TC NOTES

PRACTICAL **LEADERSHIP**
AND **GUIDANCE** FROM
TORONTO CENTRE

SUPERVISING INCLUSIVE FINANCIAL SECTORS

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SUPERVISING INCLUSIVE FINANCIAL SECTORS

TABLE OF CONTENTS

SUPERVISING INCLUSIVE FINANCIAL SECTORS

Introduction[1]

Financial inclusion is highly relevant to a supervisory authority's work. This is particularly so in emerging market and developing economies (EMDEs), where inclusion tends to be lower, especially for women.

Financial sector authorities are often active participants in efforts to increase financial inclusion. For example, authorities in more than 80 developing countries are members of the Alliance for Financial Inclusion, an organization of central banks and financial regulators with a shared commitment to financial inclusion. The World Bank reports that more than 60 countries have or are working on a national financial inclusion strategy (NFIS), which supervisory authorities typically participate in and often lead.[2]

These commitments are bearing fruit. The 2021 Global Findex survey reported account ownership by adults at a regulated financial institution increased globally from 51% to 76% between 2011-2021. Account ownership also increased in developing economies, from 63% to 71% between 2017-2021. The survey also shows growth in the use of accounts to make digital payments, save, and borrow. For instance, the share of adults making or receiving digital payments in developing economies grew from 35% in 2014 to 57% in 2021 – an increase that outpaces growth in account ownership over the same period.[3]

The role of supervisory authorities[4] in building inclusive financial sectors goes well beyond national strategies. Their everyday work presents opportunities to support financial inclusion through proportionate regulation, risk-based supervision (RBS), and consumer empowerment. These elements of inclusive financial sector supervision can facilitate a fair, competitive, and profitable marketplace that meets the needs of underserved and vulnerable consumers. These elements work best when approached in a consistent and coordinated manner.

This work becomes more complicated when supervisors juggle different policy objectives in addition to inclusion – for example, the safety and soundness of financial institutions, financial stability, consumer protection, and anti-money laundering – and must manage the linkages and tradeoffs between them.

Policy objectives may have synergies and produce a "win-win" result, while in other cases the effect may be neutral or even negative.[5] New financial products, services, and providers further complicate this issue. Many authorities are also challenged to reduce a gender gap in financial

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[1] This Toronto Centre Note was prepared by Laura Brix Newbury. Please address any questions about this Note to publications@torontocentre.org
[2] World Bank (2023).
[3] World Bank (2021b).
[4] In this document, "financial regulators and supervisors" are collectively referred to as "supervisory authorities."
[5] Tomilova and Valenzuela (2018).

access in their countries. In addition, crises such as the COVID-19 pandemic reveal the importance of understanding linkages and tradeoffs when designing policy responses to avoid adverse outcomes for financial inclusion.

The findings in this Toronto Centre Note build on previous Notes on financial inclusion and related topics.[6] The first four sections review elements of inclusive financial sector supervision, including approaches to their implementation and potential linkages and tradeoffs. The fifth section highlights important cross-cutting issues for supervisory authorities: innovation and competition, the gender gap in financial inclusion, and crisis responses. The final section contains a summary and conclusion.

Linkages and tradeoffs

Before tackling different aspects of supervising inclusive financial sectors, it is important to be aware of possible linkages and tradeoffs. Supervisory authorities often balance multiple policy objectives. A Financial Stability Institute (FSI) survey of 27 authorities revealed that nearly all of them had five or more objectives, while close to two-thirds had 10 or more. Authorities in EMDEs tend to have broader mandates compared to advanced economies. This is due to objectives such as financial inclusion, competition, and fintech development that support expanding financial services to unserved and underserved consumers.[7]

Supervisory authorities may support financial inclusion efforts due to an explicit mandate and/or as part of a collaboration with other policymakers on national initiatives. The FSI survey shows that 11 of 12 EMDE supervisors had financial inclusion as one of their mandates (either statutory or non-statutory), and all 12 had a financial literacy mandate. A larger survey of 47 central banks shows about half had some sort of financial inclusion objective, such as a legal mandate or participation in an NFIS.[8]

Balancing different objectives requires supervisors to make choices and even accept higher risk in one area to advance another. Taking stock of different mandates and their linkages and tradeoffs is needed so that core supervisory objectives are supported and decisions in one area do not adversely affect another beyond an accepted tolerance level. There is also a risk that unduly weak standards could harm consumers and undermine trust and confidence in the financial sector. For example:

- **Stability**: Promoting a larger, more diversified financial sector can improve economic development and financial outcomes for customers. But when supervisors license more firms than they can supervise or permit less stringent standards to promote market development (for example, in loan underwriting), this can have a negative effect on the safety and soundness of individual financial institutions and on financial stability.
- **Integrity**: Easing access to formal services through streamlined customer due diligence (CDD) can benefit financial inclusion and lower risks through reduced use of cash. But supervisors may struggle to control risks if there are new business models and access points (for example, agent-based transactions) that are not effectively monitored or understood.

[6] See Toronto Centre (2022) for link to a list of Toronto Centre resources related to financial inclusion.
[7] Kirakul et al (2021).
[8] Tissot and Gadanecz (2017).

- **Consumer protection**: Innovative products such as those delivered through digital means can better meet the needs of the financially excluded. However, they may also expose customers to new and unfamiliar risks (for example, fraud or over-indebtedness) that supervisors may not be able to monitor and supervise or incorporate into recourse mechanisms.

These tensions require supervisory authorities to accurately identify and monitor linkages and tradeoffs of different policy choices, and incorporate these into their approach to proportionate regulation, RBS, and consumer empowerment.[9]

Proportionate Regulation

A proportionate approach to financial regulation establishes rules and supervisory expectations consistent with an institution's systemic importance and risk profile and appropriate for the broader characteristics of the financial system.[10]

The relationship between proportionality and financial inclusion gained prominence after publication of a 2011 paper by the G20 Global Partnership for Financial Inclusion. The paper notes the importance of proportionality for standard-setting bodies to balance the benefits of regulation and supervision against their costs, and the need to consider both the risks of financial exclusion and the benefits of financial inclusion in this process.[11] Proportionate regulation is relevant to different types of financial service providers (FSPs) and domains, including prudential, anti-money laundering/combating the financing of terrorism (AML/CFT), and financial consumer protection (FCP).

Landscape of inclusive financial services

Supervisory authorities focused on financial inclusion increasingly recognize the value of diverse financial markets. These include different types of FSPs beyond commercial banks, which are not always able or willing to serve all consumers, especially those who are low-income or have limited identification and credit information. In response, authorities have supported the entry and growth of new types of inclusive FSPs, especially in the digital finance space.[12]

Nonbank financial institutions (NBFIs) such as microfinance institutions (MFIs), financial cooperatives (FCs), micro-insurers, and e-money issuers (EMIs) are the main providers of financial services targeted to unbanked and underserved consumers in many EMDEs. These institutions may not be systemically important based on size but could have a systemic dimension due to the number and type of customers served or links to the wider financial sector.

[9] CGAP's "I-SIP" (Inclusion, Stability, Integrity, Protection) approach provides a good synthesis of these issues. See Tomilova and Valenzuela (2018) for details.
[10] Basel Committee on Banking Supervision (2022).
[11] Global Partnership for Financial Inclusion (2011). Standard-setting bodies included the Basel Committee on Banking Supervision, International Association of Insurance Supervisors, Committee on Payments and Market Infrastructure, Financial Action Task Force, and International Association of Deposit Insurers.
[12] World Bank (2017a).

Proportionate regulations can help ensure these FSPs are financially sustainable, operate responsibly, and foster trust in formal financial institutions.[13]

A proportionate regulatory approach should allow inclusive FSPs the flexibility to innovate and target underserved consumer segments. Proportionate regulations are mainly applied through simplified requirements consistent with less complex business models and smaller size and/or geographic area. To the extent that regulatory requirements are properly defined and implemented, they can protect the safety and soundness of small institutions reaching harder-to-serve (due to low income, remote location, or low digital or financial literacy) customers while reducing regulatory burden.[14]

This process will be enhanced by regular feedback from FSPs and consumers who will be affected by proportionate regulation. Authorities should consult with industry associations for input on implementation issues, cost/benefit considerations of new rules, and industry positions on regulatory issues. Consumer groups can flag gaps and weaknesses in regulatory requirements and emerging risks that affect consumers, especially vulnerable groups.

Prudential considerations

In the financial stability context, proportionate regulations can be implemented by tailoring prudential requirements (such as capital and liquidity) to the number and type of permissible activities. For example, a common approach for small deposit-taking MFIs and FCs is to reduce capital and liquidity requirements in exchange for more limited deposit and lending activities. These limits might include no transaction accounts or smaller loan sizes with fewer features.

Several authorities have created tiered licensing frameworks that apply progressively higher capital and other requirements as entities increase in size, complexity, and geographic area. Authorities may also impose higher capital requirements if there are inherent business model weaknesses, such as the risk that FCs are not able to raise new capital in times of stress due to their member-based structure.[15]

A significant advance for financial inclusion has been proportionate approaches to regulating e-money through the creation of a specialized licensing window for nonbank e-money issuers. These FSPs accept funds from customers for future repayment (an activity normally reserved for banks) against the issuance of e-money accounts, a basic transaction account also known as prepaid or stored value accounts.

While banks can offer e-money, many of the largest EMIs globally are nonbanks, such as mobile network operators with large networks of agents. Experience has shown that nonbank EMIs can safely offer e-money accounts without the full range of the prudential rules that apply to traditional banks if they do not intermediate the customers' funds. Proportionate rules should define the basic parameters for e-money accounts and EMIs, licensing criteria, range of permitted activities, and safeguarding requirements for customer funds (commonly referred to as “float”).[16]

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[13] Izaguirre (2018).
[14] Restoy (2022).
[15] Basel Committee on Banking Supervision (2016).
[16] Staschen and Meagher (2018).

Microinsurance (inclusive insurance tailored to low-income customers) can also benefit from proportionate regulations following a functional or institutional approach:[17]

- The functional approach treats microinsurance as a distinct business line, as when traditional insurers offer it as part of their larger portfolio of insurance business. This is most common and used in countries such as Brazil, India, Peru, Mexico, China, the Philippines, and Ghana.
- The institutional approach regulates entities as micro-insurers, often with less stringent licensing and prudential requirements (e.g., minimum capital, solvency, and risk management) and with limited types of insurance allowed. The Philippines, Cambodia, and Brazil also use this approach in their sectors. This is relevant when there are otherwise viable small providers that lack the capacity to meet the requirements of a full-fledged commercial insurer.

Non-prudential considerations

Regulation of FSPs that do not pose prudential risk (for example, non-deposit takers) should focus mainly on market conduct issues such as AML/CFT and FCP. As in the case of prudential regulation, this requires supervisors to understand the potential tradeoffs. They must also make sound decisions on how to best protect the integrity of the financial system and contain consumer risks while allowing FSPs to reach harder-to-serve customers.

Anti-money laundering/Countering the financing of terrorism (AML/CFT)

Proportionality in AML/CFT regulation helps address one of the main challenges in financial inclusion: lack of reliable identity documents and data for CDD. Identification (ID) issues mainly arise in countries that do not have a national ID infrastructure and where consumers who live in rural areas or are employed in the informal sector lack formal proof of identity, address, or other common means to confirm identity. These challenges may also arise in more developed economies, such as when there is an influx of asylum seekers and refugees from conflict areas.[18]

Proportionate know-your-customer requirements for basic products used by low-risk customers help lower this barrier to access while reducing opportunities for money laundering and terrorist financing.[19] Policy tradeoffs are usually minimal when lighter requirements are directed at customers and small-value transactions with low likelihood of financial crimes. In fact, tough AML/CFT rules may effectively increase risks by pushing potential customers to use cash and unregulated providers when they are not able to use formal services. This is especially so when FSPs' cost of compliance makes serving these customers unprofitable.[20]

For lower-risk products and customers, supervisory authorities may allow simplified CDD such as relying on a single document (for example, government ID, reference letter, or biometric ID) for basic bank or e-money accounts with a limited number and size of transactions. Some use a tiered approach with lower CDD for basic services.[21] The main components of simplified CDD include:

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[17] International Association of Insurance Supervisors (2016).
[18] Financial Action Task Force (2017).
[19] Ibid.
[20] Financial Action Task Force (2021).
[21] Toronto Centre (2020b).

(1) principles for lower-risk scenarios that translate into risk-based tiers for different kinds of accounts, transactions, clients, and methods of account opening and transactions (remote or in-person)
(2) a wider range of allowable ID types and verification methods, including digital IDs that rely on biometrics and other technologies.[22]

While flexibility is permitted by the Financial Action Task Force (FATF), many authorities do not use it. Research on the application of risk-based guidance shows that products designed for underserved consumers often have heavier-than-necessary ID requirements even if they are low risk. Such requirements include the need to verify the address, document the purpose, or provide a tax ID number or secondary ID document. Not surprisingly, some of these countries have high financial exclusion and informal economy rates.[23]

Financial Consumer Protection (FCP)

In the case of FCP, proportionate approaches seek to protect vulnerable consumers without imposing so many requirements that FSPs cannot profitably serve them. For example, in many jurisdictions, third-party e-money agents are critical access points for underserved consumers. However, they may also have a relatively high level of risk of loss from fraud, system outages, and liquidity issues.

Supervisory authorities must decide how to effectively regulate these entities, which may be numerous. Authorities can try to license and authorize agents directly, but this can be burdensome operationally and out of proportion to the risks. Instead, authorities should place responsibility for agents on the principal entity for which services are provided and set standards related to agent onboarding, training, and oversight along with the size and scope of their activities.

Product governance also benefits from a proportionate approach. Quality, accessibility, and transparency are important drivers of financial inclusion, so it may be tempting for authorities to review every new product. However, this is time-consuming and burdensome for supervisors and FSPs, and can delay bringing innovations to market.

Unless a product is unusually complex, supervisors can instead set rules on product governance standards and processes. For example, South Africa's Conduct of Financial Institutions Bill requires retail products and services to be designed and tailored to meet the needs of consumers. The bill mandates management oversight and monitoring of the design and approval processes, periodic reporting on product performance, and remedial action if a product leads to poor customer outcomes. The supervisor may also ban some products and require minimum features and specific contract terms.[24]

Where commercial banks and insurance companies compete with nonbanks for the same business, FCP regulations should apply the concept of "same activity, same risks, same rules." This lets customers expect the same protections for a product regardless of provider. For example, when regulating short-term credit offered through digital channels (digital credit), rules should be consistent across all FSPs and protect consumers from misconduct regardless of

[22] Staschen and Meagher (2018).
[23] Celik (2021).
[24] Izaguirre (2020).

provider or channel used.[25] Reserve Bank of India follows this approach, applying its new digital lending guidelines to all regulated credit providers, including commercial banks, cooperative banks, and nonbank financial companies.[26]

Risk-Based Supervision (RBS)

Whereas proportionate regulations set the rules for financial sector participants, RBS helps supervisors assess and respond to emerging risks to financial service providers, consumers, and the financial sector on an ongoing basis and allocate resources more effectively. RBS requires supervisors to have an in-depth understanding of business models and risk profiles of FSPs, including their sizes, complexities, and range of activities. As part of RBS, financial service providers must be able to identify, measure, monitor, and control their risks, while supervisors assess their ability to do so. Supervisors must also have tools and skills to assess an FSP's inherent risks and financial resources, and intervene when problems arise.[27]

RBS is often contrasted with a compliance approach that emphasizes conformance with rules. In this case, compliance-based procedures are applied consistently to all FSPs, regardless of size, level of risk, and quality of risk management and controls. A compliance approach is useful for a point-in-time determination of an FSP's condition and problems, but does not assess its potential performance or ability to prevent problems from occurring. Supervisors focus on identifying symptoms rather than causes, and corrective programs require FSPs to reduce risks rather than improve their risk management. Compliance supervision relies on standardized procedures that can strain supervisory resources and impose undue burden on FSPs that serve the poor.[28]

This does not mean that RBS is easier or uses fewer resources. The difference is where and how resources are directed. While the compliance approach emphasizes objective evaluations of conformance with rules, RBS shifts the focus to how well an FSP manages risk. This requires training and skills development for both supervisors and FSPs, as well as a shift in the supervisory culture to be comfortable relying on more subjective judgements.

Why does this matter for financial inclusion? Overly intrusive supervision – for example, annual examinations regardless of risk profile, or excessive data collection requests – can be costly and time-consuming for small, lower-capacity FSPs without matching gains to stability, integrity, or financial consumer protection. The prospect of this level of ongoing scrutiny may also discourage new providers and product innovations.

On the other hand, relaxing supervision to promote financial sector development (for example, weak enforcement of risk management or reporting requirements) may not deter reckless practices and harmful products, with negative consequences for stability and consumers. India's 2010 microfinance crisis and the U.S. sub-prime mortgage crisis of 2007 show the adverse effect on financial stability and consumer protection when rapid growth in credit is not paired with proper monitoring and controls.

[25] FinCoNet (2019).
[26] Reserve Bank of India (2022).
[27] See Toronto Centre (2018c) and (2019) for comprehensive guidance on RBS.
[28] Newbury and Izaguirre (2019).

RBS is relevant to prudential, AML/CFT, and FCP supervision. While inherent risks will differ, the framework, processes, and techniques are effective for all risk types and the risks can feed into a single risk assessment of an FSP. In addition, risks in one area can have implications for others. For instance, when rapid growth and excessive risk-taking by FSPs give rise to stability concerns, there may also be a weakening of risk management and controls that will affect financial integrity and consumer protection.

Prudential

A key challenge for prudential supervisors of inclusive financial services is the number of FSPs in their area. Many jurisdictions have a large number of small, non-complex NBFIs and banks that serve low-income and underserved consumers, often in more remote areas of the country. Supervisors with a financial inclusion objective have an incentive to maintain both the financial stability of the sector and reliable access to these institutions. However, resource constraints often reduce supervisors' ability to assess the risk profile of numerous small providers with the same frequency or intensity as larger institutions.[29] Supervisors are then challenged to reduce their oversight of some firms to free up resources to concentrate on others, without increasing risks to the sector beyond their tolerance level.

Off-site monitoring can help supervisors effectively manage this tradeoff. Gathering preliminary information on risks and vulnerabilities to individual institutions and the subsector will inform risk profiles and ratings. Staff can then use time and effort strategically for on-site inspections and other followup, such as thematic or horizontal reviews.

The Basel Committee on Banking Supervision describes two options for supervising large numbers of small FSPs:[30]

- An *auxiliary* approach uses the work of a higher-tier entity within a network. For example, in Brazil, second-tier cooperatives supervise affiliate financial cooperatives and may perform on-site examinations when instructed by the central bank. This arrangement can help optimize supervisory resources while retaining ultimate legal responsibility with the supervisory authority. However, this approach requires extensive training and coaching of the auxiliary supervisor and attention to potential conflicts of interest.[31]
- A *collective* approach consists mainly of off-site monitoring of indicators at the subsector level, with on-site inspections at selected institutions. The Bangko Sentral ng Pilipinas (BSP) uses this approach to oversee its rural banks. These are small in asset size but are numerous and located across an archipelago where financially unserved and underserved consumers often reside.

Both collective and auxiliary approaches typically allocate fewer resources to the on-site supervision of individual institutions. In some jurisdictions, large FCs may have an annual on-site examination, with the cycle extended for small institutions unless they breach a specific risk threshold. Central Bank of Ireland targets FC supervision based on asset size. Larger FCs are subject to a supervisory approach where the frequency of on-site inspections depends on risk and impact metrics. Smaller FCs are subject to mainly off-site reviews, with on-site inspections conducted as needed based on the risk profile.[32]

[29] Basel Committee on Banking Supervision (2016).
[30] BCBS (2016). Toronto Centre (2018c) also provides helpful guidance on this type of RBS approach.
[31] Coelho et al (2019).
[32] Ibid.

The BSP's collective approach to rural bank supervision uses off-site horizontal monitoring to assess key sources of risks and exposures at the subsector level. Supervisors segment rural banks based on criteria such as business model, geographic location, and customer profiles that expose them to similar risks. Supervisors then identify institutions that contribute the most to subsector risks, and use deeper bank-level off-site analysis to determine the scope and timing of on-site inspections. Rural bank inspections are less frequent and narrower in scope than larger bank examinations, focused on the identified high-risk areas. The success of the BSP's collective approach is attributed to having sufficient data to accurately assess the risks at the individual and group level through off-site monitoring tools. Its success is also due to regular engagement with rural banks to better understand their characteristics, market developments, and emerging risks.[33]

While the approaches described so far depend on supervisors' access to adequate information for timely analysis, this must be approached with a risk-based orientation to avoid imposing excessive reporting and audit requirements. For example, large institutions could report monthly while small FSPs report quarterly. In addition, returns for small FSPs can be streamlined in line with their less complex business models. It is also critical to only request data that will be used.

Anti-Money Laundering/Countering the Financing of Terrorism (AML/CFT)

Risk-based AML/CFT supervision should be designed to effectively use and enforce regulations in line with FATF standards, including those that promote financial inclusion. As with other areas of supervision, the approach should ensure an adequate flow of information to assess FSPs' implementation of AML/CFT requirements and provide regular information to FSPs on risk trends and types.

Periodic reports are an important input to adjust the risk score of each FSP according to the supervisor's methodology. The supervisor may choose to impose additional reporting requirements on individual FSPs based on their risk score. Inspections should be based on risk profile rather than a static cycle (for example, annually) and sufficiently frequent to confirm that information provided by FSPs is accurate.[34]

Supervisors can assess the quality of AML/CFT defenses and use of permitted financial inclusion simplifications when reviewing an FSP's risk assessment, business plan, and policies and procedures. Data and internal reports on customers in risk categories, breakdown of customers by location or business, and relevant complaints can help supervisors judge AML/CFT risks and the FSP's ability to monitor and address these risks.

The collective approach described above for prudential oversight also works well in the AML/CFT context. For example, the Central Bank of Brazil developed technology-driven, risk-based AML/CFT supervision for banks and NBFIs to address the challenge of supervising the country's 1,600 banks and NBFIs that are located over a large geographical area. They created a web platform and risk-based methodology to support easy and secure information sharing and analysis. The platform helps streamline collection of data and documents and interacting online with FSPs in a cost-effective way. It also allows inspectors to carry out remote supervision when needed.

[33] Newbury and Izaguirre (2019).
[34] Toronto Centre (2020b).

The system collects mainly qualitative information (for example, reports on governance, systems, and controls to mitigate AML/CFT risks), but it can also access quantitative data where relevant. Additional information is requested as needed from individual FSPs. The Central Bank also incorporates market surveillance by its communications department on financial sector news pertinent to these FSPs. On-site activities are only conducted if elevated risks are identified during off-site activities.[35]

Regular meetings between FSPs and authorities (where geographically feasible) are another good way to monitor how FSPs fulfil their AML/CFT and financial inclusion responsibilities and learn about risks in the sector and challenges complying with rules and guidelines. Ad hoc meetings can supplement those at on-site inspections. Meetings with industry associations can help raise awareness of issues and reach small FSPs that supervisors meet with less frequently in person.

Financial Consumer Protection (FCP)

FCP supervision benefits financial inclusion by ensuring customers are treated fairly and responsibly. This promotes trust and confidence in formal financial services and improves outcomes for consumers, especially those who have low financial and digital literacy, have faced discrimination by financial service providers, or are using riskier products.

In the context of FCP, risk-based supervision focuses on identifying the risk of consumer harm from fraud and abuse, and how FSPs manage and mitigate this risk. As with prudential and AML/CFT, supervising small, inclusive providers should focus on off-site monitoring paired with targeted on-site reviews. A growing number of market monitoring tools can support this process. These include supervisory technology to collect data and analyze regulatory reports, consumer contracts, and complaints; thematic reviews; mystery shopping; and social media monitoring.[36]

Bank of Tanzania (BoT) developed a monitoring tool to assess rapid growth in the digital credit market (a product frequently used by the unbanked) and identify emerging risk of abusive contract terms and over-indebtedness. BoT developed a template to collect data from the largest digital lenders, covering around 75% of the market. The results helped BoT better understand different aspects of the market, such as size, concentration level, growth trends, average loan size, and average and maximum number of loans taken per account. It also enhanced understanding of consumer behavior, such as use and repayment trends by different population segments (for example, age, gender and region). The data also revealed consumer protection issues that required changes to regulations to better protect digital credit users.[37]

Some authorities monitor FSPs' efforts to achieve positive outcomes for their customers, which affects their willingness to engage with formal providers. Bank Negara Malaysia (BNM) established principles for fair treatment of consumers at all stages of the relationship, including expectations of the board and management to promote a culture where the interests of all consumers are integral to their operations. Its FSPs must ensure the fairness of contract terms; provide clear product information; offer advice or recommendations appropriate to a customer's needs and financial circumstances; and exercise due care, skill, and diligence in dealing with consumers. FSPs are also accountable for the conduct and actions of their agents and representatives.

[35] World Bank (2018).
[36] Izaguirre et al. (2022).
[37] Izaguirre et al. (2022). The BoT case study is in the Country Cases section of this toolkit.

BNM uses macro- and micro-surveillance to identify and address FSP conduct and business practices that may harm consumers. BNM's risk assessment determines the type and intensity of supervision to be performed. The assessment involves identifying risks that can result in unfair outcomes for consumers and assessing their severity (for example, the number of customers that are or could be affected) to prioritize and allocate supervisory resources and activities.[38]

Heightened risks that could occur with products used more often by the underserved (such as e-money, digital credit, microloans, and agent-assisted transactions) should be incorporated into the RBS process. This could affect, for example, the type of monitoring information collected, how terms and conditions are disclosed, and accessibility of recourse channels.

Consumer Empowerment

Proportionate regulation and RBS provide a good foundation for supervising inclusive financial sectors. However, the picture is not complete without empowered consumers who are able to interact confidently with FSPs and make informed financial decisions that improve their lives and livelihoods. Two ways supervisory authorities can support consumer empowerment are effective dispute resolution and financial literacy.

Dispute resolution[39]

Effective dispute resolution supports financial inclusion by improving consumer trust and satisfaction with FSPs and the financial sector. The G20/OECD High-Level Principles on Financial Consumer Protection state that jurisdictions should ensure that consumers have access to adequate complaints handling and redress mechanisms that are accessible, affordable, independent, fair, accountable, timely, and efficient.[40] The needs of consumers, including those experiencing vulnerability, should be considered when designing and publicizing these mechanisms. Supervisory authorities must also ensure that digital financial service customers have access to complaints mechanisms that are appropriate for digital channels and issues that may arise related to the use of agents in transactions.[41]

The World Bank describes two main avenues for customers to resolve disputes, and the role of authorities in these processes:[42]

- **Internal complaints handling:** Supervisory authorities should require FSPs to have systems in place to resolve complaints promptly and fairly. This includes a complaints handling function/unit and a designated member of senior management responsible for this area. Authorities should set minimum standards for FSP complaints handling – including policies and procedures related to acknowledgement, investigation, and timely response.

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[38] Bank Negara Malaysia (2023b).
[39] Dispute resolution cuts across regulation, supervision, and consumer empowerment. The discussion is combined here for simplicity.
[40] OECD (2022).
[41] The terms "complaint" and "dispute" are often used interchangeably and defined as dissatisfaction related to action or lack of action by an FSP, which may involve incurring a loss, inconvenience, and/or distress.
[42] World Bank (2017b).

They should also set a requirement to maintain and provide to the supervisor accurate, detailed records of aggregate and individual complaints. Supervisors should assess the quality of an FSP's complaint-handing process and analyze complaints data for market monitoring and RBS activities, including the FSP's analysis of the root causes of complaint trends.

- **Alternative (out-of-court) dispute resolution (ADR):** If consumers are not satisfied with an FSP's decision, they should have the right to appeal to an alternative such as an ombudsman or industry organization within a reasonable timeframe (for example, 90 to 180 days). The ADR should be empowered to make decisions that are binding on the FSP, but not the consumer; impartial and independent of both parties; staffed by professionals trained in the subjects they deal with; structured to ensure efficient, timely, and sustainable operations; and free of charge and readily accessible to consumers. ADRs are especially important for consumers who lack the financial resources and literacy to pursue action through the court system.

In the absence of an external ADR, some authorities respond directly to consumer complaints, such as mediating between FSPs and customers and arbitrating disputes. Resolving complaints provides supervisors with immediate access to data and trends but can take significant staff resources to manage. If the authority has the capacity to be directly involved in handling complaints, the function should be separate from supervision to avoid diverting resources from core supervisory activities.

Regardless of how supervisors engage in dispute resolution, FSPs should be the first line of response to complaints and provide data for supervisory review. In addition, complaints handling is not a substitute for FCP supervision. Complaints are only one indicator of consumer risk and limited to those who are willing and able to engage in this process, which may exclude more vulnerable consumers.

Using technology to handle complaints is another way to empower consumers while streamlining supervisory oversight. The BSP offers a variety of technology-assisted channels in addition to traditional options (email, mail, phone). A chatbot called BSP Online Buddy, or BOB, uses artificial intelligence (AI) and natural language processing to converse with consumers in multiple languages and improve interactions with the BSP. BOB is available 24/7 and accessible via chat on the BSP website, SMS, and Messenger on the BSP Facebook page.[43]

For effective dispute resolution, customers need to understand how and where to use it (in both traditional and digital channels). Awareness can be raised through product disclosures, social media, financial education, and other outreach activities. Authorities could do a roadshow and visit different locations to provide information in person and obtain feedback on customer experiences. As part of its financial literacy framework, Central Bank of Nigeria has hosted workshops for public and private sector entities and the public in 12 states on topics such as lodging a complaint and customer rights and responsibilities.[44]

Financial literacy

Another driver of consumer empowerment is financial literacy, defined by the OECD as "financial awareness, knowledge, skills, attitude and behaviors necessary to make sound

[43] Bangko Sentral ng Pilipinas (2023) and FinDevGateway (2023).
[44] Central Bank of Nigeria (2023).

financial decisions and ultimately achieve individual financial well-being."[45] Financial literacy supports a range of policy objectives. For example:

- Financially literate consumers may use credit more responsibly and thereby avoid over-indebtedness and credit bubbles that can lead to financial sector instability.
- Financial literacy can contribute to building trust and confidence in formal financial services so consumers rely less on cash for transactions, reducing AML/CFT risks.
- Financially literate customers may promote market discipline and competition when they demand accurate and complete information about regulated products and providers.
- Financial literacy increases the effectiveness of financial consumer protection by clarifying the roles and responsibilities of consumers and FSPs in financial transactions.[46]

For these and other reasons, supervisory authorities should actively participate in (or lead, if consistent with their mandate) efforts to increase financial literacy in their countries**.** This may include an NFIS, nationwide surveys, training and educational programs, and guidance to FSPs on incorporating financial education into their products and services.

Financial education is one of the main tools to increase financial literacy, but playing an effective role within an authority's supervisory responsibilities can be challenging. Helping consumers handle core financial risks should be the central focus.[47] Addressing immediate financial risks to consumers helps authorities have greater impact without diverting resources from supervisory activities. Authorities need a good baseline understanding of citizens' financial knowledge, skills, attitudes, and behaviors to inform financial literacy activities. This information can be used to develop strategies and indicators, and target and prioritize specific demographic groups (e.g., women, the elderly, rural residents).

Standardized classroom financial education programs are best suited to school-aged children. When suitably developed and efficiently delivered, they can have a positive cost-benefit impact.[48] Many jurisdictions work with education ministries to include financial education in school curricula. For example, BNM has an ongoing collaboration with the Ministry of Education to instill basic financial management as an essential life skill from an early age.[49]

For adults, programs should focus on helping consumers make real-life financial decisions. FSPs can also develop tools to educate consumers in using their products and services, with supervisors ensuring the information provided is clear and not misleading. To tailor adult financial education appropriately, supervisors need to understand and customize interventions to the size and type of literacy gaps for key target groups (for example, age, gender, rural/urban, and ethnicity).[50]

Supervisory authorities should offer educational materials through different access points to meet people where they are comfortable learning (podcasts, videos, web-based, and in-person instruction). They should be offered in languages used by consumers of different income and literacy levels. Content should cover both basic financial literacy skills and product-specific

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[45] OECD (2012).
[46] Toronto Centre (2018b). See also Toronto Centre (2022) for a list of Toronto Centre resources related to financial literacy and financial education.
[47] World Bank (2021a).
[48] Toronto Centre (2020a).
[49] Bank Negara Malaysia (2023a).
[50] Toronto Centre (2020a).

issues, risks, and benefits. Authorities can collaborate with other government agencies, youth programs, industry associations, media, and other stakeholders to share expertise and resources. For example:

- South Africa's MyMoney site covers learning at different life stages. Resources include fraud and scam alerts, videos, information on upcoming workshops, e-learning modules, podcasts, and teacher resources.[51]
- National Bank of Cambodia is working with the Cambodia Microfinance Association to launch Safe Finance in Community training to help people use financial services safely and securely. It will first be offered in four provinces and expanded in subsequent years.[52]
- Bank of Ghana's website has financial education resources in multiple formats, including audio, video, infographics, and brochures.[53]

The need to strengthen consumers' digital literacy is a growing concern due to the different (and potentially greater) risks in digital financial services. These include rapid accumulation of debt through "instant credit" products and vulnerability to fraud and cyberattacks. Supervisors should provide digital content on the unique features of the services and consumers' rights and duties; warnings about unlicensed entities, scams, and security risks; and digital options for recourse. BNM conducts a roadshow every year to specifically build digital financial literacy.[54] Peru enhanced the national curriculum to incorporate financial literacy as one of the competencies for students aged 6 to 17 years. The curriculum also builds digital competencies as consumers of digital financial services.[55]

Cross-cutting supervisory considerations

There are many intersecting issues to consider when incorporating financial inclusion into financial sector supervision. Three that are most timely and relevant are: (1) financial sector innovations with the potential to reach more underserved customers, but also increase risks and competition concerns; (2) the gender gap in financial services; and (3) crisis responses.

Dealing with innovation and competition

As financial services become increasingly diverse and complex, proportionate and risk-based approaches are essential. These balance the risks and benefits of innovations coming on the market to meet the needs of the financially excluded. Regulation and supervision of new types of providers and business models (for example, fintech, big tech, digital banking) and products and services (such as digital credit, crowdfunding, digital assets) should be tailored to their systemic relevance and activity rather than simply the type of institution offering them. Regulation of intermediaries that support the issuance of central bank digital currencies also pose new challenges.[56]

Authorities have different options to deal with innovations as they emerge. If the case for immediate regulation is clear due to the nature and scale of identified risks, authorities can draft

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51 Financial Sector Conduct Authority (2023).
52 Jha (2023).
53 Bank of Ghana (2023).
54 Toronto Centre (2023b).
55 FinCoNet (2018).
56 Toronto Centre (2023a).

new regulations or adapt existing ones. However, if an authority needs to better understand an activity and its market and build capacity before regulating and supervising it, useful approaches might include wait-and-see, test-and-learn, and innovation facilitators (such as a regulatory sandbox, incubator, innovation office, or hub).[57] The wait-and-see option has been a common response to "buy now, pay later," for example.[58] Alternatively, authorities can test-and-learn and use an innovation facilitator to gradually address the regulatory gap. Authorities in Kenya and the Philippines were successful early users of these tools for e-money, and their use has expanded to many other types of innovations around the globe.[59]

Competition is another increasingly complex issue. By encouraging innovation and efficiency, competition can improve prices, choices, quality, and value for underserved consumers. Promoting competition also deters excessive concentrations of market power and reduces the impact of service outages when there is a dominant provider.

Competition is not always the norm in inclusive financial services. Obstacles to competition include barriers to entry due to network effects, sunk costs, and economies of scale and scope; roadblocks by incumbents that limit access to communication and payment infrastructures, require exclusive agent contracts, and inhibit interoperability; and regulations that favour incumbents or certain providers (for example, banks over nonbanks).[60]

E-money, an important driver of financial inclusion, is a good example. Some EMDEs have concentrated EMI markets, as in Kenya, Bangladesh, Uganda, and Zimbabwe.[61] Estimates of M-PESA's market share in Kenya approach 100%.[62] Early market dominance allowed EMIs to reach critical mass and rapidly increase financial access. However, over the long term, this could lead to higher costs and lower incentives to innovate, improve customer choice and service, and avoid monopolistic behavior. Dominant EMIs operating on a single platform also raise stability concerns in the event of service disruptions or provider failure, given the large proportion of consumers who use e-money, a lack of substitutes, and links to other market participants.[63]

Big tech companies such as Alibaba, Amazon, and Google bring new inclusive finance opportunities through their platforms, along with regulatory challenges. Big tech expansion into financial services has been greater in EMDEs where inclusion is lower.[64] Financial services play a small role in these companies' business models, but this could change quickly due to network effects and the number of captive users, among other factors. As big techs expand their financial offerings, existing regulatory frameworks may fail to contain the risks to consumers and financial stability these new business models may bring. Authorities may also need to rethink activity- and entity-based regulatory approaches to address risks posed by nonfinancial firms.[65]

Supervisory authorities can incorporate competition considerations into their frameworks in different ways. Examples include:

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[57] World Bank (2020).
[58] PYMTS (2023).
[59] World Bank (2022).
[60] Soursourian and Plaitakis (2019).
[61] Ibid.
[62] Statista (2023).
[63] Dobler et al. (2021).
[64] Financial Stability Board (2020).
[65] Crisanto and Eherentraud (2021).

(1) setting proportionate standards for market entry, such as licensing and capital requirements that do not disadvantage small but viable challengers
(2) maintaining a level playing field for different providers of the same service, such as comparable rules on agent contracts and CDD for bank and nonbank e-money issuers
(3) interoperability
(4) price transparency across different provider types, so customers can comparison shop.
Authorities should also monitor markets on a regular basis to detect anti-competitive behavior.

Closing the gender gap in financial services

Financial inclusion contributes to women's economic participation and household well-being, but many countries have a gap in access for women compared to men. The Global Findex shows that in developing economies, 74% of men have an account versus 68% of women. The gender gap varies across regions; in Sub-Saharan Africa and Middle East and North Africa, the gender gap is twice the developing economy average. There is also variation within regions: Mozambique has a gender gap of 22 percentage points while South Africa has no gap.[66]

Understanding the constraints faced by women can help authorities identify how to support access to female customers.[67] These constraints are many, including:

- lack of identity documents that meet regulatory requirements
- product design and delivery that does not consider women's unique needs
- insufficient assets, or evidence of ownership of assets, to use as collateral
- inadequate gender-disaggregated data for policy and product design purposes
- lack of mobile phone ownership or reliable connectivity, especially in rural areas
- low financial literacy and low trust in formal financial services
- less mobility due to childcare responsibilities or norms regarding women travelling alone
- gender bias and discrimination, such as unintended bias in credit scoring models.

How can supervisory authorities address these constraints?

- *Intentional policies*. Include women's financial inclusion as a specific policy objective and component of NFIS and other national strategies (for example, financial education or digitalization). Policies should include supply and demand data and input from a range of stakeholders.
- *Collaboration and engagement*. Collaborate with industry, consumer groups, and other stakeholders to identify measurable goals and solutions to increase women's access.
- *Data*. Use gender-disaggregated data to assess women's financial inclusion, measure success of existing policies, and raise awareness of gaps and opportunities.
- *Enabling infrastructure*. Support initiatives to upgrade and improve financial and technology infrastructures that underpin financial access, especially in the digital space.
- *Proportionate regulation and RBS*. Review FSP requirements to detect barriers for female clients (for example, CDD, collateral, or credit history). Support the use of sound alternatives, such as digital ID for customer onboarding and alternative credit history data (utilities, rent).

[66] World Bank (2021b).
[67] Toronto Centre (2018a). See also Toronto Centre (2022) for a list of Toronto Centre resources related to gender, including a Gender-Aware Supervision Toolkit.

- *Consumer protection*. Consider the needs and vulnerabilities faced by women related to product disclosures and suitability, recourse, and data privacy and security.
- *Targeted financial literacy*. Target financial literacy programs to the local context in which women live and work to ensure measures are relevant and accessible.
- *Bias and discrimination*. Be alert to potential bias and discrimination in credit scoring and other decision-making tools and product terms and conditions. Both FSPs and supervisors should develop skills to monitor and detect signs of discrimination.[68]

Responding to crises with a financial inclusion lens

Supervisors can use policy tools to counter the effects of systemic shocks like a war, pandemic, financial crisis, or climate disaster on financial inclusion. In day-to-day emergencies, family and friends can help each other. However, crises place unique burdens on low-income and underserved citizens as their networks may not be a source of support if all are similarly affected. Authorities need to be equitable and agile when responding to crises and build the resilience of consumers to withstand future shocks through savings, insurance, and payments. Crises also bring opportunities to increase access to formal financial services. For example, the Global Findex showed that many people began using digital payments during the pandemic.[69]

The following are examples of crisis responses that support financial inclusion:

Refugees. The European Banking Authority (EBA) issued a temporary directive to FSPs on offering banking services to Ukrainian refugees after the war began. This gives them the right to access and use a payment account with basic features in line with the Payment Accounts Directive if the FSP can comply with its AML/CFT obligations. The EBA says its AML/CFT framework was sufficiently flexible to allow FSPs to comply with these requirements, such as using simplified CDD for new customers or occasional transactions if the risk is reduced.[70]

Natural disaster. Typhoon Haiyan (2013) devastated portions of the Philippines, wiping out infrastructure and greatly impairing the ability of government and NGOs to carry out relief operations. BSP provided regulatory relief to banks affected by the typhoon. This included relaxing ID requirements to allow accepting written certification as proof of identification from clients who had lost their ID due to Haiyan. This measure was accompanied by such controls as daily customer transaction thresholds and account monitoring requirements.[71]

Pandemic-related debt stress. Many authorities instituted debt moratoria during the COVID-19 pandemic. Research in India, Peru, and Uganda shows such programs achieved two main goals: protecting FSPs' financial condition from deteriorating and giving short-term relief to millions of borrowers. The program design and implementation affected whether borrowers benefitted; for example, who should pay the additional accrued interest during the moratorium. The design also considered the tradeoff between customers' right to choose to participate versus the need for a fast, system-wide rollout to maintain stability. Among the lessons learned was the need to give greater weight to the needs of consumers and ensure they are adequately informed and have reasonable choices. In addition, authorities need to monitor the market in

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[68] Supervisors are not expected to be data science experts, but should have sufficient knowledge and training to ensure FSPs' policies, risk management, and controls are sound and to monitor the sector for unfair practices.
[69] World Bank (2021b).
[70] European Banking Authority (2022).
[71] FATF (2017).

real time, and FSPs should upgrade their digital and IT systems to prepare for future disruptions.[72]

Access to recourse. The pandemic also highlighted the importance of effective recourse. Many authorities used complaints data to detect issues and monitor the use of emergency relief measures. Efforts to digitize and simplify complaints submission helps ensure complaints data from a wider range of consumers. In addition, access to recourse helps to build trust and confidence and allow consumers to feel they have a place to turn if something goes wrong. BNM used an interactive chatbot and other digital channels to help consumers access information and submit questions and complaints. The Financial Superintendency of Colombia used AI to gather insights using complaints data on how the pandemic was affecting consumers, allowing them to create new classifications for COVID-19 issues and monitor consumer risks and needs. Some jurisdictions strengthened their standards related to recourse, either through more detailed reporting requirements or more specific expectations regarding response times.[73]

Conclusion

This Toronto Centre Note describes inclusive financial sector supervision with three complementary elements: (1) proportionate regulation, (2) risk-based supervision, and (3) consumer empowerment. Supervisory authorities will need to vary the type and intensity of different approaches depending on the unique country context, financial inclusion challenges, and potential tradeoffs between objectives. Supervisors also need to understand where policy choices in one area increase or decrease risks in another. Still, three overall principles are essential for sound implementation of any framework:

1. **Culture and tone from the top**. Inclusive financial sector supervision requires more than a new set of procedures or systems to be successful. The organizational culture needs to embrace new mindsets and skills regarding inclusion, risk, and innovation. This starts with a positive tone from the top and dedicated efforts to promote organization-wide buy-in.

2. **Understanding and managing risks.** A recurring theme in this Note is the capacity of supervisory authorities to understand and manage risks effectively, including tradeoffs between different policy objectives. Without this ability – and willingness to use it – inclusion efforts will suffer. Authorities should closely examine this area and seek training and capacity-building to ensure staff have the resources needed to succeed.

3. **Good data collection and analysis**. Timely and accurate data are essential for risk-based monitoring and supervising inclusive providers and products, especially given the heavy reliance on off-site approaches. Technical assistance and training may be helpful if the authority does not have the technical capabilities to build data collection and analysis on its own.

Many of the principles and approaches discussed in this Note are likely familiar to experienced supervisors. However, as financial products and services become increasingly complex, supervisory authorities cannot be complacent in their efforts. Inclusive financial sector

[72] Rhyne and Duflos (2020).
[73] OECD (2021).

supervision must be dynamic and responsive to new risks and opportunities for financial inclusion as they emerge.

References

Basel Committee on Banking Supervision. July 2022. *High-level considerations on proportionality.*

Basel Committee on Banking Supervision. September 2016. *Guidance on the application of the Core Principles for Effective Banking Supervision to the regulation and supervision of institutions relevant to financial inclusion.*

Bangko Sentral ng Pilipinas. *Inclusive Finance - Consumer Protection (bsp.gov.ph),* Webpage accessed August 7, 2023.

Bank Negara Malaysia. (2023a). *Financial Inclusion - Bank Negara Malaysia (bnm.gov.my).* Webpage accessed August 7, 2023.

Bank Negara Malaysia. (2023b). *Market Conduct - Bank Negara Malaysia (bnm.gov.my).* Webpage accessed August 7, 2023.

Bank of Ghana. *Financial Literacy - Bank of Ghana (bog.gov.gh).* Webpage accessed August 7, 2023.

Celik, K. World Bank. 2021. *Impact of the FATF recommendations and their implementation on financial inclusion - Insights from mutual evaluations and national risk assessments.*

Central Bank of Nigeria. *Consumer Protection (cbn.gov.ng).* Webpage accessed August 7, 2023.

Coelho, R., Mazzillo, J.A., Svoronos, J.-P., and Yu, T. FSI Insights on policy implementation No 15, January 2019. *Regulation and supervision of financial cooperatives.*

Crisanto, J. C. and Erhentraud, J. May 2021. *The Big Tech Risk in Finance.*

Dobler, M., Garrido, J., Grolleman, D.J., Khiaonarong, T., and Nolte, J. 2021. *E-Money Prudential Supervision, Oversight, and User Protection.*

European Banking Authority. April 27, 2022. *EBA statement on financial inclusion in relation to Ukraine.*

Financial Action Task Force (FATF). March 2021. *Guidance on Risk-Based Supervision.*

Financial Action Task Force (FATF). 2017. *Anti-money laundering and terrorist financing measures and financial inclusion - With a supplement on customer due diligence.*

Financial Sector Conduct Authority (FSCA). *MyMoney Learning Series.* Webpage accessed August 7, 2023.

Financial Stability Board. October 12, 2020. *Bigtech Firms in Finance in Emerging Market and Developing Economies: Market developments and potential financial stability implications.*

FinDev Gateway. July 6, 2023. *A Chatbot Named BOB and Other Consumer Protection Measures in the Philippines.*

Global Partnership for Financial Inclusion (GPFI). October 2011. *Global Standard-Setting Bodies and Financial Inclusion for the Poor Toward Proportionate Standards and Guidance.*

International Association of Insurance Supervisors. November 2016. *Proportionate Regulatory Frameworks in Inclusive Insurance: Lessons from a Decade of Microinsurance Regulation.*

International Financial Consumer Protection Organisation (FinCoNet). July 2021. *Financial Product Governance and Culture.*

International Financial Consumer Protection Organisation (FinCoNet). February 2019. *Digitalisation of short-term, high-cost consumer credit: Guidance to supervisors.*

International Financial Consumer Protection Organisation (FinCoNet). November 2018. *Practices and Tools required to support Risk-based Supervision in the Digital Age.*

Izaguirre, J.C. June 2020. *Making Consumer Protection Regulation More Customer-Centric.* Working Paper. CGAP.

Izaguirre, J. C. 2018. *Regulation and Supervision of Non-Bank Financial Institutions.*

Izaguirre, J.C., Dias, D., Duflos, E., Brix Newbury, L., Tomilova, O., and Valenzuela, M. 2022. *Market Monitoring for Financial Consumer Protection.* CGAP toolkit.

Jha, P. Khmer Times March 7, 2023. *Financial literacy critical for growth, meeting contingencies - Khmer Times (khmertimeskh.com).*

Kirakul, S., Yong, J. and Zamil, R. FSI Insights on policy implementation No 30. March 2021. *The universe of supervisory mandates – total eclipse of the core?*

Brix Newbury, L.and Izaguirre, J.C. June 2019. *Risk-Based Supervision in Low-Capacity Environments: Considerations for Enabling Financial Inclusion.*

Organisation for Economic Co-operation and Development (OECD). 2022. *High-Level Principles on Financial Consumer Protection.*

Organisation for Economic Co-operation and Development (OECD). 2021. *G20/OECD Report on Lessons Learnt and Effective Approaches to Protect Consumers and Support Financial Inclusion in the Context of COVID-19*.

Organisation for Economic Co-operation and Development (OECD). 2012. *OECD/INFE High-level Principles on National Strategies for Financial Education.*

PYMTS. April 3, 2023. *PYMTS Intelligence: Governments Around the World Explore BNPL Regulation.*

Reserve Bank of India. September 2, 2022. *Guidelines on Digital Lending.*

Restoy, Fernando. BIS Speech, November 7, 2022. *Proportionality and financial inclusion: implications for regulation and supervision.*

Rhyne, E. and Duflos, E. December 2020. *Debt Relief in the Pandemic: Lessons from India, Peru, and Uganda.*

Soursourian, M. and Plaitakis, A. CGAP November 2019. *Fair Play: Ensuring Competition in Digital Financial Services.* Working Paper.

Staschen, S. and Meagher, P. CGAP May 2018. *Basic Regulatory Enablers for Digital Financial Services.* Focus Note 109.

Statista. *Kenya: Mobile money subscriptions by provider 2018-2020 | Statista.* Webpage accessed August 7, 2023.

Tissot, B. and Gadanecz, B. 2017. *Measures of financial inclusion – a central bank perspective.* Bank for International Settlements.

Tomilova, O. and Valenzuela, M. CGAP 2018. *Financial Inclusion + Stability, Integrity, and Protection (I-SIP): Policy Making for an Inclusive Financial System.* Technical Guide.

Toronto Centre. May 2023a. *Central Bank Digital Currencies: Implications for Supervisors.*

Toronto Centre. May 4, 2023b. *The Role of AML Regulators in Financial Inclusion.* Podcast transcript.

Toronto Centre. July 26, 2022. *Gender Equality and Financial Inclusion Resources.*

Toronto Centre. 2020a. *How Supervisors Can Improve the Effectiveness of Financial Education.*

Toronto Centre. October 2020b. *Supervision of Money Laundering and Terrorist Financing.*

Toronto Centre. 2019. *The Development and Use of Risk Based Assessment Frameworks.*

Toronto Centre. 2018a. *Advancing Women's Digital Financial Inclusion.*

Toronto Centre. 2018b. *Financial Literacy.*

Toronto Centre. 2018c. *Risk Based Supervision.*

World Bank. *Financial Inclusion Overview (worldbank.org).* Webpage accessed August 7, 2023.

World Bank. 2022. *Regulation and Supervision of Fintech: Considerations for EMDE Policymakers.*

World Bank. June 2021 (2021a). *Building a Financial Education Approach A Starting Point for Financial Sector Authorities.*

World Bank. 2021b. *The Global Findex Database 2021.*

World Bank. 2020. *How Regulators Respond to Fintech Evaluating the Different Approaches—Sandboxes and Beyond.*

World Bank. June 2018. *From Spreadsheets to Suptech Technology Solutions for Market Conduct Supervision.*

World Bank. 2017a. *Global Financial Inclusion and Consumer Protection Survey 2017 Report.*

World Bank. 2017b. *Good Practices for Financial Consumer Protection.*