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## Monetary Politics

When the Federal Reserve celebrated its centennial in December 2013, it bore only passing resemblance to the institution created by Democrats, Progressives, and Populists a century before. In the wake of the devastating banking Panic of 1907, a Democratic Congress and President Woodrow Wilson enacted the Federal Reserve Act of 1913, creating a decentralized system of currency and credit, and sidestepping Americans' long-standing distrust of a central bank. After the Fed failed to prevent and arguably caused the Great Depression of the 1930s, lawmakers rewrote the act, taking steps to centralize control of monetary policy in Washington, DC, while granting the Fed some independence within the government. Decades later in 2007, another global financial crisis retested the Fed's capacity to overcome policy mistakes and prevent financial collapse. Congress again responded by significantly revamping the Fed's authority, bolstering the Fed's financial regulatory responsibilities while requiring more transparency and limiting the Fed's exigent role as the lender of last resort. By the end of its first century, the Federal Reserve had become the crucial player sustaining and steering the nation's and, to a large extent, the world's economic and financial well-being—a remarkable progression given the Fed's limited institutional beginnings.

What explains the Federal Reserve's existential transformation? In this book, we explore the political and economic catalysts that fueled the development of the Fed over its first century. Economic historians have provided excellent accounts of the Fed's evolution, focusing on the successes and failures of monetary policy. Still, little has been written about why or when politicians wrestle with the Fed, each other, and the president over monetary policy, and who wins these political contests over the powers, autonomy, and governance of the Fed, or why. Moreover, in the wake of economic and financial debacles for which Congress and the public often blame the Fed, lawmakers respond paradoxically, amending the act to expand the Fed's powers and further concentrate control in Washington. Why do Congress and the president reward the Fed with new powers and punish it for poor performance? In this book, we contextualize Congress's existential role in driving the evolution of the Fed—uncovering the complex and sometimes-hidden role of Congress in historical efforts to construct, sustain, and reform the Federal Reserve.<sup>1</sup>

By concentrating on Congress's relationship with the Fed, we challenge the most widely held tenet about the modern Fed: central bankers independently craft monetary policy, free from short-term political interference. Instead, we suggest that Congress and the Fed are *interdependent*. From atop Capitol Hill, Congress depends on the Fed to both steer the economy and absorb public blame when the economy falters. Indeed, over the Fed's first century, Congress has delegated increasing degrees of responsibility to the Fed for managing the nation's economy. But by centralizing power in the hands of the Fed, lawmakers can more credibly blame the Fed for poor economic outcomes, insulating themselves electorally and potentially diluting public anger at Congress.

In turn, the Fed remains dependent on legislative support. Because lawmakers frequently have revised the Federal Reserve Act over its first century, central bankers (despite claims of independence) recognize that Congress circumscribes the Fed's alleged policy autonomy. Fed power—and its capacity and credibility to take unpopular but necessary policy steps—is contingent on securing as well as maintaining broad political and public support. Throughout

the book, we highlight the interdependence of these two institutions, exploring the political-economic logic that shapes lawmakers' periodic efforts to revamp the Fed's governing law.

The concentration of monetary control in Washington has been politically costly for the Federal Reserve, particularly in the wake of the Great Recession and continuing into the 2016 presidential campaign. Beginning in 2008, the Fed's DC-based Board of Governors vastly expanded the breadth of monetary policy. The Fed extended and stretched its emergency lending powers, purchased unprecedented levels of government, mortgage, and other debt, and more generally, played a critical role in the selective extension of credit to US industry and finance—often working closely with the US Treasury and Federal Reserve Bank of New York (one of the Fed's twelve regional reserve banks that share power with the Board to make monetary policy).<sup>2</sup> Those choices, which at one point more than quadrupled the size of the Fed's balance sheet, reinserted the Fed into the midst of political discussions about fiscal policy, and more existentially, how far and in what ways the central bank should intervene to prevent and contain financial crises as well as bolster economic growth.

By extending credit to specific institutions and demographic cohorts, the Fed's actions during and after the 2007 crisis blurred the line between monetary and fiscal policy, making the central bank a target of critics across the ideological spectrum, tarnishing its reputation. Over 90 percent of respondents in public opinion polls in the late 1990s during the "Great Moderation" (a nearly quarter-century period of low and stable inflation) applauded the performance of the Federal Reserve as either excellent or good. As shown in figure 1.1, less than a third of the public approved of the Fed at the height of the Great Recession a decade later in 2009.<sup>3</sup> Even the perennially hated Internal Revenue Service polled higher. Liberals and conservatives criticized the lack of transparency surrounding the Fed's emergency lending programs. Conservatives objected to the Fed's large-scale asset purchases (LSAPs), on the unproven grounds that the Fed was foolishly stoking inflation. And while many Democrats welcomed the Fed's focus on reducing unemployment, Republicans pushed for eliminating the employment component of the Fed's dual

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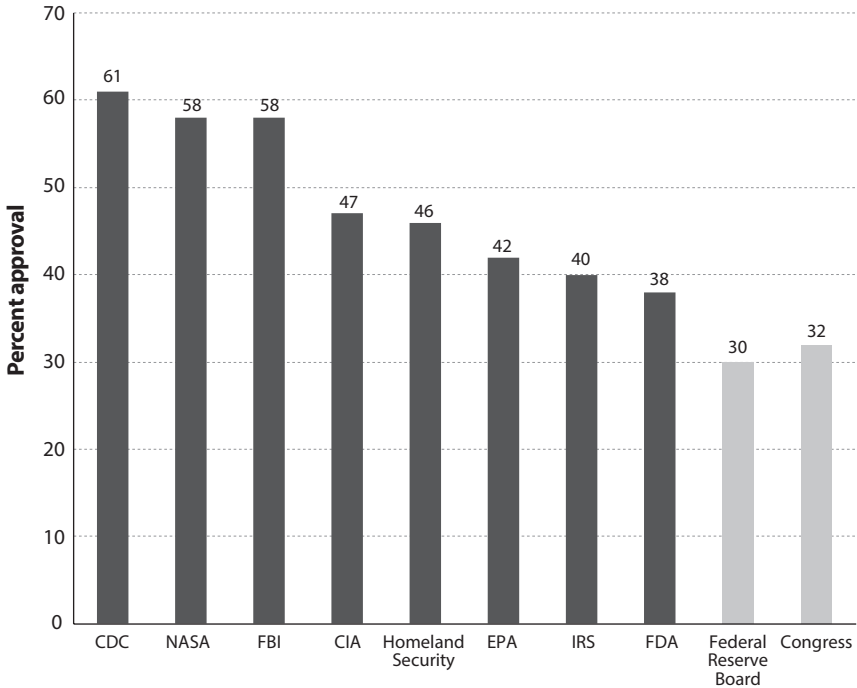


FIGURE 1.1. Public standing of Federal Reserve, Congress, and federal agencies, 2009. Question wording for agency, department, and Federal Reserve Board evaluations: How would you rate the job being done by [agency]? Would you say it is doing an excellent, good, only fair, or poor job? Approval calculated as percent responding excellent/good. Question wording for Congress evaluations: Do you approve or disapprove of the way Congress is handling its job? Gallup Organization, Gallup News Service Poll: July Wave 1, July 2009 (dataset). USAIPOGNS2009-12, Version 2, Gallup Organization (producer). Storrs, CT: Roper Center for Public Opinion Research, RoperExpress (distributor), accessed November 30, 2015, <https://ropercenter.cornell.edu/CFIDE/cf/action/home/index.cfm>.

mandate—a bank-friendly move that would force the Fed to concentrate exclusively on price stability.

Intense partisan and ideological criticism of the Fed made it harder for President Barack Obama to secure Senate confirmation of his appointments to the Fed, even after Democrats in November 2013 revamped Senate procedures to allow simple majorities to block filibusters of Obama’s nominees. Nor did the judiciary defer to the Federal Reserve: the Supreme Court in 2010 refused to come to the defense of the central bank when Bloomberg News sued to force disclosure of the identities of borrowers from the Fed’s

discount window. And in the 2016 presidential campaign, Republican nominee Donald J. Trump accused chair Janet Yellen and the Federal Reserve of playing politics with interest rates—claiming that she was doing the bidding of the White House to help elect Trump’s opponent (Davidson 2016). In short, the Fed’s autonomy was put at risk in the wake of the global financial crisis and afterward as the Fed faced tough choices about how to respond to the crisis and roll back its unconventional efforts as the economy improved. Even years after the crisis, lawmakers and market participants continue to scrutinize the Fed as it decides how to tighten monetary policy. How the Fed balances conflicting demands from politicians and industry against both its own preferences and a unique, dual mandate from Congress to maximize employment and keep inflation at bay will shape the reputation, power, and effectiveness of the Fed in its second century.

### **The Political Transformation of the Fed**

The image of the Federal Reserve as a body of technocratic experts belies the political nature of the institution. By defining the Fed as political, we do not mean that the Fed’s policy choices are politicized. To be sure, policy making within the Federal Open Market Committee (FOMC) is rarely a matter of applying partisan prescriptions to generate appropriate monetary policy, although accusations as such are common. Given internal frictions, especially during times of economic stress, the Fed chair faces the challenge of building a coalition within (and beyond) the FOMC to support a preferred policy outcome, akin to committee or party leaders in Congress, or Supreme Court justices working to secure majorities for proposals or opinions. Former Fed chair Ben S. Bernanke once described a central challenge of leading the Fed in precisely this way: “In Washington or any other political context you have to think about: how can you sell what you want to do to others who are involved in the process” (Dubner 2015). That said, the Fed is not just another partisan body reflecting the views of the presidents who appoint the Board of Governors in Washington or boards of directors who select the Fed’s reserve bank presidents who then vote on monetary

policy. Decision making inside the Fed surely involves technocratic, macroeconomic policy expertise, even within a political institution.

We deem the Fed “political” because successive generations of legislators have made and later remade the Federal Reserve System to reflect temporal, political, and economic priorities. Most important, because the Fed is a product of and operates within the political system, its power derives from and depends on the support of elected officials. Institutions are political not because they are permeated by partisan decision making but rather because political forces endow them with the power to exercise public authority on behalf of a diverse and at times polarized nation.

The Fed is an enduring political institution—its powers, organization, and governance evolving markedly over its first century. As such, the Fed is similar to many institutions that “have been around long enough to have outlived, not just their designers and the social coalitions on which they were founded, but also the external conditions of the time of their foundation” (Streek and Thelen 2005, 28). Given the difficulty of eliminating organizations once they are embedded in statute, political actors often try to adapt old rules and authorities to new purposes or to meet new demands (Pierson 2004). Indeed, reformers frequently target old organizations mismatched to new environments by seeking to remold them for new times. In other words, bureaucracies originally created to address past sets of interests can be transformed to serve the purposes of newly empowered coalitions. Old institutions become proving grounds for politicians eager to secure their policy goals without having to invest time and resources creating new organizations from scratch.

The Federal Reserve offers a prime example of historical “conversion” (Streek and Thelen 2005, 26), or more colloquially, “mission creep.” Democrats and Populists in 1913 placed high priority on devising a reserve system that would address the needs of the credit-starved, agrarian South. Creating regional reserve banks, empowering Democrats to determine where to locate the reserve banks, and providing for an “elastic currency” that would expand the money supply to meet regional as well as national credit needs served lawmakers’ goals well. Importantly, Wall Street bankers no

longer controlled agrarian Democrats' access to credit. The new decentralized reserve system, however, made it difficult to devise national monetary policy when banks began to fail again in the late 1920s. Innovation by the twelve district reserve banks (for example, creating an informal monetary policy committee to coordinate government debt purchases) proved insufficient during the Great Depression, leading Congress and the president to enact new banking acts in 1933 and 1935, thereby creating a more formal, system-wide monetary policy committee. The evolution of the economy, monetary theory, and the financial system—and crucially, the electoral map—all but guaranteed that future political coalitions would periodically revisit the handiwork of their predecessors. As a result, the Fed has been transformed over its long history: successive generations of politicians respond to economic downturns by battling over the appropriate authority, governance, and mission of the Fed.

In this book, we explore the Fed's political transformation. The growth of the US economy and concomitant transformation in the size, scope, and complexity of the financial system has naturally helped to expand the Fed's global economic influence. But congressional action has also made a difference. First, Congress has increasingly centralized monetary authority and power within the Federal Reserve System. Second, Congress has made the Fed more transparent and accountable to its legislative overseer. To be sure, Congress periodically clips the Fed's power and rejects centralizing reforms. But lawmakers' efforts to revamp the Fed have on balance made the Fed more powerful and more transparent. With more power, of course, comes more responsibility—allowing Congress to routinely blame the Fed for its policy failures. Below, we preview these twin transformations of the Fed and propose a political-economic theory to explain the dynamics of congressional reform of the Fed.

## **A MORE CENTRALIZED AND POWERFUL FED**

The 1913 Federal Reserve System was highly decentralized: twelve privately owned reserve banks operated regional “discount windows” and set their own interest rates—thereby controlling lending

to member banks in their districts. The Federal Reserve Act empowered a president-appointed, Senate-confirmed Federal Reserve Board in Washington to approve the regional banks' discount rates. But as Milton Friedman and Anna Schwartz (1963) documented in their history of monetary policy in the United States, the Board typically took a back seat to more assertive reserve banks, including the Federal Reserve Bank of New York. Because the DC-based board did not have its own lending facility, the power to devise and implement monetary policy rested largely in the hands of the regional, district banks. We show in chapter 3 that this hybrid, public-private agreement was the price of enactment for agrarian Democrats who otherwise would have rejected a more centralized, Wall Street-dominated, national bank.

The modern Fed bears little in common with the 1913 original. The institution is significantly more centralized, and has far greater powers and responsibility than it did a century ago. At its inception, the Fed's monetary policy extended only to member banks of the Federal Reserve System. Today, the Fed's authority reaches far beyond institutions that belong to the reserve system. The twelve reserve banks retain supervisory power over member banks in their districts, but the reserve banks have lost their autonomy over regional lending decisions. Moreover, centralized open market operations long ago replaced discount window lending as the key tool for affecting national interest rates and the allocation of credit more generally.<sup>4</sup> Today, the twelve reserve banks are largely local research arms that ensure the consideration of regional economic and macroprudential factors within the Federal Reserve System.<sup>5</sup>

Instead, the president-appointed, Senate-confirmed, Washington-based Board of Governors dominates monetary policy making through its voting cohesion on the FOMC. Moreover, the Board exploits its so-called 13(3) emergency lender-of-last-resort powers to direct credit without the input of reserve bank presidents.<sup>6</sup> The reserve bank presidents retain voting rights on the FOMC, but their representation is partial and rotating. Since 1935, only five of the FOMC's twelve voting seats are reserved for the regional reserve presidents, and since 1942, one has always been saved for the New



York Fed. In other words, a cohesive and fully staffed Board of Governors can always outvote the reserve bank presidents.

Why did Congress gradually concentrate power over money and credit in Washington? When lawmakers originally drafted the Federal Reserve Act in 1913, the nation's historical aversion to a strong central bank discouraged lawmakers from centering control of monetary policy in Washington or New York City.<sup>7</sup> At the time, policy makers foresaw a relatively limited role for the Fed: the new central bank's discretion would be curtailed by adherence to the gold standard—an arrangement that restricted the money supply to the nation's gold stock. As we explore in chapter 3, a decentralized reserve system was the opponents' price for creating a central bank. Lawmakers thus gave the Fed only limited lending powers, placing control of credit into the hands of regional financial agents, thereby institutionalizing access to credit beyond the nation's power centers. To centralize and empower the Fed, lawmakers ultimately would have to unravel the compromise that lay at the heart of the original Federal Reserve Act.

Our theory suggests that recurring economic crises, electoral change that often follows a crisis, and institutional competition encouraged lawmakers to concentrate greater authority in the Fed in Washington—unwinding the original deal. Monetary centralization affords Congress an easy target to blame when the economy sours, and facilitates easier oversight by Congress—useful when lawmakers are eager to escape blame for economic malaise. As we look at in chapter 4, for example, centralization of power within the Fed in 1935 was part and parcel of President Franklin Roosevelt's New Deal, the Democrats' policy program that aimed to fix the economy in the wake of the Great Depression. Indeed, FDR's pick to head the Fed in 1935, Marriner Eccles, agreed to accept the position only if Congress could be convinced to give the Board in Washington greater control over the conduct of monetary policy.

Given Congress's success in centralizing Fed authority in Washington, the resilience of the regional reserve system is curious. Why has Congress failed to fully centralize the Fed? Even after a century of technological, demographic, and economic change, each of

the reserve banks remains in its original location. As we examine throughout the book, lawmakers could not completely uproot the Fed at every turn: past institutional choices about the organization of the Fed generated coalitions that benefited from maintaining the status quo—constraining future efforts to fully centralize the Fed. Today, the central bank remains a *federal* reserve system, with some modicum of power over monetary policy still lodged in regional reserve banks around the country.

### A MORE ACCOUNTABLE, TRANSPARENT FED

Monetary policy poses a dilemma for politicians. Electoral incentives encourage short-term economic stimulants, but come with long-term costs: increased chances of inflation and higher odds of a recessionary payback. The solution worldwide has been to try to insulate central bankers from political interference (particularly in the run-up to an election) that might otherwise induce monetary policy makers to keep interest rates too loose for too long.<sup>8</sup> That is the root of politicians' dilemma: fully autonomous central banks would preclude lawmakers from micromanaging macroeconomic policy and holding central bankers accountable for their policy mistakes. In short, lawmakers face the challenge of empowering and controlling central bank decisions.

In return for giving the Fed more power, Congress periodically demands greater accountability. Critics charge today that the Fed's monetary policy decisions remain too insulated from public view. But the trajectory of the Fed over its first century has been toward greater accountability to its congressional overseers. As we explore in detail in later chapters, accountability requirements take different forms. Creating or revising the Fed's statutory mandates, imposing new reporting requirements, subjecting the Fed to audits—these and other reforms create potential avenues for greater congressional oversight of the Fed. And over the Fed's history, both parties have demanded greater transparency. For example, in the wake of the 2007 financial crisis, Republicans continue to champion “audit the Fed” legislation. But populist Democrats first proposed auditing

the Fed more than a half century ago in an effort to force the Fed to be more accountable to the views of the congressional Democratic majority.

With rare exception, the Fed routinely fights congressional efforts to increase scrutiny of monetary policy choices. Central bank resistance to greater congressional oversight is not surprising: when Congress puts in place new mechanisms for overseeing the central bank, the Fed's autonomy weakens. Mandating new goals for the Fed to guide its conduct of monetary policy, for instance, necessarily constrains and could even tilt the Fed's discretion in setting interest rates. Similarly, requiring regular reporting to Congress of the Fed's monetary policy targets creates additional economic performance benchmarks against which lawmakers can ostensibly hold the Fed accountable for its performance. By forcing the Fed to justify its policy choices in real time, Congress makes it harder for the central bank to deploy unconventional tools at the height of a financial or economic crisis.

As we discuss in detail below, lawmakers asymmetrically demand more accountability from the Fed for its performance in managing the economy. When the economy is performing well, Congress pays relatively little attention to the Fed—allowing the central bank to seem independent from its political overseers. In contrast, public support for the Fed declines markedly when the economy suffers; lawmakers are more likely to criticize the Fed and propose new limits on the Fed's operational independence. Whether congressional criticism fuels public distrust or vice versa, the result is the same: lawmakers demand more accountability from the Federal Reserve—over time transforming the Fed into a far more transparent institution.

## **A Political-Economic Theory of Reform**

Our theory of monetary politics highlights why and when economics and politics interact to shape the nature as well as timing of Fed reform. Economic and financial crises typically encourage reelection-minded lawmakers to pay attention to the Fed.

Lawmakers' inherently reactive behavior means that congressional action is countercyclical. The Fed largely escapes scrutiny when the economy is sound. But a souring economy encourages Fed-blaming lawmakers to revisit the act, and reconsider the powers and governance of the Federal Reserve.

Simple changes in the economy are necessary but rarely sufficient to generate congressional action. Political and institutional forces on Capitol Hill and in the White House shape both the chances that Congress acts and the proposals it adopts. Given many legislative veto points and often competing partisan prescriptions, changes to the Federal Reserve Act are more likely when a single party controls both Congress and the White House. Still, majority parties rarely hold enough seats to act without some support from the opposition, so reform of the Fed inevitably requires the parties to compromise. Finally, conflict with the executive branch over how monetary policy should be made can shape lawmakers' preferred reforms. As we explain in chapter 5, the most dramatic such battle between the branches generated the Treasury-Fed Accord of 1951—a document that cemented the subordination of the Federal Reserve and monetary policy to Congress. In sum, economic, political, and institutional forces collectively generate a cycle of blame and reform, and mold the Fed's evolution as a political institution.

## HOW CRISIS SHAPES REFORM OF THE FED

The Fed was born of crisis in the wake of the Panic of 1907. The existing privately controlled reserve system was incapable of stemming a full-blown banking crisis, and bank runs ended only when financier J. P. Morgan and a consortium of fellow bankers stepped in as “lenders of last resort” to provide banks needed liquidity. Despite the severity of the crisis, a Republican Congress reacted with baby steps: it passed the Aldrich-Vreeland Act of 1908 to authorize the Treasury to issue emergency currency during future panics and created the National Monetary Commission to study alternative reserve systems. In sync with financial conservatives who had for decades opposed government control of the reserve system (Ritter 1997),

the 1910 Aldrich bill advocated a largely banker-controlled reserve system. Progressives and Democrats denounced the bill in their 1912 presidential party platforms, and deferred action on a new reserve system until after the election of 1912, in which the Democrats captured control of Congress and the White House for the first time in two decades. As we examine in chapter 3, newly elected Wilson made currency reform a high priority for the Democrats and signed the Federal Reserve Act into law just before Christmas in 1913.<sup>9</sup>

The creation of the Federal Reserve significantly dampened—but could not eliminate—banking crises or the deflation that had contributed to them. Indeed, deflation (falling prices) was pivotal to the onset of depression (falling output) in the late 1920s and early 1930s.<sup>10</sup> Congress responded to subsequent financial meltdowns and major economic crises by reopening the Federal Reserve Act to empower the Fed (and in the 1930s, the executive branch) to stem and reverse deflation. Lawmakers, for example, strengthened the Fed's lender of last resort powers in 1932, concentrated more power in political appointees heading a revamped Board of Governors in Washington in 1935, and imposed greater accountability in the wake of severe economic distress in both 1977 and 2010.

The Fed's financial crisis roots made subsequent reform even more likely. Legislative changes in the wake of a crisis typically fight the last fire, even though the next crisis frequently takes a different form and requires a new approach. If an institution cannot easily adapt, its policy failures often incite Congress to consider new reforms. Moreover, compromise demanded by the legislative process in creating or reforming an institution usually undermines the future effectiveness of the organization.<sup>11</sup> In the case of the Fed, the early compromises necessary for creating a decentralized institution in 1913 generated a structure that soon proved suboptimal for future crises. The original set of tools devised for the Fed in 1913 had become nearly obsolete when Congress revamped the Fed in the wake of the Great Depression. Financial crises—accompanied by an evolving understanding of monetary policy and macroeconomics—encouraged lawmakers to reshape the Fed even before its twentieth anniversary. The Fed's crisis-driven design, implemented in the early

twentieth century amid world war and a historic depression, made subsequent changes to the Federal Reserve Act highly likely.

## HOW CONGRESS'S REACTIVE BEHAVIOR GENERATES PRESSURE FOR REFORM

By affecting output, inflation, and employment, macroeconomic decisions by central banks are among the most important policy choices made in a democracy. Powerful fiscal and monetary policy trade-offs help to shape economic outcomes. And while the effects of fiscal policy decisions and institutions can outstrip the impact of central bank decision making, monetary policy affects interest rates immediately, which in turn shape the public's borrowing costs, the availability of credit, and ultimately economic growth and household wealth. As the public demand for goods and services grows, businesses and governments increase production and services as well as employ more workers. No other bureaucracy in the US political system has such a pervasive and enduring impact on the economic lives of citizens and businesses. This was especially so in the wake of the Great Recession when congressional stalemate over fiscal policy left the Fed, in the words of Senator Chuck Schumer (D-New York) in 2012, "the only game in town" (Menza 2012).

The distributional consequences of monetary policy play a central role in generating Congress's disproportionate attention to the Fed. As we show in chapter 2, legislators' focus on the Fed is typically reactive, rising and falling with the state of the economy. Congressional attention is thus countercyclical because the Fed is especially salient to "single-minded seekers of re-election" Mayhew (1974) when they seek to avoid blame for a bad economy. When monetary policy stokes inflation or contributes to job losses, lawmakers respond in two ways. First, they blame the Fed for the state of the economy and its impact on their constituents. Second, in particularly poor economic times, politicians are likely to prevent the Fed from making the same mistakes again, proposing and sometimes securing changes to the powers, mandate, or organization of the Fed.

Lawmakers' response to populist anger toward the Fed in the aftermath of the global financial crisis illustrates the dynamic starkly. The depth and breadth of public ire in hindsight are remarkable. Republicans warned that the Fed's unconventional cocktail of zero interest rates and unfettered purchases of government bonds would lead to imminent, uncontrollable inflation. Running for the GOP presidential nomination in 2008, Governor Rick Perry of Texas vowed that "if this guy prints more money between now and the election, I don't know what y'all would do to him in Iowa, but we—we would treat him pretty ugly down in Texas. Printing more money to play politics at this particular time in American history is almost treacherous—or treasonous in my opinion" (Keyes 2011). Perry's right-wing tirade echoed popular views across the ideological spectrum that the Fed's emergency actions during the crisis revealed a preference to rescue Wall Street before Main Street. On the Left, Occupy Wall Street rants in 2011 against rising levels of economic inequality spawned Occupy the Fed protests at barely known Federal Reserve regional banks. On the Right, public anger helped to propel Rep. Ron Paul's (R-Texas) "End the Fed" presidential campaign and his "Audit the Fed" legislative drive.

Fed officials at the time worried that populist criticism was taking a toll on the Fed's reputation and autonomy to conduct monetary policy.<sup>12</sup> Such concerns led a reportedly reluctant Fed chair Bernanke to appear twice on *60 Minutes*, conduct town hall meetings, teach a course about the Federal Reserve to college students at George Washington University, and appear at other unprecedented public and private engagements to explain the Fed's unconventional monetary policy in accessible terms. The *Washington Post* subsequently reported that "the goal was to convince the country—largely through the reassuring words of the soft-spoken Bernanke, a son of Dillon, S.C.—that the Fed was out to help the average American worker" (Goldfarb 2014). After leaving office, Bernanke summed up the challenge: "The natural reaction from the guy on Main Street is, well, how come you're bailing them out and not bailing me out? And the answer is complicated: by preventing the system from collapsing, we are protecting the economy



and we are protecting you. It's a complicated argument to make" (Fitch 2014).

As we explore in chapter 7, such efforts failed to dissuade lawmakers from revamping the powers of the Fed in the wake of the global financial crisis. When Congress wrote the Dodd-Frank Wall Street Reform and Consumer Protection Act in 2010, lawmakers gave the Fed more supervisory powers over large financial institutions. But channeling public anger from the Left and Right about the Fed's unconventional policies during the crisis, Congress also imposed more transparency on the Fed and clipped its lender of last resort authority. Public anger compelled electorally motivated legislators to place reform of the Fed high on their postcrisis agendas and act to revamp the law.

#### WHY AND HOW PARTIES DIVIDE OVER MONETARY POLICY

The global financial crisis reminds us that in the wake of economic downturns, populist fringes of the two major parties are occasionally aligned in their criticism of the Fed and proposals to reform it. Over the broader arc of Fed history, however, the two parties typically hold markedly different views about the role of the government and central bank in managing the economy. Democrats and Republicans usually disagree about the appropriate trade-off between growth and inflation. More likely creditors than borrowers—today and in the past—Republicans have long been the party of financial conservatism. Even in the nineteenth century, Republicans opposed government management of the economy—instead favoring use of a gold standard along with Wall Street control of currency and credit.<sup>13</sup> In contrast, southern and western farmers were likely to have been Democrats, supporting more inflationary policies—including the adoption of a “bimetallic” standard of coining both gold and silver. Although the United States long ago abandoned the gold standard, differences between the constituency bases of the parties endure: contrasting attitudes about the appropriate trade-off between inflation and employment today still color Democratic and Republican views about how Fed power should be exercised.



That said, Congress does not give the Fed free rein to determine how to balance the goals of promoting jobs and limiting inflation. As we discuss later in the book, Democratic majorities at pivotal points in the Fed's history have dictated with increasing clarity the Fed's dual mandate: a statutory requirement that the central bank pursue both maximum employment and low, stable inflation. The parties, however, have fought over what the mandate should be and the tools that the Fed should have to pursue it. So long as the two parties represent divergent constituency interests, congressional parties will prescribe different fixes for the Fed. In short, contests over the powers and governance of the Fed reflect prevailing partisan or factional lines within the legislature. Still, neither party's majorities are typically large or cohesive enough to exclude the other party when considering reform of the Fed. In other words, majorities are often forced to compromise when they try to institutionalize their priorities into the Federal Reserve Act.

Internal party divisions also shape congressional moves to revamp the Fed. The most important such differences emerged within the Democratic Party with the rise of the Conservative Coalition in the late 1930s. For nearly a half century, Republican and southern Democratic conservatives joined forces to oppose key parts of the New Deal's economic (and later, racial) liberalism. Conservatives generally opposed the spread of federal economic power into the South, fearing that government intervention in the economy would threaten the South's racially segregated economy as well as social and political spheres. Throughout the book, we examine the impact of this ideological cleavage on reform of the Fed. We pay special attention to southern Democrats' fight to preserve the decentralized, federal character of the reserve system, even as their northern, more liberal colleagues pushed to centralize power in the Fed in Washington. Conservatives no longer rule the roost in the Democratic Party. But their imprint has been institutionalized in the governance and organization of the Fed.

## INTERBRANCH CONTESTS TO CONTROL THE FED

Institutional fault lines—pitting legislators against the president—have also shaped contests over the powers and governance of the

Fed. Interbranch rifts are particularly likely when questions of Fed independence—from whom, to do what, and over what time horizon—arise. As we explore in chapter 5, such battles are not strictly partisan: the fight to secure the Fed's independence from the Treasury in the late 1940s and early 1950s, for example, occurred largely among Democrats. Indeed, the move in 1951 to free the Fed from monetizing Treasury debt was fought largely on institutional, not partisan, grounds. A small, bipartisan coalition of senators joined the Fed's struggle to free itself from executive branch control and Treasury Department subordination. Viewed more broadly, politicians' institutional positions can shape their views about the powers and accountability of the Fed. Lawmakers assert their constitutional power to manage the currency, while presidents exploit their executive power to push the Fed to support their administration's macroeconomic goals.

Still, Congress at times has pushed the executive to exert more control over monetary policy. As we investigate in chapter 4, Congress adopted several measures in the wake of the Great Depression that enhanced presidential influence over monetary policy. Empowering the president to take the country off the gold standard, creating a currency exchange fund within the Treasury—these and other legislative moves significantly enhanced the White House's potential influence over monetary policy and central bankers in the 1930s and 1940s. Recouping those powers became a key challenge for lawmakers seeking to cement the Fed's subordination to Congress and secure its support for Congress's postwar economic priorities. In sum, the interaction of economics, politics, and institutions indelibly shapes the evolution of the Fed.

## **Plan of the Book**

Table 1.1 lists key legislation that transformed the Fed over its first century—from enactment of the Federal Reserve Act in 1913, adoption of the 1951 Treasury-Fed Accord, and reorganization of the financial regulatory system in the Dodd-Frank Act of 2010.<sup>14</sup> As we explore in detail throughout the book, political reforms can expand

TABLE 1.1. Key Episodes of Congressional Reform of the Fed, 1913–2015

Year	Reform
1913	Federal Reserve Act adopted
1917	First and Second Liberty Bond Acts
1922	Addition of agricultural seat to Federal Reserve Board
1923	Agricultural Credits Act of 1923
1927	McFadden Act
1932	Glass-Steagall Act (February) and Emergency Relief and Construction Act (July)
1933	Emergency Banking Act (March), Thomas Amendment (1933), and Banking Act (June)
1934	Gold Reserve Act of 1934
1935	Banking Act of 1935
1942	Second War Powers Act of 1942
1946	Employment Act of 1946
1951	Treasury-Fed Accord (nonlegislative)
1956	Bank Holding Company Act
1975	House Concurrent Resolution 133 (new reporting requirements)
1977	Federal Reserve Act Amendments
1978	Humphrey-Hawkins Full Employment Act
1980	Monetary Control Act
1991	Federal Deposit Insurance Corporation Improvement Act
2006	Financial Services Regulatory Relief Act
2010	Dodd-Frank Wall Street Reform and Consumer Protection Act

the power and mandates of the Fed, reorganize its governance and organizational structure, impose greater accountability, or strip the Fed of previously granted powers. Sometimes, Congress only empowers the Fed, and at other times it only clips its wings. Equally often, legislative packages become a common carrier for a broader range of changes to the Federal Reserve Act—coupling reforms that give the Fed more responsibility while imposing stronger oversight over the use of new or inherited powers.

Chapter 2 offers a broad view of patterns in the timing of proposals and successful congressional action to reform the Fed. Historical quantitative evidence allows us to apply our political-economic theory of reform to the history of the Fed, examining the conditions that encourage lawmakers to act. Chapters 3 through 7 dive chronologically into key episodes of reform, probing the particular political and economic circumstances that lead lawmakers to challenge the Fed as well as revamp the central bank's powers, organization, and

governance. Chapter 8 takes broader stock of the Fed's transformation, and speculates about the political and economic challenges ahead for the Fed's second century.

We begin in chapter 2 by testing the fit of our theory to broader trends in the Congress-Fed relationship. How does the state of the economy shape both lawmakers' and the public's attention to the Fed? We marshal public opinion polls in recent decades to demonstrate that the public routinely blames the Fed when the economy falters, even as heightened partisanship among voters now colors citizen attitudes about the Fed. Using data on congressional bill sponsorship over a sixty-year period, we also establish lawmakers' reactive attention to monetary policy. Finally, we explore the conditions that foster major Fed reform, showing the impact of partisan alignments and economic distress on changes to the Federal Reserve Act. Overall, lawmakers' political efforts to avoid blame for major downturns in the economy lead Congress to saddle the Fed with even more responsibility while often punishing it for poor performance.

We dive into the historical transformation of the Fed in chapter 3, looking at the dynamics that drove the adoption of the Federal Reserve Act in 1913. Acute financial crisis—coupled with electoral change in 1912—put creation of a central bank on Washington's agenda after nearly a century of US antipathy toward government control of currency and credit. The institution that emerged from congressional and presidential bargaining in 1913 was truly “federal”: the Federal Reserve Act empowered quasi-private, regional district banks to conduct their own open market operations, even occasionally defying the Washington-based Board's efforts to set regional lending rates. Although the reserve system's framers sought to make the Fed independent of Wall Street financial interests, there was little enthusiasm for placing the new institution out of reach of political control. Placement of the comptroller of the currency and the Treasury secretary on the Federal Reserve Board in Washington cemented the Board as a public capstone on a broadly decentralized reserve system. In sum, although the original Fed did not rely on government funds to operate, the new institution was obviously decentralized and only marginally independent.

In chapter 3, we also examine how political and financial forces shaped the organization of the reserve system in 1914. Democrats choose a design that served their policy interests: Democrats broadened the regional footprint of the Fed to ensure greater access to credit for Populist and Democratic constituencies far from the Eastern Seaboard, and bolstered the economies of the underdeveloped South. Despite the assertion of the Reserve Bank Organization Committee (RBOC)—led by high-ranking Wilson political appointees—that only economic and financial criteria would guide its decisions about where to locate the new reserve banks, our analysis shows that Democrats’ policy and political interests led them to spread access to credit beyond Wall Street and other turn-of-the-century financial hubs.

The regional design of the reserve system had political, institutional, and policy consequences. By placing reserve banks in communities across the country, Main Street political support for the new Federal Reserve was soon hardwired across the geographic array of districts and states that secured one of the twelve regional banks. Such geographically diverse support meant that “reserve bank” lawmakers would rally to the support of the Federal Reserve when future Congresses considered either cutting back the Fed’s autonomy or granting it new powers. Ironically, it was the Fed’s decentralized authority and structure that was partially to blame for the duration and severity of the Great Depression less than two decades later. Remarkably, the signature achievement of the RBOC lacked the monetary policy tools and structure to prevent another financial collapse in the run-up to the economic havoc of the 1930s.

In chapters 4 through 7, we explore the transformation of the Fed into a more powerful and accountable institution. Chapter 4 tackles congressional battles to reform the Fed amid financial and economic crises—first in the early 1920s, and later in the years following the stock market crash in 1929. The mid-1920s proved to be a period of experimentation within the Federal Reserve System as the regional reserve banks tried unsuccessfully to coordinate their “open market” buying and selling of government bonds to adjust the cost of borrowing and supply of credit. Coupled with the Board’s limited power in

Washington, missteps by the Fed (including misreading the economy, raising interest rates, and letting banks fail) ultimately led to the 1929 collapse of the stock market and onset of the Great Depression. The electoral change that followed pushed politicians to bring control of monetary policy more tightly under the thumb of political appointees. Concentrating and coordinating open market operations in Washington and New York, creating new emergency lending authority for the Fed, and creating new monetary policy powers for the president and Treasury drove reform of the central bank after Roosevelt and large Democratic majorities took office in 1933.

We also show in chapter 4 the impact of a widening divide within the Democratic Party on reform of the Fed—examining political reactions when Roosevelt and Eccles pushed Congress to rewrite the Federal Reserve Act in 1935. One coalition, aligned with FDR and Eccles, sought to revamp the FOMC that had been created in 1933 and had only included heads of the reserve banks. The FDR-Eccles coalition pushed for greater centralization of monetary policy making, proposing to empower a newly created Board of Governors in Washington and strip reserve banks of their votes on the FOMC. A rival coalition—led by Senator Carter Glass (D-Virginia), the key architect of the 1913, decentralized system—sought to protect a role and voting rights for the regional reserve banks in the making of monetary policy. We explore Congress’s institutional choices in revamping the Federal Reserve Act in 1933 and 1935, probing the partisan and electoral forces that gave rise to a split-the-difference compromise between the Eccles and Glass factions. The Fed emerged far more centralized than Glass’s original design, albeit with vestiges of his federal system that guaranteed voting rights on monetary policy for leaders of the regional reserve banks. Moreover, Congress enhanced political control over monetary policy by granting the president tools that could be used to expand the money supply and take the country off the gold standard.

We turn in chapter 5 to the postwar period, including the adoption of the 1946 Employment Act and implementation of the 1951 Treasury-Fed Accord. Most accounts of the Accord depict it as the critical moment in the birth of the modern, independent Federal

Reserve. We recognize the importance of the Accord for the Fed's maturation as a central bank. We provide an alternative account of the dynamics that gave rise to the Accord. First, we emphasize that the Fed gained independence from the Treasury, but not from Congress. In fact, the Accord made the Fed more dependent on Congress. Second, we probe the conflict between Congress and the White House over the Fed's subordination to the Treasury—given pressures from Congress for the Fed to tackle inflation after the Korean War. We highlight the impact of lawmakers who encouraged the Fed to break its wartime pledge to keep interest rates pegged low to allow the Treasury to cheaply finance its war debts. Why did Congress get involved in this dispute between the president, Treasury, and the FOMC over the pegging of the Fed's interest rate on government debt? And why did congressional Democrats oppose their party's president, Harry S. Truman, by siding with the Fed over the Treasury? By highlighting lawmakers' role in the genesis of the Accord, we recast the implications of this existential transformation of the Fed.

In chapter 6, we turn our focus to Congress's rewriting of portions of the Federal Reserve Act in the 1970s given Democrats' frustration with the performance of the Fed. A severe economic downturn, the evolution of monetary theory, and partisan politics led to the establishment of the Fed's first explicit statutory mandate from Congress—one that required the Federal Reserve to secure price stability and maximize employment. We argue that stipulating a mandate and imposing new transparency requirements reduced the Fed's autonomy: the reforms made clear the policy grounds on which Congress would seek to hold the Fed accountable, and required the Fed to set and justify policy targets before Congress. We also compare the records of successive Fed chairs, Arthur F. Burns and Paul Volcker, in combating stagflation and restoring the economy, debunking conventional wisdom that Volcker's independent leadership sufficed to return the economy to health by the mid-1980s. We suggest instead that considerable support from the White House and key lawmakers contributed to Volcker's success. Far from a demonstration of Fed independence, the Fed's performance under



Volcker's leadership indicates that support from fiscal authorities is necessary for the Fed to sustain unpopular monetary policy.

In chapter 7, we examine congressional reaction to the Fed's performance in the run-up to and aftermath of the financial and economic crises that began in 2007. By exploiting its emergency lending power, and extending billions of dollars of credit to a broad range of businesses, investment firms, banks, and nondepository institutions, the Fed stirred debate over the appropriate role of central banks in stemming crisis along with restoring the financial system and economy. The choices of the Fed in 2008—especially decisions to facilitate the acquisition of Bear Stearns by J. P. Morgan, rescue AIG and make its counterparties whole at par, and stand by while the Lehman Brothers went bankrupt—and secrecy with which the Fed acted fueled significant criticism of the Fed as well as efforts to reform it when Congress and the president turned to rewiring the financial regulatory system in 2009.

Disagreements over the appropriate powers and organization of the Fed surfaced in the drafting of the Dodd-Frank Act in the wake of the crisis. The administration and Democratic leaders contended with three competing coalitions. One group fought for new macroprudential supervisory and regulatory powers for the Federal Reserve as the regulator of systemically important institutions. Another coalition—led by two senators representing states that housed Federal Reserve district banks—sought to protect the power of the regional banks in the face of pressure to strip them of their supervisory roles and revise the process for selecting their leaders. Yet another coalition emerged to push for greater transparency in the Fed's use of its emergency lending powers. Ultimately, legislators approved new audits of the Federal Reserve, defeated efforts to strip the regional banks of their supervisory role, pared back the Fed's lending powers, and gave the Fed new supervisory and regulatory powers. In chapter 7, we demonstrate that financial crisis and partisan politics interacted to drive a Democratic Congress to reward the Fed with additional authority and expand its mission, all the while sustaining its regional structure and requiring greater transparency for its lending decisions.



Chapter 8 concludes, placing the transformation of the Federal Reserve into a broader, democratic context. Driven by the interaction of politics and economics, the Fed's evolution into the world's dominant central bank illustrates the double-edged sword of congressional empowerment. One side of the sword gives lawmakers expressly what they wish for: a central bank with a reputation for independence and sufficiently centralized authority to act as the uber regulator of the financial system, a global lender of last resort during severe economic downturns, and a receptor of more blame and power when the nation steps back from the economic abyss. In the current, polarized era in which politicians routinely stalemate over more aggressive fiscal stimulus, the burden of generating economic growth in the wake of the crisis and recession rests even more firmly on the Fed's shoulders.

The other side of the sword is problematic. The Fed's dominant macroeconomic role exposes it to severe criticism, especially in the wake of crises when the Fed attracts considerable political oversight and criticism of its policy choices. Such criticism compromises the Fed's reputation for independence. As political scientist Daniel Carpenter (2010) argues, institutional reputations are "organizational assets"; they are critical to sustaining and expanding an institution's power and autonomy over time. Has the Fed's reputation and credibility been irreparably harmed by its actions during and after the recent crisis? How will the Fed withstand its critics on the Left and Right as it continues to unwind its massive balance sheet? Will unified Republican control of government in 2017 and the elevated threat of reform alter the Fed's approach to monetary policy? We conclude our study by speculating about the likely institutional future of the Federal Reserve, given its historical path and the magnitude of the policy-making challenges it will continue to face in the years ahead.



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## NOTES

### Chapter 1: Monetary Politics

1. On the relationship between Congress and the Fed more generally, see Kettl 1986; Morris 2000; Woolley 2004.

2. The Fed's purchase of government debt during and after the financial crisis was alternately called *quantitative easing*, *large-scale asset purchases* (LSAPs), or *credit easing*. Between 2008 and 2014, the Fed purchased over three trillion dollars in mortgage-backed securities, other agency debt, and US Treasury securities. See Irwin 2014.

3. Here, we compare the results of a Harris poll in January 1998 that asked "How would you rate the job Alan Greenspan and the Federal Reserve are doing?" to the results of a Gallup Poll in July 2009 that asked "How would you rate the overall job each of the following are doing: The Federal Reserve?" Priming respondents' evaluations with a reference to Greenspan may have inflated confidence in the central bank. Louis Harris and Associates, Harris Poll, September 1988 (survey question). USHARRIS.111388.R3, Louis Harris and Associates (producer). Storrs, CT: Roper Center for Public Opinion Research, iPOLL (distributor), accessed December 30, 2015, <https://ropercenter.cornell.edu/CFIDE/cf/action/home/index.cfm>.

4. The Fed engages in open market operations when it buys and sells government bonds either directly (pursuant to statutory authorization from Congress) or indirectly through bond dealers. Regional reserve banks still operate discount windows that provide loans for member banks within their districts. Each reserve bank's discount lending rate, however, must be approved by the Board of Governors, which often rejects requests for changing the loan rate.

5. Macroprudential regulation refers to policy tools that are aimed at reducing risk that originates within and across the financial system. (In contrast, microprudential regulation targets individual consumers or firms.)

6. The Federal Reserve's 13(3) powers are detailed in Board of Governors of the Federal Reserve System 2013b. We explore the powers more extensively in chapters 4 and 7, including changes in Dodd-Frank that limited their reach.

7. For the most recent treatment of the origins of the Federal Reserve, see Lowenstein 2015.

8. See, among others, Alesina and Summers 1993; Alt 1991; Bernhard, Broz, and Clark 2002; Broz 1997; Fernandez-Albertos 2015.

9. For the platforms, see <http://www.presidency.ucsb.edu/platforms.php>.

10. Bernanke (2013a) explores the persistence of deflation after 1913. The threat of deflation in this period stemmed partially from the inadequacies of the international gold standard that tied the availability of credit to the nation's stock of gold (Eichengreen and Sachs 1985; Bernanke and James 1991). With an international gold standard, trade deficits and the accompanying outflow of gold would automatically reduce the issuance of currency, thereby constricting the money supply while deflating prices and demand.

11. As political scientist Terry Moe (1995, 143) once put it, "Bureaucratic structure emerges as a jerry-built fusion of congressional and presidential forms, their relative role and particular features determined by the powers, priorities, and strategies of the various designers."

12. For a review of the Fed's thinking in this period about its public critics, see Goldfarb 2014.

13. On nineteenth-century partisan disagreements over economic policy, see, among others, Ritter 1997.

14. Adoption of the Treasury-Fed Accord in 1951 did not actually involve legislation. As we discuss in detail in chapter 5, though, legislative threats and lawmakers' actions clearly drove the adoption of the Accord.

## Chapter 2: The Blame Game

1. We estimate an ordinary least squares model to regress the approval rating (typically combining "strong" and "somewhat strong" approval) on the average annual unemployment and inflation rates, controlling for lagged approval and a "rookie effect" (whether or not the chair is in their first year in office). The results are available from the authors. Note that some years have multiple observations while others have none (due to the absence of polling about the Fed in those years).

2. We estimate approval as a function of unemployment, inflation, and a "rookie effect" of a Fed chair's first year in office, and then generate predicted approval from the model. The results are available from the authors. Bernanke's average annual approval fell five and six points shy of his predicted approval in 2010 and 2011, respectively, before rebounding in 2012.

3. Gallup Organization, Gallup Poll, November 2014 (survey question). USGALLUP.112014A.R01C, Gallup Organization (producer). Ithaca, NY: Cornell University, Roper Center for Public Opinion Research, iPOLL (distributor), accessed July, 10, 2016.

4. We estimate approval (combining good and excellent ratings) as a function of respondent partisan identification, monthly household income, highest educational level obtained, and whether or not the respondent reported that they were retired. We code respondents who lean toward one party or the other as identifying with that party, dropping pure independents. The results are available from the authors.

5. See, for example, Schiller 1995; Sulkin 2005, 2011; Volden, Wiseman, and Wittmer 2013.



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## REFERENCES

- Aaron, Kat. 2009. "Predatory Lending: A Decade of Warnings." Center for Public Integrity. Accessed September 29, 2015, <http://www.publicintegrity.org/2009/05/06/5452/predatory-lending-decade-warnings>.
- Abrams, Burton A. 2006. "How Richard Nixon Pressured Arthur Burns: Evidence from the Nixon Tapes." *Journal of Economic Perspectives* 20 (4): 177–88.
- Adler, E. Scott. N.d. "Congressional District Data File, [Ninety-Fourth and Ninety-Fifth Congresses]." University of Colorado at Boulder.
- Adler, E. Scott, and John D. Wilkerson. N.d. Congressional Bills Project (1947–2008), NSF 00880066 and 00880061.
- Ahamed, Liaquat. 2009. *Lords of Finance: The Bankers Who Broke the World*. New York: Penguin Books.
- Alesina, Alberto, and Lawrence H. Summers. 1993. "Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence." *Journal of Money, Credit and Banking* 25 (2): 151–62.
- Alt, James. 1991. "Leaning into the Wind or Ducking out of the Storm: U.S. Monetary Policy in the 1980s." In *Politics and Economics in the Eighties*, edited by Alberto Alesina and Geoffrey Carliner, 41–82. Chicago: University of Chicago Press.
- Andrews, Edmund L. 2007. "Fed Shrugged as Subprime Crisis Spread." *New York Times*, December 18. Accessed September 29, 2015, [http://www.nytimes.com/2007/12/18/business/18subprime.html?hp&\\_r=1&](http://www.nytimes.com/2007/12/18/business/18subprime.html?hp&_r=1&).
- Appelbaum, Binyamin. 2015. "In Republican Attacks on the Fed, Experts See a Shift." *New York Times*, April 7, B1. Accessed September 29, 2015, <http://www.nytimes.com/2015/04/08/business/economy/in-republican-attacks-on-the-fed-experts-see-a-shift.html>.
- Auerbach, Robert D. 2008. *Deception and Abuse at the Fed*. Austin: University of Texas Press.
- Bailey, Stephen. 1950. *Congress Makes a Law: The Story behind the Employment Act of 1946*. New York: Columbia University Press.
- Baily, Martin Neil, and John B. Taylor, eds. 2014. *Across the Great Divide: New Perspectives on the Financial Crisis*. Hoover Institution Press. Accessed September 21, 2015, <http://www.hoover.org/research/across-great-divide-new-perspectives-financial-crisis-0>.
- Ball, Laurence. 2016. "The Fed and Lehman Brothers." Paper presented at a meeting of the NBER Monetary Economics Program, July 14. Accessed February 4, 2017, <http://www.econ2.jhu.edu/People/Ball/Lehman.pdf>.

- Bank of International Settlements. 2009. *Issues in the Governance of Central Banks*. Basel, Switzerland: Bank of International Settlements. Accessed August 1, 2015, <http://www.bis.org/publ/othp04.htm>.
- Barkley, Frederick R. 1941. "For a Firm Dollar." *New York Times*, January 2, 1.
- . 1945. "'Full' Employment Out of House Bill." *New York Times*, December 5, 21.
- Belair, Felix, Jr. 1945. "Truman Battles for Full-Job Bill." *New York Times*, December 21, 4.
- . 1950a. "Congress Is Urged to Curb Treasury on Credit Control." *New York Times*, January 13, 1.
- . 1950b. "Reserve Board Set to Cut Bank Credit as Inflation Brake." *New York Times*, October 8, 1, 93.
- . 1951a. "Bond Agreement Viewed as 'Truce.'" *New York Times*, March 5, 16.
- . 1951b. "Six Senators Urge New Credit Policy." *New York Times*, March 7, 26.
- . 1951c. "Truman Puts Rein on Reserve Board." *New York Times*, February 2, 1.
- . 1951d. "Truman 'Thanks' Reserve Board for 'Assurance' on Fiscal Policy." *New York Times*, February 3, 25.
- Bensel, Richard Franklin. 1984. *Sectionalism and American Political Development, 1880–1980*. Madison: University of Wisconsin Press.
- Bernanke, Ben S. 2002. "Remarks by Governor Ben S. Bernanke." Presented at the conference to Honor Milton Friedman, University of Chicago, November 8. Accessed December 29, 2015, <http://www.federalreserve.gov/boarddocs/Speeches/2002/20021108/default.htm>.
- . 2003. "A Perspective on Inflation Targeting." Remarks at the annual Economic Policy Conference of the National Association for Business Economics, Washington, DC, March 25. Accessed November 2, 2015, <http://www.federalreserve.gov/Boarddocs/Speeches/2003/20030325/default.htm>.
- . 2007. "The Economic Outlook." Testimony before the Joint Economic Committee, US Congress, March 28. Accessed September 20, 2015, <http://www.federalreserve.gov/newsevents/testimony/bernanke20070328a.htm>.
- . 2009. "Federal Reserve Policies to Ease Credit and Their Implications for the Fed's Balance Sheet." Speech delivered at the National Press Club Luncheon, National Press Club, Washington, DC, February 18. Accessed September 8, 2015, <http://www.federalreserve.gov/newsevents/speech/bernanke20090218a.htm>.
- . 2012a. "The Federal Reserve after World War II." Chairman Bernanke's College Lecture Series: The Federal Reserve and the Financial Crisis, lecture 2, George Washington University School of Business, March 22. Accessed September 20, 2015, <http://www.federalreserve.gov/newsevents/lectures/the-Federal-Reserve-after-World-War-II.htm>.
- . 2012b. "U.S. Monetary Policy and International Implications." Address delivered at the Challenges of the Global Financial System: Risks and Governance under Evolving Globalization seminar sponsored by the Bank of Japan–International Monetary Fund, Tokyo, October 14. Accessed February 29, 2016, <http://www.federalreserve.gov/newsevents/speech/bernanke20121014a.htm>.
- . 2013a. "A Century of U.S. Central Banking: Goals, Frameworks, Accountability." Paper presented at the First 100 Years of the Federal Reserve: The Policy

- Record, Lessons Learned, and Prospects for the Future conference, sponsored by the National Bureau of Economic Research, Cambridge, MA.
- . 2013b. “Concluding Remarks.” Speech at the ceremony commemorating the centennial of the Federal Reserve Act, Federal Reserve. Accessed November 13, 2105, <http://www.federalreserve.gov/newsevents/speech/bernanke20131216b.htm>.
- . 2015. *The Courage to Act: A Memoir of a Crisis and Its Aftermath*. New York: W. W. Norton and Company.
- . 2016. “What Tools Does the Fed Have Left? Part 3: Helicopter Money.” Brookings, April 11. Accessed February 4, 2017, <https://www.brookings.edu/blog/ben-bernanke/2016/04/11/what-tools-does-the-fed-have-left-part-3-helicopter-money/>.
- Bernanke, Ben S., and Harold James. 1991. “The Gold Standard, Deflation, and Financial Crisis in the Great Depression: An International Comparison.” In *Financial Markets and Financial Crises*, edited by R. Glenn Hubbard, 33–68. Chicago: University of Chicago Press.
- Bernhard, William, J. Lawrence Broz, and William R. Clark. 2002. “The Political Economy of Monetary Institutions.” *International Organization* 56:693–723.
- Bernstein, Irving. N.d. “Chapter 5: Americans in Depression and War.” US Department of Labor. Accessed July 27, 2016, <https://www.dol.gov/general/aboutdol/history/chapter5>.
- Binder, Sarah A. 2003. *Stalemate: Causes and Consequences of Legislative Gridlock*. Washington, DC: Brookings Institution Press.
- Blinder, Alan. 2016. “What to Do about the Federal Reserve.” Equitablog. Washington Center for Equitable Growth, October 31. Accessed February 21, 2017, <http://equitablegrowth.org/monetary-policy/what-to-do-about-the-federal-reserve/>.
- Bloomberg Business. 2011a. “Secret Fed Loans Gave Banks \$13 Billion Undisclosed to Congress.” Bloomberg Business, November 21. Accessed September 26, 2015, <http://www.bloomberg.com/news/articles/2011-11-28/secret-fed-loans-undisclosed-to-congress-gave-banks-13-billion-in-income>.
- . 2011b. “Wall Street Aristocracy Got \$1.2 Trillion in Secret Loans.” Bloomberg Business, August 21. Accessed September 26, 2015, <http://www.bloomberg.com/news/articles/2011-08-21/wall-street-aristocracy-got-1-2-trillion-in-fed-s-secret-loans>.
- Blum, John Morton. 1959. *From the Morgenthau Diaries: Years of Crisis, 1928–1938*. Boston: Houghton Mifflin.
- Board of Governors of the Federal Reserve System. N.d. Industrial Production Index. Accessed August 3, 2016, <https://www.federalreserve.gov/releases/g17/About.htm>.
- . 2013a. Federal Reserve Act, Section 2. Federal Reserve Districts. Accessed December 28, 2015, <http://www.federalreserve.gov/aboutthefed/section2.htm>.
- . 2013b. Federal Reserve Act, Section 13. Powers of the Federal Reserve Banks. Accessed December 19, 2015, <http://www.federalreserve.gov/aboutthefed/section13.htm>.
- . 2015. “Press Release.” November 30. Accessed January 1, 2016, <http://www.federalreserve.gov/newsevents/press/bcreg/20151130a.htm>.



- Bordo, D. Michael, Owen F. Humpage, and Anna J. Schwartz. 2015. *Strained Relations: US Foreign-Exchange Operations and Monetary Policy in the Twentieth Century*. Chicago: University of Chicago Press.
- Bordo, D. Michael, Peter Rappoport, and Anna J. Schwartz. 1992. "Money versus Credit Rationing: Evidence for the National Banking Era, 1880–1914." In *Strategic Factors in Nineteenth Century American Economic History*, edited by Claudia Goldin and Hugh Rockoff, 189–224. Chicago: University of Chicago Press.
- Bremner, Robert. 2004. *Chairman of the Fed: William McChesney Martin Jr. and the Creation of the Modern American Financial System*. New Haven, CT: Yale University Press.
- Broz, J. Lawrence. 1997. *The International Origins of the Federal Reserve System*. Ithaca, NY: Cornell University Press.
- Burns, Arthur F. 1979. "The Anguish of Central Banking." Per Jacobsson Lecture, Belgrade, Yugoslavia, September 30. Accessed August 7, 2015, <http://www.perjacobsson.org/lectures/1979.pdf>.
- Calomiris, Charles W., and Gary Gorton. 1991. "The Origins of Banking Panics: Models, Facts, and Bank Regulation." In *Financial Markets and Financial Crises*, edited by R. Glenn Hubbard, 109–74. Chicago: University of Chicago Press.
- Calomiris, Charles W., and Stephen H. Haber. 2014. *Fragile by Design: The Political Origins of Banking Crises and Scarce Credit*. Princeton, NJ: Princeton University Press.
- Carlson, Mark A., and David C. Wheelock. 2014. "Navigating Constraints: The Evolution of Federal Reserve Monetary Policy, 1935–59." Finance and Economics Discussion Series, Divisions of Research and Statistics and Monetary Affairs, Federal Reserve Board, Washington, DC, June 9.
- Carpenter, Daniel. 2010. *Reputation and Power: Organizational Image and Pharmaceutical Regulation at the FDA*. Princeton, NJ: Princeton University Press.
- Chandler, Lester. 1958. *Benjamin Strong: Central Banker*. Washington, DC: Brookings Institution Press.
- Clark, William, and Vincent Arel-Bundock. 2013. "Independent but not Indifferent: Partisan Bias in Monetary Policy at the Fed." *Economics and Politics* 25 (1): 1–25.
- Clifford, A. Jerome. 1965. *The Independence of the Federal Reserve System*. Philadelphia: University of Pennsylvania Press.
- Congressional Budget Office. 2010. *Historical Data on Federal Debt Held by the Public*. July. Accessed January 30, 2017, <http://www.cbo.gov/publication/21728>.
- Conti-Brown, Peter. 2014. "The Institutions of Federal Reserve Independence." Rock Center for Corporate Governance, Working Paper Series No. 139, January 2.
- . 2016. *The Power and Independence of the Federal Reserve*. Princeton, NJ: Princeton University Press.
- Cowan, Edward. 1977. "The Humphrey-Hawkins Bill." *New York Times*, November 19, 14.
- Davidson, Kate. 2015. "Rep. Hensarling to Yellen: Ignoring Subpoena Is 'Inexcusable.'" *Wall Street Journal*, July 15. Accessed November 2, 2015, <http://blogs.wsj.com/economics/2015/07/15/rep-hensarling-to-yellen-ignoring-subpoena-is-inexcusable/>.

- . 2016. “Donald Trump’s Comments on the Fed, Interest Rate Policy, and Janet Yellen.” *Wall Street Journal*, November 9. Accessed November 21, 2016, <http://www.wsj.com/articles/donald-trumps-comments-on-the-fed-interest-rate-policy-and-janet-yellen-1478724767>.
- DeBelle, Guy, and Stanley Fischer. 1994. “How Independent Should a Central Bank Be?” Center for Economic Policy Research, Stanford University. Accessed November 2, 2015, [www.bostonfed.org/economic/conf/conf38/conf38f.pdf](http://www.bostonfed.org/economic/conf/conf38/conf38f.pdf).
- De Long, J. Bradford. 1996. “Keynesianism, Pennsylvania Avenue Style: Some Economic Consequences of the Employment Act of 1946.” *Journal of Economic Perspectives* 10 (3): 41–53.
- . 1997. “America’s Peacetime Inflation: The 1970s.” In *Reducing Inflation: Motivation and Strategy*, edited by Christina D. Romer and David H. Romer, 247–80. Chicago: University of Chicago Press.
- Dubner, Stephen. 2015. “Ben Bernanke Gives Himself a Grade: A New Freakonomics Radio Podcast.” *Freakonomics: The Hidden Side of Everything*, December 3. Accessed December 13, 2015, <http://freakonomics.com/2015/12/03/ben-bernanke-gives-himself-a-grade-a-new-freakonomics-radio-podcast/>.
- Dugan, Andrew. 2014. “Fed Chairman Bernanke Leaves with Mixed Verdict.” Gallup, January 29. Accessed November 16, 2015, <http://www.gallup.com/poll/167099/fed-chairman-bernanke-leaves-mixed-verdict.aspx>.
- Dun’s Review*. 1913. Various issues. New York: R. G. Dun and Co. Accessed December 29, 2015, <http://www.loc.gov/rr/business/duns/duns15.html#db15a>.
- Dykes, Sayre Ellen, and Michael A. Whitehouse. 1989. “The Establishment and Evolution of the Federal Reserve Board: 1913–23.” *Federal Reserve Board Bulletin*, April. Accessed 29, 2015, <https://fraser.stlouisfed.org/docs/meltzer/dykest89.pdf>.
- Eccles, Marriner. 1951. *Beckoning Frontiers: Public and Personal Recollections*. New York: Alfred A. Knopf.
- Eichengreen, Barry. 1992. *Golden Fetters: The Gold Standard and the Great Depression, 1919–1939*. New York: Oxford University Press.
- Eichengreen, Barry, and Jeffrey Sachs. 1985. “Exchange Rates and Economic Recovery in the 1930s.” *Journal of Economic History* 45 (4): 925–46.
- Farhang, Sean, and Ira Katznelson. 2005. “The Southern Imposition: Congress and Labor in the New Deal and Fair Deal.” *Studies in American Political Development* 19:1–30.
- Farnsworth, Clyde H. 1977. “Washington and Business: Legislation for G.A.O. Auditing of Fed.” *New York Times*, October 27, D1, D5.
- . 1980. “More Clout for the Fed.” *New York Times*, March 17, D2.
- Federal Open Market Committee. 1933–2016. *Federal Open Market Committee Meeting Minutes, Transcripts, and Other Documents*. Accessed August 3, 2016, <https://fraser.stlouisfed.org/title/?id=677#!22661>.
- Federal Open Market Committee. 2010a. “Meeting of the Federal Open Market Committee on December 14.” In *Transcripts and Other Historical Materials*. Accessed February 21, 2017, <https://www.federalreserve.gov/monetarypolicy/files/FOMC20101214meeting.pdf>.

- . 2010b. “Conference Call of the Federal Open Market Committee on May 9.” In *Transcripts and Other Historical Materials*. Accessed February 21, 2017, <https://www.federalreserve.gov/monetarypolicy/files/FOMC20100509confcall.pdf>.
- Federal Reserve Board. 1914–2014. *Annual Report of the Board of Governors of the Federal Reserve System*. Accessed December 29, 2015, <https://fraser.stlouisfed.org/title/117>.
- . 2012. “Conversation with the Chairman: A Teacher Town Hall Meeting.” Accessed September 29, 2015, <http://www.federalreserve.gov/newsevents/conferences/chairman-bernanke-teacher-town-hall.htm>.
- . 2013. Transcript of chairman Ben Bernanke’s press conference, December 18. Accessed November 15, 2015, <http://www.federalreserve.gov/monetarypolicy/fomcpresconf20131218.htm>.
- Federal Reserve Bank of Richmond. N.d. *Treasury–Federal Reserve Accord*. Historical Documents. Accessed December 30, 2015, [https://www.richmondfed.org/publications/research/special\\_reports/treasury\\_fed\\_accord/historical\\_documents/index.cfm](https://www.richmondfed.org/publications/research/special_reports/treasury_fed_accord/historical_documents/index.cfm).
- Federal Reserve Board of St. Louis. 2015a. “Bank Prime Loan Rate.” Accessed August 10, 2015, <https://fred.stlouisfed.org/series/WPRIME/>.
- . 2015b. “Effective Federal Funds Rate.” Accessed August 10, 2015, <https://research.stlouisfed.org/fred2/series/DFE/>.
- . 2016a. “Civilian Unemployment Rate.” Accessed July 19, 2015, <https://research.stlouisfed.org/fred2/series/UNRATE/>.
- . 2016b. “Consumer Price Index for All Urban Consumers: All Items.” Accessed August 4, 2016, <https://research.stlouisfed.org/fred2/series/CPIAUCNS/>.
- . 2016c. “Gross Federal Debt as Percent of Gross Domestic Product.” Accessed August 4, 2016, <https://research.stlouisfed.org/fred2/series/GFDGDP188S/>.
- . N.d. “Industrial Production Index.” Accessed August 3, 2016, <https://research.stlouisfed.org/fred2/series/INDPRO/>.
- Fernandez-Albertos, Jose. 2015. “The Politics of Central Bank Independence.” *Annual Review of Political Science* 18:217–37.
- Financial Crisis Inquiry Commission. 2011. *The Financial Crisis Inquiry Report: Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States*. Washington, DC: Government Printing Office. Accessed September 20, 2015, <http://fcic.law.stanford.edu/>.
- Fitch, Asa. 2014. “In First Post-Fed Public Appearance, Bernanke Defends Crisis Record.” *Wall Street Journal*, March 15. Accessed July 19, 2015, <http://blogs.wsj.com/middleeast/2014/03/05/in-first-post-fed-public-appearance-bernanke-defends-crisis-record/>.
- Forder, James. 2014. *Macroeconomics and the Phillips Curve Myth*. Oxford: Oxford University Press.
- FRASER. 2015. “Annual Report of the Board of Governors of the Federal Reserve System, 1914–2015.” Accessed August 3, 2016, <https://fraser.stlouisfed.org/title/117>.
- . N.d. Marriner S. Eccles Papers, University of Utah. Accessed August 3, 2016, <http://fraser.stlouisfed.org/archival/1343>.

- Friedman, Milton. 1968. "The Role of Monetary Policy." *American Economic Review* 58, no. 1 (1968): 1–17.
- Friedman, Milton, and Anna Jacobson Schwartz. 1963. *A Monetary History of the United States, 1876–1960*. Princeton, NJ: Princeton University Press.
- . 1971. *A Monetary History of the United States, 1867–1960*. Princeton, NJ: Princeton University Press.
- Friendly, Alfred. 1950. "Congress Unit Favors Broad Budget Change." *Washington Post*, January 13, 1.
- Garbade, Kenneth D. 2012. *Birth of a Market: The U.S. Treasury Securities Market from the Great War to the Great Depression*. Cambridge, MA: MIT Press.
- . 2014. "Direct Purchases by U.S. Treasury Securities by Federal Reserve Banks." Federal Reserve Bank of New York Staff Report No. 684, August.
- Goldfarb, Zachary. 2014. "Michelle Smith, Working behind the Scenes to Shape the Fed's Public Image." *Washington Post*, January 25. Accessed December 30, 2015, [http://www.washingtonpost.com/business/michelle-smith-working-behind-the-scenes-to-shape-the-feds-public-image/2014/01/24/293cedf2-82d4-11e3-9dd4-e7278db80d86\\_story.html](http://www.washingtonpost.com/business/michelle-smith-working-behind-the-scenes-to-shape-the-feds-public-image/2014/01/24/293cedf2-82d4-11e3-9dd4-e7278db80d86_story.html).
- Hackley, Howard H. 1973. *Lending Functions of the Federal Reserve Banks: A History*. Accessed December 29, 2015, [https://fraser.stlouisfed.org/scribd/?title\\_id=128&id=0&filepath=%2Fdocs%2Fpublications%2Fbooks%2Flendfunct\\_hackley1973o.pdf](https://fraser.stlouisfed.org/scribd/?title_id=128&id=0&filepath=%2Fdocs%2Fpublications%2Fbooks%2Flendfunct_hackley1973o.pdf).
- Harrison, David. 2015a. "Key House Lawmaker Sends Subpoena to Fed over 2012 Leak." *Wall Street Journal*, May 21. Accessed November 2, 2015, <http://www.wsj.com/articles/key-house-lawmaker-sends-subpoena-to-fed-over-2012-leak-1432248908>.
- . 2015b. "Senate Duo Takes Aim at Fed's Lending Powers." *Wall Street Journal*, May 13. Accessed November 2, 2015, <http://blogs.wsj.com/economics/2015/05/13/senate-duo-takes-aim-at-feds-lending-powers/>.
- Hess, Jerry N. 1969. "Oral History Interview with John W. Snyder." Harry S. Truman Library and Museum. Accessed January 31, 2017, <http://www.trumanlibrary.org/oralhist/snyder25.htm>.
- Hetzel, Robert L., and Ralph F. Leach. 2001. "The Treasury-Fed Accord: A New Narrative Account." *Economic Quarterly* 87 (Winter): 33–55.
- Hilsenrath, Jon, and Nicholas Timiraos. 2015. "U.S. Lacks Ammo for Next Economic Crisis." *Wall Street Journal*, August 17. Accessed February 2, 2017, <https://www.wsj.com/articles/u-s-lacks-ammo-for-next-economic-crisis-1439865442>.
- Hilsenrath, Jon, and Jeffrey Sparshott. 2011. "Central Banks Move to Calm Fears." *Wall Street Journal*, December 1. Accessed September 25, 2015, <http://www.wsj.com/news/articles/SB10001424052970204012004577069960192509068>.
- Hoover, Herbert. 1952. *The Memoirs of Herbert Hoover, Volume 3: The Great Depression 1929–1941*. New York: Macmillan.
- Houston, David F. 1926. *Eight Years with Wilson's Cabinet, 1913 to 1920*. Vol. 1. New York: Double Day Page.
- Hsieh, Chang-Tai, and Christina D. Romer. 2006. "Was the Federal Reserve Constrained by the Gold Standard during the Great Depression? Evidence from

- the 1932 Open Market Purchase Program.” *Journal of Economic History* 66 (1): 140–76.
- Huff, W. R. “Senate Adopts Banking Measure without Change.” *Wall Street Journal*, July 27, 1935, 1.
- Hughes, Siobhan, and Paul Page. 2015. “Lawmakers Reach Compromise on Five-Year Highway Bill.” *Wall Street Journal*, December 1. Accessed December 19, 2015, <http://www.wsj.com/articles/congress-strikes-compromise-on-5-year-highway-bill-1449001406>.
- Humphrey, Hubert H. 1977. “The Jobs Bill: An ‘Indispensable First Step.’” *Washington Post*, December 4, 85.
- Ip, Greg. 2011. “The Republicans’ New Voodoo Economics.” *Washington Post*, August 19. Accessed September 29, 2015, [https://www.washingtonpost.com/opinions/the-republicans-new-voodoo-economics/2011/08/18/gIQAxhyRQJ\\_story.html](https://www.washingtonpost.com/opinions/the-republicans-new-voodoo-economics/2011/08/18/gIQAxhyRQJ_story.html).
- Irwin, Neil. 2010. “Bernanke Confirmed by Senate for 2nd Term as Fed Chairman.” *Washington Post*, January 29. Accessed November 1, 2015, <http://www.washingtonpost.com/wp-dyn/content/article/2010/01/28/AR2010012800103.html>.
- Jackson, Andrew. 1832. “Bank Veto (July 10).” Presidential Speech Archive, Miller Center. Accessed February 7, 2017, <http://millercenter.org/president/speeches/speech-3636>.
- Jacobs, Lawrence R., and Desmond King. 2016. *Fed Power: How Finance Wins*. New York: Oxford University Press.
- James, Scott. 2000. *Parties, Presidents, and the State: A Party System Perspective on Democratic Regulatory Choice, 1884–1936*. Cambridge: Cambridge University Press.
- Jarrett, Vernon. 1978. “Push Is on to Pass Employment Bill.” *Chicago Tribune*, B3.
- Jeong, Gyung-Ho, Gary J. Miller, and Andrew C. Sobel. 2009. “Political Compromise and Bureaucratic Structure: The Political Origins of the Federal Reserve System.” *Journal of Law, Economics, and Organization* 25 (2): 472–98.
- Kaiser, Robert. 1978. “Senate Passes a ‘Sunset Bill.’” *Washington Post*, October 12, A1.
- . 2014. *Act of Congress*. New York: Vintage Publishers.
- Katznelson, Ira. 2013. *Fear Itself: The New Deal and the Origins of Our Time*. New York: Liveright.
- Katznelson, Ira, and Quinn Mulroy. 2012. “Was the South Pivotal? Situated Partisanship and Policy Coalitions during the New Deal and Fair Deal.” *Journal of Politics* 74 (2): 604–20.
- Keil, Paul. 2012. “The Great American Foreclosure Story: The Struggle for Justice and a Place to Call Home.” *ProPublica*, April 10. Accessed September 28, 2015, <http://www.propublica.org/article/the-great-american-foreclosure-story-the-struggle-for-justice-and-a-place-t/single>.
- Keoun, Bradley, and Stephen Church. 2007. “New Century, Biggest Subprime Casualty, Goes Bankrupt.” Bloomberg News, April 2. Accessed February 22, 2017, <https://www.nachi.org/forum/fl3/new-century-biggest-subprime-casualty-goes-bankrupt-15340/>.
- Kettl, Donald. 1986. *Leadership at the Fed*. New Haven, CT: Yale University Press.
- Keyes, Scott. 2011. “Perry on Bernanke: ‘I Dunno What Y’all Would Do to Him in Iowa but We Would Treat Him Pretty Ugly Down in Texas.’” ThinkProgress,

- August 15. Accessed February 8, 2014, <http://thinkprogress.org/politics/2011/08/15/296552/perry-on-bernanke-pretty-ugly-down-in-texas/>.
- Kirshner, Jonathan. 2007. *Appeasing Bankers: Financial Caution on the Road to War*. Princeton, NJ: Princeton University Press.
- Lacker, Jeffrey M., and John A. Weinberg. 2014. "The Fed's Mortgage Favoritism." *Wall Street Journal*, October 7. Accessed September 26, 2015, <http://www.wsj.com/articles/jeffrey-lacker-and-john-weinberg-the-feds-mortgage-favoritism-1412721776>.
- Laderman, Liz. 2001. "Subprime Mortgage Lending and the Capital Markets." *FRBSF Economic Letter* 2001-38 (December 28). Accessed February 4, 2017, <http://www.frbsf.org/economic-research/publications/economic-letter/2001/december/subprime-mortgage-lending-and-the-capital-markets/>.
- Janman, Scott, and Craig Torres. 2010. "Here It Comes: Consider Yourself Warned." Bloomberg News, January 7.
- Lattman, Peter. 2013. "Suit Charges 3 Credit Ratings Agencies with Fraud in Bear Stearns Case." *New York Times*, November 11. Accessed September 28, 2015, <http://dealbook.nytimes.com/2013/11/11/suit-charges-3-credit-rating-agencies-with-fraud-in-bear-stearns-case/>.
- Lebergott, Stanley. 1957. "Annual Estimates of Unemployment in the United States, 1900–1954." In *The Measurement and Behavior of Unemployment*, edited by the National Bureau of Economic Research. Accessed November 28, 2015, <http://www.nber.org/chapters/c2644>.
- Link, Arthur. 1954. *Woodrow Wilson and the Progressive Era, 1910–1917*. New York: Harper and Brothers.
- Lippmann, Walter. 1951. "Federal Reserve Issue Subjected to Pressure." *Los Angeles Times*, March 4, B5.
- Lowenstein, Roger. 2015. *America's Bank: The Epic Struggle to Create the Federal Reserve*. New York: Penguin Press.
- Lynch, G. Patrick. 2002. "Midterm Elections and Economic Fluctuations: The Response of Voters over Time." *Legislative Studies Quarterly* 27:265–294.
- Martin, William McChesney. 1964. *The Federal Reserve System after Fifty Years*. Hearings before the Subcommittee on Domestic Finance of the Committee on Banking and Currency, House of Representatives, 88th Cong., 2nd sess., January 22, 96.
- Mayhew, David R. 1974. *Congress: The Electoral Connection*. New Haven, CT: Yale University Press.
- McAvoy, Michael R. 2006. "How Were the Federal Reserve Bank Locations Selected?" *Explorations in Economic History* 43 (July): 505–26.
- McCarty, Nolan, Keith T. Poole, and Howard Rosenthal. 2013. *Political Bubbles: Financial Crises and the Failure of American Democracy*. Princeton, NJ: Princeton University Press.
- McCubbins, Mathew, and Thomas Schwartz. 1984. "Congressional Oversight Overlooked: Police Patrols versus Fire Alarms." *American Journal of Political Science* 28:16–79.
- McGrane, Victoria, and Michael Crittenden. 2010. "Senate Passes Amendment for One-Time Audit of Fed." *Wall Street Journal*, May 11. Accessed October 31, 2015, <http://>

- www.wsj.com/articles/SB10001424052748704250104575238130707230588?alg=y.
- McMahon, Tim. 2017. "Historical Inflation Rate." Accessed February 22. [http://inflationdata.com/Inflation/Inflation\\_Rate/HistoricalInflation.aspx](http://inflationdata.com/Inflation/Inflation_Rate/HistoricalInflation.aspx).
- Meade, Ellen E., and David Stasavage. 2008. "Publicity of Debate and the Incentive to Dissent: Evidence from the US Federal Reserve." *Economic Journal* 118 (April): 695–717.
- Melendez, Eleazar David. 2013. "Financial Crisis Cost Tops \$22 Trillion, GAO Says." Huffington Post, February 14. Accessed February 4, 2017, [http://www.huffingtonpost.com/2013/02/14/financial-crisis-cost-gao\\_n\\_2687553.html](http://www.huffingtonpost.com/2013/02/14/financial-crisis-cost-gao_n_2687553.html).
- Meltzer, Allan H. 2000. "Lessons from the Early History of the Federal Reserve." Presidential address to the International Atlantic Economic Society, March 17, Munich. Accessed December 29, 2015, <http://www2.tepper.cmu.edu/afs/andrew/gsia/meltzer/Munich.PDF>.
- . 2003. *History of the Federal Reserve*. Vol. 1. Chicago: University of Chicago Press.
- . 2005. "Origins of the Great Inflation." *Federal Reserve Bank of St. Louis Review*, no. 2 (March–April): 145–75.
- . 2009. *History of the Federal Reserve*. Vol. 2. Chicago: University of Chicago Press.
- Menza, Justin. 2012. "With Congress in Gridlock, 'Fed's the Only Game in Town.'" CNBC, July 12. Accessed February 8, 2014, <http://www.cnbc.com/id/48210558>.
- Moe, Terry M. 1995. "The Politics of Structural Choice: Toward a Theory of Public Bureaucracy." In *Organization Theory: From Chester Barnard to the Present and Beyond*, edited by Oliver E. Williamson, 116–53. New York: Oxford University Press.
- Moley, Raymond. 1939. *After Seven Years*. New York: Harper and Brothers Publishers.
- Morgenthau, Henry Jr. 1938. *Diaries of Henry Morgenthau, Jr., April 27, 1933–July 27, 1945*. Vol. 111 (February 16–22). Accessed March 11, 2015, <http://www.fdrlibrary.marist.edu/archives/collections/franklin/index.php?p=collections/findingaid&id=535>.
- Morris, J. Irwin. 2000. *Congress, the President, and the Federal Reserve: The Politics of American Monetary Policymaking*. Ann Arbor: University of Michigan Press.
- Murphy, Henry C. 1950. *The National Debt in War and Transition*. New York: McGraw-Hill Book Company.
- National Bureau of Economic Research. 2010. *Report of the Business Cycle Dating Committee*. September 20. Accessed November 17, 2015, <http://www.nber.org/cycles/sept2010.html>.
- Nelson, Clarence W. 1973. "Defining the Districts: Where to Draw the Lines." Excerpt from *Reflections from History: The Minneapolis Federal Reserve Bank*. Federal Reserve Bank of Minneapolis. Accessed December 25, 2015, <https://www.minneapolisfed.org/about/more-about-the-fed/history-of-the-fed/defining-the-districts>.
- Odell, Kerry A., and David F. Weiman. 1998. "Metropolitan Development, Regional Financial Centers, and the Founding of the Fed in the Lower South." *Journal of Economic History* 58 (March): 103–25.



- Office of the Comptroller of the Currency. 1914. *Annual Report of the Comptroller of the Currency to the Second Session of the Sixty-Third Congress of the United States*. Washington, DC: Government Printing Office.
- Orphanides, Athanasios, and John C. Williams. 2002. "Robust Monetary Policy Rules with Unknown Natural Rates." *Brookings Papers on Economic Activity* 2:63–118.
- Pierson, Paul. 2004. *Politics in Time: History, Institutions, and Social Analysis*. Princeton, NJ: Princeton University Press.
- Pine, Art. 1977. "Was Humphrey-Hawkins Bill Worth it?" *Washington Post*, November 24, D1.
- Proquest. N.d. "CIS Congressional Bills, Resolutions, and Laws on Microfiche (1933–2008)." Accessed February 25, 2017, [http://cisupa.proquest.com/ws\\_display.asp?filter=cis\\_leaf&item\\_id=%7BID481C6F-CA7A-4929-B4B0-BC90D20FAC71%7D](http://cisupa.proquest.com/ws_display.asp?filter=cis_leaf&item_id=%7BID481C6F-CA7A-4929-B4B0-BC90D20FAC71%7D).
- Reinhart, Carmen M., and Kenneth S. Rogoff. 2013. "Shifting Mandates: The Federal Reserve's First Centennial." *American Economic Review: Papers and Proceedings* 103 (3): 48–54.
- Reserve Bank Organization Committee (RBOC). 1914a. *First-Choice Vote for Reserve-Bank Cities*. July 29. Accessed January 4, 2017, [https://fraser.stlouisfed.org/scribd/?title\\_id=604&filepath=/files/docs/historical/federal\\_reserve\\_history/hr1914\\_firstchoicevote.pdf](https://fraser.stlouisfed.org/scribd/?title_id=604&filepath=/files/docs/historical/federal_reserve_history/hr1914_firstchoicevote.pdf).
- . 1914b. "Location of Reserve Districts in the United States: Letter from the Reserve Bank Organization Committee Transmitting the Briefs and Arguments to the Organization Committee of the Federal Reserve Board Relative to the Location of the Federal Reserve Districts." Accessed December 28, 2015, <http://fraser.stlouisfed.org/publication/?pid=606>.
- . 1914c. "Stenographer's Minutes: Federal Reserve District Divisions and Location of Federal Reserve Banks and Head Offices." January 23, Kansas City, MO. Accessed December 28, 2015, [https://fraser.stlouisfed.org/docs/historical/federal%20reserve%20history/rboc/rbochearings\\_19140123\\_kansascity.pdf](https://fraser.stlouisfed.org/docs/historical/federal%20reserve%20history/rboc/rbochearings_19140123_kansascity.pdf).
- . 1914d. *Report to the Reserve Bank Organization Committee by the Preliminary Committee on Organization*. June 1. Accessed December 28, 2015, [https://fraser.stlouisfed.org/scribd/?title\\_id=609&filepath=/docs/historical/federal%20reserve%20history/Reserve%20Bank%20Organization.pdf](https://fraser.stlouisfed.org/scribd/?title_id=609&filepath=/docs/historical/federal%20reserve%20history/Reserve%20Bank%20Organization.pdf).
- . 1914e. *Decision of the Reserve Bank Organization Committee Determining the Federal Reserve Districts and the Location of Federal Reserve Banks under Federal Reserve Act Approved December 23, 1913. With Statement of the Committee in Relation Thereto*. Washington, DC: Government Printing Office, April 10. Accessed December 29, 2015, <http://www.federalreservehistory.org/Media/Material/Event/16-125>.
- Richardson, Gary, Alejandro Komai, and Michael Gou. 2013. "The Gold Reserve Act." Accessed December 29, 2015, <http://www.federalreservehistory.org/Events/DetailView/13>.
- Ricketts, Lowell R., and Christopher J. Waller. 2014. "The Rise and the (Eventual) Fall in the Fed's Balance Sheet." *Regional Economist*, January. Accessed September 29, 2015, <https://www.stlouisfed.org/publications/regional-economist/january-2014/the-rise-and-eventual-fall-in-the-feds-balance-sheet>.



- Ritchie, Donald A., ed. 1999. *Minutes of the Senate Democratic Caucus: 1903–1964*. Washington, DC: Government Printing Office.
- Ritter, Gretchen. 1997. *Goldbugs and Greenbacks: The Antimonopoly Tradition and the Politics of Finance in America*. New York: Cambridge University Press.
- Ritter, Lawrence S. 1980. *Selected Papers of Allan Sproul*. New York: Federal Reserve Bank of New York.
- Romer, Christina D. 2005. “Commentary: Origins of the Great Inflation,” *Federal Reserve of St. Louis Review* 87, no. 2 (March–April): 177–85.
- Romer, Christina D., and David H. Romer. 2002. “The Evolution of Economic Understanding and Postwar Stabilization Policy.” In *Rethinking Stabilization Policy*. A symposium sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, August 29–31. Accessed August 4, 2015, <https://www.kansascityfed.org/publications/research/escp/symposiums/escp-2002>.
- . 2004. “Choosing the Federal Reserve Chair: Lessons from History.” *Journal of Economic Perspectives* 18, no. 1 (Winter): 129–62.
- Rose, Sanford. 1974. “The Agony of the Federal Reserve,” *Fortune*, 186–88.
- Russell, Mary. 1978. “Weaker Version of Jobs Measure Passed by House.” *Washington Post*, March 17, A1.
- Samuelson, Robert J. 2008. *The Great Inflation and its Aftermath: The Past and Future of American Affluence*. New York: Random House.
- Sanders, Elizabeth. 1999. *Roots of Reform: Farmers, Workers, and the American State, 1877–1917*. Chicago: University of Chicago Press.
- Santoni, G. J. 1986. “The Employment Act of 1946: Some History Notes.” Federal Reserve Bank of St. Louis, November.
- Schantz, Harvey L., and Richard H. Schmidt. 1979. “The Evolution of Humphrey-Hawkins.” *Policy Studies Journal* 8, no. 3 (Winter): 368–77.
- Schiller, Wendy J. 1995. “Senators as Political Entrepreneurs: Using Bill Sponsorship to Shape Legislative Agendas.” *American Journal of Political Science* 39 (1): 186–203.
- Schroeder, Peter. 2015. “Warren, Vitter Team Up on Fed Bills.” *Hill*, May 15. Accessed October 31, 2015, <http://thehill.com/policy/finance/241894-warren-vitter-team-up-on-fed-bills>.
- Shabecoff, Philip. 1978. “Humphrey-Hawkins Bill Backers Win a Key Test in House Voting.” *New York Times*, March 10, D13.
- Shiller, Robert J. 1989. *Market Volatility*. Cambridge, MA: MIT Press.
- Shultz, George. 2002. “The Reagan Administration’s Fight against Inflation.” Interview, PBS: Commanding Heights. Accessed February 21, 2017, [http://www.pbs.org/wgbh/commandingheights/shared/minitext/int\\_georgeshultz.html#6](http://www.pbs.org/wgbh/commandingheights/shared/minitext/int_georgeshultz.html#6).
- Silber, William. 2012. *Volcker: The Triumph of Persistence*. London: Bloomsbury Press.
- Sparrow, Bartholomew. 1996. *From the Outside In: World War II and the American State*. Princeton, NJ: Princeton University Press.
- Sproul, Allan. 1951. “Meeting Notes.” February 26. Accessed December 30, 2015, [https://www.richmondfed.org/publications/research/special\\_reports/treasury\\_fed\\_accord/historical\\_documents/](https://www.richmondfed.org/publications/research/special_reports/treasury_fed_accord/historical_documents/).

- Staiger, Douglas, James H. Stock, and Mark W. Watson. 1997. "How Precise Are Estimates of the Natural Rate of Unemployment?" In *Reducing Inflation: Motivation and Strategy*, edited by Christina D. Romer and David H. Romer, 195–246. Chicago: University of Chicago Press.
- Stein, Herbert. 1996. *Fiscal Revolution in America*. Rev. 2nd ed. Washington, DC: American Enterprise Institute Press.
- Stiglitz, Joseph. 1998. "Central Banking in a Democratic Society," *Economist* 146 (2): 199–226.
- Streek, Wolfgang, and Kathleen Thelen. 2005. "Introduction: Institutional Change in Advanced Political Economies." In *Beyond Continuity: Institutional Change in Advanced Political Economies*, edited by Wolfgang and Kathleen Thelen, 1–39. Oxford: Oxford University Press.
- Sulkin, Tracy. 2005. *Issue Politics in Congress*. New York: Cambridge University Press.
- . 2011. *The Legislative Legacy of Congressional Campaigns*. New York: Cambridge University Press.
- Taylor, John B. 2009. "Commentary: How Government Created the Financial Crisis." *Wall Street Journal*, February 9. Accessed September 22, 2015, <http://www.wsj.com/articles/SB123414310280561945>.
- Timberlake, Richard. 1993. *Monetary Policy in the United States: An Intellectual and Institutional History*. Chicago: University of Chicago Press.
- Torres, Craig. 2016. "How the Fed's Cold War with Congress Could Harm the U.S. Economy." Bloomberg Business, February 26. Accessed February 21, 2017, <https://www.bloomberg.com/news/articles/2016-02-26/how-the-fed-s-cold-war-with-congress-could-harm-the-u-s-economy>.
- Torres, Craig, and Simon Kennedy. 2015. "Central Banks Fight to Ensure That Crisis Tools Become the Norm." Bloomberg Business, November 19. Accessed December 19, 2015, <http://www.bloomberg.com/news/articles/2015-11-19/central-banks-fight-to-ensure-crisis-toolkits-become-the-norm>.
- Tower, Samuel. 1946. "Compromise Bill on Jobs Is Evolved." *New York Times*, February 3, 32.
- Truman, Harry S. 1945. "Special Message to the Congress Presenting a 21-Point Program for the Reconversion Period." September 6. Accessed December 30, 2015, <http://www.presidency.ucsb.edu/ws/?pid=12359>.
- . 1951. "Memorandum Requesting a Study of the Problems of Debt Management and Credit Controls." Public Papers of the Presidents, Harry S. Truman, 1945–1933. Accessed December 30, 2015, <http://trumanlibrary.org/publicpapers/index.php?pid=252&st=&st1=>.
- Trussell, C. P. 1946. "Senate Approves Employment Bill." *New York Times*, February 4, 4.
- Tucker, Paul. 2009. "The Repertoire of Official Sector Interventions in the Financial System: Last Resort Lending, Market-Making, and Capital." Remarks at the Bank of Japan 2009 International Conference on the Financial System and Monetary Policy Implementation, Bank of Japan, Tokyo, May 27–28, 3. Accessed February 4, 2017, <http://www.bis.org/review/r090608c.pdf>.

- . 2015. “How Can Central Banks Deliver Credible Commitment and Be ‘Emergency Institutions’?” Paper presented at Central Bank Governance and Oversight Reform: A Policy Conference, Hoover Institution, Stanford University, May 21. Accessed November 7, 2015, [http://www.hoover.org/sites/default/files/tucker\\_conference\\_paper\\_0.pdf](http://www.hoover.org/sites/default/files/tucker_conference_paper_0.pdf).
- US Bureau of Economic Analysis. N.d. “National Economic Accounts.” Accessed February 28, 2016, <https://www.bea.gov/national>.
- US Bureau of Labor Statistics. 2016. “Labor Force Statistics from the Current Population Survey.” Accessed August 4, 2016, <http://www.bls.gov/cps/cpsaat01.htm>.
- . N.d. “Consumer Price Index.” Accessed August 3, 2016, <http://www.bls.gov/cpi/>.
- US Congress. 1942a. *Congressional Record*, 77th Cong., 2nd sess. Various editions.
- . 1942b. *Executive Session Hearings on the Second War Powers Act*. House of Representatives, Committee on the Judiciary. Washington, DC: Government Printing Office.
- . 1951. Joint Committee on the Economic Report. Hearings, 82nd Cong., 1st sess., pursuant to Sec. 5 (a) of Public Law 304 (79th Congress), January 22, 24, 25, 26, 29, and 31, and February 2.
- US Department of Commerce. 1942. “Table No. 282—National Banks—Summary, by States, December 31, 1940.” Accessed August 4, 2016, [https://www.census.gov/library/publications/time-series/statistical\\_abstracts.html](https://www.census.gov/library/publications/time-series/statistical_abstracts.html).
- US House Committee on Banking and Currency. 1971. *Federal Reserve Structure and the Development of Monetary Policy, 1915–1935*. Staff report of the Subcommittee on Domestic Finance, 92nd Cong., 1st sess. Washington, DC: Government Printing Office.
- US Treasury. N.d. “Legislative Basis.” Accessed August 3, 2016, <http://www.treasury.gov/resource-center/international/ESF/Pages/basis.aspx>.
- Volden, Craig, Alan Wiseman, and Dana E. Wittmer. 2013. “When Are Women More Effective Lawmakers Than Men?” *American Journal of Political Science* 57 (2): 326–41.
- Wallach, Philip. 2015. *To The Edge: Legality, Legitimacy, and the Responses to the 2008 Financial Crisis*. Washington, DC: Brookings Institution Press.
- Warburg, Paul M. 1930. *The Federal Reserve System: Its Origin and Growth*. Vol. 1. New York: Macmillan.
- Ware, Alan. 2006. *The Democratic Party Heads North, 1877–1962*. New York: Cambridge University Press.
- Weise, Charles L. 2012. “Political Pressures on Monetary Policy during the US Great Inflation.” *American Economic Journal: Macroeconomics* 4, no. 2 (April): 33–64.
- Wells, Wyatt C. 1994. *Economist in an Uncertain World*. New York: Columbia University Press.
- Wessel, David. 1993. “Federal Reserve to Release Transcripts of Past Sessions After Five-Year Delay.” *Wall Street Journal*, November 18.
- Wheelock, David C. 1991. *The Strategy and Consistency of Federal Reserve Monetary Policy, 1924–1933*. New York: Cambridge University Press.

- Wicker, Elmus. 1971. "Roosevelt's 1933 Monetary Experiment." *Journal of American History* 57 (4): 864–79.
- . 2000. *Banking Panics of the Gilded Age*. New York: Cambridge University Press.
- Willis, Henry Parker. 1923. *The Federal Reserve System*. New York: Ronald Press Co.
- Wilson, Woodrow. 1913. Inaugural Address, March 4. American Presidency Project. Accessed December 1, 2015, <http://www.presidency.ucsb.edu/ws/index.php?pid=25831>.
- Woolley, John. 1984. *Monetary Politics: The Federal Reserve and the Politics of Monetary Policy*. New York: Cambridge University Press.
- Woolley, John, and Gerhardt Peters. N.d. "Political Party Platforms of Parties Receiving Electoral Votes: 1840–2012." American Presidency Project. University of California at Santa Barbara. Accessed December 25, 2015, <http://www.presidency.ucsb.edu/platforms.php>.
- Yellen, Janet. 2016. "The Federal Reserve's Monetary Policy Toolkit: Past, Present, and Future." Speech at the Designing Resilient Monetary Policy Frameworks for the Future symposium sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, August 26. Accessed February 4, 2017, <https://www.federalreserve.gov/newsevents/speech/yellen20160826a.htm>.
- Zumbrum, Josh. 2015. "The Mystery of Missing Inflation Weighs on Fed Rate Move." *Wall Street Journal*, December 13. Accessed December 13, 2015, <http://www.wsj.com/articles/the-mystery-of-missing-inflation-weighs-on-fed-rate-move-1450056838>.