CHAPTER 8 No Need for Title VI with Simpler, Higher Capital

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Title VI—Improvements to Regulations of Bank and Savings Association Holding Companies and Depository Institutions has as a stated objective to improve the regulation of depository institutions. Sections 606 and 607 of Title VI call for bank holding companies (BHCs) to be "well capitalized," rather than "adequately capitalized." If Dodd–Frank stopped here, perhaps we would have had the foundation for what might have served as a sound framework for the regulation of depository institutions.

However, like much of Dodd-Frank, Title VI reflects a reversal of what Fischer Black, Merton Miller, and Richard Posner described when they noted that a "striking and heartening development in banking regulation in the last decade has been a movement away from exclusive preoccupation with bank-asset safety and toward greater awareness of the benefits of competition."1 They were speaking of the increase in national bank charters, the increasing number of activities banks were allowed to engage in by comptrollers of the currency, and tolerance for BHCs as a way of circumventing onerous state branch-banking laws. Title VI attempts to fix perceived, perhaps even misdiagnosed, problems during the most recent crisis, rather than addressing the source of the historically fragile design of U.S. banks, which explains the large number of banking crises throughout U.S. history.

WHY THERE ARE CRISES

Charles Calomiris and Stephen Haber,² as well as Michael Bordo and two co-authors,³ document how, in the U.S., populist politicians and small bank interests have historically colluded from the outset to pass laws preventing not only branch banking but also interstate banking. These restrictions made U.S. banks fragile. Until the recent crisis, banking crises, including the Great Depression, fit this pattern, whereby a large number of small banks would fail because they were largely prohibited from diversifying regional shocks through branching and interstate banking.

Calomiris and Haber, as well as Bordo and co-authors, point out that frequent banking crises are not inevitable. They point to the Canadian banking system, which, since confederation in 1867, has relied on a system of large national banks that operate from coast to coast, and has never experienced a system-wide crisis. That is despite the fact that Canada only founded the Bank of Canada in 1935, and only created the Canadian Deposit Insurance Corporation in 1967. For comparison, Calomiris and Haber list a total of 10 crises from 1867 to the present in the U.S., which averages almost one every 15 years.⁴

The most recent crisis appears to break that pattern. At first glance, the crisis seemed concentrated among large banks rather than small banks. However, rather than bank size, the most recent crisis reflects the spectacular crash of the market for tranches (that is, bonds) of structured-finance collateralized debt obligations (CDOs), which are structured products backed by tranches of residential mortgage-backed securities (MBS) and homeequity-loan-backed securities.

To examine why structured-finance CDOs are at the heart of the recent crisis, Larry Cordell, Yilin Huang, and Meredith Williams reconstruct 727 deals between 1999 and 2007, valued at roughly \$641 billion.⁵ They find that the expected losses on the original structured-finance CDO issuance equaled \$420 billion, roughly 65 percent of the original value. Expected losses were even higher for CDOs issued in 2006 and 2007. Isil Erel, Taylor Nadauld, and René Stulz show that while bank holdings of CDOs were largely unknown, they can reconstruct a measure of highly rated, private-label MBS tranches from BHC data that behaves much like alternative measures they construct, which include estimates of bank CDO tranche holdings.6 Erel, Nadauld, and Stulz estimate that average on-balance-sheet holdings of private-label asset-backed securities, MBS and CDO tranches, across all bank holding companies in their sample equaled 5 percent in 2006 (6.6 percent if including off-balance-sheet items). However, some banks had higher exposures, such as Citigroup, where holdings on- and off-balance sheet reached 10.7 percent. Erel, Nadauld, and Stulz illustrate how this situation could be problematic for Citigroup, which had an equity capital-to-total asset ratio equal to 6.3 percent. A hypothetical loss of 60 percent on the highly rated tranches (roughly equal to Cordell, Huang, and Williams's historical average) would effectively wipe out the equity capital.

Erel, Nadauld, and Stulz examine a number of competing hypotheses to explain why banks held so many highly rated private-label MBS and structured-finance CDO tranches. They find evidence that banks that securitized loans held more highly rated tranches, to signal to buyers that they stood by their products, but find no evidence that other factors, such as option-like features of executive pay, or poor risk-management practices, explained those holdings.

Erel, Nadauld, and Stulz also examine whether the Recourse rule⁷ explained bank holdings of those highly rated, private-label tranches. To understand the rule change, while perhaps not the primary concern, the Recourse rule, finalized in late 2001, lowered risk weights for bank holdings of private-label MBS and structured-finance CDOs from 100 percent to 20 percent for AAA-rated and AA-rated tranches. Translating the change in risk weights into a change in capital requirements, bank capital requirements on these holdings would have fallen from 8 percent to 1.6 percent. For A-rated tranches, the risk weights fell from 100 percent to 50 percent, which means that bank capital requirements on these holdings would have fallen from 8 percent to 4 percent. Erel, Nadauld, and Stulz test whether banks that increased their leverage following the Recourse rule increased their holdings of the highly rated, private-label tranches, but find no evidence that leverage-seeking explained the holdings.

Stephen Matteo Miller⁸ uses Erel, Nadauld, and Stulz's measure of highly rated private-label MBS tranches and finds that in the run-up to the crisis, some banks tilted their portfolios toward the highly rated tranches after the Recourse rule. Banks with greater holdings of the highly rated tranches, *ceteris paribus*, were much closer to default by the time of the crisis in 2008, while official measures of bank complexity and thresholds for bank size (for example, \$50/\$250 billion in total assets) were unrelated to default. In short, while commercial banks experienced the same distress as some investment banks and insurance companies during the recent crisis, the distress in commercial banks presented an additional challenge arising from insured deposits, and the potential for taxpayers to be on the hook if many banks failed.

HOW CAPITAL REQUIREMENTS CAN LESSEN CRISES

To see how higher capital helps address the banking crisis, Michel Crouhy and Dan Galai⁹ examine how banks have to make decisions concerning: (1) capital structure, which consists of how banks choose deposits and equity (assuming no additional debt for simplicity) to fund their loan origination and investments; and (2) capital requirements. While much has been written about capital requirements since their study, a key feature of their framework is their comparison of an unregulated banking system versus a banking system with regulatory capital requirements and government-insured deposits.

Crouhy and Galai show that in their hypothetical unregulated market, there is no optimal capital structure. In their approach, while equity starts out as a source of funding, once issued, it measures the difference between the bank's assets and liabilities. Both the numerator and denominator of the equity-to-asset ratio fluctuate such that when asset values change, the equity measure changes along with it. That means the equity-to-asset ratio provides no information about solvency, at least not until it hits zero.

Under these conditions, as the capital structure varies, so does the interest rate paid to depositors. For instance, for a given amount of asset risk, the higher the equity capital, the lower the likelihood of the bank's default, so the bank can offer lower rates to depositors, since they are now exposed to less default risk. Alternatively, for a given equity-capital-to-asset ratio, the lower the asset risk, the lower the interest rate the bank should offer. This outcome changes with the addition of government-deposit insurance, which through the guarantee means that depositors should earn a lower (risk-free) interest rate, and now the government insurer, and possibly the taxpayer, assumes bank-default risk.

Under these conditions, which better characterize the current regulatory environment, the capital structure should vary with the insurance premium paid to the deposit insurer, as is currently practiced. For instance, for a given amount of asset risk, the higher the equity capital, the lower the likelihood of the bank's default, so the bank pays a lower premium to the deposit insurer, reflecting the lower default risk. Alternatively, for a given equity-capital-to-asset ratio, the lower the asset risk, the lower the premium that the bank pays to the deposit insurer. The unregulated and regulated banking scenarios provide useful intuition, but additional issues arise with the implementation of regulatory capital requirements.

TOWARD BANK CAPITAL ADEQUACY STANDARDS

Current capital adequacy standards focus attention on the holding company. Yet, Black, Miller, and Posner,¹⁰ like Paul Kupiec in Chapter 4 of this book, suggest that within the context of the regulation of bank holding companies, higher capital requirements at the level of a banking subsidiary rather than the holding company provide a sound, less-onerous framework for regulating banking. Alternatively, Black suggests that bank regulation might simply entail a "dollar-for-dollar" rule, whereby for every dollar of deposits that a bank creates, it must have at least an additional dollar of capital, comprised of long-term bonds and/or stock measured at market value.¹¹

The benefits of this latter proposal lies in the fact that measuring capital at market value would help foster market discipline. For instance, Mark Flannery and Emanuela Giacomini argue¹² that book measures of equity, which have long been embedded in holding company bank regulatory capital requirements, (1) do not reflect loss-absorbing capacity at banks; (2) lag behind market values; and (3) can be manipulated by accountants. On the latter point, Harry Huizinga and Luc Laeven show¹³ how bank accounting discretion during the recent crisis helped banks appear less distressed than they actually were.

A potential problem with the proposal to measure capital-at-market value could be that bank holding company shares are traded, while bank shares often are not.¹⁴ Making this work might entail moving away from using the holding company as a reference point for regulation and instead focusing on banks themselves.

Shifting the focus of bank regulation from holding companies and toward banks may make sense now. As Randall Kroszner and Philip Strahan¹⁵ and Calomiris and Haber,16 point out, the holding company was initially created as a way to facilitate branching in states where regulations prevented branching, although it did not cover interstate banking. Calomiris and Haber also observe that the Garn-St. Germain Depository Institutions Act of 198217 allowed banks, not just holding companies, to acquire failed banks in any state. With that, states began entering into regional and national reciprocal arrangements, which effectively allowed interstate banking. The subsequent Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994¹⁸ facilitated interstate banking through the holding company.

The BHC, therefore, may once have served a purpose to lower transaction costs for banks that were prohibited from taking advantage of the benefits of branching. The growing regulatory burden arising from Dodd–Frank means that, ultimately, there may be a point where the business and regulation of banking can be done more effectively through banks rather than holding companies, and where regulation entails simpler, higher capital requirements.

DEFINING SIMPLER, HIGHER CAPITAL REQUIREMENTS

Simpler capital requirements imply eliminating the so-called risk weighting inherent in Basel capital adequacy standards, and reverting to simpler measures, such as the leverage ratio. Higher capital requirements address the problem of bank insolvency risk and potentially bank runs.¹⁹

We offer no single suggestion for how high capital requirements should be, but Will Gornall and Ilya Strebulaev have shown²⁰ that merely doubling capital requirements from 8 percent to 16 percent might eliminate roughly 90 percent of bank default risk, while Anat Admati and Martin Hellwig have suggested²¹ a 20 percent to 30 percent capital buffer, comprised of long-term debt and equity, but offer no guidance on that level except that much higher capital might be preferred. Alternatively, Black suggests a simple "dollar-for-dollar" rule.²² This proposal would likewise imply eliminating the Basel-type risk weights, and would mean that in addition to standard deposits, banks would have to seek funding from bond and equity markets, where capital (comprised of long-term bonds and stock) would be measured at market value. Black's "dollar-for-dollar" proposal therefore shifts the discussion from one where the bank has to raise capital to back assets to one where a bank has to raise capital to back deposits. In any case, the composition of capital also matters.

Black, Miller, and Posner²³ argue that the appropriate composition of capital might depend on the aims of the regulation. If the aim is to protect depositors (their preferred aim), the composition of capital matters little-except to the extent that more equity, rather than various forms of debt and their associated bankruptcy costs, would mean that there is more left for depositors in the event of a bank failure. However, if the aim is to prevent bank failures, a tilting of the composition of capital toward debt would not be desirable, since that would increase leverage. In contrast, Kupiec suggests raising capital in the form of bonds at the banking subsidiary level as part of a broader solution to end the "too-big-tofail" problem, since shares for banks within holding companies may not trade. With these alternatives in mind, we now turn to how simpler, higher capital requirements obviate the need for much of Title VI.

SIMPLER, HIGHER BANK-CAPITAL REQUIREMENTS OBVIATE NEED FOR TITLE VI

As observed, Black, Miller, and Posner argue that capital requirements offer a lower-cost alternative to overseeing holding company activities. Yet, Title VI fails to acknowledge that simpler, higher capital requirements can foster the stability within the financial system, at least for depository institutions, that many sections of Dodd–Frank seek to address by controlling banking activities through more onerous bank regulation.

For instance, Section 604, subsection (d) seeks to prevent mergers if regulators deem the merger to increase system-wide risk; financial holdings companies must also gain permission if they seek to acquire a firm with more than \$10 billion in assets. However, simpler, higher bank, rather than holding company, capital requirements, whether to protect depositors or prevent bank failures, would mean that the banking subsidiary can function even in the event of a failed holding company.

Section 605 calls for regulatory oversight of non-banking subsidiaries by bank regulators. As Hester Peirce points out in Chapter 7 of this book, the Federal Reserve has dramatically increased its regulatory scope, even as Black, Miller, and Posner have observed that supervising non-banking subsidiaries would be unappealing. Raising capital requirements for the banking subsidiary offers a lower-cost alternative to lessen the likelihood of either depositor losses or bank failures.

Sections 610 and 611 attempt to restrict derivatives activities, while Sections 614 and 615 attempt to limit transactions with insiders. Here again, since simpler, higher bank, rather than holding company, capital requirements lessen the likelihood of either depositor losses or bank failures, these sections of Title VI seem to be more costly to implement.

The proposal to establish capital requirements for the banking subsidiary rather than for the holding company stands in sharp contrast to the "sourceof-strength" doctrine endorsed by Section 616. Section 616 may help preserve the holding company, but that does not mean the benefits of a financially sound holding company will extend to the banking subsidiary.

Section 620 calls for the scrutiny of bank investments. Miller (2015) shows that the de facto lowering of regulatory capital requirements for highly rated, private-label tranches following the Recourse rule may help explain why banks increased their holdings of the very assets that experienced catastrophic losses during the crisis. This explanation should speak for simpler and higher capital requirements, rather than greater scrutiny of bank investments.

Section 622 calls for limiting any financial institution from having liabilities that exceed 10 percent of the entire financial system's liabilities. This section suggests a size threshold exists, beyond which banks suddenly become riskier. However, Miller shows²⁴ that while bank holdings of private-label structured-product tranches might explain which banks were closer to default, official measures of bank complexity and thresholds for bank size did not.

In the context of interstate mergers, Section 623 places a limit on banks such that they may not exceed 10 percent of the entire banking system's deposits. Since bank size alone does not explain the crisis, the focus on placing limits on bank size is at best arbitrary.

THE VOLCKER RULE VS. SIMPLER, HIGHER CAPITAL REQUIREMENTS

Section 619 of the Dodd–Frank Act, termed the "Volcker Rule," as it was adopted at the suggestion of former Federal Reserve Chairman Paul Volcker, restricts banks or their affiliates from sponsoring or investing in hedge funds or private-equity funds, and prohibits banks from engaging in so-called proprietary trades (for instance, shortterm trades intended to profit from the difference in the purchase and the sale price). There are a number of exemptions adopted by the statute and defined by way of an extensive rulemaking, including exemptions for market making and for hedging activities.

Market making helps to alleviate market panics and provides liquidity to markets that are otherwise infrequently traded. A market maker can also assist with execution of large block trades off exchange and thereby minimize the price impact of the large trade. Market makers are responsible for most trading in government and corporate bonds.

An Oliver Wyman study found²⁵ that there were 37,000 unique corporate bonds outstanding in the U.S. market with a value of \$7 trillion. The extent to which corporate bonds are issued in individual tranches with a wide diversity of terms and maturity dates results in a market that is quite fragmented, and thus means it is far less regularly traded than the typical company's equity securities. Due to the low average trading volume for corporate bonds, market makers who stand ready to facilitate trades play a vitally important role. Market makers provide liquidity, which effectively means that they stand willing to buy or sell securities even during crisis conditions. The presence of market makers in the corporate bond market helps to reduce the cost of issuing securities and provides benefits to both issuers of, and investors in, corporate bonds.

Yet Darrell Duffie suggests that, as unintended consequences of the Volcker rule:

investors would experience higher market execution costs and delays. Prices would be more volatile in the face of supply and demand shocks. This loss of market liquidity would also entail a loss of price discovery and higher costs of financing for homeowners, municipalities, and businesses....

The financial industry would eventually adjust through a significant migration of market making to the outside of the regulated bank sector. This would have unpredictable and potentially important adverse consequences for financial stability.²⁶

The findings of Tobias Adrian and his co-authors suggest²⁷ that Duffie's first unintended consequence has not happened; they do, however, conclude that there may have been a shift into the non-banking sector. All told, the final impact of the Volcker Rule on the corporate debt market will take time to manifest and to be measured, particularly given that the final rule was only recently adopted and that the rule has a multiyear implementation schedule going forward. However, the fact that much activity has migrated elsewhere in the financial system suggests that the Volcker Rule has imposed costs in a way that has significantly altered this segment of the financial system.

As is true for many other sections of Title VI, an alternative to the onerous Volcker Rule would be simpler and higher capital requirements applied to banking subsidiaries, rather than at the holding company, to lessen the likelihood of either depositor losses or bank failures. A first best solution might even entail a repeal of the Volcker Rule.

Alternatively, the Volcker Rule might also be amended to more closely adhere to congressional intent in originally requiring exemptions for market making and hedging. The draconian holding-period presumptions and the byzantine hedging metrics might be reconsidered in favor of a clearer approach to defining the reach of the exemption. One potential formulation could be a limitation on the percentage of an entity's revenue that trading under the exemption can represent. That was the same approach that banking regulators adopted in allowing bank affiliates to increasingly trade in certain securities in the lead-up to the Financial Services Modernization Act of 1999.²⁸

Other exemptions contained in the Volcker Rule that permit banks to obtain some limited streams of healthy, diversified non-loan revenue, such as an exemption for securitization vehicles and for joint ventures, might also be expanded. Claire Hill and Richard Painter argue²⁹ that when investment banks were still organized as partnerships, the general liability of the individual partners served to reduce agency costs at the firms and discourage excessive risk taking. An additional exemption may therefore be considered for hedge funds or private-equity funds, to allow them to be owned and sponsored by bank affiliates, for funds in which the executive members of the Board of Directors of the bank affiliate or the financial holding company also serve as general partners of the fund.

CONCLUSION

U.S. banking historians have identified laws and regulations as the key culprit behind the excessive number of banking crises observed throughout U.S. history. While the laws and regulations that explain crises prior to 2007 may have been eroded through the changing political landscape and subsequent legislation, legislators and regulators have tended to take a "let's fix the last crisis" approach to financial regulation. Instead of enacting new laws and finalizing new regulations to handle the last crisis, which may have the potential to create unpredictable instability elsewhere in the financial system, a better approach may involve using market discipline to regulate banks. In a banking system with deposit insurance, simpler and higher capital requirements at the level of a bank, rather than at the holding company level, can serve as a cost-effective foundation for a sound financial system.

Any views expressed here are those of the authors, not necessarily of The Heritage Foundation.

ENDNOTES:

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- 18. Public Law 103-328; 108 Stat. 2338.
- John Cochrane argues that the "first-come, first-served" nature of fixed-value deposits (deposits whose value remains fixed, irrespective of the financial condition of the bank's assets) makes banks prone to runs. John Cochrane, "Toward a Run-free Financial System," in Martin Neil Bailey and John B. Taylor, eds., Across the Great Divide: New Perspectives on the Financial Crisis (Stanford University, CA: Hoover Press, 2014), pp. 197–249, http://www.hoover.org/sites/default/files/across-the-great-divide-ch10.pdf (accessed February 18, 2016).
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