



Risk-Based Supervision in Low-Capacity Environments: Considerations for Enabling Financial Inclusion

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Introduction

Risk-based supervision (RBS) is a framework used by financial sector supervisors to direct supervisory resources to where risks are greatest, using a combination of risk assessment tools and strategic allocation of resources. RBS can improve supervisory outcomes such as safety-and-soundness and can also lead to more efficient allocation of staff and other resources.

Risk-taking is an inherent feature of financial services provision, so a balanced RBS approach is needed to ensure that risks are effectively managed by providers, not eliminated. Striking the right balance is important so that financial inclusion objectives are taken into account by supervisors alongside objectives of financial stability, integrity and consumer protection. An excessively conservative supervisory approach can hinder innovation and financial access, while lax supervision opens the door to reckless provider practices and harmful products, with negative consequences for consumers and the stability of the financial sector.

Emerging market and developing economy (EMDE) supervisors have been relatively slow to fully implement the RBS approach despite its widespread acceptance and promotion by global standard setting bodies. This is due in part to a lack of understanding on its practical application, particularly for those with low levels of supervisory capacity.¹ For example, some supervisors may not understand the technical aspects of adapting RBS tools and techniques into their daily work. Others may lack the experience or training that enables them to differentiate between higher and lower levels of risks in specific contexts.

Since 2017 CGAP has conducted research to help identify specific needs and opportunities to build RBS capacity of EMDE supervisors to help ensure the expansion of responsible financial inclusion, especially in the context of digital financial innovations. This working paper aims to summarize our current research findings, including an illustrative country case study, and to provide recommendations on areas for future work by the international community.²

Why Risk-Based Supervision Matters for Financial Inclusion

Multiple efforts -in a wide range of countries- to expand access to formal financial services for those who traditionally have been excluded have driven extraordinary growth and innovation in financial products, providers, and access channels, including through digital technologies. While delivering a number of positive benefits in EMDEs, this trend has created challenges for all types of policy makers (including supervisors) seeking to promote financial inclusion without compromising financial stability, integrity, and consumer protection.

¹ Most supervisors experience capacity constraints from time to time, such as during a financial crisis. For purposes of this report, “low-capacity” supervisors are defined as those facing persistent shortages of skilled, experienced staff and technological resources that inhibit their ability to fulfill their supervisory mandates. These jurisdictions may also have inadequate legal and institutional frameworks to support their mandate.

² This paper benefitted from the contributions of Myra Valenzuela and staff from the Bangko Sentral ng Pilipinas.

Supervisors who previously had responsibility for a handful of banks may find themselves overseeing a diversity of non-bank financial institutions (NBFIs), such as microfinance institutions, financial cooperatives/credit unions, and nonbank e-money issuers. These providers may be numerous, small, unsophisticated, and dispersed over a wide geographic area. In addition, the digitization of financial services poses new challenges to supervisors who may not have appropriate tools to identify, monitor, and assess emerging and evolving risks in these new and unfamiliar business models. Additionally, supervisors in multiple jurisdictions have expanded their mandates to include not only financial stability, but also financial integrity, consumer protection, inclusion, competition, and education, among others, which further increases the operational challenges faced by supervisors.³

While it is not unusual for supervision to take a back seat to regulatory reform in the international policy agenda,⁴ finding ways to address this gap is becoming increasingly urgent for EMDE supervisors whose traditional approaches are insufficient to deal with the growing size and complexity of their remit. Specifically, supervisors need guidance on practical, risk-based approaches to their daily work, including “collective approaches” that promote oversight of large numbers of small financial service providers (FSPs), and approaches to innovation.⁵

Financial sector standard-setting bodies (SSBs) have increasingly recognized the importance of the proportionate application of global standards in general, and specifically to foster responsible, safe-and-sound financial inclusion. Proportionality principles have primarily been incorporated into global standards at a high level, for example indicating that “supervisory practices should be commensurate with the risk profile and systemic importance of the banks being supervised.”⁶ However, there is not much in terms of practical guidance or examples of approaches that work in different country contexts, taking into account the evolving landscape of FSPs and expanding supervisory mandates. Further, most of the relevant international policy work has focused on regulation of inclusive financial services, rather than supervision.

The need for guidance on risk-based supervision was explicitly recognized by the G20 Global Partnership for Financial Inclusion (GPFI) in its recommendations for SSBs, which include:

- development of guidance for supervision of large numbers of geographically dispersed, small providers as well as unlicensed or informal providers (Recommendation 32); and the
- development of guidance on techniques and tools that facilitate effective risk-based supervision of financial providers targeting excluded or underserved consumers (Recommendation 34).⁷

The GPFI later reiterated the importance of effective risk-based and proportionate supervision in the G20 High-Level Principles for Digital Financial Inclusion and offered a few examples of supervisory approaches to digital finance,⁸ although without concrete guidance.

³ BCBS (2015).

⁴ Viñals and Fiechter (2010) and Zamil (2010).

⁵ While not the primary focus of this research, collective approaches may be a useful manner for supervisors to apply RBS. Further discussion may be found later in this report as well as BCBS (2016, Annex D).

⁶ BCBS (2012).

⁷ GPFI (2016a).

⁸ GPFI (2016b) and GPFI (2017).

Risk-Based Supervision: A Brief Primer⁹

RBS was first introduced in United States in the late 1980s and became the favored approach to banking supervision in the mid-1990s in response to the wave of bank failures during this period. RBS has the straightforward objective of allocating greater supervisory efforts and resources to areas of higher risk. This is conceptually similar to the focus of a medical examination, where a patient in generally good health would require fewer tests and follow-up visits compared to one with comparably poorer health and higher risk factors.¹⁰

RBS frameworks generally focus on assessing how FSPs identify, measure, monitor, and control their risks. Once the areas of greatest risk have been identified, supervisors review the FSP's risk management systems to determine its ability to mitigate or control risks and the residual (or net) risk that remains. RBS is prospective and proactive, aiming to identify sources and types of risks that allow providers and supervisors to better prepare for issues that may happen in the future. This requires a deep knowledge of the supervised institution and the environment in which it operates.

There are a number of common RBS tools and techniques, but implementation may vary from country to country. For example, reporting requirements will depend on the products and providers that exist, as well as technology available to submit the reports, which can range from high-tech "data cubes"¹¹ to Excel or Word documents submitted by email. Many supervisors use a structured risk matrix to plot the magnitude of impact and probability of different risks, although this is not essential for every situation. Regardless, the approach should be flexible and adaptable to a variety of financial products and services, and institutions of different sizes.

Similar to proportionality in regulation, proportionality in supervision should entail the application of a risk-based approach. Proportionality emphasizes the need to oversee institutions based on their size, complexity, and risk profile rather than a one-size-fits-all approach. SSBs such as the Basel Committee on Banking Supervision (BCBS), International Association of Insurance Supervisors (IAIS), and International Organization of Securities Commissions (IOSCO) encourage supervisors to devote more time and resources to larger, more complex, or riskier institutions.

RBS is often juxtaposed with a "compliance-based" supervisory approach. Compliance-based supervision is focused on ensuring conformance with rules, sometimes with a "check-the-box" mindset, and is thus backward-looking and reactive. Review procedures are applied consistently to all institutions without differentiating between higher or lower levels of risk, the quality of risk management systems, or the number of institutions being supervised.

The compliance approach is useful for determining the condition of an FSP and quantifying problems at a point in time but is not indicative of future performance or the ability to prevent problems from occurring in the first place. Compliance-based approaches tend to focus on the symptoms of problems rather than the causes, which leads to corrective programs that require FSPs to reduce risks rather than

⁹ This section is intended to provide contextual background to give the reader insights into the challenges and issues that a low capacity supervisor may face, rather than a comprehensive "how to" discussion of RBS.

¹⁰ Fitzgerald and Vogel (2000).

¹¹ Piechocki and Dabringhausen (2015).

better manage them.¹² Not surprisingly, the compliance approach deals poorly with supervising innovations.¹³ This labor-intensive approach may also strain supervisory resources and impose undue burden on well-managed FSPs.

Box 1: Compliance Versus Risk-Based Approaches

COMPLIANCE-BASED APPROACH	RISK-BASED APPROACH
Audit-oriented, with extensive transaction testing	Process-oriented, assessing institution's risk management framework
Point-in-time risk assessment	Continuously updated risk profile
Standard procedures and examination frequency	Flexible procedures and supervisory intervention determined by risk profile
One-size-fits-all	Tailored to individual institution
Focus on risk avoidance	Focus on risk mitigation

RBS is used for prudential, consumer protection and AML/CFT supervision; however, the approach to assessing risks is different. Prudential risk assessments focus on institutional safety-and-soundness and the stability of the financial sector, so monitoring relies on indicators such as capital adequacy, liquidity coverage, asset quality, and profitability. Although qualitative assessments of governance and risk management are essential, prudential oversight nonetheless requires more quantitative analysis than other types of assessments.

Consumer protection RBS is concerned with risks related to the relationship between an FSP and its customers, so assessment criteria tend to be more qualitative than quantitative. Some examples of the type of information that supervisors may analyze include:¹⁴

- Profile of target clients
- Number of retail clients (excluding corporate or high net worth clients)
- Household debt compared to income
- Foreign currency, consumer, micro/small/medium enterprise, or mortgage loans
- Volume of consumer complaints and the nature of complaints (e.g., fraud, abusive behavior, errors)
- Complexity of products
- Distribution channels (e.g., third-party agents or brokers) and geographic coverage
- Reputation of the institution
- Institution's internal control and quality of management

Box 2: Consumer Protection RBS in EMDE Countries

Consumer protection oversight of FSPs relevant for financial inclusion is an important element of financial inclusion strategies. Ensuring fair treatment of inexperienced consumers is essential for building trust and confidence in the formal financial sector. RBS frameworks for consumer protection tend to be less developed than for prudential in EMDE countries, but many are moving in this direction.

The **National Banking and Securities Commission of Mexico (CNBV)** focuses its risk-based supervision on promoting soundness and stability of the financial system in order to protect the public interest. This

¹² Fitzgerald and Vogel (2000).

¹³ Viñals and Fiechter (2010).

¹⁴ Adapted from Dias (2013).

approach allows an active monitoring of risks, governance and control systems of financial entities, enabling preventive actions, and an effective prioritization of the CNBV supervision on most vulnerable areas and systemic institutions. CNBV uses tools such as a risk matrix that reflects different risks and potential impacts, including transparency and disclosure, as well as risk-based reviewing procedures, and a set of financial and operating indicators. Condusef, which has general responsibility for protecting financial consumers in Mexico, does not use RBS but rather conducts regular supervisory activities in accordance with an annual program of supervision. These activities consider the number of complaints but are mainly driven by random selection.

The **Central Bank of Armenia (CBA)** model of consumer protection RBS includes aspects such as a Market Conduct¹⁵ Assessment Matrix and consideration of the number of complaints. The key focus areas for risk assessment are: (i) financial services rendered; (ii) interaction with consumers (eg sales practices, staff qualifications); (iii) internal complaints handling; and (iv) transparency, advertisement and other published information. The CBA measures these risks against risk-mitigating factors such as risk management and governance. The Market Conduct Assessment Matrix helps CBA to define a final and overall risk score, ranging from 5 (fully satisfactory) to 1 (unsatisfactory). Each score is associated with a defined set of supervisory actions.

Peru's **Superintendence of Banking, Insurance and Private Pension Funds (SBS)** has been continuously improving its consumer protection and market conduct regulatory framework. Since 2017, SBS requires banking and microfinance institutions to develop a market conduct management framework which involves the whole organization, from the board of directors to the staff. Also, these institutions must adopt a principles-based approach that focuses primarily on: (i) transparency of information, (ii) fair business practices, and (iii) appropriate complaints handling. SBS has moved towards a risk-based approach to assess whether regulated entities conduct their businesses according to these principles. Complaints data analysis has been the main off-site supervisory activity for many years, and even though it is still used to detect issues that could be harming consumers, the new SBS' market monitoring and off-site framework now relies on a wider range of information, including market share, financial statements, management reports, media reports, and consumer protection information from other government entities, to apply RBS. Nowadays, the SBS is aiming to enhance the market conduct regulatory and supervisory framework for insurance companies.

Sources: Supervisory authorities of Armenia, Mexico, and Peru.

AML/CFT risk assessments require measuring vulnerability to abuse of financial services that can arise from different factors. The Central Bank of Nigeria framework¹⁶ begins by identifying products, services, customers, and geographic locations that are unique to the provider, noting those that are more vulnerable to abuse than others. For example, products and services that involve higher anonymity or larger cash payments pose greater risks. The Central Bank looks at a number of factors in developing its risk assessment, such as the number and volume of transactions, geographic locations of providers and agents, and how the provider interacts with the customer (face-to-face versus electronically).

Successfully introducing new products, providers, and technologies into markets that serve the financially excluded requires sound judgment by supervisors in how they assess new and unfamiliar risk

¹⁵ The terms consumer protection and market conduct are sometimes used interchangeably. For simplicity, we use consumer protection throughout this report unless market conduct appears in a formal title, as in this case. More information on Armenia is also available in World Bank (2013).

¹⁶ Central Bank of Nigeria Framework for AML/CFT RBS of Financial Institutions reviewed at <https://www.cbn.gov.ng/OUT/2011/CIRCULARS/FPR/AML-CFT%20RBS,%20OUTLINE%20OF%20THE%20AML.CFT%20FRAMEWORK%20FINAL%2017.6.11.PDF>

profiles. A highly cautious view of pioneering approaches may stifle competition and innovation, while an excessively relaxed approach to innovation may fail to identify risks and market failures. The challenge is therefore to create a balanced supervisory framework that is risk-based and forward-looking.

Box 3: Are “Risk-Based” and “Forward-Looking” Supervision the Same?

RBS and forward-looking supervision are often described as one process (i.e. a risk-based, forward-looking approach) that looks prospectively at risks rather than a point-in-time condition. There is an important distinction, however. While RBS generates information to risk-focus supervisory activities, this will not make a supervisor “forward looking” unless the process includes both evaluation of new or growing risks and an appropriate response. The Basel Core Principles state that adopting a forward-looking supervisory approach through early *intervention*¹⁷ can prevent an identified weakness from developing into a threat to safety-and-soundness. This critical step may get lost in RBS literature that focuses primarily on the architecture of an RBS framework (e.g. risk matrix, monitoring tools, exam schedules) rather than a holistic process.

The U.S. Federal Deposit Insurance Corporation (with dual mandates as a banking regulator and deposit insurer) has embedded this concept into its examination guidance,¹⁸ noting that a forward-looking supervisory approach that identifies and *seeks to correct* objectionable conditions requires serious thought and a balanced response by examiners. A key lesson from the global financial crisis was the importance of a forward-looking approach that recognizes problems early enough to take corrective measures that will return a bank to financial health.¹⁹

The IMF similarly highlights the importance of not only identifying risks but doing something about them, saying supervisors need a *range of responses* that includes requiring providers to make significant changes in strategy (e.g. eliminating certain lines of business) or replace senior management. These require the *determination to act*. The IMF cites the absence of both an ability and willingness to act as major contributors to the financial crisis.²⁰

Why does this matter? EMDE supervisors who struggle with the basics of RBS risk assessments may have even more difficulty developing and executing an effective response, particularly one that balances financial stability, integrity, consumer protection, and inclusion objectives. This highlights the importance of a multi-faceted approach to building supervisory capacity that develops not only data and guidance but a sound training program and organizational culture as well.

Our research shows widespread promotion of the importance of RBS by SSBs and International Financial Institutions (IFIs) such as the International Monetary Fund (IMF) and World Bank. EMDE supervisors have responded positively to these recommendations, but report that they struggle with fully operationalizing RBS on a day-to-day basis. This is confirmed by country-level assessments conducted by the IMF and World Bank, which often cite slow or inadequate implementation of RBS. Supervisors note that one source of their struggle is a lack of practical guidance to assist in the implementation process. As a consequence, supervisors may adopt strategies that are either too complex or too minimalist to be effective.

¹⁷ See BCBS (2012) and BCBS (2018b).

¹⁸ FDIC (2017).

¹⁹ BCBS (2018b).

²⁰ Viñals and Fiechter (2010).

Available Guidance on Risk-Based Supervision

To understand where the gaps in practical guidance exist, we began by taking stock of global policy work on RBS implementation, with an eye to the needs of countries with low supervisory capacity and low financial inclusion. The initial scan looked for written policy documents issued by SSBs, IFIs, and other International Organizations (IOs), along with country-level supervisory entities.²¹ A list of Global Guidance and Additional Resources for Supervisors is included in Annex 1 and a summary of country-level guidance is in Annex 2. The main takeaways from the stock-taking exercise are summarized below.

Guidance Issued by SSBs, IFIs, and IOs

The research revealed abundant references to the importance of RBS in policy documents published by SSBs, IFIs, and IOs for their respective sectors. Most were in the form of principles rather than tools and techniques for practical application, although the IAIS and the International Organization of Pension Supervisors (IOPS) have issued practical guidance and country examples for the insurance and pension sectors for a number of years.²² The IAIS partners with the Access to Insurance Initiative (A2ii) to provide tools and training specifically geared to supervisors interested in financial inclusion aspects of their supervisory programs. There is also a growing body of resources for the banking sector from IFIs and IOs such as the Financial Stability Institute (FSI) and the Toronto Centre.

Publicly-available IMF and World Bank assessments of individual country's supervisory practices often cite the need to improve RBS, but our stock-taking did not identify examples of written guidance on how to do so. Generally, these IFIs provide tailored technical assistance to each supervisor rather than general guidance suited to a wider audience.

Recognition of the unique needs of supervisors of FSPs relevant for financial inclusion was rare, with the main exception being the Financial Action Task Force (FATF). However, FATF guidance mostly covers risk-based approaches to regulation, not supervision. A 2016 BCBS document on applying the Basel Core Principles to the regulation and supervision of institutions relevant to financial inclusion provides helpful guidance, but is mainly principles-based not implementation guidance.

Although most existing RBS guidance relates to prudential supervision, there are a growing number of resources related to consumer protection. For example, the Organisation for Economic Cooperation and Development (OECD) Task Force on Financial Consumer Protection developed a list of "risk drivers" that may help to identify and quantify consumer risks for supervisory purposes, and the International Financial Consumer Protection Organisation (FinCoNet), Alliance for Financial Inclusion, and World Bank have published guidance on different aspects of risk-based consumer protection supervision.

The table below provides a high-level comparison of the types of policy documents identified during the research with components of CGAP's "I-SIP Approach."²³ Gaps start to occur as the supervisor tries to

²¹ The research used judgmental and convenience sampling to identify policy documents that were publicly available, in English, and posted on relevant websites. The results should not be considered exhaustive.

²² Guidance issued by the IOPS was mainly targeted to high-income, high-inclusion countries.

²³ The I-SIP Approach seeks to identify and manage linkages among financial Inclusion, Stability, Integrity, and consumer Protection objectives, with a goal of designing policies that lead to improved outcomes and synergies

move from principles to more specific implementation guidance and tools, most notably in the stability category for banks/NBFIs and securities and consumer protection for all domains. Pairwise I-SIP linkages were covered in a few documents, such as for integrity and inclusion (FATF) and stability and inclusion (IAIS/A2ii).

Box 4: Risk-Based Supervision and I-SIP: Guidance and Gaps

	Stability	Integrity ^a	Protection ^b
Principles	Banking/NBFIP ^c Insurance Securities Pensions	Banking/NBFI Insurance Securities Pensions	Banking/NBFI Insurance Securities Pensions
Detailed Guidance or Country Examples	Banking (IFI/IO only) Insurance Pensions ^d	Banking/NBFI Insurance Securities Pensions	Banking/NBFI/Insurance (IFI/IO only)
Specific Tools (e.g. training module, risk assessment matrix)	Banking (IFI/IO only) Insurance Pensions ^d	Banking/NBFI Insurance Securities Pensions	Banking/NBFI/Insurance (IFI/IO only)

^a FATF mainly addresses risk-based approaches to regulation but there are a few references to RBS.

^b All sector-level SSBs make some reference to consumer protection/market conduct in their principles, but there is no recognized SSB for consumer protection.

^c NBFI may include microfinance institutions, financial cooperatives/credit unions, or nonbank e-money issuers.

^d Mainly focused on high-income/high-inclusion countries.

Country-Level Guidance (Banking and NBFI)

Country-level research covered the banking (and NBFI if available) sectors,²⁴ including jurisdictions that participated in the BCBS range of practice survey on financial inclusion (2015) and others that emerged while reviewing SSB, IFI, and IO documents. A total of 66 countries and three regional bodies were scanned for relevant documents.

Of 66 countries reviewed, 63 (95%) have implemented or are in process of implementing RBS in their banking sectors. Research identified several publicly available documents that address various aspects of the RBS process. Of the 63 countries, 20 (9 EMDE and 11 non-EMDE) had publicly available policy documents related to RBS. Three regional bodies (two EMDE, one non-EMDE) have guidance for their members. A list is provided in Annex 2. It is likely that many more examples exist that simply are not available for public review.

Observations on Challenges faced by EMDE Supervisors

To obtain further insights into challenges facing EMDE supervisors, we conducted interviews with several financial sector technical assistance (TA) providers. The interviewees were seasoned

among these objectives. See Tomilova and Valenzuela (2018) for details.

²⁴ This round of country-level stock-taking covered supervisory guidance focused only on banking activities.

professionals who have provided TA in a variety of jurisdictions on behalf of the World Bank, IMF, Toronto Centre, World Council of Credit Unions (WOCCU), CGAP, and others. A list of interviewees is included in Annex 3.

The discussions identified a number of specific issues and constraints faced by EMDE supervisors around the globe. Their observations centered on a few common themes, that are explored in greater depth in the next sections:

1. Supervisors have difficulty establishing the appropriate *organizational culture and mindset* needed for RBS. This type of change requires a long-term view and time commitment.
2. There is a lack of *essential data and systems* for accurate and efficient monitoring and risk assessment purposes. This can be dealt with under a shorter time frame than culture change but may require extensive technological upgrades and related training.
3. Supervisors do not fully appreciate or *differentiate the risks amongst business models and provider types*. Efforts to improve in this area require a commitment to continuous communication and cross-training.
4. *Training and development programs* often fail to effectively entrench the RBS approach. Effective RBS training and development requires an intensive dedication of staff resources to create, deliver, and update these trainings throughout the supervisor's career.

Culture

One of the first comments made by nearly every person interviewed was the need for the supervisor's organizational culture to change to successfully adopt RBS. They emphasize that the compliance approach is a different "mental model" and it can take several years to shift between the two. At its heart, RBS implementation is influenced by individual attitudes toward risk.²⁵ Supervisors who are extremely risk averse may assess risks more harshly than they should to compensate for their fear of underestimating the level and impact of a risk factor. They may underestimate the quality of risk mitigation for the same reason. Healthy perspectives toward risk taking and risk management requires training and a supportive culture throughout the organization, from the top levels of management to front line examiners.

Interviewees noted that compliance-oriented supervisors are unable or unwilling to tailor their work flow based on risks. For example, some jurisdictions require an annual uniform onsite examination for all entities of the same license type, regardless of the risk profile and competing demands.²⁶ Staff who are accustomed to traditional banking supervision may be reluctant to apply different approaches to non-bank providers that are important for financial inclusion, such as microfinance institutions, financial cooperatives, or nonbank e-money issuers. A more intensive, hands-on approach has also been observed in pre-approval requirements for new products, regardless of the features or inherent risks. This obviously has consequences not just for supervisory resources but for market development and innovation as well.

²⁵ Randle (2009)

http://siteresources.worldbank.org/FINANCIALSECTOR/Resources/Primer14_Risk_Based_Supervision.pdf

²⁶ In some cases, this is mandated by law.

A number of factors may drive resistance to the cultural shift, including a lack of understanding of how the RBS process works and confidence that it will work. Supervisors used to compliance check-lists and audit-type reviews²⁷ may not have the experience and judgment needed to identify and measure risks and supervise licensees differently based on this risk assessment. These supervisors may find it safer (professionally and politically) to follow a uniform, established compliance-based approach rather than an RBS approach.

The importance of culture transcends all types of providers (e.g. banking, insurance) and mandates (e.g. prudential, consumer protection) covered by supervisors. As with any culture change effort, tone at the top is critical. The benefits of developing a strong cadre of risk-focused supervisors will not be achieved if their judgments and decisions are not supported by the supervisor's leadership. Job performance standards may also need to be retooled to explicitly incorporate skills and behaviors that are important to RBS.

Adopting a risk-based culture and strong risk management regime is also necessary but not always found at the level of FSPs, especially inclusive providers. In some jurisdictions, FSPs may resist or ignore new requirements, especially if they do not believe they will be enforced. Others may lack experience in risk management and require their own capacity building efforts. Thus, a concerted effort is needed to educate and sensitize FSP managers to the benefit of a risk-focused regime and to help them develop adequate risk management and governance processes.

All these culture-related challenges also highlight the importance of a sound legal framework to support the RBS process, particularly for actions that are based on a qualitative judgment of risks rather than a quantitative benchmark (e.g. prompt corrective action). Supervisors may lack clear legal authority to obtain information for risk assessments from providers and other regulators, and a ladder of corrective measures to effect compliance with RBS requirements. The legal framework may also lack sufficient protections for supervisors so that they have the confidence to apply (or not apply) discretionary sanctions in line with an FSP's risk profile.

Data

As with other areas of financial sector development, good data can dramatically improve the quality and efficiency of supervision. A key area that challenges staff implementing RBS is knowing which data they need to collect, review and analyze. For example, one interviewee described a fairly common case where a supervisor requires extensive regular reports from FSPs but lacks the resources to analyze the information and translate it into effective decision making.

One reason is that supervisors often lack adequate systems and software to process and manage the data efficiently. This is a particularly strong need for supervisors of large numbers of small, remotely located institutions, especially if FSPs' information systems are unsophisticated. Some countries still rely on extremely rudimentary processes in which FSPs submit hand-written reports that require supervisory staff to manually input data into a spreadsheet in order to calculate ratios.

²⁷ Audits generally focus on conducting a systematic examination of a firm's books and records to ensure that its financial statements and disclosures are true and accurate.

Supervisors may also have insufficient data collection and analysis tools at their disposal. Some helpful tools may include dashboards, web portals to interface with FSPs, plausibility checks to ensure accurate submissions, benchmarks, and early warning systems.

Supervisors also often lack adequate legal powers to ensure the timeliness and accuracy of data, including a ladder of reasonable sanctions for noncompliance. At the same time, supervisors may not have adequate reporting requirements that are within the reach of inclusive providers, or may not provide needed assistance to those who have limited capacity. This might include outreach events, telephone and internet help desks, frequently asked question documents, and other tools to assist those with limited capacity to meet their obligations.

Understanding Business Models

Understanding the risk profile of different types of institutions (e.g. bank versus credit union) is essential for RBS. Supervisors may lack understanding of the risks of different business models and may not be well equipped to assess institutions based on their unique individual risk profiles and thus effectively apply an RBS approach. Good understanding of business models entails a different mindset than the traditional, one-size-fits-all compliance approach. This issue is particularly critical for financial inclusion so that supervisors avoid imposing unnecessary and burdensome requirements that hinder efficiency and innovation.

Although the need to understand business models may seem obvious, the inherently subjective nature of risk makes this activity more challenging than it might seem. Greater confidence in this process can be achieved with access to good data and information flows as well as regular updates on emerging risks. Staying technically proficient is particularly critical for supervisors in jurisdictions with rapid growth in innovative products and channels.

Supervisors can improve their understanding of different business models by maintaining good communication and coordination across different teams and divisions within the supervisory authority and with other authorities, such as telco regulators and data protection authorities. Specialists within the supervisory authority can share expertise and assist in analyzing complex situations as they arise.

Ongoing, open dialogue with FSPs is another important but often underutilized means for supervisors to understand new or changing business models. Maintaining frequent, regular contact with supervised entities helps to create an environment that is more conducive to introducing and vetting innovative products and channels.

Training and Technical Assistance

As highlighted above, effective RBS requires experienced and knowledgeable supervisors who are able to make subjective *judgments* about emerging risks on a continuous basis. Randle notes that while compliance-based approaches require insurance supervisors to make “yes or no” decisions regarding

conformance with a particular requirement, RBS requires supervisors to evaluate “how well” an insurer manages risk.²⁸ This ability requires extensive training and development over time.

There was universal agreement amongst the interviewees that while attending training courses is important, much more is needed than a “one and done” class if supervisors are to develop the skills needed for RBS implementation. It was also noted that in some cases, jurisdictions do not always send the right people to training; for example, a supervisor may attend and then return to the office without following through with knowledge transfer. Overworked staff members may find it easier to maintain established processes rather than lead and facilitate major changes.

The subjective nature of RBS means that training needs to be more tailored to the individual country and focused on developing individuals’ judgement and critical thinking skills. The skills needed for RBS are best developed by doing the process iteratively. Supplementing basic tools such as manuals and classroom experiences with a long-term, iterative technical assistance program allows for coaching and responding to “real world” issues and questions. This approach obviously requires a longer-term commitment of resources by providers of technical assistance; demand for these programs is described as “infinite.”

Supervisors also must be willing to make their own substantive investments in training and development of key staff. This issue is especially relevant, albeit challenging, for supervisors that have made financial inclusion a priority, as RBS training related to FSPs important for financial inclusion (e.g. microfinance institutions, financial cooperatives, nonbank e-money issuers) and specialty areas such as consumer protection, are usually a lower priority than training on prudential RBS for systemically important banks.

Some regional bodies that support RBS implementation facilitate peer-to-peer learning in addition to sponsoring trainings and developing model handbooks. East AFRITAC and the Macroeconomic and Financial Management Institute of Eastern and Southern Africa (MEFMI) both have promoted study tours for countries in the early stages of developing an RBS framework so they can learn from those who are farther along the trajectory.²⁹

Putting the Pieces Together: Lessons Learned from the Philippines

This case study provides insights and lessons learned from the Bangko Sentral ng Pilipinas (BSP) transition to RBS of inclusive financial service providers.³⁰ The process is described as a “journey” by BSP staff, which was evident during discussions that highlighted the BSP’s thoughtful, incremental approach that sought to build its capacity based on its priorities and experiences, while retaining its commitment to financial inclusion. A key takeaway is that this was not a one-time change but rather an evolutionary process that benefits from continuing process improvement in line with changes in the financial sector and supervised institutions.

²⁸ Randle (2009).

²⁹ See <http://www.eastafritac.org/> and <http://www.mefmi.org/index.php>.

³⁰ Key sources for the case study are: (i) interviews carried out with BSP staff and industry representatives in April 2018 and follow-up questions to BSP staff in April-May 2019; (ii) statistics available at BSP’s website; and (iii) Espenilla Jr. (2007) and Espenilla Jr. and Roman Tayag (2013).

The Journey Begins

The BSP is the Philippines' central bank and supervisory authority for 569 banks, including 21 universal banks, 25 commercial banks, 53 thrift banks, 25 cooperative banks and 445 rural banks. Although rural banks comprise the majority of banks, most are very small and hold a fraction of total banking sector assets. The BSP is also responsible for supervising nearly 1,060 NBFIs, most of which are pawnshops (1,051).³¹ According to a 2015 survey, more than half of the adult population use pawnshops, making them the most commonly used financial service.³² The BSP's Financial Supervision Sector (FSS) is responsible for supervision of all these entities.³³

The BSP began the transition to RBS in 1997, with the shift substantially completed by 2005. The BSP determined that a risk-based approach was necessary to keep pace with the growing complexity of the banking business and increasing demands on limited supervisory resources. The RBS approach was designed to allow institutions to take risks so long as they demonstrate the ability to manage, absorb, and price for those risks, in contrast to the traditional compliance approach that focused more on risk avoidance. The BSP also developed a collective approach to supervision that adapted RBS to rural banks and other sectors comprising large numbers of geographically dispersed institutions (see Box 5).

Implementation of RBS was incremental mainly due to the time needed to ensure the buy-in of internal and external stakeholders and to upgrade the FSS' data collection and analysis, onsite and offsite monitoring, and staff hiring and training processes for successful implementation.³⁴ These themes are explored in the following sections.

Box 5: Collective Approaches to Supervision

Although many EMDEs struggle with supervising large numbers of small, geographically dispersed institutions that are important for financial inclusion (e.g. financial cooperatives and microfinance institutions), there are few good examples of "collective approaches" to overseeing such entities.^{4F35P} This case study illustrates the BSP's effective use of this technique to supervise rural banks, pawnshops and non-stock savings and loans associations.

The Philippines' rural banking sector, while small in terms of asset size, plays an important role in financial inclusion by providing services through its large network of offices located across numerous islands where financially unserved and underserved consumers often reside. An important first step in effectively supervising this sector was rationalizing its size. The BSP has encouraged rural banks to merge and consolidate to strengthen their financial soundness and competitiveness, while at the same time extending their branch networks. These efforts have led to a reduction in the number of rural banks from 653 in 2009 to 445 as of March 2019, while maintaining nearly 3,000 branches across the country.

³¹ Source: BSP staff, as of March 2019.

³² CGAP (2017).

³³ NGO microfinance institutions and non-bank cooperatives are not supervised by BSP. The Microfinance NGO Regulatory Council is the accreditation body and supervisor of MFI NGOs, and cooperatives are under the remit of the Cooperative Development Authority.

³⁴ Espenilla Jr. (2007).

³⁵ See BCBS (2016, Annex D) for a summary of this topic.

This landscape still posed significant challenges to the BSP's supervisory capacity. An RBS approach that mirrored that of commercial banks (e.g. frequent onsite examinations of every licensee) was neither cost effective nor practical. The BSP decided to develop a collective approach to monitoring the rural banks as an industry with the goal of targeting resources to areas and institutions evidencing highest risks.

This process is centered in offsite horizontal monitoring to assess key risk drivers and exposures at a sub-sector level. Supervisors segment rural banks based on specific criteria, such as business models, geographic locations and customer profiles that would expose them to similar risks simultaneously, recognizing that the level of impact may vary from bank to bank. These institutional groupings or sub-sectors form the basis for applying the first layer of the collective approach. This is followed by identification of institutions that contribute the most to sub-sector risks, and deeper institution-level offsite analysis that informs the planning and scoping of onsite examinations. Rural bank examinations are less frequent and narrower in scope than typical bank examinations, and focus on the identified high-risk areas. This model has also been adapted to some NBFIs, such as pawnshops.

The BSP has found that the success of the collective approach relies on two key elements: (i) adequate financial data and statistics from supervised institutions to help supervisors assess the risks at the individual and group level through offsite monitoring tools; and (ii) strong engagement with supervised entities to fully understand their characteristics, market developments, and emerging risks corresponding to these financial institutions.

Data Collection and Analysis Framework

The BSP believes that intensive use of data enriches supervision and helps ensure that consistent and well-supported reports are produced for the benefit of supervisors, especially in sub-sectors where the collective approach is applied. The BSP's Supervisory Data Center (SDC) serves as the central collection, quality assurance, processing, and internal distribution point of all financial sector data coming into or being released by FSS. SDC is responsible for the accuracy of bank reports, including reconciling submissions against validation rules and ensuring only validated reports are uploaded to the repository. The data collection and analysis component of the BSP's surveillance framework includes the following:

1. The Financial Reporting Package implemented in 2008, comprises a basic set of structured reports (including balance sheet and complementary schedules) in Excel that banks³⁶ are required to submit quarterly via email. This reporting framework allows the BSP to gather more relevant and timely data, in a format that allows for easier submission by providers and better management, validation, access and analysis by BSP staff to support the supervisory process. The Financial Reporting Package can be updated on a regular basis to incorporate any reporting requirement changes based on BSP rules.
2. The Financial Institution Portal, launched as a pilot in October 2018, is an online, secured, web-based facility that aims to enhance the submission of required reports by supervised entities. The Portal is designed to automate the monitoring of report submissions and to post, in real-time, the validation results of submitted reports. It is envisioned to serve as the repository of all reports submitted to the BSP and a platform to facilitate the exchange of official communications related to report submissions, such as validation results, assessment letters, and other notices. The Portal will

³⁶ Including rural banks. NBFi reporting is currently a separate function not part of the Financial Reporting Package.

be the single point of reference to all official submissions and correspondence, as authorized users of the BSP and supervised entities will have access to the same set of records. Rural banks, which often struggle with reporting accuracy, will greatly benefit from this technology as it provides prompt feedback on report validation results. BSP intends to roll out the platform for NBFIs submissions in the near future as well.

3. The Data Warehouse System processes the data submitted by providers and validated by SDC, produces structured statistical reports for supervisors and provides BSP personnel with access to data for ad-hoc queries and mining within approved access protocols. The system facilitates vertical, horizontal, peer group and trend analyses.
4. The Bank Performance Report provides standardized summaries of a bank's financial condition and key performance indicators, and comparisons to peers and the industry.
5. The Bank Dashboard is generated quarterly by SDC for each bank and combines statistical information auto-generated from the Data Warehouse with qualitative inputs that the Central Point of Contact (CPC) supervisory staff populate. Each CPC centralizes information from different teams, such as institutional risk rating from onsite examination, AML/CFT compliance rating, cyber risk rating, rating of trust operations, and the intensity of supervision (e.g., under prompt corrective actions).
6. The Industry Dashboard presents indicators by industry (e.g. rural banks, thrift banks) and different groups or sub-sectors (e.g. rural banks in a specific location subject to collective approach), as well as economic and financial data, so that data on key sources of potential risks and concerns for supervisors are available in one location. The dashboard produces a heat map showing the risk levels associated with such areas as asset quality, liquidity, profitability, and others, using a four-level rating scale. The heat map is compared to CPC insights on industry characteristics and business models to assess whether emerging risks and mitigating factors are adequately highlighted. Heat maps are particularly useful to prioritize offsite and onsite supervision where collective approach is applied.

An important complement to the surveillance framework is the Bank Supervision Policy Committee (BSPC), a platform for the BSP and industry members to discuss trends observed in the Industry Dashboard that have raised supervisory concerns. The discussions are used to obtain industry feedback on emerging risks, improve understanding of market developments, highlight supervisory expectations, and identify areas where policy adjustments may be needed. The meetings also provide a venue to discuss newly issued policies and communicate supervisory expectations.

The BSPC is an important means of maintaining a continuous, open dialogue with the financial services industry and learning more about emerging business practices, products and services. The BSPC includes BSP representatives from the FSS, Treasury Department and Monetary Stability Sector, and representatives of 18 industry associations. Initially the meetings were held bilaterally between the BSP and each industry association, but since 2015 three meetings include representatives of a few associations that operate in similar industries and can benefit from joint discussions. Most meetings are held quarterly, except the bi-monthly meetings with rural banks and bi-annual meetings with finance companies.

Box 6: Regulatory and Supervisory Technology

As more granular, frequent, and varied data is desired from providers, better mechanisms to facilitate the submission and use of this data are also needed, especially when a collective approach is applied. The BSP is evaluating the adoption of regulatory and supervisory technologies (RegTech and SupTech) to enhance data collection, access, and analysis. For example, BSP is piloting the use of application programming interfaces (APIs)³⁷ for collection and exploitation of regulatory reporting data, as part of the RegTech for Regulators Accelerator (R²A). Banks would use APIs to generate regulatory reports in extensible markup language (XML) files that store, transport and manage data more easily, and are both human- and machine-readable. Each bank could automate the recurrent generation of one XML file with all the information needed for the Financial Reporting Package, and then transmit it to the BSP system. This would remove data redundancies and human errors associated with manual information uploading and reduce the use of resources needed to produce the reports.

BSP is also pilot testing the use of APIs to communicate with supervised institutions and to carry out such tasks as data pulling, and data integrity and consistency verification. The API environment would help institutions access their current and historical data through user-friendly interfaces. It would also help SDC elaborate different types of standardized and customized reports and share information with other authorities and with BSP staff interested in doing data mining, queries and analytics much faster. A foreseeable challenge for the scaling of these pilots is the limited understanding of XML by those who may benefit the most (e.g. rural banks under a collective approach).

The use of cloud services is another area the BSP is studying to have a better understanding of the nature and extent of associated risks. The BSP is allowing on a pilot basis the use of cloud services by rural banks, including for their core banking system, and exploring whether BSP's reporting environment could be put in the cloud for easier and faster communication with providers. Both measures, combined with the use of XML and APIs, could allow BSP to pull data directly from providers through the cloud, and to help providers better comply with regulatory reporting requirements. Currently, cloud service providers are making efforts to reach isolated areas within the Philippines and facilitate easier access and transmission of information even in remote areas with weak internet connectivity, where rural banks operate.

Offsite Monitoring and Onsite Examinations

As part of the initial RBS implementation, the BSP realigned its supervision framework from an institutional configuration (e.g. commercial banks, rural banks) to one organized by supervisory processes (e.g. onsite, offsite) and specialist activities (e.g. information technology, AML/CFT). This gave the BSP an opportunity to focus on deepening RBS skills and experience in these areas. Another major change was revising examination policies and procedures from compliance to risk-based. The BSP's core examination manual was revised in 2005 with assistance from the U.S. Agency for International Development (USAID), while a comprehensive training program on conducting risk-based examinations was developed with support from the World Bank's FIRST Initiative.³⁸ Pilot examinations were used by BSP examiners to test and apply the manual and what they learned in the training program.

³⁷ An API is a set of rules and specifications followed by software programs to communicate with each other, and an interface between different software programs that facilitates their interaction. BCBS (2018a).

³⁸ See <https://www.firstinitiative.org/stories/philippines-development-training-capacity-banking-supervision>

Proportionality has been integral to the RBS framework. Banks are segmented for regulatory and supervisory purposes as “simple” or “complex” based on size, scale, business model, products and services, and risk profile. Banks can be reassigned from their initial category as per the judgment of the supervisor. Several governance, risk management, and reporting requirements have been streamlined for simple banks, which include the majority of rural banks. For example, the simple category has less stringent internal audit, independent director, and board committee requirements, and streamlined reporting, such as fewer schedules and less frequent (quarterly instead of monthly) submissions.

In 2019, the BSP re-integrated its offsite and onsite units to better align with the changing structure and risks in the financial sector. These units coordinate with specialist groups that conduct offsite and onsite supervision over trust and asset management, information technology (IT) and AML/CFT. Microfinance institutions, which were previously supervised by a separate specialty area, are now integrated into regular examination processes as all staff have gained sufficient expertise in microfinance business models to conduct reviews without specialist support.³⁹ The offsite monitoring, onsite examinations, and specialty supervision areas are further described below.

Offsite Monitoring

A designated CPC is tasked with identifying sources of potential threats to a supervised institution’s financial and reputational soundness and adjust risk assessments accordingly. CPCs are expected to have a thorough understanding of an institution’s business model and the main characteristics and developments of the sub-sector where an institution operates.

The Institutional Overview is used to monitor financial institutions in between onsite examinations, develop a risk profile using key performance indicators and analyses of a wide range of information, and prepare a memorandum that scopes the risks that onsite examination activities will focus on. The Institutional Overview is prepared with quantitative data from the dashboards and heat maps, qualitative data from other BSP units (e.g. risk ratings for AML and IT, consumer complaints), market surveillance (e.g. news items and social media), monitoring adoption of recommendations from onsite examination reports, and interactions with institutions.

The CPCs are responsible for incorporating inputs from institutional and industry dialogues and onsite examinations into the Institutional Overview. The CPCs maintain regular contact with their supervised institutions to gather key institutional and industry insights. Industry dialogue through the BSPC is also important to obtain clarification on market developments.

The BSP is also enhancing its crisis management capabilities as part of its surveillance program. The FSS recently had its first crisis management meeting where cross-cutting concerns and emerging threats were flagged and discussed. These meetings will be conducted every two months going forward.

The BSP believes the offsite framework would further benefit from more granular and comprehensive data and better data analytics to identify and assess emerging risks. BSP staff are also challenged with ensuring they receive accurate and timely data, especially from rural banks. For example, some

³⁹ NGO microfinance institutions are not part of this process, as described in footnote 33.

institutions make a high number of reporting errors, including basic issues such as schedules not adding correctly. To impose greater discipline on submitters and reduce the time spent following up on errors, the BSP adopted a Reporting Governance Framework that promotes greater accountability by the board and senior management for the accuracy of their regulatory reports, including penalties in some cases.

Onsite Examinations

Risk scoping for onsite examinations begins with the Institutional Overview. For collective approaches, the heat map is particularly useful to identify concentrated risks in certain sectors and geographic areas. Although the BSP previously followed a regular periodic examination cycle for banks, this recently changed to permit greater flexibility in scheduling based on risk. Examinations of rural banks under the collective approach are generally shorter than for other types of banks and require fewer staff due to their narrower focus, typically covering credit risk management, governance and audit functions. NBFIs examinations are prioritized mainly based on identified money laundering and consumer protection risks.

Onsite examination schedules are determined one year in advance. Examiners are assigned to institutions of different sizes and risk profiles on a rotating basis. The examiner-in-charge changes for each examination to allow for cross-training and exposure to a variety of institutional types and risk profiles. Experienced examiners are usually assigned to be examiner-in-charge of larger banks, but a lead assistant examiner may be the examiner-in-charge at the next examination to facilitate continuity from exam to exam.

Onsite examinations may include staff from specialized units, depending on how significant the specialized risk is for the examined institution. Participation of specialists is decided during the annual examination planning stage, considering inputs from examination and specialized teams. Exceptional adjustments may be made throughout the year based on high concerns from either team. Specialized units handle areas such as financial consumer protection, AML/CFT; IT, trust, and capital markets. Most specialists begin as generalist examiners and later specialize in their chosen area. Staff can shift between areas so there is good cross-pollination.

The BSP updated its CAMELS⁴⁰ rating system to reflect the RBS approach, and formally implemented standards for a holistic assessment of banks' risk management systems and other functions. The onsite team produces an examination report that includes the CAMELS rating and risk management assessment. The completed report is sent to the CPC, who follows up with the bank on directives and findings, and may request progress reports in between examinations if the findings are serious. The BSP is enhancing its rating framework to make it more business model focused and centered on risk, governance, capital adequacy, and liquidity assessments. The framework may be used for all supervised institutions.

The BSP has a ladder of corrective action tools to help prevent problems from getting worse. Early interventions may include issuing a directive that may be accompanied by a warning from the BSP; and a

⁴⁰ CAMELS is a commonly used bank rating system that assigns numerical risk ratings to Capital adequacy, Asset quality, Management, Earnings, Liquidity, and Sensitivity to market risk.

letter of commitment signed by all directors of the supervised institution, whereby they commit to address an issue within a specific timeframe. The letter of commitment is used for issues generally not related to capital adequacy, before imposing a prompt corrective action. Institutions under a letter of commitment generally have one year to correct issues, which could extend up to three years for special circumstances. If an issue stated in the letter of commitment is not addressed within the prescribed timeline, the BSP will implement escalated enforcement actions such as placing the bank under a prompt corrective action. Issues that pose safety-and-soundness concerns would prompt the BSP to opt for a memorandum of agreement to undertake a prompt corrective action. This entails more intrusive supervision, requiring at least quarterly updates on how issues are handled.⁴¹

Communications between institutions and the BSP help to improve the effectiveness of risk-based examination procedures. Examiners discuss the examination process at their first day meetings, and banks are asked to provide feedback on the conduct of the exam to the BSP managing director at the close of each examination (including a rating and open comments). Examination teams are expected to candidly discuss how CAMELS ratings are determined during the exit meeting with staff of supervised institutions.

Supervision of NBFIs

One dedicated unit, called the “FSD IX,” carries out integrated offsite and onsite supervision of NBFIs, including non-stock savings and loans associations,⁴² pawnshops, money service businesses,⁴³ and non-bank credit card issuers. To help define the appropriate supervisory approach for individual institutions, the FSD IX utilizes the Institutional Overview which provides the risk profile of a particular institution based on data on the board, owners, partners, complaints, and AML issues, among others.

Non-stock savings and loans associations are supervised using a collective approach, with a longer examination cycle (*vis-à-vis* banks) ranging from 12 to 36 months depending on the entity’s risk profile. Some of them, specifically those larger than some commercial banks, receive priority supervisory attention. Regular meetings with their industry association (through the BSPC and Technical Working Groups) are used to better understand the industry and its ability to address emerging risks and issues identified through offsite monitoring.

For pawnshops, the BSP previously used statistical sampling techniques to identify which would be subject to inspection. In 2016, BSP adopted a network-based approach focusing primarily on pawnshop groups/networks that are systematically connected, enabling a more efficient, risk-oriented use of supervisory resources. Information on consumer complaints (e.g. lost pawned items, illegally operating

⁴¹ BSP’s early intervention framework is further described in [FSI Insights on policy implementation No 6](#).

⁴² Non-stock savings and loans associations are non-profit corporations owned by members with a common bond (e.g. government employees, military/uniformed personnel) primarily engaged in the accumulation of savings and using such accumulations for lending to its members who are confined within a well-defined group (directors/officers/employees of one company, member-retirees and immediate members of families).

⁴³ Money service businesses include remittance and transfer companies, money changers and foreign exchange dealers.

pawnshops) provided by the BSP's Consumer Empowerment Group is also used to determine the scope of examinations.⁴⁴

Supervision of the various types of money service businesses is also risk-based. The main focus for remittance and transfer companies is compliance with AML rules, as the supervisory authority resides in the AML Act.

Coordination with local governments is an important source of information for supervising NBFIs. A 2009 Memoranda of Agreement between the BSP and the Department of Interior and Local Government requests local governments to submit quarterly reports to the BSP on the list of pawnshops and money service businesses with new, renewed and cancelled, revoked or retired business permits. The BSP uses this information to identify businesses operating without the required registration and coordinate with local governments.

For all institutions under the FSD IX, quarterly meetings are conducted with the respective industry associations as a venue for the BSP to communicate new policy guidelines and regulations and discuss emerging risks and concerns in a coordinated and timely manner.

Information Technology (IT) Supervision

The Core Information Technology Specialist Group was BSP's first specialist unit, set up in 2005 and renamed the Technology Risk and Innovation Supervision Department (TRISD) in 2019. It is primarily responsible for conducting onsite and offsite IT supervision to ensure the safety and soundness of supervised institutions' technology risk management processes and governance mechanisms. Likewise, TRISD formulates and maintains a regulatory and supervisory framework relating to IT supervision aligned with international best practices and standards and up-to-date with the changing technology landscape. It is also charged with cybersecurity surveillance and oversight functions while promoting digital/fintech innovation through the BSP's "test-and-learn" approach.

Supervised institutions are required to submit annual reports providing detailed information on their IT environment, which are used to determine their offsite IT risk profile. TRISD assigns scores for six different areas and produces an overall IT risk profile for the institution (complex, moderate, or simple). This profile and the onsite IT examination results form the basis of TRISD's supervisory strategy. Complex institutions are subject to more frequent onsite examination (at least annually) while less complex ones may have longer examination cycles (every two or three years). The IT risk profile scoring currently covers only inherent IT risks, but plans are underway to require self-assessments on risk management and control measures to better identify residual risks. With this information, TRISD plans to develop IT risk reports at the institution and industry levels to be shared with senior management and other supervisory units for a more holistic supervisory approach.

As part of IT supervision, TRISD assesses business continuity and resilience of supervised institutions and monitors their compliance with recent IT-related rules. In coordination with the Payment System Oversight Department, it authorizes and monitors the use of different electronic payment and financial

⁴⁴ BSP's efforts to improve the risk focus of pawnshop oversight are described in more detail in CGAP (2017).

services.⁴⁵ by supervised institutions. TRISD also processes the licenses of non-bank e-money issuers and the registration of virtual currency exchanges.⁴⁶ TRISD has also carried out joint special examinations with financial consumer protection specialists to look at IT-related consumer complaints and systems in place to address such complaints, and with AML specialists to examine AML IT systems of supervised institutions.

TRISD serves as a resource and trainer on IT issues for the BSP and is currently developing an internal IT risk supervision course as part of the FSS' Professional Excellence Program for Supervisors (PEPS). This will better equip generalist examiners to assess IT risks in any supervised institution and conduct IT examinations of simple institutions.

AML/CFT Supervision

RBS is integral to BSP's AML/CFT efforts. The recent national risk assessment has helped BSP better understand money laundering/terrorist financing vulnerabilities to inform their institutional risk assessments. The BSP continues expanding its AML/CFT information collection efforts to enhance its risk-rating system and better prioritize supervisory resources.

The BSP Financial System Integrity Department provides the CPCs with AML/CFT risk ratings to serve as an input to the Institutional Overview and examination report for each supervised institution. Risk ratings are currently elaborated based on the national risk assessment, results of onsite examinations, and unstructured information on suspicious transactions, politically exposed persons and other high-risk clients.

Plans are underway to require the electronic submission of monthly reports on large and suspicious transactions, high-risk customers, and other relevant AML/CFT data to support institutional and sectoral risk assessments. The BSP also requires all supervised entities to conduct an institutional money laundering/terrorist financing risk assessment (including a simplified version for low-risk institutions) at least once every two years or as often as its board of directors or senior management may direct, depending on their level of risks. The assessment shall be made available to the BSP during examination or in other circumstances deemed necessary as part of BSP's continuous supervision. This information is expected to strengthen the offsite and onsite supervision processes, especially the collective approach.

AML specialists join onsite examinations of entities with high AML risks, and provide support and training to generalists who conduct AML examinations for lower-risk entities. AML risk assessments look at compliance with AML rules, internal audit and controls, Board oversight, and management information systems. Banks' AML examinations are integrated into the prudential examination and the AML risk assessment is a component of the examination report.

AML specialists conduct regular training for BSP staff on emerging risks and legal/regulatory developments, and train institutions at industry association meetings. Specialists engage with the

⁴⁵ These are products or services that enable customers to receive payments or initiate financial transactions and other related services through an electronic device such as mobile phones, automated teller machines and others.

⁴⁶ These are entities that offer services or engage in activities that provide facility for the conversion or exchange of fiat currency to virtual currency or vice versa.

Financial Intelligence Unit to deepen their knowledge and expertise, and with the National Law Enforcement Committee (that includes the Financial Intelligence Unit, all financial authorities and the police) to gather information on recent financial crime issues.

Financial Consumer Protection Supervision

Risk-based FCP supervision has progressed at a slower pace than other specialty areas. The BSP originally focused its FCP efforts on responding to consumer complaints and inquiries, with a goal of eventually incorporating an FCP risk assessment into the overall institutional supervisory process. Progress has been challenged due to inadequate data, resources, and capacities that are now slowly being addressed.

The BSP created the FCP Department (now Consumer Empowerment Group) to: 1) formulate policies, regulations and standards that promote consumer rights and fair conduct of business; 2) strengthen the supervised institutions' adherence to the standards, laws, rules and regulations; 3) provide a venue for the public to seek redress for grievances against supervised institutions; and 4) empower the public to make informed decisions through personal financial education. The Financial Consumer Protection Framework⁴⁷ describes principles of ethical business practices and sets minimum consumer protection standards.

The FSS is working to enhance complaints data for use in offsite and onsite risk assessments. Initially, CPCs received data on complaints lodged with the BSP along with briefings on industry level trends. The BSP has since issued a streamlined yet comprehensive complaints reporting template for institutions to obtain better intelligence for examination risk scoping. The BSP is also pilot testing a chatbot with artificial intelligence capabilities to handle inquiries and complaints and generate data on consumer experiences and business practices. Further, amendments to the Financial Consumer Protection Framework are being finalized to institutionalize FCP as an integral component of corporate governance, culture, and risk management. The BSP also envisions developing FCP risk indicators and ratings using complaints data and analyses of an institution's FCP policies to strengthen offsite supervision (including the collective approach) and an FCP risk assessment manual for examiners.

Staff Skills and Training

The introduction of RBS required the BSP to hire and train all their supervisory staff for a new skillset beyond those traditionally emphasized, such as accounting and auditing. The FSS established a human resources "competency model" that aims to transmit and instill five *core competencies* in FSS staff: contribute to the team's goals; understand the supervisory framework within the FSS' vision and mission; know the business and operating environment of supervised entities; protect information and behave ethically; and use good judgment.

For each competency, there is a list of representative behaviors to be displayed by FSS staff. This would serve as a guide for the *performance assessment process* that includes the assignment of ratings for

⁴⁷ See BSP website http://www.bsp.gov.ph/about/advocacies_fin_fcag.asp for further details.

each competency and reviews with employees on a semi-annual basis. Several representative behaviors have relevance to RBS, for example:

- apply standards and methodologies that are proportionate to the situation
- keep abreast of relevant trends in banking, economics, and the financial sector
- synthesize internal and external developments to identify an appropriate course of action
- identify, measure, monitor, and control potential risks
- proactively identify relevant issues and concerns and recommend an appropriate response

The core competencies are developed and strengthened through a comprehensive in-house *capacity building program*, comprising curriculum-based trainings, online learning facilities, on-the-job mentoring and coaching, global certifications, and fellowship and scholarship programs. The *curriculum-based trainings* comprise the foundational PEPS program, external trainings (local and foreign), other internal trainings to develop skills such as critical thinking, and internal briefings to disseminate new guidelines and regulatory amendments.

PEPS is an in-house, structured training program that includes a sequence of 18 ladderized courses required for examination staff, covering introductory material, intermediate materials on different supervisory topics and skills, advanced topics such as problem bank resolution, and expert areas such as macroprudential supervision and mentoring. There are also specialist courses to develop subject matter expertise in areas such as Trust, AML, Data Warehouse, and Training of Trainers. Basic IT and FCP courses are currently under development. Examiners must also complete all 69 fundamental modules of *FSI Connect*⁴⁸ over a one-year period, with specific modules identified as pre-requisites to each PEPS course.

PEPS was developed with the assistance of outside experts from the IMF (funded by the Japanese Government), FIRST Initiative, and USAID. An important objective of the technical assistance was to create a cadre of trainers within BSP to sustain and disseminate training cost-effectively. The PEPS is now fully implemented and entirely run by BSP staff. Course committees are responsible for updating materials to keep them relevant, identifying BSP experts who can teach the courses, and making sure that trainers are well equipped in terms of training content and methods. As both hard and soft skills are important for RBS, the PEPS trainers are guided to use a range of techniques and tools, such as role play, simulation, and case exercises for topics that involve critical thinking and judgment (e.g. loan review discussions and other management meetings). Writing skills are also developed interactively.

As part of the curriculum-based training, staff may also be selected to attend *external training courses*, held locally or abroad, provided by foreign governments, SSBs, and regional entities like SEACEN. This training has been very useful for specialty areas such as FCP and AML.

In addition, the BSP encourages and subsidizes staff to obtain international certifications such as Chartered Financial Analyst, Certified Internal Auditor, Professional Risk Manager, Financial Risk Manager, and Certified Information System Auditor. BSP also offers fellowships and scholarships for staff to attend graduate and post-graduate education programs in relevant fields supporting the expanding requirements of banking supervision.

⁴⁸ See FSI Connect website for details <https://www.bis.org/fsi/fsiconnect.htm>

The *hiring policy and process* for supervisory staff has been expanded to meet different RBS needs other than finance and accounting, such as statistics, economics, mathematics and engineering. One AML manager noted the importance of individuals having “street smarts” in addition to traditional audit and accounting skills. An SDC manager stated that it is increasingly important to hire staff with skills in data science, rather than just data analysis.

At the inception of RBS, there was some attrition of examiners who were not able or willing to make the shift from compliance to risk-based approaches, and an orderly transition plan that included facilitating staff reassignments was needed. The BSP has also had to deal with the challenge of *retaining its staff*. With more advanced skills, BSP staff are increasingly attractive to foreign supervisors, international accounting firms, and private industry who seek the same skill sets. The BSP has developed programs to improve employee satisfaction in an effort to increase retention; for example, by providing greater training and scholarship opportunities and an enhanced rewards and promotion system for better performing staff.

Adaptation of RBS to Innovations

The RBS framework has also enabled a policy, regulatory and supervisory environment that allows flexibility for innovations in business models, space for the provision of a wide range of products and services, and opportunities for entry into new markets. The BSP looks at the ability of an FSP to deliver new products and services with the appropriate risk management processes and its ability to adjust to new risks and balance risks and benefits of innovations.

The BSP’s “test and learn” approach begins with a review of the proposed products, services, or business models before defining a supervisory and regulatory approach.⁴⁹ Interested fintech start-ups and incumbents can approach the BSP for input and guidance prior to rolling out new products and services. Depending on the nature of the proposed products and services, various BSP units responsible for supervision, financial integrity, FCP, payment systems, and IT, among others, may be involved in the preliminary evaluation process. Should the proposal meet the BSP’s requirements (e.g., innovativeness, test of fitness and propriety), the BSP would allow the product or service to be offered within controlled parameters (e.g., specific time period and location, limited number of users) and with necessary safeguards (e.g., adequate resources, policies and procedures, transparency).

This “test and learn” approach is used for all new and emerging technologies. For example, rural banks have approached BSP to test the use of cloud services to host their core banking systems. Recognizing the potential benefits, particularly, in upgrading rural banks systems and IT capabilities, the BSP has approved these requests and is closely monitoring its development to enhance its policy and supervisory approach to cloud computing services.

Another key element of BSP’s risk-based approach to innovation is effective dialogue and coordination. There are regular meetings among staff from different departments to exchange information on, and

⁴⁹ Test and learn, along with “wait and see” and regulatory sandboxes, are different types of regulatory approaches to innovation of relevance to financial inclusion. Jenik and Lauer (2017).

better understand, new market developments. All relevant departments coordinate from the outset to follow up during pilots, assess any new or modified risks and risk mitigants, and assure consistency in the application of supervisory procedures.

Summary of Good Practices and Lessons Learned

The BSP's implementation of RBS is a success story that continues to evolve. The case study reveals a number of good practices and lessons learned that other jurisdictions may find informative. These include:

Build slowly and strategically

Key to the BSP's success is its decision to develop its RBS framework slowly, introducing new policies and processes in a phased approach. Implementation was preceded by extensive stocktaking of the people, resources, skill sets, and mindsets needed to be effective. The BSP continues to build out specialty areas (AML, IT, FCP) as resources are available. The readiness of supervised institutions to implement their own risk management systems and meet technological demands is another important consideration.

Invest in training and development

BSP made a number of sound investments in training and sought expert technical assistance for areas they were not able to develop on their own, such as the examination manual and in-house training program. At the same time, BSP aimed to develop internal expertise and institutionalize their efforts to ensure continuity. The BSP has also actively engaged with other jurisdictions to learn best practices, including sending staff to conferences and trainings in other countries. RBS adoption has been incorporated into job performance standards and is the subject of ongoing mentoring and coaching.

Good data is essential

The BSP developed a sound platform for collecting and analyzing quantitative and qualitative data from supervised entities to assess individual and sector-wide risks, especially from a prudential perspective. The BSP continuously identifies supervisory data needs with the goal of improving reporting requirements and its system to manage and analyze data. The SDC cites data reliability and skilled staff as important prerequisites for RBS, as well as staying ahead of the curve in understanding emerging new technologies, such as cloud computing, which may be mutually beneficial for providers and the BSP.

Leadership and culture change matter

BSP staff attributes much of their success to the leadership of former Governor Nestor Espenilla, Jr. An appropriate "tone from the top" is essential for instilling the right culture and mindset for RBS to take hold. Staff need to be open to change, and managers need strategies to assist those who struggle to embrace new ways of doing their jobs.

Communication and transparency must be frequent and ongoing

The BSP has made an intensive effort to increase the buy-in and capacity of supervised institutions. When the BSP launched its RBS program, supervisory staff did road shows with industry federations and communicated its new approach during BSPC meetings with industry partners. On an ongoing basis, BSP

examiners use first day meetings to walk through the examination process. While some institutions reportedly miss the greater predictability of a compliance-based exam, many entities view the change as positive overall.

Adaptation is important to support sound innovation

BSP's "test and learn" framework for vetting innovations is a good model for supervisors wishing to balance financial inclusion with stability, FCP, and financial integrity priorities. This approach has required trust, coordination, and communication across BSP units and with supervised entities, supported by a foundation of openness and willingness to learn and evolve. The ongoing participation of all relevant BSP departments helps them better understand innovations and monitor risks. The BSP is also using the BSPC meetings to discuss market developments and emerging risks with industries, and to highlight the importance of addressing issues jointly among supervisory and industry actors.

Collective supervisory approaches can help balance financial inclusion with other priorities

The collective approach used by BSP to address its oversight challenges with rural banks and other institutions important for financial inclusion can be an effective way to pursue financial inclusion goals while ensuring the stability and integrity of the sector and the protection of financial consumers.

Conclusions

The first stage of the research confirmed that most RBS-related policy documents issued by SSBs are positioned as high-level principles and not practical application tools. This was not surprising given that RBS, and risk management in general, are highly contextual. There will always be some reluctance on the part of SSBs to issue more prescriptive guidance that could inhibit flexibility and tailoring by individual jurisdictions. It was encouraging to note several recent examples of IFIs and IOs filling the gap with interpretive guidance and training materials related to RBS and other supervisory and risk management topics.

The interviews and BSP case study gave insights into the deeper nature of the capacity building challenges that need to be addressed. Successful implementation of RBS requires EMDE supervisors to make fundamental shifts in how they think about and conduct their work, a long-term process that requires top-to-bottom culture change, access to better data and analytical capacity, mechanisms to facilitate understanding of business models, and commitment to ongoing training and development. Additional written guidance for supervisors will need to be paired with long-term training and technical assistance tailored to the individual country context to drive meaningful long-term improvement.

Finally, the interviews revealed a strong interest in better tools to incorporate financial inclusion considerations into supervisory processes, along the lines of an I-SIP approach. Some practitioners have attempted to explore their own methods.⁵⁰ but there seems to be a compelling need for new tools and fresh ideas in this area.

⁵⁰ For example, one interviewee had incorporated gender equity considerations into his supervisor training program.

Recommendations for Future Work

There are a number of opportunities for SSBs, IFIs, IOs and other providers of technical assistance to further build the capacity for EMDE supervisors that will support both RBS and financial inclusion goals. Some types of resources already exist, such as country-level technical assistance, but there is insufficient supply to effectively meet demand. Other needs, such as practical guidance, case studies, and cost-effective technology solutions, will require new approaches and innovations. Some suggestions include:

Written good practices and practical guidance geared to the needs of low-capacity supervisors of institutions important for financial inclusion. This could build on the BSP case study, by providing other country examples of good practices and lessons learned related to data collection, supervisory strategies, risk assessment, training, and culture change. There is a particular need for examples and guidance on using collective approaches to supervising numerous institutions important for financial inclusion.

Expanded pool of resources for technical assistance on RBS, especially of institutions important for financial inclusion. Recognizing that demand for technical assistance on RBS in EMDE far outstrips supply (particularly for intensive, long-term engagements), efforts could be directed to more concerted awareness-raising and recruitment for specialists in this field with understanding of inclusive business models. It will also be important to promote greater collaboration among providers of different types of technical assistance to complement and leverage efforts (e.g. classroom-style training by one provider, in-country mission by another), and to facilitate technology-assisted mentoring and knowledge sharing mechanisms to reduce the amount of long-term travel needed by providers of technical assistance, while ensuring that continuous communication with supervisors is maintained.

Supervisory technology (SupTech) solutions for low-capacity supervisors. More hands-on technical assistance is needed to help supervisors develop simple, cost-effective SupTech solutions to collect and analyze data and create reports for benchmarking and early warning systems. Building this capacity is especially important for collective approaches to supervising FSPs. Because of cost considerations, many countries want to develop their own systems in-house but may lack the basic technology infrastructure to facilitate accurate and timely information sharing with FSPs.⁵¹

An “I-SIP for Supervisors” Approach. The research explored possible ideas for incorporating RBS into the I-SIP Approach for policy work. The need to balance policy priorities related to financial stability, protection, integrity, and inclusion clearly affects supervisors’ work. Follow-on efforts could explore practical manners for supervisors to consider I-SIP linkages in their supervisory processes and a multi-dimensional perspective that incorporates financial inclusion into the RBS regime.

⁵¹ See World Bank (2018) for an expanded discussion of SupTech for market conduct supervision.

List of Acronyms

A2ii	Access to Insurance Initiative
AML	Anti-Money Laundering
API	Application Programming Interface
BCBS	Basel Committee on Banking Supervision
BSP	Bangko Sentral ng Pilipinas
BSPC	Bank Supervision Policy Committee
CAMELS	Capital, Asset quality, Management, Earnings, Liquidity, Sensitivity to market risk
CBA	Central Bank of Armenia
CFT	Countering the Financing of Terrorism
CGAP	Consultative Group to Assist the Poor
CNBV	National Banking and Securities Commission of Mexico
CPC	Central Point of Contact
EMDE	Emerging Market and Developing Economy
FATF	Financial Action Task Force
FCP	Financial Consumer Protection
FDIC	Federal Deposit Insurance Corporation
FSI	Financial Stability Institute
FSP	Financial Service Provider
FSS	Financial Supervision Sector
GPFI	Global Partnership for Financial Inclusion
IAIS	International Association of Insurance Supervisors
IFI	International Financial Institution
IMF	International Monetary Fund
IO	International Organization
IOPS	International Organization of Pension Supervisors
IOSCO	International Organization of Securities Commissions
I-SIP	Inclusion-Stability, Integrity, Protection
IT	Information Technology
NBFI	Non-Bank Financial Institution
OECD	Organisation for Economic Cooperation and Development
PEPS	Professional Excellence Program for Supervisors
RBS	Risk-based Supervision
SBS	Superintendence of Banking, Insurance and Private Pension Funds of Peru
SDC	Supervisory Data Center
SSB	Standard Setting Body
SEACEN	South East Asian Central Banks
TRISD	Technology Risk and Innovation Supervision Department
USAID	United States Agency for International Development
XML	eXtensible Markup Language

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Annex 1: Global Guidance and Additional Resources for Supervisors (updated as of March 31, 2019)

This Annex summarizes global RBS guidance and additional resources identified during the stock taking review, grouped by issuer. The list includes examples of both principles-based and practical implementation guidance, as well as links to web pages to facilitate research into specific supervisory and risk topics of interest. The list is not exhaustive and new guidance is issued frequently. Supervisors are encouraged to check issuers' websites regularly for updates.

Standard Setting Bodies⁵² and International Financial Institutions

Basel Committee on Banking Supervision (BCBS)

- The BCBS has guidance that refers to proportionality, RBS, and other supervisory and risk management topics but these are generally principles-based. Examples include:
 - [“Core Principles for Effective Banking Supervision”](#) (September 2012)
 - [“Frameworks for early supervisory intervention”](#) (March 2018)
 - [“Guidance on the application of the Core Principles for Effective Banking Supervision to the regulation and supervision of institutions relevant to financial inclusion”](#) (September 2016)
 - [“Implications of fintech developments for banks and bank supervisors”](#) (February 2018)
 - [“Principles for effective risk data aggregation and risk reporting”](#) (January 2013)
 - [“Report on the impact and accountability of banking supervision”](#) (July 2015)
- Webpages with links to other materials: [Consolidated Basel Framework](#), [BCBS Publications](#)

Committee on Payments and Market Infrastructures (CPMI)

- The CPMI (with the World Bank) issued guidance on [“Payments aspects of financial inclusion”](#) (April 2016) that refers to risk-based approaches to AML/CFT regulation, but not RBS.
- Webpage with links to other materials: [CPMI home](#) (What's New section)

Financial Action Task Force (FATF)

- Several FATF publications reference a risk-based approach to both regulation and supervision, with case examples and supervisory techniques. In addition, some guidance addresses financial inclusion and low capacity countries. Examples:
 - [“Anti-Money Laundering and Terrorist Financing Measures and Financial Inclusion”](#) (February 2013)
 - [“Guidance on capacity building for mutual evaluations and implementation of the FATF standards within low capacity countries”](#) (February 2008)
 - [“Guidance for a Risk-Based Approach. The Banking Sector”](#) (October 2014)
 - [“Guidance for a Risk-Based Approach: Money or Value Transfer Services”](#) (February 2016)
- Webpage with links to other materials: [FATF Publications](#)

⁵²The research did not include the Committee on the Global Financial System, International Association of Deposit Insurers, and International Accounting Standards Board due to their limited relevance to RBS.

[Financial Stability Board \(FSB\)](#)

- The FSB has research and guidance on specific global risk topics, but none on RBS.
- Webpage with links to other materials: [FSB Publications](#)

[Financial Stability Institute \(FSI\)](#)

- The FSI (part of the Bank for International Settlements) covers RBS in its web-based training platform, [FSI Connect](#), and publishes guidance on areas of supervisory interest. Examples:
 - [Innovative technology in financial supervision \(suptech\)](#) (July 2018)
 - [Regulation and supervision of financial cooperatives](#) (January 2019)
- Webpage with links to other materials: [Insights on Policy Implementation](#)

[Inter-American Development Bank \(IADB\)](#)

- Research identified two IADB publications on regulation and supervision of microfinance that reference RBS but have no implementation guidance:
 - [“Financial Regulation in the English-Speaking Caribbean: Is it Helping or Hindering Microfinance?”](#) (November 2011)
 - [“Principles and Practices for Regulating and Supervising Microfinance”](#) (September 2004)
- Webpage with links to other materials: [IADB Publications](#)

[International Association of Insurance Supervisors \(IAIS\)](#)

- The IAIS has guidance on selected risk and supervision topics, including inclusive insurance markets and micro-insurance. A few were developed in partnership with the Access to Insurance Initiative (see below) and provide country examples and application techniques. There are also web-based learning modules on their website. Examples include:
 - [“Application Paper on Regulation and Supervision supporting Inclusive Insurance Markets”](#) (October 2012)
 - [“Issues in Regulation and Supervision of Microinsurance”](#) (June 2007)
 - [“Issues Paper on the Regulation and Supervision of Mutuals, Cooperatives and other Community-based Organisations in increasing access to Insurance Markets”](#) (October 2010)
- Webpage with links to other materials: [IAIS Supervisory Material](#)

[International Monetary Fund \(IMF\)](#)

- The IMF provides recommendations and technical assistance to countries on RBS as part of FSAP and other reviews, but does not publish implementation guidance.
- Webpages with links to other materials: [IMF Capacity Development](#), [IMF Publications](#)

[International Organisation of Pension Supervisors \(IOPS\)](#)

- The IOPS website provides principles and guidelines on pension supervision, including an RBS toolkit and country examples from high- and some middle-income countries. Examples:
 - [“Methodology for Review of Supervisory Systems using IOPS Principles”](#) (November 2010)
 - [RBS toolkit](#) (various modules)
 - [“Structure of Pension Supervisory Authorities and their Approaches to Risk-Based Supervision”](#) (July 2012)
- The IOPS also collaborated with the World Bank on research: [“Experiences and Challenges with the Introduction of Risk-Based Supervision for Pension Funds”](#) (August 2007)

- Webpage with links to other materials: [IOPS Resources](#)

[International Organisation of Securities Commissions \(IOSCO\)](#)

- The IOSCO issued guidelines on RBS for emerging market supervisors of market intermediaries that is principles-based, with country examples based on a survey of practices.
 - [“Guidelines to Emerging Market Regulators Regarding Requirements for Minimum Entry and Continuous Risk-Based Supervision of Market Intermediaries”](#) (December 2009)
- Webpage with links to other materials: [IOSCO home](#) (see various tabs, some are for members only)

[Organisation for Economic Cooperation and Development \(OECD\)](#)

- The OECD Task Force on Financial Consumer Protection created a list of “risk drivers” that may assist in implementing RBS for financial consumer protection.
 - [“Financial Consumer Protection Risk Drivers”](#) (February 2018)
- Webpage with links to other materials: [OECD iLibrary](#)

[World Bank \(WB\)](#)

- The WB provides recommendations and technical assistance to countries on RBS as part of FSAP and other reviews, but does not generally publish implementation guidance. There are a few examples, related to supervision of pensions and consumer protection:
 - [“Establishing a Financial Consumer Protection Supervision Department Key Observations and Lessons Learned in Five Case Study Countries”](#) (March 2014)
 - [“From Spreadsheets to Suptech: Technology Solutions for Market Conduct Supervision”](#) (June 2018)
 - [“Risk-Based Supervision of Pension Funds: A Review of International Experience and Preliminary Assessment of the First Outcomes”](#) (January 2008, with IOPS)
- Webpages with links to other materials: [Open Knowledge](#), [Publications \(Financial Sector\)](#)

Other International Organizations

[Access to Insurance Initiative \(A2ii\)](#)

- The A2ii has an extensive knowledge hub on its website and reports that discuss RBS along with some country examples:
 - [“Proportionate Regulatory Frameworks in Inclusive Insurance: Lessons from a Decade of Microinsurance Regulation”](#) (November 2016)
 - [“Risk-based Supervision in Inclusive Insurance”](#) (July 2015, with IAIS)
- Webpage with links to other materials: [A2ii Knowledge Center](#)

[Alliance for Financial Inclusion \(AFI\)](#)

- AFI has a few targeted documents related to RBS:
 - [“Formalizing microsavings. A tiered approach to regulating intermediation”](#) (December 2011)
 - [“Market Conduct Supervision of Financial Services Providers. A Risk-Based Supervision Framework”](#) (August 2016)
 - [“Supervision and Oversight of Mobile Financial Services”](#) (February 2014)
 - [“Techniques for supervising depository microfinance institutions \(DMFIs\)”](#) (May 2012)

- Webpage with links to other materials: [AFI Publications](#)

[Association of Supervisors of Banks of the Americas \(ASBA\)](#)

- The ASBA website has links to documents and training opportunities for various supervision and risk topics, but does not have RBS implementation guidance.
- Webpage with links to other materials: [ASBA Library](#)

[Consultative Group to Assist the Poor \(CGAP\)](#)

- The CGAP “[Guide to Regulation and Supervision of Microfinance](#)” (October 2012) is principles-based and does not reference RBS.
- CGAP has issued papers discussing specific RBS topics, for example:
 - [“A Guide to Supervising E-Money Issuers”](#) (December 2018)
 - [“Supervision of Banks and Nonbanks Operating through Agents”](#) (August 2015)
- Webpage with links to other materials: [CGAP Policy](#) page

[International Financial Consumer Protection Organisation \(FinCoNet\)](#)

- FinCoNet has published guidance on various supervision topics, such as:
 - [“Guidance to Supervisors on the setting of Standards in the field of Sales Incentives and Responsible Lending”](#) (December 2016)
 - [“Practices and Tools required to support Risk-based Supervision in the Digital Age”](#) (November 2018)
 - [“Digitalisation of short-term, high-cost consumer credit, Guidance to supervisors”](#) (February 2019)
- The [FinCoNet Supervisory Toolbox](#) is a database with links to, and brief descriptions of, tools used by consumer protection supervisors in different jurisdictions.
- Webpage with links to other materials: [FinCoNet Resources](#)

[Toronto Centre](#)

- The Toronto Centre has published several guidance documents on developing an RBS framework. Examples:
 - [“The Development and Use of Risk Based Assessment Frameworks”](#) (January 2019)
 - [“Implementing Risk Based Supervision: A Guide for Senior Managers”](#) (July 2018)
 - [Resources](#) (Toronto Centre web page with links to other relevant resources)
 - [“Risk-Based Supervision”](#) (March 2018)
- Webpage with links to other materials: [Toronto Centre - Resource Centre](#)

Annex 2: Survey of Country-Level Guidance for Supervision of Banks and NBFIs
(as of June 30, 2017)

Country	EMDE/ Non- EMDE	Document	Sector	Type	Purpose	I-SIP Objectives
Australia	Non-EMDE	Statement of Intent - Australian Prudential Regulation Authority (APRA) (2014)	Multiple	Principles	Supervisory Strategy	Stability
		The APRA Supervision Blueprint (2015)	Multiple	Principles	Risk Assessment Supervisory Strategy Enforcement	Stability
Austria	Non-EMDE	Banking Supervision in Austria (2009)	Banking	Principles Guidance	Data Collection Risk Assessment Supervisory Strategy Enforcement	Stability
		Off-Site Analysis Framework of Austrian Banking Supervision (2005)	Banking	Principles Guidance	Data Collection Risk Assessment Supervisory Strategy	Stability
Bahamas	Non-EMDE	Risk Based Supervision Framework (2010)	Banking	Guidance	Risk Assessment Supervisory Strategy	Stability
		Risk Assessment Questionnaire (for banks) (rev. 2017)	Banking	Guidance	Data Collection	Stability Integrity
Barbados	Non-EMDE	Supervisory Framework 2012 and Beyond (2012)	Banking	Principles Guidance	Supervisory Strategy	Stability Integrity
Brazil	EMDE	Supervision Manual (rev. 2017)	Banking	Guidance	Data Collection Market Monitoring Risk Assessment Supervisory Strategy Enforcement	Stability Integrity Protection
Canada	Non-EMDE	Supervisory Framework (2017)	Multiple	Principles Guidance	Data Collection Risk Assessment Supervisory Strategy Enforcement	Protection
		Supervisory Framework (2010)	Multiple	Principles Guidance	Risk Assessment Supervisory Strategy	Stability
East AFRITAC (Regional)	EMDE	Guidebook on Implementation of Risk Based Supervision (2009)	Banking	Principles Guidance	Data Collection Market Monitoring Risk Assessment Supervisory Strategy	Stability

European Central Bank	Non-EMDE	Guide to Banking supervision (2014)	Banking	Principles	Supervisory Strategy	Stability
Fiji	EMDE	Banking Supervision Policy Statement No. 18 Agent Banking Guideline (2013)	Banking Payments	Principles	Supervisory Strategy	Stability Integrity Protection
Hong Kong	Non-EMDE	Supervisory Policy Manual Risk-based Supervisory Approach et al (n.d.)	Banking	Guidance	Data Collection Risk Assessment Supervisory Strategy	Stability
Ireland	Non-EMDE	A Guide to Consumer Protection Risk Assessment (2017)	Multiple	Guidance	Risk Assessment Supervisory Strategy	Protection
		Probability Risk and Impact System (PRISM) (2016)	Multiple	Guidance	Data Collection Risk Assessment Supervisory Strategy Enforcement	Stability Protection
Japan	Non-EMDE	Financial Inspection Basic Guidelines (2005)	Banking	Guidance	Data Collection Supervisory Strategy	Stability
		Financial Monitoring Policy for 2014-2015 (Policy for Supervision and Inspection) (2014)	Multiple	Principles Guidance	Market Monitoring Supervisory Strategy	Stability Integrity Protection
		Inspection Manual for Deposit-Taking Institutions (2014)	Banking	Guidance	Risk Assessment Supervisory Strategy	Stability Protection
Kenya	EMDE	Risk Based Supervisory Framework (2013)	Banking	Guidance	Risk Assessment Supervisory Strategy	Stability
Kosovo	EMDE	Risk-Based Supervision Manual (2015)	Banking	Guidance	Data Collection Risk Assessment Supervisory Strategy	Stability
Malaysia	EMDE	Regulatory and Supervisory Framework (2011)	Multiple	Principles Guidance	Supervisory Strategy	Stability Integrity Protection
Macroeconomic and Financial Management Institute of Eastern and Southern	EMDE	Risk Based Supervision: Guidelines for Supervision of Banks (2016)	Banking	Guidance	Data Collection Risk Assessment Supervisory Strategy	Stability Protection

Africa (MEFMI)						
Mexico	EMDE	Annual Report (2011)	Multiple	Principles	Risk Assessment Supervisory Strategy Enforcement	Stability Integrity Protection
Nigeria	EMDE	Risk-Based Banking Supervision (2011)	Banking	Principles Guidance	Risk Assessment Supervisory Strategy	Stability
		Supervisory Framework for Banks and Other Financial Institutions in Nigeria (2008)	Banking NBFi	Guidance	Risk Assessment Supervisory Strategy	Stability
		Supervisory Intervention Guidelines (2011)	Banking	Guidance	Risk Assessment Supervisory Strategy Enforcement	Stability
		The Framework for Risk Based Supervision of Banks in Nigeria (n.d.)	Banking	Principles Guidance	Risk Assessment Supervisory Strategy	Stability
Philippines	EMDE	Manual of Regulations for Non-Bank Financial Institutions (2008)	Banking	Principles Regulations Guidance	Risk Assessment	Stability Integrity Protection
Singapore	Non-EMDE	Tenets of Effective Regulation (rev.2015)	Multiple	Principles	Supervisory Strategy	Stability Integrity Protection
		Monetary Authority of Singapore Framework for Impact and Risk Assessment of Financial Institutions (rev.2015)	Multiple	Principles Guidance	Risk Assessment Supervisory Strategy Enforcement	Stability Integrity Protection
		Objectives and Principles of Financial Supervision in Singapore (rev.2015)	Multiple	Principles	Supervisory Strategy Enforcement	Stability Integrity Protection
Tanzania	EMDE	Risk Based Supervision Framework (2010)	Banking	Guidance	Risk Assessment Supervisory Strategy	Stability
UK (Financial Conduct)	Non-EMDE	Business Plan 2015/2016 (2015)	Multiple	Principles	Risk Assessment Supervisory Strategy	Integrity Protection

Authority, FCA)						
		The FCA's approach to Supervision (n.d.)	Multiple	Guidance	Supervisory Strategy	Integrity Protection
UK (Prudential Regulation Authority)	Non-EMDE	The Prudential Regulation Authority's approach to Banking Supervision (2016)	Banking	Principles	Risk Assessment Supervisory Strategy Enforcement	Stability
US (Consumer Financial Protection Bureau)	Non-EMDE	Procedural Rule to Establish Supervisory Authority over Certain Nonbank Covered Persons Based on Risk Determination (2012)	Banking NBF	Law Regulations	Risk Assessment Supervisory Strategy Enforcement	Protection
		Supervisory Highlights 3.2.3 "Risk-Based Approach to Examinations" (2013)	Banking NBF	Guidance	Supervisory Strategy	Protection
		Consumer Risk Assessment Template (2012)	Banking NBF	Guidance	Risk Assessment Supervisory Strategy	Protection
US (Federal Reserve Board)	Non-EMDE	Community Bank Risk-Focused Consumer Compliance Supervision Program (rev.2014)	Banking	Guidance	Risk Assessment Supervisory Strategy Enforcement	Protection
		Commercial Bank Examination Manual (rev.2016)	Banking	Guidance	Risk Assessment Supervisory Strategy Enforcement	Stability Integrity

Annex 3: List of Interviews

Telephone Interviews

Name	Affiliation
Denise Dias Stefan Staschen	CGAP
David Grace	Dave Grace & Associates
Jennifer Moyo Rachid Awad Martin Cihak Shelton Nicholls	International Monetary Fund
Calvin Johansson	Toronto Centre
Marc Schrijver Peter Wrede	World Bank
Bryan Barnett	Independent Consultant
Ian Tower	Independent Consultant

Mission Interviews (Manila, Philippines, April 10-13, 2018)

Name	Title	Department/Organization
Bangko Sentral ng Pilipinas		
Nestor Espenilla, Jr.	Governor	BSP
Chuchi Fonacier	Deputy Governor	BSP, Supervision and Examination Sector
Ruel Bumatay	Acting Deputy Director	BSP, AML Specialist Group
Betty Christine Bunyi	Director	BSP, Examination Department II
Jimmy Hapdus	Officer-in-Charge	BSP, SES Operations Management Group
Lyn Javier	Managing Director	BSP, Financial Supervision Research and Consumer Protection Sub-sector
Florabelle Santos Madrid	Officer-in-Charge	BSP, Central Point of Contact Department II
Maricis Salud	Bank Officer	BSP, Core IT Specialist Group
Dindo Santos	Officer-in-Charge	BSP, Supervision and Examination Sub-Sector III
Cynthia Sison	Deputy Director	BSP, Office of Supervisory Policy Development
Ellen Joyce Suficiencia	Bank Officer	BSP, Inclusive Finance Advocacy Office
Rochelle Tomas	Bank Officer	BSP, Financial Consumer Protection Department
Caryl Valdez	Director	BSP, Central Point of Contact Department III
Vicente T. De Villa III	Director	BSP, Supervisory Data Center
May V. Monteras	Manager	BSP, MSME Specialist Group
Jerianne V. Delos Santos-Ambrosio	Bank Officer	
Other Authorities		
Doris D. Teodoro	Administrative Officer	Cooperative Development Authority
Juan Paolo Roxas	Acting Division Manager	Insurance Commission

Industry Representatives		
Milcah Capundag	Executive Director	Rural Bankers Association of the Philippines
Pablo Magno	Legal Counsel	Chamber of Pawnbrokers of the Philippines, Inc.
Romen Runas	Manager	Chamber of Pawnbrokers of the Philippines, Inc.
Edgardo (Eric) Valenzuela	Treasurer Vice President	Rural Bankers Association of the Philippines Country Builders Bank