# Policy Analysis



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# The Repeal of the Glass-Steagall Act

Myth and Reality

By Oonagh McDonald

### **EXECUTIVE SUMMARY**

he Glass-Steagall Act was enacted in 1933 in response to banking crises in the 1920s and early 1930s. It imposed the separation of commercial and investment banking. In 1999, after decades of incremental changes to the operation of the legislation, as well as significant shifts in the structure of the financial services industry, Glass-Steagall was partially repealed by the Gramm-Leach-Bliley Act.

When the United States suffered a severe financial crisis less than a decade later, some leapt to the conclusion that this repeal was at least partly to blame. Indeed, both the Republicans and the Democrats included the reinstatement of Glass-Steagall in their 2016 election platforms.

However, the argument that repealing Glass-Steagall caused the financial crisis, and that bringing it back would prevent future crises, is not supported by the facts. Glass-Steagall could not have prevented the bank failures of the 1920s and early 1930s had it been in force earlier, and it wouldn't have averted the 2008 financial crisis had it stayed in force after 1999.

Widespread Depression-era bank failures were primarily

due to the fragility of the banking system at that time. Regulations that prohibited branch banking meant that America's banks were frequently very small, with undiversified loan portfolios tied to the local economy of specific regions. Persistent crop failures and falling real estate values pushed thousands of these banks over the edge. Loan-financed securities speculation—the target of Glass-Steagall—had very little to do with it.

Likewise, during the recent financial crisis, commercial bank failures were largely driven by credit losses on real estate loans. The banks that failed generally pursued high-risk business strategies that combined nontraditional funding sources with aggressive subprime lending. Glass-Steagall would not have stopped any of this. Nor could it have stopped standalone investment banks, such as Lehman Brothers, from running into trouble.

Ultimately, those who see a simple solution to our contemporary financial woes in repealing Gramm-Leach-Bliley and reimposing Glass-Steagall only betray their misunderstanding of both pieces of legislation. The causes of financial crises—past, present, and future—lie elsewhere.

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66 Both the Republican and the **Democrat** general election platforms propose a reinstatement of Glass-Steagall as part of their programs for reforming the financial services sector. 99

## INTRODUCTION

The Glass-Steagall Act is in the news again: both the Republican and the Democrat general election platforms proposed a reinstatement of Glass-Steagall as part of their programs for reforming the financial services sector. The Republican platform simply calls for the act's reinstatement, on the grounds that it "prohibits commercial banks from engaging in highrisk investment." The Democrats, meanwhile, offer an "updated and modernized version of Glass-Steagall."

The original Glass-Steagall Act was enacted in 1933 in response to the banking crises of the 1920s and early 1930s. It imposed the complete separation of commercial and investment banking. Commercial banks are chartered by national or state banking authorities to take deposits, which are withdrawable on demand, and to make loans. Investment banks, by contrast, specialize in the business of underwriting and trading in securities of all kinds. Under the terms of Glass-Steagall, investment banks were no longer permitted to have any connection with commercial banks, such as overlapping directorships or common ownership.

Glass-Steagall also created the Federal Deposit Insurance Corporation (FDIC), and its drafters were anxious to ensure that federally insured commercial bank deposits were not used to finance riskier investment in securities. Congress at that time took the view that commercial banks were suffering losses from extreme equity market volatility, and that bank credit should therefore not be used for speculation, but rather restricted to industry, commerce, and agriculture.

Almost 70 years after the Glass-Steagall Act was enacted, and in the wake of many changes in the structure of banking and financial services more generally, the legislation was "repealed" by the Gramm-Leach-Bliley Act (GLBA), which was signed into law by President Bill Clinton on November 12, 1999. When the United States suffered a severe financial crisis less than a decade later, some leapt to the conclusion that the repeal of Glass-Steagall was at least partly to blame.

During his 2008 election campaign, President Barack Obama appeared to share this view, stating that "by the time the Glass-Steagall Act was repealed in 1999, the \$300m lobbying effort that drove deregulation was more about facilitating mergers than creating an efficient regulatory framework." Instead of creating a new framework of this sort, he said, "we simply dismantled the old one . . . encouraging a winner-take-all, anything-goes environment that helped foster devastating dislocations in our economy." Yet none of the many legislative attempts to revive the Glass-Steagall Act have been supported by the Obama administration.

In introducing one such bill, S. 1709, Sen. Elizabeth Warren (D-MA) claimed that for 50 years, Glass-Steagall "played a central role in keeping our country safe." She continued:

There wasn't a single major financial crisis.... The 21st Century Glass-Steagall Act will rebuild the wall between commercial banks and investment banks, separating traditional banks that offer savings and checking accounts and that are insured by the FDIC from their riskier counterparts on Wall Street. . . . By itself it will not end too big to fail and implicit government subsidies, but it will make financial institutions smaller, safer, and move us in the right direction. . . . If financial institutions have to actually face the consequences of their business decisions, if they cannot rely on government insurance to subsidize their riskiest activities, then the investors in those institutions will have a stronger incentive to closely monitor those risks.<sup>2</sup>

Despite the failure of S. 1709 and other similar bills, Warren continues to campaign on what she regards as the key issue: banks should not be able to engage in high-risk trading while they continue to receive federal insurance and tax-payer bailouts. As she puts it, federal regulators

have concluded that five U.S. banks are large enough that any one of them could crash the economy again if they started to fail and were not bailed out. . . . [T]here would have been no crisis without these giant banks. They encouraged reckless lending by gobbling up an endless stream of mortgages to securitize and by funding the slimy subprime lenders who peddled their miserable products to millions of American families. The giant banks spread that risk throughout the financial system by misleading investors about the quality of the mortgages in the securities they were offering.<sup>3</sup>

Those who want to see Glass-Steagall reinstated claim that, together with broader "deregulation," its repeal caused the financial crisis. In testimony before Congress, for example, journalist Robert Kuttner said:

Since the repeal of the Glass-Steagall Act in 1999, after more than a decade of de facto inroads, super-banks have been able to re-enact the same kinds of structural conflicts of interests that were endemic in the 1920s, lending to speculators, packaging and securitizing credits and then selling them off, wholesale or retail, and extracting fees at every step of the way. . . . The repeal of Glass-Steagall coincided with low interest rates that put pressure on financial institutions to seek returns through more arcane financial instruments. Wall Street investment banks, with their appetite for risks, led the charge.4

Other arguments in support of bringing back Glass-Steagall stress the way "repeal changed an entire culture." Nobel Prize—winning economist Joseph Stiglitz pointed out that commercial banks are "not supposed to be high-risk ventures":

Investment banks . . . have traditionally managed rich people's property—people who can take bigger risks in order to get bigger returns. When the repeal of Glass-

Steagall brought investment and commercial banks together, the investment bank culture came out on top. There was a demand for the kind of high returns that could be obtained only through high leverage and big risk-taking.<sup>5</sup>

But is this really the case? Warren, for one, has provided little evidence to back up her claim that Glass-Steagall "stopped investment banks from gambling away people's life savings for decades—until Wall Street successfully lobbied to have it repealed in 1999." Indeed, she admitted in an interview with Andrew Ross Sorkin that "even if [Glass-Steagall] wouldn't have prevented the financial crisis . . . [I]t's an easy issue for the public to understand . . . you can build public attention behind it."6 This is typical of many of the arguments for reinstating Glass-Steagall. It is somehow taken as obvious that repealing the Glass-Steagall caused the financial crisis and that bringing it back would prevent any future crises. But such arguments do not rest on any factual basis, such as an examination of which banks collapsed during previous crises and why. Even banks' growth is blamed on the repeal of the Glass-Steagall Act, when, in fact, barriers to merging with or acquiring banks in other states were removed by the Riegle-Neal Act of 1994, which led to a rapid increase in interstate banking before the GLBA became law in 1999.

However, there is a broader point to be made here, and doing so will form the basis of this Policy Analysis: in reality, Glass-Steagall was largely irrelevant in the first place. It was never an effective way of protecting banks from failure or the public from losses. It would not have prevented the banking crises of the 1920s and 1930s had it been in force earlier, and it would not have prevented the 2008 financial crisis had it remained in force after 1999. The causes of both episodes lie elsewhere. What's more, several of Glass-Steagall's key provisions, which prevent commercial banks from dealing in or underwriting securities, remain law to this day. The GLBA did not, as its critics suggest, usher in a complete free-for-all.

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# WHAT EXACTLY DID THE GLASS-STEAGALL ACT PROSCRIBE?

Between 1929 and 1932, 5,795 U.S. banks failed. A further 4,000 would fail in 1933 alone. And as Franklin D. Roosevelt assumed the presidency of the United States on March 4, 1933, bank deposits were being withdrawn at an alarming rate. Two days later, on March 6, Roosevelt declared a four-day bank holiday, which closed down the entire banking system. On March 9, the Emergency Banking Act of 1933 was introduced during a special session of Congress. The legislation passed the House and the Senate the same day. Among other things, it provided for the reopening of the banks as soon as examiners found them to be financially secure. Coupled with Roosevelt's "fireside chat," the Emergency Banking Act helped to restore a modicum of confidence in the banking system. Accordingly, banks reopened on March 13, 1933; by the end of the month, customers had returned about two-thirds of the cash they had previously withdrawn.

Confidence in the banking system was not completely restored, however, and this created an opportunity for Sen. Carter Glass (D-VA) to reintroduce a bill he had originally proposed in 1932, this time with the support of Rep. Henry Steagall (D-AL), the chairman of the House Banking and Currency Committee. The legislation was designed to "provide for the safer and more effective use of the assets of banks, to regulate interbank control, to prevent the undue diversion of funds into speculative operations and for other purposes." Steagall had agreed to sponsor the bill after Glass added an amendment establishing the FDIC. Thus, the Banking Act of 1933, now better known as the Glass-Steagall Act, was passed by the House of Representatives on May 23, 1933, and by the Senate on May 25, 1933. Glass himself believed the "main purpose of the bill . . . was to prevent the use of Federal Reserve banking facilities for stock gambling purposes." It is the provisions of the act designed to achieve this purpose that are most relevant to the contemporary discussion of Glass-Steagall.

Section 16 of the act granted to banks the

powers necessary to carry on the business of banking, such as discounting and negotiating bills of exchange, receiving deposits, and lending. Significantly, this is the section of the legislation that specifically limited banks to purchasing and selling securities for customers and largely prohibited them from dealing in or underwriting securities on their own account. Section 16 of Glass-Steagall also imposed limits on the "investment securities" a bank could hold on its own account from any one issuer of bankineligible securities. That category included bonds, notes, debentures, and other securities identified by the comptroller of the currency. It is important to note, however, that Section 16 of Glass-Steagall still allowed banks to purchase, deal in, and underwrite U.S. government bonds, the general obligations of states and municipalities, and securities issued by government-sponsored enterprises Fannie Mae and Freddie Mac. No quantitative limits were imposed on these bank eligible securities.

Section 20 and Section 32 of Glass-Steagall further prevented banks from being affiliated with any company that was principally or primarily engaged in underwriting or dealing in securities. Section 21, meanwhile, prevented securities firms from taking deposits.

"Underwriting" refers here to taking on the risk that an issue of securities may not be fully sold to investors; "dealing," in this context, refers to holding securities for trading purposes. Although investment banks are occasionally referred to as "broker-dealers," there is an important distinction between those activities. A broker facilitates the transaction between two parties, as when a real estate agent arranges a sale between the buyer and the seller. A dealer, in contrast, will usually hold the securities on its balance sheet, just as a supermarket would stock its shelves. The risk of these activities can be substantially different. And most simply, a bank may hold securities as an investment with no intention to sell but rather to hold to the security's maturity.

Glass-Steagall did not prevent banks from purchasing and selling securities for their own investment purposes; moreover, banks could buy and sell whole loans. When securitization was subsequently introduced, the terms of Glass-Steagall allowed banks to securitize their loans and sell them in that form, but they were not allowed to underwrite or deal in mortgage-backed securities (MBS). Banks could nevertheless buy MBS as investments and sell them whenever it suited their investment strategy, or when they required cash.

# WHAT WAS THE RATIONALE FOR GLASS-STEAGALL?

In 1931, Glass chaired a series of hearings on the "Operation of the National and Federal Reserve Banking Systems" before his Subcommittee on Banking and the Currency. Glass's report on these subcommittee hearings prefaced and formed the basis of both his 1932 banking reform bill—which passed in the Senate but failed to make it through the House before the 1932 election—and the Glass-Steagall Act of 1933. It is easy to understand the premise behind Glass's legislative efforts from that report. "National banks," Glass wrote, "were never intended to undertake investment banking business on such a large scale." Moreover, the

overdevelopment of security loans, and the dangerous use of the resources of bank depositors for the purpose of making speculative profits and incurring the danger of hazardous losses, has been furnished by perversions of the national banking and State banking laws, and that, as a result, machinery has been created which tends towards danger in several directions. The greatest of such dangers is seen in the growth of "bank affiliates," which devote themselves in many cases to perilous underwriting operations, stock speculation, and with maintaining a market for the banks' own stock often largely with the resources of the parent bank.<sup>7</sup>

Glass noted that the years after 1925 were characterized by great inflation of bank credit through the large loans and investments made by banks with substantial surplus reserves. Much of this credit was used to purchase securities.<sup>8</sup> From 1924 onward, bank failures began to increase rapidly, breaking down community business structures and encouraging "local hoarding." Ultimately, this process culminated in the general breakdown of 1929. Glass regarded the 1929 stock market crash as an "accompaniment or symptom of unsound credit and banking conditions themselves," rather than their cause. He also drew attention to the immense increase in real estate mortgages and bonds, which added a further "element of great difficulty," when prices and rents began to fall. His report, despite references to mortgages and real estate bonds, focused on the excessive use of bank credit in making loans for speculation in securities and bank affiliates, engaging in stock speculation, and maintaining a market for the bank's own stock with the resources of the parent bank.9 This was also the focus of Glass-Steagall.

Two other factors bolstered Glass's determination to prevent "the diversion of funds into speculative operations." First, earlier in his political career, he had played a major role in the creation of the Federal Reserve System. As a member of the House of Representatives, he had sponsored the Federal Reserve Act of 1913, which established the United States' central bank. Later, in the Senate, he was the prime mover behind the Banking Act of 1932, which gave the Federal Reserve the ability to lend to members on a wider range of assets and allowed U.S. government securities to be used on a temporary basis as collateral, in addition to gold and commercial paper (that is, unsecured, short-term corporate debt). In this context, it is not surprising that Glass was set on ensuring that member banks of the Federal Reserve System could not draw on that institution's resources to make speculative loans.

This goal was compounded by his adherence to the "Real Bills Doctrine," a monetary theory according to which the central bank should provide just as much money and credit as is needed to accommodate the legitimate needs of commerce, but not so much as to finance speculative activity. This doctrine long predated the foundSenator Glass was set on ensuring that member banks of the Federal Reserve System could not draw on that institution's resources to make speculative loans.

There is no evidence that the banks with securities affiliates were more likely to fail.

ing of the Federal Reserve and was enshrined as a key concept in that institution's founding legislation. The idea was that so long as central banks only issued money against short-term commercial bills arising from real transactions in goods and services, such issuance will not be inflationary, since the demand for money is inherently limited by the needs of commercial trade.

Accordingly, the Federal Reserve Act provided for the extension of reserve bank credit, mainly to member banks, through the Federal Reserve Board's rediscounting of eligible (shortterm, self-liquidating) commercial paper presented to it by member banks. In its Tenth Annual Report, the Federal Reserve stated: "It is the belief of the Board that there is little danger that the credit created and distributed by the Federal Reserve Banks will be in excessive volume if restricted to productive uses."10 The Board further made it clear that "productive uses" meant loans to finance the production and marketing of actual goods. Credit would be automatically adjusted to the needs of trade if banks invested in commercial and industrial loans and avoided loans for investment in stocks.

This doctrine, which many economists have subsequently blamed, at least in part, for the U.S. monetary policy that fueled the Great Depression,<sup>II</sup> was a significant driving force behind Glass-Steagall.

# WAS GLASS-STEAGALL AN APPROPRIATE RESPONSE TO THE BANKING CRISES OF THE 1920S AND 1930S?

We have already seen that Glass based his legislation on the Senate subcommittee hearings he chaired in 1931. However, some have argued that the dramatic language and assertions made in his report on those hearings were simply not supported by the evidence that had been adduced. Rutgers University economist Eugene White's analysis, for example, shows that not only was there no evidence for Glass's conclusions, but also that the evidence directly contradicted his claims. For example, from 1930 to 1933, banks engaged in commercial *and* investment bank-

ing had lower failure rates.<sup>12</sup> While 26 percent of all national banks failed, only 6.5 percent of the 62 banks with securities affiliates went the same way. For the 145 banks with large bond operations, the figure was only 7.6 percent. This is partially explained by the fact that the typical commercial bank involved in investment banking was larger than average, and therefore had all the opportunities for diversification and economies of scale that the small banks lacked. Overall, there is no evidence that the banks with securities affiliates were more likely to fail than the thousands of small banks that failed throughout the 1920s and 1930s.

Glass's hearings did point out the structural fragility of the American banking system. On June 30, 1920, there were 28,885 banks in operation, of which two-thirds were in small rural communities with populations of less than 2,500. They were generally "unit banks." Bank branching was severely restricted at the state level, both by laws preventing banks chartered in one state from operating in the territory of another, and, in some cases, by rules that limited branching within states. Branching by national banks was at first constrained by administrative actions that generally limited national banks to one branch. The McFadden Act of 1927 liberalized this to some extent by allowing national banks to operate branches in their home state, subject to the branching laws applicable to state banks in that particular state. By 1931 there were 3,467 branches; by 1938 there were 3,607.13 However, full nationwide branching was not finally permitted until 1994. As a result, banks were often forced to be small and to have an undiversified loan portfolio tied to the local economy of a single state, or even a specific region within that state.

Between 1921 and 1930, 6,171 banks failed. Of these, 827 were national banks, 230 were state banks belonging to the Federal Reserve System, and 5,114 were state banks outside the Federal Reserve System. Bank failures often reflected regional agricultural crop failures, followed by a fall in real estate values in those areas. <sup>14</sup> A further 9,096 banks failed between 1930 and 1933. The majority of these were small banks that were unable to diversify loan risk in

the agricultural towns on which they depended. In some cases, these banks faced growing competition from larger, city-based competitors, which were increasingly easily accessible from surrounding small towns. Bad loans led to many bank failures during the 1920s. Those that survived were often burdened with poorly performing loans (usually mortgages) and were dependent for their future solvency on economic conditions improving. Unfortunately for them, conditions became worse.

During Glass's Senate subcommittee hearings, New York Federal Reserve Governor George L. Harrison pointed out that the Canadian banking system consisted of 18 nationally chartered banks, operating a total of 4,676 branches in 1920. The agricultural regions of Canada faced the same problems as those south of the border, but only one bank had failed there; the rest had reduced their branch network by 13.2 percent. Canada made it through the Great Depression without any further bank failures, even though exports of raw materials, such as wheat and wood pulp, plunged as prices fell. Between 1929 and 1939, Canadian gross domestic product fell by 40 percent, yet its banking system survived pretty well intact. Nationwide branching allowed banks to handle any local runs while still maintaining only negligible excess reserves. They were in a structurally stronger position to survive any potential financial crises. There was for a time enthusiasm for reforming the U.S. banking system along Canadian lines. But strong political support for small, local banks meant that such reforms never occurred. With the Glass-Steagall Act of 1933, U.S. banking policy went in a different direction.

Harrison had also raised the issue of increased deposits in banks engaged in commercial—as opposed to savings or thrift—banking. Such growth was principally in time deposits, such as savings accounts, because many states did not require banks to carry any reserves against them. Even under the Federal Reserve Act, banks had to carry only 3 percent reserves against time deposits, compared with 7, 10, or 13 percent (depending on the bank's location) against demand deposits, such as checking accounts. Glass questioned

the adequacy of these reserve requirements, not least because they had been substantially reduced since the passage of the Federal Reserve Act in 1913. Harrison responded that the Federal Reserve was considering the current reserve requirements, and that while no conclusion had been reached, it was his personal opinion that the same level of reserves should apply to both time and demand deposits. As to Glass's frequent questions about loans on equities, Harrison stressed that raising loans on equities or corporate bonds was a perfectly legitimate form of financing and that such loans were not necessarily speculative. As Harrison put it, "if someone in the Reserve in his judgement thinks that [loans] are going up too rapidly, shall he use the threat of refusing a loan on legally eligible paper to restrain that one particular kind of business which in itself is not prohibited by law?" Glass, in turn, pointed out that the "intent [of the Federal Reserve Act] was clearly to . . . keep out of the Federal reserve banks loans which were made for speculative purposes."15

What these exchanges show is that the hearings held by Glass's subcommittee exposed many weaknesses in the U.S. banking system that were not subsequently addressed by Glass-Steagall. Had banking reforms addressed those weaknesses, they would have greatly strengthened the system and made it more efficient. Harrison summed it up as follows:

A bank today perfectly properly and legally . . . does a commercial banking business, a savings bank business, a trust company business, a securities business and even an issue-house business. . . . I do not see now that it would be wise to destroy that system even if it were possible, because the American businessman, who is in a great rush always, finds great service in going to a banking institution and (finding) . . . that all these things can be well done under one roof to the convenience of the customer. <sup>16</sup>

Destroying that system is, however, precisely what the Glass-Steagall Act set out to do. The

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evidence provided in the hearings over which Glass presided did not support the contention underlying the Glass-Steagall Act that bank loans for speculation led to the large number of bank failures before and during the Great Depression. Rather, the banking system was itself fragile. Thousands of unit banks failed because they were totally dependent on the economic well-being of the (predominantly) agricultural areas in which they were situated. However difficult it may have been to implement Harrison's analysis at the time of the hearings, doing so would have left post-Depression America with a stronger and more efficient banking system.

Instead, given that Glass-Steagall rested on a misdiagnosis of the ills of the banking sector, its decades-long separation of commercial and investment banking in the United States did nothing to remove the risk of bank failures. It is curious, looking back, that the evidence presented to Glass's 1931 subcommittee about the deficiencies of small, undiversified unit banks did not merit attention or legislation. Addressing these issues would have done so much more to protect depositors—and to stabilize the U.S. financial system—than the separation of commercial and investment banking.

The collapse of so many banks during the 1920s and 1930s left many small towns in agricultural areas without any banks at all. The lack of credit this entailed made the suffering caused by the Depression even worse. It must have looked as though the days of the unit banks were over. By the end of 1935, 13 of the 27 states that had prohibited branching entirely in 1930 repealed their prohibitions; 7 of those states passed laws allowing state-wide branching. Yet Glass-Steagall actually militated against this positive development by reaffirming the restrictions placed on national bank branching by the McFadden Act of 1927. This error was compounded by the introduction of deposit insurance, which weakened the impetus toward branch banking. As a result, Glass-Steagall can be said to have helped preserve the unit banking model in the United States, against all evidence and common sense. As late as 1979, just 21 states allowed state-wide branching, while 12 states continued to prohibit

branching altogether.<sup>17</sup> Inevitably, this raised the costs of banking, since it reduced competition over the cost of credit and its availability and thus reduced social mobility.<sup>18</sup>

For better or worse—and probably for worse—Glass-Steagall set the structure of the U.S. banking system for decades to come. The legislation left the United States with a fragile and expensive system of unit banks. This system was unusual in international terms for its rejection of universal banking, which would, in Harrison's words, have been better suited to the "American businessman," or indeed the customer, "who is always in a hurry."

There was a reduction in bank runs after Glass-Steagall passed, but it is hard to give the separation of investment and retail banking much credit for that development. The establishment of the FDIC likely did far more to convince depositors it was safe to leave their money in the bank.

# THE EROSION OF THE GLASS-STEAGALL ACT

Glass-Steagall was subject to a series of changes prior to its eventual repeal in 1999. Some of these changes resulted from the economic challenges of the 1960s and 1970s. For example, Regulation Q imposed interest rate caps on a variety of bank deposits, in accordance with Section 11 of Glass-Steagall. The inflation of the 1970s led market interest rates to rise above those statutory caps, and they were eventually abolished in March 1986. In the meantime, however, consumers turned away from saving through bank deposits and toward interest-bearing accounts and investment products offered by securities firms, such as money market funds. Corporate customers began to rely more on the commercial paper market and less on depository banks, which increasingly struggled to attract savings and saw the profitability of their traditional bank products fall.<sup>19</sup>

Other factors for change included rapid technological advances and globalization, particularly in the 1970s and 1980s. These changes greatly reduced the costs of using data from one

business to benefit another. In turn, these cost reductions increased the expected profitability of cross-selling insurance and securities products to both household and business customers. As these practices slowly gathered pace, it was seen that the risks to banks engaged in such practices had not substantially increased. As the process of globalization continued, it became clear those countries that had long practiced universal banking did not face any of the problems that Glass-Steagall had sought to prevent with its separation of commercial and investment banking. American banks operating in the United Kingdom and in continental Europe operated in the same way as other banks in those jurisdictions and did not suffer any adverse consequences.

Some statutory changes took place in the 1970s. These included the Federal Financing Bank Act of 1973, which made Fannie Mae securities bank eligible and the Housing and Community Development Act of 1974, which did the same for Freddie Mac securities. As such, these securities became exempt from the prohibition on commercial banks dealing in, underwriting, or holding securities, even though they were not guaranteed by the government. The Office of the Comptroller of the Currency (OCC) and the Federal Reserve, using its powers to interpret the "closely related" provision of the Bank Holding Company Act of 1956, gradually allowed commercial banks to engage in an increasing number of activities that resembled traditional securities products and services.

The 1971 Supreme Court decision concerning *Investment Company Institute v. Camp* was the key step in a gradual erosion of Glass-Steagall. The Investment Company Institute was an association of open-ended investment companies. Several of these companies argued that the OCC had approved First National City Bank's decision to operate a pooled investment fund and that this product was very much like an open-end mutual fund in Regulation 9.<sup>20</sup> Moreover, the pooled investment fund brought together two traditional banking services: it acted as a management agent for

clients, and it pooled trust funds. The plaintiffs argued that the "operation of a collective investment fund of the kind approved by the Comptroller, that is in direct competition with the mutual fund industry, involves a bank in the underwriting, issuing, selling and distributing securities in violation of Sections 16 and 21 of the Glass Steagall Act."

The Court concluded that

it is settled that courts should give great weight to any reasonable construction of a regulatory statute adopted by the agency charged with the enforcement of that statute. The Comptroller of the Currency is charged with the enforcement of banking laws to an extent that warrants the invocation of this principle with respect to his deliberative conclusions as to the meaning of these laws.<sup>21</sup>

The Court went on to hold that the "Comptroller should not grant new authority to national banks until he is satisfied that the exercise of that authority will not violate the intent of banking laws."22 The Court also reiterated its belief that Congress had concluded that "more subtle hazards" existed when a bank entered into the investment banking business. These included the effect of losses in the investment affiliate on the commercial bank itself: the pressure to sell may lead a bank to make its credit facilities more freely available to those companies in whose stock it had invested or even make unsound loans to such companies. This possible conflict between promoting the investment affiliate and the obligation of the bank to give disinterested investment advice also concerned Congress, in the opinion of the Supreme Court.<sup>23</sup>

Four years later, in his testimony before the Senate Committee on Banking, Housing, and Urban Affairs, the Comptroller of the Currency, William Camp, criticized the Supreme Court's analysis as an "attempt to apply a legislative remedy which was fashioned with certain specific abuses committed at a certain period in history to a different service being carried out at a different historical period." American banks in Europe operated in the same way as other banks in those jurisdictions and did not suffer any adverse consequences.

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He also noted the irony that the law permitted banks to offer investment services to the wealthy through their trust departments but prevented the general public from obtaining similar services. <sup>24</sup> Two years later, the Federal Reserve Board revised Regulation Y so that bank holding companies (BHCs) were allowed to engage in a range of nonbanking activities. <sup>25</sup> BHC subsidiaries were allowed to act as investment advisers to registered investment companies and were allowed to provide leasing, courier, and management consulting services as well as certain kinds of insurance. <sup>26</sup>

After the *Camp* decision, the OCC began to respond to requests from banks concerning whether certain activities were part of the "business of banking" under Section 16 of Glass-Steagall. For example, in Letter 494, the OCC stated that the "business of banking . . . comprised of all those powers which are recognized features of that business."<sup>27</sup> The OCC took the view that the execution and clearance of customer transactions in financial instruments—such as securities, futures, and options—were part of the business of banking and therefore permissible whatever the underlying asset.

The OCC also issued many interpretive letters following the Supreme Court's 1995 decision in *Nations Bank of North Carolina v. Variable Annuity Life Insurance Co* (VALIC). In this case, the Court decided that the business of banking "is not limited to the enumerated powers in § 24 seventh, and that the Comptroller therefore has discretion to authorize activities beyond those specifically enumerated. The exercise of the Comptroller's discretion . . . must be kept within reasonable bounds." The OCC concluded that

Judicial cases affirming the OCC interpretations establish that an activity is within the scope of this authority if the activity is (i) functionally equivalent to or a logical outgrowth of a traditional banking activity; (ii) will respond to customer needs or otherwise benefit the bank or its customers; and (iii) involves risks similar to those already assumed by banks.<sup>28</sup>

One of the criteria applied by the OCC involved "looking through" the nature of the activity to the underlying asset, which led to the OCC approving banks' trading and dealing activities in derivatives linked to interest rates, currency exchange rates, and certain precious metals. For example, in 1983, the OCC authorized a national bank to purchase and sell for its own account exchange-traded options. In 1987-88, Interpretative Letter 414 allowed an operating subsidiary of a national bank to buy and sell foreign exchange in forward markets, as well as over-the-counter options in foreign exchange markets for the purpose of hedging and arbitrage. Similar letters, numbered 553 (1990-91) and 685 (1994-95) allowed a national bank's subsidiary to engage in the brokerage of precious metals, as part of the express power to trade in "coin and bullion."

Commodity swaps were the first kind of derivatives authorized by the OCC, following a proposal by Chase Manhattan Bank that they be allowed to undertake perfectly matched commodity price index swaps. The OCC approved this request because it was incidental to the express power of national banks to lend money and was therefore part of the general business of banking as a form of funds intermediation. Such transactions would not involve market risk; rather, they only exposed the bank to counterparties' credit risk, which was similar to the credit risk involved in lending.<sup>29</sup> Later, in 1990–92, the OCC allowed unmatched swaps, arguing that a

swap contract in which payments are based on commodity prices instead of interest rates or currency exchange rates fits with the powers of national banks because it is simply a way of tailoring traditional intermediation services of commercial banks to meet the needs of bank customers.

The program merely had to be conducted in a "safe and sound manner" and be subject to the same controls as interest rate derivatives.<sup>30</sup>

The underlying argument for permitting these activities within the Glass-Steagall

framework was the OCC's wider concept of banking as "financial intermediation," involving exchanges of payments between banks and their customers. The OCC developed this idea more fully after 1995. After being allowed to conduct commodity-based swaps, banks requested permission to engage in equity swaps and equity index swaps. These were allowed on the basis that all swaps were essentially "payments that (are) analogous to those made and received in connection with a national bank's express powers to accept deposits and loan money."31 The OCC argued, in conclusion, that "since national banks are exercising . . . statutory powers related to deposit taking, lending and funds intermediation when engaging in equity derivative swap activities, the prohibitions of Glass-Steagall are inapplicable."32

In coming to this decision, the OCC focused on credit risk, but it is arguable that banks engaged in these activities would also be exposed to market risk, owing to market price fluctuations in the derivative and the underlying asset, since the banks in question would be acting as principals in both commodity- and equity-based derivatives contracts. That being said, market price fluctuations also affect bank loans, although the risks involved in derivatives may be more difficult to discern since the focus tends to be on the contract and not the underlying asset.<sup>33</sup>

Throughout the 1980s, the OCC gave its approval to banks and their operating subsidiaries to join security and commodity exchanges, <sup>34</sup> act as discount brokers, <sup>35</sup> offer investment advice, <sup>36</sup> and manage individual retirement accounts. <sup>37</sup> They were also permitted to undertake private offerings of securities, <sup>38</sup> lend securities, <sup>39</sup> and underwrite, deal in, and hold general obligation municipal bonds. <sup>40</sup>

Similarly, the Federal Reserve approved applications by banks to expand their activities when, in the Federal Reserve's view, such an expansion would provide public benefits. In such cases, the Federal Reserve would add the activity or activities in question "to the list of activities that it has determined by regulation to be so closely related to banking or managing or controlling banks as to be a proper incident

thereto."<sup>4I</sup> One example of this was the Federal Reserve's acceptance of United Bancorp's application to form United Bancorp Municipals *de novo*, in order to engage in underwriting and dealing in certain government securities.

At the request of BHCs, the Federal Reserve also provided guidance on when a company would be considered to be "engaged principally" in securities business under Section 20 of Glass-Steagall. BHCs were generally only allowed to engage in investment banking activities through separately capitalized subsidiaries, which became known as "Section 20 subsidiaries." Their bank-ineligible securities could not exceed a certain percentage of the BHC's gross revenue—a limit that the Federal Reserve initially set at between 5 and 10 percent of the revenue of the company.

In the spring of 1987 the Federal Reserve Board voted 3-2 in support of easing these regulations, despite opposition from Paul Volcker, the then-chairman. The Federal Reserve "concluded that subsidiaries would not be engaged substantially in bank ineligible activities if not more than 5-10 percent of their total gross revenues was derived from such activities over a two-year period, and if the activities in connection with each type of bank ineligible security did not constitute more than 5-10 percent of the market for that particular type of security."42 By 1999 the Federal Reserve had approved applications allowing at least 41 Section 20 subsidiaries. The Federal Reserve authorized these companies to underwrite and deal in bank-ineligible securities, 43 including municipal bonds, commercial paper, mortgagebacked securities, and other consumer-related securities, as well as corporate debt securities and corporate equity securities.<sup>44</sup>

Between 1996 and 1997, the sum of the Federal Reserve's decisions effectively overruled Section 20 of Glass-Steagall. In December 1996, with the support of then-chairman Alan Greenspan, the Federal Reserve allowed the nonbank subsidiary of a BHC to obtain up to 25 percent of its revenue from underwriting and dealing in securities that a member bank may not underwrite or deal in, effective March 1997. The experience

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it had gained through the supervision of Section 20 subsidiaries over a period of nine years led the Federal Reserve to conclude that the 10 percent limit unduly restricted the underwriting and dealing activity of the Section 20 subsidiaries. The Federal Reserve decided that a "company earning 25% or less of its revenue from underwriting and dealing would not be engaged 'principally' in that activity for the purposes of Section 20."45 In August 1997 the Federal Reserve further argued that the risks of underwriting had been proved to be manageable and that banks should have the right to acquire securities firms. In 1997 Bankers Trust (then owned by Deutsche Bank) bought the investment bank Alex Brown & Co., thus becoming the first U.S. bank to acquire a securities firm.

Further changes occurred in 1996 when the Federal Reserve relaxed three firewalls between securities affiliates and their banks. Officers and directors could subsequently work for both the Section 20 subsidiary and the bank, provided that the directors of one did not exceed over 49 percent of the board of the other.<sup>46</sup> The CEO of the bank was not allowed to be a director, officer, or employee of the securities affiliate, and vice versa. Restrictions on cross-marketing between the bank and its Section 20 subsidiary were repealed, and permissible intercompany transactions between a Section 20 and its affiliate were expanded to include any assets that have a readily identifiable and publicly available market quotation.

This outline of the most significant, incremental changes to the operation of Glass-Steagall has been provided to dispel the notion that the act was abruptly repealed without any thought being given to the safety and soundness of the banking sector. This brief history of Glass-Steagall in action also shows that the act always allowed banks to underwrite and deal in certain classes of assets, while still preventing them from being affiliated with any organization engaged "principally" in underwriting and dealing in securities. The next section of this analysis will explore the extent to which the provisions of Glass-Steagall were actually repealed in 1999.

# THE GRAMM-LEACH-BLILEY ACT OF 1999

The opening sections of the GLBA, also known as the Financial Services Modernization Act, make it clear that only Sections 20 and 32 of Glass-Steagall were being repealed. Section 20, remember, stated that national and state-chartered banks within the Federal Reserve System were not allowed to be affiliated with a business that was "engaged principally" in underwriting and dealing in securities. That section did not give a clear indication of the degree of integration that would be permissible under its terms. The section did, however, state clearly that a bank was not allowed to hold majority ownership or a controlling stake in a securities firm. <sup>47</sup>

Section 32 prohibited those same banks from having interlocking directorships with a firm principally engaged in underwriting, dealing in, or distributing securities. An officer, director, or manager of a bank could not also be a director, officer, or manager of a securities firm. In addition, a member bank could not provide correspondent banking services to a securities firm or accept deposits from such a company, unless the bank had received a permit from the Federal Reserve, which would only be issued if it were deemed to be in the public interest.<sup>48</sup> Similarly, a securities firm was prohibited from holding on deposit funds from a member bank. These two sections of the Glass-Steagall Act were repealed.

As a result, the GLBA allowed for affiliations between commercial banks and firms engaged principally in securities underwriting, as well as interlocking management and employee relationships between banks and securities firms. Under the GLBA, banks are still not able to offer a full range of securities products, and securities firms still cannot take deposits. The GLBA authorized securities activities in two types of BHC affiliates: nonbank securities firms and financial subsidiaries of banks. Under the GLBA, wider activities could be carried out though a new form of BHC known as a financial holding company, which could include securities and insurance subsidiaries as well as bank subsidiaries

and the various types of nonbanking firms that had already been permitted under the Bank Holding Company Act of 1956.<sup>49</sup> The GLBA also authorized both national and state-chartered banks to form financial subsidiaries to conduct a wide range of activities, including certain securities and insurance activities, without having to be part of a holding company structure. Nevertheless, a bank's investment in a securities subsidiary cannot be recorded as an asset on its balance sheet. Such investments are effectively written off as soon as they are made.<sup>50</sup>

Crucially, Sections 16 and 21 of Glass-Steagall were not repealed. Section 16 prohibits banks from underwriting or dealing in securities or engaging in proprietary trading activities with regard to most debt and equity securities.<sup>51</sup> Section 21 prohibits the acceptance of deposits by broker-dealers and other nonbanks. These prohibitions also apply to banks affiliated with broker-dealers through a financial holding company structure, so that while a wide range of financial services can be offered through a single affiliated financial holding company, individual subsidiaries cannot offer universal banking services.<sup>52</sup>

It is important to note, however, that the restrictions contained in Sections 16 and 21 did not and do not apply to U.S. government debt, the general obligations bonds of states and municipalities, or bonds issued by Fannie Mae and Freddie Mac. Glass-Steagall allowed banks to underwrite or deal in these securities. It also allowed banks to buy and sell whole loans; then, when securitization was developed, banks were also permitted, under Glass-Steagall, to buy and sell securities based on assets such as mortgages, which they could otherwise hold as whole loans. Banks were not allowed to underwrite or deal in MBS, but they could buy them as investments and sell them when they required cash. None of these things were relaxations introduced by the GLBA. On the contrary, they had long been part of Glass-Steagall itself.

The GLBA also left intact Sections 23A and 23B of the Federal Reserve Act, which restrict and limit the transactions between affiliates in

a single financial holding company conglomerate. Section 23A limits financial and other transactions between a bank and its holding company, or any of that BHC's subsidiaries. It also specifically limits extensions, guarantees, or letters of credit from a bank to affiliates within the same holding company to 10 percent of the bank's capital and surplus for any particular affiliate, and 20 percent of the bank's capital and surplus for all affiliates in total. Any such lending to affiliates within the conglomerate has to be backed by U.S. government securities up to the value of the loan; if other types of marketable securities are used as collateral, the loan must be over-collateralized. All transactions between a bank and its subsidiaries must be on the same terms as the bank would offer to a third party. Banks cannot purchase low-quality assets from their affiliates, such as bonds with principal and interest payments past due for more than 30 days. All of these restrictions are applied by the Comptroller of the Currency to a national bank's relationship with a securities subsidiary.

Section 23B of the Federal Reserve Act, meanwhile, requires that transactions between a bank and affiliates within the same BHC, including all secured transactions, must be on market terms and conditions. This applies to (a) any sales of assets by a bank to an affiliate; (b) any payment or provision of services by a bank to an affiliate; (c) any transaction in which an affiliate acts as agent or broker for a bank; (d) any transaction by a bank with a third party if an affiliate has a financial interest in that third party; and (e) instances in which an affiliate is a participant in the transaction in question. If there are no comparable transactions for identifying market terms, a bank must use terms, including credit standards, that are at least as favorable to them as those that would be offered in good faith to nonaffiliated companies.

These restrictions, as contained in Sections 23A and 23B of the Federal Reserve Act, serve to ensure that only banks can take advantage of the deposit insurance safety net and the Federal Reserve's discount window; such financial support is not available to a bank's

The Gramm-Leach-Bliley Act authorized both national and state-chartered banks to form financial subsidiaries to conduct a wide range of activities.

Those who see a simple solution to our contemporary financial woes in reimposing Glass-Steagall only betray their misunderstanding of the legislation.

holding company or its nonbanking affiliates.<sup>53</sup> Once again, the GLBA had no impact on these provisions.

What's more, all of the restrictions on the kind of securities in which banks could deal under Glass-Steagall remained in place after the GLBA. The OCC divides securities into five basic types. Banks can only underwrite, deal, or invest in Types I and II on their own account. These have to be "marketable debt obligations," which are "not predominantly speculative in nature" or else are rated investment grade. Examples include government debt obligations, various federal agency bonds, county and municipal issues, special revenue bonds, industrial revenue bonds, and certain corporate debt securities. Permissible Type II securities include obligations issued by a state or a political subdivision or agency of that state, which do not otherwise meet Type I requirements. The obligations of international and multilateral development banks and organizations are also permissible, subject to a limitation per obligor of 10 percent of the bank's capital and surplus.<sup>54</sup> The OCC places limits on the size of bank holdings in Types III, IV, and V securities, which include corporate bonds, municipal bonds, small business-related securities of investment grade, and securities related to residential and commercial mortgages. Banks can buy or sell securities in these categories, just as they can buy and sell whole loans; however, they cannot deal in or underwrite such securities.

To summarize, then, banks could not under Glass-Steagall and cannot under the GLBA underwrite or deal in securities outside of certain carefully defined categories. Those who see a simple solution to our contemporary financial woes in repealing the GLBA and reimposing Glass-Steagall only betray their misunderstanding of both pieces of legislation.

# THE FINANCIAL CRISIS AND THE GREAT RECESSION

If Glass-Steagall had remained in force in its entirety, would it have done anything to prevent the financial crisis and the subsequent recession? The simple answer is that it would not. Indeed, Glass-Steagall would have been irrelevant, since an examination of the causes of the crisis shows that the fault lay entirely elsewhere.

First, the investment banks that failed were stand-alone investment banks. The collapse of two Bear Stearns hedge funds in June 2007, after months of growing instability in the subprime market, exposed serious problems at that bank.55 A few months later, after the collapse of other hedge funds, Bear Stearns stock fell sharply following Moody's downgrade of its mortgage bond holdings. In March, it was acquired by JP Morgan with the support of a \$30 billion loan from the Federal Reserve. In September of that year, Lehman Brothers collapsed, as the overvaluation of its commercial and residential mortgages, its disregard of its own risk management policies, its excessive leverage, and its accounting irregularities were exposed. This time the Federal Reserve did not ride to the rescue. Lehman Brothers' collapse was a shock to the financial system that rippled around the world, sparking a global credit crunch.<sup>56</sup> But it was not links with commercial banks that caused these investment banks to fail. On the contrary, the immediate cause of the crisis can be seen more clearly by looking at why so many commercial banks failed themselves.

The number of failures of FDIC-insured banks increased as the financial crisis went on: 25 in 2008, 140 in 2009, 157 in 2010, 92 in 2011, and 51 in 2012—a total of 465 altogether. Between January 2008 and December 2011, 75 percent of these failures (313 out of 414) were at small institutions with less than \$1 billion in assets. The Government Accountability Office's report shows that these small bank failures were largely driven by credit losses on commercial real estate loans, especially those secured on real estate to finance land development and construction.<sup>57</sup> In addition, many of the failed banks had pursued aggressive growth strategies using nontraditional, riskier funding sources, such as brokered deposits—that is, large-denomination deposits that are sold by a bank to a middleman (broker), and then sold

on by the broker to its customers; alternatively, the broker may first gather funds from various investors and then place them in insured deposit accounts. Failed banks had also shown weak underwriting and credit administrative practices.

It is worth focusing on the two largest bank failures and examining their causes. The first was IndyMac, with assets of \$32 billion in July 2008, followed by Washington Mutual, with assets of \$307 billion in September 2008. In each case, the analysis provided by the Office of the Inspector General provides useful and relevant insights, showing that it was primarily ill-considered lending that led to these banks' failures.

IndyMac had metamorphosed from a real estate investment trust into a savings and loan association in 2000, and from the start had pursued an aggressive growth strategy. From mid-2000 to the first quarter of 2008, its assets increased from nearly \$5 billion to over \$30 billion. The bank originated or bought loans, securitized them, and sold them to other banks, thrifts, or investment banks, but held the mortgageservicing rights. The value of the business peaked at \$90 billion in 2006. IndyMac concentrated on adjustable rate mortgages (ARMs), including ones in which the minimum payment did not cover the monthly interest payment; 75 percent of IndyMac's borrowers were only making the minimum payment. IndyMac also specialized in Alt-A loans, which only required the minimum documentation verifying the borrower's income-and sometimes not even that. These loans were very profitable for the company. With only 33 retail branches, IndyMac lacked deposits, and depended for its funding on secured loans from governmentsponsored Federal Home Loan Banks (which provided 34 percent of the bank's funding), as well as borrowing from the Federal Reserve and a German bank. IndyMac's loan reserves were inadequate, as was soon revealed. Crucially, IndyMac did not engage in any investment bank activity, and all of its activities would have been allowed under the original Glass-Steagall Act. Its failure was entirely due to poor business strategy.

As the Office of the Inspector General put it:

IndyMac's aggressive growth strategy, use of Alt-A and other non-traditional loan products, insufficient underwriting, credit concentrations in residential real estate in the California and Florida market, and heavy reliance on costly funds borrowed from the Federal Home Loan Bank (FHLB) and from brokered deposits, led to its demise when the mortgage market declined in 2007. . . . Ultimately, loans were made to many borrowers who simply could not afford to make their payments. . . .

When home prices declined in the latter half of 2007 and the secondary market collapsed, IndyMac was forced to hold \$10.7bn of loans it could not sell on the secondary market. Its liquidity position was made worse by the withdrawal of \$1.55bn in deposits. . . . [T]he underlying cause of the failure was the unsafe and unsound manner in which the thrift was operated.<sup>58</sup>

The examination of the federal regulatory oversight of Washington Mutual (WaMu) tells a similar story. In his summary of the causes of WaMu's failure, the inspector general blamed a "high risk lending strategy coupled with liberal underwriting standards and inadequate risk controls."59 In 2005 WaMu had turned to riskier, nontraditional loans and subprime loans, defining the latter as those where the borrower had FICO scores of less than 620. In 2006 WaMu estimated that its internal profit margin on "option ARMs"-adjustable rate mortgages that let borrowers choose their level of payment (principal and interest, interest only, or a lower, minimum payment) on a rolling basis—was more than eight times that for a government-backed loan, and nearly six times that of normal, fixed-rate 30-year loans. WaMu believed these riskier loan vehicles would enable it to compete with Countrywide Financial Corporation, then one of the largest mortgage lenders in the United States. IndyMac did not engage in any investment bank activity, and all of its activities would have been allowed under the original Glass-Steagall Act.

It was subprime mortgages, not the alleged deregulation brought about by Glass-Steagall's partial repeal, that lay at the heart of the financial crisis.

Risky loans of this sort accounted for as much as half of WaMu's loan originations between 2003 and 2007, and almost half (\$59 billion) of the home loans on its balance sheet by the end of 2007. At that time, 84 percent of the total value of option ARMs were negatively amortizing.60 In other words, the outstanding balance of those loans was rising, since borrowers were making minimum payments that did not even cover the interest charged. In addition, about 90 percent of all WaMu's home equity loans, 73 percent of its option ARMs, and 50 percent of its subprime loans were "stated income" loans-that is, WaMu did not require such borrowers to have private mortgage insurance despite high loan-to-value ratios. Like IndyMac, WaMu's residential lending was concentrated in California and Florida, states that were hit by above-average home value depreciation. WaMu's earnings began to fall in 2007, with losses reaching \$3.2 billion in the second quarter of 2008. In the days after Lehman Brothers collapsed, the bank experienced net deposit outflows of \$16.7 billion.

In summing up the reasons for WaMu's failure, the Inspector General stated that

WaMu failed because its management pursued a high-risk business strategy without adequately underwriting its loans or controlling its risks. WaMu's high-risk strategy, combined with the housing and mortgage market collapse in mid-2007, left WaMu with loan losses, borrowing capacity limitations, and a falling stock price.<sup>61</sup>

As a result, "WaMu was unable to raise capital to counter significant depositor withdrawals." The bank was closed on September 25, 2008; the FDIC subsequently sold it to JP Morgan Chase for \$1.89 billion.

These analyses of the failures of commercial banks make it clear that they were due to risky bank lending and the abandonment of essential underwriting criteria. The collapse of these banks, in other words, had nothing to do with the repeal of Glass-Steagall. Whether under that act, or under the GLBA, banks were allowed both to sell on their loans and to securitize them. In neither case could they underwrite or deal in securities, apart from various government-issued or government-backed securities, including those of Fannie Mae and Freddie Mac. It is precisely for this reason that the complaints brought against leading banks by both the Department of Justice and the Federal Housing Finance Agency do not accuse the banks of dabbling in securities. Instead, the complaints all refer to mortgage lending, the extent of subprime lending, and the MBS sold to Fannie Mae and Freddie Mac-which were frequently based on subprime loans.<sup>62</sup> Furthermore, the rapid growth in subprime lending from 1995 onward was entirely the result of political commitments to "affordable housing," and the implementation of related policies by the Department of Housing and Urban Development.<sup>63</sup> This resulted in at least 28 million subprime or weak mortgages in the financial system by 2008—over half of all outstanding mortgages. It was these mortgages, and not the alleged deregulation brought about by Glass-Steagall's partial repeal, that lay at the heart of the financial crisis.

# THE VOLCKER RULE— PREVENTING THE NEXT CRISIS?

Whatever the real causes of the financial crisis, the goal of separating investment banking from commercial banking shot up the political agenda in its aftermath. In a 2010 speech on financial reform, for example, President Obama took up an idea promoted by former Federal Reserve chairman Paul Volcker, who was at that time chairman of the President's Economic Recovery Advisory Board. Obama said:

I'm proposing a simple and commonsense reform, which we're calling the Volcker Rule. Banks will no longer be allowed to own, invest, or sponsor hedge funds, private equity funds, or proprietary trading operations for their own profit, unrelated to serving their customers. . . . These firms should not be allowed to run these hedge funds and private equities funds while running a bank backed by the American people.<sup>64</sup>

The initial statement of this "Volker Rule" seemed straightforward enough: "Unless otherwise provided in this Section, a banking entity shall not (A) engage in proprietary trading; or (B) acquire or retain any equity, partnership, or other ownership interest in, or sponsor a hedge fund or a private equity fund." However, complexities began to emerge once the key elements were introduced in, for example, OCC Bulletin 2014-9. According to this document, the final regulations would:

- Prohibit banks from engaging in shortterm proprietary trading of certain securities, derivatives commodity futures, and options on these instruments for their own accounts;
- Impose limits on banks' investments in, and other relationships with, hedge funds and private equity funds;
- Provide exemptions for certain activities, including market-making-related activities, underwriting, risk-mitigating hedging, trading in government obligations, insurance company activities, and organizing and offering hedge funds and private equity funds;
- Clarify that certain activities are not prohibited, including acting as agent, broker, or custodian;
- Scale compliance requirements based on the size of the bank and the scope of the activities. Larger banks are required to establish detailed compliance programs, and their chief executive officers must attest to the OCC that the bank's programs are reasonably designed to achieve compliance with the final regulations. Smaller banks engaged in modest activities are subject to a simplified compliance program.

Taking just one of these activities—marketmaking—as an example serves to demonstrate the difficulties involved in applying the rules. Market making occurs when a firm stands ready throughout a trading day to buy or sell a given security at a quoted price. In order to do this, the firm in question must hold a certain number of shares in that security, so as to facilitate trading. Market-making is, as a result, essential to the maintenance of liquid financial markets.

Banks are only allowed to engage in marketmaking under the Volcker Rule if the relevant trading desk is usually ready to buy and sell one or more financial instruments on its own account, in commercially reasonable amounts, and throughout market cycles. The amount, type, and risks of the financial instruments in the trading desk's market-maker inventory must be designed not to exceed the reasonably expected near-term demands of clients, customers, or counterparties based on:

- The liquidity, maturity, and depth of the market for the relevant types of financial instruments, and
- Demonstrable analysis of historic customer demand, current inventory of financial instruments, and market and other factors regarding the amount, types, and risks of or associated with the financial instruments in which the trading desk makes a market, including through block trades. 66

It gets more complicated: various transactions may be booked in different legal entities by a single trading desk, provided that the transactions are all traded and managed by a single group. The Volcker Rule is aimed at the lowest level in the organization—that is, each unit that handles trading. Market makers must show a willingness to trade on both sides of the market, taking into account other dealers and customers. How this willingness is shown depends on the characteristics of the market for the security, or an identified group or groups of financial instruments for which the firm tracks profits and losses.

According to "Attachment B," the long explanatory commentary that accompanied the

Complexities began to emerge once the key elements of the Volcker Rule were introduced.

The Volcker Rule can be seen as a kind of reinstatement of Glass-Steagall, but it is an unnecessary one.

publication of the final rule, the relevant agencies accept that allowing a trading desk to engage in customer-related interdealer trading is appropriate because it can help a trading desk to manage its inventory and risk levels in such a way that clients, customers, and counterparties have access to a larger pool of liquidity.<sup>67</sup>

This example, just one among many, makes it obvious that banks will have difficulty deciding whether any trades are compliant or not. To assist the banks, the OCC and other agencies published a series of "examination procedures" setting out how examiners would assess banks' progress in developing a framework to comply with the Volcker Rule. This was followed by a series of FAQs defining terms such as "trading desk" and explaining the "treatment of mortgage backed securities issuers sponsored by government sponsored enterprises." In its first regulatory brief for clients, financial consultancy PricewaterhouseCoopers pointed out that the concept of reasonably expected near-term demand (RENTD) is "fundamental to the Volcker Rule as it is the essential evidence needed to show that a market making desk's positions are tied to customer activity, rather than being proprietary trading." However, they continued, "capturing and analyzing the data required to calculate RENTD has become an enterprise-wide conundrum."68

Now, set that in a regulatory context in which the relevant agency only needs to have a "reasonable belief" that a bank is evading the Volcker Rule in order to bring a regulatory enforcement response-something that can "provide for a wide spectrum of interpretation when a Regulatory Agency is scrutinizing an investment or activity."69 Intent is not a factor because the "offending investment or activity only needs to function like an evasion or otherwise violate the Volcker Rule."<sup>70</sup> It is not just the complexity of this rule and its attendant definitions that make it unworkable; the costs to banks of conforming to such intricate regulation, and of fighting off antievasion accusations, are also highly problematic. Put simply, the Volcker Rule is likely to be a field day for lawyers.

Yet Volcker apparently does not see any problem in distinguishing between proprietary trading and trading for customers. In an interview with *Reuters Business*, Volcker said:

Bankers know when they are doing proprietary trading, I assure you. . . . [I]f they don't know, they shouldn't be in the business. . . . If there are big unhedged positions constantly, then it's proprietary trading. . . . Regulators should start asking questions if a bank has taken on big positions in certain markets or is holding assets for a lengthy period of time. The key questions are, Why did they buy it and why are they holding on to it for that long?<sup>71</sup>

It is fair to say that no one else sees it in quite such simple terms. The final Volcker Rule, as published in the *Federal Register* on January 31, 2014, ran to 541 pages.<sup>72</sup> The rule was accompanied by an appendix providing a further, long explanatory commentary. In addition, regulatory agencies issued hundreds of pages of supplemental guidance.

The Volcker Rule can be seen as a kind of reinstatement of Glass-Steagall, but it is an unnecessary one for two reasons. First, and as noted above, the GLBA already prevents commercial banks from underwriting and dealing in most securities—subject to a few exceptions, such as U.S. government securities. The Volcker Rule is in some ways more restrictive, since it prohibits banks from trading anything except treasuries and agencies on their own account. That rules out foreign government bonds, as well as state and local bonds. The market for those securities will likely become less liquid as a result. Nevertheless, the Volcker Rule still allows commercial banks to hedge, underwrite, and make markets so long as it is not for their own account. Second, the Volcker Rule also appears to allow BHCs and their nonbank affiliates to trade only for their customers, for the purpose of market-making, or for their own hedging transactions. This limitation is despite the fact that only commercial banks have access to either federally insured deposits or the Federal Reserve's discount window.

Ultimately, the Volcker Rule is both irrelevant and highly likely to prove unworkable in practice.

# CONCLUSION

The tragedy is that so much time and effort has been spent missing the point. More recent analyses of the causes of the Great Depression and the effect of the 1929 stock market crash suggest that bank failures then were due to the fragile nature of the banking system at the time (itself a product of regulations prohibiting branch banking), the persistence of regional crop failures, the decline in real estate values, and a general economic depression that was badly handled by policymakers (chief among them the Federal Reserve, which let the U.S. money supply collapse by a third).<sup>73</sup> Glass-Steagall could not have prevented the Depression had it been in force earlier, and it did little to address its fundamental causes subsequently.

The effect of Glass-Steagall's 1999 "repeal" has also been exaggerated. First, the restrictions contained in Glass-Steagall were always subject to some exceptions; second, those exceptions had already been enlarged by regulatory and judicial decisions over the course of several decades, well before the GLBA was passed; and third, the GLBA only repealed some elements of Glass-Steagall. The general prohibition on banks underwriting or dealing in securities remained intact.

In any case, the 2008 financial crisis had precious little to do with Glass-Steagall, one way or the other. It was caused primarily by bad lending policies, which in turn led to the growth of the subprime market to an extent that neither the lawmakers nor regulatory authorities recognized at the time. The commercial banks and parent holding companies that failed—or had to be sold to other viable financial institutions—did so because underwriting standards were abandoned. Yes, these banks acquired and held large amounts of mortgage-backed securities, which pooled subprime

and other poor quality loans. But even under Glass-Steagall, banks were allowed to buy and sell MBS because these were simply regarded as loans in a securitized form.

Yet by focusing the public's anger on "greed," "overpaid bankers," and so-called "casino banking," politicians have been able to divert attention from the ultimate cause of the financial crisis, namely their belief that affordable housing can be provided by encouraging—or even obliging—banks to advance mortgages to homebuyers with low to very low incomes and requiring government-sponsored enterprises to purchase an ever-increasing proportion of such loans from lenders. If politicians continue to believe that affordable housing can only be provided in that way and act accordingly, no one need look any further for the causes of the next financial crisis.

### **NOTES**

- I. Barack Obama, "Renewing the American Economy," speech given at Cooper Union (March 27, 2008).
- 2. Elizabeth Warren's statement in presenting S.1709 on July 7, 2015. The bill takes account of market changes by limiting the business of national banks to receiving deposits, advancing personal loans, discounting and negotiating evidences of debt, engaging in coin and bullion exchange, and investing in securities. No investment is allowed in structured or synthetic products—that is, financial instruments in which the return is calculated on the value of, or by reference to, the performance of a security, commodity, swap, or other asset, or an entity, or any index or basket composed of such items.
- 3. Zach Carter, "Elizabeth Warren Has Basically Had It with Paul Krugman's Big Bank Nonsense," *Huffington Post*, April 13, 2016, http://www.huffingtonpost.com/entry/elizabeth-warren-big-banks\_us\_570ea9d6e4b03d8b7b9f52aa.
- 4. Robert Kuttner, "Alarming Parallels between 1929 and 2007," testimony before the House

The 2008 financial crisis had precious little to do with Glass-Steagall, one way or the other.

Financial Services Committee, October 2, 2007.

- 5. Joseph E. Stiglitz, "Capital Fools," *Vanity Fair*, January 2009, http://www.vanityfair.com/news/2009/01/stiglitz200901.
- 6. Andrew Ross Sorkin, "Reinstating an Old Rule Is Not a Cure for Crisis," Dealbook, *New York Times*, May 21, 2012, http://dealbook.nytimes.com/2012/05/21/reinstating-an-old-rule-is-not-acure-for-crisis.
- 7. Carter Glass, "Operation of the National and Federal Reserve Banking Systems," Report to accompany S.1631, May 15, 1933, https://fraser.stlouisfed.org/scribd/?title\_id=993&filepath=/docs/historical/congressional/1933\_bankingact\_senrep77.pdf.
- 8. Minutes of Special Meeting of the Federal Advisory Council, Washington, March 28–29, 1932, p. 4, https://fraser.stlouisfed.org/docs/historical/nara/fac\_minutes/fac\_19320328.pdf.
- 9. Ibid., p. 9.
- 10. "Tenth Annual Report of the Federal Reserve Board" (Washington: Government Printing Office, 1942), p. 34.
- II. See, for example, Milton Friedman and Anna J. Schwartz, *A Monetary History of the United States, 1867–1960* (Princeton, NJ: Princeton University Press, 1963); Lloyd W. Mints, *A History of Banking Theory in Great Britain and the United States* (Chicago: University of Chicago Press, 1945); and Ben S. Bernanke, "Money, Gold, and the Great Depression," H. Parker Willis Lecture in Economic Policy, Washington and Lee University, Lexington, VA, March 2, 2004.
- 12. Eugene N. White, "Before the Glass-Steagall Act: An Analysis of the Investment Banking Activities of National Banks," *Explorations in Economic History* 23, no. 1 (1986): 40ff.
- 13. See Charles W. Calomiris, *U.S. Bank Deregulation in Historical Perspective* (New York: Cambridge University Press, 2000), p. 57; and *Federal Reserve*

Bulletin 25, no. 9 (September 1939): 730.

- 14. See, for example, Gary Richardson and William Troost, "Monetary Intervention Mitigated Banking Panics during the Great Depression: Quasi-Experimental Evidence from the Federal Reserve District Border, 1929 to 1933." *Journal of Political Economy* 117, no. 6 (December 2009): 1031–73.
- 15. Eugene N. White, "Before the Glass-Steagall Act: An Analysis of the Investment Banking Activities of National Banks," *Explorations in Economic History* 23, no. 1 (1986): 51.
- 16. Ibid., p. 35.
- 17. See David L. Mengle, "The Case for Interstate Branch Banking," Federal Reserve Bank of Richmond *Economic Review* (November/December 1990). The author relies on figures from U.S. Department of the Treasury, *Geographical Restrictions on Commercial Banking in the United States* (Washington: Government Printing Office, 1981); as well as *Banking Expansion Reporter*, August 6, 1990.
- 18. Charles W. Calomiris and Stephen H. Haber, "Interest Groups and the Glass-Steagall Act," *CESifo DICE Report* 11, no. 4 (Winter 2013): 16.
- 19. R. Alton Gilbert, "Requiem for Regulation Q: What It Did and Why It Passed Away," *Federal Reserve Bank of St. Louis Review* (February 1986): 34.
- 20. The OCC's Regulation 9 applies to national banks and allows them to open and operate trust departments in-house, to function as fiduciaries, and to manage and administer investment-related activities, such as registering stocks, bonds, and other securities.
- 21. Investment Co. Inst. v. Camp, 401 U.S. 617, 626–27 (1971).
- 22. Ibid., p. 682.
- 23. See ibid., p. 631.

- 24. Securities Activities of Commercial Banks: Hearings before the Subcommittee on Securities of the Senate Committee on Banking, Housing, and Urban Affairs, 94th Cong. 193 (1975).
- 25. The Federal Reserve Board's Regulation Y applies to the corporate practices of BHCs and, to a certain extent, state-member banks. The regulation sets out the transactions for which a BHC must seek the Federal Reserve's approval.
- 26. Bank Holding Companies and Change in Bank Control (Regulation Y), 12 C.F.R. 225 (1977).
- 27. Office of the Comptroller of Currency (OCC) Interpretive Letter no. 494, December 20, 1989 (reprinted in 1989–1990 Transfer Binder).
- 28. OCC Interpretive Letter No. 684, August 4, 1995 (reprinted in 1995–1996 Transfer Binder).
- 29. "Matched Swaps Letter," OCC No-Objection Letter No. 87-5, July 20, 1987 (reprinted in (1988– 1989 Transfer Binder).
- 30. OCC No-Objection Letter No. 90-1, February 16, 1990 (reprinted in 1989–1990 Transfer Binder).
- 31. OCC Interpretive Letter No. 652, September 13, 1994 (reprinted in 1994 Transfer Binder).
- 32. OCC Interpretive Letter No. 652, September 13, 1994 (reprinted in 1994 Transfer Binder), n. 124.
- 33. It should be noted that although the OCC's various letters placed little emphasis on the complex risks involved in derivatives, those risks were spelled out more fully in the 1997 Derivatives Handbook. This document was for the use of the OCC's own bank examiners and alerted them to the variety and complexity of risks associated with derivative transactions.
- 34. OCC Interpretive Letter No. 380, December 29, 1986 (reprinted in 1988–1989 Transfer Binder).

- 35. OCC Interpretive Letter No. 577, April 6, 1992 (reprinted in 1991–1992 Transfer Binder).
- 36. OCC Interpretive Letter No. 386, June 19, 1987 (reprinted in 1988–1989 Transfer Binder).
- 37. Investment Company Institute v. Clarke, 630 F. Supp 593 (D. Conn. 1986).
- 38. Federal Reserve Bulletin 73, no. 2 (February 1987): 148, fn. 43.
- 39. OCC Interpretive Letter no. 380, December 29, 1986 (reprinted in 1988–1989 Transfer Binder).
- 40. "Eligibility of Securities for Purchase, Dealing in Underwriting and Holding by National Banks: Rulings Issued by the Comptroller," 47 *Federal Register* 18323 (April 29, 1982).
- 41. Federal Reserve Bulletin 64, no. 3 (March 1978): 222 (reference to the Federal Reserve's proposed rulemaking, as published in 43 Federal Register 5382 [February 8, 1978]).
- 42. Securities Industry Association v. Board of Governors, 839 F.2d 51 (2nd Cir. 1988), citing Federal Reserve Bulletin 73, no. 6: 485–86 (June 1987).
- 43. 61 Federal Register 68750 (December 30, 1996).
- 44. Ibid., pp. 68750-755.
- 45. "Revenue Limit on Bank-Ineligible Activities of Subsidiaries of Bank Holding Companies Engaged in Underwriting and Dealing in Securities," Federal Reserve System Docket no. R-0841.
- 46. Ibid.
- 47. Section 20 reads as follows: "No member bank shall be affiliated in any manner . . . with any corporation, association, business, trust or similar organization engaged principally in the issue, flotation, underwriting, public sale or distribution at wholesale or at retail or through syndicate participation in stocks, bonds or debentures, notes or other securities."

48. Section 32 states that "no officer or director of any member bank shall be an officer, director or manager of any corporation, partnership, or unincorporated association engaged primarily in the business of purchasing, selling or negotiating securities and no member bank shall perform the functions of a correspondent bank on behalf of any such individual, partnership, corporation or unincorporated association and no such individual, partnership, corporation, or unincorporated association shall perform the functions or a correspondent for any member bank or hold on deposit any funds on behalf of any member bank."

49. The Bank Holding Act of 1956 allowed BHCs to engage directly in, establish, or acquire subsidiaries that engage in nonbanking activities deemed by the Federal Reserve to be "closely related" to banking, such as mortgage banking, consumer and commercial finance, leasing, real estate appraisal, and management consulting.

50. It would be difficult for any director, senior manager or employee of the bank to breach these restrictions. The penalties under 12. U.S.C. § 1818 are onerous and apply to any Institute Affiliated Part (IAP), as well as independent contractors such as attorneys. The civil money fines are heavy (a maximum of \$1 million per day while the violation continues); other penalties include temporary or permanent prohibition on participation in the industry. It is, however, difficult to find any instance when such penalties have been imposed.

### 51. Section 16 states that

the business of dealing in investment securities by the association shall be limited to purchasing and selling such securities without recourse, solely upon the order, and for the account of, customers, and in no case for its own account, and that the association shall not underwrite any issue of securities: *Provided*, That the association may purchase for its own account investment securities under such limitations and restrictions as the Comptroller of the Currency may by regulation prescribe, but

in no event (1) shall the total amount of any issue of investment securities of any one obligor or maker purchased after this section as amended takes effect and held by the association for its own account exceed at any time 10 per centum of the total amount of such issue outstanding, but this limitation shall not apply to any such issue the total amount of which does not exceed \$100,000 and does not exceed 50 per centum of the capital of the association, nor (2) shall the total amount of the investment securities of any obligor or maker purchased after this section takes effect and held by the association for its own account exceed at any time 15 per centum of the amount of the capital stock of the association actually paid in and unimpaired and 25 per centum of its unimpaired surplus fund.

None of the above restrictions applied to the

obligations of the United States, or general obligations of any State or of any political organization thereof, or obligations issued under the authority of the Federal Farm Loan Act or issued by the Federal Home Loan Banks or the Home Owners Loan Corporation. . . . . [T]he association shall not invest in the capital stock of a corporation organized under the law of any State to conduct a safe-deposit business in an amount in excess of 15 per centum of the capital stock of the association actually paid in and unimpaired and 15 per centum of its unimpaired surplus.

### 52. Section 21 (a) reads:

(1) For any person, firm, corporation, association, business trust or other similar organization, engaged in the business of issuing, underwriting, selling or distributing, at wholesale or retail, or other securities, or through syndicate participation, stocks, bonds, debentures, notes or other securities,

to engage at the same time to any extent whatever in the business of receiving deposits, subject to check or to repayment upon the presentation of a passbook, certificate of deposit, or other evidence of debt, or upon request of the depositor; or

- (2) For any person, firm, corporation, association, business trust or other similar organization, other than a financial institution or private banker subject to examination and regulation under State or Federal law, to engage to any extent whatever in the business of receiving deposits subject to check or repayment upon presentation of a passbook, certificate of deposit, or other evidence of debt, or upon the request of a depositor, unless such person, firm or corporation, association, business trust, or other similar organization shall submit to periodic examination by the Comptroller of the Currency or by the Federal reserve bank....
- 53. Regulation W implements comprehensively Sections 23A and 23B of the Federal Reserve Act. The final rule combines statutory restrictions on transactions between a member bank and its affiliates with numerous Board interpretations and exemptions in an effort to simplify compliance with Sections 23A and 23B. The final rule published in November 2002 for compliance in April 2003.
- 54. Office of the Comptroller of the Currency, Comptroller's Handbook Section 203 (1990), https://www.occ.gov/publications/publications-by-type/comptrollers-handbook/investsecuriiesi.pdf.
- 55. Each of the Big Five investment banks had a subsidiary bank, but these were relatively small by comparison with the assets of the investment banks. The following figures are from 2008:

Goldman Sachs. Investment bank assets: \$800bn. Subsidiary bank assets: \$25bn.

*Morgan Stanley*. Investment bank assets: \$660bn. Subsidiary bank assets: \$38.5bn.

*Merrill Lynch*. Investment bank assets: \$670bn. Subsidiary bank assets: \$35bn.

*Lehman Brothers*. Investment bank assets: \$600bn. Subsidiary bank assets: \$4.5bn.

- 56. See Oonagh McDonald, *Lehman Brothers: A Crisis of Value* (Manchester, UK: Manchester University Press, 2015).
- 57. Lawrance L. Evans Jr., "Causes and Consequences of Recent Community Bank Failures," testimony before the Senate Committee on Banking, Housing, and Urban Affairs (June 13, 2013).
- 58. Office of the Inspector General, Department of the Treasury, "Safety and Soundness: Material Loss Review of IndyMac, FSB," Audit Report OIG-09-032 (February 26, 2009), pp. 2–3. The report also suggests that the thrift's situation was made worse by Sen. Chuck Schumer's letter to the FDIC and OTC expressing concerns about the company, which became public.
- 59. Offices of the Inspector General, Department of the Treasury, Federal Deposit Insurance Corporation, "Evaluation of Federal Regulatory Oversight of Washington Mutual Bank," Report No. EVAL-10-002 (April 2010), p. 2.
- 60. In 2005 and onward, 56 percent of customers with option ARMs chose to make only the minimum monthly payments.
- 61. Statement of the Honorable Eric M. Thorson, Inspector General, Department of the Treasury, before the Senate Homeland Security and Governmental Affairs Committee, Permanent Subcommittee on Investigations, April 16, 2010, p. 3.
- 62. Oonagh McDonald, "Holding Banks to Account for the Financial Crisis," *Journal of Financial Crime* 23, no. 1 (2016).
- 63. See Oonagh McDonald, Fannie Mae and Freddie Mac: Turning the American Dream into a Nightmare (New York: Bloomsbury, 2013); Edward Pinto, "Three Studies of Subprime and Alt-A Loans in the US Mortgage Market," American Enterprise Institute, February 5, 2011; and Peter J. Wallison, Hidden in Plain Sight (New York: Encounter Books, 2015).

- 64. White House, "Remarks by the President on Financial Reform," press release, January 21, 2010.
- 65. Prohibitions on Proprietary Trading and Certain Relationships with Hedge Funds and Private Equity Funds. Sec. 619, Dodd-Frank Wall Street Reform and Consumer Protection Act.
- 66. John Pachkowski, "The Volcker Rule: Past, Present and Future," Wolters Kluwer Law & Business White Paper (May 2015), p. 6.
- 67. "Prohibitions and Restrictions on Proprietary Trading and Certain Interests and Relationships with Hedge Funds and Private Equity Funds." 79 Federal Register 5563ff (January 31, 2014). The agencies are the Federal Reserve, the OCC, the FDIC, the Securities and Investments Board, and the Commodity Futures Trading Commission—all of which are in some way responsible for the regulation and supervision of financial institutions.

- 68. "The Volcker Rule: Are You Really Market-Making?" PwC Regulatory Brief (February 2015).
- 69. Frank A. Mayer, III, Timothy R. McTaggart, and Andrew J. Victor, "Observation 2.0: The Anti-Evasion Provision of the Volcker Rule." Pepper Hamilton LLP Client Alert (January 8, 2015), p. 2.
- 70. John Pachkowski, "The Volcker Rule: Past, Present and Future," p. 7.
- 71. Paul Volcker, interviewed by *Reuters Business*, May 5, 2011. Volcker left his position on the Council of Economic Advisers in February 2011.
- 72. 79 Federal Register 5535–6076 (January 31, 2014).
- 73. See Friedman and Schwartz, *A Monetary History of the United States*. The relevant chapter, entitled "The Great Contraction, 1929–33," has also been published as a stand-lone paperback.

