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# The political lessons of Depression-era banking reform

Charles W. Calomiris\*

**Abstract** The banking legislation of the 1930s took very little time to pass, was unusually comprehensive, and unusually responsive to public opinion. Ironically, the primary motivations for the main bank regulatory reforms in the 1930s (Regulation Q, the separation of investment banking from commercial banking, and the creation of federal deposit insurance) were to preserve and enhance two of the most disastrous policies that contributed to the severity and depth of the Great Depression—unit banking and the real bills doctrine. Other regulatory changes, affecting the allocation of power between the Federal Reserve System (Fed) and the Treasury, were intended to reduce the independence of the Fed, while giving the opposite impression. Banking reforms in the 1930s had significant negative consequences for the future of US banking, and took a long time to disappear. The overarching lesson is that the aftermath of crises are moments of high risk in public policy.

**Key words:** bank regulation, unit banking, real bills doctrine, branch banking, deposit insurance, Glass–Steagall, Regulation Q

**JEL classification:** N22, G20, G21, G28

## I. Introduction

In the wake of the financial crisis of 2007–9, the United States and many other countries considered new legislation and regulation purportedly to respond to flaws in the financial system that were exposed by the crisis. Critics, however, have argued that the far-reaching legislative proposals drafted in the US Congress have failed to respond to the origins of the crisis, and instead have served other political purposes. For example, the more than 2,300 page legislation failed to address a major contributor to the housing finance boom-and-bust cycle at the heart of the crisis, namely the politically motivated government subsidization of

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mortgage risk in the financial system (Calomiris, 2008, 2009*b,c*; Wallison and Calomiris, 2009). In fact, despite the financial collapse of the government-sponsored enterprises, Fannie Mae and Freddie Mac (now owned and controlled explicitly by the government), their importance has grown. Furthermore, virtually nothing was done to reform the regulatory authority of the rating agencies, whose opinions had been at the heart of the capital standards arbitrage that allowed banks to back subprime mortgages with so little equity capital.

In this article, I argue that comprehensive regulatory reform passed in haste in the wake of a banking crisis is likely not to respond well to the problems that gave rise to the crisis. To illustrate why this is so I consider the previous US attempt at comprehensive, post-crisis banking reforms in the 1930s. As in the reaction to the current crisis, the banking reforms of the 1930s not only failed to address the key structural problems that had caused the crisis, they actually reinforced those structural weaknesses. The central lesson of the 1930s reforms was that comprehensive, hasty, post-crisis reform initiatives maximize the potential for logrolling, which facilitates the enactment of ill-conceived ideas and special interest measures that otherwise would not have passed.

The economic contraction of the Great Depression in the United States (1929–33) was accompanied by a visible collapse of many US banks. According to the Federal Reserve Board (1943), the number of banks fell 39 per cent from 24,633 in December 1929 to 15,015 in December 1933. The 9,096 banks that failed during the years 1930–33 tended to be small banks. Failed banks, as defined by the Federal Reserve (1943), represented 37 per cent of the banks in existence at the end of 1929, but the deposits of those failed banks (at their dates of failure) were only 14 per cent of the average level of bank deposits over the years 1930–33, and losses borne by depositors in failed banks were roughly \$1.3 billion, representing 2.7 per cent of the average amount of deposits in the banking system for the years 1930–33, and 2 per cent of average annual GNP for 1930–33.<sup>1</sup>

Although by current standards (summarized by Caprio and Klingebiel (1996) and reported in Beim and Calomiris (2001, ch. 7) and in Calomiris (2009*a*)) the Great Depression was not a very large bank insolvency crisis, it was more severe than the crises of most other countries (Grossman, 1994) and it was large by historical standards, even for the failure-prone US banking system. During the period 1873–1913, no year had seen losses to depositors in excess of 0.1 per cent of GNP. While the 1920s were a turbulent decade for agricultural states, many of which experienced comparable stress to that of the 1930s, the country as a whole did not see a national bank failure rate or depositor loss rate similar to that of the 1930s. The 5,712 banks that failed during the years 1921–9 had total deposits equal to \$1.6 billion at the time of their failure, constituting 3.1 per cent of average total deposits in the banking system from 1921 to 1929. Losses to depositors for the period 1921–9 amounted to \$565m, which was 1 per cent of average deposits during the period 1921–9 and 0.6 per cent of average annual GNP.<sup>2</sup> Banks' abilities to avoid insolvency, including during the relatively severe episode of the Great Depression, reflected the intense and visible market discipline in the deposit market, which gave banks strong incentives to shore up their positions to avoid deposit outflows in response to loan losses. They did so by cutting lending, increasing reserves and Treasury

<sup>1</sup> Deposits and failures are from the Federal Reserve Board's data in *Banking and Monetary Statistics: 1914–1941* (1943), using suspensions as the measures of failures. Nominal GNP is from the Census Bureau's *Historical Statistics of the United States* (US Bureau of the Census, 1970).

<sup>2</sup> Ibid.

securities holdings, and cutting dividends (Calomiris and Mason, 1997, 2003a; Calomiris and Wilson, 2004).

This essay explores the principal regulatory changes in banking after the economic and financial collapse of 1930–3.<sup>3</sup> Presumably, any evaluation of the bank regulatory policy reaction to the Depression must first come to grips with the causes of the collapse of so many banks, in order to evaluate whether the policy responses addressed pre-existing weaknesses in the system. What did the Great Depression reveal about inherent flaws in the US banking system's structure and regulation? From the perspective of current scholarship, the two most obvious flaws in the structure of banking and in the operation of the central bank, which scholars have shown were particularly important in contributing to the severity of the Great Depression, were the US unit banking system (perpetuated by regulations that generally prohibited bank branching) and the central bank's adherence to the 'real bills doctrine'.

It should seem puzzling and ironic, therefore, that the three most important regulatory policy responses to the Great Depression—Regulation Q limits on bank interest payments, the exclusion of underwriting from depository banks, and the creation of federal deposit insurance—were consciously designed either to perpetuate unit banking (which was the conscious goal of the advocates of federal deposit insurance) or to facilitate continuing adherence to the real bills doctrine (the goal of Regulation Q and the separation of investment banking from commercial banking). In other words, the major bank regulatory 'reforms' of the 1930s consciously preserved and supported the two aspects of the pre-existing banking and central banking system that had done the most harm to the banking system and the economy in the 1930s.

How and why this happened is a fascinating tale that mixes misguided ideology and political intrigue, and one with important implications for understanding the risks that generally attend policy responses to financial crises, including the policy responses to the recent crisis that are being contemplated today. Before reviewing the regulatory reforms of the 1930s, it is useful to take a brief detour to understand the regulatory setting that existed prior to the Great Depression, and briefly review two peculiar aspects of the US financial system, namely its unit banking structure, and the dominant 'real bills' theory that guided its central banking.

## II. The harmful persistence of unit banking

Despite some disagreement in the literature over the extent to which unwarranted panics or fundamental weaknesses precipitated bank failures in the 1930s, there is widespread agreement that the fragmented structure of the 'unit banking' system in the US was at the core of the systemic fragility of the system, for several reasons.<sup>4</sup> Unit banking made banks less diversified, and thus more exposed to location-specific shocks (such as agricultural price declines), as discussed by White (1983, 1984a) and Calomiris (1990, 1992, 2000). Unit banking made it harder for banks to coordinate their behaviour in the face of shocks at

<sup>3</sup> It is beyond the scope of this essay to explore all the financial reforms of the 1930s. In particular, this essay does not consider the motivations or consequences of securities markets regulations affecting the behaviour of dealers, exchanges, and mutual funds, including the creation of the Securities and Exchange Commission.

<sup>4</sup> Comparisons of bank fragility across places and time clearly show that the US's unit banking structure resulted in greater propensities for bank failures. The Great Depression was just the latest in a long stream of evidence on that point (see Calomiris, 2000, Introduction and chs 1–2).

**Table 1:** Bank consolidation and branching, 1900–31

Year	Chapman Series Banks absorbed in mergers	White Series Banks absorbed in mergers	Fed Series Branch banks	Branches
1910	128		292	548
1911	119			
1912	128			
1913	118			
1914	143			
1915	154		397	785
1916	134			
1917	123			
1918	125			
1919	178	172		
1920	183	184	530	1,281
1921	292	250	547	1,455
1922	340	311	610	1,801
1923	325	299	671	2,054
1924	352	341	706	2,297
1925	356	280	720	2,525
1926	429	348	744	2,703
1927	544	477	740	2,914
1928	507	455	775	3,138
1929	575	529	764	3,353
1930	698	627	751	3,522
1931	719	635	723	3,467

Source: Calomiris (2000, p. 57).

the regional or national level, thus making it more difficult to defuse liquidity crises (Calomiris and Gorton, 1991; Calomiris and Schweikart, 1991; Calomiris, 1989, 1990, 1992, 2000). Unit banking also made banks less competitive and less cost efficient, which made them less profitable, as well.

None of this was news in the 1930s. US banks had demonstrated peculiar fragility relative to other banks in the world for many decades, both from the perspective of their greater propensity for failure, and the greater propensity of the system to suffer banking panics. The notion that unit banking was at the heart of the propensity for failure was recognized as common knowledge by the 1920s, when waves of bank failures swept through most agricultural producing areas of the country (Calomiris, 1992, 2000).

Indeed, many states had relaxed branching restrictions within their states in reaction to the banking distress of the 1920s. Fifteen states changed their regulations between 1920 and 1939 to allow expanded branching. The branching and consolidation movement was accelerating heading into the Great Depression, as shown in Table 1. Federal government adoption of deposit insurance and other policies, however, put an end to that trend for roughly 50 years (only four states relaxed their branching laws between 1939 and 1979). Eventually, the 1920s consolidation movement would be repeated and extended in the 1980s and 1990s. From 1979 to 1990, 15 states relaxed their branching restrictions. Bank distress related to the savings and loan (S&L) collapse in the late 1980s, agricultural bank failures in the early 1980s in the centre of the country, oil and gas-related failures in Oklahoma and Texas, and commercial real estate losses in the late 1980s, all prompted the relaxation and elimination of branching restrictions at the state level. Banks operating national branching networks, as defined by Correa (2008), rose from 10 per cent of the banking system's loans or deposits in around 1980 to more than

70 per cent of the system by the mid-1990s. Branching deregulation continued to gather force in the early 1990s, and ultimately at the national level, through the 1994 legislation permitting nationwide branching.

On *prima facie* grounds, given the bank failure experience of the 1930s, the decision not to permit branching and consolidation appears strange. Research has shown that the bank failures of the 1930s, like those of the 1920s, resulted from the inability of small, unit banks to withstand the severe fundamental shocks of the Depression (White, 1984a; Calomiris, 1990, 1992; Calomiris and Mason, 1997, 2003a). Moreover, even the banks that survived the Depression did so by contracting their lending supply dramatically to shore up their positions, which contributed greatly to the severity of the Depression, and the slow recovery from it during the 1930s (Fisher, 1933; Bernanke, 1983; Calomiris and Wilson, 2004; Calomiris and Mason, 2003b). Unit banking was a key influence on both the high US propensity for bank failure, and the propensity to suffer severe credit crunches; *ceteris paribus*, smaller banks were not only more likely to fail, but also tended to contract credit supply more dramatically (Calomiris, 1990, 1992, 2000; Calomiris and Mason 2003a, b).

The decision to preserve unit banking in the 1930s, in spite of the evidence that it promoted bank fragility and credit crunches, echoed a similar decision made two decades earlier, at the time of the founding of the Federal Reserve System in 1913. Since the extinction of the prior US central bank, which was the Second Bank of the United States (the re-chartering of which was vetoed by Andrew Jackson in 1832), the US operated without a central bank until the creation of the Federal Reserve System in 1913.

The Fed's founding was a grand political compromise. After the Panic of 1907, the National Monetary Commission (NMC) was established to recommend reforms to the American financial system in reaction to the peculiar US propensity for banking panics. The NMC published voluminous studies of other countries' banking systems, drawing attention in particular to the destabilizing role of America's unit banking system, in contrast to those of other countries. In particular, much attention was given to Canada's nationwide branching system, which avoided banking panics despite the absence of a central bank (the Bank of Canada was founded in 1935).

The unit structure of the banking system in the US was understood to be responsible for many problems that contributed to the peculiar instability of US banking. First, the barriers to entry implied by unit banking prevented productive competition among banks. Unit banks could only face competition from other unit banks, all of which faced high overhead costs that limited entry, especially in rural areas; low-overhead branching by banks headquartered elsewhere was prohibited. Barriers to competition allowed less profitable (more vulnerable) banks to survive during normal times, making bank failures more frequent during adverse times. The 1994 national legislation permitting nationwide branching in the US was associated with significant efficiency improvement resulting from the ability of successful branching banks to increase their share of the retail banking network (Lee, 2010). Carlson and Mitchener (2009) show that branching deregulation in California in the 1920s and 1930s substantially improved the efficiency of its banking system, even for surviving unit banks, which improved their performance as the result of intensified competition from branching banks.

Second, unit banking produced lack of diversification of loan risk within banks, as each bank's portfolio risk reflected the operations of its local economy. In agricultural areas, that meant that the income of banks was closely related to changes in the prices and harvests of one or two crops.

Third, unit banking inhibited financial integration across regions, which resulted in large differences in interest rates between the East and the West, and high seasonal volatility in liquidity risk. Seasonal swings in credit and liquidity risk in the banking system—visible in seasonal cycles in loan-to-reserve ratios, deposit-to-capital ratios, interest rates, and stock returns volatility (all of which peaked in the autumn and spring)—reflected primarily the harvesting cycle of the cotton crop (and, to a lesser extent, other crops). Crop planting and harvesting drove large seasonal swings in the demand for credit in agricultural areas in the autumn and the spring, which required seasonal transfers of funds, back and forth, twice a year, between New York and the periphery. In a branching system (e.g. Canada's, or the branching system of the antebellum South, or even the hybrid system of unit banks and the Second Bank of the United States from 1816 to 1832), branching banks internalized regional differences in credit demand within themselves and smoothed seasonal fluctuations in loan-to-reserve ratios, deposit-to-capital ratios, interest rates and returns volatility. Branching systems thus limited the swings in credit and liquidity risk over the seasonal cycle, making banks less vulnerable to shocks. (For a review of recent studies, see Calomiris (2000, 2009a)).

Fourth, the lack of financial integration through branching encouraged peripheral banks to store their reserves in cities during low-demand seasons in the form of inter-bank balances. This 'pyramiding' of reserves in New York encouraged the use of inter-bank balances to fund securities market transactions (e.g. loans to brokers and dealers), which increased the vulnerability of the banking system to shocks originating in securities markets. For example, in the Panic of 1857, shocks to Western railroads' fortunes (related to political concerns over the future battle over the expansion of slavery into the West) created a run on New York banks, which led them to suspend convertibility, which in turn, caused their correspondent banks in the periphery to suspend convertibility (Calomiris and Schweikart, 1991).

Fifth, when financial shocks occurred, it was virtually impossible for thousands of unit banks to coordinate their responses to those shocks via helpful collective action. Banks that belonged to clearing houses in major cities could coordinate to some extent within their cities—sometimes pooling their risks and resources to make markets in each other's liabilities to reduce liquidity risk by easing depositors' concerns about potential insolvency of any particular bank (see Gorton, 1985). In Indiana and Ohio during the antebellum period, self-regulating coalitions even operated effectively at the state level (Calomiris, 1989, 1990). But national shocks could not be stabilized by local action, and national action by a grand coalition of the nation's banks was not feasible. Cooperation within the banking system required mutual regulation and monitoring to prevent free riding. The physical ability to monitor was possible when banks were coincident (within a city, or within a country such as Canada, where a few banks operated branches alongside one another throughout the country). But tens of thousands of banks operating one-office banks throughout the US could not effectively establish credibly enforced rules to govern their behaviour. Thus, when adverse shocks hit the US banking system, it was not possible for banks to act collectively to mutual advantage (in contrast to the actions of the Canadian banks in the late nineteenth and early twentieth centuries, or the French banks during the Paris Bourse crisis of 1882, or the London clearing banks during the Barings failure in 1890).

Although there was not a consensus on precisely what weights to attach to each of these five aspects of unit banking for explaining the peculiar history of US banking instability and high failure propensity, all five problems pointed to unit banking as the ultimate source of banking instability. The obvious simple solution—to permit nationwide branch banking—was, however, a political non-starter.

**Table 2:** Rural wealth and branching restrictions

	States allowing some branching (1910)	States not allowing further branching (1910)
Rural <i>per capita</i> wealth (1900)		
Mean, all states	0.8	1.5
Median, all states	0.5	1.4
Mean, excluding south	1.4	1.7
Median, excluding south	1.2	1.8

Source: Calomiris (2000, p. 65.).

As White (1984*b*), Calomiris (2000), and Calomiris and Ramirez (2010) show, political support for unit banking was not confined to unit bankers. The preservation of unit banking was one of the key campaign issues advocated by William Jennings Bryan (the candidate for both the Populist Party and the Democratic Party in the 1896 election, who was also an early advocate of federal deposit insurance). Why would the populist movement—a movement identified so strongly with agricultural interests—advocate unit banking, a banking regulation that resulted in fragile agricultural banks and expensive loans in rural areas? Why would a candidate who was so clearly interested in promoting the interests of agricultural debtors (the parties who would have most clearly benefited from Bryan's advocacy of currency devaluation via 'free silver' in 1896) also be advocating unit banking rules that raised the costs of credit to farmers?

Bryan's candidacy was not an isolated example. White (1984*b*) studies the 1923 Illinois referendum on relaxing branching restrictions, which resulted in the preservation of unit banking. Obviously, there were not enough Illinois voters who profited in any obvious way from preserving unit banking. Why, then, did the voters of Illinois want to preserve unit banking?

Calomiris (2000) and Calomiris and Ramirez (2010) show that the support for unit banking was strong in rural areas that had significant agricultural wealth in land, which were areas in which local farmers borrowed from unit bankers to finance their operations and land acquisition. But in areas of poorer farmers, there was little support for unit banking. That result holds both in the time series and in the cross-section. As Table 2 shows, as of 1900, states that supported unit banking had much higher rural wealth *per capita*. Calomiris (2000, ch. 1) also reviews changes in unit banking regulation over time. Agricultural distress (and reductions in rural wealth) is associated with declining support for unit banking. Indeed, the story of the expansion of the branching network of Bank of America within California illustrates that pattern well. When A. P. Giannini first applied for permission to expand his branching network into rural California, he was denied permission, owing to the opposition of rural unit bankers. But when agricultural distress arrived in those same areas a few years later, he was granted permission (James and James, 1954).

Calomiris (2000, ch. 1) and Calomiris and Ramirez (2010) argue that by tying rural banks to one location, farmers limited the lending opportunities of banks in ways that increased the propensity of banks to lend to farmers in bad, but not disastrous, states of the world. Farmers were willing to pay for this 'loan insurance' in the form of higher interest rates on loans. Once disaster struck, however, both farm debtors and rural unit banks were ruined, and local support shifted towards permitting branching, which encouraged entry of new capital.

The founding of the Fed (like the creation of the Bank of the United States and the Second Bank of the United States before it) was a second-best economic solution to the deeper political problem of unit banking. The Fed smoothed the effects of seasonal and cyclical liquidity demands by making the supply of reserves more elastic via its new sources of reserves supply (the discount windows of the twelve Federal Reserve Banks). Importantly, the Federal Reserve Banks issued legal tender currency, which meant that the supply of riskless reserves was not limited by the inelastic stock of specie and other forms of currency. The Fed operated throughout the nation to smooth seasonal and cyclical demands for liquidity. The early history of the Fed indicates that it was quite successful in improving the elasticity of liquidity supply seasonally and cyclically (Miron, 1986; Bernstein *et al.*, 2008).

The Federal Reserve System was an acceptable political solution to banking instability precisely because of the combination of structure, powers, and rules that it embodied, and because it did not attack unit banking interests. It was decentralized in structure, and thus did not run afoul of opponents of national consolidation of control. Even more important, it was an institutional embodiment of political balance. The Fed was not ‘above it all’ politically; rather, it combined in one organization the opposing interests that held sway over its existence. The political balancing act of the founding of the Fed gave important new powers and opportunities to agrarian interests (e.g. by permitting member banks to make real estate loans—an activity prohibited for national banks in the first 50 years of their existence), gave new opportunities for borrowing to member banks, and shared power over its rules and governance with the Executive and Legislative branches of the federal government, ensuring that all these parties had an interest in preserving the institution, and that none of them had much of a chance to hijack it for their own purposes. The Fed’s charter was a credible commitment to the balanced interests that negotiated it because it would be difficult to change.

As Table 1 shows, bank consolidation and branching were gaining strength by the end of the 1920s, as the revealed superiority of branching for bank stability and profitability was leading to widespread relaxation of branching. Representative Henry Steagall of Alabama, who was the leading representative of the interests of unit bankers in Congress, saw federal deposit insurance protection of small banks as the last best hope of preventing competition and deregulation from ending the unit banking system.

Passing government deposit insurance as a salve for unit banking was not a new idea. Starting in the 1880s, there had been 150 attempts in Congress prior to 1933 to enact federal deposit insurance. Calomiris and White (1994) show that those attempts were championed by Congressional representatives of unit banking constituencies. Only once (in a proposed amendment to the Federal Reserve Act of 1913) did the idea of federal deposit insurance ever make it out of a Congressional banking committee.

Unit banking interests, however, had been successful in obtaining deposit insurance protection from a handful of state legislatures, in states where unit banking commanded strong support. As White (1983, 1985), Calomiris (1989, 1990, 1992, 2000), and Calomiris and White (1994) show, proposals to enact deposit insurance had been one of the key policy weapons used to defend unit bankers, and its use at the state level dates from the antebellum era.

In the early twentieth century, eight states had enacted deposit insurance systems for their state-chartered banks. All of these systems ended disastrously during the agricultural distress of the 1920s. The three states that operated long-lived mandatory deposit insurance systems for state-chartered banks (Nebraska, North Dakota, and South Dakota) suffered the most excessive risk taking in the agricultural states that rode the commodity price boom before the 1920s, and had by far the worst insolvency experience in the 1920s (Calomiris, 1990,

1992). That experience was common knowledge by the 1930s, which largely accounted for the fact that deposit insurance was almost universally understood by 1933 to be a source of excessive risk taking that had been responsible for the worst banking disasters of the 1920s (Calomiris, 1990, 1992; Flood, 1991; Calomiris and White, 1994). Henry Steagall would have his work cut out for him.

### III. The real bills doctrine

Another primary contributor to the Great Depression was the failure of the Federal Reserve to prevent—through the implementation of expansionary monetary policy—the collapse of money, credit, income, prices, borrowers, and banks that occurred during 1929–33. That failure reflected more than just occasional misreading of the economy by the Fed, or the constraints of the gold standard (although it is also true that the Fed interpreted the preservation of the gold standard as sometimes requiring it to tighten monetary policy during the Depression). The intellectual foundations of the Fed's cyclical policy 'reaction function'—that is, the way the Fed targeted its open market operations and discount lending and advances in response to observable cyclical indicators—has been explored in detail by Wheelock (1991), Calomiris and Wheelock (1998), and Meltzer (2003). They show that adherence to the 'real bills doctrine' was at the heart of the failure of the Federal Reserve's desire to tighten monetary policy in 1929, and its failure to respond appropriately to the economic collapse of the Depression.

There are no living adherents to the real bills doctrine today of whom I am aware, and it conflicts sharply with all the dominant theories of monetary targeting that appear in textbooks or in today's central bank policy analyses. Nevertheless, this theory was of crucial importance in the policy architecture of the Federal Reserve System and in Fed policies in the first two decades of its existence.

According to the real bills doctrine, the Fed should accommodate cyclical demand for credit *related to trade*, but not variation in credit demand associated with securities lending, real estate lending, or industrial or consumer lending. The central bank, therefore, was emphatically not supposed to be in the business of targeting the growth of aggregate credit or money or economic activity or financial system health, but rather should see itself as ensuring that reasonable needs of trade finance were being met. There is no economic theory that supports the real bills doctrine, either as a theory of banking or as a theory of monetary policy. From the standpoint of banking theory, there is no obvious reason to believe that banks should be encouraged to engage solely or mainly in financing trade, rather than industrial finance, consumer finance, securities finance, or real estate finance; all credit supports economic activity and no type of credit is inherently more socially desirable than another. From the standpoint of currently accepted monetary theory, policy should focus on the targeting of interest rates, exchange rates, inflation, credit aggregates, and monetary aggregates, out of a desire to stabilize aggregate demand and/or inflation, and there is no recognized special connection between trade credit, *per se*, and aggregate demand or inflation.

The real bills doctrine played a central role in causing and worsening the Depression. In 1929, real bills thinking led the Fed to respond to the rise in the stock market with contractionary monetary policy and admonitions to member banks not to provide credit to the securities market. That policy was being publicly cheered on by real bills advocates in Congress—most notably, the premier proponent of the real bills doctrine in Congress, Senator

Carter Glass (White, 1990). Throughout the Depression, in their attempt to follow the real bills doctrine, Fed officials focused on borrowed reserves of member banks and on the interest rates on bills and other instruments in the market. They regarded low nominal interest rates and low levels of borrowed reserves as indicative of loose credit conditions. That view, of course, was incorrect in the early 1930s. During a deflation, low nominal interest rates alongside severe deflation can imply high real interest rates. And, as the Depression led banks to scramble for cash (Calomiris and Wilson, 2004), cash was hoarded by banks and borrowed reserves fell, but these actually indicated contracting money and credit supply. Because the Fed's real bills philosophy argued against stabilizing securities markets, banks, or the economy, it led Fed officials to purposely ignore signals that the economy and the financial system was contracting during the early 1930s (Wheelock, 1991; Meltzer, 2003). Indeed, Meltzer (2003) points out that Fed officials were quite satisfied with their performance during the Depression, since they had adhered to principles rather than being distracted by what they saw as misguided desires to prevent economic and financial decline.

The real bills doctrine had many advocates, within and outside the Fed, including an influential Senator from Virginia, Carter Glass. Although Glass was not the chairman of the Senate banking committee, when Roosevelt took office he turned to Glass, who had been one of primary architects of the Federal Reserve Act of 1913 (which had passed Congress in 1913 as the 'Glass-Owen' bill) to formulate a regulatory response to the Depression. As he had done in 1912, Glass asked Parker Willis—one of the country's leading academic advocates of the real bills doctrine—to advise him on what should be done. Many of the Fed's initial architects, including Willis and Glass, had long harboured the view that the Fed had failed to fulfil its real bills ambitions, and they saw the 1930s as the opportunity to fix long-standing problems that would refocus the Fed on its real bills mission.

For example, bankers' acceptances—which real bills advocates hoped would become a dominant source of credit within the banking system—had not grown to be very important, despite the attempts to subsidize their use through Fed advances against them. The geographic breadth of the US, and its fragmented unit banking structure, made banks reluctant to discount bills over long distances (Calomiris, 2000, ch. 1); unlike in Great Britain, or the antebellum branching South, where bills thrived as a source of credit, they failed to become a large part of the US financial system, as real bills advocates had hoped.

Furthermore, real bills architects had hoped that the Regional Federal Reserve Banks would serve as independent sources of system-wide reserve management, thereby replacing the pyramiding of reserves in New York. Real bills advocates saw pyramiding as pernicious, since it encouraged the use of bank funding sources to finance speculative securities activities in New York banks during the seasons when credit demand was low in agricultural areas (summer and winter).

Real bills advocates in the 1930s wanted regulatory reform to focus on completing the unfinished business of restructuring the banking system—especially, reducing the connections between bank credit and securities lending, and discouraging the pyramiding of reserves in New York. The intended solutions advocated by Carter Glass were the separation of commercial and investment banking, and the restriction on interest payments on deposits, especially inter-bank deposits. Limiting interest payments on inter-bank deposits would encourage banks to maintain higher reserves at the Fed rather than through the interbank market.<sup>5</sup>

<sup>5</sup> As White (1983) pointed out, the same objective could have been achieved by having the Federal Reserve Banks pay interest on reserves, which would have permitted them to compete with the inter-bank market, and would have avoided the distortion of prohibiting interest payments on deposits.

#### IV. The rapid and lasting regulatory policy response of the 1930s

Despite the fact that restrictions on bank branching and adherence to the real bills doctrine had been two of the key contributors to the severity of the Depression, and despite the absence of evidence in support of the desirability of the three major banking reforms being proposed (Regulation Q, the separation of underwriting from commercial banking, and the creation of federal deposit insurance) *regulatory reformers in Congress seeking to preserve unit banking or to enhance the operation of the real bills doctrine successfully passed all three of these initiatives into law*. Not only did they succeed in doing so, the successful advocacy happened unusually quickly, in 1933, within a few months of President Roosevelt's having taken office.

That policy response was more comprehensive, much faster, and more activist than in prior banking crises. Federal government interventions included both new short-term assistance measures for banks and other corporations, and major long-term alterations in bank regulation, which were adopted in the Banking Acts of 1933 and 1935.

In contrast, the policy responses to previous financial disasters had been slower, less dramatic, and had tended to encourage post-crisis relaxation of branching restrictions. During the antebellum era, the Panics of 1837, 1839, and 1857 were quite dramatic events, and yet with the exception of changes in bank chartering laws at the state level, there was no significant policy response. Only one of the six banking panics (1873, 1884, 1890, 1893, 1896, and 1907) that occurred during the National Banking Era (1863–1913) produced a significant policy response, namely the Panic of 1907.<sup>6</sup>

The bank regulatory response to the Panic of 1907, however, was much less far-reaching and much more deliberate than the responses to the Depression. In the wake of the Panic of 1907, the government passed the Aldrich–Vreeland Act of 1908 (a fairly modest reform that made it easier to expand the supply of national bank notes quickly during a liquidity crisis) and created the NMC of 1910. The NMC commissioned thousands of pages of serious research by the world's top scholars in the areas of money and banking about the causes of banking instability. That voluminous research ultimately led to the creation of the Federal Reserve System at the end of 1913. Recent work by Miron (1986) and Bernstein *et al.* (2008) suggests that Fed discounting was successful in reducing the seasonal volatility of financial markets.

It is worth emphasizing that the banking and central banking policy reactions to the Depression in 1933–1935 were both more sudden and more wide-ranging than the reaction to the Panic of 1907. The reactions included:

- (i) unprecedented government assistance programmes for banks in the form of government-funded preferred stock investments in banks by the Reconstruction Finance Corporation (RFC) beginning in November 1933 (Mason, 2001);
- (ii) the restriction of interest payments on bank deposits, including the prohibition of interest payments on demand deposits (Regulation Q), as part of the Banking Act of 1933;
- (iii) the temporary, and then permanent, requirement of nationwide deposit insurance implemented in 1933 and made permanent in 1935, under the auspices of the newly created Federal Deposit Insurance Corporation (FDIC);

<sup>6</sup> For a review of these panic experiences, with special emphasis on the inadequacy of the fragmented financial system in preventing panics, see Sprague's (1910) and Wicker's (2000) accounts of all six events, Strouse's (1999, ch. 28) account of J. P. Morgan's interventions during the Panic of 1907, Calomiris and Gorton (1991) on the common economic causes of the six panics, and Bruner and Carr (2007) on the Panic of 1907.

- (iv) the Banking Act of 1933's prohibition of securities underwriting by depository institutions (the so-called 'Glass–Steagall' separation of commercial and investment banking);
- (v) the creation of new monetary powers for the executive branch, including the Thomas Amendment to the Agricultural Adjustment Act of 1933 (which allowed the President to require open-market purchases by the Fed), the Gold Reserve Act of 1934 (which created the Exchange Stabilization Fund under the Treasury Department), and the Silver Purchase Act of 1934, all of which enhanced the Administration's ability to prevent Fed tightening; and
- (vi) the restructuring of power within the Federal Reserve System in 1933 and 1935, which augmented and consolidated authority within the Federal Reserve Board over open market operations, discount rate setting, and reserve requirements (giving control over the setting of reserve requirements to the Fed) and removed the Secretary of the Treasury and the Comptroller of the Currency from the Federal Open Market Committee (FOMC).<sup>7</sup>

Although not all of these policy changes had a substantial impact on the banking system, many of them resulted in significant and lasting change. It took six decades to unwind Regulation Q limits on deposit interest, and only after those limits had produced the great disintermediation from banking that occurred in the 1960s and 1970s, as depositors sought higher rates of return in reaction to the accelerating inflation of that era and the limited nominal interest rates permitted under Regulation Q.

The prohibition of underwriting in commercial banks was unwound gradually beginning in 1987, as the result of Fed actions and Supreme Court decisions that permitted some underwriting at banks (Kaufman and Mote, 1990). Those actions reflected, *inter alia*, US bank regulators' observation of US and other banks' underwriting activities outside of the US, which indicated little need for concern about risk or conflicts of interest. Regulators argued that the Glass–Steagall limitations served no legitimate purpose, but threatened to undermine US competitiveness by pushing banking activities abroad. Those deregulatory initiatives ultimately paved the way to full relaxation in 1999 as the result of the Gramm–Leach–Bliley Act.

FDIC deposit insurance has proved to be the most robust regulatory innovation of all. It has expanded over time and it seems unlikely that it will ever be repealed. Indeed, as the result of the private Certificate of Deposit Account Registry Service (CDARS) account swapping product, depositors can deposit tens of millions of dollars into a single bank account and obtain 100 per cent insurance on those funds.<sup>8</sup>

The bank regulatory changes of the 1930s had long lives even though they were not supported by any evidence presented at the time they were enacted, or in subsequent scholarly work, suggesting that these three initiatives were warranted by the experience of the Great

<sup>7</sup> One puzzling aspect of Carter Glass's actions in the 1930s was his support for the consolidation of authority within the Federal Reserve Board. Glass had always championed decentralization within the Fed system and had prided himself on preventing the centralization of banking policy in the original Federal Reserve Act. In private correspondence commenting on an earlier draft of this paper, Allan Meltzer suggests a possible explanation for Glass's willingness to tolerate the centralization of authority in the 1930s: 'Glass was totally opposed to Strong and New York because they made the British loan and told him that real bills was unworkable as a regulatory device. The Board, especially Miller, stuck with real bills in the 1920s. Perhaps that is why Glass supported increased centralized power in the Board.'

<sup>8</sup> CDARS is a private company that engages in deposit insurance limit arbitrage by arranging for inter-bank swapping of account balances to allow depositors to enjoy the convenience of full FDIC insurance on a virtually unlimited amount deposited within one account in one bank (which is swapped out within the CDARS network to meet the official deposit insurance limit of \$250,000 per account).

Depression. Certainly, no one today would argue that the real bills doctrine (which, as noted above, was Carter Glass's primary motivation in his advocacy of Regulation Q and the prohibition of underwriting by commercial banks) was a legitimate motivation for Regulation Q or the prohibition of underwriting by commercial banks (or anything else).

Glass's real bills advocacy was not the only argument in favour of Regulation Q or the prohibition of underwriting by commercial banks. Some advocates of Regulation Q saw it as a means of raising the profits of banks by limiting competition among banks. And, some advocates of the prohibition of underwriting by commercial banks argued (i) that underwriting had destabilized banks by encouraging imprudent risks, and (ii) that underwriting created conflicts of interest within banks that engaged in both lending and underwriting. The Pecora hearings drew attention to these alleged deficiencies, and channelled much public disapproval towards large banks and Wall Street. The popular disapproval of the big Wall Street banking establishment provided popular political support for a variety of regulatory reforms, including the prohibition of underwriting by commercial banks.

Benston (1989) provides a detailed critical review of the legislative decision-making process that led to the prohibition of underwriting by commercial banks, and argues that the decision was made without any credible evidence of the alleged problems. Furthermore, there is contrary evidence. With respect to the accusations claiming that underwriting weakened banks during the Depression, White (1986) finds that underwriting was a source of diversification that reduced banks' risks during the Depression.

Concerns were also voiced about conflicts of interest between commercial bank lending and underwriting. Some alleged that commercial banks as lenders had an incentive to exaggerate the quality of the securities they underwrote, to rid themselves of bad debtors. (Such allegations were part of the aggressive attack against banks during the Pecora Hearings of 1932, and which fuelled anger against large Wall Street banks.) These also have been shown to be without merit by recent econometric studies of the underwriting activities of commercial banks during the 1920s and early 1930s (Kroszner and Rajan, 1994; Puri, 1994).

The competition argument used to defend the enactment of Regulation Q—that bank weakness resulted from excessive competition during the Depression—has been contradicted by Carlson and Mitchener's (2009) work. They show that the insufficiency of competition that prevailed under unit banking weakened banks during the Depression by making them more vulnerable to local idiosyncratic shocks; more competition is associated with greater stability, not less.

And, of course, the widespread bank failure experience of the 1980s illustrated once again the destabilizing effects of unit banking, which finally was brought to an end by the branching deregulation of the last two decades of the twentieth century. Most ironically of all, deposit insurance, which was chosen as an alternative to branching deregulation in the 1930s, is the only lasting bank regulatory reform of the New Deal, despite the fact that it was opposed by the Roosevelt Administration and the Fed, based on its chequered history during the 1920s. That negative opinion has been borne out by decades of experience and new research on the moral-hazard consequences of deposit insurance around the world in the past 30 years. Deposit insurance, and more broadly the generous safety nets that bail out depositors, creditors, and stockholders of banks, is now understood to be, on net, a destabilizing rather than stabilizing influence on banking systems around the world (Barth *et al.*, 2006; Demircu-Kunt *et al.*, 2009; Calomiris, 2009a).

## V. False diagnoses, based on little evidence, are suddenly embraced

If the bank regulatory policy ideas of the 1930s were so bad, then how did reformers secure a quick consensus for such far-reaching reforms? The answer, as always, is a combination of influences, including powerful political influence by special interests, purposeful misstatements of facts and a lack of contradictory evidence at the time (which was hard to assemble, given the speed with which regulatory change occurred), and stubborn and sincere beliefs (about the desirability of prohibiting banks from engaging in underwriting, and about the benefits of limiting interest on deposits) by powerful and credible people such as Carter Glass that were hard to falsify in real time, even though they happened to be false.

The details of how Henry Steagall won inclusion of federal deposit insurance in the 1933 Act are particularly interesting. The full account is provided in Calomiris and White (1994). Contrary to popular misconceptions, deposit insurance did *not* win the day because it was part of a bail-out of the banking system, or a means to deal with systemic risk or widespread bank runs. In fact, Congress and the Administration refused to use deposit insurance to help resolve the bank runs and insolvencies of 1932–3. Deposit insurance only went into effect *after the resolution of troubled banks had been handled through other means* (through a combination of permanent closure of deeply insolvent banks, and RFC assistance for marginal ones).

Three key factors explain Steagall's success in passing deposit insurance.

- (i) As Chairman of the banking committee in the House of Representatives, he had effective blocking power to prevent any banking reforms from passing. In their desire to respond aggressively to the financial crisis, Carter Glass and others were keen to implement Regulation Q and the separation of investment banking from commercial banking, and Steagall, therefore, had bargaining power.
- (ii) The Pecora Hearings had made large banks unpopular, and populist politicians such as Henry Steagall and Huey Long fed on that sentiment to argue in favour of support for small banks. Notwithstanding the merits of Glass's views on deposit insurance, the populists had won the debate with the public. As *Business Week* (12 April 1933) put it: 'Washington does not remember any issue on which the sentiment of the country has been so undivided or so emphatically expressed as upon this.'
- (iii) Deposit insurance was passed as a temporary system, and one that covered very few deposits, which made it easier to win approval in Congress. In the future (at the next big legislative logrolling fest in 1935, and at other similar subsequent moments), advocates would have the opportunity to bargain further, and make coverage permanent and larger (Calomiris and White, 1994; White, 1998).

## VI. The (hidden) reallocation of monetary powers

Not only did the 1930s see a major restructuring of the rules governing the banking system in 1933 (Glass–Steagall, Regulation Q, FDIC insurance), there were also significant changes in powers regarding banking and monetary policy. These included the aforementioned creation of new monetary powers by the Treasury, the creation of new authority within the Fed, and the reallocation of decision-making authority over Fed policies in 1933 and 1935.

The list of policy changes may seem difficult to characterize, since some of the changes seem to enhance the Administration's power over central banking (the 1934 Acts, and the Thomas Amendment to the AAA), while other actions seem to increase Fed independence (the vesting of authority over reserve requirements within the Fed and the elimination of non-Fed officials from the FOMC). That ambiguity was intentional. The Administration pursued these reforms in order to increase its power and reduce Fed independence during the mid-1930s, while attempting to give the opposite impression to the public.

Treasury Secretary Morgenthau believed that he controlled Fed decision-making through his ability credibly to threaten use of the Exchange Stabilization Fund and other levers of control over the money supply to reverse Fed actions, if necessary:

the way the Federal Reserve Board is set up now they can suggest but have very little power to enforce their will . . . [The Treasury's] power has been the Stabilization Fund plus the many other funds that I have at my disposal and this power has kept the open market committee in line and afraid of me. (Blum, 1959, p. 352)

This loss in Fed independence in the mid-1930s (owing to pressures exerted outside of formal procedures governing policy) occurred in spite of new legislative powers given to the Fed in the Banking Act of 1935 (which consolidated power within the Board of Governors and gave the Board new authorities, including control of reserve requirements). Indeed, *Morgenthau intimated in his diary that he supported the 1935 Act partly because it gave the appearance of enlarged power within the Fed, which would insulate him from responsibility 'if the financial situation should go sour', but he did not believe that the new powers of the Fed made a substantive difference to its power, given his ability to pressure the Fed to do his bidding.*

Morgenthau, like Steagall and Glass, knew how to 'use the crisis' to his own advantage by manipulating public perceptions to his own purposes. That ability allowed him to accumulate more power with less responsibility. His forecasts were prescient; he cajoled the Fed successfully in March 1937 when he pressured the Fed into supporting bond prices, after threatening to intervene in the market if they did not. That threat was credible because the Treasury had more resources available under the law to increase the money supply than the Fed (with its limited balance sheet size) had to shrink it. The Fed capitulated to Morgenthau's demands (Calomiris and Wheelock, 1998, p. 40).

That trend away from Fed independence accelerated during The Second World War, as monetary policy took a back seat to the war effort (Calomiris and Wheelock, 1994; Meltzer, 2003). As the Fed emerged from the Second World War, however, the wartime growth that had occurred in its balance sheet gave the Fed new power—namely, the power to shrink its now massive balance sheet. In the mid-1930s, the Fed's balance sheet was no match for Secretary Morgenthau, who had more than enough resources to offset with expansion any attempt at contraction by the Fed. After the Second World War, that was not the case. This simple arithmetic of a credible threat to shrink underlay the 1951 Accord, whereby the Fed once again secured control over monetary policy.

## VII. The post-Depression legacy of deposit insurance

I have already noted that substantial costs have been attributed to Regulation Q and the separation of underwriting and lending during the post-Depression era. Regulation Q limits

on deposit interest rates, combined with the high inflation of the late 1960s and 1970s, produced a massive financial disintermediation from the banking system as depositors sought higher returns from unregulated products (e.g. money market mutual funds, and commercial paper issued by finance companies). The separation of commercial banking from securities underwriting weakened US banks relative to foreign rivals that were not hamstrung by those limitations, which was the proximate cause of Chairman Greenspan's campaign to loosen those restrictions (Calomiris, 2000).

What about deposit insurance? To what extent can it be argued that deposit insurance—whatever its political motives—has been a positive contributor to systemic stability? Even though federal deposit insurance was not used in the 1930s to end bank runs or to assist failing banks, it is conceivable that its presence could have contributed to the financial stability that the US enjoyed in the 1950s and 1960s. While it is not possible to dismiss this possibility, there are several powerful arguments against it.

First, it is clear that deposit insurance is not necessary for banking stability. The experience of Canada prior to 1935—a branch banking system without even a central bank, which avoided financial panics—is illustrative of a broader pattern in historical banking. With the exception of the six US banking panics of the pre-First World War era and four episodes of severe banking system insolvency outside the US that were linked to government subsidization of real estate expansion, banking crises (defined either as severe insolvency waves or disruptive banking panics), were virtually absent from the world in the 40 years prior to the First World War. A combination of branch banking and conservative central banking (defined as the willingness to provide liquidity support during crises, but not public bail-outs of insolvent banks) seems to have accounted for that favourable experience (see Calomiris, 2009a).

Second, there is little empirical support for the stabilizing role of deposit insurance. In theory, there are two offsetting potential influences from deposit insurance, one stabilizing, the other one destabilizing. The stabilizing influence is the reduction in liquidity risk resulting from the protection of depositors (i.e. the reduced risk that insured depositors would withdraw funds from banks that they believed were weak). The destabilizing influence of deposit insurance results from the increased tolerance for risk taking that occurs within protected banks. The greater tolerance for risk taking encourages greater risk taking and greater financial system volatility, either as the result of conscious risk taking by bankers—the so-called 'moral-hazard' problem—or as the result of undisciplined incompetence in risk management. In practice, the empirical literature on deposit insurance has concluded that deposit insurance tends to be destabilizing. That tendency is visible within and outside the US for the post-Depression period (see Demirguc-Kunt and Detragiache, 2000; Demirguc-Kunt *et al.*, 2009; and Calomiris, 2009a).

Third, the macroeconomic stability of the US in the 1950s and 1960s is better explained by factors other than deposit insurance that were plausibly exogenous to the presence of deposit insurance. Measures of financial volatility (stock-market returns volatility, interest-rate volatility, inflation volatility) were all relatively low during that period. Furthermore, for large city banks in the US, deposit insurance offered very limited support against liquidity risk, since coverage was limited to small deposits. Banks in New York, in particular, had many large deposit accounts which were not covered by the \$10,000 limit in place prior to 1980. Yet there is no evidence of which I am aware suggesting that New York banks experienced runs or other severe problems owing to their higher liquidity risk during the 1950s and 1960s.

## VIII. Conclusion

As policy-makers today contemplate multiple and dramatic bank regulatory proposals in the wake of the subprime mortgage bust, it is useful to consider several aspects of the bank regulatory changes of the 1930s, which have useful lessons for policy-makers today.

The central microeconomic cause of banking system fragility in the US, before, during, and after the Depression, was the unit banking structure of the US system. Not only was this unit banking structure not dismantled by 1930s regulatory reforms, the reforms of the 1930s intentionally halted the bank consolidation movement of the 1920s by offering new protection to unit banks in the form of federal deposit insurance (which came into play in 1934). Deposit insurance was correctly viewed at the time as a destabilizing influence and was opposed (privately) by virtually every financial authority of the time, including President Roosevelt. It succeeded politically because its advocates were masters of manipulating public opinion, and because their opponents were so eager to have their own (misguided, but sincerely motivated) reforms passed, that they were willing to compromise on deposit insurance.

The major banking reforms of the 1930s were justified by advocates as solutions to the problems that had plagued the banking system during the Depression, but financial historians have been virtually unanimous in disputing those claims. In the case of deposit insurance, there was never a credible empirical basis for believing that it was warranted, or that it would stabilize the banking system. Other 1930s banking reforms (separation of underwriting from lending, limits on deposit interest rates, and the changes in the structure of decision-making in monetary policy) were unrelated to the shocks of the Depression; they were implemented in the 1930s because the banking shocks of the Depression created an 'up-for-grabs' environment that offered new opportunities for political entrepreneurs with longstanding agendas—especially advocates of the real bills doctrine—who couched their pre-existing agenda as a response to the Depression (in the current environment, one can see a repetition of this phenomenon in Paul Volcker's current advocacy of his long-standing opposition to proprietary trading in banks, which has nothing whatsoever to do with the current financial crisis—see Calomiris (2010a)).

Ironically, the primary motivations for the main bank regulatory reforms in the 1930s (Regulation Q, the separation of investment banking from commercial banking, and the creation of federal deposit insurance) were to preserve and enhance two of the most disastrous policies that contributed to the severity and depth of the Great Depression—unit banking and the real bills doctrine. Other regulatory changes, affecting the allocation of power between the Fed and the Treasury, were intended to reduce the independence of the Fed, while giving the opposite impression.

The ill-advised bank regulatory policies of the 1930s have had very long lives. Deposit insurance has grown from a temporary system designed to subsidize the risks of small unit banks to a permanent system that now covers virtually all deposits in the US. Statutory limitations on bank branching, which deposit insurance facilitated (by removing competitive pressures on small unit banks), were finally eliminated during the 1980s and 1990s, in reaction to widespread banking distress during the 1980s, culminating in free interstate branching after 1994. Limitations on interest rates for deposits have mainly been removed, but some still persist, and the removal did not begin until the 1980s. The separation of underwriting and lending activities was relaxed beginning in the late 1980s, and was repealed by the Gramm–Leach–Bliley Act of 1999. The structural changes in the Federal Reserve System passed in the 1930s remain in place, although subsequent events (the Second World War expansion of the Fed's balance sheet) set the stage for restoring Fed independence in the 1950s.

What are the lessons of the banking reforms of the 1930s for policy-makers today? The overarching lesson is that the aftermath of crises are moments of high risk in public policy. The Great Depression provoked banking reform legislation that was quick, comprehensive, and unusually responsive to popular opinion. Each of these three aspects increases the risk that regulation will have adverse consequences. When regulation is passed quickly, there is little time to verify the empirical merits of the allegations that inspire it, which admits much mischief in the advocacy of regulation solutions to alleged causes of the crisis. Political entrepreneurs—Glass, Steagall, and Morgenthau in the 1930s—will take advantage of the opportunities to act quickly without having to justify the crackpot theories, special interests, or power plays that motivate them. Comprehensive regulation invites logrolling compromises that increase each political entrepreneur's ability to get the object of his desire by creating an unusually high tolerance for special-interest measures or bad ideas in the interest of passing other measures. And when the public is engaged in the regulatory debate in such a heightened way, the technical issues of regulatory design can take a back seat to populist pressures for action on ideas that sound good to an angry public.

These three attributes—little deliberation, a comprehensive agenda, and an engaged public—which were so important during the bank regulatory debates following the Depression are not surprising in the wake of a banking crisis. Indeed, the current crisis has provoked precisely the same sort of reaction. Public anger fuelled the perceived need to act quickly. Sensing the opportunity to pass landmark legislation, the Obama Administration insisted on a comprehensive reform package, rather than a series of individual reform measures passed over time. Republican opposition to the Dodd–Frank bill invited political threats from Democrats to hold Republicans accountable in the autumn 2010 elections for a failure to respond to the public outcry for a bill. A poll by the Pew Trusts indicated overwhelming support by the public for doing something fast, and the opposition of several Republicans wilted in the electoral heat.

The Dodd–Frank bill has many flaws. It claims to reduce the chance of future bail-outs of large banks through the creation of a new resolution authority. Such an authority may make sense (Calomiris, 2010*b*), but the details of the authority as currently proposed (which extends FDIC resolution to non-banks, creates no credible barrier to unwarranted bail-outs) would institutionalize and broaden bail-out authority, making bail-outs more likely and placing no bounds on the ability of the FDIC to fully protect any holders of bank or non-bank debts.

Just as the Federal Reserve Act of 1913 and the Banking Acts of 1933 and 1935 did nothing to address the fundamental problem of unit banking, the Dodd–Frank bill does nothing to address one of the primary causes of the crisis—politically motivated government subsidization of mortgage risk in the financial system (Calomiris, 2008, 2009*b*, 2009*c*; Wallison and Calomiris, 2009). And, just as the banking crisis of the 1930s and the 1933 Act gave opportunity to unrealized objectives driven by advocates of the real bills doctrine, the Dodd–Frank bill contains reform proposals that are obviously unrelated to the crisis, but driven by the pet theories of influential people—most obviously, the Volcker Rule's proposed prohibition of proprietary trading (Calomiris, 2010*a*). Finally, just as the 1933 Act promoted special-interest logrolling by Henry Steagall, the Dodd–Frank bill is full of special interest provisions (e.g. new outreach measures to expand banking services for the poor, and an unprecedented imposition of employment quotas for minorities and women on regulated financial institutions, to name only two). In all these respects, the Dodd–Frank bill has a great deal in common with the 1933 Act.

The ill-conceived banking legislation of the 1930s took very little time to pass, but a great deal of time to disappear, and its most robust element (deposit insurance) looks to be a per-

manent feature of the banking system going forward. This should be a cautionary tale for current reformers, but tales from the past are likely to have little effect. Politicians have their own agendas, especially when pursuing regulatory reforms in the wake of a crisis. Learning from history is not high on that list, and to financial historians, that is a scary thought.

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