How To Promote Fed Independence:

Perspectives from Political Economy and US History

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I. Introduction

Practically everyone can agree that central bank independence is desirable, within the confines of a clear mandate to guide central bankers, which 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? On what does its existence depend? Why is it desirable? How independent is the current Federal Reserve System (Fed), and how independent has it been over its hundred year history? What could be done to enhance Fed independence by improving the current mandate within which the Fed operates?

These five questions have been present constantly in policy debates about the institutional design of central banks, especially since Milton Friedman's classic 1962 article addressing them.[1] Yet despite many decades of thinking, a working definition of Fed independence remains elusive, judgments differ about its extent and feasibility, and policy advocates continue to advocate very different kinds of rules for improving Fed independence.

In this article, I show that convincing answers to the five fundamental questions about Fed independence must begin by recognizing the status of the Fed within American democracy. As a matter of the logic of political economy, that means not only identifying the momentary statutory powers of

[1] Friedman (1962) considers three possibilities: a fully discretionary, independent central bank, a commodity standard, and a monetary rule. Friedman argues that the most desirable of these is a monetary rule. I conceive of a more flexible arrangement than a rule: one in which the central bank has a clear statutory mandate or explicit rule (e.g., a Taylor Rule) that it commits to follow, but it can deviate from the rule. I recognize, 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. Thus, I favor a "comply-and-explain" regime, in which departures from the rule are clearly announced and explained. The central bank describes why it is deviating from the rule, and commits to do so rarely. The leadership of the central bank, therefore, bears significant personal reputational risk if the supposed reasons for the deviation from the rule are considered to have been inappropriate, on the basis of hindsight. One could make this personal responsibility explicit by requiring that the terms of all Governors and Presidents would come up for renewal two years after they deviated from the rule, which would put discourage departure from the rule unless the circumstances clearly warranted it.

the Fed, but analyzing how alterations in those powers arise. All political constructs – including the Fed – are the result of a political bargaining process. Independence is impossible to define without considering the process through which power is delegated or withdrawn.

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* given to the Fed has been important in shaping the independence with which the Fed implements each aspect of its authority. It can be very misleading to focus – as many scholars do – only on 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 powers can have important implications for changes in the degree of Fed independence. Nor are changes over time in independence uniform across the various types of authority wielded by the Fed (which we will divide into monetary policy and regulatory policy powers). In the context of contemporary Fed actions, I define monetary policy as consisting of open market operations that expand or contract high-powered money (bank reserves plus currency) by buying or selling short-term Treasury securities, or that affect low-powered money through changes in properly bank reserve requirements.[2] The relationship between the extent of Fed power and Fed independence is not straightforward. In particular, it is not true that increased power always

[2] I do not consider Fed "credit" powers in this essay. By credit powers, I mean fiscal activities of the Fed related to the absorption of credit risk through lending and the purchases of risky securities. As Goodfriend (2011, 2012) notes, such powers are an inappropriate circumvention of proper procedures for appropriating funds in a democracy, which should be the purview of Congress and the Administration, not the central bank. These Fed powers became especially important in the recent crisis. Delegation of regulatory powers can have a similarly fiscal aspect, as I will show in the discussion of regulatory policy. I include reserve requirements in my definition of monetary policy. I recognize that this is a controversial definition. Reserve requirements that pay interest below the market (fed funds) interest rate on required balances constitute a tax on banks. Although Fed reserve requirements currently do not pay fed funds rates as a matter of policy, I propose that they should (as discussed further below). I do not explore credit policy for two reasons. First, others, especially Goodfriend (2011, 2012), have already commented on these issues at length. Second, considering the possible means for creating a credit policy authority separate from the Fed to deal with emergency subsidization of credit risk during a crisis would require a lengthy treatment.

produces greater independence. Increases in powers can result in reduced independence along some dimensions and increased independence along other dimensions.

A convincing 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 structure the discussion by first summarizing the argument of the paper in the form of eight sets of propositions, in Section II, which together address the fundamental questions about Fed independence that I posed in the first paragraph. More detailed evidence in support of those propositions is provided in Sections III and IV. Section V concludes.

II. Eight Sets of Propositions about Fed Independence

Proposition 1: Independence of authority of any agency is usefully defined as the ability to act, within the confines of a mandate, on the basis of judgment, and to do so with an expectation of impunity. An expectation of impunity is crucial to the existence of independence. An independent authority is independent not simply by virtue of the granting of de jure authority at a moment 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 that are 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. Legitimate central bank independence, as a behavioral reality, "generally requires" that four separate conditions must all be satisfied: (i) 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), (ii) the granting of statutory power for independent action within the constraints of the mandate, (iii) expected statutory authority persistence (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),[3] and (iv) central bank leadership that is desirous of acting independently. It is possible for a central bank to gain legitimate independence without one or more of these requirements (by virtue of exceptional leadership, successful policies, and spontaneous public approval), but this is unlikely.

Proposition 3: Independence is desirable because it constrains the ability of elected officials to make policy decisions. Presumably, the potential value of such constraints revolves around two aspects of political decisions in a democracy, which may be considered undesirable in economic policy making: myopia and logrolling. Myopia refers to the tendency of elected officials to sacrifice long-term objectives in order to retain their political power via reelection. Logrolling (mutual back-scratching among vested interests) makes it possible that policy choices that would benefit everyone may not be chosen because they 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 some desirable economic policies, especially if those policies make it harder to fulfill the top priorities of the various special interests that support the coalition.

[3] Consider an illustration of this point from the history of the Supreme Court. Under the Constitution, Supreme Court Justices serve for life. Lifetime tenure by itself would mean little if the Congress could act to amend the law to shorten the tenure of federal judges. The fact that it would require a Constitutional amendment to alter their tenure contributes to the Court's independence. Similarly, the fact that under current law, the number of Justices is limited to nine is important, as it limits the ability of Congress and the Administration to pack the court with new appointments to push through a point of view (for example, this was done by President Grant to achieve an outcome with respect to the constitutionality of inflationary legal tender laws in the 1870s, and President Roosevelt threatened this action in the 1930s during his battle with the Court). The nine-Justice limit, however, is arguably less potent a protection of independence than lifetime tenure because it is more easily reversed (it is a matter of statute, not the Constitution).

For example, as the result of myopia and logrolling, if monetary authority is not delegated to an independent central bank, elected officials may choose to print a large amount of money (rather than increase taxes, which would run afoul of one or more powerful constituents affected by that tax) to pay for election-year grants to some of their most powerful constituents. Elected officials may choose to do so despite the consequences of 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 delegation of monetary policy to a truly independent central bank. (Of course, myopia and logrolling may also make it far less likely that populist democracies will choose to create truly independent central banks in the first place – a problem to which I will return.)

Even a truly independent central bank may not choose to adhere to monetary policies that are in the interest of its citizens, however, for one of three possible reasons: (1) The central bank may choose objectives that are contrary to the public interest, either because of its freedom to dictate objectives, or because it is under the pressure of particular political factions. (2) Even in the absence of political factions, without a constraining mandate that requires the central bank to adhere to particular long-term objectives, it may make policy choices that are popular on a moment-to-moment basis, but that are contrary to the public interest because of a time inconsistency problem (Kydland and Prescott 1977). (3) The central bank may be incompetent in exercising its discretionary authority. Thus independence by itself, in the absence of a constraining mandate that guides policy objective and a competent agency, is no guarantee of desirable policy.

The same logic that explains the desirability of independent monetary policy also applies to regulatory policy, and explains why bank regulation is also a candidate for delegation to a truly independent agency (not necessarily the central bank). Regulation (most obviously, selective relaxation of entry barriers) can also be used to serve vested interests at the expense of the general populations. Entry barriers in fact have been used in precisely this way throughout U.S. banking history. Thus, if an independent regulatory agency can be established, it could conceivably produce decisions that are not influenced by myopia and logrolling.

Proposition 4: Unfortunately, for most of Fed history, with respect to both of its main categories of authority (monetary policy and regulatory policy), one or more of the four necessary conditions for independent behavior has been absent. As a consequence, it has been rare for the Fed to act independently. Independence has been rare in monetary policy; the only eras in which independent action in monetary policy was clearly evident were 1921-1933 and 1979-2006 (comprising less than half of the Fed's history). In the area of regulatory policy, an area of Fed authority that has become increasingly important since the 1980s, Fed policy has been much more politicized. The variation over time in the extent of Fed independence is not associated with statutory changes in the Federal Reserve Act, but rather with changes in the economic and political circumstances in which the Fed acted, and with its leadership.

Proposition 5: The greater politicization of regulatory policy, in comparison with monetary policy, reflects political trends that favored their use as hidden tax-and-transfer policy tools, especially beginning in the 1990s, as part of the "third way" policy approach of the Clinton Administration, which sought to use financial system regulation to achieve objectives that it could not achieve through the normal appropriations process. Fed leadership did not resist that trend, but rather, embraced its

newfound powers and vocally sought to obtain increasing regulatory authority, which it did obtain in the 1990s and subsequently.

The leadership of the Fed has always given greatest priority to obtaining and preserving independence with respect to monetary policy. 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, may be seen as an attempt to enhance and preserve the Fed's monetary policy autonomy. Because the Fed's leadership gives greatest priority to preserving and enhancing its monetary policy independence, delegating enhanced decision making powers in the area of regulatory policy to the Fed tends to encourage political tradeoffs that result in *relatively less independent regulatory policy, but relatively more independent monetary policy*. This likely has been anticipated in the political bargains that have allocated regulatory policy authority over the past three decades; the increasing breadth of powers granted to the Fed, therefore, can be seen as the outcome of a political bargain trading off of one aspect of Fed independence 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 used regulatory policy as a hidden form of fiscal policy. There are many examples of this phenomenon, but the most obvious and socially costly example was the Fed's oversight of bank mergers during the 1990s and 2000s. The Fed's intermediation of the grand political bargain with respect to bank mergers during that era was likely a greater contributor to the crisis of 2007-2009 than the Fed's frequently criticized departure from the Taylor Rule in 2002-2005. One interpretation of the Fed's desire to obtain regulatory power and acted its willingness to act as an intermediary of politicized regulation is that doing so is perceived as helping to preserve its monetary policy independence.

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 three of the major errors of monetary policy in the United States during the Fed's history (the Great Depression of 1929-1933, the Great Inflation of 1965-1979, and 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 in the interest of avoiding the short-term downside risk of a recession.

The tendency to make important errors in discretionary judgment during these three eras of monetary policy would have been substantially circumscribed 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 (e.g., a Taylor Rule), which would have required them to articulate a long-term objective for policy and explain any departures from it. Thus, the adoption of a clearer statutory mandate, or of a rule-based interpretation of the existing mandate, would not only have increased Fed independence (by insulating the Fed against political pressure – see Proposition 2), it would also have improved the outcomes resulting from the wielding of independent authority. This logic is especially relevant now, as the risks to the erosion of Fed independence going forward are substantial, and as the recent QE policy experiment has removed any semblance of adherence to a Taylor Rule, or any other rule, from monetary policy.

Proposition 7: The Fed's leadership tends to exaggerate the independence of the Fed, while seeking unfettered discretionary authority and resisting rule-based mandates that would increase Fed accountability. These actions do not foster legitimate independence, or maximize the benefits of independence that is achieved. They may reflect, in part, the increasing dominance of professionally trained macroeconomists in the leadership and staffs of the Fed. With some important exceptions, Fed leaders and economists increasingly have become professionally trained macroeconomists. The majority of them have been schooled in highly simplified models of monetary policy, and they tend to place too much faith in the latest versions of these faddish and unrealistic models, perhaps because doing so reinforces their credentials as policy experts and improves their career prospects. 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 can serve as the basis for confident judgments about the consequences of discretionary actions.[4]

[4] As Meltzer (2012) notes: "Recently, the Board staff and principal members used a model based on Woodford's (2003) elegant modeling. This, too, is deficient. In the model, money and credit do not matter for monetary policy. And prices of assets are not part of the transmission mechanism. Only short-term interest rates and rational expectations are relevant. How could we have a credit crisis? Could anyone believe that the decline in housing

The bias toward undisciplined discretion encourages a resistance within the Fed to clearer, rules-based limits on the exercise of Fed discretion. That resistance to rules – while often pursued in the name of promoting Fed independence – actually makes legitimate Fed independence much less likely (Proposition 2), and also makes the exercise of Fed discretionary authority more prone to error.

Furthermore, the emphasis on many years of training in highly technical macroeconomic modeling generally results in pervasive ignorance about history or about the Fed's role in regulatory policy. This ignorance contributes to a lack of interest in and understanding of the Fed's uses of regulatory policy tools, and aggravates the Fed's willingness to allow political pressures to determine regulatory policy outcomes.

Proposition 8: To promote independence along both dimensions of economic policy (monetary and regulatory) two sorts of policy reforms are required: (i) separation of authority over the two areas into two distinct agencies (to avoid tradeoffs that reduce independence of regulatory policy), and (ii) the establishment of clear mandates and accountability procedures for each category of policy. In particular, with respect to monetary policy, the Fed's mandate should be expressed in the form of a "comply or explain" rule (e.g., a Taylor Rule, or some other similar rule) that would make clear the objectives of monetary policy, and thus *permit* and *require* greater accountability. These policy actions would substantially increase the likelihood that the four necessary conditions of policy independence would hold, and thus would promote greater independence of policy.

I do not attempt to "prove" these eight complex and controversial propositions in this article. Rather, as a first step, I present them as an interpretive narrative to stimulate discussion and debate.

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prices was a rational expected response to policy? I find it incredible that a central bank ignores changes in money and credit. Simply put, that is a mistake that not only ignores much that economists have learned about monetary economics from analysis and history. No less surprising is the total neglect of the role of asset prices in the transmission mechanism of monetary impulses. Earlier work by Brunner and Meltzer (1993) and by Tobin (1969) did not neglect asset prices or credit."

They reflect my understanding of the logic of political bargaining and a much broader historical narrative of politics, banking and central banking in the United States (see, for example, Meltzer 2003, 2009, 2010, Calomiris and Haber 2013). Neither do I claim originality for any of these ideas. Since Milton Friedman's classic work on these problems, many other scholars have made similar arguments to those contained in the eight sets of propositions, although I do not believe that any previous study has integrated all of these various propositions.

III. The Logic of Central Bank Independence and the Monetary Policy History of the Fed

In what sense is any government entity (hereafter referred to as an "agency") within a democracy "independent"? Clearly, independent action is not usefully defined to be synonymous with tyrannical action. To be legitimate within a democracy, independent action must occur within the confines of Constitutional and statutory mandates that define the purposes of independent action. Furthermore, in pursuit of those mandates, the independent agency also must follow proper procedures, consistent with democratic oversight and accountability, and adherence to the rule of law.

It follows, therefore, that statutory authority that delegates decision making responsibility is necessary for legitimate independence to exist. But it is not sufficient. For example, if an agency knows that the delegation of authority will be withdrawn unless a particular outcome is chosen by the agency, then that agency is not truly independent in its actions. Unless an agency can act with impunity – so long as the agency's actions conform to the mandates that define its purposes and the required procedures that govern its deliberations – the agency cannot be independent.

In order to act with the impunity necessary to foster true independence, the statutory mandate of the agency must be clear. A lack of clarity in the mandate makes it hard to tell when the central bank

is achieving its goals and when it is not. An unclear mandate therefore makes it harder to hold the agency accountable for doing what it is supposed to do (thereby ceding too much authority to the agency to pursue its own goals). Just as bad, an unclear mandate makes the agency a target for politically motivated attacks that can threaten its independence.

These principles are illustrated well by the monetary policy history of the Fed, which is replete with examples of how statutory delegation of authority to the Fed has not been sufficient to ensure its true independence. Indeed, de jure and de facto independence have not been closely associated over time, and sometimes have moved in the opposite direction over time (see also Taylor 2013). The Banking Act of 1935, which restructured the Federal Reserve System, made the Fed more politically responsive by centralizing authority and increasing the power of government appointees within the Fed. But this restructuring had little immediate effect on Fed policy or independence because of the effective substitution of Treasury authority over monetary policy until 1951. The creation of the so-called dual mandate for the Fed in 1977 (which was really a triple mandate requiring the Fed to maintain price stability, maximum employment, and interest rate stability, without defining priorities or weights across these often competing objectives) might have been expected to make the Fed less independent. The creation of multiple, unclear and conflicting mandates might have contributed to the politicization of the Fed. As we will see, however, it coincided roughly with the beginning of an era of high de facto Fed independence.

World War I

Most of the changes in the extent of Fed monetary policy independence had nothing to do with statutory changes. The first meaningful change – which reduced Fed independence – came with World War I. The Fed was established in 1913 on the basis of the "real bills doctrine" (the view that bills related to trade should be the exclusive asset bought and sold or held as collateral against loans to member

banks). Government debt was excluded as collateral from Fed discounting operations to ensure that the Fed did not act as a source of funding to the government. Importantly, the Fed's charter required it to maintain gold convertibility, which substantially circumscribed its actions. 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 – also limited the extent to which political pressures could control Fed actions.

Under the pressures of World War I's financial challenges, however, the Fed began to become an important partner in assisting the U.S. government to market its debts. In 1917, reserve requirements were reduced to permit expanded credit to finance the war (Meltzer 2003, p. 79, footnote 31). And collateral rules for Federal Reserve note issues were relaxed in 1917: the total amount of collateral was reduced, and perhaps more importantly, promissory notes of member banks secured by government bonds could be used as collateral for the notes (Meltzer 2003, p. 89).[5] At the end of World War I, in the interest of boosting demand for outstanding Treasury debts, the Fed also reduced its discount rate for loans collateralized by Treasury securities.

The accommodation policies of World War I had long-term effects. 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 (Meltzer 2003, pp. 73, 86).[6] This change subverted the Fed founders' intent that the Fed would use a penalty discount rate as its primary tool of 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

[5] Despite the real bills doctrine, the Fed always had the ability to purchase government securities as part of its open market operations. The extent of such purchases were constrained, however, by the need to maintain gold convertibility, by the rules governing the gold backing for Federal Reserve notes, and by the dominant role of discounting in the Fed's balance sheet prior to 1932.

[6] There have been moments when the discount rate was above the market rate, but that was not part of a consistent policy rule implemented to achieve that outcome.

binge of 1917-1920 (Meltzer 2003, pp. 90-107), it also set the stage for subsequent 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, the Fed was permitted the use of Treasury securities as collateral for Federal Reserve note issues (Calomiris and Wheelock 1998, Meltzer 2003, pp. 358, 417-418, Calomiris 2013). In March 1933, the United States left 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 (see Calomiris and Wheelock 1998), 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, which was the part of the system whose leaders were government appointees (Calomiris and Wheelock 1998, Meltzer 2003).

The Fed is regarded as having operated reasonably independently in setting its monetary policy from about 1923 until 1932 (before the political backlash of the Depression eliminated many of the constraints that had insulated the Fed from political manipulation). 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 (Calomiris and Wheelock 1998). As Edwin Kemmerer (1934) lamented, "…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." Secretary of the Treasury Morgenthau mused about his ability to control monetary policy through the threat of using his new powers in his diary, where he noted that this arrangement also would allow him to escape blame for mistakes in policy because the Fed would be incorrectly regarded as in charge of monetary policy.

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 fact: the Fed's balance sheet had grown so much due to its monetization of government debt during World War II that the Fed's ability to contract now was far in excess of the Treasury's monetary powers to expand, 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 specifically intended to stabilize markets during Treasury debt offerings. Additionally, the Fed sometimes acted specifically at the behest of the Treasury to support special funding needs. Critics of the Fed that sought greater independence – like Senator Paul Douglas – withheld support for Martin's reappointment as Fed Chairman in 1956 (Meltzer 2010, pp. 132-3). These critics pointed to the main brake on Fed independence since 1951: the willingness of Fed leadership to act independently. That lack of willingness to act independently sometimes reflected political threats. In the 1950s, a longtime critic of the Fed, Rep. Wright Patman (Texas) constantly offered proposals to

reform the Fed, restructure it, and audit it. One of his proposals, in January 1955, would have required the Fed to "support the price of United States Government securities at par" (Meltzer 2010, p. 226).

Political pressures on the Fed became intense in 1967 under the combined fiscal pressures of financing the Viet Nam War and the Great Society. Under heavy lobbying by the Secretary of Treasury and prominent members of Congress, in July of 1967 the Fed Board denied requests by the Federal Reserve Banks to hike their discount rates. As Meltzer (2010, p. 511) put it: "Coordination [with the Treasury] now dominated independence for many at the Federal Reserve, so political concerns dominated economics." 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. Meltzer (2010, pp. 527-29) lists four main errors by the Fed that contributed to the acceleration of inflation in the 1960s, and the first of these was that "the Federal Reserve tried to coordinate policy with the administration and persisted 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…" (p. 527).

As inflation accelerated in the late 1960s, an important contributor to the lack of willingness of Fed leadership to act independently was that lack of desire to do so. This reflected political preferences that led Chairman Arthur Burns to put loyalty to the Nixon administration above the pursuit of proper

policy objectives. As Meltzer (2009) shows, Arthur Burns, in particular, was so loyal to President Nixon that he served the interests of Nixon's electoral ambitions, despite the consequences for rising inflation.

Central to the limits on Fed independence that came from both political threats and misplaced loyalties was the lack of statutory clarity about the objectives of monetary policy. That lack of clarity avoided accountability of the right kind – which would have been so useful to constrain Arthur Burns' willingness to allow inflation to accelerate. It also encouraged political attacks. Because any Fed critic was free to point to some shortcoming in the economy related to the long list of ill-defined Fed policy objectives, it was very hard for the Fed to defend itself against political attack. If the Fed had been given the single, overarching objective of ensuring price stability (like the Bank of England and the European Central Bank have been given), or had been given a more complicated, but clear, rule to follow (e.g., a parameterized Taylor Rule with a clearly specified long-run target rate of inflation) then the Fed would have been able to defend itself against attacks by referring to its compliance with its statutory mission. In the event, however, critics were free to attack the Fed along any dimension they chose, and could point to evidence that this dimension was part of the Fed's ill-defined mandate. Once freed from the constraint of adherence to the gold standard, and the nominal anchoring that this entailed, it was almost inevitable that an era of high fiscal deficits would produce monetary accommodation and high inflation. The absence of a clear mandate, made it virtually impossible to even define Fed independence (which is properly defined as latitude to act to achieve a specified goal), or to distinguish it from Fed diktat, or to objectively evaluate Fed performance in order to defend the Fed's record. In short, the absence of a clear mandate made legitimate independence very difficult to achieve.

Volcker, Greenspan, and the Great Moderation

But not impossible, as Paul Volcker would soon demonstrate. There is no doubt that Paul Volcker brought a different brand of leadership – and a clear commitment to independence – to the Fed

when he assumed its leadership. But this change did not occur in a vacuum. High inflation had a silver lining: it 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 in spite of (or perhaps 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" neither did he 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 Allan Meltzer (2012) put it:

> 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 tradeoff 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 employment rates and inflation rose together. He predicted that they would fall together under his policy. They did. His prediction was correct.

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" (Meltzer 2012). Greenspan's success in out-forecasting the models became legendary. He became the "maestro." The Fed's credibility, and its chairman's, was never greater. This mattered for enhancing Fed independence. Although political pot shots from Congress continued, the record of success insulated the Fed from any serious attacks on its monetary policy independence.

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 rates was maintained at levels that averaged more than 2 percentage points below the "warranted" fed funds rate that was 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, unfortunately, demonstrated that independence – when not guided by clear, rules-based mandates – may have costs as well as benefits.

As in the high-independence period of 1929-1933, and the somewhat 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 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 two earlier periods (Brunner and Meltzer 1964, 1968, Wheelock 1991, Meltzer 2003, 2010). In the case of the 1960s and 1970s, another contributor to accelerating inflation was the belief in a simple Keynesian Phillips Curve (Meltzer 2009, 2010). 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 (2010, 2011, 2012, 2013), 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. That view may somewhat exaggerate the role of monetary policy in the recent crisis because it places too little weight on micro-economic distortions produced by government policies that drove the decline in mortgage underwriting standards during the 1990s and 2000s (Pinto 2011, Wallison 2011, Calomiris and Haber 2013), but there is no doubt that loose monetary policy contributed substantially to the narrowing of credit risk spreads and to increases in the prices of real estate and common stock. The literature documenting the recent 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).

What If Monetary Policy Had Been Given a Clear Mandate?

The important role of Fed discretion in contributing to the three major monetary policy errors of the past century illustrates another important benefit of establishing a clear mandate to guide Fed

policy. In the presence of a clear mandate, Fed officials would have had to explicitly defend their purposeful departures from an explicit, publicly disclosed rule (e.g., the Taylor Rule), rather than simply make vague pronouncements about changes in beliefs, discussed in the absence of any explicit commitment to a rule. The burden of proof would have been on the use of discretion, and this would increase the adverse personal consequences of employing discretion counterproductively. In the presence of a rule, and the greater accountability that it would bring, not only would legitimate independent monetary policy be more achievable, independence would produce better outcomes by giving less latitude to faddish ideas or personal proclivities, which history has shown have a very poor track record in monetary policy.

Monetary Policy Independence at Risk?

Once one recognizes the key role of economic and political events in shaping the extent of de facto Fed independence, the prospects for preserving the current degree of monetary policy independence under the status quo are very bleak. It is not clear how much the Fed's recent actions (particularly QE2, Operation Twist 2, QE3, and the unprecedented use of very specific forward guidance) reflect politicization of the Fed leadership. Did the Fed pursue these measures under political pressure, or perhaps to limit political pressure by appearing to do something in the face of high and persisting rates of unemployment? It is hard to say, but these actions clearly have created objective grounds for worrying about the ability of the Fed to maintain its monetary policy independence in the future.

The key risk that monetary policy poses to the economy now is the possibility that the Fed will be too slow to contract the supply of money and credit once the economy returns to normal. A normal economy will see the money multiplier grow substantially. Unless the Fed contracts its balance sheet or increases required reserves substantially to keep the money multiplier from rising, the return to normal will imply substantial price inflation. Why might the Fed fail to respond by contracting its balance sheet

or raising reserve requirements? Because of the de facto political limits to its independence. What would produce political threats to contractionary monetary policy? There are five readily identifiable potential sources of trouble.

The first is the long-run risk of what has become known as "fiscal dominance" – pressures from deficit finance that effectively could constrain monetary policy's ability to tighten. In short, if the U.S. government issues more government debt than it can credibly commit to repay (which I will label an "unsustainably" large amount of debt), one of two things must occur: monetization of the debt or default. While it is true, in principle, that the Fed could refuse to monetize the unsustainable debt of the government and force it to default, in practice that would not happen. Congress and the Administration can always amend the Federal Reserve Act, as needed, to ensure that the Fed purchase sufficient government debt to avoid a default, and of course, they would have every incentive to do so if a recalcitrant Fed leadership failed to "voluntarily" monetize the government's unsustainable debt. The current path of government entitlement spending places the U.S. on a clearly unsustainable path. Absent significant entitlement reform, the U.S. government debt-to-GDP ratio will rise to clearly unsustainable levels within the next twenty years.

The second threat related to fiscal dominance is much more imminent. Whether or not the U.S. government eventually reduces its entitlement spending commitments, a decision to tighten monetary policy and drive up interest rates could imply significant increases in the government's deficit. As the economy recovers and long-term interest rates begin to rise (through a combination of expectations of higher real rates of interest, or of possible monetization of government debt) the interest costs of government debt held by the public will rise. A moderate rise of, say, two percentage points in interest rates could mean an increase in funding costs of roughly $100 billion. Furthermore, holding constant the interest rates on government debt, any shrinkage of the Fed's holdings of government debt as a means

of monetary tightening would increase the federal deficit by shifting government debt from the "interest-free" category to the "interest-paying" category.[7] The large existing level of federal deficits, the prospects of sharp increases in interest rates from their historic lows, and the vast Fed holdings of government debt all imply significant risk that the Fed will feel severe pressure from some members of Congress and possibly from the Treasury to delay tightening in the interest of limiting the rise in deficits. Thus the inflationary monetization of government debt could occur long before the explosion of entitlement expenditures.

Third, a contraction of the Fed's balance sheet would require it to disgorge itself not only of government debt but also of mortgage-backed securities (MBS) which it has been buying in vast quantity for the past few years. Any attempt to reverse the flow and dump these into the private market will drive up MBS spreads, and hence mortgage rate spreads. The housing lobby (which is as strong as it is bipartisan) will waste no time appealing to its supporters in Congress and the Administration to pressure the Fed to slow any sales of MBS.

Fourth, in a rising interest rate environment, Fed sales of government bonds and MBS will cause it to incur large capital losses. The Fed does not mark its portfolio to market, but rather, recognizes losses as it sells assets. As interest rates rise, the prices of those assets will decline, and the implied losses could be quite large. A large amount of sales could render the Fed insolvent. Although, as a matter of economics, Fed insolvency on a book value basis is irrelevant to its ability to pursue monetary policy, a Fed insolvency would provide a golden political opportunity for Fed critics. Anticipating those political attacks, the Fed might prefer not to raise interest rates on excess reserves very aggressively.

A fifth problem that could discourage monetary tightening relates to another policy option – the use of interest payments on reserves – which in principle offers a means of tightening without shrinking

[7] Government debt owned by the Fed earns interest, but those interest payments are returned to the Treasury, net of Fed operating expenses.

the Fed's balance sheet. As the economy recovers, banks will want to expand their lending at prevailing interest rates. By paying high rates of interest on excess reserves, it is argued, the Fed can entice banks to maintain those reserves rather than lend them. This will keep the money multiplier from increasing, and thereby constrain the growth of money, credit, and prices without having to shrink the Fed's balance sheet. There are, however, two rather severe political problems that could arise in reaction to this policy. Given how much bankers are despised by a large segment of the public, and given that interest payments on reserves might have to be very high to convince banks to hold vast quantities of excess reserves, large interest payments payments to "fat cat banksters" is not likely to go over well in Congress or the Administration. Furthermore, similar to the effect of realized capital losses from selling assets, high interest payments on excess reserves would render the Fed insolvent on a book value basis.

There is a possible way out of these problems, namely a significant increase in the reserve requirement.[8] By requiring banks to hold reserves, the Fed would not have to pay a very high interest rate on them. Currently, the Fed pays zero interest on required reserves. This is inappropriate because setting requirements for the holding of zero-interest reserves is tax policy, which should be outside the purview of the central bank. A statutory change that would require the Fed to pay the short-term fed funds rate on required reserves (which would avoid imposing a large tax on an already weakened banking system) not only would be desirable as a long-run policy change as a matter of limiting the Fed's powers, it would probably allow the Fed to prevent an acceleration in inflation without shrinking its balance sheet, paying high interest rates to "banksters" or imposing a huge new tax burden on banks. Not only would this policy make sense economically, it would also be less likely than the other approaches to inflation prevention to create political hazards for the Fed. Perhaps surprisingly, Fed

[8] Some Fed officials have also advocated the use of reverse repos on a massive scale as a way to contract the effective balance sheet of the Fed without actually selling assets, at least for a period of time. Repos are a way to repeatedly lend securities without actually selling them, but in doing so, to reduce the effective size of the Fed's balance sheet. Given the scale of the transactions that would be required, and given the skepticism with which the reverse repo idea has been greeted by some market participants, it is highly uncertain whether this tool will be able to provide a means of preventing a surge in inflation.

officials thus far have shown no interest in this policy option.[9] Of course, even an increase in reserve requirements will imply some rising pressure on the fiscal deficit; payments on required reserves will reduce the amount of revenue the Fed can return to the U.S. Treasury.[10]

In summary, a combination of the current size of the Fed's balance sheet, its composition, the fiscal problems of the U.S. government, and the potential for sharp increases in interest rates over the next few years create significant risk of inflation. That risk of inflation, in large part, reflects the implications of these economic factors for the political challenges that the Fed will face if it chooses to tighten monetary policy to try to forestall an increase in inflation. As in the past, it is unlikely that the Fed's statutory powers will change. And, as in the past, the implicit or explicit threats to change the Fed's powers will likely be enough to undermine the Fed's commitment to independent action.

What specific form might these political threats take? The most obvious threat was illustrated by the comments of Former Congressman Barney Frank, who suggested altering the governance of the regional Feds to make their Presidents political appointees. One could also imagine changes that would dilute the voting role of the regional Presidents. It is widely believed that the Presidents tend to be the source of greatest independent actions within the Fed, precisely because they are appointed locally, through a process that gives weight to local business interests rather than the national political interests that determine the appointment of Governors. Clearly, politicians also understand this argument. One could argue that the mere suggestion of the possibility of such a change damages Fed independence by making Fed Presidents more circumspect in voicing their opposition to positions supported by Fed Governors. As the Grand Inquisitor (and presumably Barney Frank) was aware, sometimes you only need to "show them the instruments."

[9] For a proposal along these lines, see Calomiris (2012).

[10] One issue to be considered is which deposits or debts reserves requirements would be held against. My view is that the base should be broad – total assets less common equity. This would prevent regulatory arbitrage through the redefinition of deposits as repos.

IV. Independence and the Fed's Regulatory Policy Powers

The authority of the Fed in performing its monetary function is well understood and often commented upon (e.g., the timing, membership, voting rules, and press releases related to FOMC meetings). The Fed's role in banking regulation, or more broadly in financial regulation, receives less attention, is not as well understood, and has been much more subject to change over time.

The Fed plays an important role as a regulatory policy advocate in Washington, as a writer of regulations, and as a supervisor. 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. This is an activity that increasingly occupies a great deal of time and energy at the Fed – especially since the 1980s – as the structure and rules of the financial regulation game have changed dramatically and much more frequently in the U.S. over the past three decades than the structure and rules for monetary policy. The Fed has taken on a newly dominant role as a regulator – one that has important implications for the future of Fed independence.

Modest Beginnings

From the beginning, the Federal Reserve Banks played a regulatory role, but that role began very 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,

and it shares regulatory and supervisory authority over state-chartered banks 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.

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 restricted to operate in only one state, and 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 Fed itself was a highly decentralized system, with control residing mainly in the twelve Reserve Banks, at least until the 1933 and 1935 Acts. Furthermore, the Fed was not itself a chartering authority, and Fed membership was voluntary (indeed, for much of the 20th century, most U.S. banks were not Fed member banks). Finally, 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. Indeed, the creation of the Fed itself was only possible as the result of some rather significant deregulation. Prior to 1913, national banks were prohibited from lending against real estate.[11] In order to secure political support for the Federal Reserve Act, especially in agriculture-dominated areas, the Act specifically permitted member banks (including national banks) to lend against real estate.

The Great Depression

This changed as a result of the Great Depression. The political fallout for banks from the Great Depression was extreme. It was also extremely misguided. Economic historians now agree that the

[11] National banks evaded this regulation by lending without collateral and then accepting real estate collateral after the fact as part of an ongoing negotiation with the borrower. Nonetheless, this restriction did lead to significantly less lending against real estate by national banks than by state-chartered banks (for a more complete discussion, see Calomiris and Carlson 2013).

primary causes of financial and economic distress during the Depression were traceable to a combination of misguided monetary policy targeting rules based on "real bills doctrine" thinking and the fragile unit banking structure of the U.S. banking system. Unfortunately, however, the regulatory policy changes relating to banks were based on a very different view, namely that bank consolidation and banks' involvement in securities markets (both of which had been pronounced during the 1920s) had caused the collapse of the banking system. Although this view is demonstrably false it nonetheless formed the basis for the ill-conceived banking reforms of the 1930s (Calomiris 2010). Ironically, those reforms were consciously designed by Messrs. Glass and Steagall (who were, respectively, the principal defenders of the real bills doctrine and unit banking in Congress) to strengthen the regulatory commitment 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 was the champion 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 these measures, which reflected, in part, the highly publicized Pecora Hearings, which attacked Wall Street bankers. In particular, although the 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.[12] 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.

[12] The opposition to deposit insurance reflected the disastrous experience with eight states' deposit insurance experiments, all of which collapsed in the 1920s. For more discussion of the views on deposit insurance and the politics and economics that underlay them, see Golembe (1960), Calomiris (1989, 1990, 1992), Flood (1991), Patrick (1993), Calomiris and White (1994), Calomiris (2010), and Calomiris and Haber (2013).

Interest rate limits were primarily advocated as a means of undermining the interbank deposit market, which had the effect of concentrating funds in New York City banks, which were often used for securities lending. Deposit insurance and limits on banking groups, advocated by Steagall and other unit banking supporters, were designed to protect unit banks from competition.[13] Deposit interest rate ceilings were also motivated as a limit to 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. 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 (which would take effect in 1934, and become part of what would become known as Regulation L). The Board played a central role in defining what constituted an affiliate for purpose 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 with respect to controversies 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

[13] Limits on branching prevented consolidation via that channel, but "group" banking (control of multiple banks by a common company) or "chain" banking (control of multiple banks by a common group of shareholders) could circumvent such limits to some extent by allowing a group of investors or a bank to purchase stock in multiple banking organizations. The 1933 Act and the Clayton Act made this more difficult by limiting the voting rights and corporate governance structures of groups.

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 the monetary and regulatory rules. All it could do was accept those new rules, roll with the punches, and try to maintain and competently execute whatever authority was left to it.

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.

Five Post-Depression Decades of Narrow, Fragmented Banking

The Bank Holding Company Act of 1956 (further extended in 1970 to apply to single-bank holding companies) created further limits regarding 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 (the so-called separation of banking and commerce).[14]

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 legislation (the Bank Merger Act) intended 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.[15]

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 the 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

After 1980, there was a dramatic reversal in banking regulation with respect to consolidation and bank powers (see Figure 1, taken from Calomiris and Haber 2013, Chapter 6). The relaxation of branching barriers took the form of state-level policies (often as part of regional interstate agreements), as well as federal legislation. This coincided with an unprecedented merger wave in banking, and a dramatic expansion of banks' powers, culminating in the Gramm-Leach-Bliley Act of 1999.

[14] For a review of these Acts, see Carnell, Macey and Miller (2009). The approval of individuals to take controlling interests in a bank – based on the considerations of character, the nature of his/her business dealings, and competitiveness concerns – was required under the Change in Bank Control Act of 1978.
[15] For a review of the legislative history, political economy, and enforcement of these statutes, see Klebaner (1967), Traber (1969), Shull and Horvitz (1971), and Carey (1975). For a summary of their content, see Carnell, Macey and Miller (2009).

What caused this dramatic reversal? As Calomiris and Haber (2013) discuss, five forces 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 had generally been supportive of unit banking – toward America's cities. As of 1900, 45.8 million Americans lived in rural areas, compared to 30.2 million in cities and towns with more than 2,500 inhabitants. By 1940 the number living in cities or towns had grown to 74.4 million, compared to 57.2 million rural inhabitants. After World War II, the urban population share took off; by 1970, 133.4 million Americans lived in locations with more than 2,500 inhabitants, compared to 69.8 million living in rural areas.[16]

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 reasonably well without having to rely as much on "soft information" that could only be obtained locally. With respect to depositors, technology also spurred much greater competition, especially via networked automated teller machines (ATMs that are linked via computer). The networked ATM was patented in 1974, and it was only two years before 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.[17]

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

[16] These figures are from Calomiris and Haber (2013), Chapter 6.
[17] Calomiris and Haber (2013), Chapter 6.

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, compared with 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 a means of allowing U.S. banks to compete with their foreign counterparts. For example, consider Alan Greenspan (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.

Greenspan (1990) 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 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 thrifts (savings and loan associations, or S&Ls) with large exposures to real estate loans (which paid fixed interest rates) to suffer major losses.[18] Agricultural price collapses in the early 1980s caused many small, rural banks to fail.[19] Oil and gas price collapses in the early 1980s wiped out many banks in Texas and Oklahoma.[20] 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, negatively affecting 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, sometimes after they were already deeply insolvent, further galvanized opposition to preserving the status quo.[21]

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 the branching banks that were willing to buy weak banks as a crucial source of funding. For the FDIC and federal government officials, the big banks willing to acquire 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.

[18] See, for example, Barth, Bartholomew and Labich (1989) and Wheelock (2006).
[19] See Calomiris, Hubbard, and Stock (1986).
[20] See Horvitz (1991).
[21] See Barth, Bartholomew and Labich (1989), Brewer and Mondschean (1991), White (1991), Brewer (1995), Gilbert (1994), and Schwartz (1992).

As Calomiris and Haber (2013) show, just as had occurred in 1907 and in 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 that could not respond to difficulties by shifting resources across branches of an interconnected network. But this time regulators and politicians saw an 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.[22] 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.[23] Banks operating national branching networks accounted for only ten percent of the U.S. banking system in the early 1980s. By the mid-1990s, they accounted for more than 70 percent.[24] 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.

The 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

[22] Calomiris (2000).
[23] Kroszner and Strahan (1999).
[24] Calomiris (2010).

decision in 1987 to allow small inroads by bank holding companies into investment banking. The initial opening resulted from a Supreme Court 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 firewalls that it had established to keep the operations of Section 20 affiliates separate from the other operations of the bank (Phillips 1997). 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.

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" entirely 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 underway on a large scale long before debt or equity underwriting was permitted).

Evidence from numerous academic studies that it makes sense to combine 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, 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 (see the summary in Calomiris and Pornrojnangkool 2009). In essence, savings of 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, and this 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 percent of corporate debt and less than one percent of corporate equity flotations were underwritten either solely or jointly by commercial banks. By 2002, 66 percent of corporate debt and 36 percent of corporate equity flotations were underwritten either solely or jointly by commercial banks (Calomiris and Pornrojnangkool 2009).

The Role of the Fed

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 both 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 also was a political player in the deeper drama that permitted and shaped deregulation – what Calomiris and Haber (2013) call 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 itself 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. Hawke (1988) summarizes the Volcker Fed's attitude toward relaxation of branching laws:

> 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. Its perverse attitude was exemplified by its treatment of the credit-card bank "usury haven" cases.

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, and lagged behind, a broader political movement

throughout the country. The Fed advocated consolidation only after it was clear that doing so did not threaten to cause it little difficulty with Congress or the Administration.[25]

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.

The Greenspan years did not illustrate a pure economic philosophy of financial regulation, but rather a politico-economic philosophy, which one might term "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)

[25] There is no doubt that 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. Advocates of eliminating branching restrictions, including myself, have long pointed to the gains from greater competitiveness and greater diversification of risk that comes from permitting banks to branch freely. 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.

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.

To explain the reversal in Fed advocacy of deregulation in some areas, but not in others, Calomiris (2006) categorizes financial regulatory issues into four categories, according to his interpretation of the Fed's actions and the dominant motives for those actions: one category is labeled "Fed advocacy of beneficial deregulation," and three other categories include cases where the Fed has opposed beneficial regulatory policies, which he attributes to three reasons: "Too politically hot to handle," or "Not in the interest of the big banks," or a "Fed regulatory power play" to boost its own political influence.[26] His proposed regulatory advocacy algorithm for the Fed is fairly simple: the Fed

[26] The growth of commercial bank involvement in underwriting created a regulatory turf battle in the mid-1990s between the Fed and the OCC. The OCC sought to allow national banks (for which it is the primary regulator) to underwrite securities through bank subsidiaries (which the OCC regulated) rather than through affiliates of the bank (subsidiaries of the bank holding company, which were regulated by the Fed). Ultimately, despite Fed opposition, the Gramm-Leach-Bliley Act did permit bank subsidiaries to engage in underwriting and most other activities in which affiliates are permitted to engage. The Fed opposed this proposal on the grounds that there was a possibility of conflict and a risk of bank instability arising from underwriting occurring within bank subsidiaries. Chairman Greenspan testified in Congress on April 28, 1999 that allowing investment banking to occur in bank subsidiaries "would be especially risky." This argument is hard to fathom (indeed, if anything, the opposite should be true, since some problems of asset substitution risk cannot occur between banks and their subsidiaries, but can occur between banks and their affiliates). It was a pure Fed power play. One of Chairman Greenspan's great rhetorical skills, which this and many other cases where he opposed deregulation illustrate, is to shift the burden of proof to suit his argument. When he advocated deregulation (as in the case of expanding underwriting powers via affiliates), he argued that there was no clear evidence that deregulation would cause harm. When he opposed deregulation, he argued that there was no clear evidence that deregulation would *not* cause harm. In the case of permitting underwriting, he used gradualism to compromise with worrisome critics, and build a record of performance on which to base further relaxation of constraints. But he did not advocate gradualism and experimentation as a means to overcome uncertainties on the party of policy makers in other areas (notably, with respect to permitting underwriting in subsidiaries, or as discussed below, with respect to allowing commercial firms to provide financial services). Chairman Greenspan knew how to overcome Congressional fears of change

supported consolidation and activities deregulation because doing so did not (1) stir up significant political opposition to the Fed within Congress or the Administration, which might threaten its monetary policy independence, (2) harm the large commercial banks (who were key allies of the Fed in some of its political battles in Washington), or (3) undermine the Fed's competitive position vis a vis other regulators.

Furthermore, Calomiris (2006) argues that these three constraints (opposition by politicians, opposition by big banks, and erosion of Fed regulatory power) led the Fed not only to fail to support some beneficial regulatory changes (e.g., allowing financial holding companies to actively compete in real estate brokerage, reining in the growth of Fannie Mae and Freddie Mac during the 1990s, and requiring banks to expand and improve their capital requirements), but to actively support a very harmful approach to bank consolidation.[27]

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when he wanted to, and he also knew how to use Congress's fear of change as a tool to limit deregulation. Which Congressman would want to bear the responsibility of having ignored Alan Greenspan's warning? Fortunately, in the case of the debate over subs vs. affiliates, those tactics did not win the day.

[27] With respect to Fannie and Freddie, the political landscape started to change dramatically around the middle of 2000. At that time, Congressmen Richard Baker (who occupies a "safe seat" in Louisiana, who has what appears to be a sincere philosophical opposition to the risks and costs posed by the GSEs, and who also may have been searching for an issue of national importance to call his own) began a campaign to bring to light the various GSE abuses. Magazines started to publicize the networks of GSE political connections, and the large amounts of compensation earned by GSE executives (and their lack of banking skills, but strong backgrounds in lobbying). Unseemly power plays and Congressional arm twisting by the GSEs over modest proposed reforms of their capital standards encouraged more scrutiny and opposition, which came from all parts of the political spectrum. And the recent accounting scandals added further fuel to the fire. The White House became particularly interested in GSE reform after 2003, as the result of the accounting scandals. The growing chorus of academic and political opposition to the GSEs, coupled with the strong push from the large banks, and the new shift in the Administration and Congress away from supporting the GSE status quo seems to have tipped the balance for Chairman Greenspan. For the past several years, he has been a vocal advocate of GSE reform. On May 19, 2000, he sent an open letter (Greenspan 2000) to Chairman Baker, pointing out the risks and costs inherent in the GSEs and supporting the case for reform. Subsequent remarks by Chairman Greenspan have elaborated on his initial May 2000 letter (most recently in his April 6, 2005 testimony to the Senate Banking Committee – Greenspan 2005), and open season on the GSEs has been declared for Fed researchers, who had long been chomping at that bit. Now Chairman Greenspan is practically leading the charge for GSE reform. Thus, a regulatory reform that started off as "too hot to handle" became transformed (as in the fairy tale) to be "just right."

Most importantly, Calomiris (2006) and Calomiris and Haber (2013) argue that the Fed did not prevent undesirably anticompetitive bank mergers, and also that it failed to act properly as a prudential regulator of merging banks, especially with respect to *identifying and constraining the mounting risks that banks took on as part of their contractual agreements with activist organizations (which enjoyed powerful political support in the government), as a means of gaining 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 (by creating market power) and to distribute those rents among politically powerful entities (mega banks and power 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 its increasingly unthreatened monetary policy independence. But the social costs of that bargain were large.

The Fed's 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 (Calomiris and Haber 2013). 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.[28]

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

[28]Calomiris and Haber (2013), Chapter 7.

protection. Political actions that create profit also create new opportunities for deciding how to divide them. Calomiris and Haber (2013) show that, in the new U.S. Game of Bank Bargains defined by branching deregulation, populist politics continued to play a role in determining the allocation of profits, although the center of populist power had shifted from rural to urban areas.

Each merger and acquisition required approval from regulators, most particularly from the Federal Reserve Board. The process of approval required that banks show that they had been good citizens of the communities in which they operated, and this fact 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. 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 incentives to become a megabank were multiple. Potential advantages included diversification, the ability to spread overhead costs over a larger operation, economies of scope (a large bank could afford to provide a broader range of products and services). Additional potential advantages of becoming a mega-bank was were the potential for obtaining market power and the potential implicit subsidy of too-big-to-fail protection.

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 merged bank's deposit market share, rather than its ability to set prices in credit markets.

The Fleet Financial-BankBoston merger of 1999 is a telling example: by combining the only two New England banks of significant size it created a megabank that could set prices for business borrowers. Mid-sized businesses that were too big to borrow from the remaining small, local banks, and too small to be able to borrow in global markets, were particularly affected. Not only did they object to the merger on these grounds, the Mayor of Boston and the Attorney General of Massachusetts did as well. All to no avail: the Fed approved the merger, and interest spreads for business borrowers rose by a full percentage point.[29]

The third criterion by which a merger could be blocked was "good citizenship" (as regulated under the CRA) and Calomiris and Haber (2013) show 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, but this largely 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 results: as Figure 2, taken from Calomiris and Haber (2013) Chapter 7, shows, from 1977 to 1992, only $43 billion in CRA commitments by banks had been announced, and almost all of that occurred after 1989. As of 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]

[29] Calomiris and Haber (2013), Chapter 7.

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."[30]

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 without harming other individuals or business interests. 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 these depended on the degree to which a bank was serving the needs of the low-income and minority groups in 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 to a good rating from CRA.

A bank that wanted to expand through a strategy of mergers and acquisitions faced a strategic choice: it could either create its own CRA lending program or it could enlist community activist groups as partners in creating a joint CRA lending program. The advantage of the former was that the bank retained control of decision-making about the allocation of the CRA loans. The advantage of the latter was that the bank could enlist the support of community activist groups for its merger and acquisition activities, in exchange for which it effectively gave up control over the CRA portfolio. That is, the partnership between banks and activist groups aligned the incentives of activist groups with the bank, so that the activist groups would testify on behalf of a merging bank about its commitment to good citizenship.

[30] Calomiris and Haber (2013), Chapter 7.

Of course, a formal partnership agreement with a bank was a welcome source of fee income and power for the activist groups. At least to judge from the merger of Fleet Financial and BankBoston, a bank-run program was cause for activists to oppose a merger. As the transcript of the Fed hearing for that merger makes clear, a coalition of Massachusetts activist groups testified against the merger because Fleet-BankBoston had committed $14.6 billion to CRA lending, but refused to continue Fleet's CRA partnership with ACORN. Fleet-BankBoston, anticipating this opposition, actually paid the travel expenses of out-of-state activist groups in order to testify on the bank's behalf.[31]

It was, therefore, often in a bank's interest to enter into an explicit partnership with an activist group in advance of a Fed hearing, rather than running its own CRA credit program. Some critics of the CRA described those deals as a form of "legalized extortion."[32] 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 forego the opportunity to increase its profits and forcing the activist group to forego 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

[31] Calomiris and Haber (2013), Chapter 7.
[32] Calomiris and Haber (2013), Chapter 7.

year "establishes the principles that, as we expand the powers of banks, we will expand the reach of the [Community Reinvestment] Act."[33]

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), actually 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."[34] 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."[35]

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

[33] Calomiris and Haber (2013), Chapter 7.
[34] Calomiris and Haber (2013), Chapter 7.
[35] Calomiris and Haber (2013), Chapter 7.

preparing comments on merger applications."[36] 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."[37]

Activist groups were successful in negotiating many long-term contracts with banks, in which they received specific monetary and other commitments for their organizations. Calomiris and Haber (2013) show that 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.[38] 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.[39]

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. As Calomiris and Haber (2013) show, over the period 1977-2007, these directed credit

[36] Calomiris and Haber (2013), Chapter 7.
[37] Calomiris and Haber (2013), Chapter 7.
[38] Calomiris and Haber (2013), Chapter 7.
[39] Calomiris and Haber (2013), Chapter 7.

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 Calomiris and Haber (2013) regard as likely an understatement of the true amount.[40]

Had it not been for the CRA, banks would have made fewer and less risky loans in the 1990s and 2000s. A recent study, by Agarwal, Benmelech, Bergman and Seru (2013) 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.[41] 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 is to focus on the increase in the level of CRA commitments over time. This is the approach taken by Pinto (2011), who assumes, conservatively, that the CRA had no binding effects on bank lending until the Clinton Administration's CRA policy push. Under that assumption, Pinto concludes that, by 2007, there were

[40] Calomiris and Haber (2013), Chapter 7.

[41] Agarwal, Benmelech, Bergman and Seru (2012) summarize their results as follows: "We find that adherence to the act leads to riskier lending by banks: in the six quarters surrounding the CRA exams, lending is elevated on average by about 5 percent and these loans default about 15 percent more often….We note that our 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."

$2.2 trillion dollars in CRA commitments that would not have been undertaken by banks voluntarily. 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 that one would think they should have opposed: limits on bank competition that favored mega-banks.

As Calomiris and Haber (2013) show, 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: CRA loans implied higher levels of risk for the bank than more traditional mortgage loans. Thus, the activist groups used their political power in Washington to generate regulatory mandates on housing GSEs, which included the Federal National Mortgage Association (FNMA, commonly known as Fannie Mae), and the Federal Home Loan Mortgage Corporation (FHLMC, commonly known as 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, urban, and minority constituencies. This change was a win-win for activist groups and mega-banks; more credit could be directed to targeted constituencies at less cost to the banks because the banks were now able to resell some of their CRA-related mortgages to a GSE on favorable terms.[42]

[42] 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 (2013), see Rajan (2010), Morgenson and Rosner (2011), Acharya, Richardson, van Nieuwerburgh, and White (2011), and Wallison (2011).

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 three percent (instead of the 20 percent 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 percent that of commercial banks holding similar loan portfolios. That is, 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 crucial part of the institutional glue that held the coalition together.

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—whether they realized it or not—were soon pulled 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 that only had a three percent downpayment, no documentation of income or employment, and a far from perfect credit score they changed the risk calculus of large numbers of American families, not just the urban poor.

Calomiris and Haber (2013) note that one of the cruel ironies of the debasement of lending standards was that it was not a very efficient way to raise the living standards of the urban poor. Transferring income by distorting the incentives of bankers, the managers of GSEs, government agencies, and large swathes of the population through implicit housing subsidies contributed greatly to

the Subprime crisis of 2007-09. That crisis likely undermined whatever short-run redistributive gains the subsidy programs achieved. A system of on-balance sheet tax and transfer programs might have been politically more difficult to implement, and therefore would have been of more modest scale, but it would have produced more positive outcomes in the long-run.

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

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 coincided with those mergers. The Fed, as a competitiveness regulator, should have been more concerned about the creation of concentrations of market power (as during the merger of Fleet and BankBoston). 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, 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 not only of the big banks, but of

the members of Congress and the Administration that had direct control of its authorities, both in the realm of regulatory policy and monetary policy. A Fed that would have decided to be tougher would also have risked losing its regulatory powers, and possibly a fair degree of its monetary policy independence, both of which depended on its friendly relationship with the Administration and Congress.

Neither the microeconomic 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 it had little choice but to comply. Of course, the political actors that

made mergers possible and created the CRA amendments of the 1990s would have been aware of the political realities that constrained Fed action. Indeed, they would have depended upon them.

V. Policy Implications

The policy implications drawn from the above history and analysis are summarized in Section II's eight sets of Propositions. In closing, I expand on Proposition 8. To promote independence along both dimensions of economic policy (monetary and regulatory) two sorts of policy reforms are required: (i) separation of authority over the two areas into two distinct agencies (to avoid tradeoffs that reduce independence of regulatory policy), and (ii) 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 (Calomiris and Litan 2000). Just prior to the recent crisis, Secretary Paulson's working group on regulatory reform had released its findings suggesting the desirability of 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 do so 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. That does not require the Fed to be a merger regulator, or a prudential regulator.

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 (the Burns problem) or the excessive confidence of economists in pursuit of intellectual fads (like the Riefler-Burgess doctrine, the Phillips Curve, or the DSGE framework).

On the regulatory front, on prudential grounds banks should be prohibited categorically from making contractual commitments with activist groups. The criteria for merger approval should be based on multiple objective criteria for measuring market power (not just deposit market shares), each of which must be satisfied for mergers to be permitted.

With respect to monetary policy, the Fed's mandate should be expressed in the form of a "comply or explain" rule (e.g., a Taylor Rule, or some other similar rule).[43] Such a rule would make clear the objectives of monetary policy, and thus *permit* and *require* greater accountability. The ironic and important truth is that constrained independence equals greater independence. The Fed currently is tasked with achieving four objectives: price stability, interest rate stability, maximum employment, and financial stability. There is no way to hold the Fed accountable for its monetary policy actions with this vague, multi-dimensional mandate. This invites politically motivated attacks that limit Fed independence, and also invites bad discretionary policy ideas.

It is not realistic to argue that the central bank could or should be bound by a rigid rule. As Capie and Wood (2012) point out, such rules almost never survive trying times. I favor a "comply-and-explain" regime, in which departures from the rule are clearly announced and explained. The central bank

[43] A Taylor Rule is not the only possibility. A nominal GDP growth rule tied to an inflation objective (which could be "reset" annually to avoid inflationary consequences from large supply shocks) is another possibility, which has the advantage relative to a Taylor Rule of not requiring an estimate of the natural rate of unemployment. If a Taylor Rule approach were chosen, the mandate would also have to set limits on the process governing the assumed natural rate of unemployment to avoid manipulation of the formula. For example, it might be set as a moving average of many (e.g., 20) years of lagged unemployment rates.

describes why it is deviating from the rule, and commits to do so rarely. The leadership of the central bank, therefore, bears significant personal reputational risk if the supposed reasons for the deviation from the rule are considered to have been inappropriate, on the basis of hindsight, or if it exceeds the permissible frequency of deviations from the rule. One could make this personal responsibility explicit, for example, by requiring that the terms of all Fed Governors and Presidents would come up for renewal two years after they deviated from the rule, which would put discourage departure from the rule unless the circumstances clearly warranted it.

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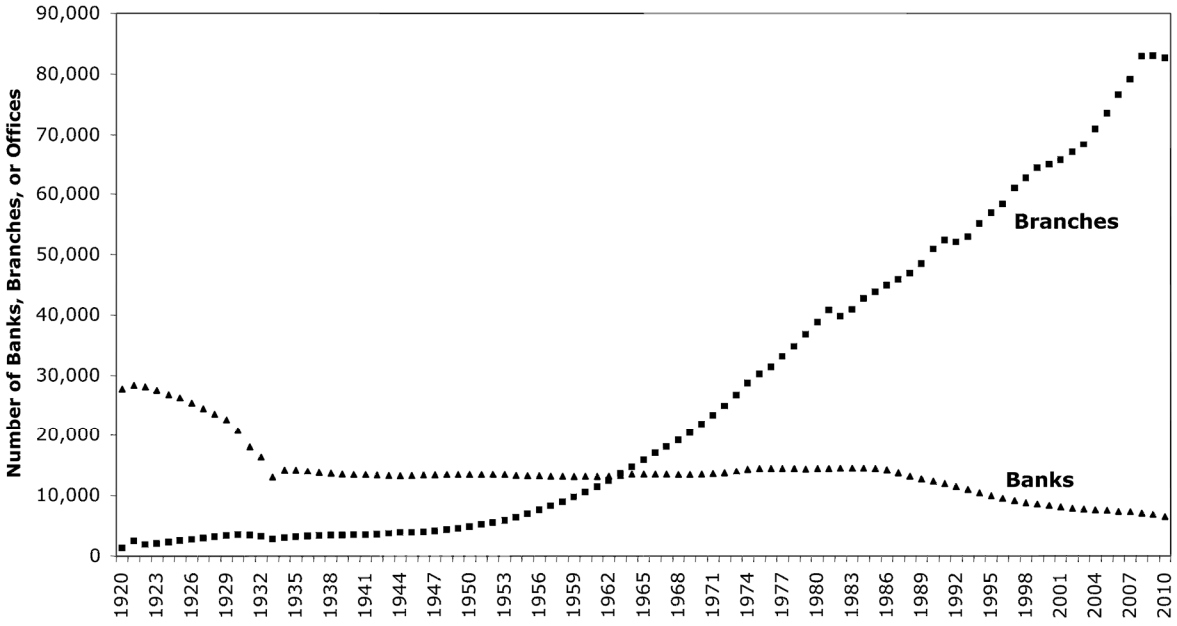
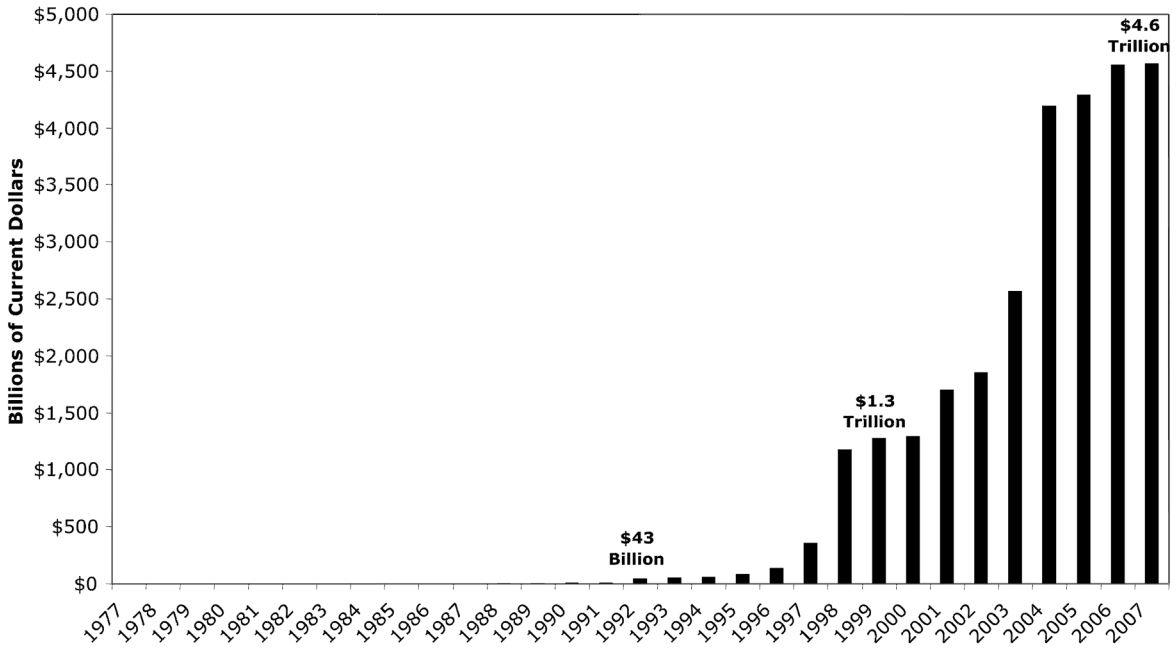
Figure 1
Number of Banks and Branches, 1920-2010



Source: Computed by Calomiris and Haber (2013), Chapter 6, from Federal Reserve, Banking and Monetary Statistics, p. 16, 297; Federal Deposit Insurance Corporation website, http://www2.fdic.gov/hsob/hsobRpt.asp

Figure 2
Cumulative CRA Commitments, 1977-2007



Source: Calomiris and Haber (2013), Chapter 7, computed from National Community Reinvestment Coalition, CRA Commitments data.