

Semiannual Risk Perspective

From the National Risk Committee

Office of the Comptroller of the Currency
Washington, D.C.
Spring 2017

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About This Report

The Office of the Comptroller of the Currency (OCC) charters, regulates, and supervises national banks and federal savings associations (collectively, banks) and licenses, regulates, and supervises the federal branches and agencies of foreign banks. The OCC supervises these banks to ensure they operate in a safe and sound manner, provide fair access to financial services, treat customers fairly, and comply with applicable laws and regulations.

The OCC's National Risk Committee (NRC) monitors the condition of the federal banking system and emerging threats to the system's safety and soundness. NRC members include senior agency officials who supervise banks of all sizes, as well as officials from the law, policy, accounting, and economics departments. The NRC meets quarterly and issues guidance to examiners that provides perspective on industry trends and highlights issues requiring attention.

The OCC's *Semiannual Risk Perspective* addresses key issues facing banks, focusing on those that pose threats to the safety and soundness of banks and their compliance with applicable laws and regulations. This report presents data in four main areas: the operating environment, bank performance, trends in key risks, and regulatory actions.

The OCC publishes the report twice a year, drawing on midyear and year-end data. The spring 2017 report reflects bank financial data as of December 31, 2016.

The OCC welcomes feedback on this report by e-mail: NRCReport@occ.treas.gov.

Executive Summary

The financial performance of the federal banking system improved for the 12 months ending December 31, 2016, compared with 2015. Total revenue increased 3.6 percent year-over-year due to stronger net interest income. Net income increased 3.9 percent year-over-year despite higher provision expenses. Strong loan growth combined with a stable net interest margin enabled the federal banking system to record the largest gain in net interest income since 2010. Profitability, as measured by return on equity (ROE), was slightly lower than 2015 for banks with total assets greater than \$10 billion and still below the historical average. The ROE at banks with total assets of \$10 billion or less was slightly higher than 10 percent, driven mostly by stronger revenue gains. While loan growth slowed in the second half of 2016, banks of all sizes have experienced consistent loan growth for the past three years, with commercial and industrial (C&I), commercial real estate (CRE), and residential real estate loans as the primary drivers. Loan growth in 2016 was particularly strong in construction and multifamily lending for banks of all sizes. Lending to nondepository financial institutions also continued to grow primarily for banks with total assets greater than \$10 billion. After a multi-year runoff, the resumption of residential mortgage growth during 2016 also boosted loan growth at banks with total assets greater than \$10 billion.

This report highlights key risk issues facing the federal banking system. The key issues remain relatively unchanged from the fall 2016 report with strategic, credit, operational, and compliance risk remaining top concerns. Compliance risk management was elevated to a key risk issue, and auto lending was re-characterized from a key risk issue to an issue warranting continued monitoring. The NRC continues to monitor these supervisory priorities closely and implement appropriate actions to address risk concerns. This report provides more detail on the key risk issues underlying the following matters:

- Strategic risk remains elevated as banks make decisions to expand into new products or services or consider new delivery channels and continue merger and acquisition (M&A) activity. Banks face competition from nonfinancial firms, including financial technology (fintech) companies entering the traditional banking industry. This competition is causing changes in the way customers and financial institutions approach banking.
- Credit underwriting standards and practices across commercial and retail portfolios remain an area of OCC emphasis. Over the past two years, commercial and retail credit underwriting has loosened, showing a transition from a conservative to an increasing risk appetite as banks strive to achieve loan growth and maintain or grow market share.
- Strong CRE loan growth has resulted in increasing credit concentrations. Results from recent supervisory activities raise concern over the quality of CRE risk management, particularly as it relates to managing concentration risk.
- Operational risk continues to challenge banks because of increasing cyber threats, reliance on concentrations in significant third-party service providers, and the need for sound governance over product service and delivery.
- Some banks continue to face challenges complying with Bank Secrecy Act (BSA) requirements as money laundering and terrorism financing methods evolve.
- Multiple new or amended regulations are posing challenges to change management processes and increasing operational, compliance, and other risks. These regulations include the integrated mortgage disclosures under the Truth in Lending Act (TILA) and Real Estate Settlement Procedures Act (RESPA), the new requirements under the amended regulation implementing the Military Lending Act (MLA), and pending changes to the data collection and processing rules for the Home Mortgage Disclosure Act (HMDA).

- Consumer compliance risk management in some banks has not kept pace with the increasing complexity of the regulatory and risk environment.

The NRC is monitoring other risks that warrant awareness among bankers and examiners. These risks have the potential to develop into broader system-wide issues or have risk characteristics that warrant close attention because of the possible effect on certain banks. These risks include the following:

- Heavy reliance on third-party service providers for critical activities and the increasing changes driven by new products offered by emerging fintech companies create increased risk relating to third-party risk management.
- The United Kingdom's planned departure from the European Union may pose operational and strategic risks to some U.S. banks. These banks are reassessing staffing and legal entity structures and risk management processes associated with the potential implementation of organizational and geographic change.
- Credit risk in banks with high concentrations in agricultural lending is increasing. Commodity prices for grain crops have declined over the past three years and livestock, and dairy prices have declined over the last two years, resulting in lower income and cash flow for agriculture industry borrowers.
- Changes in interest rates and the yield curve are raising interest rate risk. This increased risk is evident in changes in unrealized gains and losses in bank investment portfolios with long duration assets.

Key Risk Themes

Strategic risk is elevated, as management teams consider M&A, business model changes, and the potential need to adapt in an uncertain regulatory climate. Management teams are searching for sustainable ways to generate target rates of return in a persistent low interest rate environment despite recent and anticipated interest rate increases.

- Strategic risk continues to be concentrated in midsize and community banks searching for revenue and market niches. The increased pressure for revenue, challenging external economic drivers, and the changing regulatory environment continue to increase strategic risk.
- While strategic risk remains elevated for the majority of large banks, these banks continue to improve the effectiveness of their processes and controls to address strategic risk.
- Strategic planning remains important for all banks as they adopt and implement innovative products, services, and processes in response to the evolving demands for financial services and the entrance of new competitors, such as out-of-market banks and nonbanks. Boards of directors and management should comprehensively understand the benefits and risks of strategic changes before implementation. Banks involved in responsible innovation should use new products, services, and processes to meet the needs of consumers, businesses, and communities in a manner that is consistent with sound risk management and business strategies.¹
- The OCC expects M&A activity to continue as midsize and community banks seek to maximize shareholder or franchise value, gain economies of scale, increase market penetration, and improve efficiencies. Some banks fail to fully integrate appropriate management information systems, operational platforms, internal controls, and risk management after mergers or acquisitions, thereby increasing strategic, reputation, operational, and compliance risks.
- Despite recent increases in the federal funds rate, net interest margins are likely to remain under pressure for banks with extended asset maturities. A historically low interest rate environment has

¹ *Supporting Responsible Innovation in the Federal Banking System: An OCC Perspective*, March 2016.

resulted in some banks' asset managers reaching for return by extending credit and liquidity risk exposures, investing in alternative and structured products, or lengthening asset duration. As rates increase, banks should be aware of the implication for earnings.

Competitive pressures and strong credit risk appetites have driven easing in underwriting standards and increased credit risk for some loan portfolios.

- Banks continue to incrementally ease underwriting practices across a variety of commercial and retail credit products to boost or maintain loan volume and respond to competition from bank and nonbank lenders. While easing in underwriting standards slowed in the second half of 2016, credit risk is increasing because of increased risk layering, rising loan policy exceptions, increasing loan-to-value (LTV) ratios, weaker loan controls or covenant protections, and higher concentrations in CRE loans.
- Supervisory reviews continue to identify concerns regarding the quality of CRE loan underwriting and concentration risk management, including weaknesses in stress testing CRE portfolios, establishing appropriate concentration limits, and implementing adequate concentration management information systems. These concerns are amplified by strong growth in CRE portfolios over the past two years. Strong CRE growth is evident in all sizes of banks, but the CRE concentration build-up is primarily in community banks.
- Increased auto-lending risk from several years of strong growth and eased underwriting standards is now materializing in the lagging delinquency and loss severity indicators. These lagging indicators are likely to continue to increase as loans with more aggressive underwriting mature. There is renewed emphasis by bankers and examiners in monitoring the adequacy of collections processes and the appropriateness of the allowance for loan and lease losses.
- Recent supervisory activities have identified weaknesses in allowance for loan and lease losses methodologies at some banks, with examiners identifying lack of appropriate consideration of strong loan growth, rising concentrations of credit, and increasing risk appetite and tolerance for underwriting exceptions. These weaknesses illustrate the importance of documenting the analysis and effects of the qualitative factors, which have increased in relevance because of several years of relatively benign losses.

Operational risk is high as banks adapt business models, transform technology and operating processes, and respond to increasing cybersecurity threats.

- Sophisticated cyber threats continue to pose high inherent risks to an interconnected financial services marketplace. Boards and management play a critical role in establishing a sound culture and implementing effective resiliency practices.
- Cyber threats are increasing in speed and sophistication. These threats target large quantities of personally identifiable information and proprietary intellectual property and facilitate misappropriation of funds at the retail and wholesale level. Phishing is a primary method for breaching data systems and is often the entry mechanism to perpetrate other malicious activity, such as installing ransomware, accessing confidential information, compromising internal systems to effect payments, or conducting espionage.
- Timely and thorough software patch and update management, strong risk-based authentication, sound controls, and effective user awareness campaigns and training can help banks avoid phishing, ransomware attacks, and viruses and mitigate other risks.
- Over the past year, there has been a significant increase in the volume of information technology (IT)-related matters requiring attention (MRA) identified during supervisory activities of community and midsize banks and technology service providers (TSP). The top five categories of concern represent over 77 percent of outstanding IT-related MRAs and involve information

security, IT governance and oversight, business continuity, third-party risk management, and IT audit.

- The number, nature, and complexity of third-party relationships continue to expand, increasing risk management challenges for banks. Consolidation among service providers has increased third-party concentration risk, where a limited number of providers service large segments of the banking industry for certain products and services.
- Control breakdowns in the governance of product sales, delivery, and service continue to elevate levels of operational risk and can erode trust in the banking system. Effective risk management, including effective management processes, promotes timely detection, response and escalation of operational issues to reduce customer impact due to product failures, possible fraud, and potential unfair or deceptive acts or practices.
- The volume of products and services and the complexity of end-to-end processes for delivery in large, complex banks is a key driver of high operational risk. Insufficient monitoring and limited internal testing have failed to detect product and service delivery disruptions resulting in slowed response by banks and elongated impact for customers.
- Central clearing of derivative contracts through central counterparties (CCP) has helped to increase transparency as well as reduce bilateral counterparty risk. These benefits have come at the expense of increased concentration, liquidity, and operational risks. Member banks are exposed to the operational risk inherent in the CCP, including the ability to reliably handle high volume transaction processing, collateral management, monitoring, reporting, and default management. This exposure should result in an equivalent enhancement in controls and risk management by both the CCP and its member banks.

Compliance risk remains high as banks continue to manage money laundering risks subject to resource constraints in an increasingly complex risk environment and implement changes to policies and procedures to comply with amended consumer protection requirements.

- BSA and anti-money laundering (AML) compliance risks remain high. Several banks remain under enforcement actions (EA) or have MRAs to correct deficient practices related to their BSA/AML programs. The inability to develop and maintain requisite expertise to successfully implement BSA/AML controls increases the scale of vulnerabilities created by technological developments and innovation.
- Bank decisions to terminate entire categories of customer accounts without considering the risk presented by individual customers or the banks' ability to manage the identified risk may continue to facilitate the movement of certain customer segments or transactions out of the regulated financial system. Such movement reduces transparency and potential reporting to law enforcement authorities, as required under the BSA. Higher-risk customer relationships may instead migrate to other banks that are less experienced in managing complex transactions and potential money laundering risks. Decisions to terminate account relationships should be based on analysis of the risks presented by individual relationships and the banks' ability to manage those risks.
- Evolving consumer compliance risks and increasing complexity of the risk environment present significant challenges for bank compliance risk management systems. In addition to rapid and significant changes to regulations, banks face heightened regulatory and public attention on consumer protection activities. Increased compliance costs and the resultant pressures on earnings, M&A activities, entry into new products and services, and increasing use of third-party relationships place additional demands on already strained compliance risk management systems. Maintaining sufficient compliance expertise to manage the additional risks and complexities remains a concern.
- Change management challenges continue as banks work to implement new and revised consumer protection rules under TILA, RESPA, MLA, and HMDA. Implementation of the amended MLA

continues to pose compliance and operational challenges for banks. Banks continue to face similar change management challenges in achieving compliance with the integrated mortgage disclosure requirements. The changes to the data collection and processing requirements for HMDA that will be implemented over the next several years also pose significant change management, compliance, and operational challenges.

- Fair lending risks may increase when banks engage third parties to conduct some or all of the loan application or underwriting processes, or to help banks make decisions regarding terms or pricing. Variations in loan approval and denial and pricing decisions may create increased exposure for fair lending issues and require increased monitoring.

OCC Risk Perspective: Outlook of Supervisory Priorities for Next 12 Months

Bank Supervision

The outlook for the OCC's supervision, through the Large Bank Supervision, the Midsize and Community Bank Supervision, and the Compliance and Community Affairs operating units, remains broadly the same as described in the fall 2016 report. Supervisory units continue to complete supervisory activities to confirm or assign regulatory ratings and risk assessments. Compliance, governance, and operational risk issues remain leading risk issues in large banks while strategic, credit, and compliance risks remain the leading issues in midsize and community banks.

Key risks facing large banks are as follows:

- Enterprise risk governance weaknesses increase operational, reputation, and compliance risks and impede prevention, identification, and timely resolution of issues resulting in increased likelihood of poor customer service experience.
- The volume of products and services and the complexity of end-to-end processes for delivery is a key driver of high operational risk. Without strong business, risk management, and audit processes this risk increases the likelihood of not delivering products and services as intended.
- Consumer compliance risk management and change management require attention given persistent challenges in meeting compliance management expectations for existing regulations and changes in regulations.
- BSA/AML risk management is an area of emphasis due to controls at some banks not keeping pace with higher-risk services and customer relationships.
- Cybersecurity and fraud continue to pose risk from the increasing volume and sophistication of cyber threats and IT vulnerabilities.
- IT planning and infrastructure are increasingly important due to weaknesses in IT strategic planning in prior years that will take time to correct through the establishment of stronger processes.

Key risks facing midsize and community banks are as follows:

- Cyber resiliency is increasingly important as threats from malware and cyber extortion become more complex as many banks increasingly rely on third parties to provide critical activities.
- Commercial and retail credit underwriting standards have eased over the past several years as banks strive to increase or maintain loan volumes in an increasingly competitive environment.
- CRE loan concentrations have increased given the strong growth in income producing CRE loans over the past three years.
- BSA/AML compliance is increasingly challenging as banks adapt risk management systems to keep pace with evolving risks and increasing complexity of the risk environment.

- Consumer compliance risk management systems have not kept pace with evolving risks and increasing complexity of the risk environment. The implementation of the integrated mortgage disclosure requirements and the amended MLA regulatory requirements pose challenges to bank systems, policies and procedures, disclosures, and staff training.
- Strategic planning and governance risk continues to pose a challenge as banks implement plans for adapting business models to respond to changing loan demand, low interest rates, and intense competitive pressures, including competition from nonbanks.

Examination of Technology Service Providers

The OCC conducts examinations of services provided to banks by third-party service providers, which include TSPs, based on authorities granted by the Bank Service Company Act, 12 USC 1867,² and the Home Owners' Loan Act, 12 USC 1464.³ Examinations of significant TSPs typically are conducted in coordination with the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, and other agencies or regulators with appropriate legal authority. Supervisory priorities at these entities remain unchanged from the last report. The scope of examinations of services provided by the largest TSPs focuses on key technology and operational controls communicated in the *Federal Financial Institutions Examination Council (FFIEC) Information Technology Examination Handbook* and other risk management functions including cybersecurity, enterprise risk management, third-party risk management, change management processes, and management of product- and service-specific risks.

² 12 USC 1867, "Regulation and Examination of Bank Service Companies."

³ 12 USC 1464(d)(7), "Regulation and Examination of Savings Association Service Companies, Subsidiaries, and Service Providers."

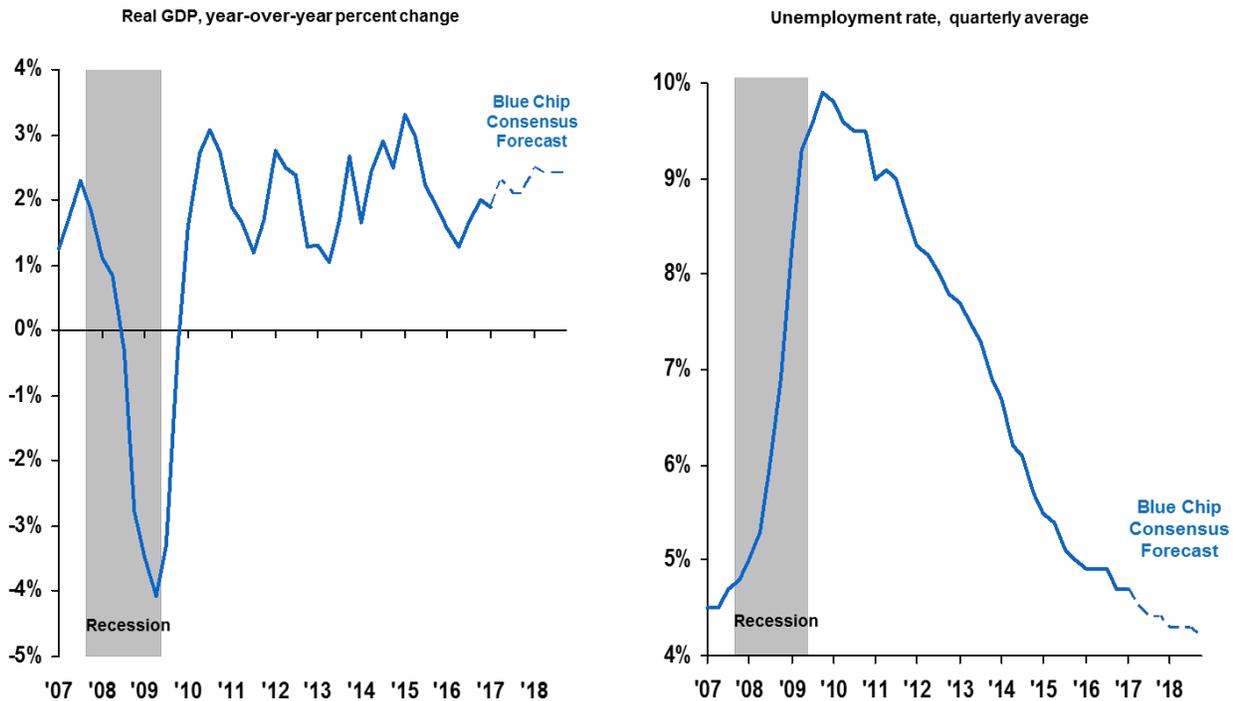
Part I: Operating Environment

U.S. economic growth slowed in 2016 compared with 2015, but solid job gains continue to spur domestic spending. Except for mining and manufacturing, job growth was widespread across industries in 2016. Regionally, job and economic growth are weakest in agriculture- and energy-dependent areas and strongest in technology-dependent areas and Southeast states with strong population growth and favorable business conditions. Wages and core inflation have started to pick up modestly. Even though the U.S. economy is on its eighth year of expansion, the consensus forecast is for expansion through at least 2018. Short- and medium-term risks to the outlook include uncertainty in the United States over potential fiscal policy changes and uncertainty in Europe including with respect to the United Kingdom's decision to leave the European Union. Long-term risks to the U.S. economy include the slowdown in productivity growth, which may pose a risk to U.S. standard of living.

U.S. Economic Expansion to Continue Through 2018

Real gross domestic product (GDP) increased 1.96 percent between the fourth quarter of 2015 and the fourth quarter of 2016 (see figure 1). Economic fundamentals, including consumer and government spending, suggest moderate expansion in 2017. The unemployment rate fell to 4.7 percent in the fourth quarter of 2016. While total employment was up 2 percent in 2016 from 2015, the economy added 500,000 fewer jobs than in 2015. The consensus of private sector forecasters is for the economic expansion to continue through 2018.⁴

Figure 1: GDP and Unemployment Trends



Source: Bureau of Economic Analysis, Bureau of Labor Statistics/Haver Analytics, Blue Chip Indicators (March 2017)

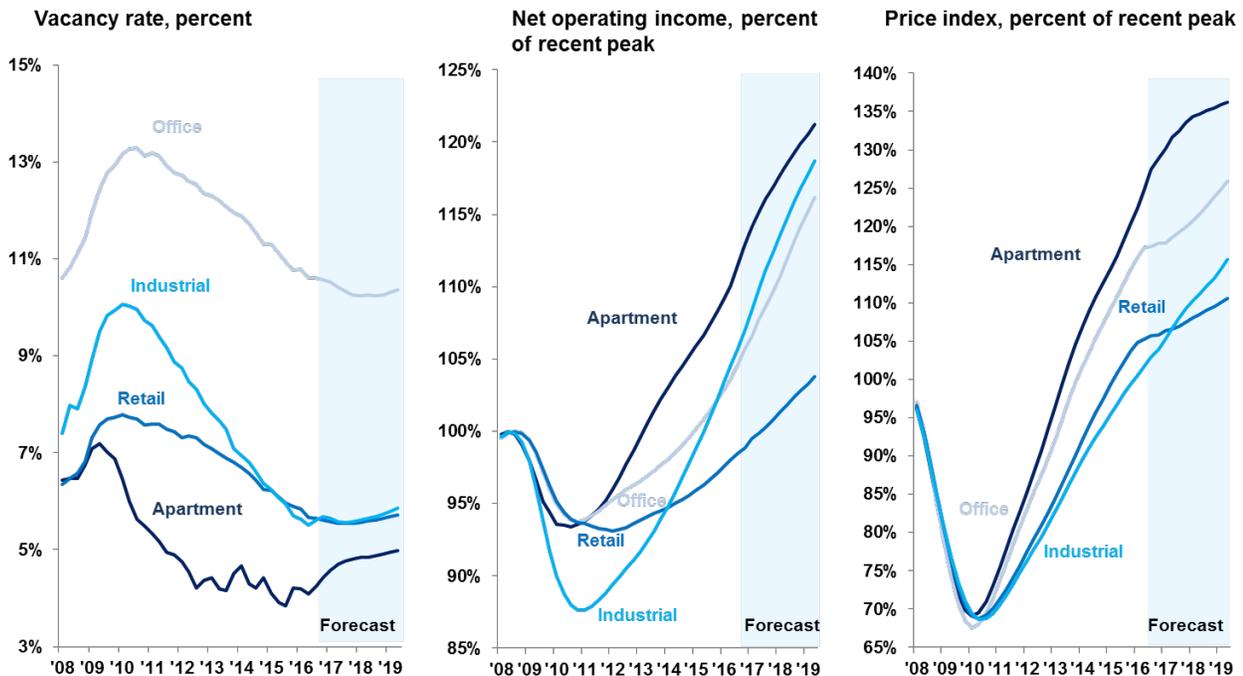
⁴ Blue Chip Economic Forecast.

CRE Outlook Remains Mixed

Apartments remain in a more advanced stage of the vacancy rate cycle than other commercial property types (see figure 2). Apartment vacancies rose year-over-year in 2016 for the first time this cycle, while demand slowed from 2014 and 2015 levels despite comparable deliveries. New apartment construction, most of which has been in the luxury end of the market, has outpaced demand. This construction has contributed to a higher national apartment vacancy rate, which, according to a CoStar Group forecast, is expected to increase an additional 50 basis points over the next three years.⁵ Markets with the most new construction are likely to see apartment vacancy rates rise by more than one percentage point and are likely to experience slower rent and net operating income growth. Construction of non-residential properties has been more limited and is likely to remain stable. Consequently, the national vacancy rates for office, industrial, and retail space declined steadily over the past two years and, unlike the vacancy rates for apartments, are expected to decline further, or flatten out, in the next three years.

The CoStar Group forecasts the pace of growth in CRE property values, particularly for apartment and retail properties, to slow. In the past two years, strong market fundamentals and low interest rates made CRE a relatively attractive investment, especially for foreign investors with limited prospects in their home markets. In response, investors rapidly bid up property prices, particularly in major U.S. markets most attractive to foreign investors. In the next three years, apartment vacancies are expected to rise, and the improvement in other property types is expected to slow, resulting in less upward pressure on CRE prices. Prices may soften more in markets where luxury apartments are pushing the bounds of affordability. Additionally, a rise in interest rates will raise borrowing costs for both domestic and foreign investors and could dampen the pace of price growth for all commercial properties.

Figure 2: CRE Performance Measures



Source: CoStar Group; fourth quarter 2016 baseline forecast for 54 tier 1 markets

⁵ CoStar Group provides information, analytics, and online marketplaces to the CRE industry.

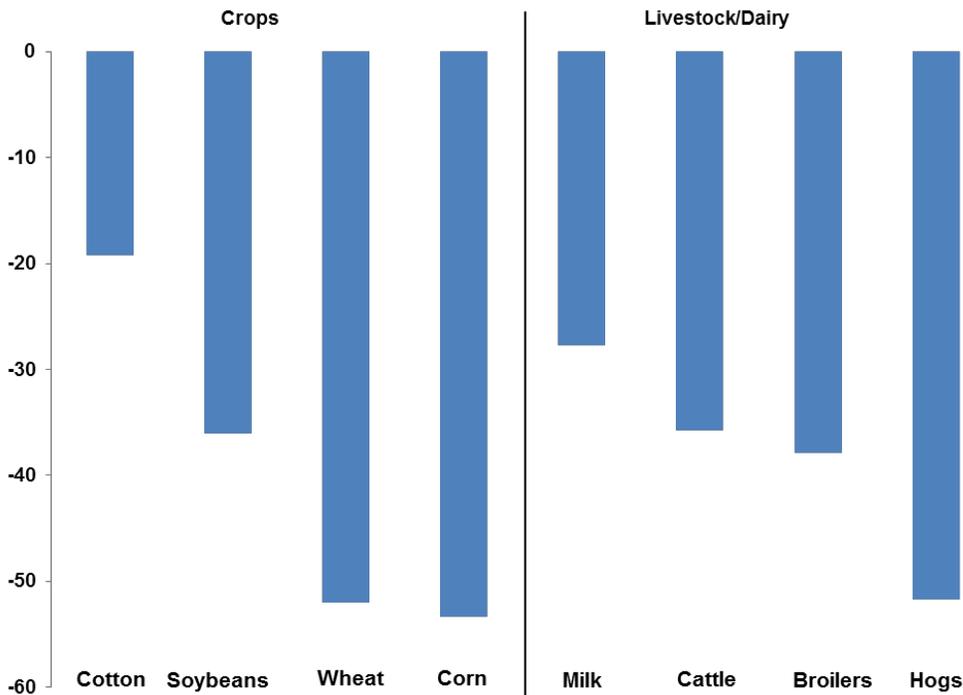
Low Agricultural Commodity Prices Remain a Drag on Farm Income

Farm income remains stunted from low agricultural commodity prices. Many major agricultural commodity prices are significantly below prior peaks (see figure 3). Grain prices surged from 2010 to early 2013 as post-recession demand strengthened, while supply sharply fell from the severe drought that gripped the Great Plains from 2011 to 2013. Grain farmers responded to high prices and corresponding record profits by expanding planted acreage once the drought ended. With supply fast outpacing moderate demand growth, grain prices have fallen since 2013. Unless acreage harvested falls or a significant weather event reduces yields, grain prices are likely to see only modest improvement during 2017.

Cattle and hogs experienced a run up in prices from 2013 to 2014. The drought caused cattle ranchers to liquidate much of their herd, bringing the U.S. herd to its smallest size since the 1950s. Cattle prices spiked as supply fell. Hog farmers faced the porcine epidemic diarrhea virus that has a near 100 percent mortality rate among infant pigs. Hog prices spiked as the disease quickly spread. With the drought's end and the containment of the virus in 2014, cattle and hog farmers quickly expanded supply, causing prices to fall over the last two years. Livestock prices are likely to remain flat in 2017 as cattle and hog herds continue expanding from low feed costs.

Dairy prices rose from a post-recessionary boom in demand but declined recently because of expanded supply. With the U.S. dairy herd expected to continue increasing, dairy prices are likely to see only modest improvement in 2017.

Figure 3: Percent Change in Quarterly Average Price, 2013-2014 Peak to Fourth Quarter 2016



Source: U.S. Department of Agriculture

Part II: Bank Performance**Revenue Growth Driven by Higher Loan Volumes****Banks Report Profitability Gains in 2016**

Banks of all sizes reported net income growth of 3.9 percent in 2016 when compared with 2015 (see table 1). Banks with total assets greater than \$10 billion, total assets from \$1 billion to \$10 billion, and those with assets less than \$1 billion reported increases in net income of 3.7 percent, 9.8 percent, and 3.0 percent, respectively. Higher net interest income across banks of all sizes was driven primarily by strong total loan growth.

Table 1: Trends in Bank Net Income

	Assets greater than \$10 billion		Assets from \$1 billion to \$10 billion		Assets less than \$1 billion	
	2015	2016	2015	2016	2015	2016
Total assets in billions	10,107.2	10,678.1	404.6	436.8	270.4	280.7
Revenues in \$ billions						
Net interest income	267.6	284.6	12.4	13.3	8.6	9.0
Noninterest income	167.6	165.4	5.8	6.2	5.7	6.1
Realized securities gains and losses	2.6	2.5	0.1	0.1	0.1	0.1
Expenses in \$ billions						
Provisioning	26.4	34.1	0.6	0.8	0.3	0.4
Noninterest expense	258.9	259.1	11.7	12.3	9.9	10.4
Income taxes	47.8	50.4	1.8	2.0	1.0	1.0
Net income	104.3	108.2	4.1	4.5	3.3	3.4

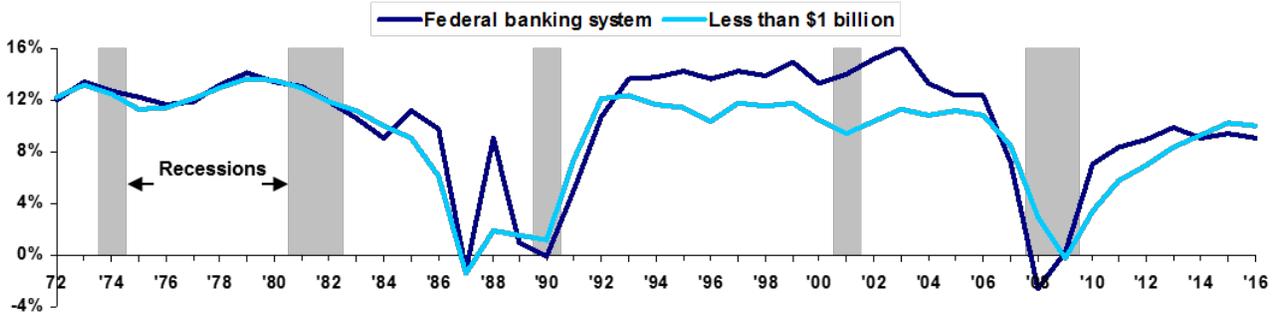
Source: Integrated Banking Information System (OCC)

Note: Data as of year-end, merger-adjusted, and held constant for banks in operation from the first quarter of 2010 to the fourth quarter of 2016.

Return on Equity Strongest in Small Banks

System-wide ROE of 9.4 percent for 2016 was slightly lower than 2015 (see figure 4). ROE across the federal banking system has been gradually improving, with half of banks seeing an ROE improvement over the past year. At banks with less than \$1 billion in total assets, ROE of 10 percent surpassed the system-wide ROE in 2014 and returned close to its pre-recession level.

Figure 4: Trends in ROE



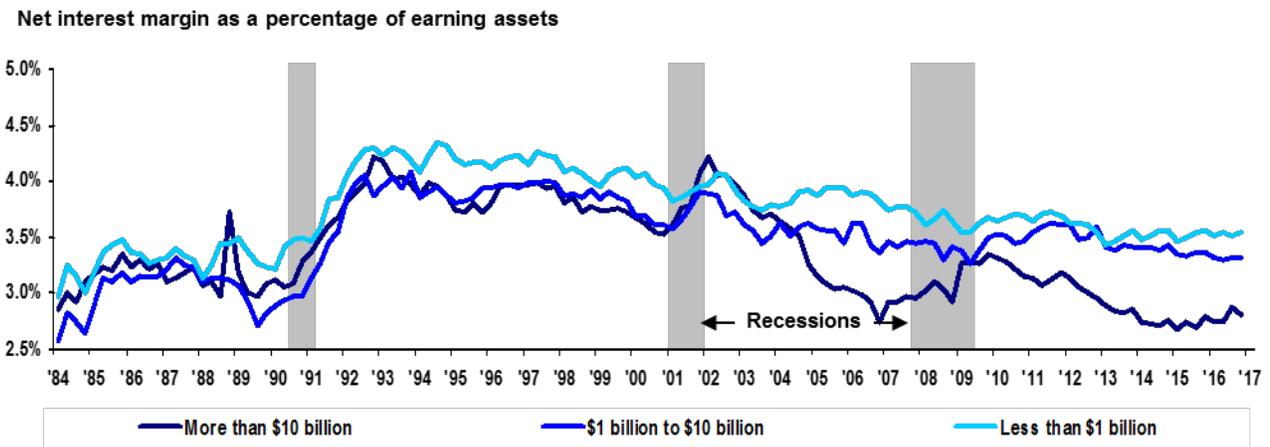
Source: Integrated Banking Information System (OCC)

Note: Annual data through year-end 2016. 2008 results are the sum of quarterly net income and include estimates from Y-9 to restore income eliminated due to purchase accounting treatment of Countrywide (2Q:08), Washington Mutual (3Q:08), Wachovia, National City, and Downey (4Q:08). Data for federal saving associations are not available before 1984.

Net Interest Margins Have Stabilized but Remain Historically Low

Net interest margins stabilized at banks of all sizes, ending a period of margin compression (see figure 5). Strong loan growth combined with stabilization of net interest margins enabled banks to report the largest net interest income gain since 2010. Net interest margins remain historically low and are likely to remain under pressure for banks with extended asset maturities or with low loan growth.

Figure 5: Net Interest Margin as a Percentage of Earning Assets



Source: Integrated Banking Information System (OCC)

Note: Data are as of year-end. Data exclude credit card and trust banks.

Part III: Trends in Key Risks

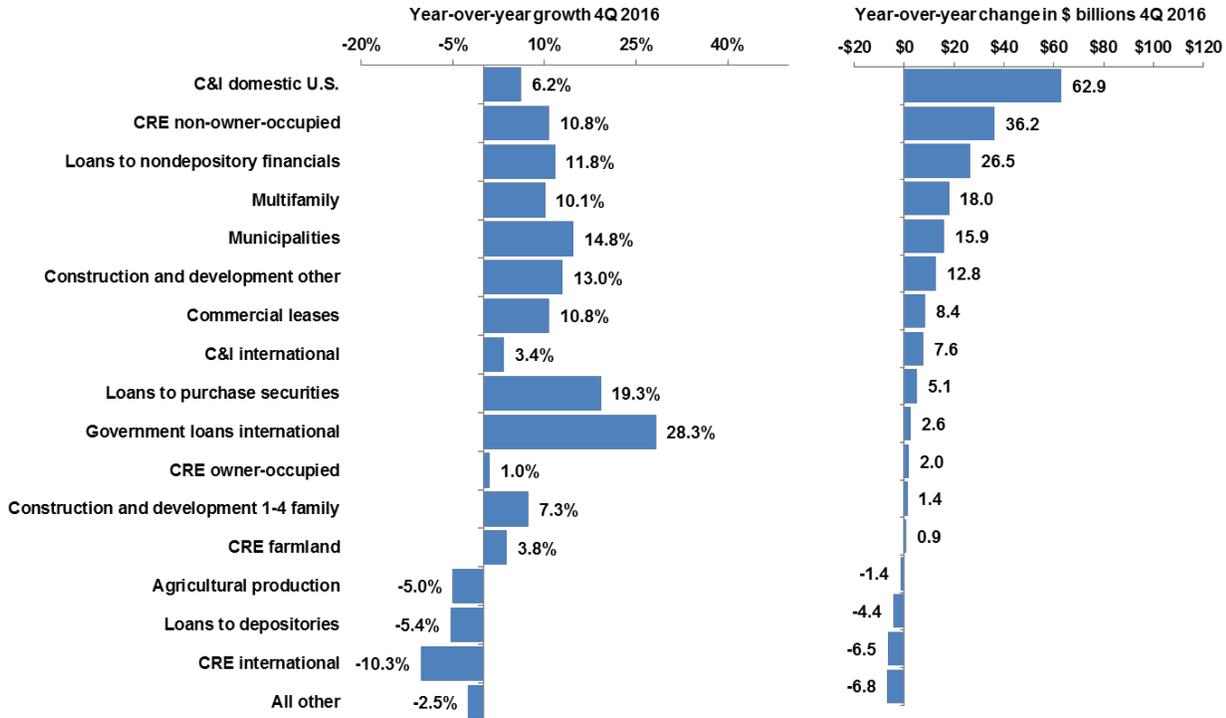
A. Loan Growth, Concentrations, and Eased Underwriting Standards Drive Credit Risk

Commercial Loan Growth Slowed in 2016

Commercial loan growth was healthy in 2016, but slower than in 2015. After increasing 2.1 percent in the first half of 2016, total commercial loan commitments, including standby letters of credit, increased at a slower pace in the second half of 2016, ending with a 3.8 percent year-over-year increase. Growth of funded commercial commitments (loans) also slowed in the second half of 2016, ending the year with a 6.1 percent growth rate, compared to 9.7 percent growth rate in 2015. The year-over-year and second half of 2016 slowdown were driven by a decline in C&I growth, particularly in the last two quarters of the year when C&I funded commitments declined.

CRE loans and nondepository financial institution loans continued their strong growth rates throughout 2016 (see figure 6). Loans secured by CRE increased 7.1 percent year-over-year following a 9.4 percent increase in 2015.⁶ Products with the largest gains in dollars of funded commitments also had strong year-over-year growth: domestic C&I (6.2 percent), non-owner-occupied CRE (10.8 percent), loans to nondepository financial institutions (11.8 percent), and multifamily loans (10.1 percent). Lending to the diverse nondepository financial institutions sector continued to expand, increasing 11.8 percent in 2016, although this increase is substantially less than the 23.0 percent growth rate in 2015. This category of commercial loans has grown nearly 90 percent over the past three years. Loans to municipal governments are another area of strong growth, up by 14.8 percent.

Figure 6: Funded Commercial Loan Commitments and Year-Over-Year Growth



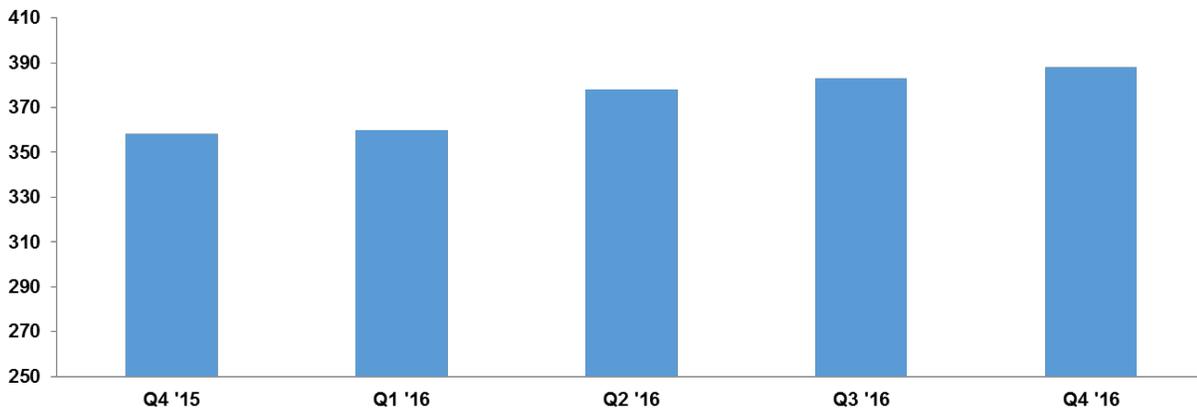
Source: Integrated Banking Information System (OCC)

⁶ Total CRE is not shown in figure 6.

CRE Loan Growth Raises Importance of Concentration Risk Management

CRE lending continued its robust growth pattern in 2016 as banks of all sizes exhibited a strong appetite for this type of lending. Although there has been a modest resumption of construction lending, CRE loan growth in this cycle so far has been dominated by increased commercial mortgage lending, both multifamily and nonresidential. The growth in CRE lending is led by the multifamily housing sector and centered in the construction of luxury apartments primarily in the Northeastern and Western regions of the United States. As of December 31, 2016, many banks saw robust growth in their CRE loan portfolios, with 388 banks (up by 30 banks, or 8.4 percent, from a year ago) having at least 25 percent of capital in CRE loans and experiencing three-year growth rates of 50 percent or more (see figure 7). Growth in some banks has been accompanied by weaker underwriting standards and examiner-identified weaknesses in concentration risk management practices. With the continuation of favorable market fundamentals, the OCC expects additional CRE loan growth in 2017.

Figure 7: Number of Banks With 25 Percent of Capital in CRE and Three-Year Growth Rate of 50 Percent or More



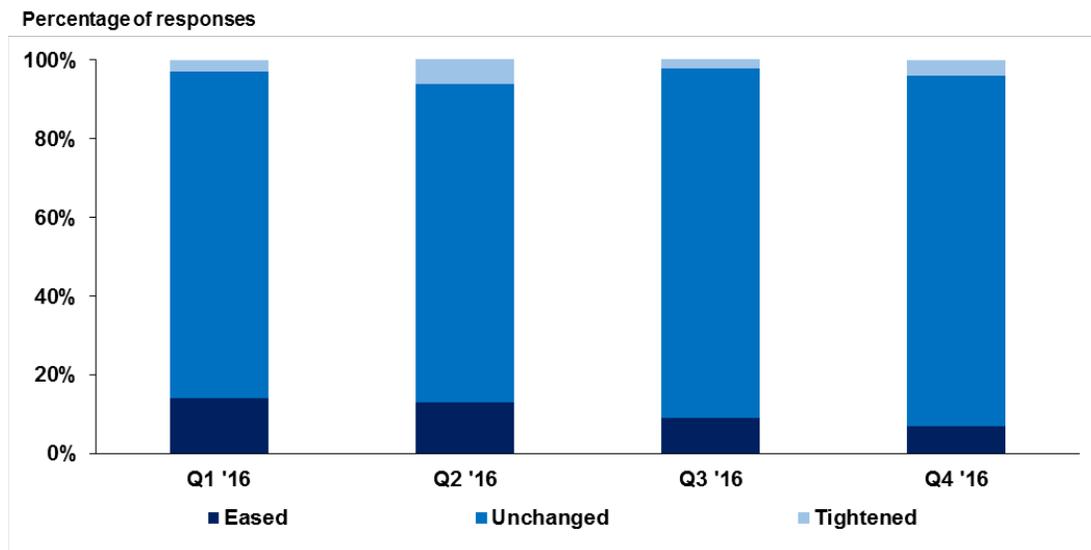
Source: Integrated Banking Information System (OCC)

Note: Data are quarterly from the fourth quarter of 2015 through the fourth quarter of 2016.

Examiners Report Continued Easing in Underwriting Standards

Credit underwriting practices reflected incremental easing in 2016, driven by increased competition, higher credit risk appetites, perceived improvements in general economic conditions, and a desire for loan growth. This easing continued a trend that began in earnest in 2013. Credit underwriting assessments completed by OCC examiners in 2016, as well as the OCC's *2016 Survey of Credit Underwriting Practices*, reflect this incremental easing but also indicate that credit underwriting policies are generally sound. The greatest volume of easing has occurred in large and midsize banks, and the easing has occurred most often in pricing, guarantor requirements, and loan covenants, as well as in retail loan sizes, collateral requirements, and debt-to-income requirements. The trend in credit underwriting reflected a slow reduction in the volume of easing, especially in late 2016 (see figure 8). This reduction occurred as banks responded to rising retail loan delinquencies and tighter risk selection in CRE and other commercial loans.

Figure 8: Assessment of Direction of Credit Underwriting Practices



Source: OCC

B. Operational Risk Remains Elevated Because of Increasing Cyber Threats and Reliance on Third-Party Service Providers

Severity of Cyber Threats Is Increasing

Cyber threats are increasing in speed and sophistication. These threats target large quantities of personally identifiable information and proprietary intellectual property and facilitate misappropriation of funds at the retail and wholesale level. Cybercriminals have demonstrated an increased willingness to take more aggressive action to expose or deny access to personal information. Bank boards and management play a critical role in strengthening the cybersecurity of individual banks, helping protect the broader financial services community, and promoting confidence in the financial system. Bank boards and senior management should understand the risks facing their banks and implement strong cybersecurity risk cultures and risk management programs to improve their organizations' ability to withstand and recover from cyber incidents.

Phishing continues to be a primary method to breach data systems. Phishing deceives people into opening files or clicking links in messages (e.g., e-mails, instant messages, or social media posts). A related form of social engineering, known as "watering holes," involves infecting websites frequently visited by targeted people. The malicious code on watering hole sites passes malware to visitors, which helps cybercriminals gather information or access corporate networks. These methods are frequently the primary entry mechanism to perpetrate other malicious activity, such as loading ransomware onto bank computers, accessing confidential information, compromising internal systems to effect payments, or conducting espionage.

Cybercriminals use a variety of evolving tactics, including more sophisticated ransomware variants, denial-of-service capabilities, business e-mail compromises, and theft of sensitive business and customer information in extortion schemes. The success of extortion campaigns has resulted in an increase in the quantity and sophistication of methods. This lucrative business model has even spawned ransomware as a service for cybercriminals with limited technical ability. Successful attacks can disrupt a bank's operations and ability to provide services.

Companies that provide IT products and services or are otherwise part of the supply chain, including those that allow remote access and management, are increasingly being targeted for cybercrime and espionage. When exploited, these third parties provide back doors into client businesses' operations. This trend coincides with many of the large breaches that have occurred throughout the last year. Millions of compromised credentials have been sold online and are being used to gain access to sensitive accounts.

Banks using unpatched or unsupported software and hardware enable the loss of data or customer breaches. Out-of-date or unsupported software often contains vulnerabilities that can lead to breaches. A sound systems development life cycle including regular maintenance is essential to protecting against these weaknesses.

Strong authentication and management of privileged and high value user access (e.g., system administrators, staff capable of moving funds, or board members and executives with access to sensitive corporate information) should be implemented as part of a layered security approach. Recent successful breaches were the result of poor authentication schemes that allowed for stolen customer data, large movements of funds, and increased reputation risk from exposing sensitive information.

Reliance on Third-Party Service Providers Is Increasing and Critical Operations Are Increasingly Concentrated in a Few Large Service Providers

Many banks have increasingly leveraged and become dependent on third-party service providers to support key operations within their banks. Over time, consolidation among service providers has resulted in large numbers of banks reliant on a small number of service providers.

In addition to overall concentrations related to the number of banks serviced, examiners have identified instances of concentration of third-party service providers for specialized services, such as merchant card processing, denial-of-service mitigation, or trust accounting systems. These third-party service providers can create concentrated points of failure for certain lines of business or operational functions for a large segment of the banking industry and necessitate appropriate oversight.

C. Compliance Risk Remains High

Technology Offerings and Traditional Criminal Methods Result in High BSA/AML Compliance Risk

BSA/AML compliance risk continues to remain high based on existing and emerging technologies that benefit customers through enhanced delivery platforms for bank products and access to financial services, but may also create new vulnerabilities that increase potential bank exposure to money laundering risk. Developments in electronic and alternative payment systems that result in less transaction transparency increase the risk of banks unwittingly being used to facilitate money laundering and terrorist financing. More traditional criminal methods, such as trade-based money laundering, bulk cash smuggling using armored car services, and the use of funnel accounts, are the preferred methods for criminal enterprises to move illicit proceeds. Existing and emerging technologies that result in less transparency, as well as traditional criminal methods, continue to contribute to the complexity of the risk environment in which banks operate.

Moreover, ongoing changes in payment technologies and criminal typologies increase the challenges for banks to maintain effective systems to keep pace with these changes. Risks related to changes in technologies and typologies are often cumulative, requiring banks to enhance processes to address these risks while maintaining existing controls. For some banks, the failure to meet challenges related to BSA/AML compliance has resulted in EAs and increased reputation risk over the past several years. Penalties and remediation costs from such actions may affect banks' financial condition and profitability. In addition, the failure to take timely corrective action may continue to limit the achievement of effective risk management outcomes. These effects, in turn, can limit banks' ability to execute strategic plans, leverage technology, or undertake other innovations to expand product and service offerings.

Certain categories of individuals and business entities, including money services businesses and foreign correspondent banking customers, have reported challenges in establishing or maintaining bank accounts. Some banks may terminate or restrict business relationships with categories of customers without fully analyzing the risk presented by customers and the ability of the bank to manage those risks. The consequences of such actions may include potentially negative effects on financial inclusion internationally or the movement of transactions out of the regulated financial system. Such transactions then may not be appropriately monitored and reported for potential suspicious activity.

The OCC has published a number of guidance documents over the years to address banks' risk management of higher-risk customer relationships while remaining in compliance with the BSA. Most

recently, the OCC published guidance reiterating that banks should conduct periodic risk reevaluations for portfolios that contain foreign correspondent accounts.⁷ Banks should base decisions to terminate foreign correspondent account relationships on analysis of the risks presented by individual foreign correspondent account relationships and the banks' ability to manage those risks. The OCC's guidance shares a range of best practices for banks to consider when conducting these periodic reevaluations and making account retention or termination decisions.

Amendments to MLA Regulation and Integrated Mortgage Disclosure Rule Pose Change Management Challenges

Prudent change management processes are important when implementing new regulatory requirements. New or amended regulations are posing challenges to change management processes and increasing operational, compliance, and other risks. These changes include the integrated mortgage disclosures under TILA and RESPA and the new requirements under the amended regulation implementing the MLA. The OCC expects banks to maintain bank processes and systems that are sufficient to identify covered borrowers and loan products, produce accurate calculations and required disclosures, and incorporate other required limitations and protections. Many banks rely on software, automated tools, disclosure forms, and third-party relationships to process loan applications, create and distribute disclosures, underwrite loans, and close loans. The OCC expects banks to manage third-party relationships to appropriately address operational, reputation, and compliance risks associated with regulatory requirements.

MLA

For most types of covered consumer credit, compliance with the 2015 amended MLA regulation was required by October 3, 2016.⁸ As promulgated by the U.S. Department of Defense, the regulation affects all banks that extend consumer credit to members of the U.S. armed forces on active duty and their dependents. The compliance date for credit card accounts is October 3, 2017, unless the Secretary of Defense provides an additional extension of up to one year. The Defense Department estimates that 238 million transactions each year will be subject to the disclosure requirements of the regulation.⁹

TILA and RESPA Integrated Disclosure/Know Before You Owe Rule

New mortgage disclosure forms—the Loan Estimate and the Closing Disclosure—have been required for most mortgage loans secured by real property since October 3, 2015.¹⁰ To comply with the new integrated rules, individual banks and the mortgage industry as a whole have needed to make significant systems and operational changes. Banks' compliance risk management and audit functions need to be sufficient to promote banks' ongoing compliance with the regulation.

⁷ OCC Bulletin 2016-32, "Risk Management Guidance on Periodic Risk Reevaluation of Foreign Correspondent Banking," October 5, 2016.

⁸ 80 Fed. Reg. 43560 (2015) (to be codified at 32 CFR 232).

⁹ *Id.* at 43595.

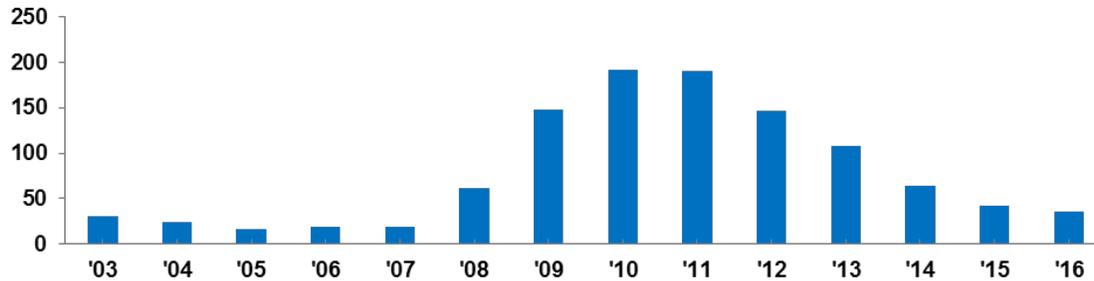
¹⁰ 78 Fed. Reg. 80225 (2013).

Part IV: Regulatory Actions

Number of Banks Rated 4 or 5 Continues to Decline

The number of OCC-supervised banks with composite ratings of 4 or 5 declined by 33 percent in 2016 year-over-year after peaking in 2010 and 2011, but the number remains above levels immediately preceding the recession (see figure 9). This decline is attributable to positive trends in the overall condition and risk management practices of OCC-supervised banks and because of M&A activity.

Figure 9: Number of Banks Rated 4 or 5



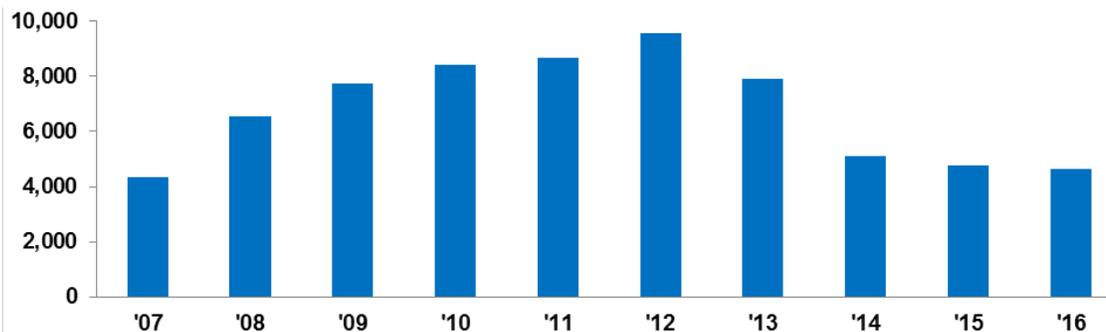
Source: OCC

Note: All data are as of year-end.

Outstanding MRA Concerns Continue to Decline

The OCC communicates supervisory concerns to a bank's board and management in the form of MRAs. Supervisory concerns include practices that deviate from sound governance, internal control, or risk management principles.¹¹ Such deviations, if not addressed appropriately, could adversely affect a bank's condition or risk profile, result in violations of laws or regulations, or result in EAs. The number of outstanding MRAs peaked in 2012 and declined through year-end 2016 to the lowest level since 2007 (see figure 10).

Figure 10: Number of MRA Concerns Outstanding



Source: OCC

Note: All data are as of year-end.

As of December 31, 2016, the top five MRA categories based on examination area for community and midsize banks were credit (33 percent), bank IT (22 percent), enterprise governance (17 percent), BSA/AML (10 percent), and capital markets (6 percent). For large banks, the top five MRA categories

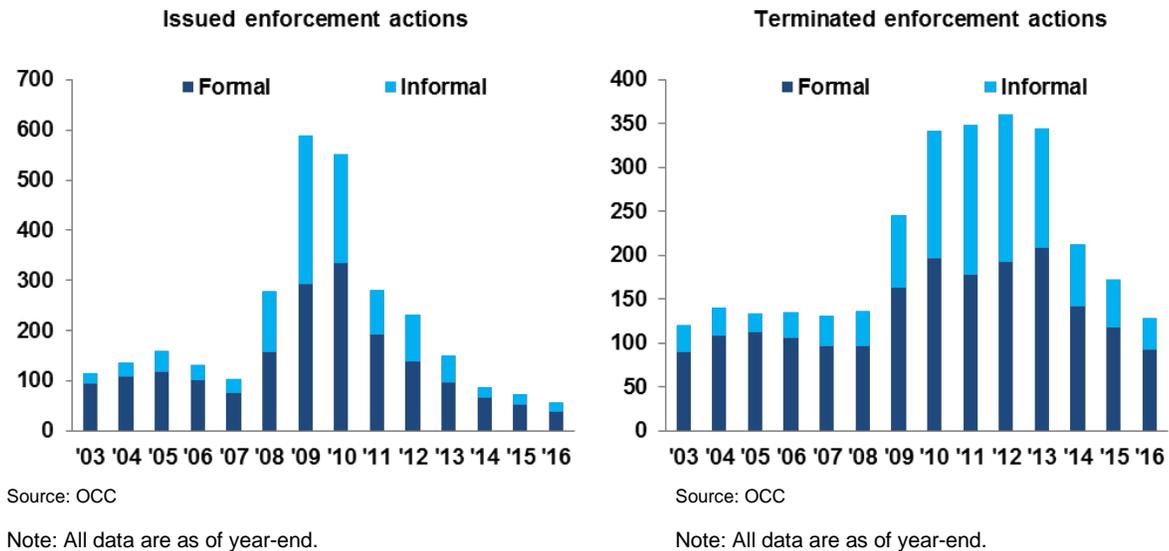
¹¹ OCC Bulletin 2014-52, "Matters Requiring Attention: Updated Guidance," October 30, 2014.

based on examination area were credit (24 percent), BSA/AML (19 percent), capital markets (13 percent), enterprise governance (11 percent), and bank IT (9 percent).

Enforcement Actions Against Banks Continue to Decline

The OCC uses EAs to address more acute problems or weaknesses requiring corrective measures. Informal EAs include commitment letters, memorandums of understanding, and approved safety and soundness plans. Formal EAs are disclosed to the public and include cease-and-desist orders, consent orders, capital directives, Prompt Corrective Action directives, and formal agreements. Generally, the OCC may take formal EAs for violations of laws or regulations; unsafe or unsound practices; or violations of final orders, conditions imposed in writing, or written agreements entered into with the OCC. The number of EAs issued by the OCC against banks has steadily declined since 2012 (see figure 11), reflecting overall improvement in banks’ financial conditions and risk management practices. Even so, compliance or operational failures have resulted in a number of recent EAs. These EAs addressed a lack of appropriate governance, oversight, and risk management systems and controls. As with new issuances, the number of terminated (resolved) EAs has declined since 2012.

Figure 11: OCC Enforcement Actions Against Banks



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