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Has Financial Regulation Been a Flop? (or How to Reform Dodd-Frank)

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The financial crisis of 2007-2008 ushered in the most sweeping changes in financial regulations since the Great Depression. But unlike the changes wrought in 1932-1935, which remained in place for decades with little alteration, much of the post-2008 legislation is already a likely target for repeal or at least significant modification. In June 2016, Congressional Republicans, led by Chairman Jeb Hensarling of the House Financial Services Committee, drafted the Financial CHOICE Act, which contains a set of specific proposals to eliminate or curtail many of the regulatory changes that were produced in the wake of the recent crisis. According to the Act's sponsors, these proposals reflect "a growing recognition that financial regulation has become far too complex and too intrusive and places too much faith in the discretion and wisdom of bank regulators."[1]

Republicans argued that the regulatory changes enacted or encouraged by Dodd-Frank have benefited large Wall Street banks by codifying their status as "too big to fail" while punishing small banks with a morass of new rules and compliance burdens. Critics of Dodd-Frank point to practically no entry into the banking industry in recent years, the closing down of many small banks, the persistently low market values of bank shares, and slow loan growth, especially loans to small businesses. A study of the industry by Harvard's Kennedy School in 2015 finds that the "increasingly complex and uncoordinated regulatory system has created an uneven regulatory playing field that is accelerating consolidation for the wrong reasons," producing a declining market share for community banks.[2]

That study and others cited by the architects of the Financial CHOICE Act also show that regulatory changes are affecting banking consumers. Many Americans—especially low-income Americans—are finding it increasingly difficult to access banking services. For example, the share of banks offering free checking accounts fell from 75% prior to Dodd-Frank to 37% in 2015. Monthly service fees charged by banks have grown 111% over the same time, while the number of "unbanked" Americans has grown. Credit card interest rates are 2% higher, and the number of credit card accounts has fallen by 15%.

In this article, I consider the case for reform from two perspectives: (1) evidence of the shortcomings of important parts of the regulatory structure created after 2008; and (2) more fundamental problems in the thinking underlying post-crisis regulatory changes that made such changes unlikely to succeed. I begin by showing how and why so many post-crisis regulations have proven not only ineffective, but counterproductive as the result of the large costs imposed on financial institutions and consumers. In analyzing the post-crisis reforms, I will discuss several of the most important aspects of the Dodd-Frank Act of 2010, the Credit Card Accountability, Responsibility, and Disclosure (CARD) Act of 2009, and other post-crisis regulatory policies. My focus, while selective, encompasses the major issues.

Post-2008 Financial Regulatory Changes Are Largely a Flop

In the wake of the financial crisis of 2007-2008, there was clear evidence of the need to improve both prudential and consumer protection regulations. With respect to prudential regulation, the lax capital regulation of banks—and of the housing Government Sponsored Enterprises (GSEs), Fannie Mae and Freddie Mac, in particular—had encouraged high and correlated risk-taking throughout the financial system. This was not an accident; it was the outcome of political bargains that protected banks while favoring risky real estate lending. Weak prudential standards—in the form of very low capital (and cash) requirements for banks, and the absence of limits on their real estate lending and use of short-term debt to fund such lending—were used in combination with GSE mandates and Community Reinvestment Act requirements as an invisible, off-budget means for the government to subsidize housing finance.[3]

With respect to consumer protection, debased underwriting standards and changes in the design of mortgages had encouraged borrowers to make promises they could not keep. Mortgages with near-zero down payments became the

*This article is a condensed version of my recently published book, *Reforming Financial Regulation After Dodd-Frank*, published by the Manhattan Institute.

1. U.S. House of Representatives Committee on Financial Services (2016). Full citations of all reports and studies are provided in the References at the end of the article.

2. Lux and Greene (2015).

3. See Calomiris and Haber (2014), Chapters 7 and 8; Wallison (2015).

norm during the 2000s—and a growing number of these mortgages also avoided documenting the borrowers' income. Many low- and moderate-income people were encouraged by such lax mortgage underwriting standards to purchase homes that they could not afford. Although the debasement of mortgage underwriting standards was justified at the time as a way of improving housing affordability for low-income and minority homeowners, it was those borrowers who ended up suffering the most from the housing bust that resulted from the debased standards.[4]

QM and QRM Standards and GSE and FHA Regulation

Some new standards established in the Dodd-Frank Act arguably were designed both as consumer protection and prudential measures. For example, the Dodd-Frank Act required the development of new regulatory standards for mortgages. Lenders issuing "qualified mortgages" (QM) would be given a safe harbor from liability under the Truth-in-Lending Act as amended by Dodd-Frank. This was meant both to discourage the origination of risky mortgages as well as to help less sophisticated consumers identify low-risk mortgages (as defined by regulators). The QM standard would be set by the congressionally delegated Consumer Financial Protection Bureau (CFPB).

The "qualified residential mortgage" (QRM) was created as part of a broader rule on credit risk retention (also known as "skin in the game"). Credit risk retention was intended to discourage the securitizers of mortgage-backed securities (MBS) from misleading investors by including excessively risky mortgages in the asset pools backing the securities. It was supposed to do so by requiring the securitizers to retain a significant, unhedged interest in the credit risk related to the securities' underlying assets. Arguably, that could also benefit unsophisticated consumers by reducing the incentives for the mortgage originators to offer excessively risky mortgages. But although Dodd-Frank specified that securitizers retain at least 5% of the mortgage asset pool, it delegated to regulators the task of defining what constituted compliance. What's more, all mortgages that fit the definition of a QRM were exempted from the 5% requirement

Further ensuring MBS securitizers' ability to avoid retaining credit risk, all mortgages bought by the Federal Housing Administration (FHA) or the housing GSEs were automatically considered QM- and QRM-compliant, no matter what their characteristics. The QM and QRM standards therefore created a huge opportunity for the FHA and the housing GSEs to dominate the mortgage market because only they could avoid the legal barriers and economic risks associated with purchasing mortgages that would not otherwise meet the QM or QRM standards.

As if the FHA/GSE exemption were not enough to neutralize any effect from the QM and QRM standards, the agencies tasked with setting these standards caved in to heavy lobbying by the Coalition for Sensible Housing Policy, which consisted of housing industry, mortgage brokerage, and urban activist groups that were opposed to limiting mortgage risk. The process by which the debasement of the QM and QRM standards took place has been described as follows:

> *As rulemaking proceeded, the central policy issues boiled down to whether a down payment requirement would be included in the QRM standard and, to a lesser degree, the maximum debt-to-income ratios for borrowers. In the end, the regulators caved and aligned QRM with the more relaxed standards CFPB had crafted for QM—eliminating the down payment requirement altogether and raising the debt-to-income ratio maximum to 43 percent.*[5]

Even Congressman Barney Frank, the sponsor of Dodd-Frank in the U.S. House, ended up lamenting the undoing of credit risk retention and quality standards through these exemptions, which he described as "the loophole that ate the standard."[6]

Not only did Dodd-Frank fail to limit risky mortgage lending by the FHA or the GSEs. Around the same time the Coalition for Sensible Housing Policy was undermining the QM and QRM standards, President Obama replaced the prudent and courageous outgoing head of the Federal Housing Finance Agency (FHFA), Edward DeMarco, with former Congressman Mel Watt. Immediately upon assuming authority, Watt reduced the down payment limit on GSE-eligible mortgages from 5% to 3%. The GSEs remain in conservatorship, and the combination of QM and QRM rules and exemptions, lax FHFA standards, and the government's funding of the GSEs and the FHA and VA continue to ensure the government's subsidization of housing finance risk—a policy that was one of the most important contributors to the 2007-2008 crisis.

The continuation of the government's push for risky housing finance already has resulted in an escalation of mortgage risk. At the end of January 2017, 28% of first-time buyers had debt service-to-income ratios in excess of the QM limit of 43%, which is four percentage points higher than it was two years earlier. Fannie Mae, Freddie Mac, the FHA, and the VA all hold riskier mortgage portfolios than banks, and they account for about 96% of purchased mortgage volume.[7]

4 See Bayer et al. (2016).

5. Gordon and Rosenthal (2016).

6. See "Dodd-Frank Five Years Later: Barney Frank's Greatest Victory, Regret," November 6, 2015, available at http://mitsloan.mit.edu/newsroom/articles/dodd-frank-five-years-later-barney-franks-greatest-victory-regret.

7. The facts noted in this paragraph are taken from Pinto and Peter's (2017) PowerPoint presentation.

Capital Regulation: Doubling Down on Internal Models and Book Value Ratios

Sometimes "regulatory arbitrage" is so easy that bankers don't even have to lobby for dilution of the rules. Risk-based capital standards are the most obvious case in point. Bankers construct models of the riskiness of their loans and other assets. If the models say that risk is lower, the bank is able to obtain a lower "risk-weight" and thereby reduce the amount of equity capital it must maintain relative to its risky assets.

In principle, risk-weighting is not a bad idea; banks need to maintain a buffer of loss-absorbing equity capital that should be commensurate with the riskiness of their assets. But considering banks' clear conflict of interest, regulators should not allow them to play a significant role in determining their own risk-weights, as they continue to do under the post-Dodd-Frank regulatory regime. Banks take advantage of their role as modelers of their own risks to understate them and thereby reduce their required levels of equity capital.[8] For example, during the period 1994 to 2008, the 16 largest global European and American banks increased their asset-to-capital ratios from an average of about 20 to about 32, an increase made possible by reducing the average measured risk-weights on their assets from 70% to less than 40%.[9] That reduction permitted them to increase their risk without having to expand their capital cushions commensurately.

There is another major problem with the current reliance on minimum capital ratios. Capital is expressed in terms of book values of equity relative to risk-weighted assets. But for two reasons, book values of equity are not reliable gauges of the true economic value of equity. First, bankers and regulators do not reliably recognize losses to loans that would cause book equity ratios to decline. In a widely recognized practice known as "forbearance," politicians, regulators, and bankers can generally agree during recessions that pretending that losses have not happened is a useful fiction; it allows banks to avoid having to shrink their risky assets, including loans, which at least temporarily props up credit. But that is not a prudent risk-management strategy, and it generally results in a deeper and more lasting credit crunch—and, when the avoidance of loss recognition is no longer tenable, a recession.

Second, book equity omits influences that have important consequences for true equity value other than loan losses. The earnings of 21st-century banks are not driven mainly by interest earned on their tangible assets. Just as important are fees of various kinds—such as fees for servicing securitizations, or for managing assets or underwriting securities—and the gains to banks from low-cost funding provided by banks' retail depositors. When financing through deposits or earning fees from certain lines of business becomes unprofitable, banks cannot immediately eliminate the drag on earnings associated with those businesses. And the persistently low market-to-book equity ratios of U.S. banks since the crisis mainly reflect these intangible contributors to negative value.[10]

In other words, book equity values have been substantially overstating the true economic value of many banks in recent years. This overstatement, in combination with understated measures of risk, has made risk-based capital ratios a poor guide to the ratio of true capital relative to true risk. Consider Citicorp's path during the crisis. In December 2008, when Citi was effectively insolvent, the market's valuation of its equity correctly reflected its problems, resulting in a ratio of the market value of its equity to the market value of its assets that dropped as low as 2% by the end of 2008. But at the same time, the bank's accounts showed a risk-based capital ratio of 11.8% and a risk-based Tier 1 capital ratio—which is supposed to include only high-quality, equity-like capital—of about 7%.

Dodd-Frank called for higher capital, but it did nothing specific to set meaningful capital standards or ensure that sufficient capital amounts are raised or maintained. While Dodd-Frank has led to a variety of measures that have significantly increased bank capital requirements, the economic value of that capital is likely to disappear during the next crisis and won't be recognized as gone until it is too late. Note that the current required capital ratios are not higher than Citi's capital ratios in December 2008. In other words, post-crisis capital standards seem designed to make banks only as sound as Citi was in December 2008.

It's instructive to recall what happened from 2006 to 2008, when supervisors of U.S. and European banks stood idly by while many of the largest banks in the world saw their market equity-to-asset ratios decline. This was not a precipitous change; it happened over a period of two and half years. For example, Citigroup's equity-to-assets ratio, measured in market value fell fairly steadily, from about 13% in April 2006 to about 2%, as just noted, by the end of 2008.

The value decline of Citi and several other bank holding companies that experienced financial distress could have been stopped if regulators forced the banks to raise more equity in 2006, 2007, and early 2008 in response to the sharp declines in banks' stock prices. But because regulators were wedded to book values, they did not act. Ultimately, the decline in capital ratios produced a liquidity crisis, as increasingly bad news (with adverse implications for mortgage values and servicing income) led the market to continually discount the value of existing bank shares. The collapse of interbank credit and repo finance in September 2008, which defined the systemic crisis, was not an automatic consequence of Lehman Brothers' failure. Lehman's collapse was the match in a tinder

8. Haldane (2012, 2013), Acharya et al. (2014), Herring (2016), Plosser and Santos (2016), and Behn et al. (2016).

9. Herring (2016, p. 19).

10. See Calomiris and Nissim (2014).

box: Rising counterparty risk in the money markets reflected *regulatory tolerance of observable declines in market equity-to-asset ratios* of Citigroup and others.

Not only is the new regime of prudential capital standards unlikely to work as intended after the next major financial shock, but the internal capital budgeting process of large banks has been confused and distorted by many new minimum capital ratio concepts. Banks often do not know in advance which of the many capital ratio requirements will bind them. It may be the simple leverage requirement, as supplemented in 2013, that binds them this quarter, or it may be the stress test's implicit and hard-to-observe requirement, or it may be one of the risk-based requirements. This uncertainty means that banks cannot be confident about how much activity their equity capital can support, which sometimes forces the banks suddenly to shrink productive activities to comply with a newly binding requirement.

Macroprudential Regulation

Dodd-Frank created a new macroprudential mandate for the newly established Financial Stability Oversight Council (FSOC) and Office of Financial Research (OFR). The OFR is supposed to identify potential systemic risks, using its unprecedented access to the proprietary data of financial regulators and financial institutions, and to inform the FSOC of emerging risks. The FSOC, which is chaired by the Secretary of the Treasury, has a statutory duty to facilitate information sharing and regulatory coordination by the various financial regulators. It is also charged with responding to systemic risks—in particular, by recommending appropriate strengthening in regulatory standards and by designating, when appropriate, certain financial market utilities and nonbank financial institutions (or other firms) as "systemically important" and therefore subject to new regulations. It is also empowered to break up any firms in the United States that it deems to be a "grave threat" to systemic stability.

Critics of the FSOC and the OFR have pointed to two primary problems in their structure and operation: procedural shortcomings and politicization. With respect to procedural shortcomings, at least one SEC commissioner—Michael Piwowar—has complained publicly about being shut out of FSOC deliberations. Commissioner Piwowar has identified an important problem. The FSOC comprises the heads of the various financial regulatory agencies, all of whom are appointed by the administration and are members of the same political party. Unlike the SEC, the Commodity Futures Trading Commission (CFTC), the Federal Reserve Board (FRB), the Federal Deposit Insurance Corporation (FDIC), and others, the FSOC does not reflect the diversity that is required by statute in the other cases or is a function of staggered appointments over time. Furthermore, its deliberations remain largely secret.

Even worse, the FSOC has not established standards with which to designate firms as systemically risky or a "grave threat." An authority that can regulate anyone in the U.S. economy, as well as shut down any business, is worrying enough, but when that authority is exercised by members of one political party, acting in secret without any specified standards to guide them, its actions are outside the realm of what should occur in a democracy governed by the rule of law.

On December 18, 2014, MetLife was notified by the FSOC that it had been designated a nonbank Systemically Important Financial Institution (SIFI), which implied new regulatory burdens and risks. MetLife challenged the FSOC's decision in federal court, and on March 30, 2016, U.S. District Court Judge Rosemary Collyer ruled in MetLife's favor and rescinded its SIFI designation. The judge's opinion was remarkable for its insight into—and pointed criticism of—the shortcomings of the FSOC's procedures, thus opening a broader debate about the abuse of "guidance" by regulators.[11]

In recent years, regulators—including financial regulators—have made increased use of such guidance in lieu of formal rule-making. Formal rule-making must adhere to procedural standards for the consideration of comments and to the clear standards laid out in the Administrative Procedures Act. Guidance, in contrast, affords regulators much more flexibility. Regulatory guidance is not the result of comments and can be extremely vague, effectively allowing regulators to determine what violates compliance standards after the fact. This invites abuse of regulatory power (as I will discuss further below).

Judge Collyer's opinion was one of the first attempts by a federal court to disallow the unlimited use of discretion in the administration of regulatory guidance. Though she did not disallow guidance *per se*, she rejected unlimited and inconsistent discretion as a regulatory tool because of its "fundamental violations of established administrative law."

In addition to the potential for abusive actions, there is also reason to be concerned about the FSOC's inaction. It may seem strange that the FSOC and the OFR have been largely silent about the mounting systemic risks in U.S. real estate, which many observers believe may be substantially overpriced. Indeed, it is not an exaggeration to say that the FSOC seems to be uninterested in the only legitimate systemic risk facing the U.S. economy today.

The unprecedented pandemic of financial system collapses during the last four decades around the world is largely a story of real estate booms and busts.[12] Real estate is central to systemic risk in many countries for four reasons: First,

11. Opinion of Rosemary M. Collyer, U.S. District Judge, United States District Court for the District of Columbia, *MetLife* v. *FSOC*, March 30, 2016, available at: https://www. metlife.com/assets/cao/sifiupdate/MetLife_v_FSOC—Unsealed_Opinion.pdf.

12. See Jordà et al. (2015) and Calomiris (2017a).

exposures to real estate risk are highly correlated with both one another and with the business cycle, which means that downturns in real estate markets can have large and sudden adverse effects on massive amounts of loans and securities backed by real estate.

Second, real estate assets are unique and generally cannot be liquidated quickly at their full long-term value, which can produce large losses for holders forced to sell real estate quickly. Those losses can further exacerbate financial losses and magnify systemic risk.

Third, over the past 40 years, real estate—worldwide but especially in the United States—has increasingly been funded by government-protected and government-regulated entities. That protection encourages the politicization of real estate funding (given the strong short-term political incentives to subsidize mortgage risk).

Fourth, throughout the world, a large amount of commercial and residential real estate investment is being funded increasingly by banks, which rely primarily on short-term debt for their funding. As we witnessed during the subprime crisis in the United States, real estate losses produced substantial liquidity risk (beginning in August 2007 in the asset-backed commercial paper market, and continuing through September 2008 in the repo and interbank deposits markets), which deepened the losses during the crisis and magnified the general contraction in credit that ensued. But this is not just a problem for large banks. The loan portfolios of small banks in the U.S. are also highly exposed to residential and commercial real estate risk, which, over the past two decades, accounted for about three-quarters of total lending by small banks.

Many observers see large banks as the only source of systemic risk, but that view overlooks the reality that the U.S. has been the most financially unstable developed economy in the world for two centuries, despite the fact that large banks are a recent development.[13] The 1980s banking crises were all about real estate losses incurred by small banks—not just in housing but also in commercial real estate, especially in the Southwest and the Northeast, and in agricultural real estate throughout the country.

It is not hard to see why the FSOC has been silent about the excessive exposure to real estate in the banking system, the increased risk taking by the GSEs and the FHA, the failure to reform the GSEs, and the increasing riskiness of mortgages over the past three years. Any discussion of these important systemic risks would be politically inconvenient.

And how would it look to identify small banks as sources of systemic risk? They are politically popular in Congress (where there is justified concern that regulatory burdens are putting many of them out of business). Builders and real estate agents also are popular with both political parties, so no one is going to point toward them or small banks' real estate exposures as a problem. When I did so in congressional testimony, I was attacked from both sides of the aisle for opposing the American dream. Of course, mortgage subsidies have little effect on housing affordability—which is currently at a long-term low in the U.S.—because such subsidies not only expand credit but prop up home prices.

But for an instructive contrast to the regulatory approach to real estate, let's now look at a case of fairly aggressive post-crisis macroprudential policy action: the imposition of "leveraged lending" limits on banks by the Fed, the OCC, and the FDIC in 2013. Leveraged loans often are originated by banks and sold to other institutional investors. They often have floating interest costs, and they face increasing default risk in a rising interest-rate environment. In its 2011 Annual Report, the FSOC highlighted risks from leveraged loans stemming from an easing of credit underwriting standards that were said to reflect "the dynamics of competition among arranging bankers." But the same report also went on to report "little evidence… that leverage is being employed on any significant scale in the funding of loans through repos or total-return swaps, suggesting that the potential for a rapid and disorderly deleveraging of this market is limited." Nevertheless, the regulators decided to limit bank involvement in leveraged loans as a systemic precaution.

In March 2013, the OCC, the Fed, and the FDIC issued guidance (not formal rules) on appropriate origination of leveraged lending, and subsequently issued further guidance about "underwriting and valuation standards, pipeline management, risk ratings and problem credit management." The stated goal of such guidance was "macroprudential"; that is to say, the goal of this policy was to limit the exposure of the *total financial system* to leveraged loans, not to address risks associated with particular leveraged loan originators.

But as a study of this guidance and its effect on leveraged lending pointed out, the initial guidance was "lack[ing] specificity in some critical areas," including the definitions of leveraged loans.[14] And as a result, leveraged lending by banks was little affected. But after the guidance was clarified, large banks (which are supervised most closely) cut their leveraged lending substantially, but other banks didn't. Furthermore, in response to the contraction of leveraged loans by large banks, nonbanks increased their leverage loans, *entirely offsetting* the effect of the reduced underwriting by large banks. In other words, the policy was an utter failure as a macroprudential initiative designed to curb leveraged lending.

This finding illustrates a broader theme: Regulating banks and their affiliates can have a major unintended side effect—namely, boosting the relatively unregulated shadow banking sector. In the case of leveraged lending, the regulations had no short-term effect and likely had a counterproductive

13. See Chapters 6 and 7 of my book with Stephen Haber (2014).

14. See Kim et al. (2017).

long-run effect: a reduction in the market share of regulated institutions that could complicate future attempts at macroprudential regulation because the importance of regulatory institutions has been lessened.

It is also noteworthy that the macroprudential concerns about leveraged lending that gave rise to the regulatory limits on banks' involvement in leveraged loans were probably unwarranted. After all, systemic risks did not materialize even though the policy proved ineffective.

The Fed's Mortgage-Backed Securities (MBS) and Repo Conflicts of Interest

One of the most remarkable aspects of Dodd-Frank was the confidence it expressed in the Fed. The Office of Thrift Supervision (OTS) was abolished after the 2007-2008 crisis in response to its perceived incompetence. But Dodd-Frank enhanced the supervisory and regulatory powers of the Fed, which was a primary regulator of several of the most deeply troubled banks, including Citi and Wachovia.

This was all the more remarkable when one considers that in March 2008 the U.S. Treasury circulated a "blueprint" explaining why it would be desirable to redesign the U.S. financial regulatory structure along functional lines.[15] That change also would have reduced the conflicts of interest inherent in the exercising of monetary policy and regulatory authority by removing many supervisory and regulatory powers from the Fed.[16] Under the blueprint, the Fed would continue playing a key role in examinations, with full access to information that might be useful to it in its capacity as lender of last resort, but it would not play a central role in the rule setting or supervision of banks. The blueprint was put aside after the crisis, which largely reflected the skill of Fed advocates (especially Chairman Bernanke) in convincing Congress that the Fed was the most able and trustworthy party in which to vest many of the new regulatory powers created by Dodd-Frank.

Since the crisis, as the Fed's powers have grown, so have its conflicts of interest. In particular, monetary policy experimentation has involved the Fed as a direct participant in financial markets in unprecedented ways. As of February 22, 2017, the Fed held $1.8 trillion in mortgage-backed securities (MBS) on its balance sheet (which amounts to roughly one-sixth of the U.S. mortgage market), reflecting the Fed's new role in spurring the economy by subsidizing mortgage finance. It is noteworthy that this was not primarily the result of crisis support, but rather of Fed purchases of MBS as part of its quantitative easing experiments. Many critics regard this as an inappropriate incursion into fiscal policy by the Fed. It also creates numerous conflicts of interest with respect to the Fed's role as a regulator of banks. As a holder of MBS, the Fed has an incentive to avoid actions that might increase mortgage interest rates, even if that would be desirable as a matter of monetary or regulatory policy. This is true for two reasons. First, any accounting losses on its MBS portfolio would increase the Fed's contribution to the measured deficit, with obvious adverse political ramifications. Second, housing finance is a magnet for political interests, implying severe continuing pressures on the Fed not to sell its mortgage portfolio, even if failing to do so serves to prop up a destabilizing housing bubble.

Furthermore, the Fed now acts as a repo counterparty, and will do so increasingly over time. This new activity provides the Fed a means for avoiding the politically embarrassing recognition of capital losses that it would otherwise incur if it sold long-duration securities into the market as interest rates rise. Rather than sell securities from its portfolio to contract its balance sheet, the Fed engages in reverse repos, repeatedly lending those securities into the market until they mature and thus avoiding sale while effectively reducing its balance sheet size. The Fed's conflicts that arise from its role as a repo counterparty are severe and worrying.

Over the past several decades, repo has been an important alternative source of funding for lending in the U.S. economy, by both regulated banks and nonbank lenders. The massive expansion of the Fed's balance sheet over the past decade has withdrawn a large amount of low-risk collateral from the market, thereby making repo funding of loans and other financial transactions harder to arrange.[17]

Furthermore, the Fed's imposition of the Supplementary Leverage Ratio (SLR) requirement has also reduced the supply of repo funding. This policy, which was announced in late 2012 and became effective in 2013, includes the quantity of repos (and other items) in the regulatory measure of leverage. In effect, including repo in the SLR means that repo funding is more costly to banks that use it as a source of funding.[18] What's more, as a repo counterparty, the Fed benefits financially from imposing the Supplementary Leverage Ratio, which reduces competitors' abilities to transact in repo. Might the Fed have taken into account its own financial benefits from being able to engage in reverse repo on more favorable terms when setting regulations for its competitors? While from an economic standpoint the Fed should not care about its profitability, it has strong political incentives to avoid suffering losses on securities sales that contribute to government deficits under current accounting rules.

Stress Tests

In 2009, the Federal Reserve conducted a stress test of U.S. banks as part of the resolution of the financial crisis (the Supervisory Capital Assessment Program). Especially because

15. U.S Treasury (2008).

16. See Calomiris (2006, 2013). This discussion draws on my detailed account in Calomiris (2017b).

17. See Gorton and Muir (2016).

18. Allahrakha et al. (2016) find that this new requirement significantly increased the cost of repo finance by regulated U.S. institutions.

Congress was prepared to inject government funds into any identified capital gaps that banks might have been unable to fill on their own, that initial stress test was regarded as credible by the market (in sharp contrast to the analogous exercise undertaken later by the European Central Bank).[19] Beginning in 2011, stress tests became a regular feature of the regulatory apparatus; and beginning in 2014, stress tests were a Dodd-Frank requirement for all banks with more than $10 billion in assets.

How much discipline do stress tests impose on risk management by large banks, and how much information do the outcomes of stress tests create about banks for the market? Stress tests have observable impacts on banks' risks. Specifically, being subjected to a stress test has been shown to reduce the supply of lending by stress-tested banks.[20] Studies have also shown that stress tests create significant information for the market about individual stress-tested bank holding companies—particularly those with higher leverage and risk[21]—and about the overall state of the banking industry.

When used with better, market-based capital ratios, stress tests could be a promising means of encouraging bankers to think ahead and consider prospective risks that could cause sudden losses of value, and prodding them to increase, as necessary, their capital buffers and improve their risk-management practices. But as they are currently structured, stress tests violate basic principles of the rule of law to which all regulations should adhere. Banks that fail stress tests are punished for falling short of standards that are never stated, either in advance or after the fact. This makes stress tests a source of uncertainty rather than a helpful guide against unanticipated risks. Fed officials have justified the lack of transparency and accountability in stress-testing by the need to ensure that banks do not "game" the test. But this is not a reasonable argument. Changing economic circumstances imply that each year the scenarios that are relevant for stress-testing should also change, and so scenario modeling should not be highly predictable on the basis of past years' tests.

Ex post disclosure of the tests combined with learning over time, changes in scenarios that track changing market circumstances, the use of multiple models designed by multiple teams of experts, and rotation of the people designing scenarios should provide adequate unpredictability about tests to prevent gaming of the test by bankers. Especially if such changes are adopted, there is no legitimate justification for keeping the details of the methodology of stress-testing a secret after test results are released. That practice has some very undesirable features: it makes it impossible for market participants to learn what regulators regard as appropriate modeling techniques and assumptions, while insulating the regulators from any accountability for poor test design.

Regulators not only impose unstated quantitative standards for meeting stressed scenarios, they also retain the option of simply deciding that a bank should fail on the basis of a qualitative judgment unrelated even to their own secret model's criteria. It is hard to believe that the current structure of stress tests could occur in a country like the United States, which prizes the rule of law, the protection of property rights, and adherence to due process.

The penalties imposed as a consequence of failing a stress test are also objectionable. Failing a stress test results not just in a bank's having to raise additional equity capital in the marketplace (which would be appropriate punishment for a bank's failing a well-designed stress test). Regulators now control the dividend or repurchase decisions of stress-tested subjects and limit their dividend payments based on the outcomes of the stress test. These penalties have been extremely disruptive to the planning of banks that fail the tests.

Regulatory actions that limit dividends make sense for capital-impaired banks, but imposing such limits on healthy institutions in compliance with their regulatory requirements is an inappropriate incursion into the decision making of the board of directors and can endanger the economic value of the institution. Bankers must be able to operate their businesses flexibly and respond to market conditions in doing so. Dividend decisions are a fundamental aspect of corporate policy that should be left to the determination of the board of directors.

There is also reason to question whether stress tests are truly a state-of-the-art approach for measuring bank resiliency. The precise content of the Fed's stress-testing framework remains unknown (and thus unaccountable); but from what I have been able to gather, measurements of bank resilience seem prone to inaccuracy. A key shortcoming is that regulators suffer from "balance sheet fetishism." That is, the effects of different scenarios are measured primarily through their expected impacts on the values of tangible assets. But as we saw earlier, the loss of value in banks is often attributable primarily to losses in the value of their intangible assets, which the recent crisis showed are just as damaging to banks' health and their ability to continue to access markets.

Stress tests should model potential scenarios in which a bank would suffer a sudden, large loss of economic value that might make it unable to roll over its short-term debts, thereby producing a steep decline in the supply of credit and other services to bank clients. But to model the potential *loss of economic value*, it's first necessary to model the *creation of value*. Value creation in contemporary large banks is largely related to lines of business that yield fee income and to the creation and maintenance of valuable customer relationships. To perform meaningful stress tests, one thus needs to begin with reasonably accurate models of bank cash-flow generation by line of business.

19. See Acharya and Steffen (2014), Acharya and Seru (2015), and Goldstein (2015).

20. See Acharya et al. (2016).

21. See Flannery et al. (2016).

But the Fed does not make use of managerial accounting information to analyze bank cash flows on a line-of-business basis. Nor does it use those cash flows to model how the values of different lines of business would respond to various shocks. Accomplishing this with reasonable accuracy would require the use of many years of managerial cash-flow data when constructing simulations of responses to shocks. For the Fed to rely, as it does, only on highly aggregated Y-9 or Y-14 financial accounts to model bank cash flows for such a consequential purpose as a stress test is tantamount to a doctor diagnosing medical conditions without the use of laboratory tests. Stress-testing could have a bright future but not until the regulators get much more serious about the quality of their data and the accountability of their analysis.

Liquidity Regulation

Liquidity requirements are another good idea that has been poorly implemented. After the recent crisis, the Fed and other countries' bank regulators constituting the Basel Committee concluded that it would be useful to establish liquidity standards alongside capital standards to reduce liquidity risk. It is noteworthy that these new Basel III liquidity requirements have not been explained by an economic framework that would justify them. The likely reason the Fed and other countries' regulators have avoided doing so is that the requirements are indefensible, either on the basis of logic or empirical evidence.

The regulations that have been imposed—specifically, the two distinct liquidity requirements—are improperly designed in three fundamental respects.[22] First, the standards implicitly assume that liquidity risk is independent of insolvency risk because the structure of liquidity requirements is independent of capital requirements or actual capital ratios. In fact, in the history of banking crises, there has almost never been a liquidity risk problem—that is, the possibility of becoming unable to roll over one's debts—that did not result from an increase in insolvency risk. Second, the standards assume that liquidity regulation should focus on a complex measure of net liquidity risk, one that attaches weights to different assets and liabilities and that equates a dollar less of short-term debt with a dollar more of cash. That equivalence assumption has been discredited both in theory and in practice;[23] contrary to the Basel and Fed focus on net liquidity risk, research findings suggest that banks that hold more cash and more uninsured debt in equal amounts generally will suffer less liquidity risk than other banks. Third, the standards assume that the appropriate definition of liquid assets should be much broader than cash.

The Basel/Fed approach to liquidity regulation also runs afoul of liquidity-requirement theories that emphasize the special role of bank reserve holdings at the central bank. Reserve holdings are unique in that (a) they are riskless, (b) their riskiness cannot be increased by the bank, and (c) they are observably held on a *continuous basis* (unlike liquid asset holdings not held at the central bank, which are subject to window dressing through the purchase and sale of those securities around balance sheet reporting dates). Because reserves also credibly boost the lower bound of the value of bank assets, they also can have important positive effects on bankers' incentives to manage risk.[24] These attributes permit reserves to play a unique role in reducing insolvency and liquidity risks and maintaining market confidence.

Of course, these are not new insights; they have been the basis for the special role of cash-reserve requirements for centuries in many countries. And in this sense, the liquidity requirements are inconsistent with the history of liquidity requirements as well as the relevant economic theory and empirical evidence.

Orderly Liquidation and Living Wills

During the 2007-2008 crisis, nonbanks such as Lehman Brothers, Bear Stearns, AIG, and Merrill Lynch either faced significant risks of failure or actually failed. Because these institutions were not banks, they were not subject to FDIC seizure and liquidation procedures. Regulators lacked a means to resolve them speedily and cost-effectively. Furthermore, because large, complex financial institutions often have thousands of affiliates and subsidiaries operating around the world, the complexity and global reach of these various internal entities complicate the disposition of assets and liabilities in the event that a conservatorship or receivership is necessary.

To address those problems, Dodd-Frank created a new authority to seize and resolve troubled nonbank financial institutions that are SIFIs. Dodd-Frank also established so-called living wills for SIFIs to facilitate their winding down if they are in need of resolution. Living wills are intended to force large, complex SIFIs to construct realistic plans for their own disposition. The plans can be rejected by regulators as inadequate (and some have been rejected), which can serve as an incentive for financial institutions to simplify their structures to make their liquidation planning more credible.

These new tools were created to facilitate orderly resolution, thereby making taxpayer bailouts of too-big-to-fail nonbanks less likely. But so far, it remains unclear whether living wills or Dodd-Frank's Title II provisions addressing the resolution of distressed nonbank institutions will succeed in facilitating orderly resolution and avoiding taxpayer bailouts. The FDIC has no experience winding down nonbanks or large, complex bank holding companies, and its experience as a small-bank liquidator has not prepared it for liquidating SIFIs. Indeed, critics see Dodd-Frank's new resolution

22. See Calomiris et al. (2016).
23. See Acharya et al. (2007), Calomiris (2012), and Calomiris et al. (2016).
24. See Calomiris et al. (2016).

authority as making bailouts *more* likely insofar as they succeed in establishing a new process that specifies how bailouts of too-big-to-fail bank holding companies, as well as other SIFIs, would occur in lieu of an orderly winding down by the FDIC.

Clearly, there are many reasons to be skeptical of the new approach to orderly liquidation. First, even if the FDIC were sufficiently skilled in liquidating SIFIs, its ability to perform an orderly liquidation of an institution in severe violation of its prudential capital requirements depends upon the institution's losses not exceeding the total loss-absorbing capital (TLAC) that it maintains in its holding company. But because book capital can be a misleading gauge of true capital, and TLAC remains small compared to the potential risk of loss, the FDIC may well find that the liabilities of a troubled institution that are subject to "haircuts" in a liquidation far exceed the value of the distressed institution.

Furthermore, there are considerable legal hurdles to the use of TLAC to recapitalize insolvent bank subsidiaries of bank holding companies.[25] Under U.S. law, the Orderly Liquidation Authority (OLA) created by Dodd-Frank would not permit the FDIC to use bank holding company resources to recapitalize subsidiaries unless the failure of the subsidiary would put the parent in danger of default. The FDIC would have to adopt an alternative approach, including possibly separating the bank from its holding company so that it could be wound down alone. How this would be accomplished is highly uncertain, to say the least. As one study has warned, "unless the Dodd-Frank Act is amended, OLA could well magnify and not reduce market instability in the next financial crisis."[26]

Finally, even if the institution entering distress has economic value in excess of its liabilities, the FDIC will face a race against time to preserve that value and avoid the uncertainties of resolution. The distressed institution will have to be resolved very quickly or face immediate operational problems, owing to its likely inability to roll over existing short-term contracts in highly risk-intolerant markets for interbank debt, commercial paper, and repo. And talented personnel, who are the source of much of the intangible value of the institution, will not wait to look for another job until a protracted resolution can be arranged. If a large financial institution faces financial distress due to an inability to roll over its debts and if a mass exit of its staff threatens to destroy its economic value, government officials may see a bailout as the only means of avoiding extreme losses from liquidation and a risky disruption to the financial system.

The difficulty of meeting these and other challenges to orderly resolution make it far from clear that the FDIC will be able to perform orderly liquidations.[27] For example, if the past is a guide to what to expect, it is quite possible that many SIFI failures will occur at the same time, crowding the courts with complex cases and complicating the task of finding healthy buyers to purchase liquidated assets, much less liquidating the whole firm. International legal jurisdictional complications are likely to arise, making it difficult for the FDIC to exert speedy control over all the assets. The process of liquidating assets may disrupt credit relationships and lead to worries by politicians about short-term impacts on economic activity.

If TLAC proves inadequate, or if speedy resolution is infeasible or considered undesirable by politicians, it is likely that government officials will find that the path of least resistance is to use the new authority codified by Title II of Dodd-Frank to bail out a failing SIFI. Dodd-Frank requires that, if this happens, the surviving financial institutions will be assessed a special tax to pay the cost of the bailout. The ultimate costs of that tax incurred to fund the bailout will, of course, be borne by bank customers and stockholders.

The Volcker Rule

Dodd-Frank's Volcker Rule, which prohibits proprietary trading within banks or bank holding companies, has always been a solution in search of a problem. Even its sponsor, former Fed chairman Paul Volcker, could not point to proprietary trading as a cause of the 2007-2008 crisis. He advocated the rule simply because he had long believed that bank holding companies should avoid involvement in securities markets.

That is not a judgment shared by the academic literature or supported by evidence of which I am aware. Studies have reported substantial benefits of diversification and operating or information synergies from allowing bank holding companies to lend and underwrite securities.[28] Large global universal banks also enjoy unique abilities to act as intermediaries in over-the-counter (OTC) markets. Such universal banks (including U.S. bank holding companies) operate at unparalleled scale; and thanks to their client relationships all over the world, they are uniquely positioned to perform OTC market making (largely a process of matching buyers and sellers based on detailed knowledge of the participants in the market) because of the economies of scale in managing securities inventories that result from the pooling of order flow and their private information about which clients are holding what securities.

As implemented by regulators, the Volcker Rule permits securities transacting within bank holding companies so long as the banks can show that it arises from their market-making function and not speculation. This requires banks

25. See Kupiec and Wallison (2015).
26. Ibid.
27. For a review of such challenges and relevant academic studies, see Bliss and Edwards (2016).
28. See Hughes and Mester (2013), and Calomiris and Pornrojnangkool (2009).

to maintain detailed records of bank-client interactions to prove that they are acting on behalf of a client or serving their function as a market maker when engaging in a trade (for example, maintaining liquidity in OTC markets for debt, foreign exchange, or other instruments) rather than engaging in proprietary trading. But because it can be hard to prove the motives of a banker engaging in a transaction without showing supervisors a great deal of information about the trading's context, the Volcker Rule has led to the production and storage of a mountain of paperwork by bankers who wish to continue making OTC markets and serving clients' needs.

Non-Risk-Based Prudential Standards and OTC Debt Market Illiquidity

Recently, there has been a contraction in banks' OTC securities inventories. While the Volcker Rule is often blamed for reducing the profitability of market making and thereby decreasing the benefits of holding inventories, the traders and senior bank managers with whom I have spoken generally blame capital ratio and liquidity requirements more than the Volcker Rule for the decline in their OTC debt inventories.

The explanation is that simple (non-risk-weighted) capital ratio requirements and liquidity requirements affect the costs of holding all bank assets, regardless of their risk. Such requirements represent a particular burden when holding low-risk assets because, for those assets, the costs of complying with non-risk-based minimum prudential requirements often are greater than the benefits to the bank from holding and trading them (which are generally low because of their low risk). Because non-risk-based capital and liquidity requirements are often binding on banks' capital budgeting decisions, increasing one's inventory of investment-grade bonds may require just as much equity capital and cash holdings as investing in very risky loans. It is economically costly for banks to raise equity capital or to hold cash (cash assets entail an opportunity cost, and raising and holding more equity create a variety of costs), and so banks that are subject to non-risk-based cash and capital requirements face strong incentives to economize on inventories of low-risk debt.

The social cost of discouraging banks' involvement in OTC markets is not only the losses suffered by the banks that forgo this business. Because market makers ensure the orderly operation of the OTC markets, suboptimal levels of inventories translate into excessive market volatility and high trading costs. Although the recent market environment has exhibited limited volatility, many market participants believe that as Fed interest-rate increases raise volatility in corporate debt markets, the costs of reduced inventories will become apparent.

The Durbin Amendment

The Durbin Amendment to Dodd-Frank regulates interchange fees for debit card transactions and was one of Dodd-Frank's most hotly contested consumer protection regulations. In keeping with the Durbin Amendment, on October 1, 2011, regulations went into effect capping certain fees associated with debit card transactions for banks with over $10 billion in assets. Interchange fees are paid by a merchant's bank to the cardholder's bank for each debit card transaction. Reg II capped interchange fees for certain debit card issuers at 21 cents plus 0.05% of the transaction value, which was well below the average of 44 cents per transaction in 2009.

The Durbin Amendment attempts to help merchants and consumers by reducing the amount that large banks earn on debit transactions, a fast-growing part of the payments system. But a recent study finds that although the Durbin Amendment reduced interchange income for large banks by about 28% (a total dollar loss of about $4.1 billion), the banks subject to this loss increased their deposit account fees by about $4 billion while showing no other consequences in their operations or expenses.[29] In other words, banks subject to the Durbin Amendment cap were able to completely offset their costs through other revenue sources. In short, the Durbin Amendment appears to have accomplished nothing except perhaps to require some bank customers inefficiently to cross-subsidize the transactions of others—that is, those who rely disproportionately on checks rather than debit cards to transfer funds are bearing a new cost.

How the CARD Act Reduced Credit Card Lending

The CARD Act of 2009 restricted disclosure, pricing, and risk-management practices by issuers as a means of protecting consumers from practices that Congress deemed unfair. Prior to the 2007-2008 crisis, the credit card industry had been experiencing rapid growth, especially among individuals with risky credit scores. As of 2001, about seven out of ten individuals in the bottom quartile of credit scores held bank credit cards. That growth by bank card issuers reflected the development and adoption of risk-based pricing, which raised issuer revenue to compensate for expected loss and discouraged risk-increasing behavior by risky borrowers.

Among the requirements introduced by the CARD Act were restrictions on risk pricing and the imposition of fees for late payment and exceeding credit limits. But as one study has reported, "These restrictions prompted credit card companies to raise prices, reduce credit limits, and limit availability of credit card credit to riskier individuals."[30] And as a result, by 2010, after the CARD Act had become effective, the study found that the proportion of consumers in the bottom quartile of the credit bureau scores that held credit cards had

29. See Kay et al. (2016).

30. Elliehausen and Hannon (2016).

fallen from 70% to 50%.[31] In response to risk pricing restrictions, banks that were subject to the CARD Act became uncompetitive for high-risk credit card borrowers. Such risky customers migrated from the credit card sector to finance companies that could serve their needs without facing the restrictions of the CARD Act. In other words, the main accomplishment of the CARD Act seems to have been to grow the shadow banking system's share of consumer credit to high-risk consumers.[32]

Operation Choke Point

Imagine that you are operating a legal business and you get a call from your banker explaining that she can no longer provide services to you. Your accounts at the bank must be closed immediately, despite the fact that your business is thriving and you have done nothing unlawful. When you call another banker to try to open an account, he turns you down, too. The bankers all tell you the same story: bank regulators have told them that they should not serve you, and they must obey or will face significant regulatory penalties. Welcome to the Obama administration's main post-Dodd-Frank contribution to financial regulation, known as "Operation Choke Point."[33]

Alongside a Justice Department litigation initiative that began in 2011, the FDIC warned banks of heightened risks from doing business with certain merchants. Purveyors of "pornography" or "racist materials" enjoy First Amendment rights but not the right to a bank account. Gun and ammunition dealers were also targeted, despite Americans' Second Amendment rights to own and bear arms. Firms selling tobacco or lottery tickets were persona non grata, too. In 2012, the FDIC explained that having the wrong kinds of "risky" clients can produce "unsatisfactory Community Reinvestment Act ratings, compliance rating downgrades, restitution to consumers, and the pursuit of civil money penalties." A total of 30 undesirable merchant categories were deemed to be "high-risk" activities. Other regulatory guidelines pointed to difficulties that banks with high "reputation risk" could have in consummating acquisitions.

Payday lenders were one of the targeted industries, based on the prejudice that they prey on the poor. A report by the House Committee on Oversight and Government Reform released in 2014 unearthed internal FDIC e-mails voicing intent to "take action against banks that facilitate payday lending" and "find a way to stop our banks from facilitating payday lending," which highlighted the FDIC's use of memoranda of understanding with banks and consent orders to implement its campaign against payday lending. The report concluded that "senior policymakers in FDIC headquarters oppose payday lending on personal grounds" and that the FDIC's campaign against payday lenders reflected "emotional intensity" and "personal moral judgments" rather than legitimate safety and soundness concerns, and was "entirely outside of the FDIC's mandate."[34]

The inspector general of the FDIC then issued a report substantiating those judgments.[35] It found that FDIC staff had been working with the Department of Justice to identify banks' relationships with payday lenders. Contrary to the FDIC's financial interests and duties, this served to make litigation risk from the Department of Justice greater for banks with payday lending relationships.

There is a comical aspect to regulators using invented risk measures to punish banks. Banks are in the business of gauging risk and have the ability and incentive to avoid customer relationships that truly expose them to reputational risk. Regulators, in contrast, have shown themselves unskilled or unwilling to acknowledge risk—most obviously, the housing finance risks that led to the subprime crisis and, as noted, continue to be a problem. Obviously, regulators have little to teach banks about risk in general, or about reputational risk in particular. Operation Choke Point is not grounded in regulators' expertise—just their willingness to harass bank clients whose activities they dislike.

Some observers may agree with Obama's list of disfavored industries. But now that Trump has taken office, will they agree with his list? Do we want our regulatory system to be a tool for attacking those that the president dislikes? If not, it's worth asking why the political abuse of regulation has become easier than in the past, and what can be done to stop it.

There was no legislation defining the 30 industries as undesirable, nor did regulators establish rules to set clear standards for what constituted undesirable behavior by a bank's client, or announce penalties for banks serving undesirables. Such legislation or formal rule-making likely would have been defeated, owing to the checks and balances inherent in congressional debate or formal rule-making under the Administrative Procedures Act. Instead, regulators relied on guidance—which requires no rule-making, solicits no comments, entails no hearings, avoids defining violations, specifies no procedures for ascertaining violations, and defines no penalties that will be applied for failure to heed the guidance.

Communications between regulators and banks are private; banks often aren't permitted to share them with outsiders. Regulators avoid public statements explicitly requiring banks to terminate undesirables but privately threaten banks with an array of instruments of torture

31. Canner and Elliehausen (2013).

32. Research by Elliehausen and Hannon (2016) supports that conclusion by showing that the migration of nonprime consumers from credit cards to finance-company loans was greater in states with higher rate ceilings on finance-company loans.

33. This section draws on the detailed account in Calomiris (2017b).

34. House Committee on Oversight and Government Reform (2014).

35. See the FDIC, Office of the Inspector General (2015).

that would have impressed Galileo, using secrecy to avoid accountability.

As several examples discussed above illustrate (including SIFI designation by the FSOC, Fed stress-testing, the Volcker Rule, and living will enforcement), there has been a dramatic increase in reliance on guidance and discretion by regulators in recent years.[36] Financial regulators can find it particularly useful to rely on vaguely worded guidance and the veil of secrecy to maximize their discretionary power, though doing so imposes unpredictable and discriminatory costs on banks and their customers.

The regulators' campaign against payday lenders has produced a wave of bank relationship terminations since 2013, with dire consequences for the payday lending industry. Not only were payday lenders victimized, but the reduced competition has imposed significant costs on consumers. A large—and very one-sided—academic literature convincingly shows that payday lenders serve customers' interests and perform competitively.[37] Their presence reduces borrowing costs for customers. If the prejudiced views of bureaucrats about payday lending had been scrutinized through public hearings, their jaundiced portrayals of the industry would have been disproved. But employing guidance when setting standards protects one's prejudices from public airing. Once the government and its regulators decided to strip the payday lending industry of its ability to transact with banks, their view that payday lenders were "risky" became self-fulfilling.

Payday lenders are now suing bank regulators for the harm they have suffered. In that lawsuit, there is more at stake than the fate of payday lenders or their customers. Regulators' reliance on vague guidance and discretionary judgments about ill-defined violations under a veil of secrecy constitute a major departure from the rule of law, with far-ranging adverse consequences for our economy, our political institutions, and our society.

CFPB Structure, Process, and Policies

Barney Frank has said that he regards the creation of the Consumer Financial Protection Bureau (CFPB) as the greatest achievement of the Dodd-Frank Act.[38] But the CFPB's policies, structure, and process have made it a lightning rod for controversy. With respect to its structure and process, the CFPB was given a unique position within the government. Its budget is derived from the Federal Reserve System's surplus before it is transferred to the Treasury, making it impervious to congressional limitation. Its mandate is extremely broad. And unlike other regulatory authorities (such as the SEC), it is run by an individual director rather than a bipartisan panel. In October 2016, a three-judge panel of the U.S. Court of Appeals for the District of Columbia found not only that the CFPB was incorrect in its interpretation of the law it used to justify the imposition of a $109 million penalty, but that it "violated bedrock due process principles." Its structure was unconstitutional, the court said, because the CFPB had "more unilateral authority than any other officer in any of the three branches of the U.S. government, other than the president" and that, as a result, the CFPB "possesses enormous power over American business, American consumers and the overall U.S. economy." The court permitted the CFPB to continue operating but ordered its restructuring as part of the executive branch. Notably, if the court's ruling stands, its director will now be subject to dismissal by the president without cause. The CFPB's appeal is currently pending before the full circuit court.

With respect to its policies, the CFPB has aggressively promoted unprecedented interpretations of consumer protection regulation. Perhaps most controversial was the use of "disparate impact" theory to gauge discrimination against minorities. According to this theory, if one group of people (identified on the basis of racial or ethnic identity) experiences different average *outcomes* (different approval/denial rates or different terms for lending), that disparate impact constitutes evidence of illegal discrimination, even in the absence of any evidence of differences in *treatment* by a lender on the basis of race or ethnicity. Furthermore, the CFPB's (2014) race and ethnicity data were derived not from actual knowledge of individuals' race and ethnicity but rather from "a Bayesian Improved Surname Geocoding (BISG) proxy method, which combines geography- and surname-based information into a single proxy probability for race and ethnicity." In other words, the penalty for discrimination is based on forecasted probabilistic racial or ethnic identities, not actual ones.

The report on the CFPB's practices by the U.S. House Committee on Financial Services in 2015 found that it had knowingly failed to control for influences other than discrimination that cause differences in outcomes. Its actions, the report found, were inconsistent with congressional intent in creating the CFPB, with the law (which specifically exempted certain automobile financing from CFPB authority), and with Supreme Court definitions of what constitutes discrimination.

The CFPB, in effect, attempted to create and enforce a new theory of discrimination, one that appears to be inconsistent with economic evidence about the causes of disparate impact and contrary to statutory language and Supreme Court opinions about what constitutes illegal discrimination. There is probably a connection between the unconstitutional structure and process that created the CFPB, which insulated its imperious director from any budgetary or administrative discipline, and its abuse of power. The broad lesson—which

36. DeMuth (2014), Epstein (2014), Hamburger (2014), and Baude (2016) have documented this phenomenon more generally.

37. See Appendix A of Calomiris (2017b).

38. See "Dodd-Frank Five Years Later" (2015), cited earlier.

applies to the regulatory abuses of guidance in general—is that financial regulatory power is easily politicized and abused when it is not required to adhere to statutory authority, or at least to a formal rule-making process.

Conclusion

Critics of the status quo in financial regulation can point to many shortcomings. First, there is the cost of regulation. Large banks face an unpredictable and complex regulatory environment, with a host of new costs and risks coming from constantly changing prudential standards, FSOC actions, and stress tests. Small banks face a morass of new rules and compliance burdens and, given their limited scale of operation, the fixed costs of complying with new regulations often put them at a severe disadvantage and produce consolidation for the wrong reasons. At the same time, efficient consolidation is sometimes discouraged as banks seek to avoid tripping size thresholds that result in new regulatory burdens. These costs imposed on banks of all sizes are being passed on to their customers, who find it increasingly difficult to access banking services on favorable terms.

Regulation also suffers from poor design features that are likely to result in failures to achieve bona fide prudential objectives. The continued reliance by capital regulation on book values of tangible net worth as a measure of loss-absorbing capacity is one obvious weakness. That approach is not likely to work better than in the past to prevent too-big-to-fail banks from failing because it does not reliably track the true economic value of bank equity. Risk measurement under the Basel approach employed in the U.S. and many other countries creates opportunities for circumvention through the understatement of risk. New bank liquidity requirements are extremely complex and lacking in any fundamental grounding in economic theory. Title II of Dodd-Frank is viewed by many academic critics as unworkable and unlikely to produce orderly resolution of nonbank institutions or large bank holding companies. Stress tests, as conducted under the current regime, are unaccountable to the public and based on very crude financial accounting measures; and for those reasons, they are a source of risk to the system and unlikely to provide a meaningful gauge of systemic risks that the banking system actually faces.

Even more troubling is our regulatory structure's increasingly frequent adoption of processes that are inconsistent with adherence to the rule of law. Inappropriate regulatory processes not only threaten to undermine the fundamental norms on which our democracy is founded, they also undermine the effectiveness of regulation. The ability of regulation to succeed depends on transparent and accountable processes because those processes define the incentives of regulators and are crucial to ensuring that regulators act diligently in pursuit of bona fide objectives. Reliance on regulatory processes that avoid transparency, accountability, and predictability increases regulatory risk and is likely to lead to poor execution of regulatory responsibilities, as well as to the creation of unnecessary regulatory costs and opportunities for politicized mischief. Recent regulation, by increasing regulators' discretionary authority with little regard for predictability, transparency, or accountability, has resulted in abuses that not only deform our democracy but impose unwarranted costs on the financial system and distract us from legitimate problems that should be the focus of prudential and consumer protection regulation.

We can do much better. As we consider ways to correct recent regulatory errors, we should begin by recognizing that good intentions, the creation of new powers, and the establishment of mandates directed at particular goals do not necessarily produce effective policy. The shortcomings of post-2008 policies reflect their failure to adhere to a set of legal and economic principles that can and should be used to guide effective reform in the future. In Table 1 below, I offer a list of ten such principles that are followed in Table 2 by a number of specific proposals for regulatory reform that are consistent with those principles, and that address the specific shortcomings of current regulation discussed above. Adopting a principled and effective set of reforms is not outside our reach, and the potential gains of avoiding severe banking crisis-induced disruptions, while reducing regulatory compliance costs, would be substantial.

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Table 1 **Ten Principles to Guide Financial Regulatory Reform**

1. Financial regulation should focus exclusively on bona fide objectives that relate to the performance of the financial sector, and that are grounded in core economic concepts of externalities and information costs and supported by evidence that shows their costs are justified by demonstrable benefits.

2. We must restore the role of laws and formal rule-making in financial regulation and end the reliance on Kafkaesque guidance, and the excessive delegation of discretionary authority to politicized actors, such as FSOC and the CFPB.

3. Regulatory standards and their enforcement must be sufficiently transparent that regulators are accountable to the public.

4. To be effective, regulation must recognize and address the incentives of market participants to avoid regulatory costs, and the incentives of supervisors and regulators to enforce (or not enforce) regulation.

5. Consumer protection regulation should help consumers make informed choices, not attempt to dictate those choices with prohibitive rules.

6. Financial institutions should pay for the losses that result from their risks, and so long as they are clearly and fully bearing the risks of their actions, regulation should not attempt to micro-manage the business of banking.

7. Real estate risk, especially when subsidized and promoted by the government, is a major threat to financial system stability. Furthermore, the subsidization of housing finance is not an effective means of promoting access to affordable housing.

8. Conflicts of interest within regulatory agencies, especially the Fed, must be addressed.

9. Statutes and regulations governing the management of financial institutions that suffer financial distress need to be judged on the basis of politically and economically realistic scenarios for how those statutes and regulations will be used, not wishful thinking.

10. Designing financial regulatory policy should *not* be viewed as striking a balance between economic growth and financial stability. The best ideas for regulatory reform can achieve the highest sustainable growth without increasing the risk of a financial crisis.

Table 2 **List of Proposed Reforms**

Fuller explanations for each of these proposals can be found in *Reforming Financial Regulation After Dodd-Frank*, published by the Manhattan Institute.

1. Repeal the Durbin Amendment.
2. Repeal the risk management and pricing limits of the CARD Act.
3. End Operation Choke Point.
4. Repeal the Volcker Rule.
5. Phase out the use of guidance in financial regulation and replace it with formal rule-making.
6. Replace Title II resolution with a new bankruptcy chapter (as discussed in Jackson et al. 2015).
7. Replace the morass of capital ratio requirements on banks with a single leverage limit and a single minimum ratio of book equity to risk-based assets. For SIFIs, also require that 10% of assets be issued in convertible CoCos with a market conversion trigger to incentivize banks to maintain sufficient economic value of equity (as discussed in Calomiris and Herring 2013).
8. When constructing risk weights for bank assets, measure loan risk with interest rates on loans, and measure securities risks using objectified NRSRO ratings subject to market discipline (as discussed in Calomiris 2011).
9. Replace the two complex Basel liquidity requirements with a simple 20% remunerative cash reserve ratio.
10. Spell out clearly and credibly the rules that guide Lender of Last Resort Lending, to limit it to address systemic risks (as discussed in Calomiris et al. 2017).
11. Provide a limited carve-out from leverage and liquidity regulations for OTC market making.
12. Reform stress tests to make them ex post transparent to ensure Fed accountability.
13. Reform stress tests by eliminating control of dividends by regulators for banks that are in compliance with all capital regulations.
14. Reform stress test forecasting of cash flows using line-of-business managerial accounting data, and delay the further use of stress tests as a regulatory tool until these realistic scenario forecasts can be constructed.
15. Replace mortgage risk subsidies with means-tested down payment matching subsidies and wind down FHA, GSEs, and FHLBs.
16. Offer means-tested subsidies for mortgage interest rate swaps to lock in long-term rates.
17. Create tax-favored housing savings accounts to further promote affordability of housing.
18. Phase in limits constraining banks to < 25% of loans for commercial or residential real estate.
19. Remove the FSOC and OFR from the Treasury Department and establish them as an independent "Sentinel" to identify problems, monitor regulatory enforcement, and propose rules (as discussed in Barth et al. 2012).
20. SIFI designations should be determined by clear rules, not opaque discretion.
21. Restructure and depoliticize the CFPB by structuring it as a bipartisan commission with a focus on enforcing consumer protection laws, and by ending Federal Reserve funding of CFPB.
22. Consolidate regulatory structure and avoid regulatory conflicts, following the suggestions in the 2008 Treasury Blueprint.

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