How To Promote Fed Independence:

Perspectives from Political Economy and History

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I. Introduction

Practically everyone can agree that central bank independence is desirable, at least when exercised within the confines of a clear mandate to guide central bankers that ensures their accountability to their citizens. Yet differences persist about the answers to five fundamental questions about central bank independence and the mandates within which that independence is expressed. What is the precise meaning of independence? What does independence depend on? Why is it desirable? How independent is today's Federal Reserve System, and how independent has the Fed been over its 100-year-plus history? And what can be done to strengthen Fed independence by changing the current mandate within which the Fed operates?

These five questions have been addressed more or less continuously in policy debates about the institutional design of central banks, especially since they were all considered in Milton Friedman's classic 1962 article.[1] Yet despite many decades of thinking, a working definition of Fed independence remains elusive, judgments differ widely about the extent and even the feasibility of such independence, and policy advocates continue to propose very different kinds of rules for protecting and promoting it.

In this article, I show that convincing answers to these five fundamental questions about Fed independence must begin by recognizing the status of the Fed within American democracy, which can be understood only from an historical perspective. As a matter of the logic of political economy, that means not only identifying the current statutory powers of the Fed, but analyzing how changes in those powers have happened in the past. All political constructs—including the Fed—are the result of a political bargaining process. Independence is impossible to define without considering the process by which power is delegated or withdrawn.

A discussion of Fed independence is also inevitably intertwined with a discussion of policy frameworks that promote or discourage independence. Advocates of Fed independence have been keenly aware of how independence is shaped by the objectives and procedures of policy, and not just by the institutional structure of the Fed. For example, as Friedman, his well-known monetarist colleague Allan Meltzer, and many other advocates of monetary rules have recognized for decades, one of the main advantages of adopting a rule is that it makes monetary policy less subject to political interference—motivated by, say, short-sighted demands for temporary stimulation of the economy. If the Fed is following a rule, the reduction in discretion that comes with adherence to a rule makes it easier for the Fed to defend its policy actions to politically motivated critics in Congress or the Administration.

When considering the political bargains that give rise to changes in Fed powers, it is crucial to consider decisions to *combine different authorities* within the Fed. The combination of authorities entrusted to the Fed has been

[1] Friedman (1962) considers three possibilities: (1) a fully discretionary, independent central bank; (2) a commodity standard; and (3) the "monetary rule" that Friedman himself proposed and with which his name is associated. One can conceive of a more flexible arrangement than a rule—one in which the central bank has a clear statutory mandate to articulate and follow an explicit rule (such as the "Taylor Rule"), but which it is also permitted to deviate from under extreme circumstances, provided it supplies an explanation. Such a construct recognizes—following Capie and Wood (2012), and in the spirit of Meltzer (2012)—that inflexible rules are not credible, especially in the presence of financial crises. Full citations of all articles are provided in the References at the end.

important in shaping—though not always strengthening—the independence with which the Fed implements each aspect of its authority. It can be very misleading to focus, as many scholars do, on just the monetary powers that have been delegated to the Fed. Deciding what combination of powers to allocate to the Fed has been an important part of the political bargain affecting Fed independence. The range of the Fed's powers has not been constant over time, and changes in those powers can have important effects on the degree of Fed independence.

Nor have changes in Fed independence over time been the same across the different types of authority wielded by the Fed—which for simplicity we will divide into just two categories: monetary policy and regulatory policy powers. And this lack of uniformity reflects, in significant part, conscious trade-offs made by Fed leaders. As discussed below, many Fed decisions on regulatory matters can be viewed as attempts to preserve the Fed's monetary powers from political interference by yielding some of its independence in exercising its regulatory authority and governance.

In the context of contemporary Fed actions, I define monetary policy as open market operations that expand or contract high-powered money—that is, bank reserves plus currency—by buying or selling short-term Treasury securities, and other actions (such as Fed policies that bear on bank reserve requirements) that affect low-powered money through changes in banks' reserve-to-deposit ratios. I do not, however, consider Fed fiscal interventions in this essay. The fiscal activities of the Fed have included subsidies that involved the absorption of credit risk through lending and the purchases of risky securities. Economists such as Marvin Goodfriend have argued that such powers should be viewed as circumventing proper procedures for appropriating funds in a democracy, which should be the purview of Congress and the Administration, not the central bank.[2] What's more, the Fed's willingness to engage in fiscal actions can undermine its independence just by attracting political pressure to do more. Notable examples of such fiscal subsides are the Fed's recent policy of paying above-market interest rates on bank reserves, and its purchases of mortgage-backed securities in response to the financial crisis.

The relationship between the extent of Fed power and Fed independence is not straightforward. In particular, it is not true that increased power always produces greater independence. Increases in powers can result in reduced independence in some dimensions, but increased independence in others.

A full treatment of the logic and history of Fed independence could be the subject of a lengthy book. In this article, my ambitions are more modest. I construct a working definition of Fed independence that reflects the realities of American democracy—one that is informed by Fed history, and that takes account of the interactions among the various aspects of Fed power in affecting the extent of policy independence. I begin the discussion with a summary statement of my conclusions in the form of eight propositions. Then, in the two sections that follow, I assemble a considerable amount of support for those propositions while providing *two* short histories of the Fed, the first in terms of its monetary policy, and then in terms of its regulatory policies, over its 100-year existence. I close with a

[2] Goodfriend (2011, 2012).

suggestion for improving the Fed's mandate in a way that is designed to ensure enough independence to weather the next 100 years.

II. Eight Propositions about Fed Independence

Proposition 1: The independence of authority of any agency is usefully defined as its ability to act, within the confines of a mandate, on the basis of judgment, and with the expectation of impunity. The expectation of impunity is critical to independence. An independent authority is independent not simply by virtue of the granting of *de jure* authority at some point in time, but also by virtue of its reasonable expectation that the delegation of power will not be withdrawn as a consequence of undertaking legitimately independent decisions—that is, decisions made according to due process and within the confines of the entity's statutory mandate.

Proposition 2: The *de jure* granting of independent authority does not itself guarantee legitimate independent action. Central bank independence, as a behavioral reality, generally requires that four separate conditions all be satisfied: (1) the presence of a clear statutory mandate—otherwise there is no way to gauge legitimacy; that is, to see whether the mandate has been exceeded; (2) the granting of statutory power for independent action within the constraints of the mandate; (3) the expected persistence of statutory authority—a reasonable expectation that the exertion of independent authority within the confines of the preexisting mandate will not result in a change in the mandate; and (4) central bank leadership that is committed to acting independently.

Proposition 3: Independence is desirable insofar as it works to limit the influence of elected officials on policy decisions, which can be particularly important in the exercise of monetary policy and regulatory policy. Much of the potential value of such constraints comes from their effectiveness in limiting two aspects of political decisions in a democracy that tend to be especially counterproductive in economic policy making: myopia and logrolling. Myopia refers to the tendency of elected officials to sacrifice long-term objectives to retain their political power through reelection. Logrolling—or mutual "back-scratching" among vested interests—reduces the probability that policy choices that would benefit everyone will be chosen because such choices are not a top priority of any powerful special interest. A political bargain that cobbles together a voting majority by making a concession to each member of its coalition will avoid supporting social welfare-maximizing economic policies, especially if those policies make it harder to fulfill the top priorities of the various special interests that support the coalition.

For example, if as a result of myopia and logrolling monetary authority is not delegated to an independent central bank, elected officials may choose to print a large amount of money to pay for election-year grants to some of their most powerful constituents—instead of raising taxes that would risk alienating one or more powerful constituents affected by that tax. Elected officials are likely to make that choice despite the consequences of higher inflation in the future.

Monetary policy is an ideal candidate for delegation to a central bank precisely because the costs of incremental decisions to inflate are small and widely distributed in the population, and because they tend to arise with a lag. Problems of myopia and logrolling—which are especially pronounced in populist democracies like that of the

United States—will therefore tend to benefit from delegating monetary policy to a truly independent central bank. (But, of course, myopia and logrolling also make it far less likely that populist democracies will choose to create truly independent central banks in the first place, a problem I return to.)

The same logic that explains the value of independent monetary policy also applies to regulatory policy, and why bank regulation is also a candidate for delegation to a truly independent agency—though not necessarily the central bank. But regulation can also, of course, be used to serve special interests at the expense of the general population. For example, the entry barriers that preserved "unit banking" throughout this country for nearly two centuries—and which I discuss later in some detail—are one of the clearest cases of deeply flawed policy-making and regulation in U.S. banking history.

Proposition 4: Unfortunately, for most of Fed history, one or more of the four necessary conditions for independent behavior has been absent, and with respect to both monetary policy and regulatory policy. As a consequence, it has been rare for the Fed to act independently. The only eras in which independent action in U.S. monetary policy was clearly evident were 1921-1933 and 1979-2006, periods that account for well under half of the Fed's over 100-year history. And in the area of regulatory policy, where Fed authority has become increasingly important since the 1980s, Fed policy has been even more politicized.

The variation over time in the extent of Fed independence has not been the result of statutory changes in the Federal Reserve Act. As I will show later, the changes in Fed independence over time have a much stronger association with changes in the economic and political circumstances in which the Fed acted, and with the strengths (and limitations) of its leaders in different periods.

Proposition 5: The greater politicization of regulatory policy, as compared to monetary policy, reflects political trends that favored the use of bank regulatory policies as "off-budget" tax-and-transfer policy tools. For example, starting in the 1990s, as part of the "third way" policy approach of the Clinton Administration, government policy sought to use financial system regulation to achieve objectives it could not achieve through the normal appropriations process. The Fed leadership at the time did not resist that trend, but instead embraced its newfound powers and actively sought the increased regulatory authority it obtained in the 1990s and thereafter.

One constant in Fed leadership has been to give greatest priority to obtaining and preserving independence with respect to monetary policy. And when viewed in this light, the Fed's quest for increased regulatory authority, and its willingness to act as a political intermediary with respect to the uses of regulatory policy, are probably best interpreted as attempts to promote the autonomy of the Fed's monetary policy. Because the Fed's leadership gives greatest priority to preserving and enhancing its monetary policy independence, delegating enhanced decision-making powers to the Fed in the area of regulatory policy tends to encourage political trade-offs that result in less independent regulatory policy, but more independent monetary policy. The increasing breadth of powers granted the Fed can be seen as the outcome of a long series of political bargains in which one aspect of Fed independence was traded off for another.

In the area of regulatory policy, the Fed has generally been willing to act as a compliant intermediary to implement the political bargains hashed out by Congress and the Administration, including bargains that use regulatory policy as a hidden form of fiscal policy. There are many examples of this phenomenon,[3] but the most obvious and socially costly example was the Fed's oversight of bank mergers during the 1990s and 2000s, and the "subprime" lending that took place as a direct consequence of these mergers under the auspices of the Community Reinvestment Act. The Fed's intermediation of this "grand political bargain" with respect to bank mergers during this period, as I discuss at length later, was a far bigger contributor to the global financial crisis of 2007-2009 than the Fed's much criticized departure from the Taylor Rule when refusing to raise rates during the period 2002-2005. One interpretation of the Fed's desire for expanded regulatory power—and of the Fed's if not willingness to encourage, then unwillingness to oppose, the politicized regulation of this period—is that such measures worked to preserve its independence in conducting monetary policy.

Proposition 6: Even in the area of monetary policy, greater Fed independence generally has not produced better policy outcomes; indeed, times of relatively great independence have been associated with all of what are widely viewed as the three greatest errors of U.S. monetary policy during the Fed's history: (1) the Great Depression of 1929-1933; (2) the Great Inflation of 1965-1979; and (3) the loose-money prelude to the subprime crisis of 2002-2005.

The Great Inflation of the 1960s and 1970s is mainly attributable to the limits on independent action by the Fed during that period, owing to a combination of political pressures on the Fed to monetize government debt in the 1960s and 1970s and to the political agenda of Fed leaders during that time. Nevertheless, to the extent that Fed leadership enjoyed independence during that era, its adherence to simple Keynesian Phillips Curve analysis encouraged the tolerance for accelerating inflation. Thus, even in the absence of politicized choices, flawed thinking about monetary policy likely would have produced an inflationary acceleration.

With respect to the other two major monetary policy errors during Fed history—the monetary contraction of 1929-1933 and the monetary expansion of 2002-2005—it is important to recognize that Fed independence was at its peak during those periods. In the first case, the Fed's discretionary errors were attributable to its pursuit of a flawed policy rule, which combined adherence to the "real bills doctrine"—a monetary policy doctrine with no current adherents—and "money illusion," the failure to distinguish between nominal and real interest rates. In the 2002-2005 period, the Fed's errors reflected a willingness to depart from its Taylor Rule behavior to avoid the short-term downside risk of a recession.

But even so, the tendency to make important errors in discretionary judgment during these three eras of monetary policy would have been substantially limited if the Fed had faced a clearer mandate to ensure price stability, or if it had adopted a transparent rule as its interpretation of its unclear mandate. Either of these options would have constrained the latitude of policy makers by forcing them to articulate a long-term rule for monetary policy that would have required them to articulate a long-term objective for policy and explain any departures from it. Thus, the

[3] For accounts of some of the most recent examples of the Fed's use of regulatory policy to carry out fiscal policy, see Calomiris (2018a).

adoption of a clearer statutory mandate, and required adoption of a rule-based interpretation of the mandate, would not only have increased Fed independence, but improved the outcomes that resulted from the wielding of independent authority.

Proposition 7: The Fed's leadership has opposed rule-based constraints on its momentary discretion, which, as Friedman and Meltzer famously pointed out, has ended up limiting Fed independence by making it more vulnerable to political attacks. This opposition to rules likely reflects two influences: the desire of Fed officials to avoid personal accountability, and excessive faith in their own discretionary judgment, which is often based on faddish and unrealistic models. There is, of course, nothing wrong with using simplified and formal models as heuristic devices for honing one's reasoning. But one should not pretend that those models provide a reliable basis for confident judgments about the consequences of discretionary actions.

Proposition 8: To promote independence along both dimensions of economic policy, regulatory as well as monetary, two sorts of policy reforms would be helpful: (1) separation of authority over the two areas into two distinct agencies (to avoid trade-offs that reduce the independence of regulatory policy); and (2) the establishment of clear mandates and accountability procedures for each category of policy. In particular, with respect to monetary policy, the Fed should be required to articulate a systematic framework—such as a Taylor Rule—that it would adhere to, and which would be subject to (the Fed's own) revision over time.[4] In extreme circumstances, it could deviate from its framework, but this should be rare and require substantial justification. And the systematic framework, by making clear the objectives of monetary policy, would *permit* and indeed *require* greater accountability. These policy actions would substantially increase the likelihood that the four necessary conditions of policy independence would hold, and thus promote greater independence of policy.

These eight propositions are based on judgment that reflects my understanding of the logic of political bargaining and the historical experience of politics, banking, and central banking, which I describe in more detail below. I do not claim originality for any of these ideas. Since Milton Friedman's classic work on these problems, many other scholars have made arguments similar to those contained in the eight propositions; but I do not believe that any previous study has integrated all of these propositions in the same way.

III. A Short History of Fed Monetary Policy (and Its Independence)

On paper, the Fed seems always to have been a highly independent monetary authority, owing to its decentralized structure and its authority to manage monetary policy without the involvement of the Executive Branch. The monetary policy history of the Fed, however, is replete with examples of how statutory delegation of authority has failed to ensure its true independence. But other factors have also often worked to limit the authority of the Fed—and its independence. For example, the Banking Act of 1935, which restructured the Federal Reserve System, made the Fed more politically responsive by centralizing authority in Washington and increasing the power of government appointees within the Fed. But although this restructuring could have reduced Fed independence, it had little

[4] See Calomiris (2018b) for details.

immediate effect on Fed policy or independence because another influence was more important: the Treasury, which received new monetary powers in the 1930s, and supplanted the Fed as the U.S. monetary authority until 1951. Similarly, the creation of the so-called "dual mandate" for the Fed in 1977 might have been expected to make the Fed less independent. (In fact, the dual mandate was really a *triple* mandate—one that required the Fed to maintain price stability, maximum employment, and interest rate stability, without defining priorities or weights across these often competing objectives.) The creation of multiple, unclear, and conflicting mandates might have contributed to the politicization of the Fed.

But, as we will see, this compounding and confusion of mandates coincided roughly with the beginning of an era of high *de facto* Fed independence. These examples illustrate the importance of historical context, not just statutory changes specifically addressing Fed powers or mandates, in shaping Fed power and independence.

World War I

In fact, most of the changes in the extent of Fed monetary policy independence had nothing to do with statutory changes. The first meaningful change—which had the effect of *reducing* Fed independence—came as a result of World War I. The Fed was established in 1913 on the basis of the "real bills doctrine," which maintained that bills related to trade should be the only asset bought and sold or held as collateral against loans to member banks. Government debt was expressly excluded as collateral from Fed discounting operations to prevent the Fed from acting as a source of funding for the government. The Fed's initial structure—which gave primary authority to its Reserve Banks, which were owned and controlled by the Fed member banks in their respective districts—limited the extent to which political pressures could control Fed actions. The Fed's charter thus gave it substantial autonomy in setting monetary policy, although its decisions were constrained by the requirement that it maintain gold convertibility.

Under the pressures of World War I's financial challenges, however, the Fed began to become an important partner in helping the U.S. government market its debt. In 1917, reserve requirements were reduced to permit expanded credit to finance the war. And in the same year collateral rules for Federal Reserve note issues were relaxed; the total amount of collateral was reduced and, perhaps more important, promissory notes of member banks secured by government bonds could be used as collateral for the notes. At the end of World War I, with the aim of boosting demand for outstanding Treasury debts, the Fed also reduced its discount rate for loans collateralized by Treasury securities.

These accommodation policies enacted in response to World War I had unintended long-term consequences. The discount rate reduction led the Fed to abandon its "penalty" rate policy for targeting the discount rate, which had been one of its core founding principles. This change undermined the Fed founders' intent that the Fed would use a penalty discount rate as its primary tool for managing the cyclical and seasonal availability of credit in the money market. More broadly, the World War I precedent of making the Fed subservient to the interests of marketing Treasury debt not only produced the short-term inflationary binge of 1917-1920, but also set the stage for later changes that eventually made the Federal Reserve a fiscal instrument of the U.S. Treasury.

The Great Depression

Those changes were completed during the 1930s, in reaction to the political upheaval that accompanied the Great Depression. First, in the 1932 Glass-Steagall Act, a temporary measure that was later made permanent allowed the Fed to use Treasury securities as collateral for Federal Reserve note issues. In March 1933, the United States abandoned the gold standard, freeing monetary policy from its constraining price level anchor. In 1934, the Treasury gained substantial new monetary powers through the Gold Reserve Act of 1934 and the Silver Purchase Act of 1934, which meant that it could exert separate control of monetary policy if it so desired. In 1935, the Fed was restructured to centralize its policy actions in the Board of Governors, the part of the system whose leaders are government appointees.[5]

The Fed is regarded as having operated reasonably independently in setting its monetary policy from about 1923 until 1932. After 1933, however, control over monetary policy was effectively transferred to the U.S. Treasury, not as the result of statutory changes with regard to Fed powers, but rather by creating new policy options for the Treasury to offset Fed actions through its new monetary powers created in 1934. After 1933, the Fed's balance sheet was small compared to the new monetary issuance powers that had been granted to the U.S. Treasury in 1934. Any attempt to tighten monetary policy by shrinking its balance sheet would have simply been undone by a Treasury policy of monetary expansion. As economist Edwin Kemmerer lamented in 1934, "the Federal Reserve would be powerless to control the market in the face of the operations of the Treasury Department with its new two billion dollar stabilization fund. These operations will of necessity dominate the situation."[6] At around the same time, Secretary of the Treasury Morgenthau gloated in his diary about his newly won ability to control monetary policy just by threatening to use his new powers, noting that this arrangement also would allow him to escape blame for mistakes in policy because the Fed would be incorrectly viewed as in charge of monetary policy.[7]

The 1951 Accord and the Great Inflation

In 1951, the famous Treasury-Fed Accord led to what is widely regarded as the re-establishment of Fed independence. It is noteworthy that there was no statutory change associated with the Accord, but rather an agreement between the Fed and the Truman Administration that the Fed could now engage in monetary policy rather than simply pegging interest rates on government debt under Treasury instruction. This new arrangement reflected an important recent development: the Fed's balance sheet had grown so much from its monetization of government debt during World War II that the Fed's ability to contract the money supply now was far greater than the Treasury's monetary powers to expand it, implying that the Fed would be able to win any prospective game of chicken with the Treasury over the setting of the money supply.

After the 1951 Accord, the Fed operated somewhat independently of the Treasury, but not completely so. Its "even keel" policies were specifically intended to stabilize markets during Treasury debt offerings. Additionally, the

[5] All of these changes are discussed in detail in Calomiris and Wheelock (1998), Meltzer (2003), and Calomiris (2013).
[6] Edwin Kemmerer (1934).
[7] Blum (1959), p. 352.

Fed sometimes acted specifically at the behest of the Treasury to support special funding needs. Critics of the Fed that sought greater independence, such as Senator Paul Douglas, withheld support for Martin's reappointment as Fed Chairman in 1956.[8] These critics identified the main brake on Fed independence since 1951 as the unwillingness of the Fed's own leadership to act independently. But such reluctance is not that hard to understand, given the political threats that often accompanied Fed efforts to exercise independence. In the 1950s, a longtime critic of the Fed, Rep. Wright Patman of Texas constantly offered proposals to reform, restructure, and audit the Fed. One of his proposals, made in January 1955, would have required the Fed to "support the price of United States Government securities at par."[9] (Think of that as a possible Fed mandate!)

Political pressures on the Fed became more than usually intense in 1967 under the combined fiscal pressures of financing the Vietnam War and the Great Society. In July of 1967, under heavy lobbying by the Secretary of Treasury and prominent members of Congress, the Fed Board denied requests by the Federal Reserve Banks to hike their discount rates. As Allan Meltzer put it, "Coordination [with the Treasury] now dominated independence for many at the Federal Reserve, so political concerns dominated economics."[10] In August, in an attempt to limit interest rate increases, Congress also proposed legislation limiting interest rates on time deposits, and increasing reserve requirements on time deposits. The Fed Board negotiated with members of Congress to withdraw the bill in exchange for its commitment to use its judgment as necessary to achieve the desired result. In other words, the Fed traded explicit limits on its independence for implicit ones. The implicit threats of government action to curb Fed powers if the Fed hiked interest rates were an important contributor to the acceleration of inflation during the 1960s.

The Fed's commitment to keep interest rates low constituted a commitment to monetize booming government deficits. When listing the four main errors by the Fed that contributed to the acceleration of inflation in the 1960s, Allan Meltzer identified the first as the Fed's attempt

> *to coordinate policy with the administration and persist in doing so long after it became a serious impediment to carrying out its responsibilities. Even when Martin recognized that a tax increase was unlikely, he resisted even mild steps toward restriction...Coordination was the enemy of central bank independence*…[11]

As inflation accelerated in the late 1960s, an important contributor to the Fed's failure to act independently was the political allegiance of Chairman Arthur Burns to President Nixon. Burns served Nixon's electoral ambitions, despite the consequences for rising inflation.

The lack of statutory clarity about the objectives of monetary policy allowed Fed leadership to avoid accountability, which made the problem worse. Without a clear objective and no mandate to follow a rule, once the Fed was freed from the constraint of adherence to the gold standard, it was almost inevitable that an era of high fiscal deficits would produce monetary accommodation and high inflation.

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[8] Meltzer (2010), pp. 132-3.
[9] Ibid. p. 226.
[10] Meltzer (2010), p. 511.
[11] Meltzer (2010), pp. 527-29.

That lack of clarity also encouraged political attacks. Any Fed critic was free to point to some shortcoming in the economy related to the long list of ill-defined Fed policy objectives, which made it very hard for the Fed to defend itself. If the Fed had been given the single, overarching objective of ensuring price stability—*which is now case for both the Bank of England and the European Central Bank*—or been required to articulate a policy rule, the Fed would have been able to defend itself against attacks by showing that it adhered to a clear mandate. In the event, however, critics were free to attack along any dimension they chose, and could point to evidence that this dimension was part of the Fed's ill-defined mandate.

Volcker, Greenspan, and the Great Moderation

But statutes aren't everything, as Paul Volcker would soon demonstrate. There is no doubt that Paul Volcker brought a different brand of leadership—and a clear desire for independence—to the Fed when he assumed its leadership. That change did not occur in a vacuum. High inflation had a silver lining: it imposed considerable economic hardship, and so was very unpopular. When Paul Volcker agreed to take on the job of Fed Chairman, he made it clear to Jimmy Carter before he was appointed that he would aggressively fight inflation, and that the consequences would not always be pleasant. President Carter supported his nomination both, I suspect, in spite as well as because of that commitment.

Volcker's commitment to beat back inflation, and his new brand of leadership, instilled a new culture of independence at the Fed, one that celebrated courage and a new commitment to the medium- and long-term objective of price stability, and which sought to enhance and preserve monetary policy independence against momentary political influences. There was no better proof of the Fed's new independence than the economic decline of 1979-1982. The Fed did not deny its role in producing tough economic times; instead it argued for the necessity of maintaining its commitment despite those costs.

Volcker's relationship with Fed staff, however, could be a bit rocky. He was not impressed by formal modeling or by opinions based on the latest macroeconomic fads, whether from "saltwater" or "freshwater" macroeconomists. And although he branded his policy approach "pragmatic monetarism," he did not subscribe to the views of the academic monetarist camp. As it turned out, Volcker's lack of interest in the modeling vanities of economists served him well. As Meltzer described the situation,

> *From the mid-1970s to the early 1980s, the Federal Reserve inflation forecast was below actual inflation for 16 consecutive quarters. The staff used the Phillips Curve to forecast inflation. There is considerable research showing that Phillips Curve forecasts are unreliable… When Paul Volcker became chairman of the Board of Governors, he told staff that their inflation forecasts were inaccurate. He repeated the message publicly and in Congressional testimony… Paul Volcker not only rejected use of the Phillips Curve, he developed and promoted what I call the anti-Phillips Curve. Unlike the staff approach relying on quarterly data, Volcker emphasized longer-term responses. His approach, based on empirical observations, was that during the 1970s, inflation and real growth or the unemployment rate rose and fell together. There was no trade-off in the longer period. In a television program as early as 1979, shortly after announcing his new policy procedure of targeting reserve growth and allowing interest rates to be set in the market, he was asked what he would do when unemployment rose and how policy reduced inflation. His reply cited the co-*

movement for the 1970s when unemployment rates and inflation rose together. He predicted that they would fall together under his policy. They did. His prediction was correct.[12]

Alan Greenspan was able to build on Volcker's achievements, both because of his own commitment to similar principles, and because the strong growth and low inflation enjoyed during the Great Moderation of 1986-2003 seemed to vindicate the short-term sacrifices made during the Volcker years. Greenspan, like Volcker, did not passively accept the views of his staff. "As chairman, Alan Greenspan told the staff that he did not find their inflation forecasts useful. Like Volcker, he explicitly rejected the Phillips Curve."[13] And Greenspan's success in outforecasting the models became legendary. He became the "maestro." The Fed's credibility, and its chairman's, was never greater. This mattered for enhancing Fed monetary policy independence. Although political pot shots from Congress continued, the record of success insulated the Fed from serious attacks.

Off the Rails, Again

Unfortunately, from 2002 to 2005, the Fed decided to make use of its high degree of independence to pursue an unusually expansionary monetary policy. In doing so, it departed from its prior adherence to something approximating a Taylor Rule with a roughly 1-2% long-run inflation target. Over the course of these four years, the fed funds rate was maintained at levels that averaged more than two percentage points below the rate consistent with adherence to the Taylor Rule. This was also the only four-year period in postwar history, other than the late 1970s, that saw a persistently negative real fed funds rate. This pattern demonstrated that independence, when not guided by clear, rules-based mandates, may have costs as well as benefits.

As during the high-independence period of 1929-1933, and the less independent era of 1951-1979, Fed policy in 2002-2005 reflected beliefs about monetary policy that were soon discredited. In the two earlier periods, adherence to the real bills doctrine—in the form of the so-called Riefler-Burgess doctrine—and a lack of understanding of the relationship between nominal interest rates and inflation, were central to the errors of the Fed. In the case of the 1960s and 1970s, another contributor to accelerating inflation was the belief in a simple Keynesian Phillips Curve. In the 2000s, it is harder to identify precisely the ideological source of the Fed's decision to depart so dramatically from the Taylor Rule. That decision seems to have reflected concerns about oil prices and other very short-term concerns that were seen as downside risks for the economy. Governor Frederic Mishkin, in particular, was vocal in defending the departure from the Taylor Rule to protect against short-term downside risk.

Many critics, including Taylor himself, have attributed much of the problem in the recent financial crisis to the impact of loose monetary policy on financial and economic overheating in the years leading up to the subprime bust.[14] Although that view places too little weight on the micro-economic distortions produced by government policies that drove the decline in mortgage underwriting standards during the 1990s and 2000s, there's little doubt that loose

[12] Meltzer (2012).
[13] Meltzer (2012).
[14] Taylor (2010, 2011, 2012, 2013).

monetary policy contributed substantially to the narrowing of credit risk spreads and to increases in the prices of real estate and common stock.[15]

In summary, I would emphasize two overarching lessons. First, unconstrained Fed discretion, driven either by inaccurate models or politicized Fed leadership, was central to the three major monetary policy errors of the past century—those of the 1930s, the 1960s-1970s, and the 2000s. If the Fed had been following a clear price stability mandate, based on adherence to a systematic policy rule, and if Fed officials had been forced to defend their actions with reference to a price stability mandate and a systematic policy rule, they would have found it much harder to err so dramatically. Second, increased statutory Fed independence did not lead to improvements in Fed policy. Bad ideas and politicized policy hobbled the Burns era, just as good ideas and the courage to ignore myopic politics underlay Volcker's success.

IV. A Short History of Fed Independence and the Fed's Regulatory Policy Powers

The Fed plays an important role as a writer of specific regulations, as a supervisor of banks, and as an advocate for regulatory policy changes. It also represents the United States at the Basel Committee, which sets international prudential regulatory standards for banks. These regulatory functions are performed by the Fed alongside many other, sometimes"competing," financial regulators: the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), the Securities Exchange Commission (SEC), the Commodity Futures Trading Commission (CFTC), and the state banking and insurance authorities, as well as the courts. Bank regulation is an activity that has increasingly occupied a great deal of time and energy at the Fed, especially during the past three decades when the structure and rules of the financial regulation game have changed dramatically, and much more frequently than the structure and rules for monetary policy. The Fed has taken on an increasingly dominant role as a regulator, and with important implications for Fed independence.

Modest Beginnings

From the beginning, the Federal Reserve Banks played a regulatory role, but that role began modestly, became significant after the Great Depression, and expanded dramatically in the last two decades of the 20th century and beyond. For Fed member banks that are state-chartered (rather than nationally chartered), the Fed has always been the primary federal supervisory and regulatory authority, while sharing regulatory and supervisory authority with the relevant states' chartering authorities. The Federal Reserve Board was given significant nationwide regulatory authority for the first time in the Banking Act of 1933, and its authority was then expanded as the regulator of bank holding companies under the Bank Holding Company Act of 1956 and several times thereafter.

The initial limits on the Fed's role as a regulator reflected the unit banking structure of the U.S. banking system, in which both nationally chartered and state-chartered banks were limited to operating in only one state, and

[15] The literature documenting the effects of expansionary monetary policy on risk spreads and risky asset pricing is now quite large, and includes Dell'Ariccia, Igan and Laeven (2008), Jimenez, Ongena, Peydro-Alcalde and Saurina (2007), Mendoza and Terrones (2008), and Bekaert, Hoerova and Lo Duca (2010).

typically were required to maintain only one banking office. Given the absence of a national system of banks, there was little obvious need for a national regulator or supervisor of banks. Indeed, the Federal Reserve System was itself highly decentralized, with control residing mainly in the 12 Reserve Banks, at least until the 1933 and 1935 Acts. Furthermore, the Fed was not a chartering authority, and Fed membership was voluntary. For much of the 20th century, most U.S. banks were not Fed member banks. Furthermore, the Federal Reserve Banks were owned and controlled by their members. Under these circumstances, not surprisingly, the Federal Reserve System was given little regulatory authority and showed little ambition to impose regulatory constraints on its members.

The Great Depression

This all changed as a result of the Great Depression. The political fallout for banking regulation from the Great Depression was extreme. It was also extremely misguided. Economic historians now agree that the primary causes of financial and economic distress during the Depression were traceable to the following combination: (1) a poorly conceived monetary policy based on "real bills doctrine" thinking; and (2) the fragile unit banking structure of the U.S. banking system. That unit banking structure can in turn be seen as the outcome of a "Game of Bank Bargains" that is played by all bankers and bank regulators—and that is described at great length by Stephen Haber and me in our 2014 book *Fragile by Design* (and that I come back to later).

As suggested above, the regulatory policy changes relating to banks in the 1930s were based on a popular, but seriously distorted, view of the causes of bank failures during the Depression—namely, that bank consolidation and banks' involvement in securities markets, both of which increased dramatically during the 1920s, *caused* the collapse of the banking system. Although this view has been shown to be not only mistaken, but indeed the polar opposite of today's consensus among financial economists, it nonetheless formed the basis for the ill-conceived banking reforms of the 1930s.[16] Not surprisingly, those reforms were designed by Messrs. Glass and Steagall, who were, respectively, the principal defenders of the real bills doctrine and unit banking in Congress. And their intent was to strengthen the regulatory commitments to the real bills doctrine and unit banking.

The principal banking reforms included the separation of commercial and investment banking, interest rate limits on deposits, the creation of Federal Deposit Insurance, and a variety of measures designed to limit the expansion of banking "groups." Glass was the champion of the first two sets of measures, and Steagall of the second two. These measures were not universally welcomed by informed policy makers, but opponents were unable to counter the strong public support for the measures, which partly reflected the attacks of the highly publicized Pecora Hearings on Wall Street bankers. In particular, although President Roosevelt, the Fed, the Treasury Secretary, and Senator Glass all opposed deposit insurance as a destabilizing measure, Representative Steagall was able to push it through on a tide of public support. Glass focused his attention on measures designed to insulate the banking system from securities markets by prohibiting connections between banks and securities related affiliates, limiting lending against securities, and limiting bank lending to affiliates. Interest rate limits were advocated primarily as a means of

[16] Calomiris (2010).

undermining the interbank deposit market. Glass disliked interbank deposits because they concentrated deposits in the New York City banks, which often used them to fund securities lending. Deposit insurance and the limits on banking groups advocated by Steagall and other supporters of unit banks were designed to protect those banks from competition. Deposit interest rate ceilings were also viewed as desirable limits on bank competition.

The architects of the 1933 reforms needed someone to enforce these new arrangements and there was no practical alternative to the Federal Reserve Board. Who else had sufficient informational access, through the Fed member banks, to monitor the nationwide and international network of banking relationships or bank ownership? Such monitoring was essential for the enforcement of the separation of commercial and investment banking and the new limits on group control of banks, as well as enforcement of Clayton Act limits on interlocking directorships.[17] The Fed Board played a central role in defining what constituted an affiliate for purposes of the various statutory limits, as well as for examining banks and affiliates to determine whether they were in violation of the various new rules on securities activities, group control, or interlocking directorates. It was also charged with setting margin requirements on securities loans.

It is noteworthy that this new delegation of regulatory responsibilities to the Fed occurred in the context of a highly volatile political environment that was fraught with controversy over the reform of monetary policy. The 1932 Act had already required the Fed to make use of government securities as collateral for its discounting. Soon the 1934 Gold and Silver Acts would effectively substitute Treasury control of monetary policy for Fed control, and the 1935 Act would centralize Fed power and give greater weight to the politically appointed Board of Governors. The Fed did not support all aspects of the reforms that were remaking its world; for example, the Fed Board opposed the creation of deposit insurance, and the use of government securities as collateral for discounting was anathema to real bills thinking. But the Fed was not in a position to push back the political tide that was fundamentally reshaping its monetary and regulatory rules. All it could do was roll with the punches, and try to maintain and execute competently whatever authority it was given.

The Fed's stock was not very high in Washington in the mid-1930s, which may also explain why the Fed was not the institution charged with overseeing the government's main policy changes toward banks. The creation of the Federal Deposit Insurance Corporation (FDIC) and the creation of the Reconstruction Finance Corporation (RFC) meant that two new powerful banking regulators would now operate as parallel organizations to the Fed with their own distinct authorities. Furthermore, it was these two institutions that were given primary responsibility for examining banks in 1933-1934 to determine which would reopen, which would reopen with RFC assistance, and which would be shut permanently. The Fed's regulatory role was primarily as a "preventative" regulator charged with preventing the mixing of commercial and investment banking, excessive lending against securities, and any backdoor consolidation of the banking system via banking groups.

[17] Which took effect in 1934, and became part of what later was known as Regulation L.

Five Post-Depression Decades of Narrow, Fragmented Banking

The Bank Holding Company Act of 1956 created further limits on the entities that could control banks, and expanded the authority of the Federal Reserve Board in its oversight of the parties in control of banks. Any entity assuming control of a bank had to receive the approval of the Fed Board. The Holding Company Act also gave the Board authority to prevent changes in control that would lead to the control of banks by entities that were involved in non-banking activities—to enforce the so-called separation of banking and commerce.

In 1960 and 1966, in reaction to an increase in bank merger activity during the 1950s, and under the continuing pressure of unit bank lobbying (especially, the Independent Bankers Association), Congress enacted the Bank Merger Act to limit mergers among banks. Bank regulators, including the Federal Reserve Board, now had to consider the competitive consequences of mergers before approving them. Although promoted as a measure to ensure competition, in fact these measures are better understood as measures designed to preserve the market power of inefficient unit banks by limiting the ability of successful banks to grow.

As this brief review makes clear, from 1933 to 1980 the dominant trend in banking regulation, and the role of the Fed and other bank regulators during that period, revolved around *restrictions* on bank consolidation and the range of banking activities. Consistent with this trend, virtually no relaxation of branching restrictions occurred, either at the state or federal level, during this period.

Deregulation of Branching and Underwriting Activities after 1980

As Stephen Haber and I emphasize in our book *Fragile by Design*, after 1980 there was a dramatic reversal in banking regulation with respect to consolidation and bank powers—one that would have enormous consequences for the Fed's role as a regulator. The relaxation of branching barriers initially took the form of state-level policies, often as part of regional interstate agreements, as well as federal legislation. As can be seen in Figure 1, this removal of impediments to branching helped spur an unprecedented merger wave in banking, and, eventually, to a dramatic expansion of banks' powers that culminated in the Gramm-Leach-Bliley Act of 1999.

What caused this dramatic reversal? Haber and I pointed to five influences that worked to undo the sway of the unit banker-agrarian populist coalition. The first was demographic: during the 20th century, the United States was transformed from a predominantly rural to a predominantly urban country, which meant that voting power shifted away from rural interests—which were generally supportive of unit banking—toward America's cities.

The second force was technological progress that eroded the ability of banks to extract rents from borrowers and depositors. With respect to borrowers, beginning in the 1970s, the computer revolution drove down the cost of information storage and retrieval, allowing prospective lenders anywhere in the country to assess a borrower's credit-worthiness without having to rely as much on "soft information" that could be obtained only locally. With respect to depositors, technology also spurred much greater competition, especially via networked automated teller machines

linked by computer. Only two years after the networked ATM was patented in 1974, unit bankers started filing cases in both federal and state courts seeking to block their proliferation. One of those cases, *Independent Bankers Association of New York State v. Marine Midland Bank*, ultimately wound its way to the Supreme Court, which in 1985 ruled that an ATM was not a bank branch, thereby eviscerating state laws that set limits on banks with branch networks.

The third influence was accelerating price inflation in the 1960s and 1970s, which spurred disintermediation from the regulated banking system, and created the first of the post-1960 "shadow banking systems" of relatively unregulated finance companies and money market mutual funds. Regulation Q limited the interest rate that could be paid on bank deposits. As inflation and nominal market rates of interest rose, the real interest rate payable on regulated deposits became increasingly negative, making it hard for banks to attract deposits. Instead, institutional depositors increasingly began to put their money into commercial paper. Households soon followed institutional depositors as "money market mutual funds" began to allow customers to write checks against their portfolios of treasury bills and commercial paper.

As technological change and inflation spurred the growth of alternatives to regulated banking, and produced declines in the domestic "core" deposit and loan market shares of regulated banks, a fourth worrying factor reared its head. U.S. banks—which were relatively small and constrained in their geographic reach and permissible product lines, as compared to the banks of other developed countries—were losing global market share. Large foreign banks were even making inroads into U.S. markets by building relationships with large U.S. corporations. The Fed and many U.S. politicians became advocates of the deregulation of interest rate ceilings, the removal of branching restrictions, and the elimination of limits on bank powers—especially the limits on corporate securities underwriting by banks—all as means of allowing U.S. banks to compete with their foreign counterparts. Consider, for example, Alan Greenspan's comment in 1988:

> *The ability of banks to continue to hold their positions by operating on the margins of customer services is limited. Existing constraints, in conjunction with the continued undermining of the bank franchise by the new technology, are likely to limit the future profitability of banking… If the aforementioned trends continue, banking will contract either relatively or absolutely.*

Then, in 1990, Greenspan went on to argue:

> *In an environment of global competition, rapid financial innovation, and technological change, bankers understandably feel that the old portfolio and affiliate rules and the constraints on permissible activities of affiliates are no longer meaningful and likely to result in shrinking the banking system.*

The fifth force driving reform of banking regulation was a wave of banking distress and failures in the 1980s, which set into motion a political movement in favor of bank consolidation. The 1980s saw an unusual confluence of shocks affecting banks. The spike in interest rates in the early 1980s caused banks and savings and loan associations, or S&Ls, with large exposures to (fixed-rate) real estate loans to suffer major losses. Agricultural price collapses in the early 1980s caused many small, rural banks to fail. Oil and gas price collapses in the early 1980s wiped out many

banks in Texas and Oklahoma. The revocation of the tax laws governing accelerated depreciation for commercial real estate transactions caused major declines in the commercial real estate market in the Northeast, hurting the banks that lent in this market. Evidence that banks had contributed to the size of their losses through aggressive risk-taking and abuse of the protection afforded by deposit insurance and access to the Fed's discount window—in many cases after the banks were already deeply insolvent—further galvanized opposition to preserving the status quo.[18]

The extreme banking distress of the 1980s even encouraged many unit bankers, as well as bank borrowers, and government officials, to favor the relaxation of branching restrictions. A unit banker facing the failure of his bank saw acquisition by a branching bank as a way to exit with some stock wealth and perhaps even a job in the new bank, a desirable alternative to losing everything. The borrowers at failing unit banks saw branching banks' willingness to buy weak banks as a crucial source of funding. For the FDIC and federal government officials, the big banks' acquisitions of small failing banks reduced the costs of paying off failed banks depositors. For state governments, the new bank entrants were a welcome means of restoring local economic growth.

So, just as had happened in 1907 and during the Great Depression, a financial crisis exposed the inherent instability of financial institutions that could not diversify risk by pooling the risks of different regions, and could not respond to difficulties by shifting resources across branches of an interconnected network. But this time regulators and politicians saw a political advantage in permitting large banks to acquire failing banks in exchange for limiting the cost of those failed banks to the FDIC. From 1979 to 1990, 15 states relaxed their branching restrictions.[19] Many states also permitted their banks to be acquired by large, out-of-state banks, many of which hailed from states like North Carolina, Ohio, and California, which had long permitted within-state branching.

A major blow to the state laws that prohibited interstate branching came in 1982, when Congress, in response to the Savings and Loan crisis, amended the Bank Holding Company Act of 1956 to allow failed banks to be acquired by any bank holding company, regardless of state laws. This induced many states to enter into regional or national reciprocal arrangements whereby their banks could be merged (not just purchased by a holding company) with banks from another state. Between 1984 and 1988, 38 states joined one of these reciprocal arrangements.[20] Banks operating national branching networks accounted for only 10% of the U.S. banking system in the early 1980s. By the mid-1990s, they accounted for more than 70%.[21] The final blow to the unit banks came in 1994, when Congress codified the process that had been taking place at the state level by passing the Riegle-Neal Interstate Banking and Branching Efficiency Act. Banks could now branch both within states and across state lines.

This massive consolidation of banking was also accompanied by an expansion of the permissible activities of bank holding companies into securities underwriting and insurance. The expansion into underwriting occurred in several discrete stages over the period 1987-1999, beginning with the Fed's discretionary decision in 1987 to allow small inroads by bank holding companies into investment banking. The initial opening resulted from a Supreme Court

[18] See Barth, Bartholomew and Labich (1989), Brewer and Mondschean (1991), White (1991), Brewer (1995), Gilbert (1994), and Schwartz (1992).
[19] Calomiris (2000).
[20] Kroszner and Strahan (1999).
[21] Calomiris (2010).

change in the 1980s, which suggested that the Court would adopt a more limited interpretation of the Glass-Steagall restrictions on mixing investment banking and commercial banking, thus opening the door to some investment banking by commercial banks.

Limitations were relaxed slowly, however, and many so-called "firewalls" were established initially to isolate investment banking affiliates' underwriting activities from the activities of the core banking enterprise. The first investment banking (Section 20) affiliates were established in 1987. There was a further relaxation of the extent of activity by these affiliates in 1989. In 1997, the Fed eliminated the firewalls that it had established to keep the operations of Section 20 affiliates separate from the other operations of the bank.[22] Ultimately, in 1999, Gramm-Leach-Bliley eliminated any restrictions on the amount of investment banking activities in commercial banks.

Over time, the Fed and other advocates of change were able to build the case that the fears of some policy makers about conflicts of interest arising from the combination of investment and commercial banking were ill-founded, and that the presumed benefits from the combination were real. Moreover, gradual changes created a favorable track record, which laid the groundwork for the Administration's and Congress's willingness to eliminate virtually all financial activity restrictions on the newly created "financial holding companies" in 1999—a policy change the Fed actively advocated in the 1990s.

Political support for the relaxation of activity limits, as in the case of consolidation, reflected the declining global position of U.S. banks. By the mid-1980s, U.S. banks had declined in international importance and profitability. Large U.S. banks had made significant profits in the growing areas of credit card lending and private equity investing; and without those profits, the losses from nonperforming loans, sovereign defaults, and increasing competition and deposit disintermediation would have placed most large banks into extreme difficulties. Ironically, equity investing by a handful of the largest banks was already underway on a large scale long before debt or equity underwriting was permitted.

Evidence from numerous academic studies of the gains from combining commercial banking and securities underwriting within the same financial intermediary supported the elimination of the regulatory barrier between the two. There is now a huge literature showing, both in theory and in practice, that it can be beneficial for bank customers to permit banks to engage in underwriting of corporate debt and equity.[23] Savings in information production costs lie at the heart of this policy.

The historical prohibition on combining commercial banking and investment banking had been based on faulty premises and a lack of evidence that became increasingly apparent during the 1990s. The growth in the market shares of commercial banks in investment banking in the 1990s and 2000s was dramatic. As of 1992, only 10% of corporate debt and less than one percent of corporate equity flotations were underwritten either solely or jointly by

[22] Phillips (1997).
[23] See the summary in Calomiris and Pornrojnangkool (2009).

commercial banks. By 2002, 66% of corporate debt and 36% of corporate equity flotations were underwritten either solely or jointly by commercial banks.[24]

The Role of the Fed and the Game of Bank Bargains

It was during the period of consolidation and the expansion of bank powers that the Fed became *the* dominant supervisor and regulator of banks, and later of the entire financial system. This expansion of Fed power reflected various influences, including the perception of the Fed as an institution full of highly competent, knowledgeable, and reputable people. But there was more to the story than that. The Fed was also a savvy political intermediary.

On the surface, the deregulation of banking was a technical issue, decided on its merits as a matter of economics, and the Fed played an important role as an honest broker of information, helping to inform policy makers, and thereby helping them to achieve a rationalization of the structure of the banking system. But there was more to the political decisions shaping deregulation than "efficiency" concerns, and there was more to the Fed's role than its provision of information to policy makers.

The Fed was also a political player in the deeper drama that permitted and shaped deregulation—a drama that, as I mentioned earlier, Stephen Haber and I referred to in our book as "the Game of Bank Bargains." Deregulation was a political deal. The Fed was both an intermediary that helped to enforce the political bargains shaping the banking system, and a party to those bargains. Most importantly, the expansion of Fed power reflected the Fed's willingness to ally itself with the dominant coalition that controlled how consolidation of the banking system would occur.

In this regard, it is instructive to note that the Fed initially did not welcome the consolidation of banking. It did so only after consolidation was well underway and regarded as politically safe to support. As former Comptroller of the Currency, John Hawke summarized the Volcker Fed's attitude toward relaxation of branching laws in 1988,

> *The Federal Reserve under Volcker was largely a bystander in this profound change in the structure of American banking. While Volcker consistently supported very limited intrusions into state authority to facilitate the interstate takeover of large failing and failed banks, his Board did nothing whatsoever to encourage broader interstate banking. On the contrary, in its grudging and suspicious treatment of the desires of banking organizations to acquire thrifts; in its response to such developments as "stake-out" investments—nonvoting equity investments in banks by bank holding companies not yet permitted to make full-scale acquisitions in the target bank's state; and in its pinched and niggling approvals of requests by bank holding companies to use nonbank banks as a means of interstate expansion, the Board seemed to view itself as the little Dutch boy of interstate banking, with a duty to plug each supposed leak in the dike as it appeared.*[25]

Why the change in Fed advocacy on branching? Given the tectonic economic shifts that favored consolidation, the political landscape in Congress regarding branching changed completely in the late 1980s. Consequently, the Fed's advocacy reflected, while lagging well behind, a broader political movement throughout the

[24] Ibid.
[25] Hawke (1988).

country. The Fed advocated consolidation only after it was clear that doing so did not threaten to cause difficulty with Congress or the Administration, which might have threatened its monetary policy independence.

Can one identify a "philosophy of regulation" that underlay the regulatory advocacy of the Fed and Chairman Greenspan after 1987? Did the Greenspan Fed have a point of view on regulatory matters? I will show that, although the Fed's advocacy on various matters may appear somewhat contradictory, or at least philosophically heterodox, the Fed has behaved in a manner that is remarkably predictable, once one takes account of the political arena in which both regulatory and monetary policy are made.[26]

The Greenspan years did not illustrate a pure economic philosophy of financial regulation, but rather a politico-economic philosophy which might be called "pragmatic and political-bargain-based deregulation." I would not argue that Chairman Greenspan's regulatory advocacy was optimal, either from the unconstrained standpoint of an ideal regulatory system, or from the constrained (realistic) standpoint of what is possible in the real world. My goal is not to highlight errors so much as to make the positive claim that there is a fairly straightforward logic implicit in the Fed's regulatory advocacy, a fairly simple algorithm of advocacy. To understand its logic, one must begin with an understanding of the Fed as a political player in the Washington drama, as a creature of the federal government subject to its oversight, as a competitor with other regulators for influence within the financial services industry and within the political realm, and as a prioritizing agent that decides which battles—monetary or regulatory—to fight when, and how hard.

In an early assessment of Greenspan's legacy, I published an article in 2006 in which I tried to explain, among other things, the reversal in Fed advocacy of deregulation in some areas, but not in others. I assigned all major financial regulatory actions by the Fed into one of four categories, according to an interpretation of the Fed's action and the dominant motives for those actions. One category was labeled "Fed advocacy of beneficial deregulation," and the three others included cases in which the Fed opposed beneficial regulatory policies for one of three different

[26] Chairman Greenspan was an active proponent of branching deregulation (see Greenspan 1988, 1990, 1997a-e, 1998, 1999, 2001). On May 3, 1997, for example, in a speech before the Conference of State Bank Supervisors, he advocated Congressional action to place state banks on an equal footing with national banks with respect to the permissible activities of branches located outside the state in which their headquarters are located. It is noteworthy that Chairman Greenspan's May 1997 speech was directed toward enhancing the scope and powers of state-chartered bank branches. That is, his recommendation would have increased the importance of the regional Feds relative to the OCC as regulators of banks (as opposed to holding companies). One of the concerns that Fed officials had about bank branching, which the Chairman recognized in his testimony before the Congress on June 17, 1998, was that interstate branching was expected to "induce shifts from state to national bank charters, reducing the Fed's supervisory role." Improving the powers of state-chartered branches would have offset some of those expected defections. In his June 1998 testimony, Chairman Greenspan argued that the Board of Governors' position in support of interstate branching was a piece of evidence that directly contradicted theories of Fed advocacy that emphasized political turf battles. He pointed with some pride to the fact that the Board of Governors supported interstate branching despite its anticipated effect of inducing shifts toward the national banking system. But that argument is not convincing for two reasons. First, the Fed Board, as opposed to the regional Feds, regulates bank holding companies. Interstate banking, by enhancing the size and scope of bank holding companies, and by ushering in the era of universal banking, set the stage for the shift in regulatory power away from both the OCC and the regional Feds and toward the Federal Reserve Board, and Chairman Greenspan was already advocating such a shift in authority toward the Board alongside his support for interstate branching. Second, the Fed's advocacy algorithm takes into account the interests of its strongest political allies, the big banks, who surely stood to gain greatly from interstate banking. Thus, despite the possibility of local charter switching toward national banks, interstate branching was a predictable big win for enhancing the power of the Federal Reserve Board.

reasons: (1) too politically hot to handle; (2) not in the interest of the big banks; and (3) a Fed regulatory power play used to boost its own political influence.

The Fed advocacy algorithm was fairly straightforward. For example, the Fed supported bank consolidation and activities deregulation because such support (1) did not stir up significant political opposition to the Fed within Congress or the Administration, which might threaten its monetary policy independence; (2) did not harm the large commercial banks, which were key allies of the Fed in some of its political battles in Washington; and (3) did not undermine the Fed's competitive position vis a vis other regulators.

Furthermore, in that same article I showed that these three constraints on the Fed—opposition by politicians, opposition by big banks, and potential erosion of Fed regulatory power—led the Fed both to fail to support some beneficial regulatory changes—notably, those that would have reined in the growth of Fannie Mae and Freddie Mac during the 1990s, and those that would have required banks to expand and improve their capital positions—and to provide active support for what proved to be a very destructive approach to bank consolidation.

Most importantly, my 2006 article—and later, and at much greater length, my book with Stephen Haber—showed that the Fed failed not only to prevent undesirably anticompetitive bank mergers, but also to serve effectively as a prudential regulator of merging banks. Specifically, they refrained from identifying and trying to limit the mounting risks that banks took on as part of their contractual agreements with urban activist organizations—organizations that enjoyed powerful political support in the government—in order to gain the activists groups' support for proposed mergers. These two failings were two sides of the same political bargain: the bank merger wave, at its heart, was a political bargain to create rents for banks by creating market power—and to distribute those rents among politically powerful entities (mega banks and powerful urban activist organizations). The Fed was a willing intermediary of this bargain, and its willingness to play that role was rewarded with increased regulatory power, and with the absence of any threat to its monetary policy independence. But the social costs of that bargain turned out to be large.

The Fed's Role as Intermediary of the Megabanks-Urban Activists Merger Bargain

The Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994, by knocking down the last barriers to interstate banking, marked the demise of the unlikely political coalition between unit bankers and agrarian populists that had dominated banking policy for over a century and a half. It permitted a wave of mergers and acquisitions that created the megabanks that now have a branch in nearly every city or town in the United States. JP Morgan Chase was created out of the merger of no less than 37 banks, creating a megabank with more than 220,000 employees and $2 trillion in assets as of 2011. The Bank of America, which had initially been a California-based bank, merged with or acquired more than 50 other banks.

The creation of the new megabanks generated tremendous profits for merging banks, from a combination of economies of scale, economies of scope, the potential for market power, and too-big-to-fail government protection.

Political actions that create profit also create new opportunities for deciding how to divide them. Each merger and acquisition required approval from regulators, most particularly from the Federal Reserve Board.

The process of Fed approval required that banks show that they had been good citizens of the communities in which they operated, and this requirement provided a source of leverage for activist groups, such as the Association of Community Organizations for Reform Now (ACORN), who could block or delay a merger by claiming that the banks were not in compliance with the Community Reinvestment Act of 1977. What had been a largely moribund piece of legislation now became a very valuable chip in the Game of Bank Bargains, which perhaps explains why the Act was revised eight times once the merger wave got underway, each revision usually increasing its stringency. Bankers seeking to become nationwide enterprises had to ally with activist groups to obtain their political blessing at Fed hearings. In exchange, the activist groups obtained contractual guarantees from the would-be merging banks to direct mortgage and other credit, as well as cash contributions, to themselves and their constituents.

The Federal Reserve Board had the key decision-making authority over mergers, as the regulator of bank holding companies, but other bank regulators and the Justice Department also could weigh in to oppose mergers, if they chose to do so. There were several criteria that could be used to block approval of a bank merger. First, an acquiring bank had to be financially strong. Second, the merged bank could not have excessive market power. This was not much of a constraint, because the Fed typically assessed market power by looking at a merging bank's prospective deposit market share, rather than its prospective ability to set prices in credit markets.

The third criterion by which a merger could be blocked was a lack of "good citizenship," as defined by and regulated under the CRA. In our book, Haber and I showed that, unlike market power, this was indeed a binding constraint. The language of the CRA focuses on making sure that banks serve their local communities, and this often translated into ensuring that low-income urban communities with minority populations were not subjected to discrimination in lending.

The early years of the CRA do not appear to have produced much in the way of major changes in bank lending practices; as can be seen in Figure 2, from 1977 to 1992, only $43 billion in CRA commitments by banks had been announced, and almost all of that occurred after 1989. By 1995, however, revisions to the CRA meant that banks faced adverse consequences for running afoul of federal government bank supervisors who monitored and rated their CRA compliance. As President Clinton boasted in a July 1999 speech, "[CRA] was pretty well moribund until we took office. Over 95 percent of the community investment…made in the 22 years of that law have been made in the six and a half years that I've been in office."[27] Clinton embraced the idea of CRA commitments as part of his more general belief in a "third way" to promote the economic well-being of disadvantaged Americans. This "third" approach stood in contrast to either a laissez-faire approach or a traditional tax and transfer approach to public policy.

Why did banks care about their CRA ratings? Banks could receive a range of CRA grades—Outstanding, Satisfactory, Needs to Improve, and Substantial Noncompliance—and they depended on the degree to which a bank

[27] Calomiris and Haber (2014), pp. 217-218.

was deemed to be serving the needs of the communities where it operated. The main penalty for getting a weak rating was that it could potentially scuttle a bank merger on the basis of "bad citizenship." A bank that was not pursuing an aggressive strategy of mergers and acquisitions did not, therefore, need to pay much attention to its CRA rating. A bank with big ambitions to grow, however, needed a high CRA rating.

It was therefore often in a bank's interest to enter into an explicit partnership with an activist group in advance of a Fed merger hearing. Some critics of the CRA described those deals as a form of legalized extortion. Regardless of the words used to describe them, the deals struck by banks and activist groups were a predictable outcome of the situation at hand. Banks had every incentive to merge: they could capture scale economies in administration, diversify risk, obtain market power, and perhaps grow large enough to obtain too-big-to-fail protection. Activist groups had every incentive to threaten to show up at Fed hearings to complain that a bank involved in a merger was not a good citizen; their organizations would prosper as the result of the CRA agreements that they negotiated, and their constituents would enjoy increased access to credit. Given the existence of the CRA, both sides had incentives to strike a deal, because failure to do so meant that the bank merger might be blocked, thereby forcing the bank to forgo the opportunity to increase its profits and the activist group to forgo the opportunity to serve its members and increase the resources at its disposal. The politicians whose policies made these deals possible saw no reason to get in the way of them. As President Clinton proudly proclaimed in a 1999 speech, the banking reform legislation of that year "establishes the principles that, as we expand the powers of banks, we will expand the reach of the [Community Reinvestment] Act."[28]

There was nothing subtle about the manner in which the deals between merging banks and activist groups were arranged. In fact, an umbrella organization for activist groups, the National Community Reinvestment Coalition (NCRC), put together a 101-page guide on how to negotiate with banks that were in the process of merging. The NCRC guide did not shy away from encouraging activist organizations to take advantage of their leverage over a prospective bank merger:

> *When a lender desires to merge with another institution or open a branch, the lender must apply to the Federal Reserve Board and/or to its primary regulator for permission. If the lender has received low [sic] CRA rating, the federal agency reviewing the lender's application has the authority to delay, deny, or condition the lender's application.*[29]

The guide goes on to say:

> *Merger and acquisition activity presents significant opportunities for community groups to intervene in the approval process and raise CRA concerns and issues. Some banks are very desirous of Outstanding ratings so that they can present a clean reinvestment record to regulators when they ask for permission to merge… Activists should keep in mind that changes from Outstanding to Satisfactory ratings (and back again) is effective in leveraging reinvestment as well as changes from passing to failing ratings (and back again to passing). This is true regardless of whether the movement in ratings is the overall rating for the bank or a rating for particular geographical areas."*

[28] Calomiris and Haber (2014), p. 220.
[29] Calomiris and Haber (2014), p. 220.

The guide then explains how to affect a bank's grade: "community organizations can offer written comments on a bank's CRA and fair lending performance when a bank has submitted an application to merge or acquire another bank or thrift. NCRC can assist community organizations in preparing comments on merger applications." Finally, the guide made clear that simply creating noise in a bank's merger application file could allow a group to leverage resources, even if the bank had been CRA-compliant:

> *Timely comments can influence a bank's CRA rating by directing examiners to particular areas of strength or weakness in a bank's lending, investments, or services in low- and moderate-income neighborhoods…. Even changing a rating from Outstanding to Satisfactory in one state or one part of the exam can motivate a bank to increase the number of loans, investments, and services to low- and moderate-income communities.*

Activist groups were successful in negotiating many long-term contracts with banks in which they received specific monetary and other commitments for their organizations. Between 1977 and 2007, there were no fewer than 376 such agreements, involving scores of groups. These agreements included a $760 million commitment from the Bank of New York to ACORN, an $8 billion agreement between Wachovia Bank and New Jersey Citizen Action, and a $70 billion agreement between the Bank of America and the California Reinvestment Coalition. In return, the activist groups did not oppose the approval of those banks' pending mergers and acquisitions. Sometimes, they submitted documentation and testified *in support* of the merger. For example, when NationsBank merged with the Bank of America in 1998, creating the largest bank in the United States, with $525 billion in assets, the President of ACORN Housing, George Butts, testified at the Fed hearing on behalf of the merging banks.

The commitments that activist organizations obtained from banks came in two forms. First, banks committed to supply mortgage and small business credit to borrowers identified by the activist organizations. Over the period 1977-2007, these directed credit commitments totaled $867 billion, with almost all of that growth coming in the years after 1992. Banks also provided a second source of support to activist groups, by paying them fees for administering the directed credit programs into which they had entered or by making direct contributions to those groups. Between 1993 and 2008, for example, ACORN received $13.5 million from the Bank of America, $9.5 million from JP Morgan Chase, $8.1 million from Citibank, $7.4 million from HSBC, and $1.4 million from Capital One. As of 2000, the U.S. Senate Banking Committee estimated that the total of such fees and contributions to all activist groups came to $9.5 billion, which likely understates the true amount.[30]

Had it not been for the CRA, banks would have made fewer and less risky loans in the 1990s and 2000s. A recent study compares the portfolios of banks in the six quarters prior to a CRA evaluation relative to the portfolios of other banks not slated for an evaluation, and finds that an impending a CRA examination caused banks to increase their lending by 5%, and increased the default risk of those banks mortgage loans by more than 15 percentage points.[31]

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[30] Calomiris and Haber (2014), p. 223.

[31] See Agarwal, Benmelech, Bergman and Seru (2012), who after summarizing their results, note that their "estimates do not provide an assessment of the full impact of the CRA. This is because we are examining the effect of CRA evaluations relative to a baseline of banks not undergoing an exam. To the extent that there are adjustment costs in changing lending behavior, this baseline level of lending behavior itself may be shifted toward catering to CRA compliance. Because our empirical strategy nets out the baseline effect, our estimates of CRA evaluations provide a lower bound to the actual impact of the Community Reinvestment Act. If adjustment costs in lending behavior are large and banks can't easily tilt their loan portfolio toward greater CRA compliance, the full impact of the CRA is potentially much greater than that estimated by the change in lending behavior around CRA exams."

This approach provides lower-bound estimates of both increased lending and increased levels of default risk resulting from the CRA.

Another approach to measuring the impact of CRA compliance has been to focus on the increase in the level of CRA commitments over time. One study based on the conservative assumption that the CRA had no binding effects on bank lending until the Clinton Administration's policy push concludes that, by 2007, there were $2.2 trillion dollars in CRA commitments that would not have been undertaken by banks voluntarily.[32] In short, however its effects on lending are measured, CRA compliance had major effects on the amount and the riskiness of lending.

The trillions of dollars worth of CRA deals also had important consequences for the structure of the banking industry. The arrangements made by banks and activist groups did not just mean that the latter would not block mergers by the former; it meant that the latter, and their political allies, ironically, became *supporters* of something one might have thought they would oppose—namely, the expanding power of mega-banks.

The partnership between megabanks and activist groups became even more ambitious as it drew in a third set of partners—Fannie Mae and Freddie Mac. Banks would not make limitless commitments to their activist partners because CRA loans implied higher levels of risk for the bank than more traditional mortgage loans. Thus, the activist groups also used their political power in Washington to generate regulatory mandates on housing GSEs, which included the Federal National Mortgage Association (Fannie Mae), and the Federal Home Loan Mortgage Corporation (Freddie Mac), and the Federal Home Loan Banks (FHLBs). Fannie Mae and Freddie Mac, in particular, were required to repurchase mortgage loans that had been made to low-income and urban constituencies. This change was a win-win for both activist groups and megabanks; more credit could be directed to targeted constituencies at less cost to the banks because the banks were now able to sell some of their CRA-related mortgages to a GSE on favorable terms.[33]

These government mandates on Fannie and Freddie were not vague statements of intent, they were specific targets; and in order to meet those targets Fannie and Freddie had little choice but to weaken their underwriting standards. By the mid-1990s, Fannie and Freddie were agreeing to purchase mortgages with downpayments of only 3%, instead of the 20% that had been the industry standard. Soon after they were buying mortgages with weak credit scores. By 2003, they were agreeing to purchase massive quantities of loans with no documentation of income (so called "liar," or "no-doc," loans). In exchange, they obtained valuable concessions from Congress, most particularly capital standards (minimum ratios of equity capital to assets) that were only 60% that of commercial banks holding similar loan portfolios. In effect, the managers and shareholders of the GSEs joined the megabank-urban activist coalition. They became a crucial ingredient to the growth of the coalition's resources, a critical part of the institutional glue that held the coalition together.

[32] See Pinto (2011).
[33] Several books document the effects of Fannie Mae and Freddie Mac on the mortgage market leading up to the subprime crisis. In addition to Calomiris and Haber (2014), see Rajan (2010), Morgenson and Rosner (2011), Acharya, Richardson, van Nieuwerburgh, and White (2011), and Wallison (2011).

Adding to the popular appeal of the Grand Bargain, weak underwriting standards were not an excludable good (or bad); they were available to *everyone*. Fannie and Freddie, by virtue of their size and their capacity to repurchase and securitize loans made by banks, set the standards for the entire industry. Thus, large swathes of the American middle class that were not targeted by GSE mandates or CRA rules, were soon pulled, whether they realized it or not, into this large bank-urban activist-GSE coalition by jumping on the easy credit bandwagon. This fact cannot be emphasized strongly enough: when Fannie and Freddie agreed to purchase loans with an only 3% downpayment, no documentation of income or employment, and a far from perfect credit score, *they did so across the board*, and thereby changed the risk calculus of large numbers of American families, not just the urban poor.

What the Fed Should Have Done in the 1990s and 2000s, and Why It Didn't

In retrospect, it seems clear that the Fed would have better served the interests of the U.S. economy and banking system if it had not been so willing to approve many of the mega-mergers of the 1990s and 2000s, or the contracts between the megabanks and the community activists that helped paved the way for those mergers. The Fed, as a competitiveness regulator, should have been more concerned about the creation of concentrations of market power—as in the merger of Fleet and BankBoston in New England, which had particularly serious consequences for market power in local business lending. The Fed, as a prudential regulator, should have been more concerned about the potentially destabilizing consequences of $4.5 trillion in contractual CRA merger-related commitments. The Fed should have recognized the systemic risks that these mergers and contracts entailed, especially in combination with debased underwriting standards and GSE mandates. Clearly, the Fed had the authority to stop or reshape these mergers, to instruct banks not to enter into risky contractual commitments, or to require banks to maintain much higher capital ratios if they undertook such risks—which by itself would have discouraged some of the risk-taking during the merger wave.

It is hard to prove why people or organizations make mistakes, but several facts no doubt contributed to the Fed's decisions not to be stricter in its regulation of mergers, competition, or risk-taking. The parties to the bargain between the megabanks and the activist organizations were extremely powerful politically, and closely allied with influential politicians in the Congress and the Administration, both during the Clinton years and during the George W. Bush presidency. Opposing this bargain would not have been easy for the Fed. Doing so would have risked the wrath of not only the big banks, but of the members of Congress and the Administration that had oversight authority over the Fed, both in the realm of regulatory policy and monetary policy. A Fed that would have decided to be tougher would have risked losing its regulatory powers, and possibly some of its monetary policy independence, both of which depended on its friendly relationship with the Administration and Congress.

Neither the regulation of mergers, nor the prudential regulation of banks, has ever been the Fed's top priority. Monetary policy is the top priority, and preserving monetary policy independence was the paramount objective of the Fed. Putting that monetary policy independence at risk to strike down the trillions of dollars of merger-related CRA contracts in the name of competition or systemic risk management would have been almost inconceivable as a political calculation. Furthermore, the Fed was involved in heated turf battles with other regulators. Fed opposition to

the political bargain between the megabanks and the activists might simply have resulted in a loss of Fed regulatory authority rather than any change in regulatory outcome, as Congress and the Administration might have transferred authority over prudential regulation or merger approval to other parties.

Finally, the Fed's regulatory mandate was itself unclear because it involved multiple, conflicting objectives. On the one hand, the Fed was charged with preserving bank safety and soundness and competitiveness (already a complicated mandate); on the other hand, the Fed had to supervise bank compliance with the CRA, and was specifically required to measure banks' commitments to their communities and to take CRA compliance into account when considering mergers. If the Fed had taken a bold stand against the grand bargain between the megabanks and the activists, critics in Congress could have argued that it was failing to fulfill its mission, and used that argument to justify either a transfer in merger approval authority or other changes in Fed authority.

In short, the best explanation for why the Fed failed to act properly is not that it was incompetent or corrupt, but that its interests were best served by cooperating with the dominant political coalition. Of course, the political actors that made mergers possible and created the CRA amendments of the 1990s were aware of the political realities that constrained Fed action. Indeed, they depended upon them.

V. Policy Implications

The policy implications drawn from the above history and analysis are summarized in the eight propositions I presented at the outset. In closing, I want to expand on the last of them, Proposition 8, which says the following: to promote independence along both dimensions of economic policy—monetary and regulatory—two sorts of policy reforms are required: (1) separation of authority over the two areas into distinct agencies, with aim of avoiding trade-offs that end up reducing the independence of regulatory policy; and (2) the establishment of clear mandates and accountability procedures for each category of policy.

With respect to the first of these proposals, so long as the Fed is vested with both monetary and regulatory authority, it will fear political reprisals with respect to monetary independence from pursuing regulatory policies that run counter to the political bargains of influential politicians in Congress and the Administration. Separating regulatory and monetary authorities would ensure greater accountability of whichever agency is charged with each, and would avoid political trading off between the two.[34]

Just prior to the recent crisis, Secretary Paulson's working group on regulatory reform had released its findings suggesting the benefits of and advocating just such a change. Unfortunately, the political deals surrounding the crisis and the legislative response to it moved further in the direction of empowering the Fed as the primary regulatory of the financial system. Some supporters of this approach have claimed that it is necessary to ensure that the Fed can monitor risks of the banks to which it lends. This is a fatuous argument: the Fed can and should retain full authority to examine all Fed member banks without *requiring* it to be a merger regulator or a prudential regulator.

[34] See Calomiris and Litan (2000) for further discussion.

With respect to the establishment of clear mandates and accountability procedures for each category of policy, I would reiterate that without clear mandates, legitimate independence is nearly impossible to achieve. Furthermore, clear mandates limit undesirable discretion that results from inappropriately politicized leadership or the excessive confidence of economists in pursuit of intellectual fads, such as the Riefler-Burgess doctrine or the Phillips Curve framework.

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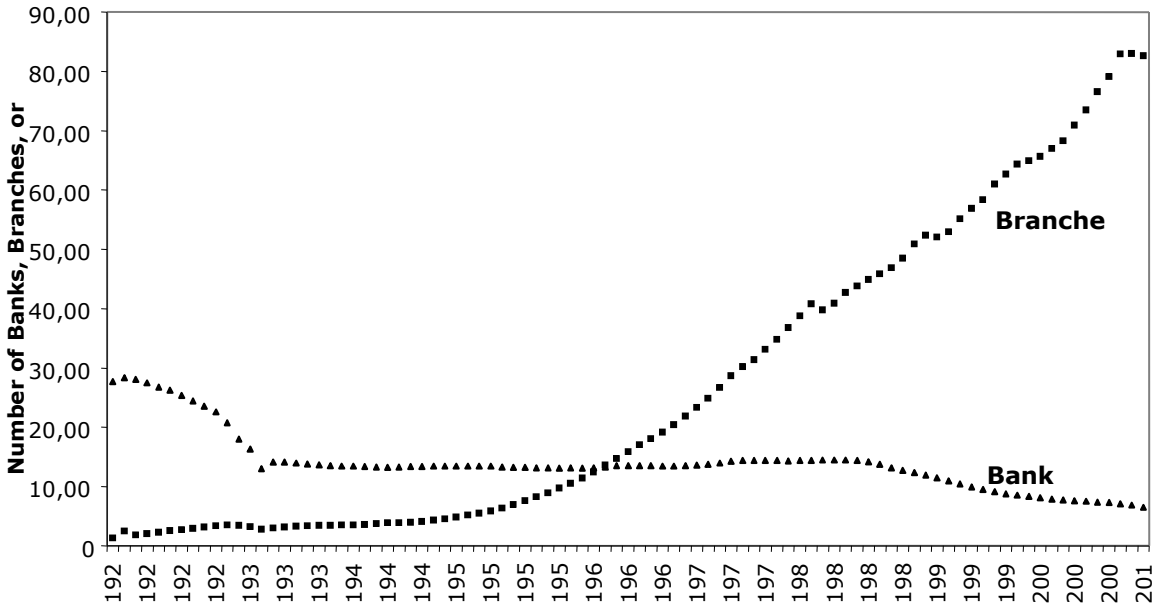
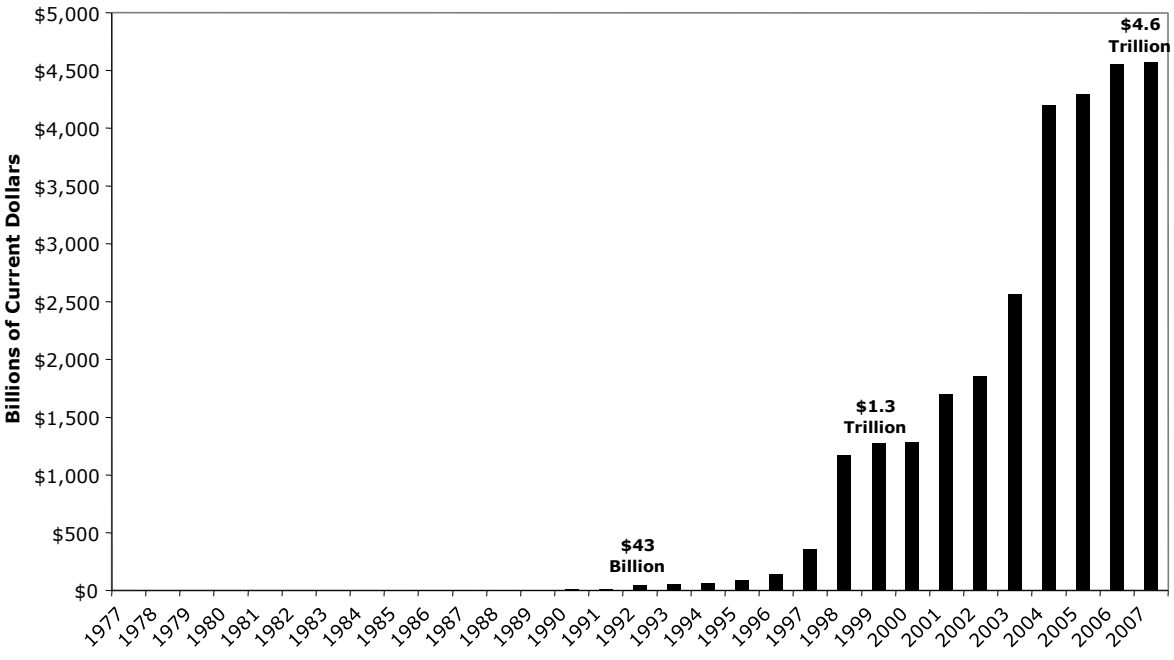
Figure
Number of Banks and Branches, 1920-



Source: Calomiris and Haber (2014), Chapter 6.

Figure 2
Cumulative CRA Commitments, 1977-2007



Source: Calomiris and Haber (2014), Chapter 7, computed from National Community Reinvestment Coalition, CRA Commitments data.