



## **BIS assessment of BCBS 239 compliance**

Data management capabilities are a growing focus area for regulators. During the financial crisis, gaps were identified in data provided to regulators and subsequent investigation revealed numerous weaknesses in data capabilities. These gaps existed in both financial and risk data that are used to manage risk, provide business insights, and comply with regulatory requirements. The increased focus on data capabilities makes data management across the enterprise a necessity.

In 2013, the Basel Committee on Banking Supervision (BCBS) issued Principles for effective risk data aggregation and risk reporting (BCBS 239).<sup>1</sup> The set of principles in the paper provide a foundation for a framework to address and help resolve critical weaknesses that banks have in understanding and accurately describing their overall exposures and key risk factor. BCBS 239 lists out four major categories and fourteen principles (11 of which are applicable to banks, the remaining three are applicable to regulatory supervisors).

The core focus areas for banks include: (1) Overarching Governance and Infrastructure; (2) Risk Data Aggregation Capabilities; and (3) Risk Reporting Practices. Developing and owning the vision for BCBS 239 can be accomplished with these three components in mind as summarized on the next page.

Overarching Governance & Infrastructure	Risk Data Aggregation Capabilities	Risk Reporting Practices
<p>Key principles that are emphasized - <b>1) Governance and 2) Data Architecture</b></p> <p><b>1) Governance:</b> a bank's risk data aggregation capabilities and risk reporting practices are subject to management oversight &amp; review. The <i>framework is not limited to "in-house"-derived data but third-party data</i> as well. Key activities include:</p> <ul style="list-style-type: none"> <li>Documenting complete end-to-end processes of all components involved</li> <li>Incorporating a process for Independent Validation assessments</li> <li>Developing data strategy (risk, impact, solution &amp; timeline) when the bank either acquires new business or develops a new product</li> </ul> <p><b>2) Data &amp; IT Architecture:</b> a bank should design, build, and maintain a data architecture &amp; IT infrastructure that is scalable and not only supports risk data aggregation and reporting under "BAU" mode, but during periods of stress and crisis</p> <p>Key Activities include:</p> <ul style="list-style-type: none"> <li>Assessing impacts to business continuity planning processes</li> <li>Developing integrated data taxonomies and infrastructure</li> </ul>	<p>Key principles that are emphasized - <b>3) Accuracy &amp; Integrity 4) Completeness 5) Timeliness 6) Adaptability</b></p> <p><b>3) Accuracy &amp; Integrity:</b> ability to generate consistent and correct data for normal and stress/crisis reporting requirements. Key activities include:</p> <ul style="list-style-type: none"> <li>Developing controls and efficient reconciliation processes</li> <li>Developing standardized operating procedures</li> <li>Identify authoritarian (<i>golden sources</i>) systems and mechanism in which personnel can access risk data to aggregate, validate and reconcile to regulatory and management reports</li> </ul> <p><b>4) Completeness:</b> ability to provide all material risk data across the various lines of business as well as entities.</p> <p><b>5) Timeliness:</b> ability to provide data point on risk factors based on the frequency as required.</p> <p><b>6) Adaptability:</b> ability to generate a broad range of on demand reporting requests.</p>	<p>Key principles that are emphasized - <b>7) Accuracy 8) Comprehensiveness 9) Clarity and usefulness 10) Frequency 11) Distribution</b></p> <p><b>7) Accuracy:</b> reports are reconciled and validated, enables management to make informed decision about risk. To ensure accuracy of the reports:</p> <ol style="list-style-type: none"> <li>Develop automated check functions, on reasonableness and on validations</li> <li>Develop procedures for, reporting &amp; explaining data errors.</li> </ol> <p><b>8) Comprehensiveness:</b> provide detailed information on all material risks within the organization, in which depth and scope should be consistent with size and complexity</p> <p><b>9) Clarity and usefulness:</b> communicating risk information that includes a balance among analysis, interpretation and tailored to needs of the receiver.</p> <p><b>10) Frequency:</b> reflect the needs of recipients, nature of risk reported, and the speed at which the risk can change</p> <p><b>11) Distribution:</b> risk management reports that clear procedure for rapid collection and analysis of risk data and timely dissemination to all appropriate recipients while ensuring confidentiality</p>

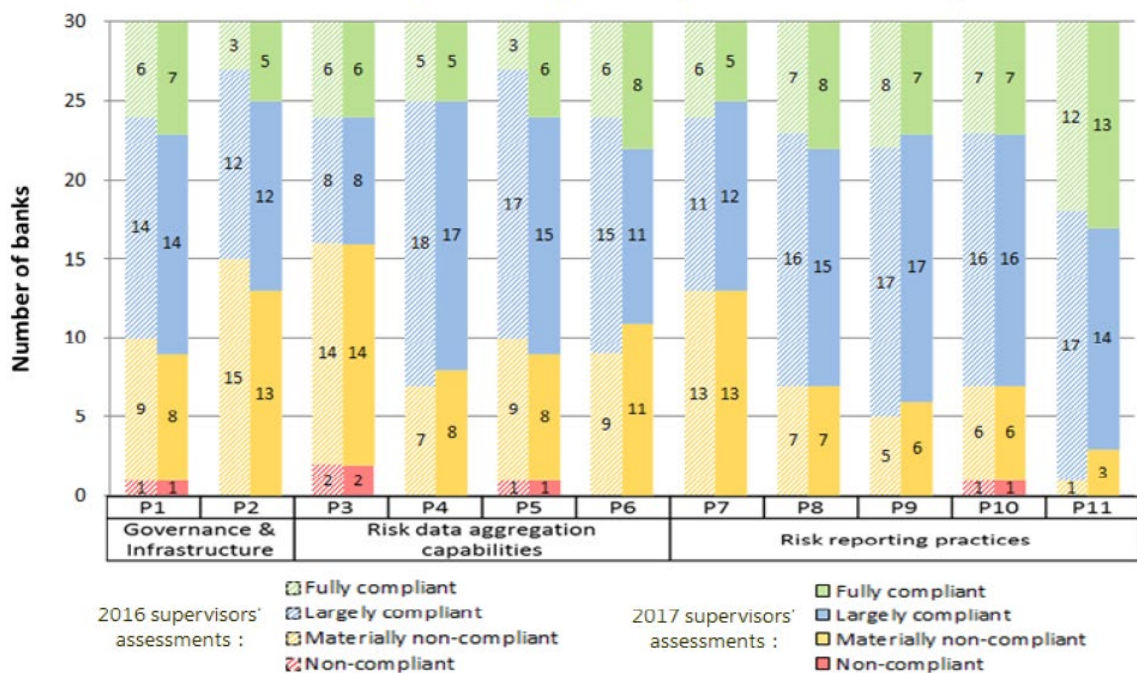
In June 2018, the BCBS published a progress report on global systemically important banks (G-SIBs) adopting BCBS 239 principles. The progress report noted the following in a comparison of 2016 versus 2017 compliance information:

- No principle is fully complied with by all banks
- Principle 1* (Governance) and *Principle 2* (Data architecture and IT infrastructure) only had marginal implementation progress. As these two principles serve as the foundation for a bank to establish strong capabilities in risk data aggregation and reporting, lack of progress in this area serves as a significant barrier to full adoption to all of the principles
- Principle 4* (Distribution), *Principle 7* (Accuracy), *Principle 9* (Clarity & Usefulness), *Principle 11* (Distribution) actually "reversed course" where compliance ratings dropped the most significantly in *Principle 9*.

***“Most banks had made, at best, marginal progress in their implementation of the Principles, which is unsatisfactory. It is clear that banks will require more time than previously indicated to achieve full compliance with the Principles.”<sup>2</sup>***

Assessments	Governance & infrastructure		Risk data aggregation capabilities				Risk reporting practices				
	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11
<b>2017</b>	2.90	2.73	2.60	2.90	2.87	2.90	2.73	3.03	3.03	2.97	3.33
<b>2016</b>	2.83	2.60	2.60	2.93	2.73	2.90	2.77	3.00	3.10	2.97	3.37
<b>Differential</b>	0.07	0.13	0.00	-0.03	0.13	0.00	-0.03	0.03	-0.07	0.00	-0.03

**Levels of compliance by Principle (2016 vs 2017)**



### Notable gaps and hurdles that banks face

Data architecture and IT infrastructure progress has been slowed by the need to address legacy system issues. Integration of these systems are difficult tasks with long time lines. There are significant challenges within infrastructure and processes around data lineage, data aggregation, data availability, and data quality. In addition, the lack of a strong data quality framework (data quality rules, controls, and processes); ineffective procedures on Data Governance (actionable responsibilities for data owners or stewards); and Data Taxonomies (regulatory definition vs. industry practices) are areas that preventing some banks from meeting requirements of BCBS 239. In our past [blog](#), we provided our views on: (1) challenges to an effective infrastructure; (2) data availability; (3) firm-wide approach to data ownership; and (4) measures & accountability.

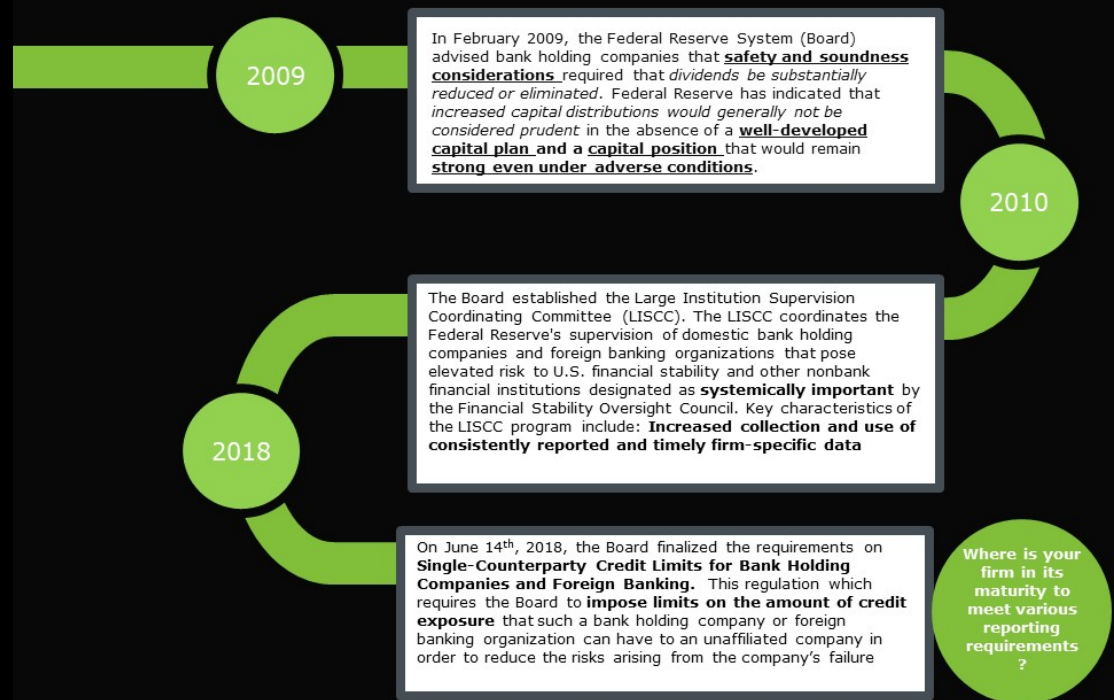
Business needs and regulatory reporting requirements will continue to evolve; however, they are dependent on having certain foundational pieces implemented correctly. In a recent blog, we discussed the important relationship between technology and data governance strategy. Financial firms can invest in technology that is designed to provide the insight they need for business growth, while meeting the goals for regulatory compliance. Listed below are key areas described in the article.

Areas	Need / challenge	Investment	Potential payback
<b>Data aggregation and reporting</b>	Regulators have increasingly moved toward standardized reporting via forms such as FR Y-14A; FR Y-14Q; and FR Y-14M, etc., creating the need for supporting capabilities	Sustainable data and technology infrastructure that can provide standardized data aggregation and reporting to support compliance with regulatory requirements	<ul style="list-style-type: none"> <li>• Authoritative data source per risk type</li> <li>• Robust data aggregation / flow capabilities</li> </ul>
<b>Data governance</b>	Increased regulatory scrutiny on data completeness and accuracy necessitates ongoing assessment of adequacy of governance framework	Compliance assessment framework designed to identify gaps and enhance risk data controls and aggregated reporting	<ul style="list-style-type: none"> <li>• Rationalized controls / processes</li> <li>• Increased efficiency and data quality</li> </ul>

Business growth and regulatory compliance are not mutually exclusive. One of the lessons from the financial crisis was that financial firms were unable to accurately aggregate their own exposures and, therefore, supervisors were unable to understand the depth and breadth of the inter-dependencies amongst various institutions. To help address this gap, several key regulatory developments took place. The illustration below review few regulatory milestones: (1) in 2009, the Federal Reserve Board (FRB) provided initial guidance on its review of Capital Adequacy Management ([SR 09-4](#)); (2) in 2010, the FRB established a committee to provide oversight on banks' ability to support stress tests for Capital (CCAR) & Liquidity (CLAR, LCR); and (3) in June 2018, the FRB provided [requirements on single-counterparty credit limits](#) (SCCL). While all these regulatory reports serve different purposes, they share a universal requirement – data and require a data governance framework and architecture that is fit for purpose.

It's been nearly a decade since the financial crisis and one of the key lessons was that financial firms were unable to **accurately describe their own exposures and regulatory agencies were unable to understand the depth and breadth of the inter-dependencies amongst various institutions**. To address this gap, several key regulatory developments took place. Let's review. *Why is data a key focus for regulatory agencies?*

We can trace back to the FRB's comments from 2009, **the implementation of stress tests for capital** (Comprehensive Capital Analysis and Review aka CCAR) & **liquidity** (CLAR) and as recently in SCCL.



## Connecting the dots, what is the path to compliance?

The BIS assessment of compliance with BCBS 239 noted that some firms have taken steps to implement BCBS 239 by committing resources and funding related to the data architecture and IT infrastructure. Many firms have also established a Chief Data Officer role dedicated to the firm's data program. In addition, firms have made progress integrating taxonomies and data lineage.

Our experience tells us that banks should be focusing on establishing an integrated finance and risk architecture - "Single Vision of Truth". Regulators are increasingly requiring detailed traceability of reported information, which can only be achieved through careful management of data usage and understanding of regulatory reporting requirements.

As further developments occur, Deloitte will issue additional updates as appropriate.

### Contacts:

**Irena Gecas-McCarthy**

Principal | Deloitte Risk and Financial Advisory  
Deloitte & Touche LLP  
igecasmccarthy@deloitte.com

**Ken Lamar**

Independent senior advisor to Deloitte & Touche LLP  
kelamar@deloitte.com

**Lakshmanan Balachander**

Principal | Deloitte Risk and Financial Advisory  
Deloitte & Touche LLP  
lbalachander@deloitte.com

**Stanley Philip**

Manager | Deloitte Risk and Financial Advisory  
Deloitte & Touche LLP  
stphilip@deloitte.com

**Michael Quilatan**

Managing Director | Deloitte Risk and Financial Advisory  
Deloitte & Touche LLP  
mquilatan@deloitte.com

### Endnotes:

<sup>1</sup> Basel Committee on Banking Supervision, "Principles for effective risk data aggregation and risk reporting", available at: <https://www.bis.org/publ/bcbs239.pdf>

<sup>2</sup> "Progress in adopting the Principles for effective risk data aggregation and risk reporting" p6

This article contains general information only and Deloitte is not, by means of this article, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This article is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your business. Before making any decision or taking any action that may affect your business, you should consult a qualified professional advisor.

Deloitte shall not be responsible for any loss sustained by any person who relies on this article.

**About Deloitte**

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. In the United States, Deloitte refers to one or more of the US member firms of DTTL, their related entities that operate using the "Deloitte" name in the United States and their respective affiliates. Certain services may not be available to attest clients under the rules and regulations of public accounting. Please see <http://www.deloitte.com/about> to learn more about our global network of member firms.