks continues to grow – industries and govt. need to sharpen their focus and ensure they protect the trust of their customers – both consumers and businesses alike.	ITU Global Cybersecurity Index	ITU
Data Protection framework	DFS are increasingly collecting and analysing data on consumers – leaving them at risk of a data breach which may infringe upon the privacy of these consumers.	Laws passed that protect the consumer's privacy in relation to online transaction (personal data protection)	Consumers International Consumer Protection and Empowerment Index
		Existence of comprehensive privacy and protection framework	AFI CP for DFS: Survey of Policy Landscape
Perceived strength of the financial consumer protection framework	Given the fast-changing and innovative nature of today's financial sector – specific consumer protection legislation is needed to ensure consumers are well protected.	Perceived CP strength of the regulatory framework for DFS	Consumers International FDFA Baseline Survey
		Main challenges faced by financial service providers to advance consumer-centred products: Regulatory framework not tailored to the digital financial sector	
		Main challenges faced by financial service providers to advance consumer-centred products: DFS being regulated by telecommunications and the traditional financial sector regulators	
		Main challenges faced by consumers of DFS: Poor regulatory framework	

Strength of supervision and enforcement	To ensure the Financial Consumer Protection Agency/Unit can sufficiently incentivise market players to abide by the relevant financial consumer protection regulations, it needs to have the necessary "stick".	Satisfaction with legislation on dispute resolution and redress	Consumers International Consumer Protection and Empowerment Index
		Frequency of CP enforcement actions	
		Enforcement Powers of the Financial Consumer Protection Agency/Unit	World Bank Global Financial Inclusion and Consumer Protection survey
		Main challenges faced by financial service providers to advance consumer-centred products: Poor law enforcement	Consumers International FDFA Baseline Survey
Sustainability criteria incorporated in the financial consumer protection framework	**Aspirational indicators:** Is ESG or TCFD reporting in place? Does the country have a green finance or sustainable finance policy?		

Element 4: Level of customer centricity of financial consumer protection

Indicator	Rationale	Variable	Source
Fair consumer practices enacted	The implementation of TCF frameworks ensures an efficient and effective market and thereby helps consumers to achieve a fair deal. A well-considered and implemented TCF aims to ensure: • capable and confident consumers • simple and understandable information for, and used by, consumers • well-managed and adequately capitalised firms who treat their customers fairly • risk-based and proportionate regulation.	Provisions to restrict excessive borrowings by individuals	World Bank Global Fin. Inclusion and CP survey
		Provisions to prohibit/restrict unfair practices	
		Provisions to prohibit/restrict terms or practices that limit customer mobility	
		Minimum standards for debt collection practices	
		Aspirational variable: Whether countries have implemented TCF principles	

Element 5: Extent of engagement between consumers, their advocates, financial service providers and regulators

Indicator	Rationale	Variable	Source
Extent of consumer engagement within the broader economy **Extent and quality of consumer engagement within FS**	To ensure that consumer protection regulation is fit for purpose and that products are designed to meet consumer needs, there needs to be sufficient collaboration and interactions between regulators, consumers, industry and consumer bodies. Both within the financial sector, but also, more broadly.	Main challenges faced by financial service providers to advance consumer-centred products: Lack of direct input from consumer perspective when designing products and services for consumers)	Consumers International FDFA Baseline Survey
		Agency consumer representation in policymaking	Consumers International Consumer Protection and Empowerment Index
		Survey shows the number of regulators that require DFS providers to consumers of their rights, which include the right to complain or rights to data privacy	AFI Consumer Protection for digital financial services: Survey of Policy Landscape

		Engagement with DFS stakeholders	Consumers International FDFA Baseline Survey
		Satisfaction of the engagement with DFS stakeholders	
		Number of consumer-centred policy formulation or review mechanisms with the regulator participated in	
		Number of interactions in the past year with providers to discuss digital financial services issues	
		Number of DFS stakeholders that demonstrated support to consumer protection and empowerment	
		Organisation of policy roundtables or bilateral meetings on digital financial services issues with regulators and/or providers	
		Main challenges faced by consumers of DFS: Representation – lack of involvement of consumer association in policy development	
		Opportunity for consumer organisations to present their views in decision-making processes	Consumers International Consumer Protection and Empowerment Index
Consumer body specialised knowledge of the digital financial services marketplace	Given the fast-changing nature and complexity associated with DFS, consumer agencies need to have sufficient knowledge to keep abreast of these trends.	Rating of understanding of technical and policy issues relating to digital financial services	Consumers International FDFA Baseline Survey
		Reason for not engaging in policy campaigning in the digital financial services regulatory space: lack of knowledge	Consumers International FDFA Baseline Survey

Element 6: Status of DFS enabling infrastructure

Indicator	Rationale	Variable	Source
Level of Connectivity: network reach	Reliable access to connectivity and basic mobile telephony infrastructure is a basic prerequisite in ensuring consumers can inclusively access DFS, regardless of where they are located.	Percentage of population covered by 2G networks	GSMA Intelligence
		Percentage of population covered by 3G networks	
		Percentage of population covered by 4G networks	
Accessibility of digital payment systems	A prerequisite for ensuring that consumers can access DFS	Perceived availability of DFS	FDFA Baseline Survey
Financial service provider footprint	Agents play an integral role in ensuring consumers can navigate and access DFS by helping in the registration process of SIMs, but also in ensuring that CICO services are available. Beyond mobile money, banking infrastructure such as POS and ATM are important proxies of the reach of DFS enabling infrastructure.	Mobile money agent outlets: active per 100,000 adults	IMF Financial Access Survey
		Mobile money agent outlets: active per 1,000 km^2	
		Number of ATMs per 100,000 adults	
		Number of ATMs per 1,000 km^2	
		Number of commercial bank branches per 100,000 adults	
		Number of commercial bank branches per 1,000 km^2	

		Frequent Issues Complained About: Agents	Findex
		Reason for not having a mobile money account: mobile money agents are too far away (% age 15+)	
Mobile phone penetration	Much like connectivity, having access to a mobile device is a basic prerequisite to ensuring financial inclusion.	Covers mobile ownership as a % of population	GSMA Intelligence
Data affordability	To ensure consumers can inclusively access financial services via their mobile device, data costs need to be affordable.	Cost of 100MB data (% of monthly GDP per capita)	Tarifica
		Cost of 500MB data (% of monthly GDP per capita)	
		Cost of 1GB data (% of monthly GDP per capita)	
		Cost of 5GB data (% of monthly GDP per capita)	
		Cost of cheapest internet-enabled device (% of monthly GDP per capita)	
Network connectivity: reliability	In addition to ensuring consumers can access the internet, the network connection needs to be of sufficient quality to ensure that transactions don't fail (which may undermine the trust of consumers).	Main challenges faced by consumers of DFS: Access to DFS	FDFA Baseline Survey
		Average mobile broadband download speeds	Ookla's Speedtest Intelligence
		Average mobile broadband upload speeds	
		Average mobile broadband latencies	

Element 7: DFS inclusivity

Indicator	Rationale	Variable	Source
Inclusiveness of DFS for vulnerable groups	This measure is intended to capture whether DFS is accessible to all population groups, without which the benefits may only accrue to a privileged few.	Perception of the prevalence of a gap in access to and usage of DFS for disadvantaged consumers	FDFA Baseline Survey
		Main challenges faced by consumers of DFS: Inclusivity and protection of disadvantaged consumers	
		Perception of the impact of the urban/rural divide on access to and usage of DFS	
		Rural vs urban gap in access to accounts	Findex
		Education gap in access to accounts	
		Income gap in access to accounts	
		Perception of the prevalence of the gender gap in access to and usage of DFS	FDFA Baseline Survey
		Gender gap in access to accounts	Findex
	Aspirational indicator: Need for disaggregated, country-level data across a large-enough sample of countries on these key marginalised groups – not only related to access and usage of DFS, but also the quality of usage. How well products are tailored to the needs of various vulnerable groups (including refugees, elderly, homeless and unemployed) and the degree to which usage is impactful, ultimately improving livelihoods.		

Element 8: Lived experience with DFS

Indicator	Rationale	Variable	Source
DFS usage	While account access may be pervasive, it does not imply that these accounts are actively being used to drive the benefits of financial inclusion for consumers.	Deposited money into a financial institution account two or more times a month (% age 15+)	Findex
		Store money using a financial institution (% age 15+)	
		Use a mobile money account two or more times a month (% age 15+)	
Extent of engagement with digital channels	The extent to which consumers engage and access financial services via the digital channels provides an overview of the extent to which consumers are equipped to navigate the digital age.	Mobile social media penetration	Datareportal
		Used a mobile phone or the internet to buy something online (% age 15+)	Findex
		Used a mobile phone or the internet to check an account balance (% age 15+)	
		Used a mobile phone or the internet to pay bills (% age 15+)	
		Made or received a digital payment (% age 15+)	
Common user frustrations and perceptions	A key measure to ensure consumers are heard and the reason for their aggrievement is known	What are the main challenges faced by consumers of digital financial services in your country?	Consumers International FDFA Baseline Survey
		Asks Consumers International members what the most significant challenges faced by consumers in FS in their respective countries are	Consumers International CGAP Role of Consumer Organisations to support Fin. Service consumers in LMICs
		Notes the most common topics of complaints by consumers	World Bank Global Fin. Inclusion and Consumer Protection survey
Reported level of trust in financial service providers	A direct outcome regarding the extent to which financial consumer protection is effective	Reason for not using their inactive account: don't trust banks or financial institutions (% age 15+)	Findex
		No account because of a lack of trust in financial institutions (% age 15+)	
		Survey asks AFI members to rank their top five concerns. Fraud and Breach of Privacy were included in the top five	AFI CP for DFS: Survey of Policy Landscape
Effectiveness of consumer recourse	Core to an effective financial consumer protection framework is an accessible and efficient recourse mechanism that allows consumers both to know and to assert their rights to have their complaints addressed and resolved in a transparent and just way within a reasonable timeframe.	Main challenges faced by consumers of DFS: Availability of effective consumer dispute resolution and redress	Consumers International FDFA Baseline Survey
		Main challenges faced by financial service providers to advance consumer-centred products: Lack of or ineffective recourse and compensation mechanisms	
		Main challenges faced by financial service providers to advance consumer-centred products: inadequate mechanisms for consumer feedback	
Reported statistics on consumer complaints	**Aspirational indicator**		

Element 9: Extent of positive consumer protection outcomes

Indicator	Rationale	Variable	Source
TCF outcome indicator	Aspirational indicator		
Financial health and wellbeing	The extent to which consumers are in a robust financial position is directly related to the effectiveness of the financial CP.	Worried about not being able to pay for medical costs in case of a serious illness or accident: very worried (% age 15+)	Findex
		Worried about not having enough money for monthly expenses or bills: very worried (% age 15+)	
		Worried about not having enough money for old age: very worried (% age 15+)	
		Worried about not being able to pay school fees or fees for education: very worried (% age 15+)	
		Experience or continue to experience severe financial hardship because of the disruption caused by COVID-19: very worried (% age 15+)	
DFS supporting sustainability	Climate change presents an ever-increasing risk to consumers. The extent to which consumers can access financial products that protect them in the face of climate shocks is a key indicator as to whether consumers are sufficiently resilient.	Main challenges faced by consumers of DFS: Sustainability – promotion of sustainable consumption patterns, i.e. environmental, social and governance practices in banking	Consumers International FDFA Baseline Survey
		Aspirational variable: consumer level data which captures consumers' ability to access and leverage DFS solutions, which provide resilience in the face of climate-induced shocks, e.g. proportion of adults covered by disaster risk insurance, countries with macro disaster cover in place, or pervasiveness of "green" retail financial service offerings.	

APPENDIX B: Overview of additional data sources scoped

<table>
<tr><th>Suggested source</th><th>Inclusion?</th></tr>
<tr><td>Experian's 2021 Global Identity and Fraud report</td><td>While the survey data is nuanced and rich in fraud-related challenges, only eight countries included: all developed economies</td></tr>
<tr><td>AFI Consumer Protection for DFS: Survey of Policy Landscape</td><td>This survey covers several relevant variables. For example:

• Under the consumer capability element, the survey assesses whether regulators and financial service providers have implemented digital financial literacy programmes
• Explicit market conduct mandate as relevant to the financial consumer protection framework status pillar

However, the underlying country-level data needed for including this data source in the index is not available. Partnership with AFI will be explored for future repeats of the index. Where relevant, the findings from the AFI survey publication are noted in the findings discussion.</td></tr>
<tr><td>Debt-policy.org</td><td>Could prove to be a valuable resource moving forward. Limited to Burundi, Kenya, Tanzania, India, Indonesia, and Uganda</td></tr>
<tr><td>Fair finance guide</td><td>Noted in designing the aspirational indicator for sustainability.</td></tr>
<tr><td>CGAP (2022) publication on DFS risks</td><td>DFS risk typology used to classify DFS consumer risks, but the paper does not contain global country-level data on risk incidence</td></tr>
<tr><td>GSMA Strategy Paper for Circular Economy: Mobile devices</td><td>Influenced the aspirational indicators suggested for sustainability. The current data on estimated mobile recycling rates is limited to 12 developed economies.</td></tr>
<tr><td>Dvara Research</td><td rowspan="3">While rich in demand-side consumer protection outcomes, the surveys are only available for a handful of countries.</td></tr>
<tr><td>FSD publications</td></tr>
<tr><td>Enhancing Financial Innovation and Access</td></tr>
<tr><td>Consumer Protection in Digital Finance Surveys (IPA)</td><td>In-depth detailed survey data, which includes information on scam attempts experienced by consumers, however only available for a handful countries. Survey questions included in the design of the index.</td></tr>
</table>

The Cambridge Centre for Alternative Finance	While CCAF runs many surveys directed at financial sector regulators, none of these are specific to (financial) consumer protection. The "Fintech Regulation" series does capture the extent to which consumer protection and financial consumer protection are integrated, but this is not publicly accessible.
Global Alliance for Legal Aid (GALA)	Limited country-level data that can be leveraged for the index.
BFA Global User Diaries	Nuanced consumer-level source of information on how individuals engage with financial services. It provides a detailed understanding of the financial behaviour and needs of low-income households. A key influence on many of the aspirational indicators and how to think beyond quantitative consumer level surveys.
AFI CP for DFS: Survey of Policy Landscape	Indicators from this source included throughout – data unfortunately not available publicly, suggestion for Consumers International to engage AFI more formally for granting access to the data in future years, or to run a similar survey with members
AFI – Measuring Inclusive Green Finance	A key source which contributed to the inclusion of indicators related to sustainability and evolving policy area that aims to mitigate the impacts of climate change and environmental degradation and to build resilience through financial inclusion. No global country-level data included, however.

BIBLIOGRAPHY

AFI, 2018. *Reserve Bank of Fiji's experience with financial inclusion and climate change*, Kuala Lumpur: AFI.

AFI, 2019. *Digital Financial Service Indicators*, Kuala Lumpur: AFI.

AFI, 2021. *Consumer Protection for Digital Financial Services: A survey of the policy landscape,* Kuala Lumpur: AFI.

AFI, 2022. *Measuring Inclusive Green Finance*, Kuala Lumpur: AFI.

Andrianaivo, M. & Kpodar, K., 2011. ICT, Financial Inclusion, and Growth: Evidence from African Countries. *IMF Working Paper.*

Armstrong, M., 2022. *This chart shows the growth of India's economy.* [Online]
Available at: https://www.weforum.org/agenda/2022/09/india-uk-fifth-largest-economy-world
[Accessed 28 November 2022].

Cabinet Secretariat of the Republic of Indonesia, 2017. *UN Verifies Names of 16,056 Indonesian Islands.* [Online]
Available at: https://setkab.go.id/en/un-verifies-names-of-16056-indonesian-islands/
[Accessed 28 November 2022].

Cabinet Secretariat of the Republic of Indonesia, 2022. *OJK Issues New Regulation on Consumer Protection.* [Online]
Available at: https://setkab.go.id/en/ojk-issues-new-regulation-on-consumer-protection/#:~:text=%E2%80%9CIt%20is%20our%20hope%20that,community's%20interest%2C%E2%80%9D%20Tirta%20added.
[Accessed 28 November 2022].

CGAP, 2022. *The Evolution of the Nature and Scale of DFS Consumer Risks: A Review of Evidence*, s.l.: CGAP.

Chadha, S., Kipkemboi, K. & Muthiora, B., 2021. *The Mobile Money Regulatory Index 2021,* London: GSMA.

Chalwe-Mulenga, M., Duflos, E. & Coetzee, G., 2022. *The Evolution of the Nature and Scale of DFS Consumer Risks: A Review of Evidence,* Washington DC: Consultative Group to Assist the Poor (CGAP).

Consumers International, 2022. *Fair Digital Finance Accelerator Survey,* England and Wales: Consumers International.

Consumers International and CGAP, 2021. *The Role of Consumer Organisations to Support Consumers of Financial Services in Low and Middle Incomes Countries,* s.l.: Consumers International.

Consumers International, 2022. *Building Fair Digital Finance.* [Online]
Available at: https://www.consumersinternational.org/media/419259/final_vision-for-fair-digital-finance.pdf
[Accessed 21 November 2022].

Consumers International, 2022. *The Global Consumer Protection and Empowerment Index 2022,* England and Wales: Consumers International.

Datareportal, n.d. *Datareportal.* [Online]
Available at: https://datareportal.com/
[Accessed 02 December 2022].

Delaporte, A. & Bahia, K., 2021. *The State of Mobile Internet Connectivity 2021,* London: GSMA.

Demirgüç-Kunt, A., Klapper, L., Singer, D. & Ansar, S., 2021. *The Global Findex Database,* Washington, DC: World Bank.

Demirgüç-Kunt, A., Klapper, L., Singer, D. & Saniya, A., 2022. *The Global Findex Database 2021,* Washington, DC: The World Bank.

Department of Financial Services, n.d. *Schemes.* [Online]
Available at: https://financialservices.gov.in/financial-inclusion-schemes#:~:text=The%20Government%20initiated%20the%20National,unsecured%2C%20funding%20the%20unfunded%20and
[Accessed 28 November 2022].

FCA, 2015. *Fair treatment of customers.* [Online]
Available at: https://www.fca.org.uk/firms/fair-treatment-customers
[Accessed 02 December 2022].

FSD Kenya, 2021. *2021 FinAccess Household Survey,* Nairobi: FSDK.

IMF, 2022. *Financial Access Survey: 2022 Trends and Developments,* Washington, DC: IMF.

ITU, 2021. *Global Cybersecurity Index 2020,* Geneva: ITU.

Nasoetion & Atyanto, 2022. CONSUMER AND PUBLIC PROTECTION WITHIN THE FINANCIAL SERVICES SECTOR. [Online]
Available at: https://nacounsels.com/client-alert-financial-system/#:~:text=With%20the%20development%20of%20financial,data%2C%20as%20well%20as%20effective
[Accessed 28 November 2022].

National Treasury, 2011. *A Safer Financial Sector to Serve South Africa Better,* Pretoria: National Treasury.

OECD, 2016. *Consumer Protection in E-commerce,* Paris: Organization for Economic Co-operation and Development (OECD).

Ozili, P., 2017. Impact of Digital Finance on Financial Inclusion and Stability. *Borsa Istanbul Review.*

Reserve Bank of India, 2021. *Press Release: Reserve Bank of India introduces the Financial Inclusion Index.* [Online]
Available at: https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=52068
[Accessed 28 November 2022].

Speedtest Intelligence, 2022. *Speedtest Global Index.* [Online]
Available at: https://www.speedtest.net/global-index#mobile
[Accessed 02 December 2022].

Standard Chartered, 2016. *Corporate Governance Statement.* [Online]
Available at: https://www.google.com/search?q=Standard+Chartered+Bank+%22Treating+customers+fairly%22&rlz=1C1CHBF_enZA1012ZA1012&ei=--KJY__-C9aX8gLD-qrwCg&ved=0ahUKEwi_6NXd69r7AhXWi1wKHUO9Cq4Q4dUDCA8&uact=5&oq=Standard+Chartered+Bank+%22Treating+customers+fairly%22&gs_
[Accessed 02 December 2022].

Standard Chartered, n.d. *Our Locations.* [Online]
Available at: https://www.sc.com/en/our-locations/
[Accessed 02 December 2022].

Standard Chartered, n.d. *Treat Customers Fairly Charter.* [Online]
Available at: https://www.sc.com/my/about-us/treat-customers-fairly-charter/
[Accessed 02 December 2022].

Tarifica, n.d. *Tarifica.* [Online]
Available at: https://tarifica.com/
[Accessed 02 December 2022].

World Bank, 2017. *Global Financial Inclusion and Consumer Protection Survey Report,* Washington, DC: World Bank.

World Bank, 2020. *Digital Financial Services,* Washington DC: The World Bank Group.

World Bank, 2021. *Climate Risk Country Profile: Fiji.* [Online]
Available at: https://climateknowledgeportal.worldbank.org/sites/default/files/country-profiles/15854-WB_Fiji%20Country%20Profile-WEB.pdf
[Accessed 28 November 2022].

World Bank, 2021. *The World Bank in India.* [Online]
Available at: https://www.worldbank.org/en/country/india/overview
[Accessed 28 November 2022].

World Bank, 2022. *Financial Inclusion and Consumer Protection.* [Online]
Available at: https://responsiblefinance.worldbank.org/en/responsible-finance/financial-consumer-protection

World Bank, 2022. *The World Bank in Indonesia.* [Online]
Available at: https://www.worldbank.org/en/country/indonesia/overview
[Accessed 28 November 2022].

CONSUMERS INTERNATIONAL
COMING TOGETHER FOR CHANGE

Consumers International brings together over 200 member organisations in more than 100 countries to empower and champion the rights of consumers everywhere. We are their voice in international policy-making forums and the global marketplace to ensure they are treated safely, fairly and honestly.

Consumers International is a charity (No.1122155) and a not-for-profit company limited by guarantee (No. 04337865) registered in England and Wales.

consumersinternational.org
@consumers_int
/consumersinternational