

## BCBS 239 Progress Report

How much has the needle moved and why is it still not enough?

The Bank for International Settlements (BIS) recently published the *2019 BCBS 239 Report – Progress in adopting the Principles for effective risk data aggregation and risk reporting (2019 Report)*.<sup>1</sup> The 2019 Report provides an **assessment of banks’ progress in complying with BCBS 239**. Similar to prior years, the 2019 Report finds that **no bank is fully compliant**, even though in 2017 at least three banks were identified to be such. This is an indication of **heightened regulatory expectations for effective data management**. According to the 2019 Report, the largest contributing factor to non-compliance is the inability to achieve the target state data architecture and IT infrastructure necessary to meet the Principles.

The 2019 Report notes that significant efforts have been made by institutions to improve on the principles within the three focus areas: **1) Overarching Governance and Infrastructure; (2) Risk Data Aggregation Capabilities; and (3) Risk Reporting Practices**. While there have been strides made in improving quality for the most critical and impactful data, continuous improvement is necessary so that the quality of data is fit for purpose across financial, risk, and management reporting. The 2019 Report also noted that firms have **begun to apply these practices beyond risk data to regulatory reporting, financial reporting, and recovery and resolution plans**.

Effective data management and compliance with BCBS 239 principles is a **firm-wide responsibility**. It is not a stand-alone exercise with sole responsibility held by a data office or project with a specific end date. Nor are data capabilities static. Rather, these are **dynamic processes across a firm** that must evolve when changes to technology or processes, business model, risk profile, or strategic initiatives occur. For example, recently, many financial institutions have had to calibrate their data capabilities to support the business processes around settlements and payments due to the impact of COVID-19.

Central banks and supervisors have an ever-increasing focus on monitoring and mitigating systemic risks in the financial system where data is key. **Regulators seek frequent, granular and comprehensive data from financial institutions and their expectations for quality and availability are increasing**. The 2019 Report recommends that “supervisors should take appropriate measures to address delays and ineffective implementation.” Specifically, the 2019 Report recommends that banking supervisors:

- **Conduct on- and off-site reviews**, inspecting banks’ management information systems to determine whether they have addressed previously identified data-related issues and if any new issues have surfaced; and progress in adopting the Principles for effective risk data aggregation and risk reporting
- Mandate external firms to **assess the implementation status** of the Principles

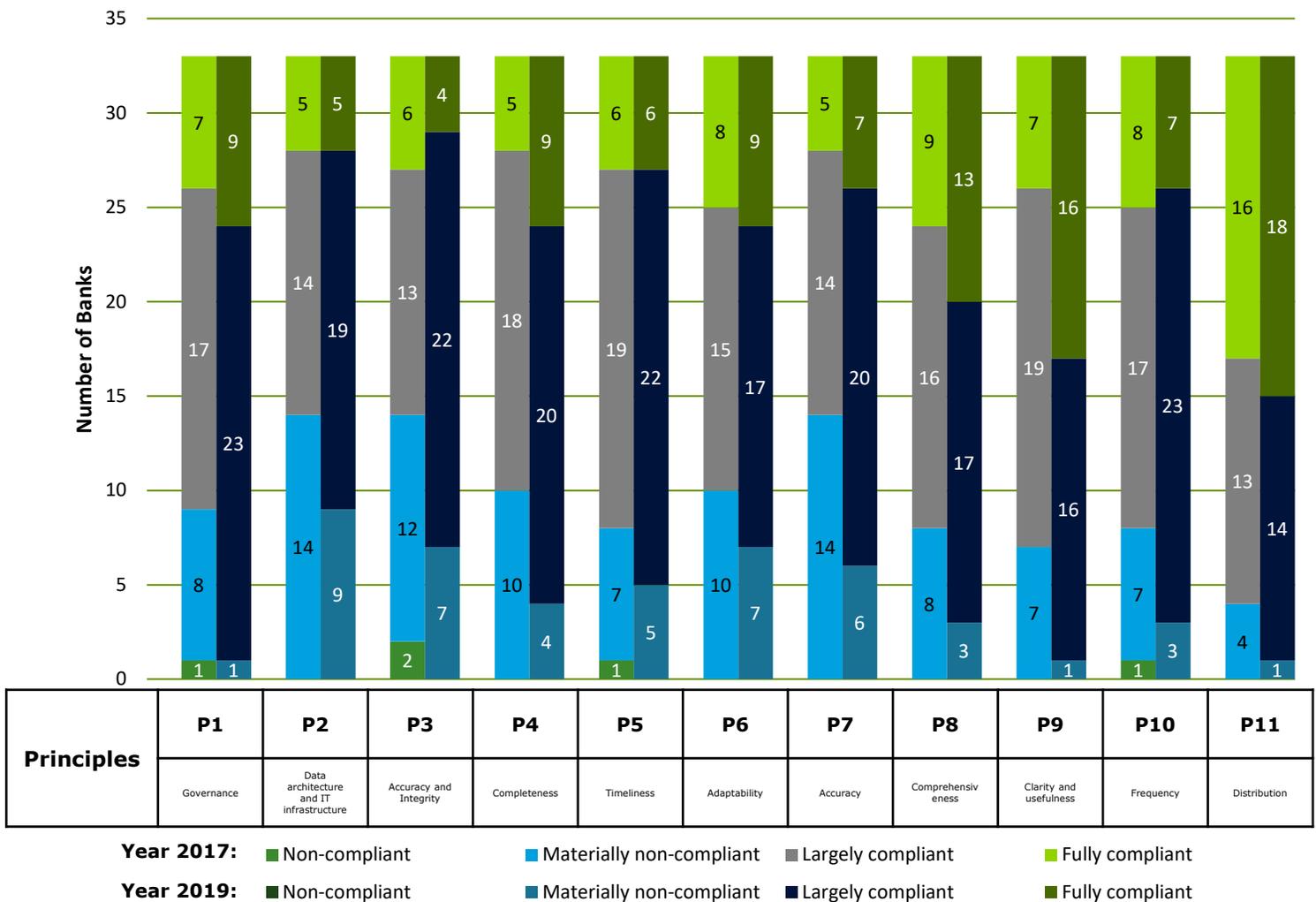
- Conduct fire-drills to **test the banks' risk data aggregation capabilities**
- **Increase supervisory intensity** in areas where weaknesses have been found
- Modify **assessment approaches to ensure comprehensiveness** of the assessment, particularly when banks have modified the scope of BCBS 239 implementation (e.g., data and reports in scope)

The goal is to create a **dynamic data environment** where the processes and infrastructure can quickly adapt to changing needs for financial, nonfinancial, and risk data, especially in times of stress. Banking institutions are **expected to deliver implementation roadmaps and to execute these plans effectively**. Roadmaps and action plans should be put in place with data capabilities for the three focus areas mentioned previously: Overarching Governance and Infrastructure; Risk Data Aggregation Capabilities; and Risk Reporting Practices.

**Progress in meeting some of the Principles has been slow.** In January 2019, Deloitte provided observations on the 2018 BIS Report on BCBS 239 compliance.<sup>2</sup> The 2018 Report found that Principle 1 ("Governance") and Principle 2 ("Data Architecture and IT Infrastructure") only had marginal implementation progress. These two principles are critical and serve as the foundation for a bank to establish a strong culture with the capabilities to support risk data aggregation and reporting. Lack of progress in these areas can pose significant barriers to compliance with the other Principles. Figure 1 shows the current assessment of progress with the other Principles.

Figure 1 below **shows the state of compliance with each of the Principles. Principle 1 and 2 are foundational for overall compliance with BCBS 239.** The key takeaways for these principles include the following:

**Figure 1. G-SIB ratings by Principle in 2017 and 2019<sup>3</sup>**



**Principle 1- Governance:** as part of establishing clear ownership and accountability for data banks have begun to **establish independent units (control functions)** for validating data quality and data management. These functions have reviewed risk data implementation efforts and have reported material weaknesses to the board and senior management creating firmwide accountability. In addition, the emergence of a **Chief Data Officer (CDO) and its respective office** serve an increasingly critical role as the standard setter and second line of defense for data quality.

**Principle 2 – Data Architecture and IT Infrastructure:** a significant number of institutions are **materially non-compliant**. Banks operate with unaligned IT solutions resulting in prevalence of End User Computing (EUC) desktop applications and legacy systems that are siloed and prevents the adoption effective data standardization. The **lack of compliance with this principle is one of the root causes of challenges with implementing Principles 3** (accuracy and integrity), 5 (timeliness), 6 (adaptability) and 7 (accuracy). The 2019 Report noted that firms should allocate the necessary resources (*e.g.*, talent and investment) to address these weaknesses.

**Independent assessments of data capabilities** are an important step to ensuring that gaps are uncovered and that data programs are moving in the direction that meets regulatory expectations. This does not mean that technology plans to support the business need to be shifted to solely a regulatory focus. Business growth and regulatory compliance are not mutually exclusive. For example, banks have always sought to find the **optimal design that lends itself to a flexible organization, with an adaptable data environment and IT infrastructure**.

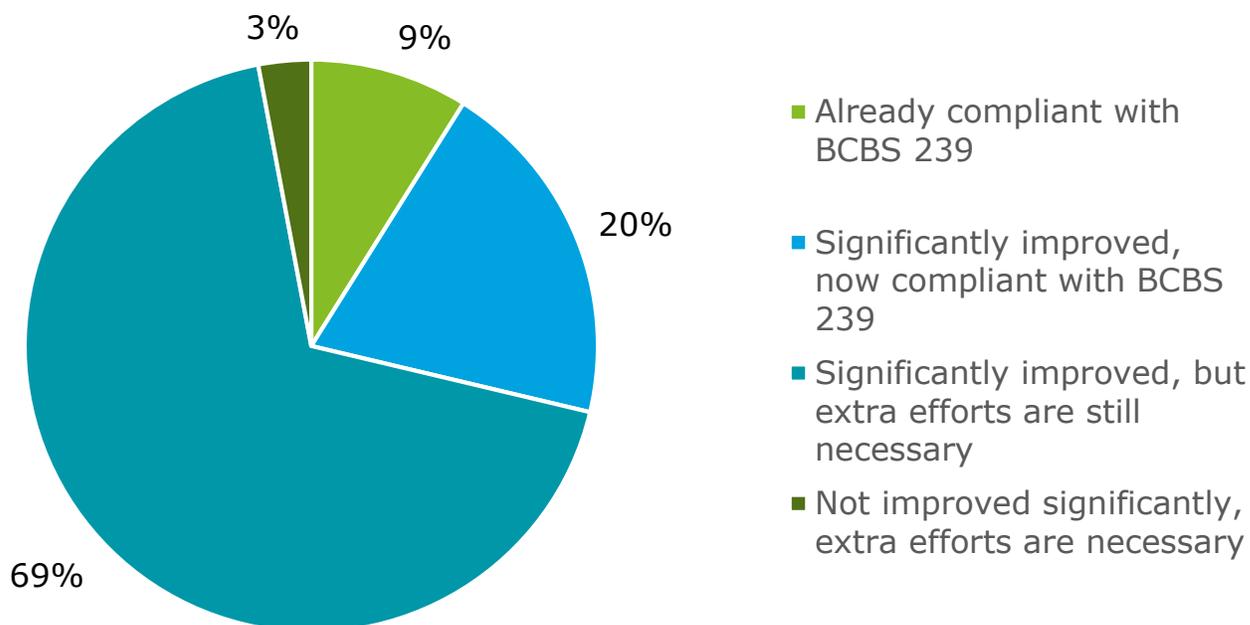
Regardless of the drivers, business strategies cannot be wholly met or effectively implemented without having a comprehensive view of key challenges and a vision for a target state. **A technology strategy can be designed through the lens of risk and data capabilities**. Firms can gain insight into the design by assessing the maturity of their capabilities. For example, continued proliferation and reliance on EUCs exemplifies a firm's "dual IT strategy." Remediating the user's reliance on EUC and not simply extending or proliferating will enable banks to become closer to having effective Authorized Data Sources.

### Investment opportunities related to Principle 2, Data Architecture and IT Infrastructure

Investment in making progress on Principle 2 should include the following steps:

- **Develop a comprehensive enterprise strategy** for data and related capabilities, including detailed plans for the allocation of appropriate resources to effectively integrate databases from disparate legal entities, subsidiaries and branches. These strategies should consider:
  - Addressing **root causes** of supervisory findings from examinations, findings from internal audit, or other reviews and processes (*e.g.*, work of Quality Assurance Functions)
  - Providing **detailed roadmaps** that encompass long-term initiatives rather than tactical solutions to data quality and data aggregation issues
  - Identifying data quality gaps, remediation plans to close these gaps, and developing training on improving data quality
- **Replace EUCs with more integrated reporting platforms.**
  - Review the EUC policies – generally, EUCs are a tactical solution; therefore, **EUC policies should be explicit for EUC owners to provide a committed time frame** in which they will decommission the EUC and migrate users onto a robust and viable system or platform
  - Remediation Plans – **Prioritize data capability development** by understanding the number and risk EUCs present to report production. Also ensure function and controls for EUCs are well understood.
- **Upgrade Data Dictionaries** (over 70% of Data Dictionaries are not compliant with BCBS 239).<sup>4</sup> Improved data dictionaries, which is a key aspect of Principle 3, help improve enterprise data quality metrics and data lineage. **Data Dictionaries and associated metadata are critical to assuring common data definitions across a firm and are needed in designating Authorized Data Sources**. Also, when a firm engages in harmonizing data taxonomy and categorizing risk types, it enables the firm to streamline any new changes if the business model or data definitions should change.

**Figure 2. Data dictionaries<sup>5</sup>**



- **Conduct Overall Infrastructure & Data Assessment.** Conducting an overall assessment of the data environment and reporting processes is an effective practice to help firms understand where data gaps may exist and where controls should be strengthened to prevent material data errors. Identifying and assessing the risk of poor data quality, especially for related business processes and data infrastructure can help determine areas for prioritization and further development. Independent risk and data assessments should occur regularly and consider:
  - The number of transformations that occur from data source to report production
  - The effectiveness of business processes, including the control environment for those processes
- **Refine Critical Data Elements (CDE).** Remediating data quality issues and creating an effective data infrastructure requires careful prioritization. Firms should conduct an analysis of data attributes and determine the impact those attributes have on managing risk, meeting regulatory needs (e.g., risk-based capital levels), and preparing management reports. Many firms identify CDEs at two levels: corporate and business line. This is an acceptable practice; however, it is important that the criteria for determining a CDE be consistent across the firm in order to avoid conflicts in the handling of data quality for CDEs. Once designated, CDEs should have enhanced controls to ensure the proper level of quality. The use of CDEs is critical to prioritizing remediation and allocating resources.
- **Implement Data Lineage.** A key role for data lineage is to identify the original sources of data used for reporting and decision-making. Firms should operate with an end-to-end ownership model throughout the data lifecycle to enable ongoing data oversight and remediation. Without data lineage, this is not possible.

The evolving and dynamic nature of banks and the banking business makes implementing the Principles an ongoing process. Data quality assessments, control monitoring, and data remediation effort performed across all business units requires measuring maturity and progress of a firm's data program. This is done through the use of Key Risk Indicators (KRI) and scorecards. Monitoring and escalating material data management issues to boards and senior management is needed to enforce accountability.

## Conclusion

As firms continue along the path toward a mature data environment that complies with the principles of BCBS 239 and meets regulatory expectations, it will be **critical to prioritize these efforts appropriately and allocate the necessary level of resources and investment.** Roadmaps and plans for target state should **go beyond filling in tactical gaps to strategic investments (including Core IT infrastructure)** that can get to root cause. These roadmaps should create a **path to future state** where data across the firm are discoverable, accessible, and can be easily aggregated. Solutions should enable firms to easily **designate authorized data sources** and **monitor data quality** throughout the data life cycle. As important as providing these capabilities is having a culture of accountability for data throughout the firm that is set from the C-suite.

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## Endnotes:

1. Basel Committee on Banking Supervision (BCBS), "[Progress in adopting the Principles for effective risk data aggregation and risk reporting](#)" accessed on May 22, 2020.
2. Deloitte, "[BIS assessment of banks' compliance to BCBS 239 principles](#)," accessed on May 22, 2020.
3. Basel Committee on Banking Supervision (BCBS), "[Progress in adopting the Principles for effective risk data aggregation and risk reporting](#)" accessed on May 22, 2020.
4. Ibid.
5. Ibid.

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