



Navigating the year ahead

Banking regulatory outlook 2017

United States
December 2016

CENTER *for*
**REGULATORY
STRATEGY**
AMERICAS

This publication is part of the Deloitte Center for Regulatory Strategy Americas' cross-industry series on the year's top regulatory trends. This annual series provides a forward look at some of the regulatory issues we anticipate will have a significant impact on the market and our clients' businesses in 2017. The issues outlined in each of the reports provide a starting point for an important dialogue about future regulatory challenges and opportunities to help executives stay ahead of evolving requirements and trends. For 2017, we provide our regulatory perspectives on the following industries and sectors: banking, securities, insurance, investment management, energy and resources, life sciences, and health care.

We hope you find this document to be helpful as you plan for 2017 and the regulatory changes it may bring. Please feel free to contact us with questions and feedback at centerregstrategies@deloitte.com.

Contents

Global foreword	2
Introduction	4
1. US elections and consequences for the regulatory landscape	6
2. The new age of capital planning and stress testing	9
3. New capital order	11
4. Data quality, analytics, and reporting	13
5. Fintech	16
6. Cyber threats and cyber risk	18
7. Resolution planning	20
8. Consumer protection	22
9. Liquidity	24
10. Governance and risk management	26
11. Regulatory outlook and enhanced prudential standards for foreign banking organizations	28
12. Credit quality concerns	30
13. Model risk management	31
14. Financial crimes risk	32
Looking ahead	34
Contacts	36

Global foreword

The year 2016 has been another difficult one for the financial sector, with economic and political uncertainty complicating the completion of the post-crisis regulatory repair agenda.

A prolonged period of tepid economic growth and persistently low and volatile interest rates has squeezed profitability in some sectors and put significant pressure on longstanding business models and balance sheet management. Firms are further challenged by continuing uncertainty over the final shape of post-crisis financial regulation. While regulators are keen to preserve the hard-won reforms of recent years, rising political uncertainty in developed economies (as demonstrated by the UK's referendum decision to leave the EU and the US Presidential election results) has increased the volatility and hence unpredictability of the macro-policy environment. This has caused some to go as far as questioning the sustainability of free trade and open markets.

At the same time, the introduction of new technologies and digital distribution platforms in the financial sector are unleashing disruptive forces, promising benefits to consumers and markets and posing further challenges to the strategies (and margins) of established firms. New technologies also stand to multiply the cyber and IT risks the industry currently faces. Nevertheless, if properly harnessed, these technologies also present opportunities for incumbents which move quickly and wisely to revitalize their business models.

The year 2017 will begin with a range of highly anticipated regulatory developments at or near their finalization. The Basel Committee on Banking Supervision (BCBS) is expected to conclude most of its banking framework; recovery and resolution planning is expected to move closer to being implemented for most large banks and increasingly clarified for non-banks; and markets are expected to continue to shift toward central clearing and higher standards for transparency. How these reforms and new regimes are implemented in national jurisdictions will, however, be more sensitive to concerns about going too far and potentially harming an already weak economic recovery. The risk of fragmentation of global regulatory approaches is rising.

From a supervisory perspective, compliance with these new requirements is the bare minimum; as important will be firms' preparedness for the unexpected. Supervisors will, more than ever, want to see that firms have in place robust plans for scenarios that could threaten their own stability or the interests of their customers.

Strategies for a more constraining regulatory environment

Despite the uncertainty that characterizes 2017, one fact is becoming increasingly clear: Financial services firms will not be able to wait out this current period of difficulty without taking decisive and, in some cases, bold actions in response. 2017 marks nearly a decade since the circumstances surrounding the financial crisis began, and many of the problems the industry has faced over this period are now starting to look more structural than cyclical. Despite a view in some quarters that the “regulatory pendulum” has swung too far, given the tastes of many politicians worldwide (if not those of supervisors as well), the regulations that have already been implemented to date are unlikely to be materially watered down—at least not soon. If interest rates stay lower for longer in major markets, many bank and insurance business models will need to be rethought. Yet rising interest rates would not be a panacea either, given the pressure it would put on (household) borrowers and counterparties with fragile balance sheets.

As a result, firms need to refresh their strategies for how they respond to regulation and how they do business in a regulatory, economic, and political environment that could be fundamentally more constraining. Not all firms will succeed in doing this in the year ahead. Those that do will be those that find ways of making this new environment work for them, capitalizing on their inherent resilience, agility, and efficiency.

It is in this fluid context that we present the Deloitte Center for Regulatory Strategy Americas’ Regulatory Outlook for 2017. This gives our view on how regulatory themes will shape the financial industry in the year ahead and how firms can respond to the challenges they will face.

Kevin Nixon

Centre for Regulatory
Strategy
APAC
Deloitte Australia

Christopher Spoth

Center for Regulatory
Strategy
Americas
Deloitte US

David Strachan

Centre for Regulatory
Strategy
EMEA
Deloitte UK

Introduction

The 2016 election results may, over time, reshape the banking industry's regulatory landscape. Key regulatory areas, such as capital planning, consumer protection, and financial crimes regulation, face uncertainty. And time will tell how these events may impact the industry.

As companies look for clues and direction to help guide their compliance strategies, actions, and investments in 2017 and beyond, they need to be proactive and pay extra attention to regulatory changes as they unfold, as the industry's regulatory trajectory may shift. That said, most of the boldest ideas to amend or repeal existing statutes and their implementing regulations would need to go through the full legislative process. Revising other regulations or guidance would be relatively easier, but there's still a process to follow and the scope of such revisions would be narrower.

On the other hand, companies should also make a conscious effort to avoid being paralyzed by uncertainty. With so much change in the air, it can be tempting to just sit back and wait for things to settle down. But until changes are officially announced and approved, compliance with existing regulation is paramount.

Also, it's important to note that firms have invested considerable money and effort in key regulatory-related activities—such as enhancements to risk management and compliance frameworks. These investments can be expected to deliver long-term business benefits regardless of the specific regulations that are enacted.

Taking all these factors into account, here are the regulatory trends we believe may have the biggest impact on the banking industry in 2017:

-  US elections and consequences for the regulatory landscape
-  The new age of capital planning and stress testing
-  New capital order
-  Data quality, analytics, and reporting
-  Fintech
-  Cyber threats and cyber risk
-  Resolution planning
-  Consumer protection
-  Liquidity
-  Governance and risk management
-  Regulatory outlook and enhanced prudential standards for foreign banking organizations
-  Credit quality concerns
-  Model risk management
-  Financial crimes risk

In this report, we explore each of these trends based on what we know now, with additional insights about high-level views on potential regulatory changes. However, in 2017 we may very well find that nothing is certain until it actually happens.

To stay on top of the latest regulatory news, trends, and insights, we invite you to visit our website at www.deloitte.com/us/about-dcrsamericas.



US elections and consequences for the regulatory landscape

The regulatory implications of the 2016 presidential and congressional elections for banks are challenging to evaluate as we go to press in December 2016. Broadly, the president-elect campaigned on reducing regulation, and this emphasis continues. Accordingly, the prospect of regulatory reform for banks over the coming months or years has increased as policymakers reconsider past legislation or amend the scope of certain existing regulations (e.g., by tailoring their applicability to regional and smaller firms). It should be noted that, thus far, financial reform hasn't been highlighted as one of the incoming administration's 100-day priorities. However, the president-elect's website has noted that the financial services policy team will work to "dismantle" Dodd-Frank and replace it with pro-growth policies.

What does this all mean? Wholesale changes to Dodd-Frank or an outright repeal of the law would require legislative negotiation. The Senate's procedural rules currently require a 60-vote majority to invoke cloture on most legislative business, and Republicans only have a slim majority (52-48). Accordingly, Democrats retain the ability to influence any new legislation, and many have expressed strong opposition to efforts to repeal or

significantly alter Dodd-Frank. In a recent speech, House Financial Services Chairman Jeb Hensarling (R-TX) acknowledged this constraint, noting that he "remain[s] painfully aware of the Senate's cloture rules. That means there will continue to be a need to work with the other party."¹

While the legislative option will perhaps be the initial focus of Congress, there are other mechanisms for amending aspects of Dodd-Frank. Changes to financial services regulatory policy may also be enacted at the agency level, both through the rulemaking process and by issuing or rescinding guidance. Although many regulatory requirements are mandated by statute, Dodd-Frank provides agencies with discretion on how to implement the law in certain areas. While enacting changes through this avenue would be relatively easier than passing new legislation, the changes would likely be narrower in scope given the limited degree of flexibility. In addition, an agency may revise or rescind its interpretations or guidance to permit greater flexibility on certain issues.

Another way to scale back the effect of regulations is for an agency to change its approach to rulemaking, supervision, or

enforcement, which includes choosing not to finalize a pending proposed rule and/or taking a less aggressive approach to enforcement. This type of approach will largely be signaled through the nominations and appointments made to the executive branch and independent agencies. Given the large number of regulatory and supervisory issues at each agency, the prioritization of future work will be a significant factor in shaping financial services regulatory policy. Notably, at least two agencies—the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC)—will likely switch from Democratic majorities to Republican majorities as a result of the election. Furthermore, by January 2018, the president will have the opportunity to fill the chair/head positions at the Federal Reserve Board (FRB), Federal Deposit Insurance Corporation (FDIC), Office of the Comptroller of Currency (OCC), SEC, and CFTC, as well as vice chair positions at the FRB and FDIC, with the director of the Consumer Financial Protection Bureau's term expiring later in 2018. The table below summarizes the current vacancies and term expiration dates across the agencies.



Agency	Position	Status
Treasury Department	<ul style="list-style-type: none"> Treasury Secretary (Chair of the Financial Stability Oversight Council) 	<ul style="list-style-type: none"> Presidential appointment (President-elect Trump announced his intent to nominate Steven Mnuchin as Treasury Secretary)
Federal Reserve Board (FRB)	<ul style="list-style-type: none"> Chair Vice Chair Governor Governor Governor Governor (Vice Chair of Supervision) Governor 	<ul style="list-style-type: none"> Chair Yellen's term expires in February 2018 Vice Chairman Fischer's term expires in June 2018 Governor Tarullo's term expires in January 2022 Governor Powell's term expires in January 2028 Governor Brainard's term expires in January 2026 Vacant Vacant
Federal Deposit Insurance Corporation (FDIC)	<ul style="list-style-type: none"> Chair Vice Chair Director (Independent) Director (Comptroller of the Currency) Director (CFPB Director) 	<ul style="list-style-type: none"> Chairman Gruenberg's term expires in November 2017 Vice Chairman Hoenig's term expires in April 2017 Vacant Comptroller Curry's term expires in March 2017 Director Cordray's term expires in July 2018
Office of the Comptroller of the Currency (OCC)	<ul style="list-style-type: none"> Comptroller of the Currency 	<ul style="list-style-type: none"> Comptroller Curry's term expires in March 2017
Consumer Financial Protection Bureau (CFPB)	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> Director Cordray's term expires in July 2018
Securities and Exchange Commission (SEC)	<ul style="list-style-type: none"> Chair Commissioner Commissioner Commissioner Commissioner 	<ul style="list-style-type: none"> Chair White will resign in January 2017 Commissioner Stein's term expires in June 2017 Commissioner Piwowar's term expires in June 2018 Vacant Vacant
Commodity Futures Trading Commission (CFTC)	<ul style="list-style-type: none"> Chair Commissioner Commissioner Commissioner Commissioner 	<ul style="list-style-type: none"> Chairman Massad's term expires in April 2017 Commissioner Bowen's term will expire in April 2018 Commissioner Giancarlo's term will expire in April 2019 Vacant Vacant
Department of Labor (DOL)	<ul style="list-style-type: none"> Labor Secretary 	<ul style="list-style-type: none"> Presidential appointment (President-elect Trump announced his intent to nominate Andy Puzder as DOL Secretary)

* President-elect Trump will be able to make all presidential appointments and fill all agency vacancies, subject to Senate confirmation. In addition, some existing agency personnel may depart before their terms expire.

The potential impact on each regulatory agency's policies and approaches from filling key leadership positions that are currently or soon-to-be vacant shouldn't be underestimated. These policymakers exert significant influence on the agencies through their "tone at the top," the priorities they establish, the shape and form of industry guidance they advance, the intensity of examinations they support, and ultimately how high they set the bar for meeting expectations. A prominent example is the unfilled vice chair of supervision role on the FRB that was established by Dodd-Frank.

As the new administration turns its attention to financial regulatory reform, the contents of the "Financial Creating Hope and Opportunity for Investors, Consumers, and Entrepreneurs (CHOICE) Act" legislation, introduced by House Financial Services Committee Chairman Jeb Hensarling and passed by the committee earlier this year, could become an important illustration of a Republican approach to these issues. Among other things, the bill would:

1. Allow banking organizations to choose to maintain a leverage ratio of at least 10 percent, rather than be subject to the Dodd-Frank-mandated supervisory regime and the Basel III capital and liquidity standards
2. Permit regulatory agencies to conduct stress tests (but not limit capital distributions) of banking organizations that have made qualifying capital elections, and subject stress test conditions to public notice-and-comment

3. Repeal the authority of the Financial Stability Oversight Council (FSOC) to designate non-bank financial companies as systemically important
4. Repeal Title II of Dodd-Frank (the Orderly Liquidation Authority) and replace it with a new chapter of the Bankruptcy Code designed to facilitate the failure of a large, complex financial institution
5. Change the CFPB's structure from a director-led organization to one with a bipartisan, five-member board, and subject the agency to congressional appropriations
6. Repeal the Volcker Rule and Durbin amendments
7. Repeal the Department of Labor's "Conflict of Interest" Rule that defines who is a "fiduciary" of an employee benefit plan under the Employee Retirement Income Security Act

Although the CHOICE Act appears to establish the preferred approach of many House Republicans, the Senate's position on regulatory reform will influence the direction of any legislative compromise. Senator Mike Crapo (R-ID), who will likely become chairman of the Senate Banking Committee, has supported various regulatory reform bills in the past. His position on the CHOICE Act, however, remains unclear. In order for this regulatory reform effort to gain legislative traction, Senator Crapo's support is essential. Here, it's worth noting previous Senate Banking Committee proposals, including a bill from outgoing Chairman Richard Shelby (R-AL) that would raise Dodd-Frank's statutory asset threshold for

subjecting banks to enhanced prudential standards from \$50 billion to \$500 billion. In addition, there has also been mention of a new Glass-Steagall Act. These past proposals, or elements of them, could be in play in 2017.

While it may be tempting to predict a significant degree of regulatory relief—and to start scaling back current regulatory and compliance efforts—this could be a risky strategy. Notably, many of the regulatory requirements developed over the past decade or so for capital, liquidity, recovery and resolution planning, and compliance are also fundamental to industry practices for strong risk management and compliance management systems. While regulatory relief may come in the form of specific reduced requirements—and perhaps refinements to the examination programs—we expect that many of the key regulatory practices developed over the past decade will remain core as the regulators develop future strategies.

Looking forward, firms should monitor the legislative and regulatory environment to identify any areas where they may have future opportunities to change course. At the same time, they should ensure they set a tone within their organizations that the institution will continue working to meet its past commitments to regulators. If and when regulations change, institutions should also evaluate how their past investments in meeting regulatory requirements might be tailored and adapted to retain their benefits toward strong risk management, governance, and compliance.



The new age of capital planning and stress testing

The seventh capital planning cycle since the financial downturn will start in 2017 and is now entering a new age. For this next cycle, the FRB has proposed eliminating the qualitative requirements for large, non-complex firms (LNFs)—exempting firms with less than \$250 billion in assets, \$10 billion in foreign exposure, and \$75 billion in non-bank assets (the latter being a new criterion not seen in other rules).

The FRB has also indicated it will issue a proposed rule to effectively embed stress-test results into current capital requirement buffers—and implement the global systemically important banks (G-SIB) surcharge buffer—while making other changes that would to some extent offset the degree of conservatism in its stress-test approach. However, at the moment it's difficult to know whether these proposals will be finalized—or how they will unfold—given the intersecting legislative proposals that have been signaled by the new Congress.

Collectively, these would be the most fundamental changes to the FRB's capital planning rule and Basel III standards since their inception. As such, they could have a wide range of impacts on firms, depending on their size, complexity, risk profile, and systemic footprint.

Under the Capital Planning Notice of Proposed Rulemaking (NPR), LNFs would continue to be subject to:

- The *quantitative* review portion of the FRB's Comprehensive Capital Analysis and Review (CCAR)
- The requirements for Dodd-Frank Act stress testing

However, LNFs would *not* be subject to:

- The *qualitative* CCAR assessment of capital plans
- A potential decision to object to a plan based on qualitative grounds

LNFs would also benefit from other reduced burdens, including lower materiality thresholds and reduced reporting requirements

At the same time, LNFs would be subject to annual reviews of their capital plans outside of CCAR through the normal supervisory review process, supplemented with horizontal reviews. Every year, the FRB plans to send a letter in advance of these reviews to describe the scope of the examination, which will likely occur one quarter after the normal CCAR reviews

Other changes that are currently being discussed, but have yet to be proposed, would affect all firms that are subject to the capital plan rules, particularly G-SIBs. According to FRB Governor Daniel Tarullo, the FRB is considering a “stress capital buffer” (SCB) approach to setting post-stress capital requirements in tandem with any G-SIB surcharge. The SCB, a risk-sensitive measure that would vary across firms, would replace the existing 2.5 percent “capital conservation buffer” (CCB) as a component of each firm's point-in-time capital requirements. In summary:

- The SCB would be set equal to the maximum decline in a firm's common equity tier 1 (CET1) capital ratio under the “severely adverse” scenario before the inclusion of the firm's planned capital distributions

- The SCB would have a specified floor at the current CCB level to avoid any reduction in the stringency of the regulatory capital rules (e.g., if the SCB is only 1.5 percent, the firm would still be subject to a 2.5 percent CCB floor)

To avoid having their proposed capital distributions curtailed, firms would have to demonstrate that they could exceed the required regulatory minimum, plus the SCB and any applicable G-SIB surcharge, throughout the baseline forecast. For example, a firm with an SCB of 5.0 percent and G-SIB surcharge of 3.0 percent would need to hold capital 8.0 percentage points above the CET1 minimum capital ratio of 4.5 percent (i.e., 12.5 percent) throughout the FRB's baseline forecast. Falling below the full buffer requirement at any point in the baseline forecast would result in an objection on quantitative grounds and would require curtailing capital distributions. This new approach to buffers would effectively add a G-SIB's capital surcharge to the estimated amount of capital it would need under stress.

Also, as part of the FRB's five-year review of its capital planning rule, it identified two important ways to make the rule less conservative. First, the rule would hold risk-weighted assets (RWA) flat over the projection horizon of stress tests, rather than assuming those assets would grow through the stress period. This would reduce pressure on capital ratios. Second, the rule would stop assuming firms under stress would continue to pay dividends and buy back stock at the same levels proposed for benign baseline conditions. Instead, it would assume only one full year of dividend payments. This change recognizes that

there are now rules constraining capital distributions and that bank capital policies now contain capital conservation measures to cut back on dividends and buybacks when under stress.

For LNFs, these changes will likely be a significant relief. Scaled-back reporting requirements, reviews that are more tightly targeted, and other reduced administrative burdens should be a welcome respite. At the same time, however, these firms need to make sure they don't lose the hard-earned momentum they have achieved in their capital planning efforts. By stating that it will use horizontal reviews as part of the supervisory process, the FRB is signaling it intends to maintain pressure on LNFs to ensure their capital planning efforts are sustained as a normal part of their governance and risk-management programs.

For both LNFs and large complex firms (LCFs) that aren't G-SIBs, relief will come in the form of more balanced assumptions on RWAs and capital distributions under stress, which will reduce the severity of the stress shock on capital. For G-SIBs, on the other hand, the introduction of the G-SIB surcharge in many cases will likely outweigh any benefits from the revised assumptions.

For all firms, the introduction of an SCB will create another degree of complexity in the capital rules by changing the required buffer every year. Although firms were already required to exceed their minimums by the FRB's stress shock, which changes from year to year, the new requirement will have a bigger impact because it applies to actual (not just forecasted) capital ratios throughout the year.

All firms would be well-advised to comment on the recently issued NPR (and the capital buffer NPR) to be issued in the near future. All firms should also perform a high-level impact analysis on the formal and informal proposals to see their likely effect on the capital targets and objectives—as well as the implications for future capital distributions. Understanding the implications of the proposals well in advance of their implementation can help affected firms provide substantive comments and enable them to begin the strategy process early enough to either take advantage of new opportunities or take defensive actions to mitigate any potentially adverse effects.

LNFs should work to maintain the momentum they have built around capital planning and make a strong effort to normalize capital planning into a sustainable

process that guides the firm's strategy going forward. Even without the threat of plan objections, the FRB's evaluation and rating of risk management and capital adequacy will be part of the supervisory review process (now outside of CCAR).

LCFs or large institution supervision coordinating committee (LISCC) firms that are new intermediate holding company (IHC) entrants to CCAR in 2017 will see no relief in terms of qualitative expectations. In fact, they will now be facing off against experienced examiners that have been freed up from reviewing the LNFs. The good news for these IHCs is that their initial reviews won't be public and won't include the FRB's independent stress test. This will provide an opportunity for course correction based on FRB feedback.

The FRB continues to tailor its capital planning and stress-testing program based on size, complexity, and systemic footprint, creating a wider range of expectations for institutions to manage. Firms that continue to invest in their capital planning capabilities will be able to effectively navigate and benefit from these ongoing changes as they emerge in the years to come.

Firms that continue to invest in their capital planning capabilities will be able to effectively navigate and benefit from these ongoing changes as they emerge in the years to come.



New capital order

Banks must contend with new fundamental reform initiatives for some aspects of Basel III that are evolving into a so-called “Basel IV” capital regime. The changes are numerous and affect a wide range of capital calculations for systemic banks, injecting a mix of simplification and complexity, as well as an additional layer of conservative capital. The new standards and proposals seek to ensure that banks hold capital commensurate with their risks. But they also place even more pressure on bank business models and shareholder returns. This is leading to some pushback from European bankers and regulators, which in turn is creating some degree of uncertainty about the direction of Basel IV.

There are essentially two key initiatives under development or implementation. One is a set of proposed changes that seek to reduce variability (RV) in the calculations of required capital that are driven not by underlying risk but by the significant differences in bank internal models upon which the calculations are based. The other initiative is a fundamental review of the trading book (FRTB), which is designed to fix

gaps in the approach to assessing capital for trading risks. FRTB was finalized by the Basel Committee on Banking Supervision (BCBS), but it needs to be proposed, finalized, and implemented by each local jurisdiction, including the US, by 2019. When layered on top of several other finalized and proposed capital reform initiatives, these proposals further complicate bank efforts to pursue an appropriate business strategy under the new capital order.

The first initiative to RV is being driven by the observation that bank-required capital calculations that use advanced approaches for credit and operational risks vary widely due to a bank’s choice of internal model approach, even when the risk exposures are identical. This lack of comparability raises issues about the rigor of the requirement, lack of transparency, and the creation of a tilted playing field across international firms and jurisdictions. The latest proposals by the BCBS would implement standardized approaches and floors to help eliminate or reduce the role of internal models in calculating minimum capital charges. This effort would reduce the complexity of some

of the capital calculations. However, some firms whose internal models calculate lower-than-average capital charges might see their requirements increase.

The RV effort has received some criticism from the industry and regulators that the loss of risk sensitivity and greater degree of conservatism would create undue costs for banks. The BCBS has committed to revisions that wouldn’t “materially increase capital requirements across the banking sector.” In December 2016, BCBS Chairman Stefan Ingves stated that “the contours of a final agreement are now clear.” He also noted that this agreement would include an “output floor” as well as a leverage ratio G-SIB surcharge to complement the risk-based version noted below. More details should be forthcoming once the agreement is finalized.

The second initiative, FRTB, was prompted by significant shortfalls in required trading book capital during the financial downturn. The fundamental review seeks to fill gaps, improve calibration, and overall ensure that trading book capital requirement

approaches are better aligned with the trading book's underlying risk. The effort also seeks to reduce the variability in modeling outcomes and creates greater hurdles in terms of quantitative tests of reliability, as well as capital penalties if models aren't performing well.

These reforms come on top of other significant mandates that affect the required capitalization of firms. They include total loss-absorbing capacity (TLAC), which is designed to ensure that firms have both adequate capital as a going concern, as well as sufficient capital for the firm to be resolved in an orderly fashion as a gone concern. The G-SIB surcharge layers on higher capital charges for firms scaled by their size, complexity, interconnectivity, and funding approach—increasing capital charges by as much as 4.5 percentage points. The supplemental leverage ratio (SLR) for systemic firms established a capital requirement based on nominal dollars of exposures on and off the balance sheet. It seeks to create a floor that isn't susceptible to any potential errors that might be attributable to the risk-weighting and internal model process. Moreover, a forthcoming US proposal would replace the Basel III capital conservation buffer of 2.5 percent with an SCB that is calculated by the FRB as part of its annual stress tests.

To further complicate matters, a revised version of the Financial CHOICE Act may resurface in the new Congress. This proposed rule would allow firms that are Capital adequacy, Asset quality, Management, Earnings, and Liquidity (CAMELS) 1 or 2 rated—and that have a variant of the tier 1 leverage ratio in excess of 10 percent—to be exempt from Basel and TLAC capital requirements. At the same time, global banks face a new EU proposal that would require US operations in Europe to have separate intermediate holding companies that are subject to their own capital and liquidity requirements. This proposal is designed to essentially mirror the FRB's newly imposed requirements for the largest foreign banks operating in the US. Each of these proposals introduces another degree of uncertainty into the strategic planning that firms need to undertake.

With the so-called Basel IV reforms layered on top of TLAC, the G-SIB surcharge, SLR, and SCB—as well as the current legislative uncertainty—it could be very challenging to manage the complexity and fully evaluate and implement an appropriate business strategy under the new capital order. Firms should take the opportunity right now to analyze the new capital order effects before they are fully phased in. This will give them

sufficient time to adjust business models and achieve first-mover advantage. Investing time and effort today to understand both the stand-alone and holistic effects of the new capital requirements on future business decisions, long-term strategies, and capital return hurdles could pay large dividends going forward.

Firms can get ahead of the strategic and implementation challenges by ensuring sufficiently strong project and change management capabilities are in place to handle the many changes necessary to simply calculate the appropriate capital requirements that will be phasing in over the next four years. Also, they should consider investing in analytics and technology that enable them to view the capital consequences and constraints created by the new rules—both on a stand-alone and combined basis—in a way that can point to an optimal business strategy. Last but not least, firms should make sure their data governance, data management, and data quality are top notch. This will help them ensure that their regulatory and internal MIS data is accurate and true and also build an agile capability that can support the required analytics.

Firms can get ahead of the strategic and implementation challenges by ensuring sufficiently strong project and change management capabilities are in place to handle the many changes necessary to simply calculate the appropriate capital requirements that will be phasing in over the next four years.



Data quality, analytics, and reporting

Regulators have increasingly made clear that they expect banking organizations—including both US BHCs, as well as FBOs and their IHCs—to have the capabilities to access and provide high-quality data. Such capabilities include credible internal reporting and MIS that support regulatory reporting requirements and management information.

The largest banks have, for several years, been aware of rising regulatory expectations for data quality and reporting—especially for data related to capital planning and liquidity management. Attention to data quality also increased with the Basel Committee's January 13, 2013, publication of principles for effective risk data aggregation and risk reporting (i.e., BCBS 239).

The FRB and other regulators have offered significant guidance on their expectations of data quality in CCAR, both publicly as well as directly to institutions. To further underscore the importance of data quality—and to ensure accountability for data quality at the top of large, complex organizations—the FRB in early 2016 finalized a proposed rule that requires the chief financial officers (CFO) of US BHCs in the LISCC portfolio to attest to the accuracy of their reports for capital assessments and stress testing.

The first attestations are due on December 31, 2016.

Additionally, in July 2016, the FRB proposed a rule that would apply the CFO attestation requirement to IHCs in the LISCC portfolio beginning with reports due December 31, 2017.

The requirement reflects the FRB's ongoing concerns with data quality, governance, controls, and accountability over reporting. Furthermore, the extension of the requirement to IHCs—which haven't yet participated in the annual CCAR program and related stress tests—is a further sign of increased regulatory expectations about the accuracy and control environment for such data.

In addition to the attestation requirement, IHCs are now subject to a number of regulatory reporting requirements that apply to large US BHCs, including the submission of consolidated financial statements and information used to evaluate systemic risk. The first financial statement submissions became publicly available in late 2016, increasing market expectations for these institutions to maintain high-quality data.

US BHCs and IHCs therefore face heightened standards for submitting accurate data across a large number of regulatory reports, including financial, capital, and liquidity reporting, as well as at the aggregated and instrument/transaction level of detail. In particular, they're expected to meet high expectations around report preparation, monitoring, and use. This includes end-to-end process and data documentation to explain controls around report preparation—from transaction capture through filing—including data transformation and aggregation, reconciliations, and manual adjustments. What's more, the documentation must describe policies and frameworks governing accountability, data, and firm-wide awareness of the criticality and impact of regulatory reporting.

In addition, FBOs face new reputational risks as a result of the increased transparency provided by public disclosure of regulatory reporting filings (most notably the FR Y-9C, which discloses a wide range of potentially sensitive information, including IHCs' capital ratios, balance sheet information, financial performance, and CCAR results).



To meet these requirements, institutions need robust data management capabilities, including:

- **Data governance.** Clear ownership and accountability combined with a robust data control framework.
- **Data sourcing and integration.** Data sourced consistently and completely across business lines with an understanding of quality issues throughout the IHC, including a transparent data catalog. Also, data needs to be integrated into a consistent, enterprise-wide form so it can be used without requiring an understanding of individual source systems' peculiarities.
- **Data quality management.** An effective quality assurance program that provides the ability to monitor data quality, identify errors, and reconcile data elements across business lines and reports.
- **Reference data management.** This needs to be maintained, managed, and distributed using a control framework that covers access, retention, distribution, and quality for customer and product data.
- **Data lineage.** The ability to clearly trace end-to-end data flow and controls from reports back to the point of origin.

- **Data operations and retention.** Efficient processing, scalability, analytics, and aggregation capabilities that are sustainable.
- **Automation.** It's conceivable that applying a very strong control framework to manual processes can achieve the desired level of data quality. But this is neither feasible in practice, nor desirable in terms of efficiency or instilling confidence to management and regulators. Therefore, most manual processes involved in reporting (at least the material ones) will need to be replaced by automated processes that can deliver high-quality reports with sustained repeatability and increased efficiency.

These programs depend significantly on a firm's ability to analyze data—both at the source and at aggregation points—to determine the data's accuracy and to document any anomalies. This capability requires skilled resources that understand the data and its associated processes, as well as its impact. It also requires tools that can be used to analyze large data sets, including the ability to do high-level aggregations, as well as the ability to drill down into granular components and business-line submissions.

To meet regulator expectations, firms should:

- Conduct a maturity assessment of their data management capabilities
- Document any gaps that exist in reporting requirements
- Demonstrate a focus on continuous improvement for data via a data governance process that includes reporting functions (such as risk and finance) and also data production functions, including the front office

As part of this effort, firms should verify that the necessary analytical procedures are in place to ensure the data they submit is high quality.

Firms may want to consider a front-to-back evaluation of their governance and systems infrastructure for risk and finance data. This will help them establish the long-term capabilities necessary to meet the ever-expanding needs of internal stakeholders, investors, and regulators. Such an evaluation should focus particular attention on past data quality issues and the degree of manual intervention required to address them.

Firms should verify that the necessary analytical procedures are in place to ensure the data they submit is high quality.



Fintech

The rapidly growing financial technology (fintech) market represents both a competitive threat and an opportunity for traditional banks. While fintech firms can compete directly with banks for loans, payment products, investment management, and other services, there are also many ways for banks to adopt fintech strategies and tactics themselves, or to partner with fintech firms in order to serve their own customers better, improve risk management systems, and grow market share.

Although they still represent a relatively small share of the overall financial market, fintech firms are growing rapidly. Compared to traditional banks, fintech firms have generally demonstrated the ability to innovate in more creative ways. For example, fintech firms have developed loan origination platforms that pull information directly from customer tax records and other financial service providers, making the process faster, less burdensome, and less costly. Banks—hampered by legacy

systems, processes, and culture—find rapid innovation harder to achieve.

On the other hand, banks have their own built-in advantages in strong balance sheet capacity and funding sources, established global payment networks, well-developed brands, and stable capital bases.

There are many ways for banks to leverage fintech's expertise and innovation, while also creating benefits for the fintech firm. A few examples include:

Lending

- Fintech uses a cheaper, easier loan origination platform, which then is passed to the bank's own underwriting system
- Fintech underwrites loans to the bank's standards and then sells them to the bank to hold or securitize
- Fintech underwrites loans using their own proprietary platform to sell to banks into a volume-controlled and carefully monitored portfolio

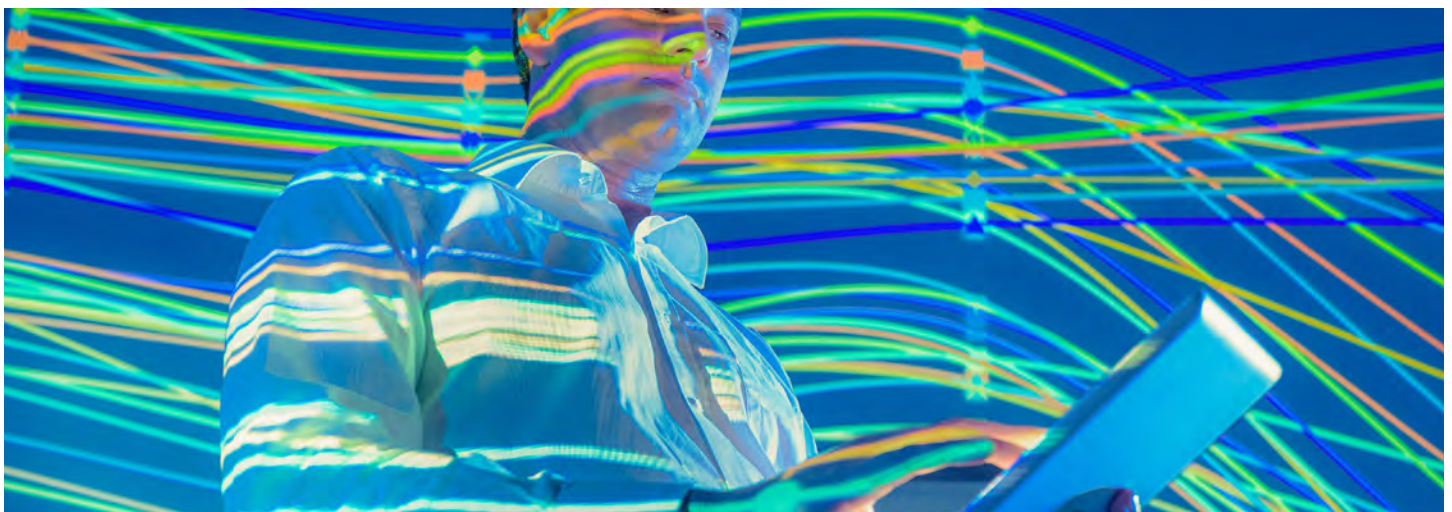
- Fintech can use real-time social media to assess customer risks when they have little or no credit history by looking at the quality of the customer's professional and social networks, combined with things like education and residence history

Payments

- Fintech allows the mobile interface to provide a better customer experience and offer next-generation security (e.g. biometrics/location based identification)
- Banks use fintech developed solutions for value-add services (e.g., integrated billing or loyalty programs)

Big data

- Fintech solutions for mining "big data" are used by banks to better understand credit portfolios, deposit behaviors, etc. for better risk management
- Banks and fintech firms use big data technology to help simplify meeting know-your-customer (KYC) requirements for customers through mining of public records and customer financial information at other firms



In addition, banks have purchased fintech firms in order to bring enhanced capabilities to market more quickly, at lower cost.

Among the various banking regulatory agencies, the OCC has been the most active in exploring issues and opportunities related to the fintech space, with a March 2016 white paper on supporting responsible innovation, and after a comment period, hosting a forum on the topic. The OCC also formed a working group to turn its *Principles for Responsible Innovation* into practice and, in October 2016, established an Office of Innovation at the agency. In a December 2016 speech, the comptroller announced that the OCC will move forward with chartering financial technology companies. The same day, they published a paper that discusses requirements and issues associated with a fintech specialty charter and seeks further comments on the process. The OCC has also published a proposed rule addressing receivership procedures for national banks not insured by the FDIC to support such a charter.

A fundamental challenge for some partnership arrangements between fintechs and banks is their substantially different risk tolerances. Private equity and other investors that help fund many fintech firms have higher risk tolerances than banks,

but also expect higher returns. On the other hand, partnerships where fintech firms underwrite to a bank's standards can receive the benefit of more stable, cheaper funding. This relative stability of funding from banks can be particularly valuable during periods of market and/or credit instability, when private equity firms pull back from the market.

Another challenge is their distinctly different company cultures. Fintechs operate in an environment of rapid innovation, while banks—which focus on carefully managing risk—often transform more slowly. They also differ in their incentive structures, with fintech being driven by equity appreciation more so than banks. For example, regulators expect banks to manage their relationships with third parties in a robustly controlled manner consistent with the OCC's 2013 guidance on third-party relationships, the Federal Reserve's 2013 guidance on managing outsourcing risk, and other regulatory issuances. This strict guidance in banking would extend to partnerships between banks and fintechs.

Another competitive challenge to banks might emerge in the OCC's decision to offer a national bank specialty charter to fintech firms. However, the OCC will likely be very deliberate and rigorous in reviewing and

potentially approving any such charter applications. The standards for obtaining it would be high, including requirements for robust business plans, experienced and capable managements, strong capital and liquidity, sound governance structures, robust compliance programs, and provision of fair access to services.

In the near term, there can be great benefits for fintechs and banks to partner in order to capitalize on their respective advantages and capabilities. Combining their unique strengths has the potential to create more value than the individual firms could produce on their own.

Banks should seek to understand the capabilities of fintechs by attending industry forums and roundtables that bring traditional banks and fintech firms together. They should also stay abreast of regulatory developments related to fintech firms and partnership arrangements, exploring ways to enhance their bank services by partnering, or possibly by investing or purchasing fintech firms.

There can be great benefits for fintechs and banks to partner in order to capitalize on their respective advantages and capabilities.



Cyber threats and cyber risk

Cyber risk is not one specific risk but a group of risks that differ in many ways, including technology, attack vectors, and means.

Examples include:

- Attacking an operating system or locking users out of their computers and/or data
- Theft or corruption of data/systems
- Release of confidential data, intellectual property, or corporate strategy

And for some criminals, it's simply the means to a larger end.

Regulators are getting more involved and focusing on cyber risk as part of operational risk. The New York State Department of Financial Services (DFS) issued a proposal that would require banks, insurance companies, and other DFS-regulated financial institutions to establish a cybersecurity program and comply with related requirements. These requirements would include the appointment of a Chief Information Security Officer and the submission of an annual certification to the DFS regarding compliance with the regulation. The proposal also includes prescriptive requirements, such as an

annual risk assessment, annual penetration testing, and quarterly vulnerability testing.

Nearly a month after the DFS proposal, the FRB, the FDIC, and the OCC issued an advance notice of proposed rulemaking (ANPR) on enhanced cyber risk management and resilience standards for large banking organizations. The ANPR, which signals a more formal proposal in the future, contemplates the establishment of a two-tiered approach: enhanced standards, which would apply to all cyber systems of covered entities; and sector-critical standards, which would apply to systems determined to be critical to the financial system.

The enhanced standards call for:

- A written, enterprise-wide cyber risk management strategy, as well as a framework of policies and procedures to implement the strategy, that is integrated into the overall business strategy
- Integration of cyber risk management into the responsibilities across at least three independent functions—business units, independent risk management, and internal audit

- Integration of an internal and external dependency management strategy into the overall strategic risk management plan
- Capability to operate critical business functions in the face of cyberattacks and continuously enhance its cyber resilience

For the more stringent sector-critical standards, the agencies are considering requiring:

- Covered entities to reduce the residual risk of sector-critical systems by implementing the most effective commercially available controls and to substantially mitigate the risk of a disruption or failure due to a cyber event
- Covered entities to establish a recovery time objective of two hours for their sector-critical systems, validated by testing, to recover from a disruptive, corruptive, or destructive cyber event
- Entities at the holding-company level to quantitatively measure their ability to reduce the aggregate residual cyber risk of sector-critical systems and their ability to reduce such risk to a minimal level

These proposals underscore the shifting focus from business continuity to resiliency, largely driven by cyber-related concerns. Cybercrime continues to grow at alarming rates, and the entire financial services industry is at risk due to its high levels of interconnectedness. Amounts of loss are growing exponentially, and customers are demanding more openness and access.

Financial services firms have an opportunity to work together as an industry to proactively attempt to address the issues. Already, members of the Financial Services Information Sharing and Analysis Center (FS-ISAC) receive timely notification and authoritative information on a worldwide basis, with the specific goal of helping to protect critical systems and assets from physical and cybersecurity threats.

Moving forward, firms can help tackle the challenge of cyber threats and cyber risk by becoming FS-ISAC members. They can also make an active effort to understand their interconnectedness and to recognize need for continuous change and monitoring. Resilience should be a major focus.

Financial services firms have an opportunity to work together as an industry to proactively attempt to address the issues.





Resolution planning

Large domestic bank holding companies and foreign banking organizations (FBOs) operating in the US with total assets of \$50 billion or more—as well as non-bank financial companies designated by the FSOC—are required to prepare annual resolution plans, also known as “living wills,” under Title I of the Dodd-Frank Act. The plans must demonstrate that the firm could be resolved under bankruptcy without severe adverse impacts to the financial system or US economy. These plans are evaluated jointly by the FRB and the FDIC.

Given the significant business implications if deficiencies aren't remediated, firms will want to avoid being in the “penalty box” for not having a credible plan. If the FRB and FDIC jointly determine that an institution hasn't adequately remediated identified deficiencies, the Dodd-Frank Act² allows them to impose additional prudential requirements (e.g., additional capital, leverage, or liquidity requirements) on the firm until it remediates those deficiencies. After imposing additional prudential requirements, if the firm still fails to adequately address the deficiencies, the FRB and FDIC, in consultation with the FSOC, may require the firm to divest assets or operations after a two-year period.³

Because the potential consequences are so severe, firms are continuing to emphasize embedding resolution planning into existing business-as-usual (BAU) processes, procedures, and capabilities. As such, resolution planning isn't just an annual compliance exercise that involves assembling and submitting a plan to regulators. Rather, it's something organizations must constantly consider

as they grow, enter new businesses, and become more complex and systemic.

Resolution planning focus for the eight US G-SIBs. April 13, 2016, was a key milestone for the evolution of resolution planning in the US. For the first time, the FRB and FDIC jointly determined that certain plans submitted by the largest banking organizations were “not credible or would not facilitate an orderly resolution” under the US Bankruptcy Code, a finding that requires the firms to revise their plans to demonstrate credibility. Institutions with resolution plans deemed not credible had until October 1, 2016, to address the identified deficiencies.

Significantly, as part of the announcements, the agencies provided explicit guidance outlining expectations for the next full resolution plan submissions, which are due by July 1, 2017. This guidance further raises the bar and sets more specific standards that will affect all eight US G-SIBs—not just those found to have deficiencies in their 2015 resolution plan.

Avoiding deficiency determinations in July 2017 will require firms to develop a deep understanding of gaps and action plans across the areas described by the new guidance.

Resolution planning focus for FBOs, December filer US bank holding companies, and non-bank financial companies designated by FSOC.

Separately, while there have been several regulatory developments targeted at the eight US G-SIBs, the agencies certainly haven't lost sight of other banking and

financial institutions. On June 8, 2016, the agencies extended—from July 1, 2016, to July 1, 2017—the next resolution plan submission deadline for the four FBOs in the FRB's LISCC portfolio. Furthermore, on August 2, 2016, the agencies extended—from December 31, 2016, to December 31, 2016—the deadline for the 38 December filers.

The agencies also advised that they would be providing firm-specific feedback for each institution's 2015 plan, as well as guidance for each institution's 2017 submission. These extensions provide slight breathing room for the institutions to meet the regulators' expectations and address firm-specific feedback. But the extensions also heighten expectations for the 2017 submissions.

Next steps for US G-SIBs. On October 1, 2016, the eight US G-SIBs filed their responses related to their 2016 resolution plan requirements, with a focus on meeting the expectations outlined in each firm's April 2016 feedback letter. Institutions with deficiencies in their plan spent the interim six months remediating deficiencies and enhancing their capabilities to support an orderly resolution. Although significant progress was made to remediate deficiencies and shortcomings, institutions shouldn't take the 2017 guidance lightly, as it includes more detailed expectations that could cause challenges for some institutions. In particular, for areas where the agencies have identified key resolution vulnerabilities, the guidance outlines additional expectations for addressing those vulnerabilities, such as enhancing capabilities, requiring detailed analysis, and/or requiring optionality. The 2017 guidance

further emphasizes the expectation that an institution have the capabilities described in the FRB's Supervision and Regulation (SR) Letter 14-1, as well as the capabilities to execute its resolution strategy.

Next steps for FBOs. A major focus for FBOs in 2017 will be to integrate their IHCs, which went live on July 1, 2016, into their resolution plan submission—if they hadn't already done so in their 2015 plan submission. Many expectations of the enhanced prudential standards for FBOs align to the agencies' focus areas for resolution planning (e.g., capital, governance). FBOs should emphasize how creation of IHCs helps the FBOs become more resolvable and helps facilitate an orderly resolution under the US bankruptcy code.

At the moment, FBOs are among the many institutions waiting for firm-specific

feedback, determinations on their 2015 resolution plan, and guidance for the 2017 resolution plan submission. Yet even in the absence of firm-specific 2017 guidance, FBOs should continue working to meet milestones and commitments previously made to the agencies. They should also continue to enhance their capabilities to improve resolvability in areas where the agencies might have previously identified shortcomings. The guidance the agencies issued for the eight US G-SIBs is a strong indicator of the expectations for these institutions and should thus be evaluated for applicability to an FBO's resolution plan and strategy.

Next steps for other US bank holding companies and non-bank financial companies designated by FSOC. US bank holding companies (with the exception of the eight US G-SIBs) and FSOC-designated non-bank financial companies are

also waiting for firm-specific feedback, designations on their previous resolution plan submissions, and guidance for their 2017 resolution plans. While they're waiting, these institutions shouldn't lose momentum as the December 2017 resolution plan deadline is likely to creep up quickly. Institutions should continue making progress on identified ex-ante projects, while also continuing to enhance the capabilities necessary to make themselves more resolvable. Similar to the FBOs, these institutions should assess how the 2017 guidance issued for the eight US G-SIBs can enhance their resolution plans and strategies. Although the expectations are different than for the eight US G-SIBs, there are core components that are applicable to all institutions, such as resolvability, governance, and appropriate liquidity and capital analyses.





Consumer protection

The coming year may become a period of significant change for the CFPB, which looks ahead to its sixth year of operation. For example, the election results have implications for the CFPB, although the specifics of any changes are uncertain. Notably, the Financial CHOICE Act of 2016 proposes to replace the CFPB's sole director with a bipartisan five-member commission and subject the agency to congressional appropriations. Observers will also be following developments related to an October 2016 decision from the US Court of Appeals for the District of Columbia Circuit ruling that the CFPB is "unconstitutionally structured" and, as a result, allows the president to remove the CFPB's director at will versus for cause. It's important to note that the court allows the agency to continue to operate. In November 2016, the CFPB appealed the decision, requesting an en banc review by the Circuit Court.

What does this mean for the CFPB? Wholesale changes to the CFPB's framework and mandate require legislative negotiation.

Other changes may also be enacted at the agency level, both through the rulemaking process and by issuing or rescinding guidance. The approach to rulemaking, supervision, or enforcement could also be changed. Thus, in the short term, it means business as usual with respect to preparing for examinations, meeting regulatory commitments that have been agreed upon, and following regulatory proposals. Bank consumer protection programs will likely continue to require management's close attention not only to maintain compliance with the Bureau's regulatory framework but also to build on their trusted relationship with current and prospective customers.

On the rulemaking front, the CFPB is working to finalize rules affecting payday lenders and arbitration in financial services contracts. It has also announced that it's considering proposals to overhaul the debt collection market by capping collector contact attempts and by taking steps to ensure that companies collect the correct debt. The proposals apply to third-party

debt collectors and others covered by the Fair Debt Collection Practices Act. However, the CFPB also intends to separately address first-party debt collectors and creditors, including banks. The CFPB is expected to focus attention on amending current rules or proposing for consumer protections emerging areas, such as fintech and marketplace lending.

In the fourth quarter of 2016, the CFPB issued its long-awaited Prepaid Final Rule, which establishes a comprehensive regulatory framework for prepaid accounts and services, including general purpose reloadable cards, digital wallets, and payment application providers. With an effective compliance date that starts in October 2017, financial institutions will need to quickly identify how to effectively address the new regulatory requirements with concrete steps, such as performing a risk assessment, developing a regulatory compliance strategic plan, and defining detailed activities and milestones for executing the strategic plan.

Furthermore, January 1, 2017, marks the beginning of a three-year implementation period under the revised Home Mortgage Disclosure Act (HMDA) final rule. Under phase one of the new rule, financial institutions that meet certain requirements will be subject to additional reporting requirements related to mortgage lending transactions. Required data points must be submitted electronically to the CFPB by March 2018.

The expanded HMDA reporting requirements pose significant operational and compliance challenges. Firms should strongly consider proactively assessing and evaluating technology systems that enable them to capture and accurately report

the additional data elements. Firms that take the initiative in this area can expect positive improvements in their fair lending obligations, which will likely be viewed favorably by financial regulators.

From the supervision perspective, institutions should continue to follow the CFPB's supervisory practices for consumer complaints. For example, during the third quarter of 2016, the CFPB announced enhancements to its complaint database, giving consumers the option to numerically rate how financial institutions handle their complaints. Moreover, the CFPB disclosed that the numerical ratings would be used as a tool to aid in supervisory examinations of banks and non-banks alike.

With respect to the CFPB's overall supervisory expectations, regulated entities (including both banks and nonbanks) are expected to embed strong compliance programs in their compliance management systems (CMS), thereby reducing the chances of problems occurring—and helping to identify, escalate, and remediate problems that do arise. To better manage its CMS, a firm should consider assessing and enhancing its entire compliance infrastructure (including policies, procedures, systems, controls, testing, training, and audit) in a way that's sustainable and repeatable.

Bank consumer protection programs will likely continue to require management's close attention not only to maintain compliance with the Bureau's regulatory framework but also to build on their trusted relationship with current and prospective customers.



Liquidity

The year 2016 was a milestone one for the implementation of extensive liquidity requirements for foreign and domestic financial institutions, largely as part of the FRB's final rule on EPS. The liquidity requirements apply (in varying degrees) to US BHCs and FBOs with total consolidated assets of \$50 billion or more. Several other key requirements, such as the US liquidity coverage ratio (US LCR) and complex institution monitoring reporting (FR 2052a), also made important strides towards implementation.

The financial crisis brought to the fore liquidity risk as one of the main risks for financial institutions. Dodd-Frank and several of its implementing regulatory requirements/guidelines, such as EPS, the LCR, and reporting form FR 2052a, have reiterated the importance of liquidity risk and increased its management rigor and complexity.

The regulatory environment, through recent, ongoing, and forthcoming liquidity requirements, continues to put pressure on the financial services industry. The full breadth of requirements has yet to be finalized or implemented, and their potential implications and linkages are still being studied. However, here are the key trends and highlights.

Regulatory requirements implemented in 2016, or nearing their final phased implementation dates:

- **EPS:** EPS liquidity requirements impact treasury, risk, and operations, particularly around risk management, cash flow forecasting, contingency funding planning, limit setting, stress testing, liquidity buffer sizing and management, governance, intraday liquidity and collateral monitoring, and governance.

- **US LCR:** The rule was developed to ensure institutions have sufficient high-quality liquidity assets (HQLA) in the short-term (i.e., over a 30-day time horizon). The LCR complements EPS in that LCR is a standardized measure of liquidity across firms whereas EPS provides an internal stress testing view of an individual firm under tailored assumptions.
- **FR 2052a liquidity reporting:** This requirement places an additional emphasis on reporting granularity needed and a burden on associated resource requirements. The FRB uses these reports to monitor the overall liquidity profile of institutions.

Liquidity requirements recently finalized:

- **US LCR public disclosure:** Like FR 2052a liquidity reporting, the public disclosure requirements related to the US LCR underscore the need for putting "pen to paper." These requirements, which were finalized in December 2016, are both quantitative and qualitative in nature and will provide market participants with "direct and prominent" access to information on liquidity risk profiles of companies that need to report LCR on a quarterly basis. The disclosure for these companies needs to be available for at least five years on a rolling basis.

Liquidity requirements with forthcoming initial implementation dates:

- **Net stable funding ratio (NSFR):** This rule, which was proposed in April 2016 for US BHCs but not yet finalized, was developed to ensure institutions have more stable sources of funding in the long term (i.e., over a one-year time horizon) and complements the LCR, which focuses on the short term.

Other regulatory initiatives that have been ongoing since the enactment of Dodd Frank:

- **Comprehensive liquidity analysis and review (CLAR):** CLAR is a set of horizontal reviews in which regulators compare the soundness of various institutions' liquidity profiles to help identify future regulatory focus areas.
- **Recovery and resolution planning:** The 2017 guidance for the largest US BHCs reiterates and builds on the guidance provided in SR 14-1. Firms are expected to be able to forecast liquidity required (including for critical services and FMUs) going into and during resolution by each material entity.

Additional focus areas for 2017:

Funds transfer pricing (FTP): FTP costs and benefits should be allocated based on funding and contingent liquidity risk and should have a robust framework around them.

Intraday liquidity and collateral:

While intraday liquidity and collateral are addressed as part of EPS, further regulatory focus and enhancements by financial institutions are expected in terms of monitoring, management, and reporting, including better governance and measurement capabilities incorporated into cash, liquidity, and payments processes.

Capital and liquidity integration:

Alignment across capital and liquidity models will likely be on the horizon, including adequate documented rationale for inconsistencies across models where relevant.

Enhancements of the three-lines-of-defense model (treasury, risk, internal audit): Strengthened US-based model aligned to US-based well-defined risk appetite. Risk and audit will need to strengthen their review processes and authorities.

Treasury data: Data will become a more significant issue as heavy reporting requirements (FR2052a) lead to increased scrutiny. Also, data will need to be linked across multiple liquidity management tools such as stress testing and intraday liquidity.

Non-covered companies: Institutions not subject to CLAR, the LCR, or the NSFR should review these and other regulatory requirements for the largest banks and identify the practices that will raise prudential standards in liquidity risk management for their organizations. For example, although LCR requirements are not currently in scope for FBOs, it is anticipated that FBOs will also be required to comply with the regulation and its disclosure requirements.

Liquidity risk measuring, monitoring, and reporting continues to be at the top of the regulatory agenda for financial institutions, and a key driver of operating model changes in treasury and related functions (risk, finance, operations).

Full implementation of liquidity requirements across banks' entire liquidity "maturity model" is still years away. Although many requirements have been implemented, there has been significant room for interpretation for many elements. Institutions need to continue with "phase two" enhancements. They also need to continue reacting to the CLAR horizontal reviews, which we expect will gradually hone in on the "interpretations" made by each institution. Also, it's likely that new requirements will continue to be issued and existing requirements enhanced.

Impacts

Institutions need to shift their liquidity risk management approach from reactive to proactive, as regulators will increasingly expect regulatory requirements to become part of a firm's standard operating procedures.

Liquidity management costs will need to be contained wherever possible, and treasury groups will need to look at their liquidity management regimes as "cost-optimization" efforts.

Business areas within financial institutions will need to better understand their respective liquidity and funding costs, with transfer pricing serving as the mechanism to deliver this direct impact to the businesses. Broad operating model transformations may be required to meet the new regulatory requirements. Within financial institutions, the treasury function is interconnected with other key functions, specifically risk, finance, and operations. This interconnectedness will continue to be required during the continued implementation of liquidity requirements, as well as post implementation.

As with other requirements, firms should continue to monitor legislative and regulatory developments that may impact liquidity to identify regulations that may change in the future.

Institutions need to shift their liquidity risk management approach from reactive to proactive, as regulators will increasingly expect regulatory requirements to become part of a firm's standard operating procedures.



Governance and risk management

It has been over two years since the FRB finalized its enhanced prudential standards (EPS) rule and since the OCC issued its heightened standards (HS) enforceable guidelines. However, many firms haven't yet developed risk governance and cultural frameworks sufficient to fully meet regulatory expectations.

Over the past couple of years, regulators have reviewed the governance frameworks of the banks they supervise and have provided feedback. Through that process, certain themes have emerged as areas of regulatory emphasis. In order to meet regulator expectations and avoid negative examination comments, it's important that bank managers assess their frameworks with these themes in mind:

- **Demonstration that the first line of defense (LOD) is assessing and managing the risks in their business line.** First, LOD managers need to show evidence that the material risks associated with their business line's activities have been assessed and that there are sufficient risk information systems and

control mechanisms to manage those risks. This includes robust compliance and conduct testing processes, quality assurance procedures, and problem escalation processes. Although the second LOD shares responsibility for risk oversight, this shouldn't be viewed as a substitute for robust risk management in the first LOD. Some banks have found that selected activities need to be moved to the first LOD in order for those functions to fulfill their risk management responsibilities. For example, some banks have been moving loan underwriting and structuring functions into the front line—if it wasn't there already. This also helps the second line demonstrate independence in its approval and oversight responsibilities.

- **Demonstration that line-of-business risk limits, thresholds, and product selections are consistent with the firm's strategy, business planning, and risk appetite.** Risk and concentration limits, new product decisions, and strategic initiatives need to be designed with the firm's risk appetite in mind. Decisions

about these limits and initiatives should articulate how they're consistent with the bank's stated and approved strategy and risk tolerance.

- **Clear documentation in the second LOD that identifies all material aggregate risks and how those risks are being managed.** The independent risk management function needs to be enterprise-wide and must understand the business lines' risk management systems and processes, exert appropriate oversight, and document its findings about whether systems and procedures are sufficient to manage the business within firm-wide risk tolerances.
- **Maintenance of strong compliance, conduct, and cultural frameworks.** Numerous compliance breakdowns and cultural failures over the past several years have resulted in little regulatory tolerance for compliance failures. To achieve consistent compliance with regulations that cross multiple business lines (e.g., EPS, capital planning, Regulation W – Affiliate transactions, Flood Insurance Act,

Bank Secrecy/Anti-Money Laundering), firms have often found it beneficial to create “centers of excellence” to centralize controls for a specific set of regulations. Often, these are first LOD functions, although they cross multiple business lines.

- **Maintenance by internal audit of a complete inventory of material risks at the bank.** The FRB and OCC have made it clear that while the internal audit function can leverage another LOD in identifying the bank's material risks, it must maintain a separate inventory.

In addition to the innate benefits of better risk management practices and controlled losses, the payoff for institutions with robust frameworks that garner little to no regulatory criticism is that they can gain flexibility in capital actions, acquisitions, and strategic initiatives. For non-mega banks, the ability to acquire other firms has opened up lately, so it's important that they be positioned to take advantage if an opportunity presents itself. But they should also be aware of the various regulatory thresholds that currently exist and how potential changes to regulations could affect acquisition strategies and expectations.

Banks should review their risk management and cultural frameworks against the themes and focus areas noted above. If gaps are identified, they should implement corrective action plans ahead of regulatory reviews. Regulators usually view such self-identification of issues favorably, especially if corrective action is already being taken.

Another important development in this area is the incentive compensation proposed rule that was published in May 2016 by the FRB, FDIC, OCC, SEC, National Credit Union Association (NCUA), and Federal Housing Finance Agency (FHFA). The incentive compensation proposal hasn't been finalized, and the final version may be different from what was proposed. Also, the earliest compliance date for the rule would be sometime in 2018, depending on when the final rule is published. However, it's important for banks to do some contingency planning and preparation in case the requirements remain intact. These requirements should also be viewed in line with the banks' current efforts regarding risk culture and conduct risk. At the very least, bankers need to understand the proposed requirements, which are far more prescriptive and apply to many more employees than previous rules. If the final

rule is similar to the proposal, banks will likely need to make substantial changes to their compensation programs and human resources systems.

The proposed requirements include up to a 60 percent deferral of incentive-based compensation over as much as four years, depending on the size of the firm. There's also a proposed “clawback” period of at least seven years from when the compensation vests. The proposed definition of “significant risk takers” (individuals who would fall under the scope of the rule) would likely capture a large swath of loan originators, approvers, market makers, etc.

Banks would be well-advised to assess the proposed incentive compensation requirements against existing compensation practices and broadly identify the expanded set of employees that could be subject to the rule. Although the rule wouldn't take effect until 540 days after it's finalized, that time can pass quickly when dealing with major system changes.

The payoff for institutions with robust frameworks that garner little to no regulatory criticism is that they can gain flexibility in capital actions, acquisitions, and strategic initiatives.



Regulatory outlook and enhanced prudential standards for foreign banking organizations

Although the July 1, 2016, compliance deadline for large FBOs to establish IHCs has passed, the long road to operationalizing run-the-bank (RtB) functions has just begun. Rather than viewing the July 1 date as the “finish line,” FBOs and their IHCs should see it as mile 13 of a marathon.

FBOs must demonstrate that they can govern and manage risk for their combined US operations on a self-sufficient and sustainable basis. Ultimately, it will come down to how an FBO’s US management and US IHC board of directors work through key issues and decisions, such as business strategy, budget approvals, capital planning, and crisis management—as well as how they navigate their shareholders; their parent organizations; and the dichotomy between global consolidated efficiency and a regional, legal-entity focus.

FBOs are now subject to a variety of risk, liquidity, capital, and stress-testing requirements that will enable the largest ones to be compared to their domestic US counterparts. These requirements include emphasis on governance, risk management, recovery and resolution planning, capital planning and stress testing, and filing a number of new regulatory reports. Although FBOs have been subject to resolution planning requirements prior to the

establishment of their IHCs, the new legal-entity structures will play a crucial role in this exercise going forward, including the July 2017 plan submission for the largest IHCs.

This comparability has been supported as of November 2016 when the initial set of core regulatory reports (detailed balance sheet, income statement, off-balance sheet, and capital information) were publicly disclosed, revealing how the IHCs compared to their US bank holding company counterparts. Given the marketplace, these reports provide a much deeper view into the financial health of the large FBOs operating in the US.

Similarly, although some FBOs have previously participated in the FRB’s annual stress-testing and CCAR programs, both assessments will include their IHCs in April 2017, presenting an additional layer of complexity. With the UK’s recent referendum to leave the European Union (the so-called “Brexit”), additional rules being finalized, and additional forthcoming supervisory guidance, the pressure on regulatory change, strategic thinking, and implementation capabilities doesn’t lessen.

We expect significant regulatory focus on the supervisory teams’ reviews of IHC/Regulation YY implementations, as well as a focus on how compliance, audit,

and businesses within the three LoDs’ operating models are actually working. To that end, FBOs will need to continue clearly defining their business strategies and business models in the US, as well as the interconnectivity to the parent/head office.

In addition, we expect continued close regulatory scrutiny of FBOs in the following areas: vendor management, internal audit, cybersecurity, regulatory reporting, data governance, internal management information system (MIS), liquidity risk management practices, model governance, and leveraged lending/energy lending. Demonstrating substantive progress in each of these areas will be a key component of meeting regulatory expectations and remaining competitive with their US bank holding company peers.

In a sense, each FBO must think about its US business model and answer the following questions: *What is the next stage of development of our US operations? How should we operate in the future to provide growth and fulfill our parent’s strategies? Who do we want to be when we grow up?* That is, they must identify markets and business lines that will continue to be profitable and will allow them to return capital to their shareholders. Much of this strategic thinking was put on hold during the IHC implementation and the rush

to build infrastructure capabilities. Clearly, those that can be proactive and use the time after July 1 to strategically evaluate their business, booking models, and optimization should be ahead of the game.

Ensuring adequate data quality that measures up to regulatory expectations requires a transformative multi-year effort, which could include large-scale IT programs. Institutions should demonstrate

a continuous improvement focus on data in order to be ready when the regulators show up at the door.

Having established all the necessary processes, controls, and governance frameworks, FBOs that are still working toward the go-live date face significant challenges from an operational readiness standpoint. These include orchestrating multiple complex reports simultaneously,

going live, and instituting a regime of regular data quality and control testing. Also, FBOs in lower tiers may be on a path to grow into higher tiers—organically or through acquisition. That means, in the short term, they need to comply with the regulatory requirements that apply to them today, while positioning themselves for long-term compliance with the requirements that may apply to them in the future.

Ensuring adequate data quality that measures up to regulatory expectations requires a transformative multi-year effort, which could include large-scale IT programs.





Credit quality concerns

After several years of a relatively benign credit environment, underwriting standards continue to loosen, and concentrations have increased at a number of firms. Regulators are increasingly reminding banks to maintain their lending discipline and to avoid responding to competition by making imprudent changes in lending practices.

Although most credit indicators remain favorable, regulators have communicated that credit risk is now building in the system. FRB and OCC underwriting surveys have shown that underwriting standards are deteriorating. Credit indicators have either leveled off or are moderately deteriorating at most firms. Also, certain asset classes continue to garner regulatory scrutiny. Regulators expect enhanced and rigorous portfolio management practices designed to limit exposure to losses when the credit cycle turns. This includes portfolio stress testing and implementation of mitigation programs in areas where credit risk exceeds established risk tolerances.

In a recent risk perspective, the OCC expressed concern about increasing concentrations of credit. In particular, the OCC noted the rapid growth of commercial real estate (CRE) loans in banks—a type of loan that has historically exhibited high loss volatility during credit downturns.

These factors prompted a new interagency issuance reminding banks to adhere to existing interagency guidance in the area of CRE lending.

Oil and gas (O&G) lending is an increased concern, especially upstream (exploration and production). Classified commitments to the extraction O&G sector increased from minimal at the end of 2014 to almost 16 percent of commitments within a year. In March 2016, the OCC updated its handbook on O&G lending, reminding firms that underwriting should be based on cash flow (rather than relying too heavily on collateral), and provided a number of suggested metrics for use in sound underwriting. In the Interagency Shared National Credits review, a disproportionate number of O&G loans were downgraded.

In leveraged lending, after a couple of years of intense scrutiny for compliance with the 2013 interagency guidance and related FAQs, regulators report that most firms have improved their adherence. However, scrutiny will continue due to the inherent risks in this asset class.

Regulators have also identified growing risks in auto lending. There has been a substantial increase in auto loan volume, delinquencies have started to rise, and used car auto

prices have begun to fall. As banks compete for market share, some have weakened underwriting standards for both direct and indirect auto loans.

Banks should understand the regulatory standards for the various credit asset classes, which are articulated in guidance, handbooks, “reminder issuances,” etc. Some of these documents contain relatively specific suggested metrics for underwriting certain types of credit. Banks would be well-advised not to stray materially from these guidelines without strong justification. Otherwise, they could find themselves very susceptible to criticism.

Banks should also continue to build appropriate credit metrics, including stress metrics, in order to remain consistent with the firm’s risk appetite. And they should pay attention to concentration risk management. Regulators surely will.

Last year, we highlighted the old credit maxim that “the worst of loans are made during the best of times.” The reward for maintaining credit discipline during the best of times is the ability to capitalize on strategic opportunities and seize market share when the next downturn inevitably occurs.

Although most credit indicators remain favorable, regulators have communicated that credit risk is now building in the system.



Model risk management

Many of the largest firms have already undergone examinations regarding the quality of their model risk management (MRM) relative to the expectations of SR 11-7. However, a further test is likely for new IHC entrants to capital planning and stress testing.

Although most firms have taken their past examination feedback to heart and improved their MRM frameworks in terms of both practice and documentation, further improvement activities are ongoing and challenging. Also, the quality of MRM functions is likely to be a focus area for IHCs undergoing the dry run of CCAR.

Moving forward, firms need to continue building out their MRM capabilities across all three LODs. Key activities include:

- Promoting an organizational culture that values effective challenge and debate
- Ensuring budget is aligned with the steep demands across the entire model inventory, which involves much more than just stress-testing models
- For models that couldn't be fully validated prior to CCAR, ensuring that any required compensating controls/actions are identified and implemented

MRM expectations continue to evolve in the area of financial crimes. Recent communications indicate that regulators now acknowledge that not all processes related to financial crimes should, by default, be considered models for MRM purposes. Examples of processes that, in some cases, may not be treated as MRM models include sanctions screening, customer

risk rating, and parts of the processes focused on suspicious activity, which include monitoring, identification, investigation, and filing.

While this more flexible position is welcome news for the financial crimes industry, it increases uncertainty about the factors that drive model and non-model determinations. It also makes it harder to achieve consistent implementations. Looking ahead, financial crimes experts and business leaders responsible for corporate MRM functions need to collaborate and reach a consensus about the designation of models related to financial crimes. But whether a process is designated as a model or non-model, regulators will continue to expect rigorous controls and governance.





Financial crimes risk

Fifteen years after the passage of the USA Patriot Act, financial crimes compliance continues to pose a substantial risk to financial institutions. The government's focus on compliance and enforcement—augmented by more robust tools and techniques—has prompted the industry to devote substantial resources to meeting or exceeding evolving expectations.

A key goal of financial crimes compliance and enforcement is to ensure the integrity of the financial system. Although the volume and pace of enforcement actions has ebbed, the costs and penalties of non-compliance can be substantial, including:

- Board and management distraction from strategic initiatives
- Potential personal liability
- An adverse impact on CAMELS “management rating”
- Prohibitions or restrictions on corporate activities
- Remediation of the compliance program and transactions

In addition, the financial “intelligence” that institutions provide through filing Bank Secrecy Act information to the US government is actively used to support investigation, prosecution, and conviction of criminals, terrorists, and corrupt officials.

Today's compliance and enforcement environment has prompted institutions to augment their board and senior management governance and to more fully integrate financial crimes within their institution's overall risk management framework. More robust board governance is reflected in more frequent and in-depth briefings on the structure, operational fitness, and future vision of the financial crimes compliance program. Board and senior management teams throughout the industry are actively working to ensure the culture of compliance is understood and assimilated across the organization.

Some unintended consequences of this current environment can be found in the “de-risking” of some domestic and international account relationships. Some institutions have generally become more

risk averse and conscious of the increasing cost of compliance. Therefore, they are more selective in adding and maintaining clients that are perceived to be higher risk. This has adversely affected financial flows and the availability of financial services in some counties, regions, and entities—making it an issue that US government stakeholders are vigorously trying to influence.

The fundamental challenge of financial crimes compliance is that critical portions of the requirements are risk-based, which presents challenges to both the US government and banking industry as they seek to determine what preventive actions are sufficient given the risks posed within individual institutions and across industries. This is particularly challenging because of the diversity of financial services providers in the US and abroad. Ensuring sufficient governance, expertise, controls, and coordination across an enterprise poses significant operational challenges.

Another challenge is monitoring emerging criminal threats and risks and integrating them into the compliance program.

Criminals are constantly altering and seeking new money laundering and fraud schemes to exploit compliance system vulnerabilities. Maintaining the awareness and flexibility to adjust institution controls to meet these evolving threats is an ongoing challenge.

On a broader level, the design and maintenance of enterprise-wide risk compliance programs continues to create significant challenges as well, particularly with regard to risk and controls alignment across an organization, awareness and collaboration among stakeholders, and integration of financial crimes compliance within the first-line risk framework.

Competition for talent and expertise, particularly at the executive and mid-tier employee levels, also remains an industry-wide challenge. Poaching of expertise is an ever-present problem, and institutions are increasingly using such approaches as flexible work arrangements and special developmental assignments to recruit and retain needed talent and expertise.

Escalating compliance costs have prompted a focused effort to identify opportunities for increased efficiencies while maintaining the quality of controls. Solving the increasing cost curve is a priority for the industry. It's also an area where there are prime opportunities to leverage breakthrough technologies and advanced analytics. Expanded use of innovative technologies and processes—including cognitive technologies and robotic process automation—can boost effectiveness while simultaneously reducing costs.

Leveraging customer data through advanced analytics and an integrated enterprise-wide platform can expand an institution's capabilities to refine risks, shape controls, and assess client profitability. They can also be key differentiators that increase the efficiency and effectiveness of an institution's financial crimes compliance programs, creating a distinct competitive advantage.

Moving forward, institutions need to stay abreast of evolving threats posed by financial crimes—as well as government initiatives to combat such crimes—by attending industry forums and roundtables that include key stakeholders. They should also work to ensure program performance through robust governance, strong integration within an overall risk management framework, monitoring of key financial crimes metrics, and maintaining a high level of expertise and experience. Last but not least, institutions should actively look for ways to enhance compliance program efficiency while maintaining effectiveness by leveraging innovative technologies and advanced analytics.

Escalating compliance costs have prompted a focused effort to identify opportunities for increased efficiencies while maintaining the quality of controls.

Looking ahead

From a regulatory perspective, 2017 is shaping up to be a year with more than the usual uncertainty. In this dynamic and sometimes unpredictable environment, firms in the banking industry would be well-advised to focus extra attention on keeping up with the latest regulatory trends, while at the same time continuing to do what's needed to achieve compliance with existing laws and regulations.

At the Deloitte Center for Regulatory Strategy Americas, we will be continuously monitoring and analyzing new regulatory developments as they unfold throughout the year.

For the latest news, trends, and insights, please visit our website at www.deloitte.com/us/about-dcrsamericas.

Endnotes

1. House Financial Services Committee, "Hensarling Remarks to the Exchequer Club," (November 16, 2016), available at <http://financialservices.house.gov/blog/?postid=401199>.
2. Section 165(d)(5)(A) of the Dodd-Frank Wall Street Reform and Consumer Protection Act
3. Section 165(d)(5)(B) of the Dodd-Frank Wall Street Reform and Consumer Protection Act
4. Additional rules include single counterparty credit limits, TLAC and long-term debt requirements, and restrictions on incentive-based compensation.

Contacts

Leadership

Kevin McGovern

Regulatory & Compliance Leader
Partner | Deloitte Advisory
Deloitte & Touche LLP
kmcgovern@deloitte.com

Alok Sinha

Advisory Financial Services Leader
Principal | Deloitte Advisory
Deloitte & Touche LLP
asinha@deloitte.com

Monica O'Reilly

Advisory Banking & Securities Leader
Principal | Deloitte Advisory
Deloitte & Touche LLP
monoreilly@deloitte.com

Robert Penshorn

Advisory Energy & Resources Leader
Partner | Deloitte Advisory
Deloitte & Touche LLP
rpenshorn@deloitte.com

Chris Spoth

Executive Director, Center for Regulatory
Strategy Americas
Managing Director | Deloitte Advisory
Deloitte & Touche LLP
cspotth@deloitte.com

Authors

Mike Bolan

Managing Director | Deloitte Advisory
Deloitte & Touche LLP
mbolan@deloitte.com

JH Caldwell

Partner | Deloitte Advisory
Deloitte & Touche LLP
jacaldwell@deloitte.com

Matt Dunn

Managing Director | Deloitte Advisory
Deloitte & Touche LLP
matdunn@deloitte.com

Joe Fellerman

Independent Senior Advisor to
Deloitte & Touche LLP
jfellerman@deloitte.com

Irena Gecas-McCarthy

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

Dmitriy Gutman

Managing Director | Deloitte Advisory
Deloitte & Touche LLP
dgutman@deloitte.com

Ed Hida

Partner | Deloitte Advisory
Deloitte & Touche LLP
ehida@deloitte.com

Marlo Karp

Partner | Deloitte Advisory
Deloitte & Touche LLP
mkarp@deloitte.com

Julia Kirby

Managing Director | Deloitte Advisory
Deloitte & Touche LLP
jukirby@deloitte.com

Dilip Krishna

Managing Director | Deloitte Advisory
Deloitte & Touche LLP
dkrishna@deloitte.com

Ken Lamar

Independent Senior Advisor to
Deloitte & Touche LLP
kelamar@deloitte.com

John Wagner

Managing Director | Deloitte Advisory
Deloitte & Touche LLP
johnwagner@deloitte.com

Dave Wilson

Independent Senior Advisor to
Deloitte & Touche LLP
daviwilson@deloitte.com

David Wright

Managing Director | Deloitte Advisory
Deloitte & Touche LLP
davidmwright@deloitte.com

The Center wishes to thank the following Deloitte professionals for their insights, contributions, and support to this report:

Zach Dressander, Senior Marketing Specialist, Deloitte Services LLP
Krisztina Geosits, Senior Manager | Deloitte Advisory, Deloitte & Touche LLP
Lara Hamilton, Senior Manager | Deloitte Advisory, Deloitte & Touche LLP
Alex LePore, Senior Consultant | Deloitte Advisory, Deloitte & Touche LLP
Ryan Press, Senior Marketing Specialist, Deloitte Services LLP
Richard Rosenthal, Senior Manager | Deloitte Advisory, Deloitte & Touche LLP
Brandon Sternberg, Manager | Deloitte Advisory, Deloitte & Touche LLP
Pierre Whatley, Senior Consultant | Deloitte Advisory, Deloitte & Touche LLP

CENTER *for* **REGULATORY STRATEGY** **AMERICAS**

About the Center

The Deloitte Center for Regulatory Strategy provides valuable insight to help organizations in the financial services, health care, life sciences, and energy industries keep abreast of emerging regulatory and compliance requirements, regulatory implementation leading practices, and other regulatory trends.

Home to a team of experienced executives, former regulators, and Deloitte professionals with extensive experience solving complex regulatory issues, the Center exists to bring relevant information and specialized perspectives to our clients through a range of media including thought leadership, research, forums, webcasts, and events.

Deloitte.

This publication contains general information only and Deloitte is not, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This publication 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 publication.

As used in this document, "Deloitte" means Deloitte & Touche LLP, a subsidiary of Deloitte LLP. Please see www.deloitte.com/us/about for a detailed description of the legal structure of Deloitte LLP and its subsidiaries. Certain services may not be available to attest clients under the rules and regulations of public accounting.

Copyright © 2016 Deloitte Development LLC. All rights reserved.