

United States Government Accountability Office Report to Congressional Addressees

December 2015

DODD-FRANK REGULATIONS

Impacts on Community Banks, Credit Unions and Systemically Important Institutions

Accessible Version

GAO Highlights

Highlights of GAO-16-169, a report to congressional addressees

Why GAO Did This Study

The 2010 Dodd-Frank Act requires or authorizes various federal agencies to issue rules to implement reforms intended to strengthen the financial services industry. The act, as amended, includes a provision for GAO to annually study these regulations. This report examines (1) the regulatory analyses federal agencies conducted in Dodd-Frank Act rulemakings and interagency coordination in the rulemaking process; (2) the possible impact of selected Dodd-Frank Act provisions and related rules on community banks and credit unions; and (3) the possible impact of selected Dodd-Frank Act provisions and their implementing rules on financial market stability.

GAO reviewed Federal Register releases for 26 Dodd-Frank Act rules that became effective July 23, 2014-July 22, 2015 to determine if agencies conducted the required regulatory analyses and coordination. Separately, GAO examined nine Dodd-Frank Act rules that were effective as of October 2015 for their impact on community banks and credit unions. GAO chose these rules because regulators and others expected them to affect these institutions. GAO analyzed data on community banks and credit unions from 2010 to 2015, reviewed studies, and interviewed staff from federal financial agencies and market participants. Additionally, GAO developed indicators on the impact of systemic risk-related provisions and rules and conducted an economic analysis to assess the act's impact on large bank holding companies.

Regulators provided technical comments, which were incorporated as appropriate.

View GAO-16-169. For more information, contact Lawrance Evans, Jr. at (202) 512-8678 or evansl@gao.gov.

DODD-FRANK REGULATIONS

Impacts on Community Banks, Credit Unions and Systemically Important Institutions

What GAO Found

Federal financial agencies conducted required regulatory analyses for rules issued pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) and also reported required coordination. These agencies also addressed key elements of Office of Management and Budget guidance for conducting cost-benefit analyses for rules considered major—rules likely to result in an annual impact on the economy of \$100 million or more, among other things.

With regard to select Dodd-Frank Act rules expected to have impacts on community banks and credit unions, community banks, credit unions, and industry associations GAO interviewed cited an increase in compliance burden associated with these rules. This included increases in staff, training, and time allocation for regulatory compliance and updates to compliance systems. Some of these industry officials also reported a decline in specific business activities, such as loans that are not qualified mortgages, due to fear of litigation or not being able to sell those loans to secondary markets. The results of surveys we reviewed suggest that there have been moderate to minimal initial reductions in the availability of credit among those responding to the various surveys and regulatory data to date have not confirmed a negative impact on mortgage lending. However, these results do not necessarily rule out significant effects or the possibility that effects may arise in the future. Federal financial regulators are conducting retrospective analyses of Dodd-Frank Act rules on small entities. GAO developed indicators associated with resources used to comply with regulations and with business lines that may be affected by Dodd-Frank Act regulations to provide baselines against which to monitor future trends. For example, GAO's indicators suggest that residential mortgage loans as a fraction of assets have generally grown for banks of all sizes and for some smaller credit unions but have decreased for larger credit unions. However, changes in GAO's indicators may reflect factors other than the influence of Dodd-Frank Act rules, such as consumer demand for credit.

The full impact of the Dodd-Frank Act remains uncertain because many of its rules have yet to be implemented and insufficient time has passed to evaluate others. Using recently released data, GAO updated indicators from its prior reports that monitor key risk characteristics of large U.S. bank holding companies, and added new indicators that monitor interconnectedness. Although changes in the indicators are not evidence of causal links to the act's provisions, some indicators suggest companies' leverage generally decreased and liquidity generally improved since the act's passage. GAO's updated regression analysis suggests that the act has had little effect on the funding costs of these companies and may be associated with improvements in some measures of their safety and soundness. Indicators associated with the act's swap reforms suggest that holding companies have been requiring their counterparties to post a greater amount of collateral against derivatives contracts. GAO also developed indicators to monitor key risk characteristics of nonbank financial companies designated for supervision by the Board of Governors of the Federal Reserve System. Because few rules for these companies have been finalized or implemented, these indicators provide a baseline against which to monitor future trends.

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Abbreviations

AIG	American International Group, Inc.
APA	Administrative Procedure Act
ATR/QM	Ability to Repay and Qualified Mortgage Standards
Call Reports	Reports of Condition and Income
CDS	credit default swap
CFPB	Consumer Financial Protection Bureau
CFTC	Commodity Futures Trading Commission
CRA	Congressional Review Act
CUNA	Credit Union National Association
Dodd-Frank Act	Dodd-Frank Wall Street Reform and Consumer
	Protection Act
E.O.	executive order
EGRPRA	Economic Growth and Regulatory Paperwork
	Reduction Act of 1996
FDIC	Federal Deposit Insurance Corporation
Federal Reserve	Board of Governors of the Federal Reserve System
FFEIC	Federal Financial Institutions Examination Council
FHFA	Federal Housing Finance Agency
FSOC	Financial Stability Oversight Council
GECC	General Electric Capital Corporation
G-SIB	globally systemically important bank
HUD	Department of Housing and Urban Development
ICBA	Independent Community Bankers of America
MetLife	MetLife, Inc.
NCUA	National Credit Union Administration
000	Office of the Comptroller of the Currency
OMB	Office of Management and Budget
PRA	Paperwork Reduction Act of 1995
Prudential	Prudential Financial, Inc.
RESPA	Real Estate Settlement Procedures Act
RFA	Regulatory Flexibility Act
SEC	Securities and Exchange Commission
SIFI	systemically important financial institution
TILA	Truth in Lending Act
Treasury	Department of the Treasury
TRID	TILA-RESPA Integrated Disclosure
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U.S. GOVERNMENT ACCOUNTABILITY OFFICE

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December 30, 2015

Congressional Addressees

In 2010, Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) in response to the 2007–2009 financial crisis that disrupted the U.S. financial system.¹ Under the Dodd-Frank Act, federal agencies are directed or have the authority to issue hundreds of regulations to implement the act's provisions. As agencies continue to develop and implement the regulations, some industry associations and others have reported on the potential impact, individually and cumulatively, on financial markets and nonfinancial institutions. Although the Dodd-Frank Act exempts small institutions, such as community banks and certain credit unions, from several of its provisions, and authorizes regulators to provide small institutions with relief from certain regulations, it also contains provisions that impose additional restrictions and compliance costs on these institutions.²

Agencies normally must comply with various federal rulemaking requirements as they draft and implement regulations. For example, many rulemakings are substantive and are generally subject to the notice and comment requirements of the Administrative Procedure Act (APA), and many rulemakings must include some form of regulatory analysis, which provides a formal way of organizing evidence to help in understanding the potential effects of new regulations.³ Certain statutes and executive orders require varying regulatory analyses, and the extent

³Pub. L. No. 89-554, § 553, 80 Stat. 378, 383 (1966) (codified at 5 U.S.C. § 553).

¹Pub. L. No. 111-203, 124 Stat.1376 (2010). We identified 236 provisions of the act that require regulators to issue rulemakings. See GAO, *Financial Regulatory Reform: Regulators Have Faced Challenges Finalizing Key Reforms and Unaddressed Areas Pose Potential Risks*, GAO-13-195 (Washington, D.C.: Jan. 23, 2013).

²Although no commonly accepted definition of a community bank exists, the term often is associated with smaller banks (e.g., under \$1 billion in assets) that provide relationship banking services to the local community and have management and board members who reside in the local community. In this report, we generally define community banks as insured depository institutions that are not credit unions with less than \$10 billion in total assets. We also include in our analysis federally insured credit unions with less than \$10 billion in total assets. (The Dodd-Frank Act exempts, or provides possible relief for certain small institutions from a number of its provisions based on that threshold.)

to which independent regulatory agencies, such as some of the federal financial regulators (financial regulators), are subject to the requirements varies.⁴ For example, Executive Order (E.O.) 12,866 requires executive federal agencies to assess costs and benefits of proposed regulatory action and any alternatives.⁵ This order does not apply to independent regulatory agencies such as banking, securities, or futures regulators, or the Bureau of Consumer Financial Protection (commonly known as the Consumer Financial Protection Bureau, or CFPB). However, the CFPB has a separate requirement under the Act to consider the potential benefits and costs to consumers and covered persons as part of a rulemaking under a federal consumer financial law.⁶

Section 1573(a) of the Department of Defense and Full-Year Continuing Appropriations Act of 2011 amends the Dodd-Frank Act and includes a provision for us to annually review financial services regulations, including

⁴Independent regulatory agencies are identified as such in the Paperwork Reduction Act. They include, but are not limited to, the agencies to which we refer as federal financial regulators—the Board of Governors of the Federal Reserve System, Bureau of Consumer Financial Protection, Commodity Futures Trading Commission, Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, National Credit Union Administration, and Securities and Exchange Commission. 44 U.S.C. § 3502(5). In contrast to independent regulatory agencies, executive agencies are cabinet departments and other agencies that answer directly to the President.

⁵E.O. 12,866, 58 Fed. Reg. 51,735 (Sept. 30, 1993). For significant rules, the order requires agencies to prepare a detailed regulatory (or economic) analysis of anticipated benefits and costs of the regulation and the benefits and costs of potentially effective and reasonably feasible alternatives. More recently, E.O. 13,563 supplemented E.O. 12,866, in part by incorporating its principles, structures, and definitions. E.O.13,563, 76 Fed. Reg. 3,821 (Jan. 18, 2011). E. O. 12,866 contains 12 principles of regulation that direct agencies to perform specific analyses to identify the problem to be addressed, assess its significance, assess the benefits and costs of the intended regulatory objective, and base decisions on the best reasonably obtainable information available.

⁶Pub. L. No. 111-203, § 1022(b)(2)(A)(i), 124 Stat. 1376, 1980 (2010) (codified at 12 U.S.C. § 5512(b)(2)(A)(i)).

those of CFPB.⁷ We have previously issued four reports under this mandate.⁸ This report examines the

- regulatory analyses conducted by the federal financial regulators and the Department of the Treasury (Treasury) in their Dodd-Frank Act rulemakings, including their assessments of which rules they considered to be major rules, and coordination between and among federal regulators on these rulemakings;⁹
- possible impact of promulgated Dodd-Frank Act provisions on community banks and credit unions and their business activities; and
- possible impact of selected Dodd-Frank Act provisions and their implementing regulations on financial market stability.

To examine the regulatory analyses and coordination conducted by the federal financial regulators and Treasury, we focused our analysis on the final rules issued pursuant to the Dodd-Frank Act that became effective from July 23, 2014, through July 22, 2015, a total of 26 rules (see app.

⁸GAO, Dodd-Frank Act Regulations: Implementation Could Benefit from Additional Analyses and Coordination, GAO-12-151 (Washington, D.C.: Nov. 10, 2011); Dodd-Frank Act Regulations: Agencies' Efforts to Analyze and Coordinate Their Rules, GAO-13-101 (Washington, D.C.: Dec. 18, 2012); Dodd-Frank Regulations: Agencies Conducted Regulatory Analyses and Coordinated but Could Benefit from Additional Guidance on Major Rules, GAO-14-67 (Washington, D.C.: Dec. 11, 2013); and Dodd-Frank Regulations: Regulators' Analytical and Coordination Efforts, GAO-15-81 (Washington, D.C.: Dec. 18, 2014).

⁹As defined by the Congressional Review Act (CRA), a major rule is generally one that the Office of Management and Budget finds has resulted in or is likely to result in (1) an annual effect on the economy of \$100 million or more; (2) a major increase in costs or prices; or (3) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S.-based enterprises to compete with foreign-based enterprises in domestic and export markets. Pub. L. No. 104-121, tit. II, § 251, 110 Stat. 868 (1996) (codified at 5 U.S.C. § 804(2)).

⁷Pub. L. No. 112-10, § 1573(a), 125 Stat. 38, 138-39 (codified at 12 U.S.C. § 5496b). We are to analyze (1) the impact of regulation on the financial marketplace, including the effects on the safety and soundness of regulated entities, cost and availability of credit, savings realized by consumers, reductions in consumer paperwork burden, changes in personal and small business bankruptcy filings, and costs of compliance with rules, including whether relevant federal agencies are applying sound cost-benefit analysis in promulgating rules; (2) efforts to avoid duplicative or conflicting rulemakings, information requests, and examinations; and (3) other matters related to the operations of financial services regulations deemed appropriate by the Comptroller General. The focus of our reviews is on the financial regulations promulgated pursuant to the Dodd-Frank Act.

II).¹⁰ We reviewed federal statutes, regulations, and GAO studies on these rules as well as *Federal Register* releases that contain information on the regulatory analyses conducted by agencies and their coordination efforts. Using GAO's Federal Rules database, we found that 6 of the 15 rules were classified by the Office of Management and Budget (OMB) as major rules under the Congressional Review Act (CRA). We developed a data collection instrument to compare and assess the regulatory analysis conducted for the major rules against the principles outlined in OMB Circular A-4, which provides guidance to federal agencies on the development of regulatory analysis.¹¹ We also reviewed the Dodd-Frank Act and *Federal Register* releases to identify the interagency coordination or consultation requirements as required by the act for the 26 rules in our scope.

To assess the possible impact of the Dodd-Frank Act on community banks and credit unions, we used our September 2012 report, which identified provisions expected to affect some or all community banks and credit unions, to identify select final rules that became effective by October 2015.¹² While we started with a larger population of rules, we specifically reviewed nine final rules which were identified by the community banks and credit unions we interviewed as potentially having an impact for the purpose of this report. We reviewed the *Federal Register* releases for these final rules and relevant material on the act and the final rules, as well as five studies by federal and state regulators, industry associations, and academics on the potential impact of the final rules on community banks and credit unions. All but one study we reviewed relied on surveys of banks, usually contacted through banking association member lists. The final study consisted of a study of all

¹²GAO, Community Banks and Credit Unions: Impact of Dodd-Frank Act Depends Largely on Future Rulemakings, GAO-12-881 (Washington, D.C.: Sept.13, 2012).

¹⁰We use rules, regulations, or rulemakings generally to refer to *Federal Register* notices of agency action pursuant to the Dodd-Frank Act, including final and interim final rules. These terms do not include orders, guidance, notices, interpretations, corrections, or policy statements. With this and our past four reports, we have reviewed all Dodd-Frank Act rules in effect as of July 22, 2015. See GAO-12-151, GAO-13-101, GAO-14-67, and GAO-15-81.

¹¹As independent regulatory agencies that are not required to follow the economic analysis requirements of E.O. 12,866, the financial regulatory agencies also are not required to follow OMB Circular A-4. However, Circular A-4 is an example of best practices for agencies to follow when conducting regulatory analyses, and the financial regulatory agencies have told us that they follow the guidance in spirit.

payment card networks. We conducted semi-structured interviews with federal regulators, representatives from the Independent Community Bankers of America (ICBA), the Credit Union National Association (CUNA), the National Federation of Independent Business, the U.S. Chamber of Commerce, and a non-generalizable, purposive sample of four state credit union and community bank associations and eight community banks and credit unions about the impact of the final rules on community banks and credit unions. Between July and September 2015, we interviewed representatives from two state community banking and two state credit union associations from Georgia, Illinois, Louisiana, and Pennsylvania. We also interviewed representatives from four community banks and four credit unions that fell in each of the four asset categories: under \$250 million, between \$250 million and \$500 million, between \$500 million and \$1 billion, and between \$1 billion and \$10 billion. While the information we obtained from the interviews provides useful insights, it cannot be used to make generalizations about the experiences of all community banks and credit unions since the selection of interviewees relied on non-probability sampling methods. Nevertheless, we purposely sought to achieve variety in our sample as a way to gain access to a range of experiences within the target population.

We also analyzed bank guarterly Reports of Condition and Income (Call Reports) data for depository institutions and credit unions obtained from the Federal Financial Institutions Examination Council (FFIEC) and National Credit Union Administration (NCUA), respectively, from the first guarter of 2006 through the second guarter of 2015. We used these data to construct indicators of the cumulative costs associated with complying with Dodd-Frank Act regulations, including numbers of employees per \$1 million in assets, non-interest expenses as a percentage of assets, and earnings as a percentage of assets.¹³ We used the same data to construct indicators associated with business lines that may be affected by Dodd-Frank Act regulations, including residential mortgage lending as a percentage of assets. We assessed the reliability of the FFIEC and NCUA data by reviewing relevant documentation and electronically testing the data for missing values, outliers, and invalid values, and we found the data to be sufficiently reliable for the purpose of constructing indicators associated with compliance costs and business lines for banks

¹³Non-interest expenses are for resources other than borrowed funds and generally include the costs of resources (such as compliance staff or consulting services) banks and credit unions are likely to employ to comply with regulations.

and credit unions. Although we analyzed the impact of a number of specific Dodd-Frank Act provisions on community banks and credit unions, assessing the extent to which these provisions or their related regulations should apply to such institutions was beyond the scope of our work.

To analyze the impact of the Dodd-Frank Act on financial market stability, we updated several indicators developed in our prior reports with data through the second quarter of 2015.¹⁴ We also created new indicators for banks that are systemically important financial institutions (bank SIFIs) and nonbank financial institutions designated by the Financial Stability Oversight Council (FSOC) for supervision by the Board of Governors of the Federal Reserve (Federal Reserve), or designated nonbanks.¹⁵ We updated indicators monitoring changes in size, complexity, leverage, and liquidity of bank SIFIs and added new indicators of interconnectedness, which captures direct or indirect linkages between financial institutions that may transmit distress from one institution to another. We updated our econometric analysis estimating changes in measures of the (1) funding cost for bank SIFIs and (2) safety and soundness of bank SIFIs. Since we began developing and tracking indicators for bank SIFIs, FSOC has designated four nonbank institutions for enhanced supervision by the Federal Reserve. As such, we added new indicators associated with the size, interconnectedness, leverage, and liquidity of these institutions. Finally, we updated our indicators monitoring the extent to which certain swap reforms are consistent with the act's goals of reducing risk.¹⁶ For those parts of our methodology that involved the analysis of computerprocessed data from Bloomberg, the Federal Reserve Bank of Chicago, the Federal Reserve, the National Information Center, and the Bureau of Economic Analysis, we assessed the reliability of these data by reviewing relevant documentation; electronically testing the data for missing values,

¹⁴See GAO-13-101, GAO-14-67, and GAO-15-81.

¹⁵The Dodd-Frank Act does not use "systemically important financial institution." Academics and other experts commonly use this term to refer to bank holding companies with \$50 billion or more in total consolidated assets and nonbank financial companies designated by the FSOC for Federal Reserve supervision and subject to enhanced prudential standards under the Dodd-Frank Act. For this report, we refer to these bank and nonbank financial companies as bank SIFIs and designated nonbanks, respectively.

¹⁶Swaps include interest rate swaps, commodity-based swaps, and broad-based credit default swaps. Security-based swaps include single-name and narrow-based credit default swaps and equity-based swaps.

outliers, and invalid values; and interviewed Federal Reserve staff about Federal Reserve's data. We determined the data were sufficiently reliable for our purposes—monitoring changes in SIFI characteristics, estimating changes in the cost of credit bank SIFIs provided and their safety and soundness, and assessing the amount of margin collateral that over-thecounter derivatives counterparties used.

We conducted this performance audit from April 2015 to December 2015 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background Federal Prudential In the banking industry, the specific regulatory configuration generally depends on the type of charter the banking institution chooses. Regulators Depository institution charter types include commercial banks, which originally focused on the banking needs of • businesses but over time have broadened their services; thrifts, which include savings associations and savings and loans, and • were originally created to serve the needs-particularly the mortgage needs-of those not served by commercial banks; and credit unions, which are member-owned cooperatives run by member-• elected boards with an historical emphasis on serving people of modest means.¹⁷ All depository institutions that have federal deposit insurance have a federal prudential regulator that generally may issue regulations and take enforcement actions against institutions within its jurisdiction. These regulators also oversee depository institutions for safety and soundness purposes and compliance with other laws and regulations. Holding companies that own or control a bank or thrift are subject to Federal

¹⁷Unless otherwise indicated, we use the term "banks" to refer to commercial banks and thrifts in this report.

Reserve supervision. The Bank Holding Company Act of 1956 and the Home Owners' Loan Act set forth regulatory frameworks for bank holding companies and thrift holding companies, respectively.¹⁸ The Dodd-Frank Act made the Federal Reserve the regulator of thrift holding companies and amended the Home Owners' Loan Act and the Bank Holding Company Act to create certain similar requirements for bank and thrift holding companies.¹⁹ The prudential regulators are identified in table 1.

Agency	Basic function
Office of the Comptroller of the Currency	Charters and supervises national banks, federal savings associations (also known as federal thrifts), and federally chartered branches and agencies of foreign banks.
Board of Governors of the Federal Reserve System	Supervises state-chartered banks that opt to be members of the Federal Reserve System, bank and thrift holding companies, and the nondepository institution subsidiaries of those institutions, and nonbank financial companies designated by the Financial Stability Oversight Council for enhanced supervision. ^a Also supervises Edge corporations pursuant to the Edge Act and certain designated financial market utilities (such as a clearinghouse) pursuant to the Dodd-Frank Act. ^b Also supervises state- licensed branches and agencies of foreign banks and regulates the U.S. nonbanking activities of foreign banking organizations.
Federal Deposit Insurance Corporation	Supervises state-chartered banks that are not members of the Federal Reserve System, as well as state savings associations; insures the deposits of all banks and thrifts that are approved for federal deposit insurance; resolves all failed insured banks and thrifts and, if appointed receiver by the Secretary of the Treasury, has authority to resolve certain large bank holding companies and nonbank financial companies.
National Credit Union Administration	Charters and supervises federally chartered credit unions and insures savings in federal and most state-chartered credit unions.
Source: GAO. GAO-16-169	^a The Dodd-Frank Act does not use the term "systemically important financial institution" (SIFI). This term is commonly used by academics and other experts to refer to bank holding companies with \$50 billion or more in total consolidated assets and nonbank financial companies designated by the Financial Stability Oversight Council for Federal Reserve supervision and enhanced prudential standards under the Dodd-Frank Act.
	¹⁸ Bank Holding Company Act of 1956, Pub. L. No. 84-511, 70 Stat. 133 (codified as amended at 12 U.S.C. §§ 1841-1852); Home Owners' Loan Act, Pub. L. No. 73-43, 48 Stat. 128 (1933) (codified as amended at 12 U.S.C. §§ 1461-1470). Bank holding companies own or control a bank, as defined in the Bank Holding Company Act. 12 U.S.C. § 1841(a)(1),(c). Savings and loan holding companies directly or indirectly control a savings association. 12 U.S.C. § 1467a(a)(1)(D).
	¹⁹ For a more detailed discussion of the regulatory framework for bank holding companies and savings and loan holding companies, see GAO, <i>Bank Holding Company Act:</i> <i>Characteristics and Regulation of Exempt Institutions and the Implications of Removing</i> <i>the Exemptions</i> , GAO-12-160 (Washington, D.C.: Jan. 19, 2012).

Table 1: Federal Prudential Regulators and Their Basic Prudential Functions, as of November 2015

	^b Edge Act corporations are established as separate legal entities and may conduct a range of international banking and other financial activities in the United States. Pub. L. No. 66-106, 41 Stat. 378 (1919) (codified as amended at 12 U.S.C. § 611).
Securities and Futures Regulators	The securities and futures markets are regulated under a combination of self-regulation (subject to oversight by the appropriate federal regulator) and direct oversight by the Securities and Exchange Commission (SEC) and Commodity Futures Trading Commission (CFTC), respectively. ²⁰ SEC regulates the securities markets, including participants such as securities exchanges, broker-dealers, investment companies, corporate issuers, and certain investment advisers and municipal advisors. ²¹ SEC's mission is to protect investors; maintain fair, orderly, and efficient markets; and facilitate capital formation. SEC also oversees self-regulatory organizations—including securities exchanges, clearing agencies, and the Financial Industry Regulatory Authority. These organizations have responsibility for overseeing securities markets and their members; establishing the standards under which their members conduct business; monitoring business conduct; and bringing disciplinary actions against members for violating applicable federal statutes, SEC's rules, and their own rules. ²²
	CFTC is the primary regulator of futures markets, including futures exchanges and intermediaries, such as futures commission merchants. ²³ CFTC's mission is to protect market users and the public from fraud, manipulation, abusive practices, and systemic risk related to derivatives subject to the Commodity Exchange Act, and to foster open, competitive, and financially sound futures markets. CFTC oversees the registration of intermediaries and relies on self-regulatory organizations, including the
	²⁰ State government entities also oversee certain securities activities.
	²¹ Some smaller investment advisers are regulated by state government entities.

²²In the securities markets, self-regulatory organizations, such as a national securities exchange or association, are regulators that have responsibility for much of the day-to-day oversight of the securities markets and broker-dealers under their jurisdiction.

²³Futures commission merchants are individuals, associations, partnerships, corporations, and trusts that solicit or accept orders for the purchase or sale of a commodity for future delivery, among other products, on or subject to the rules of any exchange and that accept payment from or extend credit to those whose orders are accepted. 7 U.S.C. § 1a(28). Firms and individuals trading futures with the public or giving advice about futures trading must be registered with the National Futures Association, the self-regulatory organization for the U.S. futures industry.

	futures exchanges and the National Futures Association, to establish and enforce rules for member behavior. CFTC and SEC jointly regulate security futures (generally futures on single securities and narrow-based security indexes). In addition, Title VII of the Dodd-Frank Act expands regulatory responsibilities for CFTC and SEC by establishing a new regulatory framework for swaps. The act authorizes CFTC to regulate swaps and SEC to regulate security-based swaps with the goals of reducing risk, increasing transparency, and promoting market integrity in the financial system. CFTC and SEC share authority over mixed swaps— security-based swaps that have a commodity component.
Consumer Financial Protection Bureau	The Dodd-Frank Act transferred consumer protection oversight and other authorities regarding certain consumer financial protection laws and institutions from multiple federal regulators to CFPB, creating a single federal entity to help, among other things, foster consistent enforcement of federal consumer financial laws. ²⁴ The Dodd-Frank Act charged CFPB with the following responsibilities, among others:
	 ensuring that consumers are provided with timely and understandable information to make responsible decisions about financial transactions; ensuring that consumers are protected from unfair, deceptive, or abusive acts and practices, and from discrimination; monitoring compliance with federal consumer financial law and taking appropriate enforcement action to address violations; identifying and addressing outdated, unnecessary, or unduly burdensome regulations; ensuring that federal consumer financial law is enforced consistently, without regard to the status of a person as a depository institution, in order to promote fair competition;

enforcement authorities transferred on July 21, 2011. CFPB has primary supervision and enforcement authority for federal consumer protection laws for depository institutions with more than \$10 billion in assets and their affiliates. The prudential regulators—the Federal Reserve, Office of the Comptroller of Currency, Federal Deposit Insurance Corporation, and NCUA—that previously supervised and examined all depository institutions and credit unions for consumer protection, retain supervision and enforcement authority for certain consumer protection laws for those depository institutions with more than \$10 billion in assets and their affiliates, and they have primary supervision and enforcement authority for consumer financial laws for institutions that have \$10 billion or less in assets.

- ensuring that markets for consumer financial products and services operate transparently and efficiently to facilitate access and innovation; and
- conducting financial education programs.

Furthermore, the Dodd-Frank Act gave CFPB consumer protection supervisory authority over certain nondepository institutions, including, among others, certain mortgage market participants, private student loan lenders, and payday loan lenders.²⁵

Financial Stability Oversight Council

The Dodd-Frank Act also established the FSOC to identify risks to the financial stability of the United States, promote market discipline, and respond to emerging threats to the stability of the U.S. financial system. FSOC consists of 10 voting and 5 nonvoting members and is chaired by the Secretary of the Treasury. The 10 voting members are the heads of Treasury, CFPB, CFTC, Federal Deposit Insurance Corporation (FDIC), the Federal Reserve, the Federal Housing Finance Agency (FHFA), NCUA, Office of the Comptroller of the Currency (OCC), and SEC, and an independent member with insurance expertise. The Dodd-Frank Act also established the Office of Financial Research in Treasury to support FSOC and its member agencies by improving the guality, transparency, and accessibility of financial data and information; conducting and sponsoring research related to financial stability; and promoting best practices in risk management.²⁶ The director of the Office of Financial Research is a nonvoting member of FSOC, along with the director of the Federal Insurance Office, and designated state insurance, securities, and banking regulators.

 $^{^{25}}$ The Dodd-Frank Act also gave CFPB supervisory authority over "larger participants" in markets for consumer financial products or services as CFPB defines by rule. Pub. L. No. 111-203, § 1024(a)(1)(B), 124 Stat. 1376, 1987 (2010) (codified at 12 U.S.C § 5514(a)(1)(B)). Title X also contains additional authorities and responsibilities for CFPB that are not outlined here.

²⁶§§ 153-154, 124 Stat. at 1415-18 (codified at 12 U.S.C. §§ 5343-5344). For additional information on FSOC and the Office of Financial Research see GAO, *Financial Stability Oversight Council: Status of Efforts to Improve Transparency, Accountability, and Collaboration*, GAO-14-873T (Washington, D.C.: Sept. 17, 2014) and *Financial Stability: New Council and Research Office Should Strengthen the Accountability and Transparency of Their Decisions*, GAO-12-886 (Washington, D.C.: Sept. 11, 2012).

Dodd-Frank Act Regulations

The Dodd-Frank Act authorizes certain agencies to adopt regulations to implement the act's provisions and, in some cases, gives the agencies little or no discretion in deciding how to implement the provisions.²⁷ However, other rulemaking provisions in the act are discretionary in nature, stating that (1) certain agencies may issue rules to implement particular provisions or that the agencies may issue regulations that they decide are "necessary and appropriate," or (2) agencies must issue regulations to implement particular provisions but have some level of discretion as to the substance of the regulations. As a result, the agencies may decide to promulgate rules for all, some, or none of the provisions, and often have broad discretion to decide what these rules will contain. Many of the provisions in the Dodd-Frank Act target the largest and most complex financial institutions, and regulators have noted that much of the act is not meant to apply to community banks. As such, the act exempts certain small institutions with \$10 billion or less in total assets from a number of its provisions and in other provisions authorizes regulators to provide smaller institutions with relief in a number of areas. However, the act is comprehensive and far-reaching and includes some provisions that impose additional requirements on small insured depository institutions. In our September 2012 report, we identified Dodd-Frank Act provisions expected by federal regulators, state regulatory associations, and industry associations to impact community banks and credit unions. Almost 6,200 (about 98 percent) FDIC-insured banks and thrifts had less than \$10 billion in assets in 2015.²⁸ Of those, almost 61 percent had less than \$250 million in total assets. The vast majority of credit unions had less than \$10 billion in total assets in 2015.²⁹ Furthermore, around 75 percent of the credit unions had less than \$100 million in total assets.

²⁷The Dodd-Frank Act gives several different agencies authority to write rules for various provisions—in some cases more than one agency must write implementing rules jointly; in other cases a single agency has authority to write rules. See Appendix II.

²⁸Call report data provided by FDIC as of the third quarter 2015.

²⁹GAO analysis of SNL Financial data as of the second quarter, 2015. SNL Financial is a private service that aggregates and disseminates data from quarterly regulatory reports, among other information. We included commercial banks and thrifts in these data.

Requirements for Regulatory Analyses in Rulemaking and Retrospective Review

Several regulatory analysis requirements may apply to independent regulators, including the financial regulators. The regulators are subject to compliance with various requirements as part of their rulemakings, such as those in the Paperwork Reduction Act of 1995 (PRA), the Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996, and the CRA.

- PRA requires agencies to minimize the paperwork burden of their rulemakings and evaluate whether a proposed collection is necessary for the proper performance of the functions of the agency. Under PRA, agencies include this analysis in the notice of proposed rulemaking and obtain approval for an information collection from the OMB.³⁰
- RFA requires that federal agencies consider the impact on small entities of certain regulations they issue and, in some cases, alternatives to lessen regulatory burden on small entities.³¹ Although RFA, through reference to the Small Business Act, generally defines the term "small entity," the statute also sets forth a procedure that permits agencies to formulate their own definitions. For example, NCUA defines small entities to include federally insured credit unions with less than \$100 million in assets as opposed to other agencies' reliance on the Small Business Administration's definition of a small depository institution (a commercial bank, thrift, or credit union with \$550 million or less in total assets) to define a small depository institution that falls under that RFA asset threshold.
- In some cases, PRA and RFA also require agencies to assess various impacts and costs, respectively, of their rules. However, RFA, like PRA, does not require the agencies to conduct formal benefit and cost analyses.
- The Small Business Regulatory Enforcement Fairness Act of 1996, which amended RFA, generally includes judicial review of compliance with certain provisions of RFA and requires agencies to develop one or more small entity compliance guides for each rule or group of related rules for which the agency must prepare a final regulatory

³⁰Paperwork Reduction Act of 1995, Pub. L. No. 104-13, 109 Stat. 163 (codified as amended at 44 U.S.C. §§ 3501-3520).

³¹Regulatory Flexibility Act, Pub. L. No. 96-354, 94 Stat. 1164 (1980) (codified as amended at 5 U.S.C. §§ 601-612). Under RFA, agencies, including financial regulators, generally must prepare a regulatory flexibility analysis in connection with certain proposed and final rules, unless the head of the issuing agency certifies that the proposed rule would not have a significant economic impact on a substantial number of small entities.

flexibility analysis.³² In addition, when an initial regulatory flexibility analysis is required in connection with a proposed rule, covered agencies like CFPB must convene a review panel and obtain advice and recommendations from representatives of small entities on the effects of the proposed rule on small entities.³³ The initial regulatory flexibility analyses must describe the number of small entities to which the proposed rule would apply, projected reporting and recordkeeping requirements of the proposed rule, any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities, and any projected increase in the cost of credit for small entities.

 Under CRA, before rules can take effect, agencies must submit their rules to Congress and the Comptroller General, and rules deemed major by OMB generally may not become effective until 60 days after the rules are submitted.³⁴

In addition to these requirements, authorizing or other statutes require certain financial regulators to consider specific benefits, costs, and impacts of their rulemakings (see table 2). However, like PRA and RFA, none of these authorizing statutes prescribe a benefit and cost analysis that includes the identification and assessment of alternatives.

³³5 U.S.C. § 609(b).

³²Pub. L. No. 104-121, tit. II, 110 Stat. 847, 857 (codified at 5 U.S.C. § 601 note, §§ 801-808, 15 U.S.C. § 657).

³⁴Pub. L. No. 104-121, tit. II, § 251, 110 Stat. 847, 868 (1996) (codified at 5 U.S.C. §§ 801- 808). CRA requires agencies to submit a report to each house of Congress and the Comptroller General, before rules can become effective. The report must contain (i) a copy of the rule, (ii) a concise general statement relating to the rule, including whether it is a major rule, and (iii) the proposed effective date of the rule. 5 U.S.C. § 801(a)(1)(A). Rules not classified as major take effect as otherwise provided by law after submission to Congress, while rules classified as major take effect on the later of 60 days after Congress receives the rule report, or 60 days after the rule is published in the *Federal Register*, as long as Congress does not pass a joint resolution of disapproval. 5 U.S.C. § 801(a)(3),(4). CRA also includes a provision that we provide a report to Congress for each major rule that includes an assessment of an agency's compliance with the CRA process. We do not analyze or comment on the substance or quality of rulemaking. We must report to each house of Congress by the end of 15 calendar days after a rule's submission or publication date. 5 U.S.C. § 801(a)(2)(A).

Table 2: Authorizing and Other Statutes That Apply to Financial Regulators and Their Implications for Benefit-Cost Considerations

Authorizing or other statute	Implications for agency's consideration of benefits and costs
Commodity Exchange Act	The Commodity Futures Trading Commission (CFTC) must consider the benefits and costs of its action in light of (1) protection of market participants and the public; (2) efficiency, competitiveness, and financial integrity of futures markets; (3) price discovery; (4) sound risk-management practices; and (5) other public interest considerations. ^a
Consumer Financial Protection Act of 2010 (Title X of the Dodd-Frank Act)	The Consumer Financial Protection Bureau (CFPB) must consider the potential benefits and costs of its rules to consumers and entities that offer or provide consumer financial products and services, including potential reductions in consumer access to products or services. ^b CFPB also must consider the impact of proposed rules on insured depository institutions and credit unions with \$10 billion or less in assets, and the impacts on consumers in rural areas. ^c CFPB must consult with the appropriate prudential regulators or other federal agencies prior to proposing a rule and during the comment process regarding consistency with prudential, market or systemic objectives administered by such agencies. ^d When an initial Regulatory Flexibility Act (RFA) analysis is required, CFPB must describe any projected increase in the cost of credit for small entities, any significant alternatives which accomplish the stated objectives of applicable statutes and which minimize any increase in the cost of credit for small entities, and any advice and recommendations of small entity representatives related to such projected increase or significant alternatives. ^e
National Securities Markets Improvement Act of 1996 and the Securities Exchange Act of 1934, as amended	Whenever the Securities and Exchange Commission (SEC) is engaged in rulemaking and is required to consider or determine whether an action is necessary or appropriate in the public interest, the agency must consider, in addition to the protection of investors, whether a rule will promote efficiency, competition, and capital formation. ^f SEC also must consider the impact that any rule promulgated under the Securities Exchange Act of 1934 would have on competition. ^g
Electronic Fund Transfer Act, as amended by the Dodd-Frank Act regarding reasonable fees and rules for payment card transactions	The Board of Governors of the Federal Reserve System must prepare an analysis of the economic impact of regulations that considers the benefits and costs to financial institutions, consumers, and other users of electronic fund transfers. ^h The analysis must address the extent to which additional paperwork would be required, the effects on competition in the provision of electronic banking service among large and small financial institutions, and the availability of such services to different classes of consumers, particularly low-income consumers.
The Riegle Community Development and Regulatory Improvement Act of 1994	Each federal banking agency, when determining the effective date and administrative compliance requirements of new regulations that impose additional reporting, disclosure, or other requirements on insured depository institutions, must consider, consistent with the principles of safety and soundness and the public interest, any administrative burdens the regulations would place on depository institutions or customers of insured depository institutions and the benefits of such regulations. ¹
Source: GAO. GAO-16-169	
	^a Pub. L. No. 67-331, §15(a), 42 Stat. 998 (1922) (codified as amended at 7 U.S.C. § 19(a)).
	^b Pub. L. No. 111-203, § 1022(b)(2)(A)(i), 124 Stat. 1376, 1980-81 (codified at 12 U.S.C. § 5512(b)(2)(A)(i)).
	^c § 1022(b)(2)(A)(ii), 124 Stat. at 1980-81 (codified at 12 U.S.C. § 5512(b)(2)(A)(ii)).
	^d § 1022(b)(2)(B), 124 Stat. at 1981 (codified at 12 U.S.C. § 5512(b)(2)(B)).
	^e § 1100G, 124 Stat. at 2112 (codified at 5 U.S.C. § 603(d)) (amending the RFA).
	^f Pub. L. No. 104-290, § 106(a)-(c), 110 Stat. 3416, 3424 (1996) (codified as amended at 15 U.S.C. §§ 77b(b), 78c(f), 80a-2(c)). Conforming amendments to the Investment Advisers Act of 1940 were

made in section 224 of the Gramm-Leach-Bliley Act..Pub. L. No. 106-102, § 224, 113 Stat. 1338, 1402 (1999) (codified at 15 U.S.C. § 80b-2(c)).

^gPub. L. No. 73-291, § 23(a)(2), 48 Stat. 881 (codified as amended at 15 U.S.C. § 78w(a)(2)). ^h15 U.S.C. § 1693b(a)(2)(B).

ⁱPub. L. No. 103-325, § 302, 108 Stat. 2160, 2214 (codified at 12 U.S.C. § 4802).

In contrast, E.O. 12,866, supplemented by E.O. 13,563, requires executive agencies (which do not include independent regulators such as financial regulators), to the extent permitted by law and where applicable, to provide more formal cost-benefit analyses that (1) assess costs and benefits of available regulatory alternatives and (2) include both quantifiable and qualitative measures of benefits and costs in their analysis, recognizing that some costs and benefits are difficult to quantify. Such analysis, according to OMB, can enable an agency to learn if the benefits of a rule are likely to justify the costs and discover which possible alternatives would yield the greatest net benefit or be most cost-effective.

In 2003, OMB issued Circular A-4 to provide guidance to executive agencies on developing regulatory analysis as required by E.O.12,866.³⁵ The circular defines good regulatory analysis as including a statement of the need for the proposed regulation, an assessment of alternatives, and an evaluation of the costs and benefits of the proposed regulatory actions should be measured and reported. FSOC and Treasury are subject to E.O. 12,866 and Circular A-4. However, as we have reported, some independent agencies consult Circular A-4 and some have revised their internal rulemaking guidance to more fully incorporate OMB's regulatory analysis guidance as we had recommended in our 2011 report on Dodd-Frank Act regulation.³⁶

³⁵Office of Management and Budget, Circular A-4: *Regulatory Analysis* (Washington, D.C.: Sept. 17, 2003). Circular A-4 replaced OMB's best practices guidance issued in 1996 and 2000. E.O. 13,579 encourages independent regulatory agencies to comply with E.O. 13,563. E.O. 13,579, 76 Fed. Reg. 41,587 (July 11, 2011).

³⁶GAO-12-151. We recommended that federal financial regulators more fully incorporate OMB's regulatory analysis guidance into their rulemaking policies. As a result of actions taken, we have closed this recommendation with CFPB, FDIC, OCC, and SEC but not other agencies. Independent regulatory agencies are defined by 44 U.S.C. § 3502(5), which the Dodd-Frank Act revised to include OCC, CFPB, and the Office of Financial Research.

The Economic Growth and Regulatory Paperwork Reduction Act of 1996 (EGRPRA) requires OCC, FDIC, and the Federal Reserve, along with the FFIEC, to review their regulations at least every 10 years to identify outdated, unnecessary, or unduly burdensome regulations and consider how to reduce regulatory burden on insured depository institutions.³⁷ The report from the first EGRPRA review was submitted to Congress in 2007 and the second review is underway.³⁸ The agencies anticipate completing the current EGRPRA review by the end of 2016. NCUA conducts a voluntary review of its regulations on the same cycle and in a manner consistent with the EGRPRA review. Additionally, per NCUA's internal policies, NCUA conducts a review of all of its regulations every 3 years and produces a non-binding memo for its board with suggestions on rules that should be revised or streamlined. In a process separate from EGRPRA, CFPB must conduct an assessment of its significant regulations and publish a report of its review 5 years after the regulations take effect.39

Agencies Conducted Required Regulatory Analysis and Reported Coordinating as Required on Dodd-Frank Act Rulemakings In the *Federal Register* releases of the 26 Dodd-Frank Act rules that we identified and reviewed, the issuing federal agencies conducted the regulatory analyses required by RFA and PRA. The agencies also addressed key elements in OMB's Circular A-4 for six of the rules that were identified to be major, that is, they resulted or are likely to result in an annual impact on the economy of \$100 million or more, a major increase in costs or prices, or significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S.-based enterprises to compete with foreign-based enterprises in domestic or export markets. Additionally, federal agencies reported coordinating on 11 of the 26 rules and were not required to coordinate for the remaining 15 rules.

³⁹12 U.S.C. § 5512(d).

³⁷Pub. L. No. 104-208, § 2222, 110 Stat. 3009, 3009-414 (codified at 12 U.S.C. § 3311(a)).

³⁸ *Joint Report to Congress*, July 31, 2007; Economic Growth and Regulatory Paperwork Reduction Act, 72 Fed. Reg. 62,036 (Nov. 1, 2007).

Agencies Conducted Required Regulatory Analyses

Of the 26 Dodd-Frank Act rules in our scope, 15 were substantive generally subject to public notice and comment under APA—and also required some form of regulatory analysis. These rules were issued individually or jointly by CFPB, CFTC, FDIC, the Federal Reserve, FHFA, Department of Housing and Urban Development (HUD), NCUA, OCC, SEC or Treasury. (See app. II for a list of the regulations in our review).

In examining the regulatory analyses the agencies reported they conducted for the 15 substantive rules, we found the following:

- Agencies conducted the required regulatory analyses. All the agencies we reviewed conducted the regulatory analyses pursuant to RFA for their Dodd-Frank Act rules, when required or applicable. For example, in the final regulatory flexibility analysis for its rule on Nationally Recognized Statistical Rating Organizations, SEC identified significant issues raised by public comments and included responses; it further determined that small entities may be affected by the rule and identified actions it took to minimize the effect on small entities.⁴⁰ The Federal Reserve conducted the flexibility analysis for two of the final rules it issued, although the agency determined that the rules would not have a significant economic impact on a substantial number of small entities. All of the agencies also conducted the analyses required under PRA when required or applicable.
- Agencies issued 6 major rules and addressed key elements in OMB's Circular A-4 for these rules. Of the 15 substantive rules, OMB identified 6 as major rules under CRA. Specifically, SEC issued 5 major rules, and the Federal Reserve, FDIC, FHFA, HUD, OCC, and SEC jointly issued one major rule. Based on our review of all 6 rulemakings, the regulators identified the problems to be addressed by the rule, the potential benefits and costs, the baseline against which they assessed benefits and costs, and the regulatory alternative approaches they considered. They asked for and received public comments on alternatives for all 6 rulemakings. In 4 rulemakings, the regulators provided reasons why they did not quantify them. Regulators did not quantify benefits for all 6 major rules

⁴⁰Nationally Recognized Statistical Rating Organizations, 79 Fed. Reg. 55,078 (Sept. 15, 2014).

because the benefits were qualitative or the economic benefits were difficult to quantify. $^{41}\,$

Agencies Reported Coordinating as Required on Dodd-Frank Act Rulemakings	 The rulemaking agencies coordinated as required by the Dodd-Frank Act for 11 of the 26 regulations we reviewed (see app. III). For the remaining 15 of the 26 rules, the agencies were not required by the Dodd-Frank Act to coordinate. We reviewed the rulemakings to document evidence of required coordination among the agencies and found the following: On three of SEC's rulemakings related to swaps, the agency reported that it coordinated with CFTC and the prudential regulators pursuant to Title VII of the Dodd-Frank Act. SEC also reported coordinating with foreign regulators on these rules through bilateral and multilateral discussions. On five of CFPB's rulemakings, the agency reported that it consulted, or offered to consult with, the prudential regulators and other agencies pursuant to section 1022 of the Dodd-Frank Act. CFPB staff we spoke with stated that CFPB met with agencies to coordinate on the rules. Several agencies jointly issued two of the rulemakings as required by the act. OCC, Federal Reserve, FDIC, FHFA, SEC, and HUD jointly issued a rule on credit risk retention.⁴² Additionally, CFPB, OCC, and the Federal Reserve jointly issued a rule on appraisals for higher-priced mortgage loans.⁴³ The Federal Reserve reported that it consulted with CFTC, FSOC, and SEC for its rule on financial market utilities as required by the act.⁴⁴
	⁴¹ In our December 2014 report, we reported that regulators were constrained by several factors in their analyses, including limited data or data availability and difficulties modeling and quantifying costs and benefits (GAO-15-81).
	⁴² See Credit Risk Retention, 79 Fed. Reg. 77,602 (Dec. 24, 2014).
	⁴³ See Appraisals for Higher-Priced Mortgage Loans Exemption Threshold Adjustment, 79 Fed. Reg. 78,296 (Dec. 30, 2014). A higher-priced mortgage loan generally means a closed-end loan secured by the consumer's principal dwelling with an annual percentage rate that exceeds the average prime offer rate for a comparable transaction as of the date the interest rate is set by a certain amount of percentage points, depending on the type of loan. 12 C.F.R. § 1026.35(a)(1). An average prime offer rate is an annual percentage rate that is derived from average interest rates and certain other loan pricing terms of low-risk mortgages. 12 C.F.R. § 1026.35(a)(2).
	⁴⁴ See Financial Market Utilities, 79 Fed. Reg. 65,543 (Nov. 5, 2014).

	Most of the agencies stated that they did not encounter any significant challenges in coordination and that they have continued to consult and coordinate with each other.
Community Banks and Credit Unions Cited a Cumulative Compliance Burden Associated with Dodd-Frank Act Rules	Representatives of community banks and credit unions and industry associations with whom we spoke noted an increased compliance burden associated with implementation of Dodd-Frank Act rules. The Dodd-Frank Act includes numerous reforms to strengthen oversight of financial services firms and consolidate certain consumer protection responsibilities within CFPB. In our September 2012 report, we concluded that some provisions, such as the deposit insurance reforms and CFPB supervision of nonbank providers of financial services products, have benefitted or may benefit community banks and credit unions. However, we noted that other provisions—such as some of the act's mortgage reforms—could negatively affect them depending in part on how regulators implement such provisions and exercise their exemption authority. Some credit union, community bank, and industry association representatives said several of the mortgage-related rules have increased their overall compliance burden, such as increases in staff and training. Additionally, some said these rules had begun to adversely affect some lending activities, such as mortgage lending to customers not typically served by larger financial institutions, even though CFPB provided exemptions or other provisions to reduce such impacts. The results of surveys conducted by regulators, industry associations, and academics on the impact of the Dodd-Frank Act on small banks suggest that there have been moderate to minimal initial reductions in the availability of credit among those responding to the various surveys, and regulatory data to date have not confirmed a negative impact on mortgage lending. Some community bank, credit union, and industry association representatives also identified the impact of nonmortgage-related requirements on business activities.
	Regulators told us that it may be too early to assess the full impact of the Dodd-Frank Act rulemakings and while they have heard concerns about an increase in compliance burden, they have not been able to quantify compliance costs. Regulators also said that they are aware of industry concerns about the potential for unintended impacts from Dodd-Frank Act rulemaking and implementation. Regulators are currently engaged in retrospective reviews of rules. In addition, we developed indicators which, when monitored over time, may be suggestive of impact of the regulations on community banks and credit unions.

Industry Officials Reported Mortgage-Related Rules Generally Increased Compliance Burden

CFPB's implementation of mortgage-related rules imposes additional requirements on community banks and credit unions. In September 2012, we reported that mortgage reform provisions are expected to impose additional burdens on a large percentage of community banks and credit unions. In particular, some regulators and industry representatives expected the reforms to lead smaller institutions to decrease certain lending activities, or, at the extreme, exit the mortgage business. However, we also concluded that the full burden on the entities would depend on the extent to which CFPB (and other agencies) exercised its authority, where available, to exempt small institutions from any regulations and how it implemented provisions to provide more limited relief to small institutions, particularly those in rural or underserved communities.⁴⁵

Since our 2012 report, CFPB issued mortgage-related rules pursuant to Titles X and XIV of the Dodd-Frank Act that became effective by October 2015. Many of these rules amended Regulation X, which implements the Real Estate Settlement Procedures Act (RESPA) of 1974 and Regulation Z, which implements the Truth in Lending Act (TILA). Representatives from credit unions, community banks, and industry associations we interviewed said several of these new rules have increased their overall compliance burden—training staff, allocating time for regulatory compliance matters, and updating compliance systems—and in some cases, have begun to affect mortgage lending. These rules include new disclosure requirements, minimum standards for mortgage loans, and new requirements related to escrow accounts and appraisals for higherpriced mortgage loans and mortgage servicing (see table 3).

Table 3: Select Mortgage Rules under the Dodd-Frank Act Effective by October 2015—General Rule Descriptions, Applicable Exemptions, and Effective Dates

Agency and final rule	Rule descriptions, applicable exemptions, and effective dates
Consumer Financial Protection Bureau (CFPB), Integrated Mortgage Disclosures Under the Real Estate Settlement Procedures Act (Regulation X) and the Truth in Lending Act (Regulation Z), 78	The rule consolidates closed-end mortgage disclosures required under the Truth in Lending Act (TILA) and Real Estate Settlement Procedures Act (RESPA) of 1974 into two forms: a loan estimate form that must be delivered or placed in the mail no later than the third business day after receiving the loan application and a closing disclosure form that must be received by the consumer 3 business days before consummation (when the

⁴⁵The Dodd Frank Act and certain federal consumer financial laws provide CFPB with the authority to exempt covered persons or transactions from certain CFPB rules. See, e.g., Pub. L. No. 111-203, § 1022(b)(3), 124 Stat. 1376, 1981 (2010); § 1071, 124 Stat. at 2058; § 1461, 124 Stat. at 2179.

Agency and final rule	Rule descriptions, applicable exemptions, and effective dates
Fed. Reg. 79,730 (Dec. 31, 2013) (TRID rule)	consumer becomes contractually obligated to the creditor on the loan). The rule became effective on October 3, 2015.
	Exemptions: Applicable to all creditors as defined by Regulation Z. Lenders that do not regularly extend consumer credit as defined in the regulation are not included in that definition. Some types of loan transactions are also exempt from the TRID rule, but creditors may have to provide different disclosures under Regulation Z and Regulation X.
CFPB, Ability-to-Repay and Qualified Mortgage Standards Under the Truth in Lending Act (Regulation Z), 78 Fed. Reg. 6,408 (Jan. 30, 2013)(ATR/QM rule)	Lenders making closed-end loans must make a reasonable, good faith determination of the borrower's ability to repay the loan. This ability-to-repay determination requires lenders to meet minimum underwriting standards, including consideration and verification of a borrower's income or assets, debt, and credit history. Lenders are presumed to meet the ability-to-repay requirement when they make a qualified mortgage, which is a loan that meets specific product feature and underwriting criteria. The rule, which became effective on January 10, 2014, sets out several categories of qualified mortgage: general, temporary and small creditor.
	• The general category includes loans to borrowers with a total monthly debt-to-income ratio of 43 percent or less and that otherwise meet the restrictions on product features, points and fees, and other underwriting requirements.
	• The temporary category, to be phased out as relevant federal agencies issue their own qualified mortgage rules and within seven years, generally consists of loans that meet the restrictions on product features and points and fees, and that are eligible for purchase, insurance, or guarantee by certain entities, including Fannie Mae, Freddie Mac, U.S. Department of Agriculture or its Rural Housing Service. The Federal Housing Administration and U.S. Department of Veterans Affairs issued their own qualified mortgage rules; the Rural Housing Service has published a proposed rule. Qualified mortgages under the temporary category are not subject to a specific debt- to-income ratio.
	• The small creditor category generally consists of loans that meet the restrictions on product features and points and fees. Although creditors must consider and verify the borrower's debt-to-income ratio, these loans are not subject to a specific debt-to-income ratio. These loans must be made by small creditors and generally held in portfolio for at least 3 years. Small creditors are generally creditors that have less than \$2 billion in assets (adjusted annually for inflation) and together with their affiliates originated no more than 500 first-lien mortgage loans in the preceding year. Certain small creditors operating in rural or underserved areas can also originate qualified mortgages with balloon payments, a risky loan feature otherwise not permitted for a qualified mortgage, as long as the loans meet specific underwriting criteria. Qualified mortgages originated by small creditors also generally have different, higher thresholds for when they are considered higher-priced than other qualified mortgages. On September 21, 2015, CFPB finalized rules, Amendments Relating to Small Creditors and Rural or Underserved Areas Under the Truth in Lending Act (Regulation Z), 80 Fed. Reg. 59,944 (Oct. 2, 2015), which revised Regulation Z criteria for small creditors and rural areas, and made technical changes and clarifications to other sections of Regulation Z and the related commentary. These changes are effective January 2016.
	Exemptions: See above for a description of several limitations in the rule's scope based on categories of qualified mortgages, as applicable.
CFPB, Escrow Requirements Under the Truth in Lending Act (Regulation Z), 78 Fed. Reg. 4,726 (Jan. 22, 2013) (TILA Higher-Priced Mortgage Loans Escrow)	In general, lenders that originate a first-lien higher-priced mortgage loan must establish and maintain an escrow account until the earlier of: (1) termination of the debt obligation or (2) receipt of the consumer's request to cancel the escrow account at least five years after consummation. The rule became effective on June 1, 2013. Exemptions: Covered higher-priced mortgage loans made by certain small creditors

Agency and final rule	Rule descriptions, applicable exemptions, and effective dates
	(same asset threshold and loan cap as ATR/QM rule, in addition to other criteria) that operate in rural or underserved areas and that generally do not otherwise escrow are exempt as long as loans are not subject to forward commitments for sale to nonexempt creditors.
CFPB, Board of Governors of the Federal Reserve System (Federal Reserve), Federal Deposit Insurance Corporation (FDIC), Federal Housing Finance Agency (FHFA), Office of Comptroller of the Currency (OCC), and National Credit Union Administration (NCUA), Appraisals for Higher-Priced Mortgage Loans, 78 Fed. Reg. 10,368 (Feb. 13, 2013); Appraisals for Higher-Priced Mortgage Loans, 78 Fed. Reg. 78,520 (Dec. 26, 2013) ^a	For higher-priced mortgage loans, creditors must obtain an independent appraisal conducted by a licensed or certified appraiser who physically views the property interior and produces a written report, provides a disclosure within 3 days of application on consumers' rights with regard to the appraisal, and gives consumers a free copy of the appraisal report at least 3 days before transaction consummation. If timing and pricing requirements are triggered, creditors must obtain two independent appraisers for higher-priced mortgage loans. ^b The rule became effective on January 18, 2014 and compliance with provisions regarding manufactured home loans became mandatory starting July 18, 2015.
	Exemptions: Transactions for which creditors are not subject to this rule include, among others, mortgage loans of \$25,000 or less (adjusted annually for inflation). Creditors of certain manufactured home loans are exempt from the requirement to obtain an appraisal, but alternative requirements may apply. The requirement to obtain two appraisals under certain timing and pricing requirements have several exemptions, including higher-priced mortgage loans secured by properties in rural counties (same definition of "rural county" as in ATR/QM rule).
CFPB, Mortgage Servicing Rules Under the Real Estate Settlement Procedures Act (Regulation X), 78 Fed. Reg. 10,696 (Feb. 14, 2013); Mortgage Servicing Rules Under the Truth in Lending Act (Regulation Z), 78 Fed. Reg. 10,902 (Feb. 14, 2013)	The final rule under RESPA addresses mortgage servicers' obligations to, among other requirements, respond to written notices of error received from borrowers; provide certain information requested by borrowers in writing; provide protections to borrowers in connection with forced-placed insurance; establish and implement certain reasonable policies and procedures; provide certain information relating to loss mitigation options; follow certain procedures when evaluating loss mitigation applications; and establish policies and procedures with respect to continuity of contact with servicer personnel.
	The final rule under TILA addresses, among other requirements, initial rate adjustment notices for adjustable-rate mortgages; periodic statements for certain residential mortgage loans; prompt crediting of mortgage payments; and responses to requests for payoff amounts. It also amends rules on scope, timing, content, and format of disclosures to consumers about interest rate adjustments. The rule became effective on January 10, 2014.
	Exemptions: Small servicers (including, in general, those that with their affiliates service 5,000 or fewer mortgages for which they or their affiliates are the creditors or assignees) are exempt from parts of the rule.
Source: GAO analysis of CFPB documents. GAO-16-169	
	^a CFPB, Federal Reserve, and OCC versions of the appraisal rules and corresponding official interpretations are substantially identical; the FDIC, NCUA, and FHFA adopted CFPB's version of the regulations. ^b Two appraisals are required if the seller acquired the property within a certain timeframe (e.g.,180
	days or less prior to the consumer's agreement to acquire) and the consumer's acquisition price is more than a certain percentage of the seller's acquisition price. 12 C.F.R. § 1026.35(c)(4)(i).
Integrated Mortgage Disclosures	CFPB's integrated mortgage disclosure rule implementing requirements in the Dodd-Frank Act, known as TILA-RESPA Integrated Disclosures (TRID), combines certain disclosures that consumers receive in connection with applying for and closing on a mortgage loan. The purpose of the integrated disclosure is to facilitate compliance with the

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disclosure requirements of TILA and RESPA and to help the consumer understand the transaction by using plain language for the disclosures.

Representatives from community banks, credit unions, and industry associations we interviewed and CFPB stated that the compliance costs incurred by community banks and credit unions to implement the new disclosures included costs to revise and test software and compliance systems and costs to train employees. Representatives from two community banks and four credit unions we interviewed stated that they had to work with third-party vendors to update their loan origination and documentation system software. CFPB stated in its analysis of the final rule that the one-time cost of updating software largely would fall on software vendors because a majority of creditors rely on these vendors.⁴⁶ The CFPB analysis also stated that many vendor contracts are structured in a way that vendors would not be able to pass through any cost increase due to a regulation-related software update such as this one. However, representatives from one community bank and one credit union indicated that they had to retain a new vendor to comply with the rules. Representatives from one community bank and one credit union also stated that they have to conduct additional due diligence on their vendors to ensure compliance because they are ultimately held liable if the vendors' systems or disclosures are not compliant with the rule. As part of guality assurance, they have to test the vendors' new systems prior to implementation. Representatives from ICBA and CUNA stated that some entities would not have adequate time to test the software for compliance before the effective date of the rule due to delays by third-party service providers. CFPB and the other FFIEC member agencies stated in their letters to industry associations that during initial examination for compliance with TRID, the agencies' examiners will expect the supervised entities to make good faith efforts to comply with the rule's requirements in a timely manner. The agencies stated that during early examinations, examiners will consider an institution's implementation plan, including actions taken to update policies, procedures, and processes; its training of appropriate staff; and its handling of early technical problems or other implementation challenges. In October 2015, FDIC and the Federal Reserve issued a Financial Institution Letter and

⁴⁶See Integrated Mortgage Disclosures Under the Real Estate Settlement Procedures Act (Regulation X) and the Truth in Lending Act (Regulation Z), 78 Fed. Reg. 79,730, 80,076 (Dec. 31, 2013).

guidance, respectively, on their approach to early supervision.⁴⁷ CFPB also issued a press release on the regulators' approach.

Representatives from several community banks and credit unions also said that they had to train their staff on TRID, including familiarizing them with the new forms. A representative from one community bank association stated that compared with larger institutions, community bank staff have to take on more compliance duties and the community banks may decide to stop offering certain products in order to minimize compliance risk. A representative from a community bank state association stated that community banks may exit the market due to the costs and time allocated to comply. Furthermore, representatives from one community bank and one credit union state association indicated that the new TRID requirements could lengthen the closing process and result in potential closing delays related to meeting these requirements. CFPB also recognized this potential impact in its final rulemaking analysis.

Representatives from credit unions, community banks, and industry associations we spoke with said that CFPB's Ability to Repay and Mortgage Standards Qualified Mortgage Standards (ATR/QM) rule could affect mortgage lending activities of credit unions and community banks, particularly lending to customers who otherwise might not be served by larger lenders.⁴⁸ However, agency data thus far have not reflected such changes. The Dodd-Frank Act amended TILA to generally prohibit

⁴⁸Community banks and credit unions traditionally have allocated a greater percentage of their lending to small businesses and rural areas than large banks due to their focus on relationship lending, in which they rely on relationships with customers and local knowledge to make loans that larger banks may not make due to their reliance on more automated processes. In prior work, we noted that large banks are more likely to engage in transactional banking, which focuses on the provision of highly standardized products that require little human input to manage and are underwritten using "hard" statistical information. Small banks (particularly those with less than \$1 billion in assets) are more likely to engage in relationship banking, which involves more one-on-one interaction with customers. In relationship banking, banks consider not only hard information, but also "soft" information that is not readily available or quantifiable and is acquired primarily by working with the customer. GAO, Financial Institutions: Causes and Consequences of Recent Bank Failures, GAO-13-71 (Washington, D.C.: Jan. 3, 2013).

Ability to Repay and Qualified

⁴⁷Federal Deposit Insurance Corporation, Financial Institution Letter FIL-43-2015, Supervisory Expectations for Financial Institutions Implementing the Truth in Lending Act (Regulation Z) and the Real Estate Settlement Procedures Act (Regulation X) Integrated Disclosure Rule, (Washington, D.C. Oct. 2, 2015); The Board of Governors of the Federal Reserve System, Supervisory Expectations for Supervised Institutions Regarding the TILA-RESPA Integrated Disclosure Rule (Washington, D.C., Oct. 21, 2015).

lenders from making mortgage loans unless the lender makes a reasonable and good faith determination based on verified and documented information that the consumer has a reasonable ability to repay the loan. In its final rule, CFPB identified eight underwriting factors a creditor must consider in relation to making the required good faith determination of a borrowers' ability to repay, such as current employment status and monthly debt-to-income ratio. A creditor presumably satisfies the ability-to-repay requirement by making a qualified mortgage, which meets certain underwriting requirements and restrictions on product features and points and fees. CFPB sets out three main categories of qualified mortgages that are presumed to comply with the ability-to-repay requirements: general, temporary, and small creditor (see table 3). Creditors that make gualified mortgages receive some protection from liability—a safe harbor, or in cases of higher-priced loans, a rebuttable presumption that ability-to-repay requirements have been met.49

CFPB included special provisions in the final rule for small creditors, which during our review were defined as those creditors with less than \$2 billion in assets (adjusted annually for inflation) that, together with their affiliates, originated no more than 500 first-lien mortgage loans in the preceding year. For loans that are not sold and kept in their portfolios, such creditors must meet some restrictions on qualified mortgages loans, such as points and fees, but are not subject to a specific debt-to-income ratio and are permitted a higher interest rate threshold for a safe harbor. Certain small creditors operating in rural or underserved areas can also originate mortgages with balloon payments, a risky loan feature otherwise not permitted for a qualified mortgage.

Representatives from some community banks and credit unions as well as industry associations we interviewed stated that the ATR/QM rule has negatively affected mortgage lending, particularly for mortgages that do not meet the criteria for qualified mortgages. For example, representatives from some community bank and credit union associations and one credit union said they were unwilling to make loans that are not

⁴⁹12 C.F.R. § 1026.43(e)(1). Under the rebuttable presumption, lenders are still presumed to have satisfied the ability-to-repay-requirements, but borrowers can generally rebut the presumption by proving that based on information available to the lender at loan consummation, the borrower would not have enough income left for living expenses after paying the mortgage and other debts. 12 C.F.R. § 1026.43(e)(1)(ii)(B).

qualified mortgages because they may not benefit from the liability protection afforded qualified mortgages and borrowers may hold lenders liable for making mortgage loans that they cannot repay. Representatives from two community banks said that many banks have been unwilling to originate loans that cannot be sold on the secondary market.⁵⁰ Representatives from one community bank and one credit union we spoke with said that investors will not purchase loans that are not qualified mortgages, such as those that do not meet the debt-to-income requirement. A 2015 survey of community banks conducted by the Conference of State Bank Supervisors and state regulators found that about a third of the 974 state-chartered commercial banks that responded said that they will only make loans that are not qualified mortgages on an "exception" basis; additionally, about a third of the respondents did not intend to make any loans that are not qualified mortgages.⁵¹

Representatives from several industry associations and community banks told us that those most likely to be affected by community banks originating only qualified mortgages are borrowers on the margins of meeting qualified mortgage standards, or those that would not meet the underwriting standards at large banking institutions because they were self-employed, did not have steady income, or were buying in an area with a lack of comparable sales of similar properties. Representatives from CUNA and one state community bank association told us that CFPB's current rural or underserved area exemption is too narrow and as a result has limited the ability to lend to those potential borrowers.

⁵⁰After making loans, the originating lender can retain loans in portfolio or sell them to investors on the secondary market, either as whole loans to other financial institutions or (directly or indirectly through other financial institutions) as loan pools that are held in trust and administered by a trustee. The loan pools become asset-backed securities that are issued and sold to investors and are referred to as mortgage-backed securities. The financial institutions that buy these loans include Fannie Mae and Freddie Mac, private institutions approved by Ginnie Mae, and other private institutions that issue securities under their own authority.

⁵¹Federal Reserve and Conference of State Bank Supervisors, *Community Banking in the 21st Century, Opportunities and Challenges* (St. Louis, MO.: 2015). The survey was conducted between April 17, 2015 and July 15, 2015 and relied on a convenience sample (a type of nonprobability sample) of state-chartered commercial banks with assets less than \$10 billion. The survey was distributed by state bank commissioners directly to these banks. Although it is unknown exactly how many institutions received the questionnaire, about 974 (24 percent) institutions of a total of 4,095 state chartered banks responded. Because the survey relied on a non-probability sample, the results cannot be used to make inferences about all commercial banks.

Additionally, while survey results cannot be generalized to all banks, an ICBA survey found that about two thirds of the 519 responding community banks in the \$500 million to \$2 billion asset range made too many loans to qualify as small creditors under CFPB's current rural and underserved area exemption.⁵² Moreover, about half of the banks responding to this survey that serve rural areas did not gualify for the rural exception. In response to concerns expressed by the industry, CFPB amended the regulatory criteria for small creditor in September 2015 to raise the limit for small creditors and their affiliates from 500 first-lien mortgages in the preceding year to 2,000, excluding loans that are held in portfolio, and expanded the definitions of rural and underserved areas.⁵³ The rule will be effective on January 1, 2016. According to CFPB, the revised small creditor criteria will effectively expand the overall number of creditors that are eligible to extend small creditor portfolio-gualified mortgages. Additionally, CFPB estimated that the number of rural small creditors will increase from about 2,400 to about 4,100. The final rule retains the asset

⁵²Independent Community Bankers of America, *2014 ICBA Community Bank Lending Survey, Executive Summary,* (Washington, D.C.: January 2015). The survey was conducted between September and October of 2014. It was emailed to 6,500 community banks and 519 responded for a response rate of 8 percent overall. Since the survey relies on a non-probability sample, the results cannot be used to make inferences about all community banks.

⁵³Amendments Relating to Small Creditors and Rural or Underserved Areas Under the Truth in Lending Act (Regulation Z), 80 Fed. Reg. 59,944 (Oct. 2, 2015). The rule expanded the definition of "rural area" to generally include either: a county that meets the current definition of a rural county or a census block that is not in an urban area as defined by the U.S. Census Bureau. Previously, only counties were included in the rural area definition. A county is rural during a calendar year if it is not in a metropolitan statistical area nor in a micropolitan statistical area adjacent to a metropolitan statistical area, as those terms are defined by the OMB and as they are applied under currently applicable Urban Influence Codes, established by the U.S. Department of Agriculture's Economic Research Service. 12 C.F.R. § 1026.35(b)(2)(iv)(A). A county is "underserved" if, in the preceding calendar year's public Home Mortgage Disclosure Act aggregate dataset, no more than two creditors have reported five or more first-lien covered transactions with Home Mortgage Disclosure Act geocoding that places the properties in that county. The final rule additionally reduced the time period relating to determining the creditor's operation in rural or underserved areas from any of the three preceding calendar years to the preceding calendar year. 12 C.F.R. § 1026.35(b)(2)(iv)(B).

limit used to determine small creditor status, but was updated to generally include the assets of certain affiliates.⁵⁴

In our June 2015 report on mortgage reforms, we found that studies that were conducted or posted after the implementation of the ATR/QM rule anticipated or suggested moderate to minimal initial reductions in the availability of credit and willingness to originate loans that are not qualified mortgages.⁵⁵ However, we also found that the ATR/QM rule would have limited initial impacts on mortgage lending activities because most loans originated in recent years largely conformed with gualified mortgage criteria and because not all loans that qualify as qualified mortgages are subject to the same restrictions.⁵⁶ According to a November 2015 Federal Reserve report examining 2014 data collected under the Home Mortgage Disclosure Act, there is little indication that the ATR/QM rules significantly curtailed mortgage credit availability in 2014 relative to 2013.⁵⁷ For example, despite the ATR/QM rule that caps borrowers' debt-to-income ratio for many loans, the fraction of high debtto-income loans does not appear to have declined in 2014 from 2013. However, the report also stated that the results here do not necessarily rule out the possibility that effects may arise in the future. Additionally, FDIC stated that FDIC's data do not appear to confirm a large negative effect of the rule on small banks. In early 2014, FDIC introduced a new Community Bank Performance section to the FDIC Quarterly Banking Profile that is intended to monitor the health of community banks. In the aggregate, these profiles showed that community banks' one-to-four

⁵⁷Neil Bhutta, Jack Popper, and Daniel R. Ringo, Federal Reserve Bulletin, *The 2014 Home Mortgage Disclosure Act Data*, vol. 101, no. 4 (November 2015).

⁵⁴The rule retains the asset limit of \$2 billion, adjusted annually (e.g., total assets of less \$2,060,000,000 on December 31, 2014 for determining small creditor status in 2015), but will require that the creditor count not only its assets in the preceding year but also the assets of any affiliate that regularly extended first-lien covered transactions in the preceding calendar year. See 80 Fed. Reg. 59,944. A grace period may also be available, which is determined in part by calculating assets in the calendar year preceding that year.

⁵⁵GAO, *Mortgage Reform: Actions Needed to Help Assess Effects of New Regulations*, GAO-15-185 (Washington, D.C.: June 25, 2015).

⁵⁶GAO-15-185. However, we did not conduct a prospective analysis on the impacts that could potentially materialize once loans that were not qualified mortgages were originated. A more rigorous analysis would incorporate, among other things, the effect the rule may have on nonqualified mortgage loan origination, which may affect banks by constraining activity in this area.
family residential mortgage loan balances have grown in 2014 and 2015.58

Rules Related to Higher-Priced Mortgage Loans and Mortgage Servicing Representatives from some community banks, credit unions, and industry associations with whom we spoke noted increased compliance costs associated with CFPB's new rules related to escrow accounts, appraisals for higher-priced loans, and mortgage servicing.

Escrow Requirements. To enhance consumer protection, the Dodd-Frank Act amended TILA to expand escrow requirements for first-lien higher-priced mortgage loans, including by generally establishing a 5year minimum for escrow accounts.⁵⁹ CFPB's rule on escrow for higher-priced mortgage loans increases the time for which mandatory escrow accounts established for such loans must be maintained from 1 to 5 years, but provides an exemption for certain small creditors operating in rural or underserved areas and meeting other criteria.⁶⁰ Representatives from ICBA and CUNA said that some of their community banks and credit union members had to increase resources to set up and monitor these escrow accounts. Representatives from both national associations stated that setting up and monitoring escrow accounts is burdensome and that some community banks and credit unions do not have adequate technology or staff to support it. CUNA representatives further stated that some credit unions had to outsource these functions. ICBA has advocated for community bank loans held in portfolio to be exempted from the escrow requirement for higher-priced mortgages because they do not hold a huge volume of such mortgages. CUNA representatives stated credit unions that provide low volumes of higher-priced mortgage

⁵⁸FDIC, Quarterly Banking Profile, First Quarter 2014 through Second Quarter 2015.

⁵⁹The act generally requires that mandatory escrow accounts be established for closedend mortgages secured by a first lien on a customer's primary residence if (1) the escrow account is required by federal or state law; (2) the mortgage is made, guaranteed, or insured by a state or federal agency; (3) the mortgage is a "higher-priced" mortgage loan; or (4) the escrow account is required pursuant to regulation. 15 U.S.C. § 1639d(b).

⁶⁰Certain small creditors that operate in rural or underserved areas will generally be able to rely on the exception from the escrow requirement even if they continue to maintain escrow accounts established for first-lien higher-priced mortgage loans if the applications of such loans were received between April 1, 2010, and January 1, 2016, or if the escrow account was established as an accommodation to a distressed consumer. Amendments Relating to Small Creditors and Rural or Underserved Areas Under the Truth in Lending Act (Regulation Z), 80 Fed. Reg. 59,944, 59,954 (Oct. 2, 2015).

loans may cease to provide those loans altogether. While the survey results cannot be generalized to all banks, in a 2015 survey conducted by the American Bankers Association, the 182 responding banks in the survey indicated that cost and, a lack of escrow capabilities, or, inadequate staff were the primary reasons that they did not offer escrow services.⁶¹ As discussed earlier, the CFPB expanded the exemption for small creditors operating in rural or underserved areas.⁶²

 Appraisal Requirements For Higher-Priced Mortgage Loans. CFPB's joint rule with other federal financial regulators implementing the Dodd-Frank Act appraisal requirements for higher-priced mortgages generally requires lenders to obtain one, or in some limited cases where timing and pricing requirements are triggered, two written appraisals. In addition, the requirement to obtain two appraisals does not apply to a number of transactions, including where the property is

⁶²See 80 Fed. Reg. 59,944 (Oct. 2, 2015).

⁶¹American Bankers Association, 22nd Annual American Bankers Association Real Estate Survey Report (Washington, D.C.: 2015). The survey was conducted between March and April of 2015 as a web survey sent out to both American Bankers Association member and non-member banks (commercial banks and thrifts). It was sent to over 3000 banks and 182 responded for a response rate of 6 percent overall. Sixty-eight percent of the respondents were commercial banks and 32 percent were thrifts. About 77 percent of the respondents had assets of less than \$1 billion. Since the survey relies on a non-probability sample, the results cannot be used to make inferences about all commercial banks and thrifts.

in a rural county.⁶³ One credit union representative said that having to deliver appraisals 3 business days prior to consummation delayed an intended closing (due to its remote location, which makes appraisals complex and turnaround times longer). Representatives from a state community bank association and one community bank we interviewed said the requirement for two appraisals (when timing and pricing requirements are triggered) is a challenge because they have had difficulty finding two independent appraisers who understand the market in their respective areas. ICBA representatives stated that for higher-priced mortgage loans of smaller amounts, the cost of appraisal becomes significant in proportion to the loan. Representatives from CUNA and two state credit union associations stated the rule had a minimal impact on their members because they generally did not make higher-priced loans.

 Mortgage Servicing Rules. CFPB issued two mortgage servicing rules under TILA and RESPA, designed in part to provide, among other things, better disclosure to consumers about their loan obligations and loss mitigation options that may be available if they have difficulty with their loan obligations.⁶⁴ CFPB, in its final rule analysis, noted that the small servicer thresholds were appropriate in part because it

⁶³See 12 C.F.R. § 34.203(d) (OCC); 12 C.F.R. § 226.43(d)(7) (Federal Reserve); and 12 C.F.R. § 1026.35(c)(3)(vii) (CFPB). Issued jointly by the CFPB, OCC, and Federal Reserve, the higher-priced mortgage loan appraisal rule implements section 1471 of the Dodd-Frank Act, which established additional appraisal requirements for "higher-risk mortgages," defined as a mortgage that is not a qualified mortgage and the annual percentage rate of which generally exceeds average rates (specified in the act) for a comparable transaction. The OCC, Federal Reserve, and CFPB published the same rule separately; the FDIC, NCUA, and FHFA adopted the rule as published by the CFPB. Section 1472 of the act amends TILA to require that appraisers be independent and to prohibit any conflicts of interest. This report section focuses primarily on section 1471. For additional information relating to Dodd-Frank Act appraisal provisions, see GAO, Residential Appraisals: Opportunities to Enhance Oversight of an Evolving Industry, GAO-11-653 (Washington, D.C.: July 13, 2011); and Real Estate Appraisals: Appraisal Subcommittee Needs to Improve Monitoring Procedures, GAO-12-147 (Washington, D.C.: Jan. 18, 2012). The two-appraisal requirement is triggered when the property seller acquired the property for a lower price during the six months prior to the current sale and the price difference exceeds certain thresholds. See, e.g., 12 C.F.R. § 1026.35(c)(4) (CFPB). Several types of transactions are exempt from the entire rule, including smaller dollar loans of \$25,000 or less, adjusted annually for inflation, and streamlined refinance transactions, among others. See, e.g., 12 C.F.R. § 1026.35(c)(2) (CFPB).

⁶⁴A mortgage servicer is typically responsible for the day-to-day management of a mortgage loan account, such as processing loan payments and managing escrow accounts. The mortgage servicer may not be the same as the mortgage lender because the loans (and the right to service them) often are bought and sold.

estimated that more than 98 percent of the insured depository institutions and credit unions, with less than \$2 billion in assets fall beneath the 5,000 loan threshold, qualifying for the small servicer exemption from many of the rules.⁶⁵ Representatives from ICBA and one state credit union association told us that the exemptions available to small servicers are too narrow. Although the rules exempt small servicers from certain provisions, they require all servicers to respond to written notices of errors received from borrowers, and all servicers generally must not make the first notice or filing for foreclosure unless the borrower is more than 120 days delinquent, among other provisions. Representatives from several industry associations we interviewed said that community banks and credit unions had to expand resources to meet these requirements. ICBA representatives said the small servicer threshold should be increased from 5,000 to 20,000 loans. However, representatives from four community banks we interviewed stated the rules had no impact on their mortgage servicing or that they did not provide mortgage servicing. A 2013 survey by the Mercatus Center indicated that less than two-fifths of the approximately 200 small banks participating in their survey currently offered mortgage servicing and less than a tenth discontinued or anticipated discontinuing mortgage servicing as a result of the Dodd-Frank Act. While survey results and interview responses cannot be generalized to all small banks, they suggest that the regulatory requirements would have a small overall impact on mortgage servicing practices at these banks.⁶⁶

⁶⁵We plan to issue two reports in early 2016 on mortgage servicing: one on the trends of nonbank mortgage servicers, the benefits or risks associated with their participation in the market, and the oversight framework in which they operate; and another report on trends in the mortgage servicing industry, including the market and regulatory factors that influence small depository institutions and credit unions in holding or selling mortgage servicing rights and impacts to consumers related to these mortgage servicing decisions.

⁶⁶Hester Peirce, Ian Robinson, and Thomas Stratmann, *How Are Small Banks Faring Under Dodd-Frank*? (Arlington, VA.: Mercatus Center, George Mason University, February 2014). The Mercatus Center survey was based on a convenience sample—a nonprobability sampling method made up of respondents who are easy to reach — of small banks and was conducted between July and September of 2013, prior to the effective dates of some of the rules covered in the survey. The survey was distributed by national and state-level banking associations to their members and to 500 additional small banks. The survey had about 200 respondents with less than \$10 billion in assets, although the number of respondents differed for each section of the survey. A majority of the respondents fell in the asset-size range from \$10 million to \$1 billion. Because the survey relied on a non-probability, convenience sample, it is not possible to use the results to draw inferences about the population of small banks.

Industry Officials Also Said Certain Nonmortgage-Related Rules Had Increased Compliance Burden or Changed Business Practices

Representatives from community banks, credit unions, and industry associations we interviewed also identified the impact of several nonmortgage-related requirements and implementing rules on compliance and related business activities. These included requirements related to credit rating removal, remittance transfers, and debit interchange and routing (see table 4).⁶⁷

Table 4: Select Nonmortgage-Related Rules under the Dodd-Frank Act Effective by October 2015—Rule Descriptions, Available Exemptions, and Effective Dates

Agency and final rule	Rule descriptions, applicable exemptions, and effective dates
Various Agencies, Permissible Investments for Federal and State Savings Associations: Corporate Debt Securities, 77 Fed. Reg. 43,151 (July 24, 2012) (FDIC); Alternatives to the Use of External Credit Ratings in the Regulations of the OCC, 77 Fed. Reg. 35,253 (June 13, 2012) (OCC); Alternatives to the Use of Credit Ratings, 77 Fed. Reg. 74,103 (Dec. 13, 2012) (NCUA) (Removal of Credit Ratings from Regulations)	Section 939A of the Dodd-Frank Act required each applicable federal agency to review its regulations and identify (1) any regulation that required the use of an assessment of the creditworthiness of a security or money market instrument and (2) any references to or requirements in such regulations regarding credit ratings. Section 939A also directed each applicable federal agency to modify the regulations identified in the review by removing all references to or requirements of reliance on credit ratings and substituting alternative standards of creditworthiness. In establishing such alternative standards, agencies must seek to establish, to the extent feasible, uniform standards of creditworthiness, taking into account the entities it regulates and the purposes for which such entities would rely on the alternative standards. The effective dates of the rules and guidance varied by agency. Federal Deposit Insurance Corporation's (FDIC) rule and final guidance became effective in July 2012; Board of Governors of the Federal Reserve System's (Federal Reserve) guidance and Office of the Comptroller of the Currency's (OCC) rule became effective in January 2013; National Credit Union Administration's (NCUA) final rule became effective in June 2013. Exemptions: None.
Consumer Financial Protection Bureau (CFPB), Electronic Fund Transfers (Regulation E), 79 Fed. Reg. 55,970	This CFPB rule amended Regulation E, which implements the Electronic Fund Transfer Act. It generally required remittance transfer providers to provide disclosures to consumers before they pay for the remittance transfers sent to designated recipients in
(Sept. 18, 2014); Electronic Fund Transfers (Regulation E), 78 Fed. Reg.	foreign countries. The rule requires disclosure of various items such as the exchange rate and certain fees and taxes imposed by the remittance transfer providers. The rule also

⁶⁷Our September 2012 report identified several other nonmortgage Dodd-Frank Act provisions as potentially having an impact on community banks and credit unions. These included new requirements related to the registration of municipal advisors, the retention of credit risk in mortgages sold to the secondary market and swap transactions, and proprietary trading. Most community banks and credit unions we interviewed said that they were generally not engaged in the activities covered by the final rules issued under the Dodd-Frank Act provisions, and national and state industry associations said their members also generally were not affected by these rules. The regulators that promulgated the rules also stated they did not have a significant impact on community banks and credit unions. Our September 2012 report identified only one rule on small business loan data collection and reporting requirement as potentially having a direct impact on such lending. As of November 2015, that rule had not been proposed.

Agency and final rule	Rule descriptions, applicable exemptions, and effective dates
30,662 (May 22, 2013) (Remittance Transfers)	required providers to investigate and resolve errors a consumer reports with a transfer. Under the rule, the consumer generally has 30 minutes to cancel a transfer. For certain circumstances, the rule included a temporary exception that permitted insured institutions to estimate some information on the disclosure instead providing the exact pricing, including exchange rates and foreign fees and taxes. The Dodd-Frank Act provided that this exception was to end on July 21, 2015 but permitted CFPB to extend the exception for up to an additional five years. The CFPB exercised its authority to extend the exception until July 21, 2020. The rule became effective on October 28, 2013.
	Exemptions: Companies that consistently provide 100 or fewer remittance transfers per year or that do not provide remittance transfers in the normal course of their business are exempt from the rule.
Federal Reserve, Debit Interchange Fees and Routing .76 Fed. Reg. 43,394 (July 20, 2011)	The Federal Reserve adopted Regulation II (Debit Card Interchange Fees and Routing) to implement section 1075 of the Dodd-Frank Act. Regulation II established standards for assessing whether debit card interchange fees received by issuers are reasonable and proportional to the costs incurred by issuers for electronic debit transactions. The rule sets a cap on the maximum permissible interchange fee that any issuer may receive for an electronic debit transaction at \$0.21 per transaction, plus 5 basis points multiplied by the transaction's value. ^a The rule also prohibits all issuers and networks from restricting the number of networks over which debit transactions may be processed to less than two unaffiliated networks. The rule became effective October 1, 2011.
	Exemptions: Issuers, together with their affiliates, that have less than \$10 billion in assets are exempt from the fee cap but not from the network requirement.
Source: GAO analysis of CFPB, Federal Reserve, NCUA, OCC, a	and FDIC documents. GAO-16-169
	^a The cap is 21 cents plus 0.05 percent multiplied by the value of the transaction, plus up to 1 cent for the certified fraud-prevention programs.
Removal of Credit Ratings from Regulations	The Dodd-Frank Act required each federal agency to review regulations that require the use of an assessment of creditworthiness of a security or money market instrument and any references to, or requirements in, those regulations regarding credit ratings. The act also required the agencies to modify the regulations identified during the review by substituting any references to, or requirements of, reliance on credit ratings with standards of creditworthiness each agency determines to be appropriate. Under the agencies' revised regulations, to determine whether a security is "investment grade," insured depository institutions must determine that the probability of default by the issuer is low and the full and timely repayment of principal and interest is expected. ⁶⁸ To
	⁶⁸ The Federal Reserve did not issue a final rule. However, OCC's rule had broad

⁶⁸The Federal Reserve did not issue a final rule. However, OCC's rule had broad applicability because the Federal Reserve Board's Regulation H and FDIC's regulations on activities of insured state banks and insured savings associations prohibit member and nonmember state banks and state savings associations from engaging in activities and investments that are not permissible for national banks and their subsidiaries. Therefore, OCC's final rule established the standard for all banks and thrifts.

comply with the new standard, banks and credit unions may not rely exclusively on external credit ratings, but may continue to use such ratings as part of their determinations. They must supplement any consideration of external ratings with due diligence processes and additional analyses that are appropriate for the institution's risk profile and the size and complexity of the investment instrument.⁶⁹

Representatives from two industry associations, three community banks, and one credit union said that the rules increased compliance burden. Representatives from the community banks and credit union said that investing became more complex and they have had to devote more time and resources to research the investment vehicles. Two community bank association representatives we interviewed stated that community banks do not have the internal expertise to evaluate their investments. One community bank association's representative also stated that the rule required community banks to hire experts and spend additional time to document the due diligence they have conducted. While the results cannot be generalized to all banks, in the Mercatus Center survey, almost half of the approximately 200 community banks responding to the survey said that they altered their credit analysis practices in response to this provision or related guidance, while the other half said they did not. Among those that altered practices, some said they contracted with outside firms or hired additional employees to conduct credit analysis or altered the type of securities they purchased.⁷⁰

Remittance Transfers The Dodd-Frank Act imposes new requirements on remittance transfer providers. CFPB's rule on remittance transfers amended Regulation E, which implements the Electronic Fund Transfer Act. It requires companies to provide disclosures to consumers before they pay for the remittance transfers, including about items such as the applicable exchange rate, if any, and certain fees and taxes. In our September 2012 report, representatives from some community banks, credit unions, and associations we interviewed expected the remittance transfer rule to

⁷⁰Hester Peirce, Ian Robinson, and Thomas Stratmann, *How Are Small Banks Faring Under Dodd-Frank*, February 2014.

⁶⁹At the same time OCC issued its final rule to revise the "investment grade" standard, the agency published guidance to further explain how banks should implement the new standard and continue to adhere to the relevant due diligence requirements. See Guidance on Due Diligence Requirements in Determining Whether Securities Are Eligible for Investment, 77 Fed. Reg. 35,259 (June 13, 2012).

decrease their (or their member institutions) remittance transfer business.⁷¹

Representatives from four industry associations, as well as two credit unions and one community bank whom we interviewed stated the rule has had a negative impact. ICBA representatives said that some community banks tried to keep the number of remittance transfers each year to below 100 (to avoid having the rules apply to them). Representatives from CUNA and two state credit union associations said that some credit unions have increased fees or left the market. For example, one credit union representative said that it did not have access to the information and services required by the rule and had to contract with a correspondent bank to continue to offer the service. As a result, it increased its remittance fees. One state credit union association representative said that their members stopped the service to avoid the related compliance costs. Although the Mercatus Center conducted its survey of approximately 200 banks prior to the effective date of the rule, it indicated that a small percentage of the respondents had discontinued or anticipated discontinuing offering remittances as a result of the rule.⁷² CFPB stated that in response to these concerns, it delayed and amended this rule twice to ease compliance concerns related to the disclosure of foreign fees and taxes.⁷³ In addition, CFPB officials stated that, based on their analysis of NCUA call report data, about 90 percent of the credit unions do not send over 100 transfers annually and thus are exempt from the remittance rule. CFPB officials additionally stated that the call data indicates virtually no change in the remittance market by credit unions since the rule has been implemented.

⁷¹See GAO-12-881.

⁷²Hester Peirce, Ian Robinson, and Thomas Stratmann, *How Are Small Banks Faring Under Dodd-Frank?* (Arlington, VA.: Mercatus Center, George Mason University, February 2014).

⁷³First, in a final rule published May 22, 2013, CFPB made optional, in certain circumstances, the requirement to disclose fees imposed by a designated recipient's institution and also made optional the requirement to disclose taxes collected by a person other than the remittance transfer provider. See Electronic Fund Transfers (Regulation E), 78 Fed. Reg. 30,662, 30,670-77 (May 22, 2013). Second, in a final rule published September 18, 2014, CFPB extended the exception that permits insured institutions to estimate certain information, including exchange rates and foreign fees and taxes in certain circumstances from July 2015 to July 2020, having found that the conditions set forth in the Dodd-Frank Act warranting such an extension were met. See Electronic Fund Transfers (Regulation E), 79 Fed. Reg. 55,970 (Sept. 18, 2014).

Debit Interchange Fee Rule	The Dodd-Frank Act requires the Federal Reserve to prescribe regulations for any interchange transaction fee that an issuer may receive or charge for an electronic debit transaction. In implementing the debit interchange fee rule, the Federal Reserve set a cap on the maximum permissible interchange fee that any issuer may receive for such a transaction. Although issuers, together with their affiliates, that have less than \$10 billion in assets are exempt from the cap on interchange fees, all issuers and networks are prohibited from restricting the number of networks over which the debit transaction may be processed to less than two unaffiliated networks. Our September 2012 report on community banks found that the rule had had a limited impact on exempt issuers, but industry officials expressed concerns about the potential for their interchange fees or fee income to decline over the long term. ⁷⁴
	Representatives from five industry associations, one community bank, and one credit union stated that the rule has led to a decline in interchange revenue, although one credit union said that the decline was minimal. Representatives from one credit union stated that it was hard to measure the impact of the rule because their revenue had increased due to the increase in volume of debit card transactions. Data collected by the Federal Reserve from card networks on the interchange fees showed that exempt issuers have not experienced a significant impact on the amount of average interchange fees. ⁷⁵ In 2011, these data showed that the average interchange fee received by exempt issuers declined from \$0.45 over the first three quarters of 2011 to \$0.43 in the fourth quarter of 2011, when the rule took effect. Federal Reserve data from 2014 showed that the average interchange fee remained at \$0.43 for exempt issuers.
Regulators Face Challenges Determining the Cumulative Impact of Dodd-Frank Act Rules on Community Banks and Credit Unions	Regulators told us that it is still too early to assess the full impact of Dodd- Frank Act rulemakings on community banks and credit unions, and while they have heard concerns about the increase in compliance burden, they have not been able to quantify compliance costs. Two regulators told us that it was too early to determine the impact of the Dodd-Frank Act rulemakings; NCUA officials stated that there has been little cumulative impact from the rules to date because many have only recently become

⁷⁴See GAO-12-881.

⁷⁵Federal Reserve, *Average Debit Card Interchange Fee By Payment Card Network*, (Washington, D.C.: May 12, 2015).

effective. OCC and FDIC officials also said that it would be difficult to disentangle the impact of Dodd-Frank Act regulations from changes in response to the overall economic environment or other rulemakings.

FDIC, OCC, and Federal Reserve officials stated that the institutions with which they have spoken are concerned about integrating many rules into their business operations and with the increase in compliance costs. For instance, OCC officials stated that even if community banks do not hire new staff, the existing staff would have to be redeployed into compliance areas. FDIC officials stated that the cumulative compliance cost is hard to quantify because these costs are not reported separately in Call Reports. Regulators also said that compliance activities do not appear to have reduced profitability for community banks. For example, Federal Reserve officials said that profitability for community banks has increased. Additionally, FDIC officials said that noninterest expenses have decreased or remained flat since the financial crisis. Further, FDIC officials stated that the Dodd-Frank Act did not appear to have conferred a negative effect. For example, they noted that since 2010, small banks have increased loan growth and their earnings have improved. Officials from OCC said that the benefits of the Dodd-Frank Act would be difficult to quantify, but OCC and CFTC officials stated that having a safer and sounder financial system is a benefit of the Dodd-Frank Act. In our prior work on federal rulemaking, many agency officials told us that monetizing benefits is more difficult than monetizing costs.⁷⁶

OCC, FDIC, and the Federal Reserve have been conducting retrospective reviews of their rules pursuant to EGRPRA, while NCUA and CFPB have been conducting retrospective reviews pursuant to other requirements and internal policies. These reviews include Dodd-Frank Act rules. As part of their review, agencies have requested comments from the public on the impact on the community banks and conducted outreach

⁷⁶GAO, Federal Rulemaking: Agencies Included Key Elements of Cost-Benefit Analysis, but Explanations of Regulations' Significance Could Be More Transparent, GAO-14-714 (Washington, D.C.: Sept. 11, 2014). We noted in prior work that the Dodd-Frank Act's potential benefit of reducing the probability or severity of a future financial crisis cannot be readily observed and this potential benefit is difficult to quantify. Any analyses must be based on assumptions about, or models of, the economy. Consequently, the results of such analyses are subject to substantial uncertainty. GAO, *Financial Regulatory Reform: Financial Crisis Losses and Potential Impact of the Dodd-Frank Act,* GAO-13-180 (Washington, D.C.: Jan. 16, 2013).

meetings, including an outreach meeting with those in rural areas. In past work, we have noted the usefulness of retrospective reviews.⁷⁷

CFPB, which is not subject to EGRPRA, conducts its own analyses of regulations that impact financial institutions with \$10 billion or less in assets. Section 1022(d) of the Dodd-Frank Act requires CFPB to assess each significant rule it adopts under federal consumer financial law and publish a report of the assessment not later than 5 years after the effective date of such rule.⁷⁸ The assessment must address, among other relevant factors, the rule's effectiveness in meeting the purposes and objectives of Title X of the Dodd-Frank Act, and the specific goals stated by the CFPB. According to CFPB officials, the review conducted for each significant rule is to include broad data analysis. In our June 2015 report on mortgage reforms, we found that CFPB has begun planning for review of the qualified mortgage regulations.⁷⁹ Regulators also said they are aware of industry concerns about the potential for unintended impacts from Dodd-Frank Act rulemaking and implementations. Representatives from community banks, credit unions, and industry associations expressed concern about future "trickledown effects" from regulations intended for large banking institutions and one-size-fits-all regulation on community banks and credit unions. For example, representatives from community banks and credit unions we interviewed stated that while CFPB exempts them from certain rules or parts of the rules, their prudential regulators might hold them to regulatory standards for larger

⁷⁸Pub. L. No. 111-203, § 1022(d), 124 Stat. 1376, 1984-85 (2010) (codified at 12 U.S.C. § 5512(d)).

⁷⁹GAO-15-185. CFPB identified potential outcomes, data sources, and analytical methods for examining its qualified mortgage regulations, but had not finalized its plans that specified what outcomes and methodologies it will use to examine the effects of the CFPB regulations as of May 2015.We recommended that CFPB complete its plan on its retrospective review of qualified mortgage regulations and in its plan, identify the outcomes it will examine to measure the effects of the regulations and specific metrics, baselines, and analytical methods to be used. Additionally, we recommended CFPB include in its plan alternate metrics, baselines, and analytical methods that could be used if data were to remain unavailable.

⁷⁷See GAO-12-151 and GAO, *Reexamining Regulations: Agencies Often Made Regulatory Changes, but Could Strengthen Linkages to Performance Goals,* GAO-14-268 (Washington, D.C.: Apr. 11, 2014). We reported that retrospective analysis can help agencies evaluate how existing regulations work in practice. Agencies could use retrospective analysis to examine how existing regulations have contributed to specific policy goals, assess the effectiveness of their implementation, or reexamine their estimated benefits and costs based on actual performance and experience.

institutions as a best practice. Additionally, some industry associations have expressed concerns about a one-size-fits-all approach in regulating community banks and credit unions as well as large banking institutions. FDIC and Federal Reserve officials stated that they have heard similar concerns from the institutions they regulate. FDIC officials stated that the agency has emphasized that best practices are not requirements and that FDIC has been monitoring its examiners to help ensure they are following FDIC policies, which take into consideration the size, complexity, and risk profiles of banks. Federal Reserve officials said that the Federal Reserve has set expectations for its examiners to not examine regional banks using the same requirements as for large banking institutions. Additionally, Federal Reserve officials said the agency has tried to communicate the applicability of rules clearly to smaller institutions.

Indicators Provide Baselines for Monitoring the Future Impact of the Dodd-Frank Act on Small Banks and Credit Unions

We developed indicators that, although imperfect, may shed light on the cumulative impact of Dodd-Frank Act regulations on small banks and credit unions over time. These indicators are likely to capture some of the cost associated with regulatory compliance and include: (1) the number of employees; (2) a measure of labor and other noncapital costs; (3) profitability; and (4) residential mortgage lending. As we have discussed, both mortgage-related rules and certain nonmortgage-related rules may increase the compliance burden for small banks and credit unions. Banks and credit unions may have to hire additional staff to manage compliance with regulations, hire outside counsel or consultants, or take other actions. As a result, the numbers of employees and the total cost of resources other than funding at banks and credit unions are likely to increase and profits are likely to decrease, all else being equal. Also, as discussed earlier, mortgage-related rules may affect mortgage lending by small banks and credit unions. Residential mortgage-related regulations, in particular, may raise the cost of originating loans and result in a shifting of portfolios away from residential lending. All else being equal, residential mortgage lending by small banks and credit unions is likely to decrease as a result.

While these indicators are baselines against which to compare future trends between different sized institutions, they are limited in their ability to assess the regulatory burden associated with the Dodd-Frank Act and care should be used in interpreting the results of this analysis. First, the level of, and trends in, these indicators for the various groups of institutions does not provide evidence on the impact of Dodd-Frank at this time. Going forward, the differences in the trends for each quintile would be the more important indicator to monitor. Second, even when assessed over time and across different size institutions, our analysis cannot rule out other important factors that may influence our indicators, including other regulations, policies, and general macroeconomic conditions, such as the demand for credit. Furthermore, trends in our indicators are generally representative of trends for banks and credit unions of different sizes, but may not reflect the experience of every bank or credit union. Moreover, many of the Dodd-Frank Act regulations that apply to small banks and credit unions have not been implemented or have been implemented only recently. Finally, while we presented similar indicators for banks and credit unions, comparisons between the two types of institutions on the basis of these measures may not be appropriate and certain indicators may be more relevant than others for each type of institution.

Figure 1 summarizes trends in our indicators for banks of different sizes. We used total assets to measure size and grouped banks into five equalsized groups, or quintiles, based on total assets. The first quintile represents the smallest banks while the fifth quintile represents the largest. We then calculated the median value of each indicator for each quintile for each quarter. Our indicators for banks allow for the following observations:

- Smaller banks tend to have more employees per \$1 million in assets than larger banks, and employment at banks of all sizes generally has fallen since the third quarter of 2010.
- Smaller banks tend to have slightly higher noninterest expenses (e.g., salaries and employee benefits, consulting and advisory expenses) as a percentage of assets than larger banks, and noninterest expenses generally have fallen for banks of all sizes since the third quarter of 2010.
- Smaller banks tend to have lower earnings as a percentage of assets than larger banks, at least in recent quarters, and earnings generally have increased for banks of all sizes since the third quarter of 2010.
- The smallest banks tend to have fewer residential mortgage loans on their balance sheets as a percentage of assets than larger banks. However, since the third quarter of 2010, residential mortgage loans have grown as a fraction of assets for banks of all sizes.





Source: GAO analysis of data from the Federal Financial Instituions Examination Council. | GAO-16-169

Notes: Levels and trends in these indicators should not be interpreted as causally related to the Dodd-Frank Act. Over time, changes in the differences across quintiles will provide information that may be suggestive of Dodd-Frank Act's impact. We used data on insured depository institutions (banks) that filed Reports of Condition of Income (Call Reports) from first quarter 2006 to second quarter 2015. We measured employment as the number of full-time equivalent employees per \$1 million in assets. We measured labor and other noncapital costs as noninterest expense as a percentage of total assets. We measured profitability as net income before income taxes, extraordinary income, and other adjustments as a percentage of total assets. We measured residential mortgage loans as a percentage of total assets. We grouped banks into size quintiles based on the distribution of total assets in each quarter. We calculated our indicators for each bank and then calculated the median value of the indicator for each quintile.

Figure 2 summarizes trends in our indicators for credit unions of different sizes. As we did with banks, we used total assets to measure size and grouped credit unions into quintiles based on total assets and then calculated the median value of each indicator for each quintile for each quarter. Again, the current level of these indicators and the trends for each quintile are not sufficient for assessing the impact of the Dodd-Frank

Act. Nevertheless, our indicators for credit unions allow for the following observations:

- Smaller credit unions tend to have more full-time employees per \$1 million than larger credit unions with the exception of the smallest, which tend to have no full-time employees at all. Furthermore, smaller credit unions tend to have more part-time employees per \$1 million in assets than larger credit unions. However, the numbers of both fulltime and part-time employees generally have decreased since the third quarter of 2010.
- Noninterest expenses as a percentage of assets are generally the same for credit unions of different sizes and generally have decreased for credit unions of all sizes since the third quarter of 2010.
- Smaller credit unions tend to have lower earnings as a percentage of assets than larger credit unions, but earnings at credit unions of all sizes generally have increased since the third quarter of 2010.⁸⁰
- Smaller credit unions tend to have fewer residential mortgage loans on their balance sheets as a percentage of assets than larger credit unions, and most of the smallest credit unions have no residential mortgages at all. However, residential mortgages generally have decreased as a percentage of assets for larger credit unions —those in the third, fourth, and fifth quintiles—but have increased for the smaller credit unions in the second quintile.

⁸⁰Earnings for credit unions of all sizes generally declined during the 2007-2009 financial crisis. In 2008, 18 credit unions failed and \$290 million in losses were charged to the National Credit Union Share Insurance Fund. In 2009, 28 credit unions failed and National Credit Union Share Insurance Fund absorbed another \$695 million in insurance fund losses.





Source: GAO analysis of data from the National Credit Union Administration. | GAO-16-169

Notes: Levels and trends in these indicators should not be interpreted as being causally related to the Dodd-Frank Act. Over time, changes in the differences across quintiles will provide information that may be suggestive of Dodd-Frank Act's impact. We used data on credit unions that filed Reports of Condition and Income (Call Reports) from first quarter 2006 to second quarter 2015. We measured employment as the number of full-time employees per \$1 million in assets and the number of part-time employees per \$1 million in assets. We measured labor and other noncapital costs as noninterest expense as a percentage of total assets. We measured profitability as net income as a percentage of total assets. We grouped credit unions into size quintiles based on the distribution of total assets in each quarter. We calculated our indicators for each credit union and then calculated the median value of the indicator for each quintile.

Possible Impacts of the Dodd-Frank Act on Bank SIFIs, Designated Nonbanks, and Swaps	Financial regulators have continued to implement reforms pursuant to the Dodd-Frank Act, but the full impact of the act remains uncertain. This uncertainty stems from a number of factors, in particular, not all rules have been finalized and taken effect. When the act's reforms are fully implemented, it will take time for the financial services industry to comply with the array of new regulations—meaning additional time will need to elapse to measure the impact of the rules. Moreover, the evolving nature of implementation makes isolating the Dodd-Frank Act's effect on the U.S. financial marketplace difficult. This task is confounded by the many factors that can affect the financial marketplace, including factors that could have an even greater impact than the act.
	Recognizing these limitations and difficulties, we developed a multipronged approach to analyze current data and trends that might indicate some of the Dodd-Frank Act's initial impacts. First, using data through the second quarter of 2015, we updated the indicators developed in our December 2012 report to monitor changes in certain characteristics of SIFIs, which are subject to enhanced prudential standards and oversight under the act, and also developed new indicators. ⁸¹ Second, we updated our difference-in-difference econometric analysis to infer the act's impact on funding costs for bank SIFIs and the safety and soundness of bank SIFIs. Third, we developed indicators of designated nonbanks that parallel our bank SIFI indicators. Fourth, using data through the second quarter of 2014, we updated indicators developed in our December 2013 report to monitor the extent to which certain of the act's swap reforms are consistent with the act's goals of reducing risk. ⁸² All of these analyses have limitations, which we discuss below.

⁸¹See GAO-13-101.

⁸²See GAO-14-67.

Indicators Suggest Large Bank SIFIs Have Become Larger but Less Vulnerable to Financial Distress Since the Dodd-Frank Act

According to its legislative history, the Dodd-Frank Act contains provisions intended to reduce the risk of failure of a large, complex financial institution and the damage that such a failure could do to the economy.⁸³ Such provisions include (1) authorizing FSOC to designate a nonbank financial company for Federal Reserve supervision if FSOC determines it could pose a threat to U.S. financial stability and (2) directing the Federal Reserve to impose enhanced prudential standards and oversight on bank holding companies with \$50 billion or more in total consolidated assets (bank SIFIs) and nonbank financial companies designated by FSOC (designated nonbanks). (See app. IV for a summary of provisions related to SIFIs and their rulemaking status.)

As we first reported in December 2012, the Dodd-Frank Act and its implementing rules may result in adjustments to the size, interconnectedness, complexity, leverage, or liquidity of bank SIFIs over time.⁸⁴ We updated the indicators we developed in our December 2012 report and updated in our December 2013 and December 2014 reports to monitor changes in some of these characteristics of SIFIs.⁸⁵ In addition, we added indicators of interconnectedness. The size, interconnectedness, and complexity indicators reflect the potential for the financial distress of a single SIFI to affect the financial system and economy (spillover effects). The leverage and liquidity indicators reflect a SIFI's resilience to shocks or its vulnerability to financial distress.

⁸³S. Rep. No. 111-176, at 4 (2010).

⁸⁴See GAO-13-101.

⁸⁵Our indicators analysis generally includes all top-tier U.S. bank holding companies with total consolidated assets of \$1 billion or more that filed Form FR Y-9C for one or more quarters during the period from the first quarter of 2006 to the second quarter of 2015, including any U.S.-based bank holding company subsidiaries of foreign banking organizations that on their own have total consolidated assets of \$1 billion or more and that filed Form FR Y-9C. Generally, a foreign banking organization is a company organized under the laws of a foreign country that engages in the business of banking and that operates a U.S. branch, agency, or commercial lending company subsidiary in the United States or controls a bank in the United States, and any company of which the foreign bank is a subsidiary. We chose the threshold of \$1 billion in assets to match the threshold for reporting Form FR Y-9C starting in the first quarter of 2015. We defined bank SIFIs as bank holding companies with total assets of \$50 billion or more. We defined large bank SIFIs as bank holding companies with total assets of \$500 billion or more and we defined other bank SIFIs as bank holding companies with total assets of at least \$50 billion but less than \$500 billion. We defined non-SIFI bank holding companies as bank holding companies with less than \$50 billion in total assets.

It is important to note however, that our analysis has limitations. For example, the indicators do not identify causal links between changes in SIFI characteristics and the act. Rather, the indicators track changes in the size, interconnectedness, complexity, leverage, and liquidity of SIFIs since the passage of the act to examine if the changes have been consistent with the goals of the act. However, other factors-including international banking standards agreed upon by the Basel Committee on Banking Supervision (Basel Committee) and monetary policy actionsalso affect bank holding companies and, thus, the indicators.⁸⁶ These factors may have a greater effect than the Dodd-Frank Act on SIFIs. Furthermore, because a number of rules implementing provisions related to SIFIs have not yet been finalized, our indicators include the effects of these rules only insofar as SIFIs have changed their behavior in response to issued rules or in anticipation of expected rules. In this regard, our indicators provide baselines against which to compare future trends. See appendix VI for additional limitations of our indicators.

Table 5 summarizes the changes in our bank SIFI indicators from the third quarter of 2010 through the second quarter of 2015 and allows for the following observations (see app. VI for more information):

- Changes in some size, interconnectedness, and complexity indicators are consistent with increased potential spillover effects for large bank SIFIs (which we define as bank holding companies with \$500 billion or more in assets) while changes in others are consistent with decreased potential spillover effects for large bank SIFIs.
- Changes in all of the size, interconnectedness, and complexity indicators are consistent with decreased or no change in potential spillover effects for other bank SIFIs (which we define as bank holding companies with at least \$50 billion but less than \$500 billion in assets).
- Changes in all of our leverage and liquidity indicators are consistent with increased resilience for both large bank SIFIs and for other bank SIFIs.

⁸⁶The Basel Committee has agreed on a new set of risk-based capital, leverage, liquidity, and other requirements for banking institutions (Basel III requirements). Additionally, the Financial Stability Board and the Basel Committee have agreed on new capital and other requirements applicable to designated globally systemically important banks. U.S. banking regulators have implemented some of these requirements.

Table 5: Summary of Changes in Indicators for Bank Systemically Important Financial Institutions (Bank SIFIs), from 2010 through 2015

Characteristic	Indicator (italicized) and description of change	What does the change in the indicator suggest about potential spillover effects or resilience?
Size. Size captures the amount of financial services or financial intermediation that an institution provides and is associated with the potential for its financial distress to affect the financial system and the broader economy (spillover effects).	Numbers of SIFIs. Between the third quarter of 2010 and the second quarter of 2015, the numbers of large bank SIFIs and the numbers of other bank SIFIs decreased.	Decreased potential spillover effects for large bank SIFIs and for other bank SIFIs.
	Total assets. Between the third quarter of 2010 and the second quarter of 2015, median assets for large bank SIFIs increased while median assets of other bank SIFIs decreased.	Increased potential spillover effects for large bank SIFIs and decreased potential spillover effects for other bank SIFIs.
	Market share. Between the third quarter of 2010 and the second quarter of 2015, median market shares for large bank SIFIs increased while median market shares of other bank SIFIs remained about the same.	Increased potential spillover effects for large bank SIFIs and with no change in potential spillover effects for other bank SIFIs.
Interconnectedness. Interconnectedness captures direct or indirect linkages between financial institutions that may transmit distress from one institution to another (spillover effects).	Gross notional amounts of credit default swaps outstanding for which the company is the reference entity. Between the third quarter of 2010 and the first quarter of 2015, median credit default swaps for large bank SIFIs and for other bank SIFIs decreased.	Decreased potential spillover effects for large bank SIFIs and for other bank SIFIs.
	Total debt outstanding (excluding deposits). Between the third quarter of 2010 and the second quarter of 2015, median debt for large bank SIFIs and for other bank SIFIs decreased.	Decreased potential spillover effects for large bank SIFIs and for other bank SIFIs.
Complexity. Institutions that are more complex are likely to be more difficult to resolve and therefore cause significantly greater disruption to the wider financial system and economic activity if they fail (spillover effects).	Numbers of legal entities. Between the second quarter of 2010 and the second quarter of 2015, median numbers of legal entities for large bank SIFIs and for other bank SIFIs decreased.	Decreased potential spillover effects for large bank SIFIs and for other bank SIFIs.
	Numbers of foreign legal entities. Between the second quarter of 2010 and the second quarter of 2015, median numbers of foreign legal entities for large bank SIFIs increased while median numbers of foreign legal entities for other bank SIFIs decreased.	Increased potential for spillover effects for large bank SIFIs and decreased potential spillover effects for other bank SIFIs.
	Numbers of countries in which foreign legal entities are located. Between the second quarter of 2010 and the second quarter of 2015, median numbers of countries in which foreign legal entities are located for large bank SIFIs remained relatively constant, while median numbers of countries in which foreign legal entities are located for other bank SIFIs decreased.	No change in the potential for spillover effects for large bank SIFIs and decreased potential for spillover effects for other bank SIFIs.

Characteristic	Indicator (italicized) and description of change	What does the change in the indicator suggest about potential spillover effects or resilience?
Leverage. Leverage generally captures the relationship between an institution's exposure to risk and capital that can be used to absorb losses from that exposure and is associated with the likelihood that an institution will fail	Tangible common equity as a percentage of assets. Between the third quarter of 2010 and the second quarter of 2015, median tangible common equity as a percentage of assets for large bank SIFIs and for other bank SIFIs increased.	Increased resilience for large bank SIFIs and for other bank SIFIs.
(resilience).	Total equity as a percentage of assets. Between the third quarter of 2010 and the second quarter of 2015, median total equity as a percentage of assets for large bank SIFIs and for other bank SIFIs increased.	Increased resilience for large bank SIFIs and for other bank SIFIs.
Liquidity. Liquidity captures an institution's ability to fund assets and meet obligations as they come due and is associated with the likelihood that an institution will fail (resilience).	Short-term liabilities as a percentage of total liabilities. Between the third quarter of 2010 and the second quarter of 2015, median short-term liabilities as a percentage of total liabilities for large bank SIFIs and for other bank SIFIs decreased.	Increased resilience for large bank SIFIs and for other bank SIFIs.
	Liquid assets as a percentage of short-term liabilities. Between the third quarter of 2010 and the second quarter of 2015, median liquid assets as a percentage of short-term liabilities for large bank SIFIs and for other bank SIFIs increased.	Increased resilience for large bank SIFIs and for other bank SIFIs.

Source: GAO analysis of data from the Federal Reserve Bank of Chicago, the Bureau of Economic Analysis, the Federal Reserve Board, and Bloomberg | GAO-16-169.

Notes: The changes in indicators are suggestive, meaning they are consistent with changes in resilience and the potential for spillover effects but cannot definitively establish the impact of the Dodd-Frank Act. Our indicators analysis generally includes all top-tier U.S. bank holding companies with total consolidated assets of \$1 billion or more that filed Form FR Y-9C for one or more quarters during the period from the first quarter of 2006 to the second quarter of 2015, including any U.S.based bank holding company subsidiaries of foreign banking organizations that on their own have total consolidated assets of \$1 billion or more and that filed Form FR Y-9C. We chose the threshold of \$1 billion in assets to match the threshold for reporting Form FR Y-9C starting in the first guarter of 2015. We defined bank SIFIs as bank holding companies with total assets of \$50 billion or more, large bank SIFIs as bank holding companies with total assets of \$500 billion or more, other bank SIFIs as bank holding companies with total assets of at least \$50 billion but less than \$500 billion, and non-SIFI bank holding companies as bank holding companies with less than \$50 billion in total assets. We calculated each of our indicators for each bank holding company in our sample for each quarter from the first quarter of 2006 to the second quarter of 2015, with the exceptions of our complexity indicators, which we calculated only for bank SIFIs as of the second quarter of each year from 2006 to 2015, and one of our interconnectedness indicators, which we calculated only for bank SIFIs. We then calculated the median value of each indicator for each group of bank holding companies—large bank SIFIs, other bank SIFIs, all bank SIFIs, non-SIFI bank holding companies, and all bank holding companies, to the extent possible—and track the median values over time. Finally, we assess the changes in the median values of the indicators for large bank SIFIs and other bank SIFIs between the second or third guarter of 2010 and the second guarter of 2015, depending on the indicator. We say that an indicator has increased or decreased if it has changed by 5 percent or more, depending on the direction of the change, and we say that an indicator has remained about the same if it has changed by less than 5 percent.

Enhanced Prudential Standards Associated with Some Improvements in Bank SIFI Safety and Soundness but Not with Changes in Funding Costs for Bank SIFIs

The act requires the Federal Reserve to impose a variety of regulatory reforms on SIFIs, including enhanced risk-based capital, leverage, and liquidity requirements. These reforms may affect the safety and soundness of bank SIFIs and the funding costs for bank SIFIs. Specifically, capital and leverage requirements may help reduce the probability of bank failures and promote financial stability. However, by increasing funding costs for banks, the requirements might also cause banks to raise lending rates and limit their ability to provide credit, especially during a crisis.⁸⁷ Similarly, while stricter liquidity requirements may help reduce the probability, banks could respond to these requirements by increasing lending spreads to offset lower yields on assets or higher costs associated with liabilities with longer maturities. To the extent that they increase the cost and reduce the availability of credit, these reforms may lead to reduced output and economic growth.⁸⁸

Our analysis shows an association between the Dodd-Frank Act and an increase in some indicators of SIFI safety and soundness.⁸⁹ However, we find no evidence of an association between the Dodd-Frank Act and increased funding costs for bank SIFIs. Our econometric analysis leverages the Dodd-Frank Act requirement that bank holding companies with total consolidated assets of \$50 billion or more are subject to enhanced regulation by the Federal Reserve but other bank holding companies are not. Specifically, we compare funding costs, capital adequacy, asset quality, earnings, and liquidity for bank SIFIs and non-SIFI bank holding companies before and after enactment of the Dodd-Frank Act. All else being equal, the difference in the comparative differences is the inferred effect of the Dodd-Frank Act's prudential requirements on bank SIFIs.

⁸⁷One way banks may respond to changes in funding costs is by adjusting the spread between the cost of funds and the interest rate charged to borrowers.

⁸⁸For example, see Basel Committee on Banking Supervision, *An Assessment of the Long Term Economic Impact of Stronger Capital and Liquidity Requirements* (Basel, Switzerland: August 2010), and Basel Committee on Banking Supervision and Financial Stability Board, *Assessing the Macroeconomic Impact of the Transition to Stronger Capital and Liquidity Requirements* (Basel, Switzerland: August 2010).

⁸⁹See appendix VI for more information on our econometric analysis.

Our approach allows us to partially differentiate changes in funding costs, capital adequacy, asset quality, earnings, and liquidity associated with the Dodd-Frank Act from changes due to other factors. However, several factors make isolating and measuring the impact of the act's new requirements for SIFIs challenging. For example, the effects of the act cannot be differentiated from the effects of simultaneous changes in economic conditions, such as the pace of the recovery from the recent recession; regulations, such as those stemming from Basel III; or other changes, such as changes in credit ratings that differentially may affect bank SIFIs and other bank holding companies. In addition, some of the new requirements for SIFIs have yet to be fully implemented.⁹⁰ For example, in August 2015, the Federal Reserve issued a final rule that established risk-based capital surcharges for the largest, most interconnected SIFIs.⁹¹ Nevertheless, our estimates are suggestive of the initial effects of the act on bank SIFIs and provide a baseline against which to compare future trends.

Our analysis suggests that the Dodd-Frank Act has not been associated with a significant change in funding costs for bank SIFIs (see table 6). Our measure of funding cost captures the interest paid on borrowed funds and deposits. To the extent that the cost of credit provided by bank SIFIs is a function of their funding costs, the new requirements for SIFIs appear to have had little effect on the aggregate cost of credit to date via the funding cost channel.

⁹⁰See appendix IV for the summary of rulemakings related to select Dodd-Frank Act provisions applicable to SIFIs.

⁹¹Regulatory Capital Rules: Implementation of Risk-Based Capital Surcharges for Global Systemically Important Bank Holding Companies, 80 Fed. Reg. 49,082 (Aug. 14, 2015). This rule became effective on December 1, 2015.

Table 6: Estimated Changes in Bank Systematically Important Financial Institutions (Bank SIFIs) Funding Costs and Measures of Safety and Soundness Associated with the Dodd-Frank Act, from Third Quarter 2010 through Second Quarter 2015 (Percentage Points)

			Estimated change and standard error of estimated change (percentage
	Variable	Measured as	points)
Funding cost indicator	Funding cost	Interest expense as a percentage of interest-bearing liabilities	0.06 (0.06)
Safety and soundness indicators	Capital adequacy	Tangible common equity as a percentage of total assets	1.47*** (0.26)
		Total bank holding company equity as a percentage of total assets	0.50 (0.39)
	Asset quality	Performing assets as a percentage of total assets	0.43*** (0.12)
	Earnings	Earnings as a percentage of total assets	0.33*** (0.12)
	Liquidity	Liquid assets as a percentage of short-term liabilities	3.04 (12.22)
		Long-term liabilities as a percentage of total liabilities	3.87*** (1.06)

Source: GAO analysis of data from the Federal Reserve Bank of Chicago and the Federal Reserve Board. | GAO-16-169

Notes: We analyzed data for top-tier bank holding companies that filed Form FR Y-9C from the first quarter of 2006 through the second quarter of 2015, including U.S. bank holding companies and U.S.based bank holding company subsidiaries of foreign banking organizations. We defined bank SIFIs as bank holding companies with assets of \$50 billion or more. We estimated the effects of the new SIFI requirements on bank SIFIs by regressing the variables listed in the table on indicators for each bank holding company, indicators for each quarter, indicators for whether a bank holding company is a SIFI for quarters from the third in 2010 through the second in 2015, and other variables controlling for size, foreign exposure, securitization income, other nontraditional income, and participation in the Troubled Asset Relief Program. Estimated changes are the coefficients on the indicators for whether a bank holding company is a SIFI in quarters from the third in 2010 percent level. ***=estimate is statistically significant at the 10 percent level. ***=estimate is statistically significant at the 10 percent level. ***=estimate is statistically significant at the 10 percent level. VI.

Our estimates also suggest that the Dodd-Frank Act is associated with improvements in some measures of bank SIFIs' safety and soundness.

	Bank SIFIs appear to be holding more tangible common equity as a percentage of assets than they otherwise would have held since Dodd-Frank Act enactment (see table 6). The quality of assets on the balance sheets of bank SIFIs seems to have improved since enactment. The act is also associated with improved liquidity as measured by the extent to which a bank holding company is using stable sources of funding and with higher earnings. However, capital adequacy as measured by the capacity of a bank holding company equity and liquidity as measured by the capacity of a bank holding company's liquid assets to cover its volatile liabilities have not clearly improved since enactment. Thus, the Dodd-Frank Act appears to be associated with improvements in some indicators of safety and soundness for bank SIFIs (relative to non-SIFI bank holding companies) but not others. See appendix VI for more details on our regression analysis.
Indicators for Designated Nonbanks Provide Baselines for Assessing the Future Impact of Dodd-Frank Act Reforms	We developed indicators associated with size, interconnectedness, leverage, and liquidity for institutions whose material financial distress or activities FSOC determines could pose a threat to U.S. financial stability and therefore should be subject to Federal Reserve supervision and enhanced prudential standards. As of July 2015, FSOC has designated four nonbank financial companies—American International Group, Inc. (AIG) and General Electric Capital Corporation (GECC) in July 2013, Prudential Financial, Inc. (Prudential) in September 2013, and MetLife, Inc. (MetLife) in December 2014. FSOC has determined that each of these institutions was predominately engaged in financial activities (that is, at least 85 percent of their revenues were derived from, or more than 85 percent of their assets were related to, activities that were financial in nature). According to FSOC, at the time of the determinations, AIG was the third-largest insurance company in the United States and one of the largest insurers in the world; GECC was one of the largest holding companies in the United States and a significant source of credit to commercial and consumer customers; Prudential was one of the largest financial services, including group and individual life insurance, annuities, retirement-related products and services, and asset management; and MetLife was the largest publicly traded U.S. insurance organization and one of the largest financial services companies in the United States.
	As we first reported in December 2012, the Dodd-Frank Act and its implementing rules may result in adjustments to size, interconnectedness, leverage, and liquidity characteristics of designated nonbanks over time.

Size and interconnectedness reflect the potential for the financial distress of a single designated nonbank to affect the financial system and economy, while leverage and liquidity reflect a designated nonbank's resilience to shocks or its vulnerability to financial distress. We developed the following indicators based on the characteristics of companies that FSOC reviews as part of its process for designating nonbanks:

- Size. Our indicator of size is total consolidated assets.
- Interconnectedness. Our indicators of interconnectedness are gross notional amounts of credit default swaps outstanding for which the designated nonbank is the reference entity and total debt outstanding (excluding deposit liabilities).⁹²
- Leverage. Our indicator of leverage is total equity as a percentage of total consolidated assets (excluding separate account assets).⁹³
- Liquidity. Our indicator of liquidity is short-term debt (excluding deposit liabilities) as a percentage of total consolidated assets (excluding separate account assets).

We calculated each indicator for each designated nonbank for each quarter from the second quarter of 2012 to the second quarter of 2015. We also calculated the medians of each indicator for publicly traded

⁹²A credit default swap is an agreement between two parties in which one party (the protection seller) agrees to provide payment to the other party (the protection buyer) should a credit event occur against a third party debt issuer (known as the reference entity), a specified debt (known as the reference obligation), a basket of debts (known as the reference pool), a credit index (known as the reference index), or any other swap underlying reference in exchange for periodic payments from the protection buyer. The maximum amount of protection provided by the protection seller is equal to the notional amount of the swap.

⁹³A life insurance company's invested assets are held in two types of accounts: the general account and one or more separate accounts. The general account consists of assets and liabilities of the insurance company that are not allocated to separate accounts. Separate accounts consist of funds held by a life insurance company that are maintained separately from the insurer's general assets. An insurer's general account assets are obligated to pay claims arising from its insurance policies, annuity contracts, debt, derivatives, and other liabilities. By contrast, for non-guaranteed separate accounts, the investment risk is passed through to the contract holder; the income, gains, or losses (realized or unrealized) from assets allocated to the separate account are credited to or charged against the separate account. Therefore, non-guaranteed separate account liabilities are not generally directly exposed to the insurer's credit risk because they are insulated from claims of creditors of the insurance company. However, in the case of separate account contracts supported by the general account through guarantees, holders of separate accounts may be directly exposed to the insurer's credit risk.

banks and insurance companies with total consolidated assets of \$50 billion or more to provide a frame of reference.

Like our indicators for bank SIFIs, our indicators for designated nonbanks have some limitations. For example, the indicators do not identify causal links between changes in designated nonbanks' characteristics and the act. Rather, the indicators track changes in the size, interconnectedness, leverage, and liquidity of designated nonbanks since the passage of the act to examine if the changes have been consistent with the goals of the act. However, other factors, such as capital standards for large, internationally active insurance companies may also affect designated nonbanks and, thus, the indicators. Furthermore, to the extent that a number of rules implementing provisions related to designated nonbanks have not yet been finalized, our indicators include the effects of these rules only insofar as designated nonbanks have changed their behavior in response to issued rules or in anticipation of expected rules. In this regard, our indicators provide baselines against which to compare future trends.

Figure 3 below shows the indicators for the period from second quarter 2012 through second quarter 2015. As of July 2015, the Federal Reserve issued specific rules requiring designated nonbank financial companies to conduct resolution planning and stress testing, but additional rules are forthcoming.⁹⁴ Thus, the current values of our indicators are baselines against which to compare future trends as more rules for designated nonbanks are implemented. Our indicators allow for the following observations:

⁹⁴In addition, both Treasury and the Federal Reserve assess fees directly on nonbank financial companies designated by FSOC. Under an interim final rule, Treasury assesses fees for a fund to cover FSOC's and OFR's operating and capital costs, as well as some other costs. See Assessment of Fees on Large Bank Holding Companies and Nonbank Financial Companies Supervised by the Federal Reserve Board To Cover the Expenses of the Financial Research Fund, 77 Fed. Reg. 29,884 (May 21, 2012). The Federal Reserve's assessment covers the supervisory and regulatory responsibilities for the designated nonbank financial companies. See Supervision and Regulation Assessments for Bank Holding Companies and Savings and Loan Holding Companies With Total Consolidated Assets of \$ 50 Billion or More and Nonbank Financial Companies Supervised by the Federal Reserve, 78 Fed. Reg. 52,391 (Aug. 23, 2013). Also, FDIC has the authority under the Dodd-Frank Act to assess designated nonbank financial companies to recover the portion of money obligated in resolving a failed institution under Title II that was not otherwise repaid within 60 months of obtaining the funds. Pub. L. No. 111-203, § 210(o)(1)(D)(ii), 124 Stat. 1376, 1509-1510 (2010)(codified at 12 U.S.C. § 5390(o)(1)(D)(ii)).

- Based on their total assets, all four designated nonbanks are relatively large. They are all larger than the median publicly traded bank or insurance company with assets of \$50 billion or more.
- Gross notional amounts of credit default swaps outstanding (for which designated nonbanks are the reference entities) have decreased since the second quarter of 2012, suggesting that the designated nonbanks are relatively less interconnected and thus have smaller potential spillover effects than in prior years by this measure, all else being equal.
- Total debt outstanding for one designated nonbank is relatively high, suggesting that it is more interconnected and thus has larger potential spillover effects than the other three designated nonbanks by this measure, all else being equal.
- Total equity as a percentage of nonseparate account assets varies across the four designated nonbanks, ranging from less than 10 percent to almost 25 percent in the second quarter of 2015. This variation in leverage suggests that the designated nonbanks have varying resilience to shocks and financial distress by this measure, all else being equal.
- Short-term debt as a percentage of nonseparate account assets for one designated nonbank is relatively high, suggesting that it faces greater liquidity risk and is relatively less resilient than the other three designated nonbanks by this measure, all else being equal.





------ Insurance (median)

Source: GAO analysis of data from Bloomberg and the Bureau of Economic Analysis. | GAO-16-169

Notes: Designated nonbanks are American International Group (AIG), General Electric Capital Corporation (GECC), MetLife, and Prudential Financial (Prudential). Insurance is the median value for publicly traded insurance companies with assets of \$50 billion or more. Banking is the median for publicly traded bank holding companies with assets of \$50 billion or more. Dollar amounts are adjusted for inflation and measured in millions of second quarter 2015 dollars.

Indicators Suggest That the Dodd-Frank Act Is Associated with Increased Use of Margin Collateral in Over-the-Counter Derivatives Transactions

As we reported in December 2013, once fully implemented, some provisions in Title VII of the Dodd-Frank Act may help reduce systemic risks to financial markets by increasing margins posted for uncleared swaps.⁹⁵ Using data through the second quarter of 2015, we updated the set of indicators that we developed in our December 2013 report and updated in our December 2014 report to measure changes in the use of margin collateral for over-the-counter derivatives.⁹⁶ This set of indicators may shed light on changes in the use of margin collateral associated with Dodd-Frank Act swap reforms as they are implemented, but has several key limitations, as described later in this section.⁹⁷

Our margin indicators measure the fair value of collateral pledged by counterparties to secure over-the-counter derivatives contracts as a percentage of net current credit exposure to those counterparties for bank holding companies.⁹⁸ To protect itself from the loss it would incur if a counterparty defaulted on a derivative contract, a swap entity could require counterparties to post margin collateral in an amount equal to or greater than its exposure to the contracts. An increase in collateral as a percentage of credit exposure suggests that holding companies have required their counterparties to post a greater amount of collateral against

⁹⁵See GAO-14-67.

⁹⁶See GAO-14-67 and GAO-15-81.

⁹⁷See appendix VII for Dodd-Frank Act rules implementing central clearing, capital, and margin swap reforms.

⁹⁸Our indicators use data collected by the Federal Reserve on Form FR Y-9C, which currently requires bank holding companies with \$10 billion or more in assets to report their net current credit exposure to counterparties in over-the-counter derivatives contracts and the fair value of the collateral pledged by those counterparties to secure the contracts. The fair value of collateral is the amount that would be received if the collateral were sold in an orderly transaction between market participants in its principal market on the measurement date. The net current credit exposure approximates the credit loss that a bank, financial, or savings and loan holding company would suffer if its counterparties defaulted on their over-the-counter derivatives contracts. Net current credit exposure to a counterparty is derived by first calculating the fair values of all derivatives contracts with that counterparty, where the fair value of a derivative contract is analogous to the fair value of collateral. If a legally enforceable bilateral netting agreement is in place, the fair values of all applicable derivatives contracts in the scope of the netting agreement with that counterparty are netted to a single amount, which may be positive, negative, or zero. Net current credit exposure across all counterparties is the sum of the gross positive fair values for counterparties without legal netting arrangements and the net current credit exposure for counterparties with legal netting agreements.

their credit exposure due to derivatives contracts overall, which would be consistent with the purposes of the act's swap reforms.

Figure 4 shows trends in our margin indicators from the second quarter of 2009 through the second quarter of 2015. The rate of collateralization of net current credit exposure to all counterparties has increased from about 71 percent in the third quarter of 2010 to about 104 percent in the second quarter of 2015, suggesting that holding companies generally required their counterparties to post a greater amount of collateral against their derivatives contracts. However, as discussed later, aggregate measures of collateralization rates can mask differences in collateralization rates for different counterparty types.⁹⁹

Figure 4: Fair Value of Collateral as a Percentage of Net Current Credit Exposure for Over-the-Counter Derivatives Contracts for Counterparty Type and for All Counterparty Types Combined, from Second Quarter 2009 through Second Quarter 2015 (Percentage)



Source: GAO analysis of data from the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of Chicago. | GAO-16-169

Notes: To calculate the fair value of collateral as a percentage of net current credit exposure for all counterparty types, we used quarterly data (from second quarter 2009 through second quarter 2015) on U.S. bank holding companies from Form FR Y-9C. For each quarter, we divided total fair value of collateral pledged by each counterparty type and by all counterparty types for all of these holding companies by total net current credit exposure to each counterparty type and to all counterparty types for all of these holding companies.

⁹⁹A counterparty is one of the two people, companies, or organizations involved in a business transaction, as referred to by the other participant in the transaction.

Collateral posted by type of counterparty—banks and securities firms, monoline financial guarantors, hedge funds, sovereign governments, and corporate and all other counterparties—has increased (as a percentage of net credit exposure) between the third quarter of 2010 and the second quarter of 2015.¹⁰⁰ However, the rate of collateralization consistently differed by the type of counterparty, with hedge funds consistently posting more collateral as a percentage of credit exposure than other types of counterparties. As we reported in December 2013, according to OCC, the rates differ partly because swap dealers may require certain counterparties to post both initial and variation margin and other counterparties to post only variation margin. Depending on how the margin rules are finalized, the rates of collateralization for some counterparties may increase.

Our margin indicators, while suggestive, are subject to important limitations. First, they do not identify causal links between changes in collateralization and the Dodd-Frank Act, including its regulations. Rather, the set of indicators tracks changes in collateralization since the act's passage to examine if the changes were consistent with the act's goals for increasing collateralization. Second, both net current credit exposure and the fair value of collateral are as of a point in time because the fair values of derivatives contracts and collateral can fluctuate over time. Third, an average collateralization of 100 percent does not ensure that all current counterparty exposures have been eliminated, because one counterparty's credit exposure may be overcollateralized and another's undercollateralized. Fourth, our indicators measure the fair value of the collateral held against net current credit exposures but do not necessarily measure the risk of uncollateralized losses. The fair value of net current credit exposure does not fully account for the riskiness of any single swap contract. If a party has entered into riskier swaps, it is possible for the rate of collateralization to increase while the risk of uncollateralized losses also increases. Fifth, our indicators are market aggregates that may not reflect the collateralization rate for any single company. Finally, these indicators do not reflect collateralization rates for companies, such as stand-alone broker-dealers, that have credit exposure to counterparties in over-the-counter derivatives contracts but are not affiliated with a bank holding company.

¹⁰⁰A monoline financial guarantor is a financial guaranty company that guarantees all scheduled interest and principal payments on its insured bonds and writes no other line of insurance.

Agency Comments and Our Evaluation	We provided a draft of this report to CFPB, Federal Reserve, FDIC, OCC, NCUA, SEC, CFTC, and Treasury for review and comment. NCUA provided written comments that we have reprinted in appendix VIII. The regulators also provided technical comments, which we have incorporated, as appropriate.
	In its comment letter, NCUA concurred with our report and noted it acknowledges the difficulty of clearly identifying the impact of the Dodd- Frank Act regulations on community banks, credit unions and systemically important financial institutions. However, it said that it would like to see a deeper consideration of structure of the credit union industry, which may help to more clearly illustrate the effects of the Dodd-Frank Act on this sector. NCUA suggested using a set of indicators better-calibrated to credit union business models, which may be more helpful in assessing the effects of the Dodd-Frank Act on smaller credit unions. NCUA noted that despite caveats in our report, indicating comparisons between the credit union and community banking sectors may not be appropriate because readers with limited background in these sectors may not be able to judge the extent of the differences between these institutions.
	While we maintain that the indicators we developed are reasonable, in the report, we acknowledged that they are imperfect and have limitations. Specifically, as we noted in the report, these indicators developed for various sizes of credit unions do not reflect the experience of every individual credit union. We also stated in the report that while we presented similar indicators for banks and credit unions, comparisons between the two types of institutions may not be appropriate and that certain indicators may be more relevant than others for each type of institution. We also acknowledged in the report that these indicators are baselines against which to compare future trends between different sized credit unions, they are limited in their ability to assess the cumulative impact of Dodd-Frank Act regulations, and that care should be used in interpreting the results of this analysis.
	We are sending copies of this report to the appropriate congressional

We are sending copies of this report to the appropriate congressional committees and members, federal financial regulators, and the Department of the Treasury. This report will also be available at no charge on our website at http://www.gao.gov.

Should you or your staff have questions concerning this report, please contact me at (202) 512-8678 or evansL@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on

the last page of this report. Key contributors to this report are listed in appendix IX.

L Erons, Jr. D

Lawrance L. Evans, Jr. Director, Financial Markets and Community Investment

List of Addressees

The Honorable Mitch McConnell Majority Leader The Honorable Harry Reid Minority Leader United States Senate

The Honorable Paul Ryan Speaker The Honorable Nancy Pelosi Minority Leader House of Representatives

The Honorable Pat Roberts Chairman The Honorable Debbie Stabenow Ranking Member Committee on Agriculture, Nutrition and Forestry United States Senate

The Honorable Thad Cochran Chairman The Honorable Barbara Mikulski Ranking Member Committee on Appropriations United States Senate

The Honorable Richard Shelby Chairman The Honorable Sherrod Brown Ranking Member Committee on Banking, Housing, and Urban Affairs United States Senate

The Honorable John Thune Chairman The Honorable Bill Nelson Ranking Member Committee on Commerce, Science, and Transportation United States Senate The Honorable Mike Conaway Chairman The Honorable Collin Peterson Ranking Member Committee on Agriculture House of Representatives

The Honorable Hal Rogers Chairman The Honorable Nita Lowey Ranking Member Committee on Appropriations House of Representatives

The Honorable Fred Upton Chairman The Honorable Frank Pallone Ranking Member Committee on Energy and Commerce House of Representatives

The Honorable Jeb Hensarling Chairman The Honorable Maxine Waters Ranking Member Committee on Financial Services House of Representatives
Appendix I: Objectives, Scope, and Methodology

Under the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), various federal agencies are directed or have the authority to issue hundreds of regulations to implement the act's provisions.¹ This report examines

- regulatory analyses conducted by the federal financial regulators and the Department of the Treasury (Treasury) in their Dodd-Frank Act rulemakings, including their assessments of which rules they considered to be major rules, and coordination between and among federal regulators on these rulemakings;²
- possible impact of promulgated Dodd-Frank Act provisions on community banks and credit unions and their business activities; and
- possible impact of selected Dodd-Frank Act provisions and their implementing regulations on financial market stability.

The agencies covered in our review are the federal financial regulators, the Financial Stability Oversight Council (FSOC), and the Treasury. We use the term "federal financial regulators" to refer to the Bureau of Consumer Financial Protection (commonly known as the Consumer Financial Protection Bureau, or CFPB), Commodity Futures Trading Commission (CFTC), Federal Deposit Insurance Corporation (FDIC), the Board of Governors of the Federal Reserve System (Federal Reserve), Office of the Comptroller of the Currency (OCC), National Credit Union Administration (NCUA), and Securities and Exchange Commission (SEC).

To examine the regulatory analyses and coordination conducted by the federal financial regulators and Treasury, we focused our analysis on the final rules issued pursuant to the Dodd-Frank Act that became effective from July 23, 2014, through July 22, 2015, a total of 26 rules (see app.

¹Pub. L. No. 111-203, 124 Stat. 1376 (2010).

²As defined by the CRA, a major rule is generally one that the Office of Management and Budget finds has resulted in or is likely to result in (1) an annual effect on the economy of \$100 million or more; (2) a major increase in costs or prices; or (3) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S.-based enterprises to compete with foreign-based enterprises in domestic and export markets. Pub. L. No. 104-121, tit. II, § 251, 110 Stat. 868 (1996) (codified at 5 U.S.C. § 804(2)).

II).³ We compiled these rules from a website maintained by the Federal Reserve Bank of St. Louis that tracks Dodd-Frank Act regulations. We corroborated this information with staff from CFPB, Federal Reserve, FDIC, OCC, NCUA, SEC, CFTC, and the Treasury. We asked these staff to identify any other rulemaking that should be included. We reviewed federal statutes, regulations, and GAO studies on these rules as well as Federal Register releases that contain information on the regulatory analyses conducted by agencies and their coordination efforts. Using these materials, we identified the regulatory analyses, including benefitcost analysis, required to be conducted by the agencies as part of their Dodd-Frank Act rulemakings. Of the 26 rules in our scope, 15 were substantive regulations, meaning that they were generally subject to public notice and comment under the Administrative Procedure Act (APA)—and also required the agencies to conduct some form of regulatory analysis. For each of the 15 rules, we reviewed the Federal *Register* release of the final rule document and summarized the analyses conducted by the regulators and Treasury. Using GAO's Federal Rules database, we found that 6 of the 15 rules were classified by the Office of Management and Budget as major rules under the Congressional Review Act (CRA). That is, they resulted or are likely to result in an annual impact on the economy of \$100 million or more, a major increase in costs or prices, or significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S.-based enterprises to compete with foreign-based enterprises in domestic or export markets. For agencies subject to Executive Order (E.O.) 12,866, such major rules would be considered significant regulatory actions and subject to formal cost-benefit analysis.⁴ We developed a data collection

³We use rules, regulations, or rulemakings generally to refer to *Federal Register* notices of agency action pursuant to the Dodd-Frank Act, including final and interim final rules. It does not include orders, guidance, notices, interpretations, corrections, or policy statements. With this and our past four reports, we have reviewed all Dodd-Frank Act rules in effect as of July 22, 2015. See GAO-12-151, GAO-13-101, GAO-14-67, and GAO-15-81.

⁴The CRA definition of a major rule is similar, but not identical, to the E.O. 12,866 definition of a "significant regulatory action," which means any regulatory action that is likely to result in a rule that may: (1) have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues.

instrument to compare and assess the regulatory analysis conducted for the major rules against the principles outlined in OMB Circular A-4, which provides guidance to federal agencies on the development of regulatory analysis.⁵

We also reviewed the Dodd-Frank Act and *Federal Register* releases to identify the interagency coordination or consultation requirements as required by the act for the 26 rules in our scope. As a part of this review, an analyst looked for key words relating to coordination in the *Federal Register* releases and the requirements for coordination in the Dodd-Frank Act and recorded this information in a spreadsheet. An attorney then reviewed related rulemakings and acts and also independently evaluated each determination documented in the spreadsheet to reach concurrence on the assessment.

To assess the possible impact of the Dodd-Frank Act on community banks and credit unions, we used our September 2012 report, which identified provisions expected to affect some or all community banks and credit unions, to identify select final rules that became effective by October 2015.⁶ While we started with a larger population of rules, we specifically reviewed nine final rules that were identified by the community banks and credit unions as potentially having an impact for the purpose of this report. We reviewed the *Federal Register* releases for these final rules and relevant material on the act and the final rules, as well as five studies by federal and state regulators, industry associations, and academics on the potential impact of the final rules on community banks and credit unions. All but one study we reviewed relied on surveys of banks, usually contacted through banking association member lists. The final study consisted of a study of all payment card networks. We identified these studies through electronic searches of Google and Google Scholar using keywords such as the name of the rule and "impact on community banks or credit unions." Two GAO social science analysts reviewed the quality of each study's research design and methods and

⁵As independent regulatory agencies that are not required to follow the economic analysis requirements of E.O. 12,866, the financial regulatory agencies also are not required to follow OMB Circular A-4. However, Circular A-4 is an example of best practices for agencies to follow when conducting regulatory analyses, and the financial regulatory agencies have told us that they follow the guidance in spirit.

⁶GAO, Community Banks and Credit Unions: Impact of Dodd Frank Act Depends Largely on Future Rulemakings, GAO-12-881 (Washington, D.C.: Sept. 13, 2012).

identified related limitations. Because most of the studies relied on surveys of non-probability, convenience samples of banks with low response rates, the study results cannot be used to make inferences about the population of all small banks. However, the results do provide useful insights into the experiences of surveyed banks with Dodd-Frank Act rules.

We conducted semi-structured interviews with federal regulators, the Independent Community Bankers of America (ICBA), the Credit Union National Association (CUNA), the National Federation of Independent Business, the U.S. Chamber of Commerce, and a non-generalizable sample of four state credit union and community bank associations and eight community banks and credit unions about the impact of the final rules on community banks and credit unions. Between July and September 2015, we interviewed representatives from two state community banking and two state credit union associations from Georgia, Illinois, Louisiana, and Pennsylvania. We also interviewed representatives from four community banks and four credit unions that fell in each of the four asset categories: under \$250 million, between \$250 million and \$500 million, between \$500 million and \$1 billion, and between \$1 billion and \$10 billion. In determining our sample, we relied to the extent possible on entities interviewed for our September 2012 report for continuity.⁷ As two state bank community banking and credit union associations that we previously interviewed declined to be re-interviewed, we used a methodology similar to our September 2012 report to select replacements. Using SNL Financial data on the number and percentage of banks and credit unions in each state within different asset classes, we selected one state banking association and one state credit union association that (1) represented a higher-than-average percentage of institutions within specific asset classes and (2) represented a larger number of institutions within that asset class than other states.⁸

⁸SNL Financial is a private service that aggregates and disseminates data from quarterly regulatory reports, among other information.

⁷At the time of the September 2012 report, many Dodd-Frank Act regulations had not been promulgated and the information we obtained from the respondents was based on the expected impact of potential regulations. As of June 2015, about 250 Dodd-Frank Act regulations had been promulgated. By interviewing the same entities that previously thought about the potential impact, we intended to obtain information on how the actual impact compared with the expected impact and the extent to which the rule-making agencies addressed concerns raised by these entities.

Additionally, we interviewed three community banks and two credit unions that we previously interviewed in our September 2012 report and randomly selected and interviewed one community bank and two credit unions for the remainder. While the information we obtained from the interviews provides useful insights, it cannot be used to make generalizations about the experiences of all community banks and credit unions since the selection of interviewees relied on non-probability sampling methods. Nevertheless, we purposely sought to achieve variety in our sample as a way to gain access to a range of experiences within the target population.

We also analyzed bank guarterly Reports of Condition and Income (Call Reports) data for depository institutions and credit unions obtained from FFIEC and NCUA, respectively, from the first guarter of 2006 through the second guarter of 2015. We used these data to construct indicators of the cumulative costs associated with complying with Dodd-Frank Act regulations, including numbers of employees per \$1 million in assets, non-interest expenses as a percentage of assets, and earnings as a percentage of assets.⁹ We used the same data to construct indicators associated with business lines that may be affected by Dodd-Frank Act regulations, including residential mortgage lending as a percentage of assets. We assessed the reliability of the FFIEC and NCUA data by reviewing relevant documentation and electronically testing the data for missing values, outliers, and invalid values, and we found the data to be sufficiently reliable for purpose of constructing indicators associated with compliance costs and business lines for banks and credit unions. Although we analyzed the impact of a number of specific Dodd-Frank Act provisions on community banks and credit unions, assessing the extent to which these provisions or their related regulations should apply to such institutions was beyond the scope of our work.

To analyze the impact of the Dodd-Frank Act on financial market stability, we updated several indicators developed in our prior reports with data through the second quarter of 2015.¹⁰ We also created new indicators for banks that are systemically important financial institution (bank SIFI) and

⁹Non-interest expenses are for resources other than borrowed funds and generally include the costs of resources (such as compliance staff or consulting services) banks and credit unions are likely to employ to comply with regulations.

¹⁰See GAO-13-101, GAO-14-67, and GAO-15-81.

nonbank financial institutions designated by the FSOC for supervision by the Federal Reserve (designated nonbanks).¹¹ We updated indicators to monitor changes in size, complexity, leverage, and liquidity of bank SIFIs and added new indicators of interconnectedness, which captures direct or indirect linkages between financial institutions that may transmit distress from one institution to another. We updated our econometric analysis estimating changes in measures of the (1) funding cost for bank SIFIs and (2) safety and soundness of bank SIFIs. Since we began developing and tracking indicators for bank SIFIs. FSOC has designated four nonbank institutions for enhanced supervision by the Federal Reserve. As such, we added new indicators associated with the size, interconnectedness, leverage, and liquidity of these institutions. Finally, we updated our indicators monitoring the extent to which certain swap reforms are consistent with the act's goals of reducing risk.¹² For those parts of our methodology that involved the analysis of computerprocessed data from Bloomberg, the Federal Reserve Bank of Chicago, the Federal Reserve, the National Information Center, and the Bureau of Economic Analysis, we assessed the reliability of these data by reviewing relevant documentation, and electronically testing the data for missing values, outliers, and invalid values. We also interviewed Federal Reserve staff about Federal Reserve's data. We determined the data were sufficiently reliable for our purposes-monitoring changes in SIFI characteristics, estimating changes in the cost of credit bank SIFIs provided and their safety and soundness, and assessing the amount of margin collateral that over-the-counter derivatives counterparties used.

We conducted this performance audit from April 2015 to December 2015 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that

¹¹The Dodd-Frank Act does not use "systemically important financial institution" (SIFIs). Academics and other experts commonly use this term to refer to bank holding companies with \$50 billion or more in total consolidated assets and nonbank financial companies designated by FSOC for Federal Reserve supervision and subject to enhanced prudential standards under the Dodd-Frank Act. For this report, we refer to these bank and nonbank financial companies as bank SIFIs and designated nonbanks, respectively.

¹²Swaps include interest rate swaps, commodity-based swaps, and broad-based credit default swaps. Security-based swaps include single-name and narrow-based credit default swaps and equity-based swaps.

the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Dodd-Frank Act Rules Effective as of July 22, 2015

The following table lists the 26 Dodd-Frank Act rules that we identified as having effective dates during the scope of our review—from July 23, 2014, through July 22, 2015. Fifteen of the rules were substantive—meaning they are generally subject to the notice and comment requirements of the Administrative Procedure Act (APA)—and, of those, 6 were major.¹

Table 7: Dodd-Frank Act Rules Effective from July 23, 2014, through July 22, 2015

		Critica	I dates				stated it nalysis under		
Rulemaking	Responsible regulator ^a	Published	Effective ^b	Federal Register number	Substantive rule	Regulatory Flexibility Act ^c	Paperwork Reduction Act ^c	Dodd- Frank Act provision	Major rule
Integration of National Bank and Federal Savings Association Regulations and Licensing Rules	OCC	5/18/2015	7/1/2015	80 Fed. Reg. 28,346	Yes	Yes	Yes	§§ 314, 604, 612, 623	No
Regulation SBSR— Reporting and Dissemination of Security- Based Swap Information	SEC	3/19/2015	5/18/2015	80 Fed. Reg. 14,564	Yes	Not required	Yes	§§ 763, 766	Yes
Security-Based Swap Data Repository Registration, Duties, and Core Principles	SEC	3/19/2015	5/18/2015	80 Fed. Reg. 14,438	Yes	Not required	Yes	§ 763	Yes

¹As defined by the Congressional Review Act, a major rule is generally one that the Office of Management and Budget finds has resulted in or is likely to result in (1) an annual effect on the economy of \$100 million or more; (2) a major increase in costs or prices; or (3) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S.-based enterprises to compete with foreign-based enterprises in domestic and export markets. 5 U.S.C. § 804(2).

	Critical dates					Agency s conducted an			
Rulemaking	Responsible regulator ^a	Published	Effective ^b	Federal Register number	Substantive rule	Regulatory Flexibility Act ^c	Paperwork Reduction Act ^c	Dodd- Frank Act provision	Major rule
Homeownership Counseling Organizations Lists and High- Cost Mortgage Counseling Interpretive Rule	CFPB	4/21/2015	4/21/2015	80 Fed. Reg. 22,091	No	Not applicable	Not required	§ 1450	No
Submission of Credit Card Agreements Under the Truth in Lending Act (Regulation Z)	CFPB	4/17/2015	4/17/2015	80 Fed. Reg. 21,153	Yes	Not required	Not required	§§ 1061, 1100A	No
Credit Risk Retention	FDIC, FHFA, Federal Reserve, HUD, OCC, SEC	12/24/2014	2/23/2015	79 Fed. Reg. 77,602	Yes	Not required ^d	Yes	§ 941	Yes
Annual Stress Test—Schedule Shift and Adjustments to Regulatory Capital Projections	OCC	12/3/2014	1/2/2015	79 Fed. Reg. 71,630	Yes	Not required	Not required	§165	No
Appraisals for Higher-Priced Mortgage Loans Exemption Threshold Adjustment	CFPB,OCC, Federal Reserve	12/30/2014	1/1/2015	79 Fed. Reg. 78,296	No	Not applicable	Not required	§ 1471	No
Home Mortgage Disclosure (Regulation C) Adjustment to Asset-Size Exemption Threshold	CFPB	12/29/2014	1/1/2015	79 Fed. Reg. 77,854	No	Not required	Not applicable	§ 1094	No
Truth in Lending Act (Regulation Z) Adjustment to Asset-Size Exemption Threshold	CFPB	12/29/2014	1/1/2015	79 Fed. Reg. 77,855	No	Not applicable	Not required	§ 1461	No

		Critica	l dates			Agency stated it conducted analysis under			
Rulemaking	Responsible regulator ^a	Published	Effective ^b	Federal Register number	Substantive rule	Regulatory Flexibility Act ^c	Paperwork Reduction Act ^c	Dodd- Frank Act provision	Major rule
Annual Stress Test	FDIC	11/21/2014	1/1/2015	79 Fed. Reg. 69,365	No	Not required	Not required	§ 165	No
Concentration Limits on Large Financial Companies	Federal Reserve	11/14/2014	1/1/2015	79 Fed. Reg. 68,095	No	Not required	Yes	§ 622	No
Consumer Leasing (Regulation M)	CFPB, Federal Reserve	9/22/2014	1/1/2015	79 Fed. Reg. 56,482	No	Not applicable	Not required	§§ 1029, 1100E	No
Truth in Lending (Regulation Z)	CFPB, Federal Reserve	9/22/2014	1/1/2015	79 Fed. Reg. 56,483	No	Not applicable	Not required	§§ 1029, 1100E	No
Truth in Lending (Regulation Z) Annual Threshold Adjustments (CARD ACT, HOEPA and ATR/QM)	CFPB	8/15/2014	1/1/2015	79 Fed Reg. 48,015	No	Not applicable	Not required	§§ 1061, 1100A, 1411, 1412, 1431	No
Financial Market Utilities	Federal Reserve	11/5/2014	12/31/2014	79 Fed. Reg. 65,543	Yes	Yes ^e	Not required	§ 805	No
Defining Larger Participants of the International Money Transfer Market	CFPB	9/23/2014	12/1/2014	79 Fed. Reg. 56,631	Yes	Not required	Not required	§ 1024	No
Capital Plan and Stress Test Rules	Federal Reserve	10/27/2014	11/26/2014	79 Fed. Reg. 64,026	No	Yes ^e	Yes	§ 165	No
Asset-Backed Securities Disclosure and Registration	SEC	9/24/2014	11/24/2014	79 Fed. Reg. 57,184	Yes	Not required	Yes	§ 942	Yes
Electronic Fund Transfers (Regulation E)	CFPB	9/18/2014	11/17/2014	79 Fed. Reg. 55,970	Yes	Not required	Not required	§ 1073	No
Nationally Recognized Statistical Rating Organizations	SEC	9/15/2014	11/14/2014	79 Fed. Reg. 55,078	Yes	Yes	Yes	§§ 932, 936, 938, 943	Yes

		Critica	l dates			Agency conducted ar			
Rulemaking	Responsible regulator ^a	Published	Effective ^b	Federal Register number	Substantive rule	Regulatory Flexibility Act ^c	Paperwork Reduction Act ^c	Dodd- Frank Act provision	Major rule
Amendments to the 2013 Mortgage Rules Under the Truth in Lending Act (Regulation Z)	CFPB	11/3/2014	11/3/2014	79 Fed. Reg. 65,300	Yes	Not required	Not required	§§ 1061, 1100A, 1411, 1412	No
Amendment to the Annual Privacy Notice Requirement Under the Gramm- Leach-Bliley Act (Regulation P)	CFPB	10/28/2014	10/28/2014	79 Fed. Reg. 64,057	Yes	Not required	Not required	§§ 1061, 1093	No
Unfair or Deceptive Acts or Practices; Technical Amendments	NCUA	10/3/2014	10/3/2014	79 Fed. Reg. 59,627	No	Not required	Not required	§§ 1092	No
Application of "Security-based Swap Dealer" and "Major Security-Based Swap Participant" Definitions to Cross-Border Security-Based Swap Activities	SEC	7/9/2014	9/8/2014	79 Fed. Reg. 39,068	Yes	Not required	Yes	§§ 761, 929P	Yes
Government Securities Act Regulations; Replacement of References to Credit Ratings and Technical Amendments	Treasury	7/8/2014	8/7/2014	79 Fed. Reg. 38,451	Yes	Not required	Not required ^f	§ 939A	No

Source: GAO analysis of Federal Register notices and Congressional Review Act filings. | GAO-16-169

Note: In this report, we use the terms "rules," "regulations," or "rulemakings" generally to refer to *Federal Register* notices of agency action pursuant to the Dodd-Frank Act, including regulations or rules that are final or interim final. With this and our past four reports, we have reviewed all Dodd-Frank Act rules in effect as of July 22, 2015.

^aBoard of Governors of the Federal Reserve System (Federal Reserve), Bureau of Consumer Financial Protection (commonly known as the Consumer Financial Protection Bureau, or CFPB), Commodity Futures Trading Commission (CFTC), Federal Deposit Insurance Corporation (FDIC), Federal Housing Finance Agency (FHFA), National Credit Union Administration (NCUA), Office of the Comptroller of the Currency (OCC), Securities and Exchange Commission (SEC), and Department of Housing and Urban Development (HUD). The Department of the Treasury (Treasury) is included here due to its rulemaking authority.

^bTo determine our scope for this review, we considered the earliest effective date shown in the final *Federal Register* releases for each Dodd-Frank Act rulemaking. If the effective date shown fell within our scope, the rule was included even if subsequent rulemakings or agency decisions changed the effective date of the rule or if the rule contained subsequent effective dates.

^cInstances in which the agency certified that the final regulation would not have a significant economic impact on a substantial number of small entities, and therefore no further analysis under the Regulatory Flexibility Act was necessary, are marked as not required. Instances in which the agency stated that no new collection of information would be required by the regulation also are marked as not required. Instances in which an agency determined that the Regulatory Flexibility Act or the Paperwork Reduction Act did not apply are marked as not applicable.

^dSEC prepared an initial Regulatory Flexibility Act analysis; all agencies certified that the rule would not have a significant economic impact on a substantial number of small entities.

^eThe Federal Reserve certified that the final rule would not have a significant economic impact on a substantial number of small entities, but prepared a final regulatory flexibility analysis.

^fThe Paperwork Reduction Act applies to rulemakings in which an agency by rule creates a new paperwork burden on regulated entities or modifies an existing burden. In this rulemaking, Treasury was silent as to whether the agency had conducted an analysis under the Paperwork Reduction Act. In connection with this review, Treasury stated that this rule does not include "information collections" as that term is defined in the Paperwork Reduction Act, and that as a result, it was not required to reference the Paperwork Reduction Act in the preamble to the rule

Appendix III: Coordination for Dodd-Frank Act Rules Effective as of July 22, 2015

The following table lists the 26 Dodd-Frank Act rules that we identified as having effective dates during the scope of our review (from July 23, 2014, through July 22, 2015), whether the Dodd-Frank Act required interagency or international coordination, and the nature of required coordination (if any).¹ The rulemaking agencies coordinated as required by the Dodd-Frank Act for 11 of the 26 regulations we reviewed (see app. III). For the remaining 15 of the 26 rules we reviewed, the agencies were not required by the Dodd-Frank Act to coordinate.

Table 8: Evidence of Coordination on Dodd-Frank Act Rules Effective from July 23, 2014, through July 22, 2015

		Critic	al dates			
Rulemaking	Responsible regulator ^a	Published	Effective ^b	- Required?	Agency conducted required coordination? ^c	Nature of coordination
Integration of National Bank and Federal Savings Association Regulations and Licensing Rules	OCC	5/18/2015	7/1/2015	No	Not required	Not required
Regulation SBSR—Reporting and Dissemination of Security-Based Swap Information	SEC	3/19/2015	5/18/2015	Yes ^{d, e}	Yes	SEC consulted and coordinated with CFTC, prudential regulators, and foreign regulatory authorities.
Security-Based Swap Data Repository Registration, Duties, and Core Principles	SEC	3/19/2015	5/18/2015	Yes ^{d, e}	Yes	SEC consulted and coordinated with CFTC, prudential regulators and foreign regulatory authorities.
Homeownership Counseling Organizations Lists and High- Cost Mortgage Counseling Interpretive Rule	CFPB	4/21/2015	4/21/2015	No	Not required	Not required

¹Our analysis of the coordination is based solely on review of the *Federal Register* notices. This approach would not uncover any coordination activities that are not reported by the agencies in the *Federal Register*.

		Critica	al dates			
Rulemaking	Responsible regulator ^a	Published	Effective ^b	Required?	Agency conducted required coordination? ^c	Nature of coordination
Submission of Credit Card Agreements Under the Truth in Lending Act (Regulation Z)	CFPB	4/17/2015	4/17/2015	Yes ^f	Yes	CFPB consulted, or offered to consult with the prudential regulators, Treasury and the FTC.
Credit Risk Retention	FDIC, FHFA, Federal Reserve, HUD, OCC, SEC	12/24/2014	2/23/2015	Yes ^g	Yes	Jointly issued.
Appraisals for Higher-Priced Mortgage Loans Exemption Threshold Adjustment	CFPB, OCC, Federal Reserve	12/30/2014	1/1/2015	Yes ^h	Yes	Jointly issued.
Annual Stress Test—Schedule Shift and Adjustments to Regulatory Capital Projections	OCC	12/3/2014	1/2/2015	No	Not required	Not required
Home Mortgage Disclosure (Regulation C) Adjustment to Asset-Size Exemption Threshold	CFPB	12/29/14	1/1/2015	No	Not required	Not required
Truth in Lending Act (Regulation Z) Adjustment to Asset-Size Exemption Threshold	CFPB	12/29/2014	1/1/2015	No	Not required	Not required
Annual Stress Test	FDIC	11/21/2014	1/1/2015	No	Not required	Not required
Concentration Limits on Large Financial Companies	Federal Reserve	11/14/2014	1/1/2015	No	Not required	Not required
Consumer Leasing (Regulation M)	CFPB, Federal Reserve	9/22/2014	1/1/2015	No	Not required	Not required
Truth in Lending (Regulation Z)	CFPB, Federal Reserve	9/22/2014	1/1/2015	No	Not required	Not required

		Critica	al dates	_		
Rulemaking	Responsible regulator ^a	Published	Effective ^b	Required?	Agency conducted required coordination? ^c	Nature of coordination
Truth in Lending (Regulation Z) Annual Threshold Adjustments (CARD ACT, HOEPA and ATR/QM)	CFPB	8/15/2014	1/1/2015	No	Not required	Not required
Financial Market Utilities	Federal Reserve	11/5/2014	12/31/2014	Yes	Yes	Federal Reserve consulted with CFTC, the Financial Stability Oversight Council, and SEC.
Defining Larger Participants of the International Money Transfer Market	CFPB	9/23/2014	12/1/2014	Yes ^f	Yes	CFPB consulted with or offered to consult with FTC, Federal Reserve, FDIC, OCC, NCUA, and SEC.
Capital Plan and Stress Test Rules	Federal Reserve	10/27/2014	11/26/2014	No	Not required	Not required
Asset-Backed Securities Disclosure and Registration	SEC	9/24/2014	11/24/2014	No	Not required	Not required
Electronic Fund Transfers (Regulation E)	CFPB	9/18/2014	11/17/2014	Yes ^f	Yes	CFPB consulted with or offered to consult with prudential regulators and FTC.
Nationally Recognized Statistical Rating Organizations	SEC	9/15/2014	11/14/2014	No	Not required	Not required
Amendments to the 2013 Mortgage Rules Under the Truth in Lending Act (Regulation Z)	CFPB	11/3/2014	11/3/2014	Yes ^f	Yes	CFPB consulted with or offered to consult with prudential regulators, SEC, HUD, FHFA, FTC, Department of Veterans Affairs, Department of Agriculture, and Treasury.
Amendment to the Annual Privacy Notice Requirement Under the Gramm- Leach-Bliley Act (Regulation P)	CFPB	10/28/2014	10/28/2014	Yes [†]	Yes	CFPB consulted and coordinated with SEC, CFTC and the National Association of Insurance Commissioners. CFPB also consulted with other appropriate federal agencies.

		Critic	al dates			
Rulemaking	Responsible regulator ^a	Published	Effective ^b	- Required?	Agency conducted required coordination? ^c	Nature of coordination
Unfair or Deceptive Acts or Practices; Technical Amendments	NCUA	10/3/2014	10/3/2014	No	Not required	Not required
Application of "Security-based Swap Dealer" and "Major Security-Based Swap Participant" Definitions to Cross-border Security-Based Swap Activities	SEC	7/9/2014	9/8/2014	Yes ^{d, e}	Yes ^e	SEC consulted and coordinated with CFTC, prudential regulators, and foreign regulatory authorities.
Government Securities Act Regulations; Replacement of References to Credit Ratings and Technical Amendments	Treasury	7/8/2014	8/7/2014	No	Not required	Not required

Source: GAO analysis of Federal Register notices. | GAO-16-169

Note: In this report, we use the terms "rules," "regulations," or "rulemakings" generally to refer to *Federal Register* notices of agency action pursuant to the Dodd-Frank Act, including regulations or rules that are final or interim final. With this and our past four reports, we have reviewed all Dodd-Frank Act rules in effect as of July 22, 2015.

^aBoard of Governors of the Federal Reserve System (Federal Reserve), Bureau of Consumer Financial Protection (commonly known as the Consumer Financial Protection Bureau, or CFPB), Commodity Futures Trading Commission (CFTC), Federal Deposit Insurance Corporation (FDIC), Federal Housing Finance Agency (FHFA), Federal Trade Commission (FTC), National Credit Union Administration (NCUA), Office of the Comptroller of the Currency (OCC), Securities and Exchange Commission (SEC), and Department of Housing and Urban Development (HUD), and the Department of the Treasury (Treasury).

^bTo determine our scope for this review, we considered the earliest effective date shown in the final *Federal Register* releases for each Dodd-Frank Act rulemaking. If the effective date shown fell within our scope, the rule was included even if subsequent rulemakings or agency decision changed the effective date of the rule or if the rule contained subsequent effective dates

^cSee Nature of Coordination for additional notes on evidence of coordination.

^dAccording to section 712(a)(2) of the Dodd-Frank Act, before commencing any rulemaking or issuing an order regarding swaps, swap dealers, major swap participants, swap data repositories, derivative clearing organizations with regard to swaps, persons associated with a swap dealer or major swap participants, eligible contract participants, or swap execution facilities pursuant to Subtitle A of Title VII of the Dodd-frank Act, SEC shall consult and coordinate to the extent possible with CFTC and the prudential regulators for the purposes of assuring regulatory consistency and comparability, to the extent possible. 15 U.S.C. § 8302(a)(2).

^eAccording to section 752(a) of the act, to promote effective and consistent global regulation of swaps and security-based swaps, CFTC, SEC, and the prudential regulators, as appropriate, shall consult and coordinate with foreign regulatory authorities on the establishment of consistent international standards with respect to the regulation (including fees) of swaps, security-based swaps, swap entities, and security-based swap entities and may agree to such information-sharing arrangements as may be deemed necessary or appropriate in the public interest or for the protection of investors, swap counterparties, and security-based swap counterparties. 15 U.S.C. § 8325(a).

¹Section 1022(b)(2)(B) of the Dodd-Frank Act requires CFPB, in prescribing a rule under the federal consumer financial laws, to consult with the appropriate prudential regulators or other federal agencies before proposing a rule and during the comment process regarding consistency with prudential, market or systemic objectives administered by such agencies. 12 U.S.C. § 5512(b)(2)(B). Additionally, under section 1015 of the act, CFPB must coordinate with SEC, CFTC, FTC, and other federal agencies and state regulators, as appropriate, to promote consistent regulatory treatment of consumer financial and investment products and services. 12 U.S.C. § 5495.

^gSection 941 of the Dodd-Frank Act requires SEC and federal banking agencies to jointly prescribe regulations to require any securitizer to retain an economic interest in a portion of the credit risk for any asset that the securitizer, through the issuance of an asset-backed security, transfers, sells, or conveys to a third party. 15 U.S.C. § 780-11(b)(1).

^hSection 1471 of the Dodd-Frank Act generally requires the Federal Reserve, OCC, FDIC, NCUA, FHFA, and CPFB to jointly prescribe regulations to implement the section. 15 U.S.C. § 1639h(b)(4)(A).

ⁱSection 805(a)(1) of the Dodd-Frank Act requires the Federal Reserve to consult with the Financial Stability Oversight Council, CFTC, SEC, and supervisory agencies, defined as the appropriate federal banking agency under 12 U.S.C § 1813(q), when issuing rules regarding risk management standards. 12 U.S.C. § 5464(a)(1).

Appendix IV: Summary of Rulemakings Related to Selected Dodd-Frank Act Provisions Applicable to Designated Nonbanks

The Dodd-Frank Act contains several provisions—including designation by the Financial Stability Oversight Council (FSOC) for supervision by the Board of Governors of the Federal Reserve System (Federal Reserve) and enhanced prudential standards—that apply to nonbank financial companies if FSOC determines that material financial distress at the company or the nature, scope, size, scale, concentration, interconnectedness, or mix of activities at the company could pose a threat to U.S. financial stability. Enhanced prudential standards also apply to bank holding companies with \$50 billion or more in total consolidated assets. For this report, we refer to those nonbanks financial companies as designated nonbanks and bank holding companies as systemically important banks (bank SIFI), respectively. Table 9 summarizes some of the Dodd-Frank Act provisions and the rulemakings, including their status, to implement those provisions as of July 22, 2015.

Table 9: Rulemakings Implementing Selected Dodd-Frank Act Provisions Applicable to Designated Nonbanks and Bank SIFIs and Their Status as of July 22, 2015

Dodd-Frank Act provision	Rulemaking status
Financial Stability Oversight Council (FSOC) designation of Nonbank Financial Companies for Board of Governors of the Federal Reserve System (Federal Reserve) supervision—Section 113 authorizes FSOC to determine that a nonbank financial company shall be subject to enhanced prudential standards and supervision by the Federal Reserve if FSOC determines that (i) material financial distress or (ii) the nature, scope, size, scale, concentration, interconnectedness, or mix of activities at the nonbank financial company could pose a threat to the financial stability of the United States. FSOC's final rule and interpretative guidance describe the manner in which FSOC intends to apply statutory considerations (related to a six-category framework for size, interconnectedness, substitutability, leverage, liquidity risk, and maturity mismatch), and the procedures FSOC intends to follow, when making a determination to designate a nonbank financial company for Federal Reserve supervision under section 113 of the act.	FSOC final rule and interpretative guidance, Authority to Require Supervision and Regulation of Certain Nonbank Financial Companies, 77 Fed. Reg. 21,637 (Apr. 11, 2012). On July 8, 2013, FSOC voted to designate two nonbank financial companies for Federal Reserve supervision. On September 19, 2013, FSOC voted to designate a third nonbank financial company for Federal Reserve supervision. On December 18, 2014, FSOC voted to designate a fourth nonbank financial company for Federal Reserve supervision.
Enhanced supervision and prudential standards —Sections 165 and 166 require the Federal Reserve to impose enhanced prudential standards and early remediation requirements on bank holding companies, including foreign banking organizations with total consolidated assets of \$50 billion or more that are treated as bank holding companies for purposes of the Bank Holding Company Act of 1956, and nonbank financial companies designated by FSOC to prevent or mitigate risks to U.S. financial stability. ^a According to the Federal Reserve, the standards for foreign banking organizations and foreign nonbank financial companies supervised by the Federal Reserve are broadly consistent with the standards proposed for large U.S. bank SIFIs and designated nonbanks. The final rule requires foreign banking organizations with U.S. nonbranch assets, as defined in the final rule, of \$50 billion or more to form a U.S. intermediate holding company and imposes enhanced risk-based and leverage capital requirements, liquidity requirements, risk-management requirements, and stress-testing requirements on the U.S. intermediate holding company.	Federal Reserve final rule, Enhanced Prudential Standards for Bank Holding Companies and Foreign Banking Organizations, 79 Fed. Reg. 17,240 (Mar. 27, 2014). The March 2014 final rule does not impose enhanced prudential standards on nonbank financial companies designated by FSOC for supervision by the Federal Reserve.

Dodd-Frank Act provision	Rulemaking status
Enhanced risk-based capital and leverage requirements required under section 165(b)(1)(A)(i)—capital plans: Bank holding companies with \$50 billion or more in total consolidated assets and nonbank financial companies designated by FSOC must comply with the requirements of any regulations adopted by the Federal Reserve on capital plans and stress tests, including the Federal Reserve's capital plan rule, which requires such companies to submit an annual capital plan to the Board for review that, together with the proposed stress tests (below), would demonstrate to the Board that the company has robust, forward-looking capital planning processes that account for their unique risks and permit continued operations during times of stress. ^b Intermediate holding companies of foreign banking organizations generally are subject to the same U.S. risk-based and leverage capital standards that apply to a U.S. bank holding company. An intermediate holding company of a foreign banking organization with total consolidated assets of \$50 billion or more is subject to the Federal Reserve's capital Reserve's capital plan rule.	Federal Reserve final rule, Enhanced Prudential Standards for Bank Holding Companies and Foreign Banking Organizations, 79 Fed. Reg. 17, 240 (Mar. 27, 2014). The March 2014 final rule does not impose enhanced prudential standards on nonbank financial companies designated by FSOC for supervision by the Federal Reserve. Federal Reserve final rule, Capital Plan and Stress Test Rules, 79 Fed. Reg. 64,026 (Oct. 27, 2014).
Enhanced risk-based capital and leverage requirements required under section 165(b)(1)(A)(i)—capital surcharges: The Federal Reserve intends to issue a proposal imposing a quantitative risk-based capital surcharge for all or a subgroup of bank holding companies with \$50 billion or more in total consolidated assets, certain foreign banking organizations, and nonbank financial companies designated by FSOC based on the Basel capital surcharge for globally systemically important banks (G-SIB). ^c The Federal Reserve stated that it may, through a future rulemaking, impose a capital surcharge to an intermediate holding company of a foreign banking organization that is determined to be a domestic systemically important bank, consistent with the Basel Committee on Banking Supervision's (Basel Committee) regime or a similar framework.	Intention to propose included in January 5, 2012, proposed rule. Enhanced Prudential Standards and Early Remediation Requirements for Covered Companies, 77 Fed. Reg. 594, and December 28, 2012, proposed rule. Enhanced Prudential Standards and Early Remediation Requirements for Foreign Banking Organizations and Foreign Nonbank Financial Companies, 77 Fed. Reg. 76,628. Risk-Based Capital Guidelines: Implementation of Capital Requirements for Global Systemically Important Bank Holding Companies, 79 Fed. Reg. 75,473 (Dec. 18, 2014), proposed rule.
Enhanced liquidity requirements required under section 165(b)(1)(A)(ii)— liquidity risk management standards: Bank holding companies with \$50 billion or more in total consolidated assets and nonbank financial companies designated by FSOC would be subject to liquidity risk-management standards that require those companies to, among other things, project cash flow needs over various time horizons, stress test the projections at least monthly, determine a liquidity buffer, and maintain a contingency funding plan that identifies potential sources of liquidity strain and alternative sources of funding. Large foreign banking organizations with combined U.S. assets of \$50 billion or more must meet liquidity risk-management standards that are broadly similar to the standards proposed for U.S. firms.	Federal Reserve final rule, Enhanced Prudential Standards for Bank Holding Companies and Foreign Banking Organizations, 79 Fed. Reg. 17,240 (Mar. 27, 2014). The March 2014 final rule does not impose enhanced prudential standards on nonbank financial companies designated by FSOC for supervision by the Federal Reserve.
Enhanced liquidity requirements required under section 165(b)(1)(A)(ii)—Basel liquidity ratios: The banking agencies have adopted a final rule that implements a quantitative liquidity requirement consistent with the liquidity coverage ratio standard established by the Basel Committee. The rule applies to large, internationally active banking organizations, generally, bank holding companies, certain savings and loan holding companies, and depository institutions with more than \$250 billion in assets or more than \$10 billion in on-balance sheet foreign exposure and their consolidated assets. The Federal Reserve is separately adopting a modified liquidity coverage ratio for bank holding companies without significant insurance or commercial operations that have \$50 billion or more in total consolidated assets that are not internationally active.	Federal Reserve, Federal Deposit Insurance Corporation (FDIC), and Office of the Comptroller of the Currency (OCC) final rule, Liquidity Coverage Ratio: Liquidity Risk Measurement, Standards, 79 Fed. Reg. 61,440 (Oct. 10, 2014).

Dodd-Frank Act provision	Rulemaking status
<i>Credit exposure reports required under section 165(d)(2):</i> Section 165 also requires the Federal Reserve to impose credit exposure reporting requirements on bank holding companies with \$50 billion or more in total consolidated assets, certain foreign banking organizations, and nonbank financial companies designated by FSOC. The joint proposed rule would require those companies to report credit exposures to other covered companies have to that company.	Federal Reserve and FDIC proposed rule, Resolution Plans and Credit Exposure Reports Required, 76 Fed. Reg. 22,648 (Apr. 22, 2011).
Concentration limits required under section 165(e): As required by the act, the Federal Reserve would prohibit bank holding companies with \$50 billion or more in total consolidated assets, certain large foreign banking organizations and intermediate holding companies, and nonbank financial companies designated by FSOC from having credit exposure to any unaffiliated company that exceeds 25 percent of the company's capital stock and surplus or total consolidated regulatory capital. The Federal Reserve proposed a more stringent credit exposure limit of 10 percent between the largest, more complex financial institutions.	Proposal included in January 5, 2012, proposed rule and December 28, 2012, proposed rule.
Stress tests required under section 165(i): Bank holding companies with \$50 billion or more in total consolidated assets, certain foreign banking organizations, and nonbank financial companies designated by FSOC are required by the act to conduct semi-annual company-run stress tests, and the Federal Reserve is required to conduct an annual stress test on each of those companies. ^d The final rule builds on the stress tests required under the capital plans that large, complex bank holding companies submitted to the Federal Reserve for supervision under the Supervisory Capital Assessment Program in 2009, the subsequent Comprehensive Capital and Analysis Review in 2011, and the capital plan rule effective December 30, 2011.	Federal Reserve final rule for U.S. bank holding companies with \$50 billion or more in total consolidated assets and nonbank financial companies designated by FSOC for Federal Reserve supervision, Company-Run Stress Test Requirements, 77 Fed. Reg. 62,378 (Oct. 12, 2012). Federal Reserve final rule for foreign banking organizations, Enhanced Prudential Standards for Bank Holding Companies and Foreign Banking Organizations, 79 Fed. Reg. 17,240 (Mar. 27, 2014). Federal Reserve final rule, Capital Plan and Stress Test Rules, 79 Fed. Reg. 64,026 (Oct. 27, 2014). FDIC final rule, Annual Stress Test, 79 Fed. Reg. 69,365 (Nov. 21, 2014). OCC final rule, Annual Stress-Test— Schedule Shift and Adjustments to Regulatory Capital Projects, 79 Fed. Reg. 71,630 (Dec. 3, 2014). FHFA final rule, Stress Testing of Regulated Entities, 78 Fed. Reg. 59219 (Sept. 26, 2013).
Resolution plans required under section 165(d)(1): Section 165 also requires the Federal Reserve to require resolution plans from bank holding companies with \$50 billion or more in total consolidated assets, certain foreign banking organizations, and nonbank financial companies designated by FSOC. The joint final rule requires each plan to include information about the company's ownership structure, core business lines, and critical operations, and a strategic analysis of how the SIFI can be resolved under the U.S. Bankruptcy Code in a way that would not pose systemic risk to the financial system.	Federal Reserve and FDIC final rule, Resolution Plans Required. 76 Fed. Reg. 67,323 (Nov. 1, 2011).
Debt-to-equity limits under section 165(j): Section 165(j) provides that the Federal Reserve must require bank holding companies with \$50 billion or more in total consolidated assets and nonbank financial companies supervised by the Federal Reserve to maintain a debt-to-equity ratio of no more than 15- to-1, upon a determination by the Council that (i) such company poses a grave threat to the financial stability of the United States and (ii) the imposition of such a requirement is necessary to mitigate the risk that the company poses to	Federal Reserve final rule, Enhanced Prudential Standards for Bank Holding Companies and Foreign Banking Organizations, 79 Fed. Reg. 17,240 (Mar. 27, 2014). The March 2014 final rule does not impose enhanced prudential standards on nonbank financial companies designated by FSOC for supervision by the

Dodd-Frank Act provision	Rulemaking status
U.S. financial stability. The final rules implement the 15-to-1 debt-to-equity limitation for U.S. bank holding companies and foreign banking organizations for which FSOC has made the grave-threat determination.	Federal Reserve.
<i>Early remediation requirements under section 166:</i> Section 166 requires the Federal Reserve, in consultation with FSOC and FDIC, to prescribe regulations to provide for the early remediation of financial distress of bank holding companies with \$50 billion or more in total consolidated assets, certain foreign banking organizations, and nonbank financial companies designated by FSOC. The proposed requirements would include a number of triggers for remediation, including capital levels, stress test results, and risk-management weaknesses. In certain situations, the Federal Reserve would impose restrictions on asset growth, acquisitions, capital distributions, executive compensation, and other activities that the Federal Reserve deems appropriate. The proposed rule for foreign banking organizations adapts these requirements to their U.S. operations, tailored to address the risks to U.S. financial stability posed by the U.S. operations of foreign banking organizations and taking into consideration their structure.	Proposal included in January 5, 2012, proposed rule and December 28, 2012, proposed rule.
FDIC Orderly Liquidation Authority —Title II gives FDIC new orderly liquidation authority to act as a receiver in the event of a failure of certain systemically important financial companies, including certain bank holding companies and nonbank financial companies that pose significant risk to the financial stability of the United States. The rule establishes a more comprehensive framework for the implementation of the liquidation authority and is intended to provide greater transparency to the process.	FDIC final rule, Certain Orderly Liquidation Authority Provisions under Title II of the Dodd- Frank Wall Street Reform and Consumer Protection Act, 76 Fed. Reg. 41,626 (July 15, 2011).
Federal Reserve authority to impose mitigatory actions on certain nonbank financial companies determined to pose a grave threat to financial stability— Section 121(a) allows the Federal Reserve, with a two-thirds vote by FSOC, to impose certain additional restrictions on bank holding companies with \$50 billion or more in total consolidated assets and nonbank financial stability of the United States, including limiting mergers and acquisitions, requiring the company to terminate activities, or requiring the company to sell or transfer assets or off-balance-sheet items to unaffiliated entities.	No rules proposed or issued.
Collins Amendment —Section 171(b) requires the appropriate federal banking agencies to establish permanent minimum risk-based capital and leverage floors on insured depository institutions, depository institution holding companies, and nonbank financial companies designated by FSOC. Under the final rule, these institutions must calculate their floors using the minimum	Federal Reserve, FDIC, and OCC final rule, Risk-Based Capital Standards: Advanced Capital Adequacy Framework—Basel II; Establishment of a Risk-Based Capital Floor, 76 Fed. Reg. 37,620 (June 28, 2011).
risk-based capital and leverage requirements under the prompt corrective action framework implementing section 38 of the Federal Deposit Insurance Act.	
Concentration limit/ liability cap on large financial institutions —Section 622 establishes, subject to recommendations by FSOC, a financial sector concentration limit that generally prohibits a financial company from merging or consolidating with, acquiring all or substantially all of the assets of, or otherwise acquiring control of another company if the resulting company's consolidated liabilities would exceed 10 percent of the aggregate consolidated liabilities of all financial companies.	Federal Reserve final rule, Concentration Limits on Large Financial Companies, 79. Fed. Reg. 68,095 (Nov. 14, 2014).

Source: GAO analysis. | GAO-16-169

^a Section 165 of the Dodd-Frank Act directs the Federal Reserve to impose enhanced prudential standards for bank holding companies with \$50 billion or more in total consolidated assets, certain foreign banking organizations, and nonbank financial companies designated by FSOC regarding overall risk management, which also were proposed in the January 5, 2012 rule. Section 115 of the

act authorizes FSOC to recommend to the Federal Reserve additional enhanced prudential standards for bank holding companies with \$50 billion or more in total consolidated assets, certain foreign banking organizations, and nonbank financial companies designated by FSOC.

^bBank SIFIs already must comply with the capital plan rule. The Federal Reserve issued its final capital plans rule on December 1, 2011 (see Capital Plans,76 Fed. Reg. 74,631). On September 30, 2013, the Federal Reserve issued an interim final rule that amends the capital plan and stress test rules and clarifies how bank SIFIs must incorporate the new U.S. Basel III-based final capital rules into their capital plan submissions and stress tests. See Regulations Y and YY: Application of the Revised Capital Framework to the Capital Plan and Stress Test Rules, 78 Fed. Reg. 59,779.

^cIn November 2011, the Financial Stability Board identified 29 G-SIBs and indicated it would update this list annually each November. The Financial Stability Board last updated this list on November 11, 2013. The updated list contains 29 G-SIBs; the same eight U.S, bank SIFIs were designated as G-SIBs in 2011, 2012, and 2013.

^dSection 165(i)(2) of the act requires that any bank holding company with more than \$10 billion in total consolidated assets and that is regulated by a federal financial regulatory agency also be subject to company-run stress tests. The Federal Reserve issued a separate rule to implement this requirement. See Annual Company-Run Stress Test Requirements for Banking Organizations With Total Consolidated Assets Over \$10 Billion Other Than Covered Companies, 77 Fed. Reg. 62,396 (Oct. 12, 2012).

Appendix V: Trends in GAO Indicators for Bank Systemically Important Financial Institutions

We developed indicators to monitor changes in the size, interconnectedness, complexity, leverage, and liquidity of bank holding companies with \$50 billion or more in total consolidated assets (bank systemically important financial institutions or bank SIFIs). As we first reported in December 2012, some provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) and related rules may result in adjustments to the these characteristics of bank SIFIs over time.¹ The size, interconnectedness, and complexity indicators are intended to capture the potential for a bank SIFI's financial distress to affect the financial system and economy (spillover effects). The leverage and liquidity indicators are intended to capture a bank SIFI's resilience to shocks or its vulnerability to financial distress.

Data

We used the following data to construct our indicators:

- quarterly data on the price index for gross domestic product, which we obtained from the Bureau of Economic Analysis for the period from the second quarter of 2006 to the second quarter of 2015.
- annual data on numbers and locations of legal entities for holding companies obtained from the Board of Governors of the Federal Reserve System for the period from the second quarter of 2010 to the second quarter of 2015.
- quarterly data on second tier bank holding companies, which we obtained from the Board of Governors of the Federal Reserve System via the National Information Center for the period from the second quarter of 2006 to the second quarter of 2015.
- quarterly balance sheet and income statement data that bank holding companies report on Form FR Y-9C, which we obtained from the Federal Reserve Bank of Chicago for the period from the second quarter of 2006 to the second quarter of 2015, and
- quarterly data on gross notional amounts of credit default swaps outstanding by reference entity, which we obtained from Bloomberg for the period from the third quarter of 2010 to the second quarter of 2015.

¹See GAO, *Dodd-Frank Act Regulations: Agencies' Efforts to Analyze and Coordinate Their Rules*, GAO-13-101 (Washington, D.C.: Dec. 18, 2012).

Sample

Our indicators analysis generally includes all top-tier U.S. bank holding companies with total consolidated assets of \$1 billion or more that filed Form FR Y-9C for one or more quarters during the period from the first quarter of 2006 to the second quarter of 2015, including any U.S.-based bank holding company subsidiaries of foreign banking organizations that on their own have total consolidated assets of \$1 billion or more and that filed Form FR Y-9C. We chose the threshold of \$1 billion in assets to match the threshold for reporting Form FR Y-9C starting in the first quarter of 2015.² We defined bank SIFIs as bank holding companies with total assets of \$50 billion or more. We defined large bank SIFIs as bank holding companies with total assets of \$50 billion but less than \$500 billion. We defined non-SIFI bank holding companies as bank holding companies with less than \$50 billion in total assets.

Methodology

We calculate each of our indicators for each bank holding company in our sample for each guarter from the first guarter of 2006 to the second guarter of 2015, with the exceptions of our complexity indicators, which we calculate only for bank SIFIs as of the second guarter of each year from 2006 to 2015, and one of our interconnectedness indicators, which we calculate only for bank SIFIs for the period from the third guarter of 2010 to the second guarter of 2015. We then calculate the median value of each indicator for each group of bank holding companies—large bank SIFIs, other bank SIFIs, all bank SIFIs, non-SIFI bank holding companies, and all bank holding companies, to the extent possible-and track the median values over time. Finally, we assess the changes in the median values of the indicators for large bank SIFIs and other banks SIFIs between the second or third guarter of 2010 and the second guarter of 2015, depending on the indicator. We say that an indicator has increased or decreased if it has changed by 5 percent or more, depending on the direction of the change, and we say that an indicator has remained about the same if it has changed by less than 5 percent.

²Between 2006 and 2014, top-tier bank holding companies with assets of \$500 million or more were generally required to file Form FR Y-9C. However, the Federal Reserve Board raised the threshold to \$1 billion starting in the first quarter of 2015.

Limitations

Our indicators analysis has limitations. For example, the indicators do not identify causal links between changes in bank SIFI characteristics and the act. Rather, the indicators track changes in the size, interconnectedness, complexity, leverage, and liquidity of bank SIFIs since the Dodd-Frank Act was passed to examine whether the changes were consistent with the act. However, other factors-including the economic downturn, international banking standards agreed upon by the Basel Committee on Banking Supervision (Basel Committee), and monetary policy actionsalso affect bank holding companies and, thus, the indicators.³ These factors may have a greater effect on bank SIFIs than the Dodd-Frank Act. In addition, some rules implementing bank SIFI-related provisions have not yet been finalized or fully implemented. Thus, changes in our indicators include the effects of these rules only insofar as bank SIFIs have changed their behavior in response to issued rules and in anticipation of expected rules. In this sense, our indicators provide baselines against which to compare future trends. Furthermore, each indicator has its own specific limitations, which we expand on below.

Indicators

Size

An institution's size is associated with the potential for its financial distress to affect the financial system and the broader economy (spillover effects). We developed three indicators of size—the number of bank holding companies with assets of \$50 billion or more, total assets of the consolidated bank holding company as reported on its balance sheet (adjusted for inflation and measured in billions of second quarter 2015 dollars), and the market share of the bank holding company (equal to its total assets as a percentage of the total assets of all of the holding companies we analyzed).

These indicators do not include an institution's off-balance-sheet activities and thus may understate the amount of financial services or intermediation an institution provides. Furthermore, asset size alone is not an accurate determinant of systemic significance because an institution's

³The Basel Committee has agreed on a new set of risk-based capital, leverage, liquidity, and other requirements for banking institutions (Basel III requirements). Additionally, the Financial Stability Board and the Basel Committee have agreed on new capital and other requirements applicable to designated globally systemically important banks. U.S. banking regulators have implemented some of these requirements.

systemic significance also depends on other factors, such as its complexity and interconnectedness. Furthermore, some bank SIFIs are U.S.-based bank holding company subsidiaries of foreign banking organizations, and the size of these bank SIFIs may not reflect the potential for the parent company's financial distress to affect the financial system and the economy.

We observed the following changes in our size indicators over the period from the third quarter of 2010 to the second quarter of 2015:

- The number of bank SIFIs had decreased by three between the third quarter of 2010 and the second quarter of 2015. The number of large bank SIFIs had decreased by one and the number of other bank SIFIs had decreased by two.
- Median assets of bank SIFIs had decreased by about 12 percent. Median assets of large bank SIFIs have increased by about 35 percent, while median assets of other bank SIFIs had decreased by about 9 percent.
- Median market shares of bank SIFIs had decreased by about 7 percent. Median market shares of large bank SIFIs had increased by about 42 percent while median market shares of other bank SIFIs had remained about the same.

		Large bank SIFIs	Other bank SIFIs	All bank SIFIs	Non-SIFI bank holding companies	All bank holding companies
Numbers of bank SIFIs	2010 Q3	7	29	36	428	464
	2011 Q2	7	27	34	434	468
	2012 Q2	7	27	34	448	482
	2013 Q2	6	27	33	454	487
	2014 Q2	6	27	33	469	502
	2015 Q2	6	27	33	485	518
Median assets (billions of second quarter 2015 dollars)	2010 Q3	1319.64	144.37	177.67	2.07	2.29
	2011 Q2	1338.97	139.14	176.20	2.07	2.20
	2012 Q2	1396.42	122.36	170.67	2.08	2.21
	2013 Q2	1709.58	121.50	154.91	2.09	2.21
	2014 Q2	1770.88	120.15	151.37	2.11	2.25
	2015 Q2	1774.99	131.76	156.47	2.22	2.41
Median market shares (percentage)	2010 Q3	7.39	0.81	0.99	0.01	0.01
	2011 Q2	7.60	0.79	1.00	0.01	0.01

Table 10: Indicators of Size for U.S. Bank Holding Companies, from Third Quarter 2010 to Second Quarter 2015

	Large bank SIFIs	Other bank SIFIs	All bank SIFIs	Non-SIFI bank holding companies	All bank holding companies
2012 Q2	8.09	0.71	0.99	0.01	0.01
2013 Q2	10.32	0.73	0.94	0.01	0.01
2014 Q2	10.43	0.71	0.89	0.01	0.01
2015 Q2	10.51	0.78	0.93	0.01	0.01

Source: GAO analysis of data from the Board of Governors of the Federal Reserve System, the Bureau of Economic Analysis, and the Federal Reserve Bank of Chicago. | GAO-16-169

Notes: Bank-SIFIs is used for Bank Systemically Important Financial Institutions. We used data on top-tier U.S. bank holding companies with total consolidated assets of \$1 billion or more that filed Form FR Y-9C for one or more quarters during the period from the first quarter of 2006 to the second quarter of 2015, including any U.S.-based bank holding company subsidiaries of foreign banking organizations that on their own have total consolidated assets of \$1 billion or more and that filed Form FR Y-9C. We chose the threshold of \$1 billion in assets to match the threshold for reporting Form FR Y-9C starting in the first quarter of 2015. We defined bank SIFIs as bank holding companies with total assets of \$50 billion or more, large bank SIFIs as bank holding companies with total assets of \$50 billion bank SIFIs as bank holding companies with total assets of at least \$50 billion but less than \$500 billion, and non-SIFI bank holding companies as bank holding companies with less than \$50 billion in total assets.

Interconnectedness Interconnectedness reflects direct or indirect linkages between financial institutions that may transmit distress from one financial institution to another (spillover effects). We developed two indicators of interconnectedness based on those that Financial Stability Oversight Council uses in the first stage of its process for designating nonbank SIFIs—gross notional amount of credit default swaps outstanding for which the institution is the reference entity (adjusted for inflation and measured in millions of second quarter 2015 dollars) and total debt outstanding (adjusted for inflation and measured in second quarter 2015 dollars).⁴ We measure total debt outstanding as the difference between total liabilities and total deposits.

We observed the following changes in our interconnectedness indicators:

 Median credit default swaps gross notional amounts among bank SIFIs that are reference entities have decreased by about 57 percent.

⁴A credit default swap is an agreement between two counterparties in which one party, the protection seller, agrees to provide payment (the protection leg) to the other party, the protection buyer, should a credit event occur against a specified debt (known as the reference obligation), a basket of debts (known as the reference pool), a debt issuer (known as the reference entity), a credit index (known as the reference index), or any other swap underlying reference in exchange for periodic payments (the fee leg) from the protection buyer. The maximum amount of protection provided by the protection seller is equal to the notional amount of the swap.

Median credit default swaps gross notional amounts for large bank SIFIs that are reference entities have decreased by about 55 percent while median credit default swaps gross notional amounts for other bank SIFIs that are reference entities have decreased by about 75 percent. We note that few bank SIFIs are reference entities—only 6-7 large bank SIFIs are reference entities and only 3-4 other bank SIFIs are reference entities in any one quarter.

 Median total debt outstanding for bank SIFIs has decreased by about 32 percent. Median debt outstanding for large bank SIFIs has decreased by about 21 percent, while median debt outstanding for other bank SIFIs has decreased by about 9 percent.

Table 11: Indicators of Interconnectedness for U.S. Bank Systemically Important Financial Institutions (bank SIFIs), from Third Quarter 2010 to Second Quarter 2015

		Large bank SIFIs	Other bank SIFIs	All bank SIFIs	Non-SIFI bank holding companies	All bank holding companies
Median gross notional	2010 Q3	\$70.10	\$28.86	\$61.59	na	na
amounts of credit default swaps outstanding for	2011 Q2	72.86	28.58	62.30	na	na
which the company is the	2012 Q2	79.56	24.95	64.64	na	na
reference entity (billions of second quarter 2015 dollars)	2013 Q2	58.88	18.51	49.62	na	na
	2014 Q2	43.04	9.98	34.37	na	na
	2015 Q1	31.36	7.33	26.43	na	na
Median total debt outstanding (billions of second quarter 2015 dollars)	2010 Q3	858.34	22.97	40.16	0.21	0.24
	2011 Q2	876.58	22.51	41.41	0.19	0.2
	2012 Q2	853.09	23.14	31.45	0.16	0.17
	2013 Q2	791.23	17.11	30.02	0.16	0.17
	2014 Q2	722.69	21.09	29.79	0.16	0.18
	2015 Q2	681.57	20.93	27.31	0.18	0.19

Source: GAO analysis of data from Bloomberg, the Board of Governors of the Federal Reserve System, the Bureau of Economic Analysis, and the Federal Reserve Bank of Chicago. | GAO-16-169

Notes: We used data on top-tier U.S. bank holding companies with total consolidated assets of \$1 billion or more that filed Form FR Y-9C for one or more quarters during the period from the first quarter of 2006 to the second quarter of 2015, including any U.S.-based bank holding company subsidiaries of foreign banking organizations that on their own have total consolidated assets of \$1 billion or more and that filed Form FR Y-9C. We chose the threshold of \$1 billion in assets to match the threshold for reporting Form FR Y-9C. We chose the threshold of \$1 billion in assets to match the threshold for reporting Form FR Y-9C starting in the first quarter of 2015. We defined bank SIFIs as bank holding companies with total assets of \$500 billion or more, large bank SIFIs as bank holding companies with total assets of \$500 billion, and non-SIFI bank holding companies as bank holding companies bar total assets of \$500 billion in total assets.

Complexity

Institutions that are more complex are likely to be more difficult to resolve and therefore cause significantly greater disruption to the wider financial system and economic activity if they fail (spillover effects). Resolution via a bankruptcy or under the backstop orderly liquidation authority in title II of Dodd-Frank Act may be more difficult if a large number of legal entities or legal systems are involved. For example, a SIFI with a large number of legal entities—particularly foreign ones operating in different countries under different regulatory regimes—may be more difficult to resolve than a SIFI with fewer legal entities in fewer countries. We developed three indicators of this type of complexity—the number of a bank SIFI's legal entities, the number of a bank SIFI's foreign legal entities, and the number of countries in which a bank SIFI's foreign legal entities are located.

A key limitation of our indicators is that they may not capture all relevant aspects of the complexity of a SIFI, such as complexity that could result from being a subsidiary of a foreign company.

We observed the following changes in our complexity indicators:

- Median numbers of legal entities for bank SIFIs decreased by 25, (about 19 percent). Median numbers of legal entities for large bank SIFIs decreased by 534, (about 19 percent), and median numbers of legal entities for other bank SIFIs decreased by 24, (about 22 percent).
- Median numbers of foreign legal entities for bank SIFIs did not change. However, median numbers of foreign legal entities for large bank SIFIs increased by 143, (about 21 percent), and median numbers of foreign legal entities for other bank SIFIs decreased by 2, (about 33 percent).
- Median numbers of countries in which foreign legal entities are located for bank SIFIs did not change. Median numbers of countries in which foreign legal entities are located for large bank SIFIs remained about the same and median numbers of countries in which foreign legal entities are located for other bank SIFIs decreased by 1, (about 25 percent).

Table 12: Indicators of Complexity for U.S. Bank Systemically Important Financial Institutions (bank SIFIs) , from Second Quarter 2015

	Year	Large bank SIFIs	Other bank SIFIs	All bank SIFIs
Median numbers of legal entities	2010 Q2	2753	108	130
	2011 Q2	2268	122	167
	2012 Q2	2059	97	150
	2013 Q2	2605	94	124
	2014 Q2	2454	93	99
	2015 Q2	2219	84	105
Median numbers of foreign legal	2010 Q2	663	6	9
entities	2011 Q2	590	8	12
	2012 Q2	652	5	12
	2013 Q2	858	5	9
	2014 Q2	832	5	9
	2015 Q2	806	4	9
Median numbers of countries in	2010 Q2	50	4	5
which foreign legal entities are located	2011 Q2	51	4	6
localed	2012 Q2	52	4	6
	2013 Q2	53	4	5
	2014 Q2	52	4	5
	2015 Q2	52	3	5

Source: GAO analysis of data from the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of Chicago. | GAO-16-169

Notes: We used data on top-tier U.S. bank holding companies with total consolidated assets of \$1 billion or more that filed Form FR Y-9C for one or more quarters during the period from the first quarter of 2006 to the second quarter of 2015, including any U.S.-based bank holding company subsidiaries of foreign banking organizations that on their own have total consolidated assets of \$1 billion or more and that filed Form FR Y-9C. We chose the threshold of \$1 billion in assets to match the threshold for reporting Form FR Y-9C starting in the first quarter of 2015. We defined bankSIFIs as bank holding companies with total assets of \$50 billion or more, large bank SIFIs as bank holding companies with total assets of \$500 billion, and non-SIFI bank holding companies as bank holding companies with less than \$500 billion in total assets.

Leverage

Leverage generally captures the relationship between an institution's exposure to risk and capital that can be used to absorb losses from that exposure (resilience). Institutions with more capital to absorb losses are less likely to fail, all else being equal. We track two indicators of leverage—a bank SIFI's tangible common equity as a percentage of total assets and a bank SIFI's total bank holding company equity as a percentage of total assets. We measure tangible common equity as bank holding company equity capital minus preferred stock, goodwill, and other intangible assets, plus mortgage servicing rights.

A limitation of both indicators is that they may not fully reflect an institution's exposure to risk because total assets do not reflect an institution's risk exposure from off-balance-sheet activities and generally treat all assets as equally risky.

We observed the following changes in our leverage indicators between the third quarter of 2010 and the second quarter of 2015:

- Median tangible common equity as a percentage of assets for bank SIFIs has increased by about 29 percent. Median tangible common equity as a percentage of assets for large bank SIFIs has increased by about 21 percent and median tangible common equity as a percentage of assets for other bank SIFIs has increased by about 26 percent.
- Median total equity as a percentage of assets for bank SIFIs has increased by about 13 percent. Median total equity as a percentage of assets for large bank SIFIs has increased by about 29 percent and median total equity as a percentage of assets for other bank SIFIs has increased by about 9 percent.

Table 13: Indicators of Leverage for U.S. Bank Holding Companies, from Third Quarter 2010 to Second Quarter 2015

		Large bank SIFIs	Other bank SIFIs	All bank SIFIs	Non-SIFI bank holding companies	All bank holding companies
Median tangible common equity as a percentage of total assets	2010 Q3	6.26	6.83	6.49	7.24	7.18
	2011 Q2	5.67	7.24	6.99	7.88	7.77
	2012 Q2	6.60	7.98	7.62	8.32	8.25
	2013 Q2	6.85	8.19	8.06	8.35	8.34
	2014 Q2	7.35	8.83	8.44	8.70	8.69
	2015 Q2	7.58	8.60	8.37	8.67	8.66
Median total equity as a percentage of total assets	2010 Q3	8.21	11.55	10.64	9.29	9.41
	2011 Q2	8.14	11.13	10.88	9.58	9.72
	2012 Q2	8.40	11.76	11.14	9.85	10.04
	2013 Q2	9.49	12.12	11.61	9.87	9.98
	2014 Q2	10.21	12.16	11.43	10.28	10.34
	2015 Q2	10.60	12.57	12.00	10.33	10.42

Source: GAO analysis of data from the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of Chicago. | GAO-16-169

Notes: Bank-SIFIs is used for Bank Systemically Important Financial Institutions. We used data on top-tier U.S. bank holding companies with total consolidated assets of \$1 billion or more that filed Form FR Y-9C for one or more quarters during the period from the first quarter of 2006 to the second quarter of 2015, including any U.S.-based bank holding company subsidiaries of foreign banking organizations that on their own have total consolidated assets of \$1 billion or more and that filed Form FR Y-9C. We chose the threshold of \$1 billion in assets to match the threshold for reporting Form FR

Y-9C starting in the first quarter of 2015. We defined bank SIFIs as bank holding companies with total assets of \$50 billion or more, large bank SIFIs as bank holding companies with total assets of \$500 billion or more, other bank SIFIs as bank holding companies with total assets of at least \$50 billion but less than \$500 billion, and non-SIFI bank holding companies as bank holding companies with less than \$50 billion in total assets. Liquidity represents the ability to fund assets and meet obligations as they become due, and liquidity risk is the risk of not being able to obtain funds at a reasonable price within a reasonable time period to meet obligations as they become due. Institutions with more liquidity (and less liquidity risk), are less likely to fail, all else being equal (resilience). We developed two indicators of liquidity-short-term liabilities as a percentage of total liabilities and liquid assets as a percentage of short-term liabilities. Shortterm liabilities reflect an institution's potential need for liquidity in the short-term. We measure short-term liabilities as the sum of federal funds purchased and repurchase agreements, trading liabilities (less derivatives with negative fair value), other borrowed funds, deposits held in foreign offices, and jumbo time deposits (deposits of \$100,000 or more) held in domestic offices. Liquid assets are assets that can be sold easily without affecting their price and, thus, can be converted easily to cash to cover debts that come due. Accordingly, liquid assets as a percentage of an institution's short-term liabilities are a measure of an institution's capacity to meet potential upcoming obligations. We measure liquid assets as the sum of cash and balances due from depository institutions, securities (less pledged securities), federal funds sold and reverse repurchases, and trading assets. A limitation of both indicators is that they do not include off balance sheet liabilities, such as callable derivatives or other potential derivativesrelated obligations. The second indicator also does not include offbalance-sheet liquid assets, such as short-term income from derivative contracts. Because these limitations affect both the numerator and the denominator of our indicators, we cannot determine whether the exclusion of off-balance-sheet items results in an under or an overstatement of an institution's liquidity need and access.

We observed the following changes in our liquidity indicators between the third quarter of 2010 and the second quarter of 2015:

 Median short-term liabilities as a percentage of total liabilities for bank SIFIs have decreased by about 15 percent. Median short-term liabilities as a percentage of total liabilities for large bank SIFIs have decreased by about 20 percent, and median short-term liabilities as a percentage of total liabilities for other bank SIFIs have decreased by about 31 percent.

 Median liquid assets as a percentage of short-term liabilities for bank SIFIs have increased by about 70 percent. Median liquid assets as a percentage of short-term liabilities for large bank SIFIs have increased by about 51 percent, and median liquid assets as a percentage of short-term liabilities for other bank SIFIs have increased by about 60 percent.

Table 14: Indicators of Liquidity for U.S. Bank Holding Companies, from Third Quarter 2010 through Second Quarter 2015

		Large bank SIFIs	Other bank SIFIs	All bank SIFIs	Non-SIFI bank holding companies	All bank holding companies
Median Short-term	2010 Q3	55.10	25.55	28.90	24.47	24.70
Liabilities as a Percentage of Total Liabilities	2011 Q2	52.04	23.14	26.27	22.27	22.59
	2012 Q2	46.41	22.66	25.63	19.96	20.03
	2013 Q2	52.00	20.82	23.61	18.99	19.09
	2014 Q2	47.25	20.48	24.12	18.17	18.34
	2015 Q2	43.86	17.57	24.49	18.12	18.21
Median liquid assets as a percentage of short-term liabilities	2010 Q3	100.75	78.90	79.26	67.43	69.17
	2011 Q2	109.51	93.23	98.10	81.46	84.46
	2012 Q2	124.22	102.58	106.89	99.46	102.61
	2013 Q2	136.50	104.89	110.16	101.27	102.42
	2014 Q2	150.67	111.43	112.52	88.90	92.18
	2015 Q2	152.05	126.15	134.94	82.70	85.06

Source: GAO analysis of data from the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of Chicago. | GAO-16-169

Notes: Bank-SIFIs is used for Bank Systemically Important Financial Institutions. We used data on top-tier U.S. bank holding companies with total consolidated assets of \$1 billion or more that filed Form FR Y-9C for one or more quarters during the period from the first quarter of 2006 to the second quarter of 2015, including any U.S.-based bank holding company subsidiaries of foreign banking organizations that on their own have total consolidated assets of \$1 billion or more and that filed Form FR Y-9C. We chose the threshold of \$1 billion in assets to match the threshold for reporting Form FR Y-9C starting in the first quarter of 2015. We defined bank SIFIs as bank holding companies with total assets of \$50 billion or more, large bank SIFIs as bank holding companies with total assets of \$50 billion bank SIFIs as bank holding companies with total assets of \$50 billion bank SIFIs as bank holding companies with total assets of \$50 billion and non-SIFI bank holding companies as bank holding companies with less than \$50 billion in total assets.

Appendix VI: Econometric Analyses of the Impact of Enhanced Regulation and Oversight on Systemically Important Financial Institutions

We updated our econometric analysis assessing the impacts of new requirements in the Dodd- Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) for bank holding companies with total consolidated assets of \$50 billion or more—bank systemically important financial institutions or bank SIFIs—as they relate to (1) the funding costs for bank SIFIs and (2) indicators of their safety and soundness.

Methodology

Our multivariate econometric model uses a difference-in-difference design that exploits the fact that the Dodd-Frank Act subjects bank SIFIs to enhanced regulation by the Board of Governors of the Federal Reserve System (Federal Reserve) but not other holding companies, so we can view bank SIFIs as the treatment group and other bank holding companies as the control group. We compared the changes in the characteristics of bank SIFIs over time with changes in the characteristics of other bank holding companies over time. All else being equal, the difference in the differences is the impact of new requirements for bank SIFIs primarily tied to enhanced regulation and oversight under the Federal Reserve.

Our general econometric specification is the following:

 $y_{bq} = \alpha_b + \beta_q + \gamma SIFI_{bq} + X'_{bq}F + \varepsilon_{bq},$

where *b* denotes the bank holding company, *q* denotes the quarter, y_{bq} is the dependent variable, α_b is a bank holding company-specific intercept, β_q is a quarter-specific intercept, SIFI_{bq} is an indicator variable that equals 1 if bank holding company *b* is a SIFI in quarter *q* and 0 otherwise, X_{bq} is a list of other independent variables, and ε_{bq} is an error term. We estimated the parameters of the model using quarterly data on top-tier bank holding companies that filed Form FR Y-9C from the first quarter of 2006 through the second quarter of 2015.

The parameter of interest is γ , the coefficient on the SIFI indicator, which is equal to 1 for bank holding companies with consolidated assets of \$50 billion or more in the quarters starting with the treatment start date and is equal to zero otherwise. The Dodd-Frank Act was enacted in July 2010, so the treatment start date is the third quarter of 2010. Thus, the parameter γ measures the average difference in the difference in dependent variable between bank SIFIs and other bank holding companies before and after the Dodd-Frank Act was enacted. Appendix VI: Econometric Analyses of the Impact of Enhanced Regulation and Oversight on Systemically Important Financial Institutions

We use different dependent variables (y_{bq}) to estimate the impacts of the new requirements for SIFIs on the cost of credit provided by bank SIFIs and on various aspects of bank SIFIs' safety and soundness, including capital adequacy, asset quality, earnings, and liquidity.

- Funding cost. A bank holding company's funding cost is the cost of deposits or liabilities that it then uses to make loans or otherwise acquire assets. More specifically, a bank holding company's funding cost is the interest rate it pays when it borrows funds. All else being equal, the greater a bank holding company's funding cost, the greater the interest rate it charges when it makes loans. We measure funding cost as an institution's interest expense as a percent of interest-bearing liabilities.
- Capital adequacy. Capital absorbs losses, promotes public confidence, helps restrict excessive asset growth, and provides protection to creditors. We use two alternative measures of capital adequacy: tangible common equity as a percentage of total assets and total bank holding company equity as a percent of total assets.
- Asset quality. Asset quality reflects the quantity of existing and potential credit risk associated with the institution's loan and investment portfolios and other assets, as well as off-balance sheet transactions. Asset quality also reflects the ability of management to identify and manage credit risk. We measure asset quality as performing assets as a percent of total assets, where performing assets are equal to total assets less assets 90 days or more past due and still accruing interest and assets in non-accrual status.
- Earnings. Earnings are the initial safeguard against the risks of engaging in the banking business and represent the first line of defense against capital depletion that can result from declining asset values. We measure earnings as net income as a percent of total assets.
- Liquidity. Liquidity represents the ability to fund assets and meet obligations as they become due, and liquidity risk is the risk of not being able to obtain funds at a reasonable price within a reasonable time period to meet obligations as they become due. We use two different variables to measure liquidity. The first variable is liquid assets as a percent of volatile liabilities. This variable is similar in spirit to the liquidity coverage ratio introduced by the Basel Committee on Banking Supervision (Basel Committee) and measures a bank holding company's capacity to meet its liquidity needs under a significantly severe liquidity stress scenario. We measure liquid assets as the sum of cash and balances due from depository institutions, securities (less pledged securities), federal funds sold and reverse repurchases, and trading assets. We measure volatile (short-term) liabilities as the sum

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of federal funds purchased and repurchase agreements, trading liabilities (less derivatives with negative fair value), other borrowed funds, deposits held in foreign offices, and jumbo time deposits (deposits of \$100,000 or more) held in domestic offices.

The second liquidity variable is stable liabilities as a percent of total liabilities. This variable measures the extent to which a bank holding company relies on stable funding sources to finance its assets and activities. This variable is related in spirit to the net stable funding ratio introduced by the Basel Committee, which measures the amount of stable funding based on the liquidity characteristics of an institution's assets and activities over a 1-year horizon. We measure stable funding as total liabilities minus volatile liabilities as described earlier.

Finally, we include a limited number of independent variables (X_{bq}) to control for factors that may differentially affect SIFIs and non-SIFIs in the quarters since the Dodd-Frank Act was enacted. We include these variables to reduce the likelihood that our estimates are reflecting something other than the impact of the new Dodd-Frank Act requirements for SIFIs.

- Securitization income. Bank holding companies with more income from securitization are likely to have different business models than those with more income from traditional banking associated with an originate-to-hold strategy for loans. Changes in the market for securitized products since enactment of the Dodd-Frank Act thus may have had a greater effect on bank holding companies with more securitization income. If bank SIFIs typically have more securitization income than other bank holding companies, then changes in the market for securitized products since enactment may have differentially affected the two groups. We measure securitization income as the sum of net servicing fees, net securitization income, and interest and dividend income on mortgage-backed securities minus associated interest expense, and express securitization as a percent of operating revenue. Operating revenue is the sum of interest income and noninterest income less interest expense and loan loss provisions.
- Nontraditional income. Nontraditional income generally captures income from capital market activities. Bank holding companies with more nontraditional income are likely to have different business models than those with more income from traditional banking activities. Changes in capital markets since enactment of the Dodd-Frank Act may have had a greater effect on bank holding companies with more nontraditional income. If bank SIFIs typically have more
Appendix VI: Econometric Analyses of the Impact of Enhanced Regulation and Oversight on Systemically Important Financial Institutions

nontraditional income than other bank holding companies, then changes in capital markets since enactment may have differentially affected the two groups. We measure nontraditional income as the sum of trading revenue; investment banking, advisory, brokerage, and underwriting fees and commissions; venture capital revenue; insurance commissions and fees; and interest income from trading assets less associated interest expense, and we express nontraditional income as a percent of operating revenue.

- Foreign exposure. Changes in other countries, such as the sovereign debt crisis in Europe, may have a larger effect on bank holding companies with more foreign exposure. If bank SIFIs typically have more foreign exposure than other bank holding companies, then changes in foreign markets may have differentially affected the two groups. We measure foreign exposure as the sum of foreign debt securities (held-to-maturity and available-for-sale), foreign bank loans, commercial and industrial loans to non-U.S. addresses, and foreign government loans and we express foreign exposure as a percent of total assets.
- Size. We include size because bank SIFIs tend to be larger than other bank holding companies, and market pressures or other forces not otherwise accounted for may have differentially affected large and small bank holding companies in the time since enactment of the Dodd-Frank Act. We measure the size of a bank holding company as the natural logarithm of its total assets.
- Capital Purchase Program participation. We control for whether or not a bank holding company participated in the Capital Purchase Program component of the Troubled Asset Relief Program to differentiate any impact that this program may have had from the impact of the Dodd-Frank Act.

We also conducted several sets of robustness checks:

- We restricted our sample to the set of institutions with assets that are "close" to the \$50 billion cutoff for enhanced prudential regulation for bank SIFIs. Specifically, we analyzed two restricted samples of bank holding companies: (1) bank holding companies with assets between \$25 billion and \$75 billion and (2) bank holding companies with assets between \$1 billion and \$100 billion.
- We examined different treatment start dates. Specifically, we allowed the Dodd-Frank Act's new requirements for SIFIs to have an impact in the third quarter of 2009, 1 year before the passage of the act. We did so to allow for the possibility that institutions began to react to the act's requirements in anticipation of the act being passed.

	 We allowed the effect of the treatment to vary by quarter to allow for the possibility that the impact of the act varied over time. 					
Data	We conducted our analysis using quarterly data on top-tier U.S. bank holding companies that filed Form FR Y-9C, including top-tier U.Sbased bank holding company subsidiaries of foreign banking organizations. We analyzed these companies for the period from the first quarter of 2006 through the second quarter of 2015. We obtained these data from the Federal Reserve Bank of Chicago and the Board of Governors of the Federal Reserve System.					
Results	While some of the SIFI-related rulemakings have yet to be implemented, our estimates are suggestive of the initial effects of the Dodd-Frank Act on bank SIFIs and provide a baseline against which to compare future results. Our baseline estimates suggest that the Dodd-Frank Act has not been associated with a significant change in funding costs of bank SIFIs (see table 15). To the extent that the cost of credit provided by bank SIFIs is a function of their funding costs, the new requirements for SIFIs are likely to have had little effect on the cost of credit to date through the					

 Table 15: Estimated Changes in Bank Systemically Important Financial Institution Funding Costs and Measures of Safety and

 Soundness Associated with the Dodd-Frank Act, From Third Quarter 2010 through Second Quarter 2015 (Percentage Points)

funding cost channel.

			Capital a	dequacy		Earnings		
		Funding cost Interest expense as a percentage of interest- bearing liabilities	Tangible common equity as a percentage of total assets		Asset quality Performing assets as a percentage of total assets	•	Liquid assets as a percentage of short- term liabilities	Liquidity - Long-term liabilities as a percentage of total liabilities
Panel 1. Baseline model	Estimated change	0.06	1.47***	0.50	0.43***	0.33***	3.04	3.87***
	787 bank holding companies	(0.06)	(0.26)	(0.39)	(0.12)	(0.12)	(12.22)	(1.06)
	17,837 observations	[0.93]	[0.19]	[0.10]	[0.33]	[0.24]	[0.21]	[0.42]
Panel 2. Sample restricted to bank	Estimated change	0.11	0.46	-0.26	0.91*	0.72*	83.87***	3.49*

			Capital a	dequacy		Earnings		
		Funding cost Interest expense as a percentage of interest- bearing liabilities	Tangible common equity as a percentage of total assets	•	Asset quality Performing assets as a percentage of total assets	Earnings as a percentage of total assets	percentage	Liquidity - Long-term liabilities as a percentage of total liabilities
holding companies with assets \$25-75	40 bank holding companies	(0.20)	(0.66)	(0.69)	(0.52)	(0.38)	(24.21)	(1.90)
billion	610 observations	[0.88]	[0.54]	[0.33]	[0.69]	[0.48]	[0.41]	[0.73]
Panel 3. Sample restricted to bank	Estimated change	-0.06	1.52***	0.50	0.77***	0.73***	13.45	4.39**
holding companies with assets \$1-100 billion	766 bank holding companies	(0.07)	(0.37)	(0.63)	(0.13)	(0.22)	(21.96)	(2.19)
	16,997 observations)	[0.93]	[0.15]	[0.08]	[0.33]	[0.24]	[0.21]	[0.39]
Panel 4. Impact of the Dodd-Frank Act	Estimated change	-0.07	1.58***	0.67	0.48***	0.40***	10.99	4.68***
anticipated enactment by 1 year	787 bank holding companies	(0.07)	(0.27)	(0.42)	(0.13)	(0.10)	(12.88)	(1.11)
	17,837 observations	[0.93]	[0.19]	[0.10]	[0.33]	[0.24]	[0.21]	[0.42]

Source: GAO analysis of data from the Federal Reserve Bank of Chicago and the Federal Reserve Board. | GAO-16-169

Notes: We analyzed data for top-tier bank holding companies that filed Form FR Y-9C from the first quarter of 2006 through the second quarter of 2015, including U.S. bank holding companies and U.S. based bank holding company subsidiaries of foreign banking organizations. We defined bank systemically important financial institutions (SIFI) as bank holding companies with assets of \$50 billion or more. We estimated the effects of the new SIFI requirements on bank SIFIs by regressing the variables listed in the table on indicators for each bank holding company; indicators for each quarter; indicators for whether a bank holding company is a SIFI for quarters from the third in 2010 through the second in 2015; and other variables controlling for size, foreign exposure, securitization income, other nontraditional income, and participation in the Troubled Asset Relief Program. Estimated changes are the coefficients on the indicators for whether a bank holding company is a SIFI in quarters from the third in 2010 through the second in 2015. *=estimate is statistically significant at the 10 percent level. **=estimate is statistically significant at the 5 percent level. ***=estimate is statistically significant at the 1 percent level. Clustered standard errors are in parentheses. Within R-squareds are in square brackets.

Our estimates also suggest that the Dodd-Frank Act is associated with improvements in some measures of bank SIFIs' safety and soundness. Bank SIFIs appear to be holding more tangible common equity as a percentage of assets than they otherwise would have held since Dodd-Frank Act enactment (see panel 1 in table 15). The quality of assets on

Appendix VI: Econometric Analyses of the Impact of Enhanced Regulation and Oversight on Systemically Important Financial Institutions

the balance sheets of bank SIFIs seems to have improved since enactment. The act is also associated with improved liquidity as measured by the extent to which a bank holding company is using stable sources of funding and with higher earnings. However, capital adequacy as measured by total bank holding company equity and liquidity as measured by the capacity of a bank holding company's liquid assets to cover its volatile liabilities have not clearly improved since enactment. Thus, the Dodd-Frank Act appears to be associated with improvements in some indicators of safety and soundness for bank SIFIs (relative to non-SIFI bank holding companies) but not others.

Our approach allows us to partially differentiate changes in funding costs, capital adequacy, asset quality, earnings, and liquidity associated with the Dodd-Frank Act from changes due to other factors. However, several factors make isolating and measuring the impact of the Dodd-Frank Act requirements for SIFIs challenging. The effects of the act cannot be differentiated from the effects of simultaneous changes in economic conditions, such as the pace of the recovery from the recent recession, or regulations, such as those stemming from Basel III, or other changes, such as in credit ratings that differentially may affect bank SIFIs and other bank holding companies. In addition, some of the new requirements for SIFIs may not yet be fully implemented.¹ Nevertheless, our estimates are suggestive of the initial effects of the Dodd-Frank Act on bank SIFIs and provide a baseline against which to compare future trends.

The results of our robustness checks are as follows:

 Our results for funding costs, capital adequacy as measured by total bank holding company equity as a percentage of assets, asset quality, earnings, and liquidity as measured by long-term liabilities as a percentage of total liabilities are generally robust to restricting the set of bank holding companies we analyze to those with assets of \$25 billion to \$75 billion, but our results for capital adequacy as measured by tangible common equity as a percentage of assets and liquidity as measured by liquid assets as a percentage of short-term liabilities are not.

¹See appendix IV for a summary of rulemakings related to select Dodd-Frank Act provisions applicable to bank SIFIs.

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- Our results are generally robust to restricting the set of bank holding companies we analyze to those with assets of \$1 billion to \$100 billion.
- Our results are generally robust to starting the treatment in the third quarter of 2009, 1 year before the passage of the Dodd-Frank Act. This finding is consistent with the idea that bank holding companies began to change their behavior in anticipation of the act's requirements, perhaps as information about the content of the act became available and the likelihood of its passage increased. However, there may be other explanations, including anticipation of Basel III requirements, reactions to stress tests, and market pressures to improve capital adequacy and liquidity.
- Our results for funding costs, capital adequacy, and liquidity are generally robust to allowing the treatment effect to vary by quarter (see table 16). However, our results for asset quality and earnings suggest that the Dodd-Frank Act may not be associated with improvements in asset quality and earnings in every quarter.

Table 16: Estimated Changes in Bank Systemically Important Financial Institution (Bank SIFI) Funding Costs and Measures ofSafety and Soundness Associated with the Dodd-Frank Act, by Quarter From Third Quarter 2010 through Second Quarter2015 (Percentage Points)

	Funding cost	Capital a	adequacy	Asset quality	Earni	ngs	Liquidity
Estimated change in	Interest expense as a percentage of interest- bearing liabilities	Tangible common equity as a percentage of total assets	Total bank holding company equity capital as a percentage of total assets	Performing assets as a percentage of total assets	Earnings as a percentage of total assets		Long-term liabilities as a percentage of total liabilities
2010Q3	-0.1	0.88***	0.48*	0.55***	0.56***	5.04	2.32**
	(0.07)	(0.20)	(0.27)	(0.16)	(0.15)	(8.21)	(0.98)
2010Q4	-0.05	1.27***	0.74**	0.58***	0.68***	5.74	1.92
	(0.07)	(0.21)	(0.30)	(0.15)	(0.15)	(8.87)	(1.17)
2011Q1	0.06	1.21***	0.45	0.59***	0.60***	-0.13	1.33
	(0.07)	(0.22)	(0.29)	(0.15)	(0.14)	(10.01)	(1.12)
2011Q2	0.06	1.10***	0.26	0.69***	0.54***	2.90	2.29*
	(0.07)	(0.22)	(0.31)	(0.14)	(0.16)	(10.22)	(1.17)
2011Q3	0.04	1.09***	0.24	0.70***	0.48***	5.70	3.74***
	(0.07)	(0.22)	(0.33)	(0.14)	(0.15)	(11.02)	(1.20)
2011Q4	0.06	1.14***	0.14	0.59***	0.41**	-0.18	3.96***
	(0.07)	(0.22)	(0.34)	(0.14)	(0.18)	(12.30)	(1.36)
2012Q1	0.08	1.59***	0.58	0.57***	0.24*	-4.95	4.47***
	(0.08)	(0.33)	(0.45)	(0.13)	(0.14)	(13.30)	(1.29)

	Funding cost	Capital a	adequacy	Asset quality	Earni	Liquidity	
Estimated change in	Interest expense as a percentage of interest- bearing liabilities	Tangible common equity as a percentage of total assets	Total bank holding company equity capital as a percentage of total assets	Performing assets as a percentage of total assets	Earnings as a percentage of total assets	Liquid assets as a percentage of short-term liabilities	Long-term liabilities as a percentage of total liabilities
2012Q2	0.1	1.57***	0.53	0.53***	0.18	-5.33	4.63***
	(0.08)	(0.33)	(0.47)	(0.14)	(0.14)	(12.98)	(1.20)
2012Q3	0.09	1.54***	0.44	0.46***	0.21	-2.29	4.51***
	(0.08)	(0.31)	(0.45)	(0.15)	(0.14)	(14.02)	(1.22)
2012Q4	0.06	1.67***	0.61	0.42***	0.22	-12.67	4.48***
	(0.07)	(0.32)	(0.46)	(0.15)	(0.14)	(14.09)	(1.22)
2013Q1	0.07	1.70***	0.67	0.38**	0.31**	-15.09	4.18***
	(0.07)	(0.33)	(0.46)	(0.15)	(0.14)	(13.71)	(1.28)
2013Q2	0.09	1.82***	0.76	0.34**	0.08	-6.76	4.84***
	(0.07)	(0.35)	(0.47)	(0.15)	(0.25)	(13.48)	(1.31)
2013Q3	0.09	1.78***	0.71	0.27*	0.13	-3.06	4.52***
	(0.07)	(0.36)	(0.46)	(0.14)	(0.18)	(14.15)	(1.34)
2013Q4	0.1	1.90***	0.71	0.26*	0.14	-4.50	4.81***
	(0.07)	(0.36)	(0.51)	(0.14)	(0.16)	(13.79)	(1.40)
2014Q1	0.09	1.68***	0.61	0.27*	0.35*	-7.59	3.91***
	(0.08)	(0.29)	(0.49)	(0.14)	(0.18)	(15.05)	(1.29)
2014Q2	0.09	1.63***	0.53	0.27*	0.38**	5.27	4.38***
	(0.08)	(0.30)	(0.50)	(0.14)	(0.18)	(16.00)	(1.36)
2014Q3	0.09	1.58***	0.47	0.26*	0.34**	19.99	4.69***
	(0.08)	(0.33)	(0.52)	(0.14)	(0.16)	(19.45)	(1.43)
2014Q4	0.1	1.49***	0.36	0.24*	0.27*	23.55	4.35***
	(0.08)	(0.35)	(0.54)	(0.15)	(0.14)	(19.27)	(1.45)
2015Q1	0.08	1.51***	0.37	0.25*	0.16	20.47	4.54***
	(0.08)	(0.35)	(0.55)	(0.15)	(0.13)	(21.29)	(1.55)
2015Q2	0.09	1.48***	0.32	0.23	0.10	31.95	4.59***
	(0.08)	(0.35)	(0.55)	(0.15)	(0.12)	(22.10)	(1.59)
Within R- squared	0.93	0.19	0.10	0.33	0.24	0.21	0.42
Number of bank holding companies	na	na	na	na	na	na	787
Observations	na	na	na	na	na	na	17,837

Source: GAO analysis of data from the Federal Reserve Bank of Chicago and Board of Governors of the Federal Reserve System. | GAO-16-169

Appendix VI: Econometric Analyses of the Impact of Enhanced Regulation and Oversight on Systemically Important Financial Institutions

Notes: We analyzed data for top-tier bank holding companies that filed Form FR Y-9C from the first quarter of 2006 through the second quarter of 2015, including U.S. bank holding companies and U.S.based bank holding company subsidiaries of foreign banking organizations. We defined bank SIFIs as bank holding companies with assets of \$50 billion or more. We estimated the effects of the new SIFI requirements on bank SIFIs by regressing the variables listed in the table on indicators for each bank holding company, indicators for each quarter, indicators for whether a bank holding company is a SIFI in each quarter from the third in 2010 through the second in 2015, and other variables controlling for size, foreign exposure, securitization income, other nontraditional income, and participation in the Troubled Asset Relief Program. Estimated changes are the coefficients on the indicators for whether a bank holding company is a SIFI in quarters from the third in 2010 through the second in 2015. *=estimate is statistically significant at the 10 percent level. **=estimate is statistically significant at the 5 percent level. ***=estimate is statistically significant at the 1 percent level. Clustered standard errors are in parentheses.

Appendix VII: Dodd-Frank Act Rules Implementing Central Clearing, Capital, and Margin Swap Reforms

The following table lists select rules that implement sections of Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) related to central clearing requirements for swaps and security-based swaps, and margin and capital requirements for swaps entities, as of July 22, 2015.

Table 17: Select Dodd-Frank Act Rules Implementing Central Clearing Swap Reforms Final as of July 22, 2015

Rulemaking	Responsible regulator	Published date	Effective date
Process for Review of Swaps for Mandatory Clearing	CFTC	7/25/2011	9/26/2011
Derivatives Clearing Organization Operations, Standards, and Risk Management	CFTC	11/8/2011	1/9/2012
Derivatives Clearing Organization General Provisions and Core Principles	CFTC	11/8/2011	1/9/2012
Customer Clearing Documentation, Timing of Acceptance for Clearing, and Clearing Member Risk Management	CFTC	4/9/2012	10/1/2012
Process for Submissions for Review of Security-Based Swaps for Mandatory Clearing and Notice Filing Requirements for Clearing Agencies	SEC	7/13/2012	8/13/2012
End-User Exception to the Clearing Requirement for Swaps	CFTC	7/19/2012	9/17/2012
Swap Transaction Compliance and Implementation Schedule: Clearing Requirement under Section 2(h) of CEA	CFTC	7/30/2012	9/28/2012
Clearing Agency Standards	SEC	11/2/2012	1/2/2013
Clearing Requirement Determination under Section 2(h) of CEA	CFTC	12/13/2012	2/11/2013
Clearing Exemption for Swaps between Certain Affiliated Entities	CFTC	4/11/2013	6/10/2013
Core Principles and Other Requirements for Swap Execution Facilities	CFTC	6/4/2013	8/5/2013
Enhanced Risk Management Standards for Systemically Important Derivatives Clearing Organizations	CFTC	8/15/2013	10/15/2013
Clearing Exemption for Certain Swaps Entered into by Cooperatives	CFTC	8/22/2013	9/23/2013
Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Capital Adequacy, Transition Provisions, Prompt Corrective Action, Standardized Approach for Risk-weighted Assets, Market Discipline and Disclosure Requirements, Advanced Approaches Risk-Based Capital Rule, and Market Risk Capital Rule	Federal Reserve, OCC	10/11/2013	1/1/2014
Derivatives Clearing Organizations and International Standards	CFTC	12/2/2013	12/31/2013
Prohibitions and Restrictions on Proprietary Trading and Certain Interests in, and Relationships With, Hedge Funds and Private Equity Funds	CFTC	1/31/2014	4/1/2014
Prohibitions and Restrictions on Proprietary Trading and Certain Interests in, and Relationships With, Hedge Funds and Private Equity Funds	FDIC, Federal Reserve, OCC, SEC	1/31/2014	4/1/2014

Source: GAO analysis of Dodd-Frank Act, Federal Register documents. | GAO-16-169

Note: CFTC is the Commodity Futures Trading Commission, FDIC is the Federal Deposit Insurance Corporation, Federal Reserve is the Board of Governors of the Federal Reserve System, OCC is the Office of the Comptroller of the Currency, SEC is the Securities and Exchange Commission, and CEA is the Commodity Exchange Act. As of July 22, 2015, SEC had not yet proposed rules requiring central clearing for any security-based swap.

Table 18: Select Dodd-Frank Act Rules Implementing Capital and Margin Swap Reforms Proposed as of July 22, 2015

Rulemaking	Responsible regulator	Rule status	Published date
Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants	CFTC	Proposed	10/3/2014 (originally proposed 4/28/2011)
Margin and Capital Requirements for Covered Swap Entities	Farm Credit Administration, FDIC, FHFA, Federal Reserve, OCC	Proposed ^a	9/24/2014 (originally proposed 5/11/2011)
Capital Requirements of Swap Dealers and Major Swap Participants	CFTC	Proposed	5/12/2011
Swap Transaction Compliance and Implementation Schedule: Trading Documentation and Margining Requirements under Section 4s of CEA	CFTC	Proposed	9/20/2011
Capital, Margin, and Segregation Requirements for Security-Based Swap Dealers and Major Security-Based Swap Participants and Capital Requirements for Broker-Dealers	SEC	Proposed	11/23/2012

Source: GAO analysis of Dodd-Frank Act, Federal Register documents. | GAO-16-169

Note: CFTC is the Commodity Futures Trading Commission, FDIC is the Federal Deposit Insurance Corporation, FHFA is the Federal Housing Finance Agency, Federal Reserve is the Board of Governors of the Federal Reserve System, OCC is the Office of the Comptroller of the Currency, SEC is the Securities and Exchange Commission, and CEA is the Commodity Exchange Act.

^aSubsequent to our review period, the agencies issued an interim final rule exempting, pursuant to section 302 of the Terrorism Risk Insurance Program Reauthorization Act of 2015, Pub. L. No. 114–1, 129 Stat. 3, non-cleared swaps and non-cleared security-based swaps from the agencies' final rule implementing margin requirements. See Margin and Capital Requirements for Covered Swap Entities, 80 Fed. Reg. 74916 (Nov. 30, 2015).

Appendix VIII: Comments from the National Credit Union Administration

TAN PORT	National Credit Union Administration Office of the Executive Director
	December 15, 2015
<u>SEN</u>	T VIA E-MAIL
Finar Unite 441 (Stefanie Jonkman, Assistant Director ncial Markets and Community Investment ed States Government Accountability Office 3 Street, NW nington, DC 20548
Dear	Ms. Jonkman:
	RE : Draft Report Entitled Dodd-Frank Regulations: Impacts on Community Banks, Credit Unions and Systemically Important Institutions (GAO-16-169)
Regu Instit	k you for the opportunity to comment on GAO's draft report entitled <i>Dodd-Frank</i> <i>lations: Impacts on Community Banks, Credit Unions and Systemically Important</i> <i>utions.</i> We appreciate the importance of your work in this regard and offer the following ments.
regul and 1 deep	report acknowledges the difficulty of clearly identifying the impact of the Dodd-Frank Act ations on community banks, credit unions and systemically important financial institutions nakes no recommendations. NCUA concurs with the report, though we would like to see a er consideration of structure of the credit union industry, which may help to more clearly rate the effects of the Dodd-Frank Act on the sector.
more such	report's parallel construction between credit union and bank indicators implies there may be comparability between the two sectors than what really exists. Despite caveats indicating comparisons might not be appropriate, readers with limited background in these sectors not be able to judge how different these institutions are.
indic instit Usin	ness models of institutions of varying asset sizes can be very different. The appropriate ators to use in assessing the effects of the Dodd-Frank Act may be different for very small utions – where most of the credit unions are clustered – than they are for larger institutions. g a set of indicators better-calibrated to the business models may be more helpful in sing the effects of the Dodd-Frank Act.
Thar	k you again for the opportunity to comment.
	Sincerely,
	Market. Treit
	Mark A. Treichel Executive Director

Appendix IX: GAO Contact and Acknowledgments

GAO Contact	Lawrance L. Evans, Jr. (202) 512-8678, evansl@gao.gov
Staff Acknowledgments	In addition to the contact named above, Stefanie Jonkman (Assistant Director), Akiko Ohnuma (Analyst-in-Charge), Bethany Benitez, Pamela Davidson, Courtney LaFountain, Marc Molino, Barbara Roesmann, and Weifei Zheng made key contributions to this report.

Appendix X: Accessible Data

Agency Comment

Letter	
Text of Appendix VIII:	Ms. Stefanie Jonkman,
Comments from the National Credit Union	Assistant Director Financial Markets and Community Investment
Administration	United States Government Accountability Office
	441 G Street, NW
	Washington, DC 20548 Dear
	Ms. Jonkman:
	RE: Draft Report Entitled Dodd-Frank Regulations: Impacts on Community Banks, Credit Unions and Systemically Important Institutions (GA0-16-169)
	Thank you for the opportunity to comment on GAO's draft report entitled Dodd-Frank Regulations: Impacts on Community Banks, Credit Unions and Systemically Important Institutions. We appreciate the importance of your work in this regard and offer the following comments.
	The report acknowledges the difficulty of clearly identifying the impact of the Dodd-Frank Act regulations on community banks, credit unions and systemically important financial institutions and makes no recommendations . NCUA concurs with the report, though we would like to see a deeper consideration of structure of the credit union industry, which may help to more clearly illustrate the effects of the Dodd-Frank Act on the sector.
	The report's parallel construction between credit union and bank indicators implies there may be more comparability between the two sectors than what really exists. Despite caveats indicating such comparisons might not be appropriate, readers with limited background in these sectors may not be able to judge how different these institutions are.

Business models of institutions of varying asset sizes can be very different. The appropriate indicators to use in assessing the effects of the Dodd-Frank Act may be different for very small institutions -where most of the credit unions are clustered -than they are for larger institutions. Using a set of indicators better-calibrated to the business models may be more helpful in assessing the effects of the Dodd-Frank Act.

Thank you again for the opportunity to comment.

Sincerely,

Mark A. Treichel

Executive Director

Data Tables

Data Tables for Figure 1: Indicators of the Potential Impact of the Dodd-Frank Act on Banks by Size, First Quarter 2006 through Second Quarter 2015

Small Banks--Median number of full-time equivalent employees per \$1 million in assets

	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2006q1	38.1	33.9	31.4	29.7	25.2
2006q2	39.2	33.9	31.7	29.2	25.1
2006q3	38.4	33.5	30.9	28.9	24.7
2006q4	37.3	32.7	30.8	28.5	24.5
2007q1	36.9	32.3	30.3	28.4	24.3
2007q2	36.9	32.7	30.1	28.4	24.2
2007q3	36.9	32.1	29.7	27.8	23.9
2007q4	36.2	31.4	29.2	27.7	23.3
2008q1	35.5	30.8	28.4	27.2	23.1
2008q2	34.6	30.6	28.2	27.1	22.9
2008q3	34.3	30.1	27.9	26.6	22.5
2008q4	33.6	29.3	26.9	26.1	22.1
2009q1	32.8	28.5	26.6	25.5	21.5
2009q2	32.7	28.5	26.5	25.5	21.5
2009q3	32.2	27.7	25.9	25.3	21.3
2009q4	31.3	27.3	25.7	24.6	21.2
2010q1	30.9	26.9	25.3	24.5	20.8
2010q2	30.8	26.9	25.5	24.7	21.2

	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2010q3	30.7	27.0	25.0	24.3	21.3
2010q4	30.3	26.6	24.9	24.4	21.6
2011q1	29.7	26.3	24.7	24.3	21.5
2011q2	29.5	26.3	24.7	24.6	21.6
2011q3	29.2	26.1	24.2	24.2	21.2
2011q4	28.7	25.7	24.4	23.8	21.2
2012q1	27.8	24.8	23.8	23.4	20.8
2012q2	27.8	25.3	24.1	23.6	21.0
2012q3	27.7	25.2	24.1	23.6	20.7
2012q4	27.5	24.6	23.7	23.4	20.7
2013q1	27.0	24.6	23.5	23.4	20.8
2013q2	27.3	24.7	24.0	23.8	20.9
2013q3	27.4	24.5	23.9	23.6	20.5
2013q4	27.2	24.4	23.9	23.0	20.4
2014q1	26.6	24.0	23.4	22.9	20.0
2014q2	26.6	24.2	23.8	23.1	19.9
2014q3	26.5	24.2	23.6	22.8	19.5
2014q4	25.8	23.8	23.2	22.5	19.1
2015q1	25.7	23.7	23.0	22.3	18.8
2015q2	25.7	23.9	23.3	22.3	18.9

Small Banks--Median earnings as a percent of assets (%)

	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2006q1	1.1	1.3	1.4	1.5	1.7
2006q2	1.2	1.3	1.4	1.5	1.7
2006q3	1.1	1.3	1.4	1.5	1.6
2006q4	1.0	1.2	1.3	1.4	1.6
2007q1	1.1	1.2	1.2	1.4	1.5
2007q2	1.1	1.2	1.3	1.4	1.5
2007q3	1.1	1.2	1.3	1.3	1.4
2007q4	0.9	1.1	1.2	1.3	1.3
2008q1	1.0	1.1	1.1	1.2	1.2
2008q2	1.0	1.1	1.1	1.1	1.1
2008q3	1.0	1.0	1.0	1.0	0.9
2008q4	0.8	0.9	0.8	0.8	0.7
2009q1	0.8	0.9	0.9	0.9	0.7
2009q2	0.8	0.8	0.8	0.7	0.5

	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2009q3	0.8	0.7	0.7	0.7	0.5
2009q4	0.7	0.6	0.6	0.6	0.5
2010q1	0.8	0.8	0.8	0.8	0.7
2010q2	0.8	0.9	0.8	0.9	0.8
2010q3	0.8	0.9	0.8	0.9	0.8
2010q4	0.7	0.8	0.8	0.8	0.8
2011q1	0.7	0.9	0.9	0.9	0.9
2011q2	0.8	0.9	0.9	0.9	1.0
2011q3	0.9	0.9	1.0	0.9	1.0
2011q4	0.8	0.8	0.9	0.9	1.0
2012q1	0.8	1.0	1.0	1.1	1.1
2012q2	0.8	1.0	1.0	1.1	1.2
2012q3	0.9	1.0	1.1	1.1	1.2
2012q4	0.7	0.9	1.0	1.1	1.1
2013q1	0.7	0.9	1.0	1.0	1.2
2013q2	0.8	0.9	1.0	1.1	1.2
2013q3	0.8	0.9	1.0	1.1	1.2
2013q4	0.7	0.9	1.0	1.0	1.2
2014q1	0.7	0.9	1.0	1.1	1.2
2014q2	0.8	0.9	1.1	1.1	1.2
2014q3	0.8	1.0	1.1	1.1	1.2
2014q4	0.8	0.9	1.1	1.1	1.2
2015q1	0.8	1.0	1.1	1.1	1.3
2015q2	0.8	1.0	1.1	1.2	1.3

Small Banks--Median residential mortgage loans as a percent of assets (%)

Quarter	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2006q1	9.9	14.9	16.1	16.1	15.8
2006q2	10.3	15.1	16.4	16.2	15.7
2006q3	10.1	15.1	16.0	16.1	15.6
2006q4	10.0	14.7	15.6	16.3	15.4
2007q1	9.8	14.6	15.4	16.3	15.3
2007q2	10.0	14.6	15.3	16.6	15.5
2007q3	9.8	14.6	15.4	16.5	15.2
2007q4	9.6	14.8	15.3	16.3	15.3
2008q1	9.6	14.9	15.2	16.1	15.2

Quarter	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2008q2	9.8	15.3	15.3	16.5	15.6
2008q3	10.6	15.5	16.0	16.8	15.9
2008q4	10.6	15.6	16.4	17.2	16.0
2009q1	11.0	15.3	16.5	17.2	16.0
2009q2	11.0	15.6	16.5	17.2	16.4
2009q3	11.3	16.0	16.6	17.1	16.1
2009q4	11.4	15.6	16.6	17.2	16.2
2010q1	11.3	15.6	16.5	17.2	16.0
2010q2	11.5	15.7	16.6	17.1	16.0
2010q3	11.4	15.5	16.7	17.1	16.1
2010q4	11.2	15.4	16.7	16.6	16.0
2011q1	11.0	15.0	16.3	16.1	15.3
2011q2	11.3	14.9	16.4	16.6	15.5
2011q3	11.1	15.3	16.3	16.1	15.6
2011q4	11.3	15.1	16.1	16.1	15.5
2012q1	12.0	15.8	16.6	16.7	16.3
2012q2	11.9	16.0	16.8	16.7	16.5
2012q3	12.2	16.0	16.6	16.8	16.5
2012q4	11.9	15.9	16.4	16.5	16.3
2013q1	12.0	15.5	16.4	16.1	16.1
2013q2	11.9	15.9	16.6	16.5	16.3
2013q3	12.4	16.0	16.6	16.6	15.9
2013q4	12.6	16.1	16.3	16.6	16.1
2014q1	12.5	16.0	16.1	16.5	16.0
2014q2	12.7	16.0	16.8	16.9	16.3
2014q3	13.0	16.1	16.8	17.2	16.3
2014q4	13.1	16.2	16.7	17.1	16.5
2015q1	13.0	16.2	16.5	16.9	16.4
2015q2	13.5	16.8	16.9	17.4	16.8

Data Tables for Figure 2: Indicators of the Potential Impact of the Dodd-Frank Act on Credit Unions by Size, First Quarter 2006 through Second Quarter 2015

Credit Union--Median number of full-time employees per \$1 million in assets

Quarter	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2006q1	0.0	43.0	39.3	38.4	33.9
2006q2	0.0	43.5	39.9	39.2	34.4
2006q3	0.0	44.3	39.9	40.0	34.2
2006q4	0.0	45.4	40.2	40.1	34.2
2007q1	0.0	45.0	39.4	38.7	33.4
2007q2	0.0	44.0	39.2	38.9	33.5
2007q3	0.0	45.0	39.8	39.1	34.0
2007q4	0.0	46.0	39.9	39.2	34.0
2008q1	0.0	44.2	38.3	37.9	32.6
2008q2	0.0	43.4	37.6	37.0	32.6
2008q3	0.0	43.7	37.5	37.3	32.9
2008q4	0.0	44.3	37.5	37.2	32.6
2009q1	0.0	42.5	35.7	35.2	30.6
2009q2	0.0	41.0	34.6	34.4	30.0
2009q3	0.0	40.9	34.3	34.2	29.8
2009q4	0.0	40.5	34.4	33.7	29.5
2010q1	0.0	39.1	33.3	32.9	28.9
2010q2	0.0	38.9	32.9	32.5	28.8
2010q3	0.0	38.4	32.6	32.0	28.7
2010q4	0.0	38.3	32.8	32.2	28.5
2011q1	0.0	37.2	31.7	31.3	27.7
2011q2	0.0	36.4	31.5	31.0	27.6
2011q3	0.0	36.6	31.1	30.9	27.5
2011q4	0.0	36.7	31.1	30.5	27.3
2012q1	0.0	34.9	29.6	29.5	26.3
2012q2	0.0	34.4	29.5	29.5	26.5
2012q3	0.0	34.3	29.6	29.5	26.5
2012q4	0.0	34.3	29.6	29.6	26.4
2013q1	0.0	33.0	28.0	28.8	25.8
2013q2	0.0	32.7	28.2	28.8	26.0
2013q3	0.0	32.9	28.3	28.9	26.2
2013q4	0.0	33.1	28.6	28.7	26.1

Quarter	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2014q1	0.0	31.9	27.9	27.8	25.5
2014q2	0.0	32.1	27.7	28.0	25.6
2014q3	0.0	31.8	27.9	28.5	25.6
2014q4	0.0	31.9	27.9	28.6	25.3
2015q1	0.0	30.9	27.0	27.7	24.8
2015q2	0.0	31.1	27.1	28.0	25.0

Credit Union--Median number of part-time employees per \$1 million in assets

Quarter	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2006q1	86.1	17.3	7.3	4.5	3.4
2006q2	88.7	17.4	7.4	4.5	3.4
2006q3	87.3	16.9	7.4	4.5	3.3
2006q4	90.0	16.9	7.5	4.4	3.4
2007q1	88.3	16.6	7.2	4.3	3.3
2007q2	85.0	16.5	7.5	4.5	3.4
2007q3	86.6	16.6	6.9	4.4	3.4
2007q4	88.1	16.9	7.1	4.6	3.4
2008q1	85.6	16.3	6.5	4.3	3.2
2008q2	82.4	15.8	6.3	4.1	3.2
2008q3	83.2	15.5	6.5	4.1	3.2
2008q4	85.2	15.0	6.0	4.0	3.2
2009q1	78.2	14.4	5.8	3.9	2.9
2009q2	71.8	13.9	5.7	3.9	2.8
2009q3	71.7	13.5	5.5	3.7	2.7
2009q4	69.2	12.5	5.4	3.6	2.7
2010q1	65.6	12.3	5.2	3.6	2.6
2010q2	64.4	11.9	5.3	3.5	2.6
2010q3	62.1	12.2	5.2	3.6	2.5
2010q4	62.5	11.8	5.1	3.5	2.5
2011q1	59.9	11.4	5.1	3.3	2.5
2011q2	61.1	11.7	5.2	3.4	2.6
2011q3	56.6	11.0	5.0	3.4	2.5
2011q4	56.3	10.8	5.0	3.2	2.4
2012q1	55.9	9.9	4.8	3.2	2.2
2012q2	52.5	10.0	4.9	3.2	2.3
2012q3	52.3	9.8	4.7	3.1	2.3

Quarter	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2012q4	52.3	9.6	4.7	2.9	2.4
2013q1	52.0	9.2	4.7	2.9	2.3
2013q2	50.4	9.2	4.7	2.9	2.3
2013q3	49.4	9.3	4.7	2.9	2.3
2013q4	50.0	9.2	4.6	2.8	2.3
2014q1	46.5	8.7	4.3	2.7	2.1
2014q2	44.5	8.5	4.6	2.8	2.2
2014q3	44.7	8.3	4.3	2.7	2.1
2014q4	45.0	8.2	4.3	2.6	2.1
2015q1	42.9	8.2	4.1	2.5	2.0
2015q2	42.3	8.1	4.0	2.5	2.0

Credit Union--Median noninterest expense as a percent of assets (%)

Quarter	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2006q1	3.7	3.7	3.8	3.9	3.7
2006q2	3.6	3.8	3.8	4.0	3.7
2006q3	3.7	3.8	3.9	4.0	3.7
2006q4	3.8	4.0	4.0	4.1	3.7
2007q1	3.9	4.0	4.0	4.1	3.7
2007q2	3.8	3.9	4.0	4.1	3.7
2007q3	3.8	4.0	4.0	4.1	3.8
2007q4	3.9	4.2	4.1	4.1	3.8
2008q1	3.9	4.1	4.0	4.0	3.7
2008q2	3.8	4.0	3.9	4.0	3.7
2008q3	3.8	4.0	3.9	4.1	3.8
2008q4	4.0	4.1	4.1	4.2	3.9
2009q1	4.0	4.0	3.9	4.0	3.6
2009q2	3.9	4.0	3.8	3.9	3.6
2009q3	3.8	4.0	3.8	3.9	3.6
2009q4	3.9	4.0	3.8	3.9	3.5
2010q1	3.7	3.8	3.7	3.8	3.5
2010q2	3.7	3.8	3.6	3.7	3.4
2010q3	3.7	3.8	3.8	3.8	3.5
2010q4	3.9	4.1	3.9	3.9	3.7
2011q1	3.6	3.8	3.7	3.8	3.5
2011q2	3.6	3.7	3.6	3.8	3.5
2011q3	3.9	3.9	3.8	3.9	3.7

Quarter	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2011q4	3.9	3.9	3.8	3.8	3.6
2012q1	3.6	3.6	3.5	3.6	3.4
2012q2	3.6	3.6	3.5	3.6	3.4
2012q3	3.6	3.6	3.6	3.6	3.5
2012q4	3.7	3.7	3.6	3.7	3.5
2013q1	3.5	3.5	3.5	3.5	3.4
2013q2	3.5	3.5	3.5	3.5	3.4
2013q3	3.6	3.6	3.5	3.6	3.5
2013q4	3.6	3.6	3.6	3.6	3.5
2014q1	3.5	3.5	3.5	3.5	3.4
2014q2	3.4	3.4	3.5	3.5	3.4
2014q3	3.5	3.5	3.5	3.6	3.4
2014q4	3.5	3.5	3.5	3.6	3.4
2015q1	3.4	3.3	3.4	3.5	3.4
2015q2	3.4	3.3	3.4	3.5	3.4

Credit Union--Median earnings as a percent of assets (%)

Quarter	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2006q1	0.7	0.6	0.6	0.6	0.7
2006q2	0.6	0.6	0.7	0.7	0.8
2006q3	0.7	0.7	0.7	0.7	0.8
2006q4	0.5	0.6	0.7	0.7	0.8
2007q1	0.6	0.6	0.6	0.6	0.6
2007q2	0.6	0.6	0.7	0.7	0.7
2007q3	0.7	0.6	0.7	0.7	0.7
2007q4	0.5	0.6	0.7	0.7	0.7
2008q1	0.5	0.4	0.5	0.5	0.5
2008q2	0.3	0.4	0.4	0.5	0.5
2008q3	0.3	0.4	0.5	0.5	0.5
2008q4	0.1	0.3	0.3	0.3	0.2
2009q1	-1.8	-2.2	-2.3	-2.0	-1.5
2009q2	-0.1	0.0	0.1	0.2	0.3
2009q3	0.0	0.0	0.1	0.2	0.3
2009q4	-0.2	-0.2	0.0	0.0	0.2
2010q1	0.0	0.1	0.2	0.2	0.4
2010q2	-0.2	-0.1	0.1	0.1	0.4
2010q3	-0.2	-0.1	0.0	0.1	0.4

Quarter	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2010q4	-0.2	0.0	0.1	0.2	0.4
2011q1	0.1	0.2	0.3	0.4	0.6
2011q2	0.0	0.2	0.3	0.4	0.6
2011q3	-0.1	0.0	0.2	0.3	0.5
2011q4	-0.1	0.1	0.2	0.3	0.6
2012q1	0.1	0.2	0.3	0.4	0.7
2012q2	0.1	0.2	0.3	0.4	0.7
2012q3	0.0	0.2	0.3	0.4	0.7
2012q4	0.0	0.1	0.2	0.4	0.7
2013q1	0.0	0.1	0.2	0.3	0.6
2013q2	0.0	0.1	0.2	0.4	0.6
2013q3	0.0	0.1	0.2	0.3	0.6
2013q4	0.0	0.1	0.2	0.4	0.6
2014q1	0.1	0.1	0.2	0.3	0.6
2014q2	0.1	0.1	0.2	0.4	0.6
2014q3	0.1	0.2	0.3	0.4	0.7
2014q4	0.1	0.1	0.3	0.4	0.6
2015q1	0.1	0.2	0.2	0.3	0.6
2015q2	0.1	0.2	0.3	0.4	0.6

Median residential mortgage loans as a percent of assets (%)

Quarter	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2006q1	0.0	0.2	11.7	20.7	29.3
2006q2	0.0	0.2	12.2	21.4	30.6
2006q3	0.0	0.5	12.6	22.3	31.4
2006q4	0.0	0.5	13.0	22.6	31.6
2007q1	0.0	0.5	13.0	22.0	30.8
2007q2	0.0	0.4	13.5	22.0	31.5
2007q3	0.0	0.5	13.5	23.0	32.4
2007q4	0.0	0.6	13.8	23.2	32.7
2008q1	0.0	0.7	13.3	22.3	32.0
2008q2	0.0	0.8	13.5	22.6	32.8
2008q3	0.0	1.1	14.1	23.6	34.2
2008q4	0.0	1.4	14.8	23.7	34.5
2009q1	0.0	1.4	14.3	22.7	32.6
2009q2	0.0	1.4	14.5	22.5	32.3
2009q3	0.0	1.6	14.7	23.1	32.6

Quarter	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
2009q4	0.0	1.8	14.9	22.9	32.5
2010q1	0.0	1.7	14.7	22.5	31.9
2010q2	0.0	1.9	14.7	22.6	32.0
2010q3	0.0	1.9	14.8	22.9	32.1
2010q4	0.0	2.2	15.0	22.6	31.5
2011q1	0.0	2.1	14.3	22.0	30.3
2011q2	0.0	2.1	14.5	21.9	30.5
2011q3	0.0	2.4	14.8	21.7	30.4
2011q4	0.0	2.5	14.7	21.6	30.2
2012q1	0.0	2.1	14.3	20.8	28.9
2012q2	0.0	2.3	14.3	20.6	29.0
2012q3	0.0	2.4	14.5	21.0	29.0
2012q4	0.0	2.4	14.3	20.9	29.3
2013q1	0.0	2.3	13.8	20.1	28.3
2013q2	0.0	2.2	13.9	20.3	28.5
2013q3	0.0	2.4	14.2	20.9	29.2
2013q4	0.0	2.3	14.2	21.2	29.4
2014q1	0.0	2.4	13.8	20.5	28.5
2014q2	0.0	2.5	14.0	20.8	28.9
2014q3	0.0	2.9	14.5	21.2	29.2
2014q4	0.0	3.0	14.7	21.1	29.4
2015q1	0.0	3.2	14.0	20.5	28.6
2015q2	0.0	3.1	14.1	20.6	29.5

Data Tables for Figure 3: Indicators for Designated Nonbanks and Large Publicly Traded Banks and Insurance Companies, Second Quarter 2012 through Second Quarter 2015

Total Assets for Designated Nonbanks and Large Publicly Traded Banks and Insurance Companies, Second Quarter 2012 through Second Quarter 2015 (Millions of Second Quarter 2015 Dollars).

Date	MET US Equity	AIG US Equity	GELK US Equity	PRU US Equity	Insurance (median)	Banking (median)
2012Q2	862378	580413	583988	676643	113320	186291
2012Q3	879255	572179	583481	697867	114198	179928
2012Q4	866181	567909	558301	734153	117293	179536
2013Q1	868012	566048	546081	746746	115581	182161

Date	MET US Equity	AIG US Equity	GELK US Equity	PRU US Equity	Insurance (median)	Banking (median)
2013Q2	838872	552731	535932	725693	110637	182181
2013Q3	841874	553385	532882	740031	110662	180538
2013Q4	901985	551534	526572	745576	110082	167453
2014Q1	904379	555387	518168	758030	111425	168023
2014Q2	919827	534165	514438	772853	111286	168900
2014Q3	913710	530139	509750	768421	108916	165357
2014Q4	907118	518313	502867	770717	111948	173234
2015Q1	924401	523311	478849	782515	108606	160972
2015Q2	898409	509987	463320	762731	107117	163627

Gross Notional Amounts of Credit Default Swaps Outstanding for which Designated Nonbanks and Large Publicly Traded Banks and Insurance Companies are the Reference Entities, Second Quarter 2012 through Second Quarter 2015 (Millions of Second Quarter 2015 Dollars).

Date	MET US Equity	AIG US Equity	GELK US Equity	PRU US Equity	Insurance (median)	Banking (median)
2012Q2	33454	46087	89964	11136	12280	68294
2012Q3	31848	43365	84204	11008	11848	62393
2012Q4	30469	38848	79793	10940	10759	55709
2013Q1	29092	37217	75683	9856	10521	51451
2013Q2	26932	33621	68667	9537	10035	49618
2013Q3	25549	30453	63542	8997	9304	47257
2013Q4	23943	25207	55031	8035	7277	41880
2014Q1	25045	22495	56350	7914	6879	39686
2014Q2	25721	21999	54535	8125	6467	38562
2014Q3	24060	19829	49051	8732	6111	35030
2014Q4	23294	19034	43224	8605	5927	34008
2015Q1	21645	18091	41117	8500	5952	32271
2015Q2	22144	17100	38976	8370	5602	29546

Total Debt Outstanding Excluding Deposits for Designated Nonbanks and Large Publicly Traded Banks and Insurance Companies, 2012Q2-2015Q2 (Millions of Second Quarter 2015 Dollars).

Date	MET US Equity	AIG US Equity	GELK US Equity	PRU US Equity	Insurance (median)	Banking (median)
2012Q2	27556	77227	392978	37271	3440	25485
2012Q3	28165	76621	389776	36250	3714	21059
2012Q4	27483	50204	363165	34192	3701	21050

Date	MET US Equity	AIG US Equity	GELK US Equity	PRU US Equity	Insurance (median)	Banking (median)
2013Q1	27030	46682	346665	35495	3687	23439
2013Q2	26808	43827	336333	34154	3394	22587
2013Q3	26343	43218	332904	34711	3377	24478
2013Q4	26711	42479	323690	34763	3362	23985
2014Q1	24649	40106	315176	35460	3350	24847
2014Q2	24504	38781	307755	36423	3332	24735
2014Q3	24012	36426	299307	36267	3318	25102
2014Q4	23901	31382	288228	33252	3534	25333
2015Q1	25329	32159	274620	30635	3317	24181
2015Q2	24227	30360	250590	31748	3374	24834

Total Equity as a Percentage of Total Assets for Designated Nonbanks and Large Publicly Traded Banks and Insurance Companies, 2012Q2-2015Q2 (Percentage).

Date	MET US Equity	AIG US Equity	GELK US Equity	PRU US Equity	Insurance (median)	Banking (median)
2012Q2	10.4	21.1	14.4	9.4	13.8	11.0
2012Q3	10.6	20.8	14.6	9.3	14.3	11.2
2012Q4	10.8	20.2	15.3	8.6	14.3	11.2
2013Q1	11.0	20.6	16.0	8.9	13.9	11.5
2013Q2	10.6	20.7	16.3	8.1	14.1	11.5
2013Q3	10.8	21.0	16.3	7.8	14.6	11.4
2013Q4	11.1	21.5	16.1	8.0	14.6	11.2
2014Q1	11.6	22.0	16.7	8.5	14.7	11.4
2014Q2	12.0	23.9	16.9	8.9	17.2	11.3
2014Q3	12.1	24.3	17.6	9.0	16.9	11.3
2014Q4	12.4	24.6	18.1	9.0	16.4	11.3
2015Q1	12.5	24.7	15.5	9.6	16.5	11.3
2015Q2	12.1	24.5	15.1	9.1	15.7	11.2

Short Term Debt Less Deposits as a Percentage of Total Assets Less Separate Account Assets for Designated Nonbanks and Large Publicly Traded Banks and Insurance Companies, 2012Q2-2015Q2 (Percentage).

Date	MET US Equity	AIG US Equity	GELK US Equity	PRU US Equity	Insurance (median)	Banking (median)
2012Q2	0.71	0.95	21.44	2.76	0.13	3.45
2012Q3	0.71	0.17	20.23	3.31	0.02	2.62
2012Q4	0.84	0.65	17.79	2.25	0.05	2.30
2013Q1	0.73	0.55	15.61	2.20	0.02	2.47
2013Q2	0.75	0.32	14.73	2.51	0.04	2.95

Date	MET US Equity	AIG US Equity	GELK US Equity	PRU US Equity	Insurance (median)	Banking (median)
2013Q3	0.76	0.16	15.33	2.75	0.00	2.79
2013Q4	1.02	0.71	14.96	2.71	0.10	3.41
2014Q1	0.75	0.34	14.71	3.29	0.00	2.29
2014Q2	0.73	1.09	14.18	3.22	0.09	2.37
2014Q3	0.73	0.95	13.55	3.52	0.10	2.91
2014Q4	0.94	0.46	13.75	3.53	0.00	2.91
2015Q1	0.72	0.72	13.89	2.79	0.03	1.92
2015Q2	0.74	1.22	13.84	3.05	0.00	2.74

Figure 4: Fair Value of Collateral as a Percentage of Net Current Credit Exposure for Over-the-Counter Derivatives Contracts for Counterparty Type and for All Counterparty Types Combined, from Second Quarter 2009 through Second Quarter 2015 (Percentage)

	All Counterparties Combined	Banks and Securities Firms	Monoline Financial Guarantors	Hedge Funds	Sovereign Governments	Corporations and All Other Counterparties
2009q2	62.2	85.3	1.2	211.3	27.5	31.3
2009q3	62.9	87.2	1.2	243.9	26.0	29.0
2009q4	68.0	92.4	1.2	282.4	24.9	32.9
2010q1	67.6	91.4	1.0	311.8	26.2	31.9
2010q2	68.8	92.1	1.6	299.3	30.8	31.6
2010q3	71.3	92.6	1.7	272.9	11.2	38.3
2010q4	70.9	88.0	1.7	342.5	15.6	40.3
2011q1	72.2	87.2	3.2	363.3	14.6	42.3
2011q2	73.6	90.9	3.2	380.6	20.1	40.7
2011q3	67.1	83.9	3.9	209.9	17.5	40.3
2011q4	73.0	89.7	9.9	317.1	13.6	41.2
2012q1	76.1	92.4	10.9	392.5	14.6	43.4
2012q2	77.5	94.9	10.2	380.5	16.2	44.4
2012q3	77.5	91.2	12.3	391.2	14.8	48.3
2012q4	79.1	92.2	14.3	405.3	13.7	50.2
2013q1	83.0	97.3	20.7	422.2	12.8	52.2
2013q2	82.2	91.8	29.4	406.3	13.5	57.1
2013q3	85.2	95.8	50.7	413.4	14.3	58.0
2013q4	86.2	98.6	41.4	413.3	14.9	57.4
2014q1	91.9	101.0	35.5	593.3	14.1	59.1
2014q2	92.7	102.1	22.7	607.7	16.0	57.9
2014q3	93.6	100.6	25.5	604.5	14.9	62.8

	All Counterparties Combined	Banks and Securities Firms	Monoline Financial Guarantors	Hedge Funds	Sovereign Governments	Corporations and All Other Counterparties
2014q4	94.6	101.4	17.5	614.4	11.3	71.8
2015q1	96.3	97.8	17.1	667.9	17.0	75.5
2015q2	103.6	98.2	14.0	711.0	14.2	85.5

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