



Introduction

Stringent banking regulation has become even more the norm for the financial-services sector across the globe. Global systemically important banks (G-SIBs) and domestic systemically important banks (D-SIBs) have to meet new layers of requirements.

In January 2013, the Basel Committee on Banking Supervision issued 11 principles for effective risk data aggregation and risk reporting (BCBS 239) and outlined the paths to compliance for G-SIBs and D-SIBs. The BCBS 239 requirements are intended to address what supervisors see as a major weakness that banks carried into the crisis: inability to understand quickly and accurately (and tell their supervisors about) their overall exposures and other key risk metrics influencing the key risk decisions of the bank. The regulation was, however, designed at a high level, using a principles-based approach that allowed banks to interpret and build tailored remediation approaches. While this can be perceived as a burden, it can also be seen as a great benefit. Banks have the opportunity to interpret this regulation using a strategic lens that allows them to balance the right decisions to gain a competitive advantage, which would be lost if the work were driven from a "checking-the-box" technical perspective.

Aligning with the 11 principles is a lengthy and complex process. It requires interweaving risk data aggregation capabilities with supervisory risk-reporting practices (running on a sound technical infrastructure). It also needs support from the right level of governance to ensure that information flows in the right ways, along with sustained commitment by the organization.

Beyond BCBS 239, a further host of critically important regulatory items will have implications for risk and finance data and technology in banks:

- In the United States, comprehensive capital analysis and review (CCAR) and comprehensive liquidity analysis and review (CLAR)
- In the European Union, comprehensive assessment, asset quality review (AQR), stress testing, analytical credit, and supervisory review and evaluation process (SREP)
- Globally, evolving requirements for the Financial Stability Board (FSB) data templates, revised and expanded Pillar 3 disclosures, and intersecting with the recommendations of the private-sector but FSB-inspired Enhanced Disclosure Task Force²
- 1 Principles for effective risk data aggregation and risk reporting, Basel Committee for Banking Supervision Publication 239, Bank for International Settlements, January 2013, bis.org. G-SIBs must reach compliance by January 1, 2016, having already conducted two self-assessments, designed to help the banks and their regulators benchmark and monitor progress. In July 2014, G-SIBs completed their second self-assessment and started a phase of close regulatory scrutiny leading up to January 1, 2016. D-SIBs must reach compliance three years after the date on which they were so designated, which varies by bank. Many received their designation during 2014.
- 2 2014 Progress Report of the Enhanced Disclosure Task Force, Enhanced Disclosure Task Force, Bank for International Settlements, September 2014, financialstabilityboard.org.

In addition, significant accounting changes such as IFRS 9 and the parallel US Current Expected Credit Loss (CECL) proposal for loan-loss provisioning will make additional demands. These changes will further strain bank management, requiring additional large investments and additional enhancements to the data infrastructure.

We foresee two large consequences if data and IT platforms for these programs are not properly addressed. First, there is massive regulatory risk and a reputational risk if a bank fails to comply. Aside from possible specific supervisory measures against banks that don't get it right, deficiencies reported in early assessments of BCBS 239 often figure in "break-up-the-banks" arguments. Second, the bank might incur excessive but not fully productive investment and put strains on management capacity. Risk and finance data and technology should become—and already have become in many institutions—key strategic board-level topics. Most institutions agree with the view that BCBS 239 compliance is not the end, but rather the beginning of a continuous journey of enhancing Risk and Finance data aggregation and reporting. Many regard this process as a long-term cultural transformation that will change how banks look at and work with their data and technology to generate risk and opportunity insights.

McKinsey estimates that with strategically targeted and run Risk and Finance Data and Technology programs, the industry as a whole could add between USD 19 billion and USD 24 billion of annual benefits

This perspective is reflected in the numbers. Based on our joint IIF / McKinsey industry survey, we estimate that the overall banking industry is spending a total incremental investment between USD 12 billion and USD 15 billion on Risk and Finance Data and Technology transformation (Average G-SIB: USD 230 million, average D-SIB: USD 75 million). Much of this investment is already underway (mainly in G-SIBs, with the bulk starting around 2013) and will continue for the next 3-5 years (mostly by recently designated D-SIBs). These are certainly very significant figures, warranting utmost care and strategic foresight to steer investments in a value-based way. Indeed, some banks are looking beyond the direct regulatory demands and complexity, considering how to leverage their investments and drive strategic opportunities, rather than just improving reporting capabilities. In short, they are focusing on uncovering what could drive the most value for the investment.

The good news is that in survey respondents' views, as well as ours, there is indeed a great deal of value to unearth. Based on projects and case studies, McKinsey estimates that with strategically targeted and run Risk and Finance Data and Technology programs, the industry as a whole could add between USD 19 billion and USD 24 billion³ of annual benefits to the other

³ Based on a detailed analysis for a representative sample of 10 banks and extrapolating it for the overall industry – for more details see the discussion on value at the end of this article.

side of the equation, including revenue improvement, capital enhancement and Operations and IT expense reduction. We will discuss these estimates in greater detail later in the paper, but it is important to note that these projections depend significantly on starting position and on the scope and aggressiveness of the data transformation. Reaping the full benefits as project would depend for most banks on significant investment in business-enabling analytics (with a typical budget of USD 100-150 million).

Irrespective of the specific figures, the general message is compatible with the view of most industry participants (expressed both in the survey and in recent live polls at McKinsey roundtables) that BCBS 239 acts as a catalyst for meaningful investments that would have been the right thing to do anyway. Despite the promise of this undertaking, however, it is important to remember how difficult and complex it is likely to be: very high investments, many complex interdependencies, overlaying timelines and scopes, multi-jurisdiction, and (despite the global standard set in BCBS 239) possibly unaligned regulations and supervisors' requirements.

To support the industry through this complex journey, McKinsey & Company has partnered with the Institute of International Finance (IIF) to conduct initial research and annual benchmarks, working-group discussions, and roundtables with banks and regulators. The goal has been to understand the approaches that G-SIBs and D-SIBs are taking to embrace the BCBS 239 principles and to go beyond them, to give banks a sense of what their peers are doing, and to distill the key strategic issues that need remediation for banks to be on track for compliance and seizing strategic value beyond that. This report sheds light on industry preparedness and the remaining challenges. More importantly it looks at solutions for achieving compliance and possibilities for gaining new competitive advantages.

Where does the industry stand?

During 2013 and 2014, McKinsey polled executives across 55 banks responsible for addressing BCBS 239 programs, building on the survey developed by the Basel Committee on Banking Supervision (BCBS). The survey was supplemented by further questions which were jointly developed by McKinsey and the IIF with industry representatives in IIF discussions to shed light on a broader set of perspectives around approach and target compliance capabilities that banks were employing to address the BCBS 239 principles. This large data set allowed McKinsey, with a working group of IIF members, to extract powerful insights that industry participants can use in further detailing and aligning the course of their strategic decisions over time.

High expectations for compliance being taken seriously

Banks have reported consistently middling scores when rating their compliance progress for the past two years, but this is, counterintuitively, a sign that they are taking the standards seriously. Banks have analyzed the standards in detail, have a good understanding of the problems, and are very self-critical about their progress. On average, respondents score their banks between 2 (materially noncompliant) and 3 (largely compliant) on a four-point rating scale (Exhibit 1).

G-SIBs were designated earlier, so their remediation projects are usually further advanced than those of D-SIBs, a fact that is reflected in G-SIBs' higher self-assessments across all dimensions. Banks generally assess reporting practices higher than infrastructure and data-aggregation capabilities, which might lead regulators to ask critical questions about dependency on manual processes and sustainability of sound reporting capacities. Many scores remained constant between the first and second self-assessments, and some even declined, probably reflecting greater appreciation of the magnitude of the requirements and even more careful consideration of the scope of the exercise.

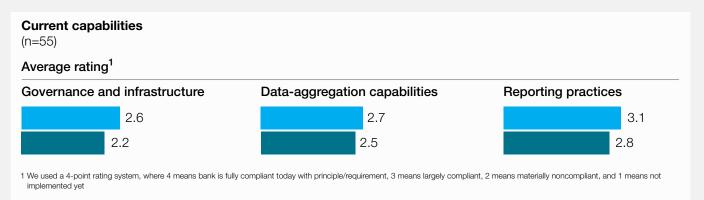
One problem for interpreting the data is that the BCBS survey's scoring system is quite broad, making it difficult to reflect granular progress. Given a four-point scale, respondents were unable to indicate incremental progress if, say, a 3 ("largely compliant") was too low but a 4 ("fully compliant") was too high.

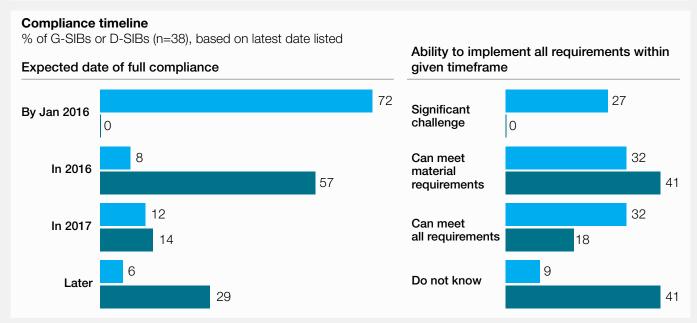
Thus, despite the slow reported improvements on scores, banks argue that they are making substantial progress. The industry still expects to achieve substantial compliance on time. More than 70 percent of G-SIBs plan to be compliant by January 2016, and about 60 percent of G-SIBs and D-SIBs believe they are on track to meet at least the essential requirements.

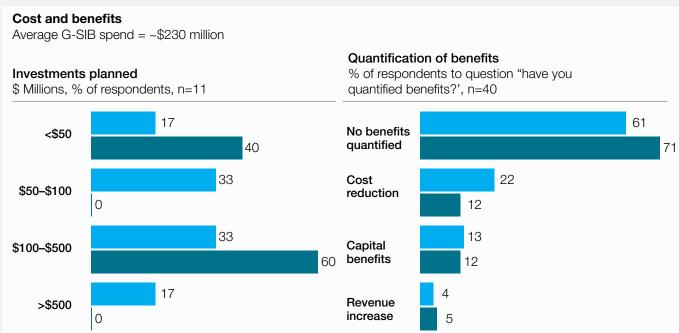
Industry taking a significant effort and investments to remediation

Bank executives have changed their perception of risk data aggregation and reporting. They no longer see it as a specialized and technical issue that only the risk department cares about, but as a strategic board-level topic. Most banks either are seeking or have received full board support for their program. Furthermore, financial institutions are making significant investments: about 50 percent of G-SIBs are in the process of investing over USD 100 million to achieve compliance, with an industry average of USD 230 million planned. This means that, since 2013 and for the next 3-5 years the overall industry is investing between USD 12 billion and USD 15 billion in improving Risk and Finance Data Aggregation and









Note: Survey respondents represent banks categorized as either global systemically important banks (G-SIBs) or domestic systemically important banks (D-SIBS). SOURCE: IIF/McKinsey benchmarking Q3 2014

reporting. In addition, since banks reported in the survey only their incremental investments related to BCBS 239, we believe that the overall investment could add up to USD 20 billion or even USD 30 billion.

Industry experts stress that this progress has come despite a considerable number of competing regulatory requests. While the vast majority of banks agree that BCBS 239 is a meaningful catalyst for long-needed upping of the game in Risk and Finance Data and Technology, and while they aim at propagating meaningful change that will create value, close to 60 percent report they have not yet quantified potential benefits beyond the need for compliance. This should change if banks want to maintain a competitive edge (see the discussion on value at the end of this article).

Some G-SIB executives also note that their institutions may be "maxed out" on change capacity for the moment. These institutions will continue to face relentless pressure from the regulatory community, which attaches high importance to risk data aggregation. However, in its consulting work, McKinsey also finds that these programs provide banks with the nucleus for impactful broader data programs and an impetus to push ahead with change.

Supervisory expectations for G-SIB compliance by January 2016 remain high. Supervisors are already preparing compliance tests. Some of the core requirements that supervisors are likely to emphasize include strong frameworks for risk data governance, reduced dependence on manual interventions in key processes, common data dictionaries, and "adaptability"—the enhanced risk data aggregation and reporting needed during stress periods. As a key pillar, we expect a need for banks to have in place strong and effective quality controls and monitoring for both data and reports at compliance date. Beyond that, BCBS 239 principles are expected to inform supervisory stress tests and in banks' "resolvability" assessments on an ongoing basis.

How are banks tackling remediation?

McKinsey and the IIF working group have been discussing with banks their approaches and the key decisions they are making to address BCBS 239. Overall, banks most often adopt a federated model of execution, considering different approaches to defining the scope of the program, and setting ambitious targets for automation and timeliness.

Federated models becoming the industry standard

Most banks are adopting federated models for both architecture and governance. In these models, a strong central BCBS 239 program layer steers dedicated work streams or projects focusing on risk types, divisions, or geographies. In terms of data architecture, 60 percent of banks are migrating to domain-oriented "golden sources" that capture data in line with common standards and feed through to group-level repositories. Almost no banks plan to create product- or business-aligned repository silos.

Banks report the same governance approach for the business-as-usual regime: 60 percent of the respondents are planning a federated model for the future accountability of data governance. Here, individual business lines are accountable for the program and report to a central data-management function that sets up policies and standards.

Across all the banks, and regardless of governance model, the topic of BCBS 239 has been elevated from just a risk-team topic to a boardroom discussion. This important development reflects supervisory expectations that boards should be acutely aware of their institutions' data capabilities—and the limitations on what data can be served up at short notice. It also reflects a realization experienced by managements and boards when they looked into the abyss in 2008: they need to ensure their risk managers have all the data necessary to take a comprehensive view of the risks their banks face.

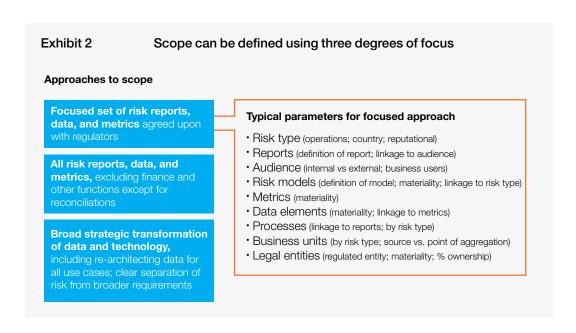
In many of the data transformations that McKinsey is supporting, banks are using domainoriented architecture as a vehicle to rationalize the upstream data sources. With these efforts, large universal banks may be able to reduce data spend by as much as a third and improve other capabilities, such as reduced time to market and cost for solution delivery.

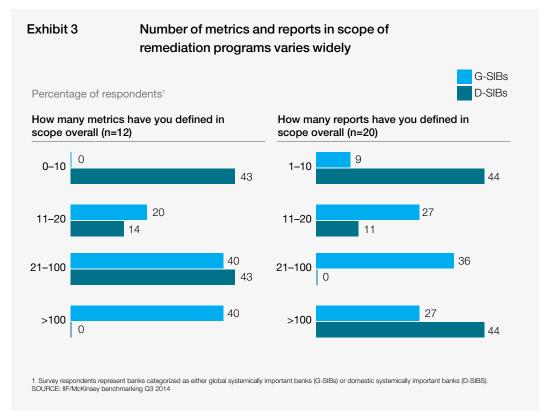
Boards should be acutely aware of their institutions' data capabilities—and the limitations

Banks taking diverse approaches to scope

Financial institutions are taking multiple approaches to defining the scope of their remediation programs (Exhibit 2). Most are opting for a focused, value-oriented set of key risk metrics and reports. Our survey work and discussions with banks indicate that the selection is driven by the spirit of the regulatory text: focusing on the key metrics or reports used by senior management for the bank's material risk decisions. Roughly 80 percent of banks are scoping fewer than 100 metrics, and 60 percent fewer than 100 reports (Exhibit 3). Banks that are handling scope in such a focused way have the strong benefit of tightly managing expectations for compliance. They might leave further steps for later, leveraging the transformation for a broader strategic goal.

A few banks are using BCBS 239 for a strategic data transformation beyond risk data. However, they clearly separate the work on risk from their broader efforts.





Most banks are cascading the scope of the effort down to individual legal entities. About 50 percent of the banks are doing this with respect to governance principles; about 60 percent are doing so for both risk data aggregation and risk reporting principles.

In data lineage, banks are similarly taking varied approaches. About 60 percent of institutions are capturing and documenting data flows all the way back to the point of data entry. The rest are more selective and mostly starting at handoff points into risk or finance systems.

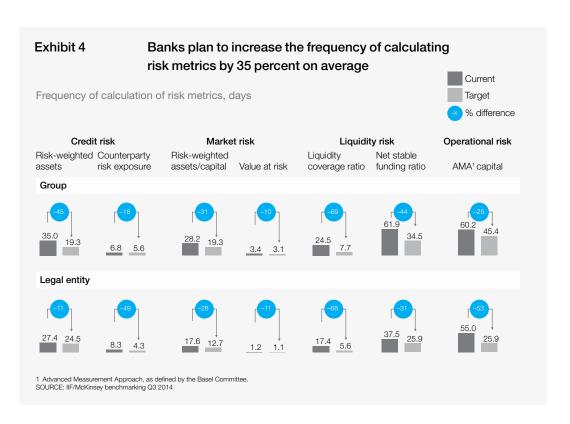
Industry setting ambitious goals for timeliness and automation

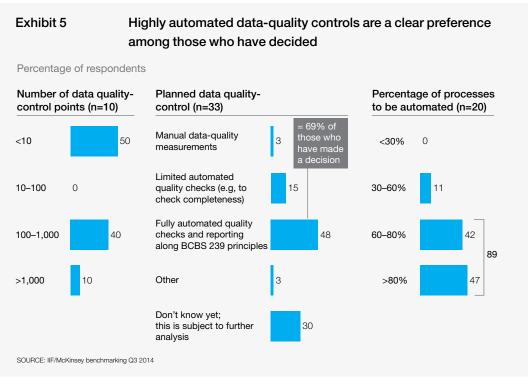
In addition to investments, a further indication of banks' seriousness about remediation is that they plan to reduce significantly the number of days between critical risk calculations. On average, they expect to reduce the time to produce these calculations by 35 percent (Exhibit 4). For most banks, such a change in timeliness will require further automation of key parts of the data-aggregation flow. Maximizing automation is also clearly a top regulatory expectation.

As discussed, a fundamental demand of the regulators for compliance capabilities will be strong and effective mechanisms for ensuring data and report quality. Among banks that have already made a decision about how to implement data-quality controls, almost 70 percent plan to implement fully automated quality checks (Exhibit 5). And among all respondents, almost 90 percent will automate at least 60 percent of their quality-control processes. From work with industry leaders, McKinsey sees many banks implementing internal utilities such as a reconciliation center of excellence, single data-quality platforms, or automated data-lineage tools; some are even considering external utilities as well.

The ambitious aspirations for timeliness, automation, and integrity of architectures will likely require massive and expensive programs. These efforts will truly differentiate the few banks that design and manage their programs correctly, avoiding the risk of underdelivering. Many banks will be faced with a key trade-off: implementing tactical fixes quickly toward the compliance date versus focusing on better longer-term strategic solutions that will go live at some later point. We will discuss this trade-off in more detail in the next section.

A fundamental demand of the regulators for compliance capabilities will be strong and effective mechanisms for ensuring data and report quality





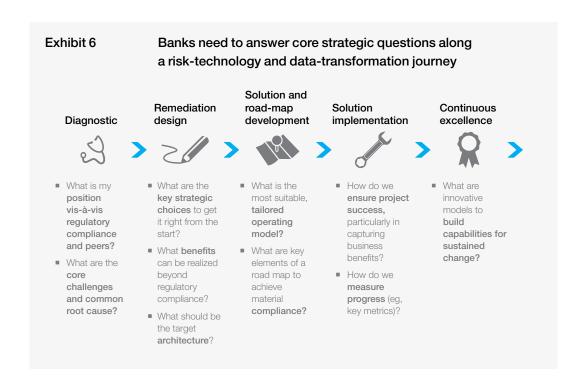
The road to compliance

Banks are identifying a consistent set of priorities on their journey to compliance, with some nuanced differences between G-SIBs and D-SIBs due to their different natures and starting points. As the compliance date approaches for G-SIBs, and as D-SIBs are also moving toward their goals, it is important to focus on key priority actions. The following industry-proven priorities can help in meeting tight deadlines.

Priorities for 2015

Naturally, G-SIBs and D-SIBs are in different phases of the risk-technology and data-transformation journey (Exhibit 6). G-SIBs are in the midst of implementing solutions and are starting to plan for setting up business-as-usual operations to ensure continuous excellence. Many D-SIBs, which have not had the same regulatory time pressure, are still in the early stages of their programs.

Using the benchmark based on the IIF/McKinsey survey, we found that priorities are typically consistent among peer groups (Exhibit 7). The key overall priorities are improving data governance and developing data dictionaries and taxonomies. Compared to peers, G-SIBs are more focused on consistency between risk and finance and on data repositories: many are considering creating joint risk-and-finance data-management production units to capture efficiencies. D-SIBs are focusing more on automation of processes: most haven't gone through the same long-term data transformations that G-SIBs experienced after the crisis to deliver against Basel III requirements, and need to catch up in that process.



	across peer groups						
Ranking of pr	iority areas with need for remediation,	% of responder	nts¹ ranking area	in top 3			
	Remediation areas	Overall (n=34)	G-SIBs (n=19)	D-SIBs (n=15)			
Data	Data governance	59	58	60			
	Data dictionary and taxonomy	44	58	27			
	Data consistency between risk and finance	35	47	20			
	Consistency with upstream data providers	24	21	27			
	Data consistency between risk metrics	21	16	27			
Data operations	Data-quality monitoring	29	26	33			
	Data controls	21	16	27			
	Automation of processes	18	11	27			
	Data Service Level Aggrements (SLAs)	3	0	7			
Infrastructure /technology	Data repositories	21	26	13			
	Hardware and storage upgrades	9	11	7			
	Risk-reporting platform	6	0	13			
	Ad hoc analysis capabilities	6	0	13			
	Automated data interfaces	6	11	0			
	Metrics calculations/analytics	0	0	0			

Matching regulator expectations

Bank consultations with supervisors on BCBS 239 have so far generally not focused on specific compliance targets. However, we have identified variability in regulators' attitudes by individual bank. In our survey and broader discussions, banks say they welcome more specific and more committal guidance on specific capability targets to reach for compliance and beyond. They also state they would welcome discussions about how to balance the many challenges to achieving the best results by the 2016 deadline. As discussions progress, banks are hoping for more alignment among supervisors across regions.

The industry anticipates that the Basel Committee will remain intent on longer-term transformational solutions and that supervisors will discourage quick fixes. Generally, we believe that the BCBS will regard the final objective of the regulation as driving improvement in banks' risk-management capabilities through enhanced data capabilities. As banks are defining how to achieve compliance in different ways, it becomes essential to align expectations with regulators. This alignment will also mean getting more commitment on banks' individual compliance-capability proposals in order to reduce interpretational delivery risk for G-SIBs in 2015 and in longer-term road maps.

It is clear from the benchmarking results and many industry discussions that some G-SIBs will still have gaps relative to some principles by January 2016. The main areas of continued implementation are likely to be around architecture, automation, and adaptability, since these naturally take time to get right. Our discussions with industry practitioners and regulators

suggest several possible compromises, although these general guidelines might vary by individual regulator:

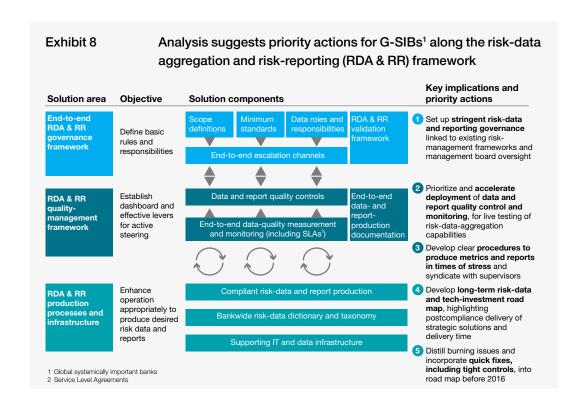
- Regulators might support ongoing transformational approaches that will be fully completed after the compliance date, provided that these approaches are built on solid logic and the bank has designed a road map of sustained investment.
- Manual solutions might be acceptable as intermediate stopgap measures to provide the data-aggregation capabilities the regulators want to see, but only if core requirements are in place.
- The Basel Committee might place more emphasis on ensuring minimum implementation consistency among banks and consistent application of the regulation across different supervisors.

It is obvious that institutions need to keep engaging with and seeking advice from the regulators throughout the journey, in order to ensure continuous alignment.

G-SIBs: Five priorities for 2015

Post-crisis banks clearly appreciate the value of effective risk management and are investing in it. However, in 2015 G-SIBs must make the commitment and effort necessary to complete compliance with BCBS 239. The current work by McKinsey and the IIF working group, discussions with industry leaders, and analysis of the results of the IIF/McKinsey survey suggest that banks focus on five priority actions along the risk data aggregation and risk reporting framework (Exhibit 8):

- Stringent governance of risk data and reporting. Build program awareness and
 adoption across the organization through effective communication, leveraging typical
 channels, training sessions, and tactics for cultural and mindset change. As a tactical step,
 it is essential to use internal communications to cascade awareness of the program down
 from the executive level to the front line (e.g., by promoting plenary sessions, creating an
 internal blog, and publishing in newsletters).
- 2. Quality control and monitoring of data and reports. First, focus on implementing quality processes for prioritized data domains, metrics, or reports, and create momentum to scale up capabilities to the broad organization. McKinsey's proprietary accelerated-deployment methodology would suggest that banks select two or three domains containing data used by critical reports, and engage the data stewards to deploy the target-state processes (e.g., designate critical data elements, measure data quality, and run issue-remediation processes). Second, strike the right balance between largely automated and less-automated procedures (where necessary as temporary expedients) and between strategic and tactical solutions while managing the progress against the target state. Practically, banks should engage with enterprise teams to run proof-of-concept trials for automated tools (e.g., for data-lineage documentation and data-quality measurement).



- 3. Procedures for metric production and reporting in times of stress. Ensure that the more ambiguous principles are interpreted as concrete goals related to producing and reporting metrics, including procedures for reporting during times of stress. As a next step, conduct live testing of key capabilities through the end users and produce evidence for regulators.
- 4. Long-term risk data and tech-investment road map. Define the road map to embed BCBS 239 as a continuous-improvement process, including the structure of three lines of defense for data risk, and the independent validation and verification (IVV) framework. Specifically for G-SIBs, the next step is to designate and empower a leader and team to conduct the upcoming IVV review process and to conduct four- to six-week deep dives into the elements of the program.
- 5. Quick fixes, including tight controls. For aggregation and metric- and report-production procedures where material challenges have been evidenced, develop rapid solution approaches, including tight controls within the quality-control framework previously depicted. Live measurements from the quality-control framework will help inform the further trajectory from quick fixes to fully compliant solutions.

⁴ Principle 1 on Governance of BCBS 239 states the expectation that banks will have an IVV function, although many banks would institute one in any case, on general risk-management principles.

⁵ The leader and team should be independent of audit and the BCBS 239 program leadership.

McKinsey is working with banks to deploy agile implementation approaches that can help deliver end-to-end processes in focused areas in months. Thus, although the challenges are great, there are opportunities for managing them in reasonable and responsible ways.

D-SIBs: Areas of focus for 2015

The year 2015 will also be critical for D-SIBs. Their priorities are somewhat different than those for G-SIBs, given their different timelines, but no less urgent:

- 1. **Diagnostic.** Start by executing a detailed diagnostic of all capabilities across the BCBS 239 framework. Identify the key gaps that need to be addressed.
- 2. **Remediation design.** Define the remediation components, including those driving key decisions (e.g., whether to use a federated governance model, which enterprise data capabilities to create), and design the target-state architecture.
- 3. Scope and target capabilities. Early on, develop a value-oriented view of scope, in terms of metrics and reports, and in terms of level at which to apply the regulation (group, legal entities, or divisions). At the same level of granularity, define individual target aspirations (e.g., timeliness and completeness) that again are oriented toward generating value, and link these back to the principles.
- 4. Quality measurement and controls. For all metrics and reports in scope, define a set of quality metrics that allow measurement and control of ongoing quality performance. It would also be valuable to define the evidence that will be gathered to prove compliance. The earlier these goalposts are established and regularly measured, the greater the precision and acceleration will be through the program.
- 5. **Solution and road-map development.** Create a multiyear road map for the transformation, covering detailed priorities and funding needs for 2015 and beyond, recognizing that maintaining this roadmap will be an ongoing supervisory priority.

The industry anticipates that the Basel Committee will remain intent on longer-term transformational solutions and that supervisors will discourage quick fixes. Generally, we believe that the BCBS will regard the final objective of the regulation as driving improvement in banks' risk-management capabilities through enhanced data capabilities

A view of the value and the future

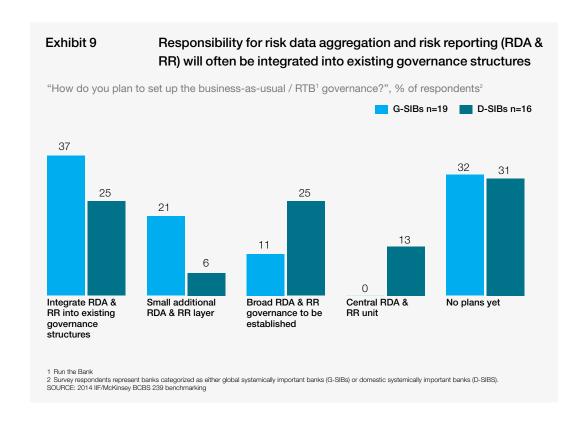
Banks should not consider the compliance deadline as the end of the journey. Successful institutions are already looking beyond this date and considering how to embed BCBS 239 in their ongoing processes and how to harvest value from the investments made.

Implementing continuous improvement

Banks and regulators say that, while the deadline is critical, it's important not to consider January 2016 as the end of regulatory implementation. Risk leaders are considering strategies that maintain a long-term perspective, require ongoing investment, and anticipate further regulatory change.

Demand for continuous improvement is coming primarily from within banks, rather than from external forces, although we can be certain supervisory pressure will continue. About two-thirds of institutions have already considered where the BCBS 239 responsibility lies in the longer term. Most G-SIBs and D-SIBs prefer the federated model, where there is dedicated accountability in business units with reporting line to the group level. Close to a third of banks plan to integrate responsibility for risk data aggregation and risk reporting into existing structures, while some G-SIBs may add a small additional governance layer on top of existing structures (Exhibit 9).

The IVV function, in addition to meeting BCBS 239 requirements, will further ensure that the capabilities for risk data aggregation and reporting indeed contribute to ongoing fostering of proper risk management.



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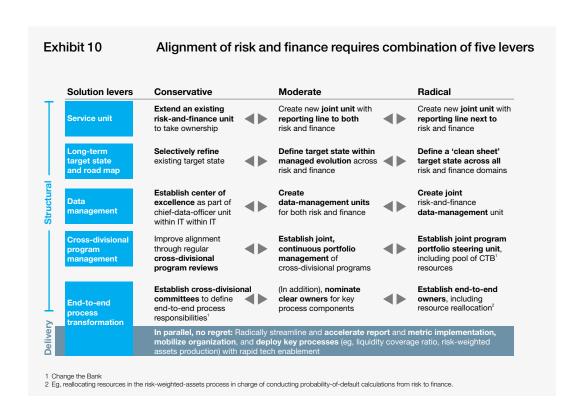
Shift to strategic business value

As we look into the future, the survey suggests we can expect banks to leverage the enhanced infrastructure developed for BCBS 239 in order to drive business value. Over the next five to ten years, the following outcomes can be anticipated:

- Risk and finance units become radically redesigned and operate as a cross-divisional dataand-reporting shared-services unit (Exhibit 10).⁶
- Banks leverage the strategic data assets that were enhanced using BCBS 239 through large-scale analytics programs, with the objectives of improving customer experience, driving structural cost reductions, increasing revenue streams, and enhancing risk management to support pockets of analytical skills in the businesses.
- Banks establish utilities to drive efficiency in data capabilities (e.g., common data-quality measurement, plug-and-play reporting)—similar to what some banks have developed for customer-reference data.
- Supervision, official stress-testing, and regulation will continue to focus on the need to strengthen risk-management and governance capabilities.⁷ This will require further development of data infrastructure—including, for example, new rules on underwriting decisions, use of internal-control mechanisms (including dynamic limit allocation and exposure management), more sophisticated and comprehensive collateral management, and ad hoc crisis response or operational risk-management rules.
- Continued work across the industry and regulatory communities to develop standardized and simplified data elements, for purposes such as supporting supervisory reporting to the FSB Data Hub and domestic regulators. This standardization of data elements will further the FSB's and BCBS's goal of more consistent and comparable public risk reporting and will increase globally standardized reporting of derivatives and other types of transactions.

Of course, many other regulatory pressures in addition to BCBS 239 will reinforce this trend, as will the need to meet the requirements of expected-credit-loss provisioning under international and US accounting requirements consistently with the BCBS's pending guidance on expected credit losses. Guidance on accounting for expected credit losses, Basel Committee for Banking Supervision Consultative Document, Bank for International Settlements, February 2015, bis.org.

⁷ Miklos Dietz, Philipp Härle, Paul Hyde, Akshay Kapoor, Matthieu Lemerle, and Fritz Nauck, "The road back: McKinsey global banking annual review," December 2014, mckinsey.com.



Substantial value to be captured

Based on relevant case studies, McKinsey estimates that with strategically targeted and run Risk and Finance Data and Technology programs, the industry as a whole could add between USD 19 billion and USD 24 billion of annual benefits.⁸

In particular, our rough estimates indicate that on average a typical G-SIBs could extract up to USD 700 million to USD 1 billion of annual benefits and a typical D-SIBs on average could expect to drive annual benefits up to USD 250 million to USD 400 million (Exhibit 11). Sources of value are increased revenue (typically captured through improved analytics⁹), improved capital management (through reduced Risk Weighted Asset buffers¹⁰), optimization of operational cost (captured by reducing teams that manipulate data in support functions¹¹), and reduction of IT costs (obtained through rationalization of data assets and tools¹²).

⁸ Based on an analysis for a representative sample of 10 banks, using top-down benchmarks for each type of benefit to calculate the total value, and extrapolating it for the overall industry; includes a factor to weight the capability of banks to capture the full value due to limiting decisions on the BCBS 239 program.

⁹ Case studies suggest that banks can capture 2-4% of revenue through cross / up-sell analytics.

¹⁰ Benchmarks indicate reduction of 2-3% of capital requirements.

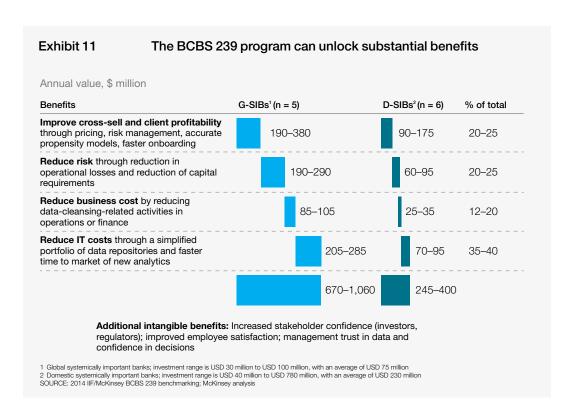
¹¹ Case studies have demonstrated savings of 5-8% in Finance Operations teams.

¹² Banks that developed a business case estimate savings of \sim 10% in the IT expenditure related with data.

Rough estimates indicate that on average a typical G-SIBs could extract up to USD 700 million to USD 1 billion of annual benefits and a typical D-SIBs on average could expect to drive annual benefits up to USD 250 million to USD 400 million

However, capturing these benefits will largely depend on three factors:

- The ability of data programs beyond BCBS 239 requirements to capture the full strategic benefit, due to decisions to restrict scope or take a tactical approach (already factored into the estimates presented)
- The extent to which banks might already have captured this value (e.g., mature institutions
 with strong customer analytics capabilities would likely have captured most of the revenue
 enhancement opportunity)
- Further investments from banks in non-BCBS 239 related areas (e.g., investing in analytics resources and capabilities to generate cross-sell insights or in programs to clean poorquality data related to Risk Weighted Assets).



The investments that banks have made and are making in BCBS 239 and beyond (assuming they are the right investments) will soon show their value in banks' ability to respond to new regulations, to meet repeated supervisory stress-testing requirements, to demonstrate their resolvability, to produce reports in times of stress, to manage resources better in an environment constrained by regulations and market forces, and to generate broader, strategic, value-oriented analytics. Many banks have used BCBS 239 as an opportunity to push the envelope on data transformation and hope this will deliver a competitive edge. One thing is for certain: risk data and technology have arrived in the boardroom as a strategic topic, and that topic is here to stay.