



Statement before the Subcommittee on Monetary Policy and Trade

Government Financial Policy and Credit Availability

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Chairman Campbell, Ranking Member Clay, and distinguished members of the Subcommittee, thank you for convening today's hearing, "Federal Reserve Oversight: Examining the Central Bank's Role in Credit Allocation," and thank you for inviting me to testify. My name is Paul Kupiec and I am a resident scholar at the American Enterprise Institute, but this testimony represents my personal views. My research is focused on banking and financial stability. I have years of experience working on banking and financial policy as a senior economist at the Federal Reserve Board, as a Deputy Director at the IMF and most recently as Director of the FDIC Center of Financial Research. I recently completed a three-year term as chairman of the Research Task Force of the Basel Committee on Bank Supervision. It is an honor for me to be able to testify before the subcommittee today.

History is replete with examples where governments direct private sector credit. Without checks and balances, governments often use their powers to direct private institutions into making nonviable loans in order to achieve favored political goals. Such policies often benefit targeted constituencies and appear to be costless in the short run. Eventually, however, they end up costing taxpayers dearly, as loans made to satisfy political goals rarely make economic sense without an explicit government subsidy somewhere in their life cycle. There are many historical instances, including in the U.S., where government directed lending policies not only sowed but fertilized seeds that grew into a financial crisis.

After briefly reviewing the link between government housing policy and the recent financial crisis, I consider a number of important post-crisis bank regulatory reforms and gauge their impact on the availability of consumer and business credit. For better or worse, bank regulatory policies shape bank behavior. They shape the environment in which the Federal Reserve conducts monetary policy, and they can have important impacts on economic growth and financial stability. Overly restrictive bank regulatory policies can discourage banks from lending, making monetary stimulus less effective and slowing the recovery from the Great Recession. Unbalanced bank regulatory policies can lead to a distorted allocation of bank credit, discouraging some types of bank lending while encouraging the oversupply of others.

I review the impact new bank regulations including developments related to financial regulators' use of their new systemic risk powers. In addition to new tools to discharge their new safety and soundness mission, the Dodd-Frank Act (DFA) gave regulators the responsibility of controlling "systemic risk" in the financial sector without ever defining systemic risk. This ambiguity has enabled bank regulators to use poorly supported systemic risk arguments to expand the regulatory jurisdiction of the Federal Reserve to an increasing number of large non-bank financial institutions.

The key points of my testimony are:

- Government policies encouraged the housing bubble that triggered a financial crisis. The same policies are in place today along with new programs to stimulate mortgage borrowing.
- CFPB regulations surrounding mortgage origination are likely to reduce consumer access to mortgage credit without benefiting financial stability or consumer protection.
- Small banks have been negatively impacted by the new mortgage origination rules, and many have decided to stop making mortgages.

- New approaches for enforcing fair lending laws create a new entitlement: bank credit for high-risk borrowers with protected characteristics. This fair lending enforcement standard will raise the costs and reduce credit availability for well-qualified non-protected borrowers.
- Volcker rule restrictions on collateralized loan obligations will impose significant costs on banks with no measurable gain in bank safety or soundness. The rule should be amended without delay to allow banks to retain their legacy CLOs.
- The Dodd-Frank mandatory stress test for large banks and bank holding companies gives the Federal Reserve unchecked power to exercise regulatory discretion over bank operations and shareholder property rights. The Federal Reserve can fail a bank in the stress test without any legal requirement to provide objective evidence that the bank is at risk.
- Bank regulators are stopping banks from making high-yield syndicated corporate loans arguing that these loans are fueling a bubble in high-yield mutual funds. If there is a bubble, this is the wrong policy as reducing the supply of loans will only make the bubble worse.
- Mutual fund investor demand for high-yield corporate loans is being driven by the Federal Reserve's zero-rate monetary policy.
- The Dodd-Frank Act granted financial regulators broad new powers and the responsibility to prevent "systemic risk" without providing a clear definition of "systemic risk." This ambiguity gives financial regulators wide latitude to exercise their judgment to define firms, products, specific financial deals, and market practices that create systemic risk and require additional regulation and expand their own jurisdictions.
- Regulatory systemic risk powers create enormous regulatory uncertainty for many private sector financial firms, including many that do not benefit from deposit insurance or any other implicit government safety net guarantees.

Government Housing Financial Policies and the Financial Crisis

While bank leverage and risk-taking enabled the growth of the mortgage and real estate bubble, the cause of the recent U.S. financial crisis was deeply rooted in excessive consumer leverage in residential mortgages. A host of government policies subsidized home mortgage borrowing, and consumers' ability to overleverage was facilitated and encouraged by government housing policies that seriously weakened national mortgage underwriting standards.¹ More than half a dozen years after the crisis, government housing policy today remains firmly focused on stimulating consumer mortgage borrowing, including borrowing by households with subprime credit quality.

Since the onset of the crisis, government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac have been the repository of most US mortgage market risk. Following conservatorship in 2008, the government fully controls these GSEs' operations through the conservatorship powers of the Federal Housing Finance Agency (FHFA). The crisis required nearly \$200 billion in government support to keep the GSEs operating. Next to GSE losses, the \$1.7 billion required to bailout the Federal Housing Administration's (FHA) mortgage losses seems minor, but it may only be a down payment on a larger taxpayer bill that will eventually come due.²

Still, affordable housing advocates are calling for another dose of distortionary housing policies. As real estate markets stabilize and GSE's pay back the government and return to profitability, their profits provide the government with a cushion to fund new politically-favored housing finance subsidies off-budget and without legislation by using the FHFA to control GSE

operations. Following the release of the administration's 2014 budget proposal, housing advocates have called for substantial reductions in FHA insurance premiums to stimulate mortgage borrowing, arguing that at current insurance rates, the FHA makes money on every new mortgage it guarantees.³ These arguments, however, ignore the FHA's need to cover large potential losses on its existing mortgage portfolio.

In addition to the mortgage market support provided by FHA and the GSEs, the Federal Reserve has purchased almost \$1.6 trillion in mortgage-backed securities to reduce mortgage interest rates and stimulate mortgage borrowing. Thus far, the government strategy to repair a deflated mortgage bubble has been to increase government mortgage subsidies and try to get consumers to take on new mortgage debt.

Post-Crisis Bank Regulatory Policy and Access to Credit

The Dodd-Frank Act (DFA) made extensive changes in the regulatory landscape, but it did not provide the operational details. Instead it instructed the financial regulatory agencies to work out the rulemaking. Post DFA, the responsibility for setting bank regulatory policy has spread beyond the pre-crisis bank regulatory agencies. The CFPB now plays the central role in crafting many of the consumer protection policies that used to be housed in the Federal Reserve Board. Other new bank regulations have been crafted by a committee of financial regulators. For example, the regulations implementing the Volcker Rule required agreement among the Federal Reserve Board, the Office of the Comptroller of the Currency, the Securities and Exchange Commission, the Commodity Futures Trading Commission and the Federal Deposit Insurance Corporation.

In many cases, the Federal Reserve is not the sole Federal banking regulator setting policy. Still, it is important to understand how new DFA financial regulations are likely to impact bank behavior. In this regard, I believe that a host of new regulatory policies are discouraging banks from lending, making it more difficult for the Federal Reserve to use monetary policy to stimulate economic growth by expanding credit through the banking system.

New Rules for Mortgage Originations Discourage Mortgage Lending and Increase Bank Risk

The Qualified Mortgage (QM) and the Ability-to-Repay (ATR) rules will significantly increase many small banks costs of mortgage lending. The QM and ATR rules, moreover, set minimum underwriting standards that are far weaker than underwriting standards consistent with prime, low default-risk mortgages. The QM and ATR rules will not deter predatory lending as a high percentage of borrowers who are fully qualified under these rules would likely default and lose their homes should we again experience a stress similar to the recent financial crisis. The QM and ATR rules will force many small banks to abandon the mortgage business, reducing mortgage credit availability, especially in geographic markets without a large bank presence. Mortgages have been shown to be risk-reducing investments for community banks, so forcing community banks out of the mortgage lending business will increase their risk of distress.

It is well-known that smaller banks, so-called community banks⁴, specialize in relationship lending, or the use of "soft information" or qualitative to underwrite loans. Qualitative information is gained through social and business interactions with potential borrowers and is used to assess, for example, a borrower's "character," the strength of the informal financial support a borrower might receive from

family or relatives, or the quality of a small business's business plan. Unlike credit scores and income data that reflect past experiences, qualitative information can be forward looking and identify issues that are not yet reflected in public databases. It is especially helpful for assessing a borrower's ability to repay a loan when verifiable data on income, the value of collateral, or formal guarantees from co-signatories are not available.

Relationship lending differs from high-volume model/scorecard-based lending which assesses the quality of a loan application based on data from credit bureaus, public records, and potentially verifiable information on income, expenses, and assets provided by the borrower. Scorecard-based underwriting models are very useful in large organizations when loans are made across a wide branch network or by independent mortgage brokers. Scorecards provide a means to standardize the loan underwriting process and, when designed properly, impose controls and discipline on the many loan officers or mortgage brokers whose decisions are otherwise not easily monitored.

One important change initiated by the DFA is a virtual requirement that mortgage lenders move toward a model/scorecard-based approach to mortgage lending. In order to limit their exposure to predatory lending allegations, a mortgage underwriter must ensure that a loan satisfies the CFPB's Qualified Mortgage (QM) and Ability-to-Repay (ATR) rules. These rules represent a well-intentioned attempt to prohibit many of the "risky" mortgage products that were associated with the financial crisis. Unfortunately, the rules may have unintended negative consequences for a large number of banking institutions and their customers.

A loan that meets QM standards reduces the risk of a predatory lending action. To qualify as a QM mortgage, contracts may not include negative amortization, interest only, excessive origination points or fees, terms in excess of 30 years, or approved for a borrower with a total debt-to-income ratio in excess of 43 percent. While there are some specific exceptions in the rules, the QM mortgage designation rules exclude mortgage loan contract characteristics that were commonly associated with high default rate subprime and no-doc loans in the crisis.

The CFPB's ATR rules require that a lender must make a reasonable good-faith effort to establish that a borrower has the capacity to repay a loan. The rule establishes 8 underwriting criteria that lenders may use to satisfy this rule and protect themselves from predatory lending enforcement actions. The data items that must be collected, verified and maintained are similar to data that would normally be used to underwrite a loan using a model or scorecard approach.

The ATR rule does not prohibit the use of qualitative information in the underwriting process, but if the lender wants safe harbor, it must adopt the technology and expense of a scorecard lender even if the true loan underwriting decision is based on soft information. Moreover, should the borrower's data not be sufficient or verifiable under the ATR guidelines, a soft-information lender is exposed to the costs of future litigation should the loan become non-performing.

The ATR and QM regulations make it risky to underwrite mortgage loans based on qualitative information gathered through the bank-customer relationship. These requirements impose significant new costs on many smaller institutions, and, for small volume banks, these costs may not be recoverable even if mortgage origination fees are increased to the maximum permissible under QM rules. In addition to creating potentially prohibitive compliance costs, many community bankers believe that the QM and ATR rules preclude them from using soft information to gain a competitive lending advantage over larger scorecard-based lenders.⁵

The QM and ATR rules will significantly increase small bank compliance costs

Community banks argue that the CFBP’s QM and ATR rules significantly increase their costs of regulatory compliance and some regulatory officials have acknowledged these arguments. For example, in a February 2013 speech, Federal Reserve Governor Elizabeth Duke estimated that DFA would require small banks, those with less than \$50 million in assets, to hire one extra full time person to manage mortgage regulatory compliance.⁶ A larger bank, for example one with \$500 million in assets, would likely require three extra full time staff.

These compliance cost estimates can be used to gauge the impact of these new mortgage rules on community banks’ costs and profitability. For banks with less than \$50 million in assets, I estimate the impact of adding one additional full-time employee for DFA mortgage compliance. For banks in the \$50-\$150 million range, 1.5 full-time equivalent staff are added. Banks in the \$150-\$250 million range require two additional full-time staff, while banks between \$250 and \$500 million are assumed to add three full-time employees. In each case, the added compliance cost is estimated by assuming that each new bank employee receives salary and benefits equal to the bank’s current actual average cost per employee calculated from June 2013 regulatory report data. Using the average cost of a bank employee is conservative as compliance experts are likely to earn more than an average banker’s salary.

Each bank’s pre-tax ROA on continuing operations is calculated as the ratio of bank reported pre-tax operating profit to assets.⁷ The effect of new DFA mortgage compliance costs are estimated by reducing the bank’s reported pre-tax operating profit by the estimated increase in compliance cost and a revised pre-tax ROA is calculated. The results of this simulation are reported in Exhibit 1.

Exhibit 1: Dodd-Frank Mortgage Compliance Cost Implications for Community Banks

Banks Size Group	Number of Banks	Number of banks with negative pretax operating earnings	Average pre-tax ROA (bps)	Average number of employees	Number of banks with negative pre-tax operating earnings *	Average pre-tax ROA*	Average number of employees*
Banks assets less than \$50 million	833	142	32.7	10.39	202	16.5	11.39
Bank assets between \$50 million and \$150 million	2358	239	56.9	26.27	323	50.3	27.77
Bank assets between \$150 million and \$250 million	1204	118	48.0	50.01	128	44.4	52.01
Bank assets between \$250 million and \$500 million	1221	78	55.1	85.58	89	51.9	88.58

Source: June 2013 FDIC Statistics on Depository Institutions and the author's calculations. Pretax operating earnings are defined as net income before tax and extraordinary items and other adjustments minus gains (losses) on securities not held in trading accounts. Pre-tax ROA is defined as pre-operating earnings divided by bank assets and is expressed in basis points.

**Revised estimates for June 2013 using Federal Reserve estimates of the additional compliance staff required for Community Banks to satisfy DFA*

The compliance cost simulation paints a bleak picture for small community banks. Should banks with assets less than \$50 million continue to make mortgages on the same terms, the increase in compliance costs will cause 60 additional institutions to post a pre-tax loss. The average pre-tax ROA for this size group will be cut in half and reduced to a non-sustainable return of only 16.5 basis points. The effect on this size group is especially severe since the new DFA regulations will increase their employee expenses by about 10 percent with no beneficial effect on their revenues.

For banks between \$50 and \$150 million, additional compliance costs are estimated to cause 84 additional institutions to post a pre-tax loss. On average this group’s pre-tax ROA will be reduced by over 10 percent to a level of about 50 basis points. As banks increase in asset size, the effects of new mortgage compliance costs are less pronounced, but they still reduce ROAs by about 10 percent.

Banks between \$150 and \$250 million would earned less than 45 basis points on their assets while those in the \$250-\$500 million range would have earned earn less than 52 basis points.

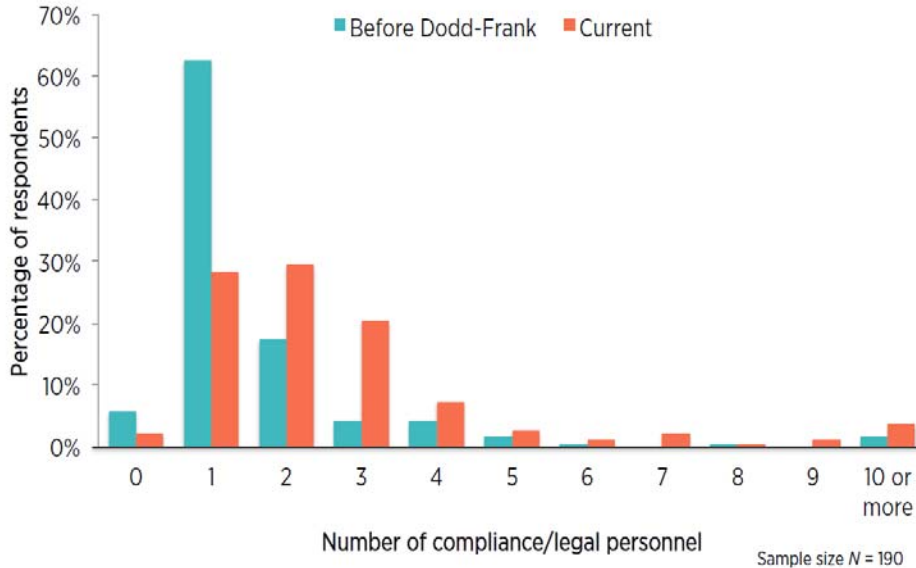
The simulation suggests that, should banks continue to make mortgages on similar terms as in the past, new DFA mortgage regulations will have a large negative effect on the profitability of smaller community banks. Under the Federal Reserve compliance staffing assumptions, larger community banks face a proportionally smaller increase in their staff size, so the compliance effects are less pronounced. Still for all the bank size groups examined above, compliance with the new DFA mortgage regulations are likely to have a pronounced negative effect on the profitability of community banks, and many community banks may simply stop mortgage lending to avoid these new costs.

The implications of the compliance cost analysis are mirrored in the results of a recent survey of community banks.⁸ Academic researchers conducted a survey of community banks to gain a better understanding of the effects of DFA regulations on their operations. Bank participation in the survey was voluntarily and anonymous. The final sample of respondents, 222 banks, have characteristics that are similar to the larger population of community banks. The sample is comprised of small banks (on average \$500 million in assets), located across the country but primarily in rural and small metropolitan areas, serving moderate income customers. The average bank in the survey sample had 120 employees, including employees specialized in regulatory compliance. On average, the banks responding to the survey are slightly larger than the average community bank.

Before discussing the results of this community bank survey, it is useful to recall some relevant population characteristics of community banks. FDIC data show that roughly 80 percent of individual banking institutions are smaller than \$500 million,⁹ the threshold for a bank to qualify as a small business. When it comes to employees, most banks have relatively few. Approximately half of all banks have fewer than 50 employees; almost 25 percent have fewer than 20 employees. A large number of small banks have only a single legal or regulatory compliance professional and many small banks rely on consultants, industry trade organizations, or regulatory outreach to keep track of regulatory changes. The compliance function in many small institutions is not geared to implement hundreds of new rules.¹⁰

The survey results indicate that the QM and ATR rules have had a substantial impact on community banks' compliance costs. Exhibit 2 shows the number of compliance staff at community bank survey respondents in 2013 compared to their compliance staff before the DFA. Many community banks have more than doubled the number of their staff dedicated to compliance. The biggest factor driving compliance staffing needs are the QM and ATR regulations.

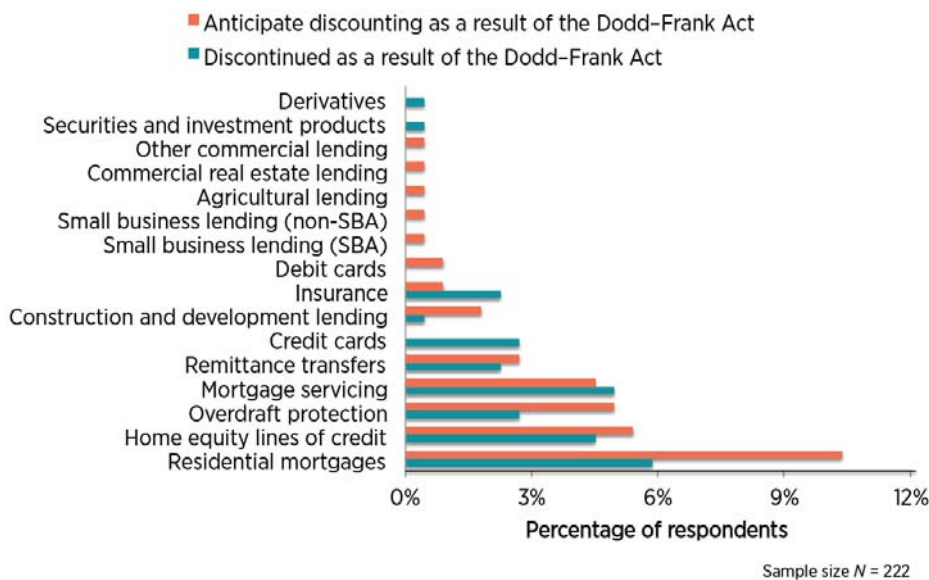
Exhibit 2: Dodd-Frank Impact on Community Bank Compliance Staff



Source: Peirce, Robinson, Stratmann (2014) Figure 20.

In addition to requiring many community banks to increase their compliance staff and costs, the survey results also indicate that many community banks have decided to discontinue their mortgage lending operations rather than absorb higher regulatory compliance costs. Exhibit 3 shows that 16 percent of the community bank sample respondents have either discontinued or plan to discontinue offering residential mortgages, and more than 10 percent have stopped or plan to stop offering home equity lines of credit.

Exhibit 3: Dodd-Frank Impact on Community Bank Product Offerings



Source: Peirce, Robinson, Stratmann (2014) Figure 14.

The evidence on the impact of the DFA QM and ATR regulations is clear: these new rules are making it unprofitable for many community banks to remain in the residential mortgage lending business. When community banks discontinue residential mortgage lending, it is likely to have the greatest impact on rural markets in locations where community banks have few large bank competitors. Large banks frequently do not find it profitable to service sparsely populated rural markets, and in these markets the scale of community bank mortgage operations is unlikely to justify the additional compliance costs associated with QM and ATR regulations.

The discontinuation of mortgage lending at community banks is unlikely to enhance community bank safety and soundness. Historically, residential mortgage lending has been a low risk, low return business for community banks. For the most part, community banks avoided making high-risk subprime mortgages in the past financial crisis. Analysis shows that throughout the financial crisis, residential mortgage lending was, on average, a stabilizing source of profit for community banks.¹¹

QM and ATR Regulations Do Not Reduce Risk or Prevent Predatory Lending

The legislative intent behind the QM and ATR regulations is the prevention of predatory mortgage lending. If banks underwrite mortgages that comply with minimum QM and ATR regulatory standards, there is the presumption that borrowers have the ability to repay the mortgages.

In practice, the final form of the QM and ATR regulations is a remarkably lax though onerous government standard for mortgage underwriting. It was designed to aid government policies that encourage mortgage borrowing to reverse home price declines by minimizing constraints on borrowers' ability to qualify for a home mortgage. The QM rule stretches underwriting standards to allow overextended consumers to continue purchasing houses that would otherwise be unaffordable.

Borrowers can satisfy QM standards with only a 3 percent down payment and a subprime (580 FICO) credit score. It is doubtful that the QM rule offers borrowers much protection against predatory lending. Regulatory estimates show that, of the GSE mortgages guaranteed between 2005 and 2008, 23 percent of those that meet current QM ATR standards defaulted or became seriously delinquent.¹²

The QM ATR rules do not seem to force a particular lending outcome. A bank could impose underwriting rules stricter than those specified in these rules and underwrite only high-quality mortgages. The problem that arises with this strategy is that such an underwriting rule may risk fair-lending legal challenges.

Disparate Impact Policies Reduce Consumer Access to Mortgage and Auto Loans

One new regulatory tool for directing bank credit is the threat of regulatory charges of loan discrimination. Enforcement actions can now be based on statistical analysis that compares the characteristics of an institution's borrowers to the characteristics of its potential borrowers.¹³ If the characteristics of actual borrowers differ from the characteristics of potential borrowers, regulators can undertake an enforcement action based on so-called disparate impact. Regulators have used disparate impact arguments to force banks to restructure their auto and mortgage lending processes.¹⁴

When bank loan underwriting standards based on objective financial criteria produce an “unbalanced” distribution of credit, lenders can be accused of discrimination. In disparate impact cases, plaintiffs need not any establish evidence of lenders’ intent to discriminate. The loan underwriting standards can be completely blind to race, gender, ethnicity, or other protected characteristics, yet if they do not extend credit in a pattern that is consistent with the market population characteristics, the bank may be in violation of fair lending statutes.¹⁵

Suppose a bank makes loans using a single “facially neutral” underwriting process that uses standard financial analysis to assess a borrower’s ability to service a loan. Indeed, neither the bank nor its designated loan officer will record an applicant’s race or any other borrower protected characteristics when taking loan applications. A discrimination case can be brought when statistical estimates show that the share of loans that are approved using neutral underwriting standards disproportionately and adversely affect access to credit by a protected characteristic.¹⁶ Again, since the protected characteristics of a bank’s borrowers are typically not recorded, these characteristics must be inferred using statistical techniques. Once a plaintiff shows evidence of “statistical discrimination” in lending outcomes, the bank is assigned the burden of proving its own innocence. The disparate impact standard for fair lending enforcement seeks to create a new entitlement for protected characteristics: access to credit from the banking system regardless of borrower credit quality.

How will the disparate impact standard work in practice? Standard finance theory suggests that the bank could serve the underrepresented segment of the population by adding risk premiums to compensate for the expected losses attached to riskier loans. However, this economically sound potential solution could itself easily bring charges of lending discrimination if protected characteristics disproportionately bring about higher rates.

Absent risk pricing, banks seemingly have three possible options to avoid charges of disparate impact. One option is to discriminate against good borrowers. Banks can reduce the credit they grant to non-protected classes until their overall approval ratios balance. Alternatively, banks can extend loans on unfavorable terms to borrowers in protected classes that do not meet their facially neutral underwriting standards and, whenever possible, and raise rates, including those on well-qualified borrowers, to cross-subsidize higher-risk loans. A third option is to combine both strategies.

Because the extension of poorly underwritten and underpriced credits will lower expected bank profits, disparate impact enforcement of fair lending laws is likely to constrain the availability of credit and raise the rates for well-qualified borrowers without protected characteristics.

Disparate impact enforcement of fair lending statutes is controversial. Many scholars believe that a disparate impact standard is inconsistent with the language of the U.S. Fair Housing Act which includes a requirement to prove “intent to discriminate.” It is also alleged that disparate impact enforcement violates the Equal Protection Clause of the Fourteenth Amendment to the U.S. Constitution.¹⁷ These issues remain unsettled as many recent regulatory enforcement actions using disparate impact arguments have reached settlements without going to trial.

Volcker Rule CLO Restrictions have Negative Unintended Consequences

Collateralized loan obligations (CLOs) are specialized investment funds that invest primarily in bank loans. CLOs purchase shares in syndicated bank loans, pool the cash flows, and fund the

pool of loans by issuing securities that have a senior-subordinated structure of claims against the loan pool's cash flows. Banks have been involved in organizing CLOs, in originating many of the loans that CLOs purchase, and in purchasing the securities that CLOs issue. CLOs are securitizations similar in concept and structure to private label mortgage-backed securities, only CLOs securitize bank business loans, not residential mortgages.

The Volcker Rule prohibits banks from proprietary trading activities including owning or managing hedge funds or private equity funds. Volcker Rule regulations restrict banks from acquiring or retaining an equity, partnership, or other ownership interest in, or "sponsoring," "covered funds." They also specifically allow banks to purchase or participate in loan securitizations including asset-backed commercial paper and covered bonds. Given the permissible activities enumerated in the final rule, it may come as a surprise to learn that bank investments in many CLOs securities are prohibited by the current Volcker regulations.

Many CLOs have two characteristics that make them inadmissible bank investments under the Volcker Rule. The first issue is that, in addition to owning loans, most CLOs own bonds or have the right to purchase bonds. While bonds typically comprise a small portion of most CLO holdings, any bond holdings make all CLO securities ineligible for bank ownership.

The second feature of CLOs is that senior CLO securities generally have the right to replace the collateral manager should the manager fail to perform required functions. Senior CLO tranches are typically treated as debt securities, but the power to replace the CLO manager gives these securities a key characteristic of an ownership interest and this feature may make them inadmissible under current Volcker regulations.

While the market can probably adapt and issue new Volcker-compliant CLOs structures, the problem of course is that banks already own inadmissible CLOs, more than \$70 billion of them according to one estimate.¹⁸ If the rules are unchanged, these inadmissible securities would have to be restructured or sold by July 21, 2015. Restructuring existing CLOs to remove and prohibit bonds, and change senior tranche management rights, would be difficult. All of the owners of the various tranches of the CLO would have to agree to the changes, and the interests of all CLO security holders are not aligned. The negotiations needed to accomplish a CLO restructuring would be similar to reorganizing a corporation's capital structure in a bankruptcy.

Following the regulatory release of the final Volcker Rule in December, CLO issuance declined sharply but recovered somewhat in February as CLO structures changed in response to the regulatory rules.¹⁹ Going forward, it appears likely that CLO structures can be adapted to be Volcker-compliant. Still, there is probably no safety and soundness benefit to be gained by forcing banks to restructure or divest their legacy CLOs.

Regulators should move quickly to remove regulatory uncertainty and modify Volcker regulations to grandfather bank existing CLO investments. Bank holdings make up a sizeable share of outstanding CLOs, and it is unlikely banks could divest these holdings without negatively impacting CLO security prices. Should banks be forced to take sizeable losses on CLO divestitures, it would likely have negative ramifications for credit availability.²⁰

New Systemic-Risk Powers are being used to Restrict Business Credit

Recent reports suggest that regulators intervened and stopped some banks from making specific "leveraged loans." Regulators objected to leveraged loan deals being originated by JPMorgan

Chase, Bank of America, and Citigroup on the grounds that they violated new regulatory safety and soundness guidelines issued in March 2013.²¹

Citigroup reportedly was forbidden to make loans associated with a KKR and Co. buyout of Brickman Group Ltd., and Bank of America and JPMorgan reportedly were pressured to pass on originating loan funding for a Carlyle Group acquisition of a Johnson and Johnson subsidiary. Press accounts estimate these regulatory actions cost Citibank \$10 million and JPMorgan and Bank of America more than \$20 million each in lost fee income.

These deal-specific regulatory lending prohibitions took many market participants by surprise. In the past, an individual bank might receive a blanket prohibition against certain types of business transactions if regulatory examinations revealed material weaknesses in a bank's risk management or controls. Typically, prohibitions are articulated in a memorandum of understanding between the bank and its regulator. Certain new activities may be banned until specific bank safety and soundness issues are remedied. In the past, it would have been highly unusual for US regulators to prohibit specific loans and approve others—this has typically been the banker's job.

Leveraged loans are a core banking business involving loans to sub-investment-grade firms.²² Loan shares typically are syndicated to a group of banks and other financial institutions. Like many other types of bank loans, leveraged loans are risky, and some default. Still, as an asset class, regulatory data show that bank-leveraged loans outperformed bank mortgages, construction and development loans and sub-investment-grade bonds throughout the recent financial crisis.

Bank regulators issued new regulatory guidelines for leveraged lending in March 2013. These guidelines include new specific thresholds for commonly used debt-service coverage ratios that will be used by regulators to flag deals that create “excessive” leverage. The new regulations also include vague and far-reaching discretion that allows regulators to prohibit loans even if they pose no immediate risk to the originating bank.

Under the new guidance, regulators need argue only that a loan is poorly underwritten and may become a risk to the ultimate investors, and it can be prohibited. The new regulatory discretion to prohibit loans that create “systemic risk” is especially troubling because systemic risk has never been clearly defined. Still, regulators are increasingly making use of this new systemic-risk power including to quash the specific leverage loan deals mentioned in January 2014 press reports. Regulators did not stop these deals because they posed safety and soundness risks to the originating banks, but rather, because regulators think these deals are fueling a bubble in high-yield mutual funds.

In March 2013, the Federal Reserve voiced concerns of a “bubble” in the leveraged loan market.²³ More recent statements by a senior deputy comptroller of the Office of the Comptroller of the Currency (OCC) specifically mentioned the possibility of a bubble in the market for junk-rated credit.²⁴ The OCC official argued that financial-sector stability could be at risk if banks continue to work with asset managers to originate leverage loan deals and transfer this loan risk to mutual funds.

Regulators have misinterpreted the Cause of the Leveraged Loan “Bubble”

Bank regulators are using their systemic-risk powers to stop banks from originating leverage loans to stem an alleged bubble in mutual funds. But cutting off the supply of new leveraged loans for mutual funds to purchase will only make the credit bubble worse. If there is strong investor demand for leveraged-loan mutual fund shares, limiting new leveraged loan supply will only reduce leverage loan yields, worsening the mispricing of credit risk and the alleged bubble. With more favorable credit spreads, industry demand for new leveraged borrowing will be further stimulated and bank regulators will be forced to increase their loan rationing. Clearly, it is important to understand why such strong investor demand for leveraged loans exists before intervening to restrict new loan supply in this market.

After bottoming out in 2008, leveraged loan originations recovered as low interest rates allowed firms to refinance their outstanding bank loans. 2013 brought a record \$605 billion in originations, besting the prior issuance record of \$535 billion in 2007.²⁵ Takeover activity, often an important source for new leveraged loans, has not been particularly strong.

Before 2013, much of the supply of new leveraged loan originations stayed in the banking system. Collateralized loan obligations (CLOs)—special financial entities that purchase and securitized leverage loans—provided a strong source of demand for leveraged loan originations. CLOs purchase a large number of leveraged loans and tranche the cash flows from the loan pool into senior-subordinated structures similar to those associated with private-label mortgage-backed securities issued in abundance before the financial crisis. The resulting CLO bond securities (tranches) are rated by National Statistical Rating Organizations. Historically, banks have been important sponsors for CLOs and have often purchased highly-rated CLO tranches for bank investments.

In early 2013, bank CLO demand for leveraged loans diminished as changes in the rules for calculating deposit insurance premiums made CLO securities less attractive to large banks. Beginning in April 2013, the FDIC implemented changes in the scorecard it uses to set insurance premiums for banks with more than \$10 billion in assets. The changes increased deposit insurance rates for banks holding CLOs and leveraged loans.²⁶ It effectively became more expensive for banks to hold leveraged loans or CLO tranches and so these exposures migrated out of bank portfolios.

Shortly after deposit insurance rules reduced banks' demand for CLOs and leveraged loans, mutual fund demand for leveraged loans was stimulated by the Federal Reserve taper scare in May. When former Federal Reserve chairman Ben Bernanke suggested the Fed might begin tapering its QE purchases, investors were surprised and reacted by selling long-term Treasury bonds, causing long-term rates to rise. This rise generated losses for bond fund investors. Yield-hungry investors sold bond funds and invested in high-yield loan funds as an alternative to junk bond investments.

Unlike junk bonds, which typically have fixed coupon rates, leveraged loans are floating rate instruments and so are less exposed to the risk of rising Treasury rates. Following the taper scare, high-yield loan funds absorbed a large share of bank-leveraged loan originations. Retail and institutional investors, desperate for yield and fearful of a jump in long rates, moved money into funds filled with leveraged loans and credit risk. Some analysts have compared the risk profiles

of high-yield mutual funds to the risks run by high-yield money funds prior to the Lehman bankruptcy and argued that credit losses could trigger a run on these funds and generate wider systemic risk in financial markets.

Bank regulators are now trying to throw sand in the gears of leveraged loan originations in an attempt to stall what they view to be a bubble building in high-yield mutual funds. In evaluating this policy, it is important to understand that the true source encouraging investor demand for high-yield floating rate loans is the Federal Reserve's zero-interest-rate policy.

Under the prolonged policy of zero interest rates, investors lack short-maturity alternative investments with measurable yields. Indeed, for most retail investors, the rebates on their credit card purchases far outstrip the interest they earn on bank deposits and money funds. Investors also face the prospect of near-certain capital losses on long-term bond investments should they invest for yield using these investments.

In the current environment, it is not surprising that investors have a strong demand for mutual funds that invest in high-yield floating-rate loans. Unless they take equity market risk or choose to earn nearly nothing in short-term deposits and money funds, yield-focused investors have few alternatives but to take on exposure to credit risk through leveraged loan funds. The bank regulatory policy of artificially restricting the supply of leveraged loans will only reduce the yield that investors earn on these mutual fund shares, reinforcing the loss in retail saver interest income earned under Federal Reserve QE policies.

The source of the alleged bubble is not demand for excessive bank or corporate leveraging, but rather investor-driven demand for yield and protection against losses from anticipated increases in long-term interest rates. Safety and soundness bank regulations are being used to restrict business credit and limit the yields retail investors earn to allow the Federal Reserve to continue a monetary policy designed to stimulate growth in consumer mortgage credit.

DFA Mandated Stress Tests Give the Federal Reserve Unlimited Regulatory Power

Legislators were impressed with the results of the 2009 (SCAP) stress tests and so they incorporated mandatory stress test requirements for large banks and bank holding companies into the DFA. The Federal Reserve has been performing stress test for the largest bank holding companies for a few years now, and for the first time this year large deposit-taking institutions must also participate in the stress test process. Are all these stress test really useful?

From a purely scientific standpoint, the ability of macro-scenario stress tests to uncover hidden financial weaknesses in an institution is virtually nil. Anyone who has modelled bank profits and loss and attempted to link them to GDP, unemployment, or any other macro indicator will tell you that these models do not work very well. Within a historical sample period, the best models leave the most of the variation in bank profit and loss data unexplained—meaning that the behavior of bank profits and losses cannot be reliably modeled. The performance of these models out of sample—in a true forecast situation—is truly horrible. This is, of course, why the Federal Reserve will not reveal its own stress test model loss estimates to bank holding companies or even to the other Federal bank regulatory agencies who are involved in the DFA mandated stress tests.

Is the lack of compelling scientific evidence to support a stress testing approach to regulation important? Yes. It gives the Federal Reserve (and now the OCC and the FDIC) a virtual “blank check” to control the lending, capital, and payout policies of the largest banks and bank holding companies.²⁷

Should the Federal Reserve want to limit dividends or share buy-backs, or restrict a line of bank business, it merely has to assert that the bank fails the stress test on the grounds that its proprietary stress tests models show bigger losses than the bank’s estimates, and the banks just have to accept that finding. These are purely hypothetical bank losses realized in a fictional stress scenario estimated using questionable statistical methods without any minimum standard for disclosure or forecast accuracy. And yet the Federal Reserve can use this process to apply any capital or regulatory standard it desires.

Among the classes of models that banks typically employ to measure financial risk, macro-scenario stress test models are by far the worst performers. And still they are being used as a tool for institution-specific regulation. The DFA stress test requirements are a poster example of bad regulation. While the Federal Reserve (and soon the other bank supervisors too) love them because of the power they convey over large banks operations, there is no sound experience-based history that supports their use. Unfortunately, the stress test requirements have already spawned a very profitable consultancy business where banks pay significant sums to “recognized experts” and consultancies (most in demand are those recently departed from the Federal Reserve) to develop models to satisfy the DFA stress test requirement but are mostly useless for any other practical business purpose.

Regulators should redirect their time and resources toward understanding the institutions they supervise rather than wasting time identifying the “best” hypothetical loss estimate among those generated by really bad alternative models. As currently administered, the stress test requirement destroys banks’ shareholder property rights and compromise banks’ ability to appeal misguided regulatory findings when they occur.

DFA “Systemic-Risk” Powers Extend the Jurisdiction of Bank Regulators

The exercise of bank regulators’ new systemic-risk powers is not limited to banks. Through the very subjective process of systemically important financial institution (SIFI) designation, the Financial Stability Oversight Council (FSOC) may designate large nonbank financial institutions as “systemically important.”²⁸ The DFA enumerates the general designation criteria that the FSOC must consider but gives the FSOC discretion to determine the thresholds needed to achieve SIFI status for each of the DFA criteria.²⁹

If a designated institution does not agree with the SIFI designation, it can appeal the decision to the FSOC. If the FSOC does not rescind its designation, the institution has the right of judicial appeal. However, in practice there is little to gain from a judicial appeal. The vagaries of the designation criterion in the DFA make it very unlikely that the courts would overturn an FSOC designation. Perhaps the only way to place limits on the regulators’ new-found ability to expand their own jurisdiction with any legislative approval is to amend the DFA and constrain the FSOC’s designation authorities.

A SIFI designation requires the Federal Reserve to exercise its large bank holding company powers over the designated financial institution, even though the institution may have nothing to

do with banking. The Federal Reserve, moreover, has determined that the DFA Collins Amendment requires it to impose capital rules consistent with those that apply to banks and bank holding companies on all SIFIs. So each designated SIFI will be regulated like a large bank holding company regardless of whether the institution uses insured deposit funding or even makes extensive use of leverage.³⁰

Banking regulators, the dominant principals on the FSOC, have made aggressive use of the SIFI designation power. For example, the FSOC designated a large insurance firm over the formal objections of multiple nonbank regulatory members of the FSOC. Bank regulators are the leading advocates for FSOC SIFI designation for large asset management companies. For example, bank regulators' use of the systemic-risk clause to prohibit leveraged loans destined for mutual fund portfolios echoes arguments recently made in the Office of Financial Research's report *Asset Management and Financial Stability*.³¹ The September report, prepared at the request of the FSOC, identified mutual fund "reach for yield," "herding," and the potential for "fire sales" as sources of systemic risk. The FSOC has also expressed the bank-centric regulatory view that money market and close substitute higher-yielding funds pose a continuing threat to financial stability.³²

Given the skewed voting power and influence on the FSOC, the DFA gives bank regulators a ready path for extending their jurisdiction over nonbank financial institutions. Aside from votes, the bank regulatory agencies resources dwarf those of the remaining FSOC members. For example, the total 2013 budgets for selected FSOC member institutions were: CFTC (\$201.7 million), SEC (\$1.255 billion), OCC (\$1.1 billion), the FDIC (\$2.7 billion), and the Federal Reserve (\$5.1 billion). The combined Federal bank regulators budget of \$8.9 billion is more than 6 times the combined budgets of the SEC and CFTC. The SEC³³ and CFTC³⁴ moreover have testified that that they lack the resources needed to carry out their oversight responsibilities and craft the rulemakings mandated by the DFA. Meanwhile, the Federal Reserve has expanded its already comparatively enormous staff to devote more resources to systemic risk, the FSOC, and regulatory matters.³⁵

While bank regulators are busy making a case for SIFI designations for large insurers and asset management companies based on dubious financial stability arguments, it is reasonable to ask why they have not considered GSE designations. The housing GSEs, despite their size, central importance, and huge need for government assistance, have not been designated as SIFIs. They received more support than any of the designated SIFIs and are the repository of most new mortgage risk since 2008, and yet they are exempt from the heightened prudential capital standards required of designated bank and nonbank SIFIs. Exempting housing GSEs from SIFI designation prolongs the government's ability to direct lending and subsidize housing finance without focusing on sorely needed reforms.³⁶

Financial Regulators' Systemic-Risk Powers Threaten Competitive Financial Markets

Banking regulators are interpreting DFA systemic-risk powers as a broad grant to identify and prohibit any lending or financial activity they judge to be potentially destabilizing for the financial system. Unfortunately, history shows that regulators do not always fully understand financial system developments.

Regulators have a history of missing building financial imbalances and, left to exercise their own preferences, could easily discourage new financial innovations that promote financial efficiency and economic growth. Undoubtedly, systemic-risk powers will be beneficial when we have benevolent regulators who can see into the future, but until then, the rules create a dangerous new avenue for government to exercise control over the extension of credit. There are few practical checks or balances on these vague systemic-risk powers.

A particularly troublesome aspect of regulators' new systemic-risk powers is that systemic risk is never clearly defined in law. Essentially nothing prevents regulators from crying "systemic risk" to prohibit any type of lending in disfavor by the government. Regulators might, for example, stop a bank loan funding a specific merger by claiming systemic risk when the real underlying motivation is the protection of a labor union. Or regulators might use systemic risk to veto a bank loan to fund entrepreneurs in an "out-of-favor" (e.g., carbon-based) industry or a loan to a firm competing against firms with politically influential owners.

In the recent case where regulators prohibited leveraged lending, a senior OCC official said the agency would look unfavorably on leveraged loans to private equity firms that are used to pay dividends.³⁷ At face value, this policy certainly restricts loans that benefit the so-called "1 percent" who work in the private equity industry. As long as regulators can prohibit specific loan transactions by simply arguing that the loans are a source of systemic risk, the scope for the government to use its discretion to withhold bank credit bank is unchecked.

The Dodd-Frank Act granted financial regulators broad new powers and the responsibility to prevent "systemic risk" without providing a clear definition of "systemic risk." As a consequence, financial regulators have been given wide latitude to exercise their judgment in defining firms, products, specific financial deals, and market practices that create systemic risk and require additional regulation. This process lacks Congressional checks and balances and creates an enormous new source of regulatory uncertainty for many private sector financial firms that had nothing to do with prior financial crisis and do not benefit from deposit insurance or other implicit government safety nets guarantees.

Conclusion

History has shown, many times over, that when governments try to use private financial markets to carry out targeted lending policies they often end up promoting the extension of nonviable credits. These credits will require a government subsidy somewhere in their life cycle. Often, the subsidy takes the form of a taxpayer bailout of banking losses when the government-directed loans eventually sour. When government policies force banks and other private financial institutions to make unprofitable loans, they impose an invisible tax that discourages the development of the financial system. Eventually resources leave the financial sector, reducing consumer and business access to credit, which limits economic growth.

The financial reforms enacted in the DFA have given government regulators many new powers, including the ability to use the banking system to implement politically driven lending policies. These new rules, many well-intentioned, have created a number of negative unintended consequences. New consumer mortgage protection rules have layered on compliance costs to a degree that many smaller banks are withdrawing from the mortgage market. Other new

regulatory enforcement policies aimed at preventing loan discrimination treat consumer credit as a virtual entitlement and likely increase the cost and restrict the credit access of well-qualified borrowers. Particularly problematic are the new systemic risk powers the DFA confers on financial regulations. Without a restrictive legislative definition of systemic risk, regulators—particularly bank regulators—are finding systemic risk nearly everywhere they decide to look, and they are taking actions to extend their own jurisdiction to contain the symptoms they identify.

¹ For additional details see, Peter Wallison, “Only a private housing finance market can create stability,” <http://www.aei.org/outlook/economics/financial-services/housing-finance/only-a-private-housing-finance-market-can-produce-stability/>

² Jim Puzanghera, “FHA to get \$1.7 billion in its first taxpayer-funded bailout,” <http://articles.latimes.com/2013/sep/28/business/la-fi-0928-fha-bailout-20130928>

³ Brian Collins, “Lenders Use Budget Data to Lobby FHA for Lower Premiums,” http://www.americanbanker.com/issues/179_45/lenders-use-budget-data-to-lobby-fha-for-lower-premiums-1066076-1.html?utm_campaign=daily%20briefing-mar%207%202014&utm_medium=email&utm_source=newsletter

⁴ There are different definitions of community banks. A common definition used by the Federal Reserve is banks with under \$10 billion in assets.

⁵ See, for example, Andy Peters, “What Would you tell the CFPB? This Georgia Banker Had His Shot,” http://www.americanbanker.com/people/what-would-you-tell-the-cfpb-this-georgia-banker-had-his-shot-1066070-1.html?utm_campaign=daily%20briefing-

⁶ Federal Reserve Governor Duke’s speech at the Southeastern Bank Management and Directors Conference, University of Georgia, Terry College of Business, Duluth, Georgia.

⁷ Pre-tax operating profit is income before tax and extraordinary items and other adjustments minus the gain (loss) on securities not held in trading accounts.

⁸ Hester Peirce, Ian Robinson and Thomas Stratmann (2014), “How are small banks faring under Dodd-Frank?,” Mercatus Center Working Paper No. 14-05, George Mason University.

⁹ The analysis in this section are based on the authors calculations using FDIC Statistics on Depository Institutions, <http://www2.fdic.gov/sdi/index.asp>

¹⁰ This message was clearly conveyed in the community bank interviews that took place during the 2012 FDIC Community Bank Study.

¹¹ Paul Kupiec and Yan Lee (2012), “What Factors Explain Differences in Returns on Assets Among Community Banks?” <http://www.fdic.gov/regulations/resources/cbi/report/cbi-roa.pdf>

¹² See the discussion in Edward J. Pinto, Peter J. Wallison, and Alex J. Pollock, “Comment on Proposed Credit Risk Retention Rule,” AEI, October 30, 2013, www.aei.org/files/2013/10/31/-comment-on-the-proposed-credit-risk-retention-rule_0725007171.pdf

¹³ The US Department of Housing and Urban Development issued its final rule on the use of disparate impact analysis as means for legally assessing compliance with the 1964 Fair Housing Act on February 15, 2013. See Rules and Regulations, *Federal Register* 78, no. 32 (February 15, 2013), www.gpo.gov/fdsys/pkg/FR-2013-02-15/pdf/2013-03529.pdf.

¹⁴ The U.S. Department of Justice has reached fair settlements in cases alleging mortgage fair lending violations based on disparate impact with Countrywide, Wells Fargo, and SunTrust, among others. See, for example, <http://www.propublica.org/article/disparate-impact-and-fair-housing-seven-cases-you-should-know>. For a decision of a recent auto lending disparate impact settlement see, Richard Riese, “Regulators Forced Ally’s Hand on Unlawful Auto Lending Settlement,” <http://www.americanbanker.com/bankthink/regulators-forced-allys-hand-on-unlawful-auto-lending-settlement-1066038-1.html>

¹⁵ The list of what constitute “protected characteristics” in these cases has been expanding over time.

¹⁶ In the case of mortgages, the government can alter the bank’s calculus by using GSE affordable housing goals as a means for transferring the risk of low-quality loans from the originating banks to a government-sponsored agency.

¹⁷ See the November 19, 2013 testimony of Hon. Kenneth L. Marcus before the U.S. House of Representatives Committee on Financial Services Subcommittee on Oversight and Investigation, “General Overview of Disparate Impact Theory.”

¹⁸ Estimates are provided in Jesse Hamilton and Cheyenne Hopkins, “Volcker Rule Curbs on Banks Owning CDOs Eased in U.S.,” <http://www.businessweek.com/news/2014-01-14/u-dot-s-dot-regulators-said-ready-to-ease-volcker-cdo-limits-for-banks>

¹⁹ Kristen Haunss, “CLO Issuance Jumps as U.S. Managers Bet on Volcker Rule Verdict,” <http://www.bloomberg.com/news/2014-02-19/clo-issuance-jumps-as-u-s-managers-bet-on-volcker-rule-verdict.html>

²⁰ The academic evidence suggests that when banks take losses, they curtail their loan growth, even when the losses were not generated by bank-originated loans. See, for example, Kupiec, Lee and Rosenfeld (2013), “Macroprudential Policies and the Growth of Bank Credit,” and the references therein, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2368989

²¹ Gillian Tan, “Banks Sit Out Riskier Deals,” *Wall Street Journal*, January 21, 2014, <http://online.wsj.com/news/articles/SB10001424052702304302704579334820201530010>.

²² By some estimates, leveraged loan originations generated about 25 percent of all investment banking revenue in 2013. See Matt Wirz, “‘Junk’ Loans Pick Up the Slack,” *Wall Street Journal*, January 9, 2014, <http://online.wsj.com/news/articles/SB10001424052702303754404579310643802262108>.

²³ Mark Gongloff, “Credit Bubble Comeback: Feds Warn of Dangers in Leveraged Loan Market,” *Huffington Post*, March 2, 2013, www.huffingtonpost.com/2013/03/22/credit-bubble-leveraged-loan_n_2932421.html.

²⁴ Greg Roumeliotis, “Exclusive: U.S. Banking Regulator, Fearing Loan Bubble, Warns Funds,” *Reuters*, January 29, 2014, www.reuters.com/article/2014/01/29/us-banks-regulators-loans-idUSBREA0S0DG20140129.

²⁵ Wirz, “‘Junk’ Loans Pick Up the Slack.”

²⁶ The FDIC’s new deposit insurance premium scorecard was finalized in 2011, well before regulators expressed fears of a bubble in leveraged lending. Therefore, the FDIC increase in deposit insurance charges for leveraged loans was completely separate from bank regulators’ systemic-risk campaign against leveraged loan origination.

²⁷ As recently as last summer, the FDIC did not have its own proprietary stress test model.

²⁸ Designation requires a two-thirds majority, including the vote of the secretary of the Treasury.

²⁹ The criteria are broad and include size, complexity, importance as a source of credit, and interconnectedness.

³⁰ Indeed, as the Office of Financial Research report on the asset management industry suggests, the FSOC is considering designating mutual funds even though they have limited ability to borrow and are funded with nearly 100 percent shareholder equity.

³¹ Office of Financial Research, *Asset Management and Financial Stability*, September 2013, www.treasury.gov/initiatives/ofr/research/Pages/AssetManagementFinancialStability.aspx.

³² Financial Stability Oversight Council, *Proposed Recommendations Regarding Money Market Mutual Fund Reform*, November 2012, www.treasury.gov/initiatives/fsoc/Documents/Proposed%20Recommendations%20Regarding%20Money%20Market%20Mutual%20Fund%20Reform%20-%20November%202013,%202012.pdf.

³³ In its 2014 budget appropriation, the SEC chairman testified that it required a 26 percent increase over its 2013 budget to fulfill its regulatory obligations, but was awarded an increase of only 2 percent. See Bruce Carton, “SEC to Receive 2% Budget Increase in F.Y. 2014, Far Below 26% Requested Increase,” <http://www.complianceweek.com/sec-to-receive-2-budget-increase-in-fy-2014-far-below-26-requested-increase/article/329305/>

³⁴ See Sarah Lynch, “Acting CFTC head pleads with U.S. Congress for more funding,” <http://www.reuters.com/article/2014/03/06/us-house-cftc-budget-idUSBREA251HR20140306>

³⁵ Detailed data on the Federal Reserve Board’s budget and staff size are illusive. The Federal Reserve Board has by far the largest staff of economists of any bank regulatory agency. Still, the Fed’s post Dodd-Frank spending outpaces all other regulatory agencies. For example, its budget summary shows it increased spending on employees by 10.3 percent in 2012 and 9.8 percent in 2013. <http://www.federalreserve.gov/publications/budget-review/2013-federal-reserve-system-budget.htm>

³⁶ For example, see Alex J. Pollock, “How Do You Solve a Problem Like Fannie?” *Wall Street Journal*, December 23, 2013, <http://online.wsj.com/news/articles/SB10001424052702304011304579220154026887972>.

³⁷ Tan, “Banks Sit Out Riskier Deals.”