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It is Always the Shadow Banks: the Failures that Ignited America’s Financial Panics

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Abstract

Many discussions of the panic of 2008 assume that it was something new: a panic ignited by failures of large shadow banks rather than by failures of regulated commercial banks. In fact, however, the failure of one or more shadow banks – banks that were unregulated or nominally regulated but given a free rein – played an important role in most peacetime panics in the United States going back to the earliest days of the Republic. These banks had excellent reputations prior to their failure. And that was one of the reasons why these failures undermined confidence in the financial system as a whole. The shadow banks that failed were levered with short-term liabilities, but had made long-term investments, creating a serious maturity mismatch in their balance sheets. Their investments, moreover, were concentrated in one sector of the economy. Real estate, canals and railroads, and mining – the latter three, real estate at one remove in 19th century America – were the main problems. The panic of 2008, in these respects, was similar to earlier panics. The continued repetition of this story points to a deep and persistent fault line in the American system of bank regulation.
“Such accidental events are of the most various nature: a bad harvest, an apprehension of foreign invasion, the sudden failure of a great firm which everybody trusted, and many other similar events, have all caused a sudden demand for cash” (Walter Bagehot 1924 [1873], 118).

1. Famous failures

The failure of a famous financial firm features prominently in the narrative histories of most U.S. financial panics. The most recent panic is typical: Lehman brothers failed on September 15, 2008: and … all hell broke loose. Future historians, we can be sure, will dwell on the failure of Lehman Brothers when they describe the panic. Many of these failures, although not all, have been examined by economic and social historians who have written detailed case studies. But there has not been, as far as I am aware, a systematic attempt to compare and contrast these cases, and extract some general conclusions. In this paper I survey these failures starting with the Panic of 1819 to see what they have in common.

Although each failure presents many individual peculiarities, several generalizations emerge clearly. (1) Typically, panics were started by a cluster of failures in which shadow banks played a prominent role. (2) The shadow banks that failed were,}

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1 This paper had its origin in a conversation with Albrecht Ritschl who asked me a number of searching questions about the history of U.S. banking panics some of which I answer here.

2 In some cases the offending firm did not fail in the sense that its assets were liquidated by a court appointed official, but merely suspended payment of its obligations for a time, or was in trouble but was rescued in some way, etc. I have made these distinctions as necessary, but have used the term “failure” to cover these cases when the exact nature of the trouble was not issue.
to use a phrase from Bagehot quoted in the epigraph, “great firms which everybody trusted.” These failures were immediately interpreted as evidence that something fundamental had gone wrong with the financial system and that only cash was safe. (3) The famous shadow banks that failed were highly levered with short-term liabilities, but had invested in long-term assets, creating severe maturity mismatches. And (4) they had concentrated their investments in one sector of the economy, typically real estate, or in the nineteenth century canals and railroads, real estate at one remove, increasing their vulnerability. The term “Lehman Brothers Syndrome,” might be used to describe the complex of problems suffered by these firms. But that would be unfair to Lehman Brothers’ many predecessors. It would be better to call it Nicholas Biddle syndrome because this was the story Biddle’s Bank of the United States of Pennsylvania which failed in 1841, or Jay Cooke syndrome, because this is the story of Jay Cooke and Company which failed in 1873.

In section 2 I will briefly outline the relationship between this paper's stress on famous failures and other ideas about the origin of financial panics. Section 3 identifies the panics that are examined here and explains why some episodes often labeled panics are excluded. Section 4 explains why a cluster of failures was typical. Section 5 explains why shadow banks were important members of the clusters of failures that sparked panics. Section 6 presents evidence that the firms that failed and triggered panics were “great firms which everybody trusted.” Section 7 presents evidence that the famous failures had invested in long-term assets and failed to diversify their portfolios. Section 8 summarizes the main conclusions and draws some further implications.
2. Famous failures and the theory of panics

It is conceivable that failures of trusted firms by themselves accounted for the financial crises that have periodically disrupted the American financial system. A financial panic in this view is like a panic in a crowded auditorium when a crazy person shouts fire and there is a mad rush for the exit. The epigraph from Walter Bagehot expresses this view of panics: an “accidental event” causes “a sudden demand for cash.” Diamond and Dybvig (1983) were the first to provide a formal model of a fragile banking system prone to runs, although the idea that a fractional reserve banking system is inherently fragile is, of course, much older. A considerable body of research, on the other hand, argues that panics arose when distortions built up in the financial system. Some examples are Gary Gorton and Charles Calomiris (1991), Moritz Schularick and Alan Taylor (2012), or to take an older example, Wesley C. Mitchell (1941).

The two approaches to panics are not, of course, mutually exclusive. There may be a fire in a crowded auditorium, and that fire may mean that many people will be overcome by smoke, but it is still possible to imagine two different outcomes. In one, someone rises quietly and begins walking toward the exit, leading an orderly evacuation. In the other scenario, someone yells fire, a panic ensues, and the crush of people trying to leave magnifies the damage. A full explanation of panics, I believe, will include both the forces that produce stresses in the financial system and the failures that turned anxiety and contraction into panic. Bagehot, although he seems to be supporting the idea of panics as accidental events in the epigraph, also discusses the
problem of an “incipient panic” and the problems that incipient panics created for the Bank of England.

The idea that famous failures played a causal role in panics is related to the idea that there are “systemically important” banks. The idea is that there are certain banks whose failure can be safely ignored by central banks because they would be ignored by financial markets; but that there are other banks that because of their size and their interconnectedness with other financial institutions must be bailed out because ignoring them would ignite a panic.³ Hopefully, a study of the failures that ignited past panics will help identify the markers of “systemically important banks.” Unfortunately, as will become clear, our survey does not bode well for the project of identifying the markers of systemic importance. What seemed to matter the most is that these banks had many admirers before they failed. Conceivably, regulators could spot firms that were on the verge of failure while markets continued to admire them, but it is also possible that regulators will be taken in by the same markers of success that influenced the market. And as we will see, the order in which things happened was also important. A failure that might have been shrugged off if it had been first, might lead to a wave of pessimism if it followed other failures that already raised concerns about a liquidity crisis.

3. Twelve major financial panics

This paper exams the failures (or in two cases, suspensions of cash payments) that precipitated twelve major financial panics in the United States. The dates of the panics

³ I have used a variety of terms – caused, ignited, triggered, precipitated – merely to achieve some variation which congenial to the ear.
are shown in the first column of Table 1. The chronology was constructed by looking at the classic financial and general economic histories of the United States as well as more recent studies. I included panics that drew the attention of several writers, about a half dozen depending on the period covered. I put extra weight on economic history textbooks because it is well known that the authors of those books inevitably possess a broad yet nuanced understanding of American economic history.\(^4\) I excluded panics that were associated with wars, such as the panic of 1914, that appeared to be confined to the stock market, such as the rich man’s panic of 1903, or that were the result of monetary policy actions by the central bank, such as the severe contraction of 1920-21. The most notable events referred to frequently as panics that I excluded, and the reasons for doing so, are summarized in the table 2. I divided the panics into two categories as shown in column 2 of table 1. The A level panics are discussed in almost all financial and economic histories and left obvious imprints on time series such as the stock of money and real GDP. The B level panics were regional affairs that are sometimes omitted in U.S. financial histories and left imprints on the time series that are harder to see with the naked eye.

Recently, Andrew J. Jalil (2013) went back to the financial press and identified seven major banking panics and 20 non-major panics during the period 1825-1929. My list of major panics during this period agrees with his except that Jalil identifies a major panic in 1833-34 that I exclude. And I include only 2 of his 20 non-major banking crises.

The difference in coverage, however, is not as great as it first appears. As indicated above I excluded several war related crises and several severe contractions precipitated by monetary and fiscal policy. The latter consideration explains my exclusion of 1833-34. And Jalil includes a number of panics of restricted geographic impact. These include a panic in December 1905 that according to Jalil affected only Chicago, a panic in 1908 in New York City, a panic in 1920 in Boston, a panic in 1920-21 in North Dakota, and panics in 1927 and 1929 in Florida. Had I included them, I would have labeled them C level panics. It would be fruitful test of this paper's generalizations to see whether they hold in these additional cases.

4. Typically, there was a cluster of failures

The third column of Table 1 lists the failures that contemporary observers and financial historians have identified as the key failures in each panic. The failures are listed in chronological order. The failure listed next to the panic year is the one that occurred closest in time to the panic, earlier failures are listed below with the first failure at the bottom of the list. In two cases – 1857 and 1873 – there seems to have been only one important failure, although even these cases could be questioned since a few sources mention additional failures. Typically, however, there was a cluster of failures. This makes sense. An initial failure puts people on high alert; ready for fight or flight. A subsequent failure or failures then ignites a full blown panic. The first failure, after all, might mean that an individual firm had made a bad mistake: the prudent stance would be watchful waiting. Subsequent failures would prove that the problem was systemic: at some point prudence became “run for the hills.” One can view the process as one of
Bayesian revisions of the expectation of the probability that the financial system as a whole had become illiquid. The Panic of 1907 provides a good example. Several national banks came under pressure, and resort was had to Clearing House loan certificates, a form of privately issued emergency credit. These banks did not fail, but as Sprague (1910, 249) pointed out these difficulties “doubtless gave rise to a vague feeling of distrust.” Then the run on the Knickerbocker Trust unleashed a full blown panic. In some cases the cluster was small, two or three firms, but in a few cases the cluster was larger.

Typically, a cluster included firms from different parts of the country and/or different parts of the financial system. Again, this is makes sense. A failure in just one part of the country or one part of the financial system might be addressed by shifting funds to a safer region or type of financial institution. But once failures had leaped these boundaries the natural inference would be that wealth wasn’t safe in any kind of bank; only cash or government bonds would do. To reiterate, we can think of the process as Bayesian updating of the probability of an illiquid or bankrupt financial system. Initially, the probability of that the financial system is bankrupt appears to be extremely low. But as more information arrives the estimate of the probability that the system is bankrupt rises until wealtholders feel they must act to save their wealth.

The Panic of 1893 illustrates the crossing of institutional boundaries; there were failures of national banks, state banks, savings banks, and private banks. The Panic of 1893 started with a stock market crash in New York and a banking panic in Chicago. Frank Cyril James (1938, 580-591) provides a detailed description of the banking panic. On Monday, May 8, 1893 the Chemical National Bank of Chicago suspended and soon
went into receivership. Shortly thereafter the Capital National Bank of Indianapolis, which was closely associated with the Chemical National, and the Evanston National Bank, also went into receivership. The Chemical National was widely regarded as an unsound institution by Chicago bankers, many of the loans being notes of insiders and the Clearing House Committee refused to aid the bank. As things turned out, however, some of the bank’s depositors were protected. The Chemical National had won the right to have a branch at the Chicago World’s Fair (World’s Columbian Exposition). The branch had $100,000 in deposits, many from foreign exhibitors, and so a committee of wealthy Chicagoans was formed to guarantee the deposits. The managers of the Fair did “not desire an exhibition of a failed national bank among the interesting collection on the Midway Pleasance” (James 1938, 582). A few days later the Columbia National Bank and United States Loan and Trust Company with which it was intimately connected closed their doors. The Columbia National and the United States Loan and Trust were both controlled by Zimri Dwiggins who had created a financial house of cards. The base was the Trust Company which issued bonds the proceeds from which he used to purchase stock in country banks. When Dwiggins’ banks failed, the country banks went with them. Again, the Chicago Clearing House refused to aid the Bank. With banks in Chicago and rural Illinois and Indiana failing, the panic seemed to be well underway.

The public, however, retained some confidence in the Chicago banks, despite the failures of the Chemical National, Evanston National, and Columbia National. But

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5 The Chemical National had paid $20,000 for the right to the branch. Having a branch required special permission from Congress because Illinois was a unit banking state. National banks were required to follow state law on this issue.
then on Saturday June 3, Herman Schaffner and company broke. The firm initially had specialized in commercial paper, but had been drawn into financing local businesses including speculators in street-railway stocks and real estate developers (Judy 2013). Schaffner hired a boat and rowed into Lake Michigan from which his body was later recovered. Following Schaffner’s failure a near panic, concentrated among the savings banks, took hold. It is said that 35,000 depositors in the Illinois Trust and Savings Bank presented themselves.

For a time the banks in Chicago once more seemed to be on the mend. But then panic took hold once more. On Monday July 17, The Missouri National Bank failed, bringing with it a string of failures, and on July 25, the Wisconsin Marine and Fire Insurance Company Bank of Milwaukee failed. The latter failure proved to be the precipitant for the crisis.

The Panic of 2008 was similar. In short order we saw national banks, investment banks, government sponsored lenders, and a giant insurance company under threat. The nature of the cluster of failures, and that in turn determines whether the panic will be of limited scope or will involve the financial system as a whole.

The Panics of 1837 and 1930 illustrate the crossing of both institutional and regional boundaries. The important failures in 1837 were in New Orleans (a cotton factor) and New York (a bill broker); in 1930 the important failures were in Nashville (an investment bank) and New York (a state chartered commercial bank). An economic contraction had begun in August 1929 and had been accelerated by the stock market crash. But the failures at the end of 1930 appear to have added a financial panic to a severe contraction.
5. Typically, they were shadow banks

Unregulated or lightly regulated financial institutions, what today we would call shadow banks – or perhaps following Michener and Richardson (2013) with reference to the lightly regulated state chartered commercial banks, “shadowy banks” – have always been an important part of the financial system. The classic descriptions of the private banking sector in the nineteenth century are Fritz Redlich (1968, part II, chapter xiv, 60-84) and Richard Sylla (1976). Column 4 of Table 1 shows the regulatory status of the firms that started the financial panics. The cells are shaded to represent the degree of regulation. Through 1930 the shading works as follows: Banks that were regulated at the federal level are unshaded, banks that were regulated at the state level are filled with a light shade of gray, and banks that were unregulated are filled with a darker shade of gray. For the 2008 crisis I followed conventional definitions. Lehman Brothers is shaded to depict it as a shadow bank even though it was nominally regulated by the Securities and Exchange Commission.

The ink tells the story: shadow banks played a prominent role in precipitating almost all of the panics. Oddly, the first major banking panic in the United States in 1819 was the only one where federally regulated institutions played the leading role, and so I have left these institutions unshaded in column 4 of table 1. There is a sense, however, in which the western and southern branches of the Second Bank behaved much like shadow banks. The West had been caught up in real estate speculation. Much of the land was still held by the federal government, but was being purchased rapidly from federal land offices. Many of the mortgages were provided by state chartered banks and
private banks. But the branches of the Second Bank seem to have made personal loans that facilitated the real estate boom. The Second Bank had initially adopted the policy that notes issued by any individual branch should be redeemed at every other branch. This policy, moreover, was not accompanied by any restrictions on the total amount of notes that any individual branch could issue. This allowed the western branches – Cincinnati, Chillicothe, Lexington, and Pittsburgh – to make large loans in a currency that other branches were responsible for redeeming. There were also problems at the Baltimore branch with speculation in stock of the Second Bank and insider loans. In 1818, for this and other reasons, the Second Bank found itself in danger of running short of specie. In July it began a program of reducing its loan portfolio and reigning in the western and southern branches.\(^6\) This was the spark that precipitated the suspension of specie payments in the West. In November the federal Land Office added to the pressure on the western banks by ruling that federal land could be sold only for specie or notes issued by the Second Bank; not for notes issued by local banks. Like the more famous “specie circular” issued by Andrew Jackson, this policy helped end the boom in land sales. Almost immediately the three chartered banks in Cincinnati and the Bank of the State of Kentucky suspended (Huntington 1915, 292).\(^7\) A similar story was playing out in western Pennsylvania where the Pittsburgh branch was taking actions to

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\(^6\) According to the statistics for the Bank as a whole in Historical Statistics, Table Cj189-200, the Bank had total assets of $57 million in 1818 which had fallen to $47 million by 1820. The reserve ratio (specie to short-term liabilities) had increased from .11 to .28 and leverage (short-term liabilities to capital) had fallen from .6 to .4. No real estate is recorded on the official balance sheet.

\(^7\) There was also a private bank in Cincinnati, John H. Piatt & Co., but it is not clear whether it suspended with the others. In the fall of 1819 some merchants in Cincinnati announced that they would accept only Piatt’s notes. But in February 1820 twenty-one leading merchants announced that they would no longer accept the notes. Piatt then gave up banking, returned to his grocery business, and redeemed most of his notes with merchandise (Rowe 1912, 175-78).
restrict credit to western banks (Blackson 1979, 343-66). The Cincinnati branch of the Second Bank was closed in October 1820, a participant in and victim of the crisis (Caterall 1903, 79-80). All of the other western banks besides the branches of the Second Bank were small state chartered or private banks. They were shadow banks by my definition, but they did not cause the crisis.

A Cotton factor in New Orleans and a bill broker in New York, both shadow banks, were the triggers for the Panic of 1837. The United States Bank of Pennsylvania, which superseded the Second Bank of the United States, became an investment bank and hedge fund, which suspended in October 1839 triggering the Panic of 1839. The United States Bank of Pennsylvania was preceded in death by the Morris Canal and Banking Company, a state chartered institution. The New York office of a firm chartered by Ohio was the problem in 1857. The failure of an unregulated investment bank, Jay Cooke and Company, was the trigger for the panic of 1873. An unregulated brokerage, today it might be called a hedge fund, Grant & Ward, triggered the panic of 1884. Unregulated brokerages were part of the cluster that produced the panic of 1890. The failure of national banks figured prominently in the run-up to the Panic of 1893, but so did the failure of unregulated private banks. Again in 1907 troubles at national banks were important, but suspension of cash payments by a lightly regulated trust company triggered the panic.

Why were shadow banks so important in the United States? Shadow banking was encouraged by several factors. One was that state chartering of commercial banks produced a geographically fragmented banking system. Branching across state lines was prohibited through most of America’s history. Commercial banks, therefore, were
often small, geographically limited affairs that could not provide capital for industrial firms. The stock and bond markets expanded to fill the gap, and these markets required brokerages and investment banks which could morph into shadow banks. Another factor making for shadow banking was reliance on the real bills doctrine as a basis for regulating chartered banks -- reflected for example in prohibitions against real estate lending -- that created gap in the financial system for private institutions to fill. Perhaps a legal ethos in the United States that held that what was not forbidden was permitted played a role as well.

6. Typically, they were “great firms which everybody trusted”

Bagehot, as the epigraph shows, thought that a panic might be started by “the sudden failure of a great firm which everybody trusted.” The failure of a firm that has a questionable reputation is unlikely to cause a flight to safety: Its failure was always a possibility. A failure of a small, specialized firm might cause a flight from a particular sector of the financial system. Perhaps savings banks are not safe or southern banks are not safe. But the sudden failure of a large firm with a sterling reputation may cause, especially if it follows some previous anxiety provoking failures, a widespread reevaluation of the integrity of the financial system as a whole. If X, which everyone said was beyond reproach, was rotten to the core, then how can I trust any firm: only government bonds or cash are safe. Markets, to put it somewhat differently, usually agree on a narrative that frames a particular failure. The failure of Drexel, Burnham, and Lambert in 1990 did not cause a panic because it was framed as a failure that might

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8 This point is developed in detail by Calomiris and Haber (2014).
have been expected. It was, after all, a dodgy firm run by the junk bond king Michael Milken. The failure of Lehman Brothers, on the other hand, was seen in a very different light because prior to the financial crisis it was regarded as one of the best securities dealers on Wall Street.

Bagehot was thinking, I suspect, mainly about the British panic of 1866, the last British panic before *Lombard Street* (1873). This panic was triggered by the failure of Overend, Gurney, & Co. Before the crisis Overend, Gurney stood, according to Bagehot, “next to the Bank of England in the City of London” and was “the most trusted private firm in England” (Bagehot 1924 [1873], 17, 175). The banking system in Bagehot’s day was evolving: joint stock banks were supplanting private banks. But for Bagehot that didn’t change the possibility that the failure of a trusted firm could start a panic.⁹

Now, no cause is more capable of producing a panic, perhaps none is so capable, as the failure of a first-rate joint stock bank in London. Such an event would have something like the effect of the failure of Overend Gurney & Co.; scarcely any event would have an equal effect (Bagehot 1924 [1873], 251).

The American experience provides abundant additional evidence that it is the failure of large trusted firms that spark panics. To be sure, we have to rely mainly on the testimony of contemporary observers. Conceivably, there was a tendency to claim that a firm that failed was highly regarded in order to stress the extent of the calamity: “Oh how the mighty have fallen.” However, the observations of many contemporary

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⁹Overend, Gurney had invested heavily in railways, and other long-term investments. When discussing the losses of Overend Gurney, Bagehot (1924 [1873], 18) wrote that “these losses were made in a manner so reckless and so foolish that one would think a child who had lent money in the City of London would have lent it better.”
observers and historians speaking about panics that occurred in very different historical periods suggest that a high reputation was more than a useful literary trope.

The Panic of 1837 was triggered by the failures of Hermann, Briggs, & Co. a cotton factor in New Orleans and J.L. & S. Josephs in New York. Both firms had excellent reputations before they went under (Lepler 2013, *passim*). The Josephs were known to be clients of the Rothschilds and that must have been viewed as a marker of distinction. The New York Herald (March 18, 1837, column A), although perhaps an ally, positively gushed about the Josephs after their failure.

The Josephs and their partners were the favorites of the merchants of New York – their liberality – their aptitude for business – their gentlemanly behavior and their honorable conduct – their frank, unassuming manners – have made for them, in their days of prosperity, troops of friends.

The panic of 1839 was triggered by suspension of specie payments by the United States Bank of Pennsylvania in October 1839. The Bank continued to struggle, but failed in 1841 adding to the depth of the ongoing depression. The Bank was headed by Nicholas Biddle, next to Alexander Hamilton the most renowned financier in America before the Civil War. Biddle had lost the great "Bank War" with the immensely popular Andrew Jackson, but Biddle had come close to winning. His proposal to renew the charter of the Second Bank of the United States passed both houses of Congress only to be vetoed by Jackson. Biddle’s decision to seek and get a new charter from the state of Pennsylvania and to continue his dominant position in the nation’s financial system was widely applauded.

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10 Samuel Hermann, however, had tried to ally himself with the Rothschilds, based on the recommendation of the Josephs, but was not accepted.
The first headline in the *New York Times* to use the word panic in 1854 occurred in October (*New York Times*, October 23, 1854, p. 3, reprinting a story from the Cincinnati Gazette). Several failures occurred almost simultaneously. The Kentucky Trust Company of Covington failed, and that led to a run on the Ohio Savings Bank in Cincinnati which had the same president. A private bank, P.B. Manchester also failed, and Ellis and Sturges, another private bank suspended. In November Ellis and Sturges and two other private banks closed. The run on Ellis & Sturges was sparked by a rumor that Ellis had died, but the revelation that he was simply very very ill did not save the bank. According to Huntington (1915, 445), the private banks in Cincinnati that closed in 1854 were “well thought of houses.”

The Ohio Life Insurance and Trust Company, the trigger for the much larger *Panic of 1857*, was also highly regarded before it collapsed. Here is the description of the bank by Hugh McCulloch a well-known Indiana banker, first Comptroller of the Currency, and a U.S. Treasury Secretary under three presidents.

The Ohio Life and Trust Company had enjoyed the highest credit. Its home business had been managed in the most careful manner. It had been distinguished for its conservatism. Its directors, who were among its largest stockholders, met every day to pass upon the offering for discount. Not a bill or note, no matter how small, was discounted without their approval (McCulloch 1888, 133).

Jay Cooke and Company which failed on September 18, 1873, sparking the *Panic of 1873*, enjoyed, if anything, an even higher reputation before its fall. At the time Cooke’s company failed. Cooke was the most trusted living American financier; surely the only one who enjoyed as much prestige on Main Street as on Wall Street. Cooke had helped finance the Civil War by establishing a network of agents throughout the North to sell the bonds to middleclass investors. After the war these investors looked to
Cooke and his agents for financial advice and to his bank as a safe place to put their savings. When Cooke’s firm closed its doors, the shock was palpable.

Like a thunderclap in a clear sky” said the Philadelphia Press. No one could have been more surprised said the Philadelphia Inquirer, if snow had fallen amid the sunshine of a summer noon” (Oberholtzer 1907, 423).

The panic of 1884 began with the failure of Grant & Ward. This is a case where the reputation depended on the financial sophistication of the investor. Ferdinand Ward, Grant’s partner, was known to be a speculator, but seems to have had a good reputation, at least in some quarters, in the early days of the firm. He was known, according to Sobel (1999, 219), as one of the “young Napoleons of Wall Street.” Ulysses Grant, despite some scandals during his Presidential administrations, was still one of America’s most beloved citizens, at least outside the South. Ward, however, was in over his head. He raised funds by promising high returns and made good with Ponzi financing. Shortly before the failure of the firm word of Ward’s shenanigans began to spread among the financial cognoscenti. When Grant went to William Vanderbilt for $150,000 in a last ditch effort to save the firm, Vanderbilt, according to Sobel (1999, 215), told Grant:

...as for Grant & Ward – what I have heard of that firm would not justify me in lending it a dime. But I’ll lend you a hundred and fifty thousand dollars personally, to you – General Grant – I’m making this loan, and not to the firm.

Vanderbilt's understanding of the failure soon became general: a crook, Ward, had taken advantage of a great and honest man, Grant. The effects of the failure were multiplied by the suspension by the Metropolitan National Bank a week later. The President of the Metropolitan, George Seney, who according to Sobel (1999, 219), was “a well-known patron of the arts,” and was “thought beyond suspicion” was using the
bank’s money to speculate in railroad stocks. The Clearing House issued loan certificates for the Metropolitan and it reopened in a few days. The prompt issue of Clearing House certificates quelled the panic before it could do major economic harm (Sprague 1910, 111-15; Wicker 2000, 40). The rapid framing of the problem as one caused by a few crooks, some of whom had fled and were being sought by the police, could help account for the mildness of the panic.

**The Panic of 1890**, like the Panic of 1884, was mild. Sprague (1910) refers to it as a “financial stringency” rather than a panic; Wicker (2000) refers to it as “banking unrest.” Like the Panic of 1837 it was strongly shaped by events abroad. Indeed, Sprague (1910, 128) thought that there would have been no panic in the United States if it had not been for the Baring Crisis in Britain. There were, however, important failures in the United States before news of the Baring crisis crossed the Atlantic. The stock market panic, which led to the banking difficulties, was triggered, according to Wicker (2000, 45) by the failure of “the large and well respected brokerage firm of Decker Howell and Co.”

In the panic of 1893, as shown in Table 1, there was a large cluster of failures. The coup de grâce was the failure of the Wisconsin Marine and Fire Insurance Bank in Milwaukee. The Wisconsin Marine was founded in 1839 by George Smith, a young Scottish immigrant. The charter permitted Smith to write insurance and do some banking. He had no authority to issue bank notes, but he did so anyway. He issued “certificates of deposit” in convenient denominations payable to bearer – effectively bank notes -- that circulated widely in the Midwest (Farwell 1905, Smith 1966). Smith’s early years in the Midwest have been celebrated by a number of writers for whom
“George Smith’s money,” as it came to be known, was a wonderful example of how an unregulated bank can supply currency successfully. The role of the bank in the crisis of 1893, however, has received less attention.

George Smith retired at a relatively young age and returned to Britain. His deputy, Alexander Mitchell, a fellow Scot, continued to run the bank successfully for many years. Later, Mitchell’s son, U.S. senator John L. Mitchell, became president. Under his leadership the Bank abandoned its prudent ways. It invested heavily in the debt of Ferdinand Schlesinger, a “plunger” in the vocabulary of the time, who had been borrowing heavily from several sources to finance an ambitious plan to dominate Great Lakes iron ore production. The bank also lent heavily to insiders including Senator Mitchell. To outsiders, however, the bank’s suspension was a shock. According to Cyril James (1938, 593) at the time the Wisconsin Marine and Fire Insurance Bank suspended it had been “a legendary example of financial soundness throughout the northwest for more than half a century.” To describe the height of the crisis in 1893 Sprague turned to an extract from the Commercial and Financial Chronicle, as he did with other financial crises. The Chronicle told the story this way.

Monday and Tuesday an unusual number of failures among our banks and private firms were reported in various parts of the country, but especially in the West, some of them being concerns of long standing and high repute (Sprague 1910, 176).

The Chronicle didn’t say exactly what institutions it had in mind, but the timing points to the Wisconsin Marine and Fire Insurance Company Bank.¹¹

¹¹ In this case, however, there was redemption. The shareholders were personally liable under an 1880 law and Senator Mitchell, the largest shareholder, lost heavily (New York Times, November 16, 1893, 4), but the firm was reorganized and reopened. Years later the Wisconsin Marine and Fire was merged with another pioneer bank to form the
The reputation of the Knickerbocker Trust, and of its President Charles T. Barney, was excellent prior to the run on it that sparked the Panic of 1907, (Bruner and Carr 2007, chapter 9, passim). It had grown rapidly and become the third largest trust in New York. In 1904 it had completed an impressive new headquarters designed by the famous architect Stanford White.

The reputation of Caldwell and Company, which failed the in November 1930 was also excellent. According to John McFerrin (1969, 119), the historian of Caldwell and Company, by the late 1920s the bank “had so increased its size and built up such prestige in financial circles that it was referred to as the ‘Morgan of the South.’” The reputation of the Bank of United States which failed in December 1930 – the failure that Friedman and Schwartz stressed in their analysis of the depression – was mixed. But as Friedman and Schwartz noted (1963, 309-11) it was the largest failure in U.S. banking history up to that point ($200 million in deposits) and its name “had led many at home and abroad to regard it somehow as an official bank….”

The reputation of the Bank of United States at its failure in December 1930 probably varied among different sectors of the public. As Friedman and Schwartz (1963, 309-11) suggested, the fact it was the largest failure in U.S. history to that point, that it’s name suggested a special relationship to the government, and that it was a bank in New York City, the nation’s financial center may have led unsophisticated investors to think that a fundamental pillar of the financial system had collapsed. On the other hand, more knowledgeable investors may have recognized that it was not a Wall Street Bank, not a

Marine National Exchange Bank of Milwaukee (Smith 1966, 177-8). More acquisitions followed, and today George Smith’s Bank can be found in the DNA of JPMorgan Chase & Co.
national bank, but rather a state chartered bank that had expanded rapidly in the late 1920s, and one that had indulged in speculative real estate ventures. There was a debate at the time about whether the bank should be bailed out. In the end it was not, the consensus being that its failure would have only local effects; in today’s language, it was not “systemically important.”

The Bank of United States dealt, at least when it began, mainly with Jewish customers. In an article in *Business Week* and in his TV program “Free to Choose,” Friedman suggested that anti-Semitism played a role in the decision not to bail out the Bank of the United States.¹² Friedman’s contentions about the role of anti-Semitism were vigorously challenged and vigorously defended (Peter Temin 1976, 90-93, Joseph Lucia 1985, Friedman and Schwartz 1986, Anthony Patrick O’Brien1992, and Paul B. Trescott 1992). In this respect there is a strong parallel with the Panic of 1837. In 1837 both firms that failed precipitating the crisis were led by German Jews. It does not seem that this caused much of a problem before they failed, but anti-Semitism doses seem to have influenced the way some people thought about the failures afterwards (Lepler 2007, *passim*).

In any case, whether the members of the Clearing House thought that the failure of the Bank of United States could be ignored because only local businesses and depositors would be affected or because only local Jewish businesses and Jewish depositors would be affected, and whether they were concerned about real estate investments or Jewish real estate investments, it is clear that the failure of the Bank of the United States was viewed as a failure that would not start a panic. The mistake was

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¹² Friedman and Friedman (1980) is the volume based on the TV series. The episodes are available on youtube.
failing to recognize that an institution that was considered unimportant by the financial cognoscenti might be considered very important by the general public, especially in the context of unrelenting news about deteriorating economic and financial conditions.

One could argue about which of these two failures, Caldwell and Company or Bank of United States, was the “real” trigger for the panic. But the two failures (and a contemporaneous wave of smaller failures) probably reinforced one another. The implication of having two large financial institutions in different parts of the country failing one after the other along with numerous failures of smaller banks was that your money really wasn’t safe in any bank. Again, this is reminiscent of the twin failures in 1837, one in New Orleans and one in New York. The banks that failed in 1930 evidently failed for the same balance-sheet reasons that banks had failed in the late 1920s (White 1984). An extensive debate has proceeded on whether the failures in the 1930s were the result of illiquidity or insolvency. A recent paper by Bordo and Landon Lane (2010) argues that the problem was mainly illiquidity and surveys the earlier literature.

In any case, it is clear that doubts about the safety of the banking system took a turn for the worse after the failures of Caldwell and Company and Bank of United States. Friedman and Schwartz (1963, 311) looked at currency held by the public and bank reserves which both show upward trends starting at the end of 1930. A similar piece of evidence is shown in Figure 2 which plots postal savings monthly from January 1929 to December 1932. It is a classic “hockey stick” with the inflexion point in November 1930.

The crisis of 2008 may appear to be an exception to the rule that it is the failure of trusted firms that start panics. Lehman Brothers’ stock had been falling for some
months before it filed for bankruptcy protection on September 15, 2008. But dial the clock back to 2007. In March *Fortune Magazine* released its annual list of “America’s Most Admired Companies” based on surveys of corporate executives and Wall Street analysts. Lehman Brothers Holdings (see table 3) was ranked number one among securities firms in 2007 ahead of Goldman Sachs, Morgan Stanley, Merrill Lynch, etc. Which firm was number two? Bear Stearns! True, by March 2008 the two had fallen a bit. Lehman Brothers was now ranked third among securities firms and Bear Stearns, which was only two months away from its government aided acquisition by JPMorgan, was ranked eighth. Other firms that would play a role in the panic also did well in the 2007 rankings. American International Group ranked seventh in the property and casualty group ahead of State Farm and Nationwide. Countrywide Financial ranked third among Mortgage Service companies, IndyMac Bancorp ranked seventh, and Freddie Mac ranked ninth.\(^{13}\) Clearly the fall from grace of Lehman Brothers must have been unsettling, but its failure did not come as a total surprise. Another factor, as suggested by Anna Schwartz and others, may have added to the shock of Lehman’s failure: markets were surprised because they were expecting a bailout along the lines of the Federal Reserve assisted purchase of Bear Stearns (Ryssdal 2009; Sorkin 2009, epilogue, Kindle locations 10281-10335).

### 7. Typically, they had put all their eggs in one (long-term) basket

The institutions whose failure precipitated panics had violated two cardinal rules of banking: (1) they made long-term investments leveraging their investments with bank

\(^{13}\) Fannie Mae did not make the top 10.
notes, short-term deposits or deposit-like liabilities, creating a severe maturity
mismatch, and (2) they had put all their eggs in one basket. To some extent the more
highly regulated banks avoided the first problem because they were forced to adhere to
the “real bills doctrine.” The idea, which goes back to Adam Smith, is that banks should
invest solely in short-term self-liquidating loans, originating in commodity transactions:
“real bills.” The real bills doctrine, as economists have long recognized, cannot provide
a useful rule for the conduct of monetary policy, but it does provide a useful rule for an
individual bank that wants to avoid trouble. An important corollary of real bills is that a
bank should avoid real estate. Here is how Adam Smith put it in the *Wealth of Nations*.

…of the capital which the person who undertakes to improve land employs in
clearing draining, enclosing, manuring, and ploughing waste and uncultivated
fields, in building farm-houses with all their necessary appendages of stables,
granaries, etc. … such expenses, even when laid out with the greatest prudence
and judgment, very seldom return to the undertaker till after a period of many
years, a period far too distant to suit the conveniency of a bank (Smith, *Wealth of
Nations* II.ii.64).

The second point, don’t put all your eggs in one basket, sounds like
grandmother’s economics. Surely, one would think, the great Lords of Finance must
have been making more sophisticated mistakes. But a reading of the literature on the
famous failures suggests that this is exactly what they did. The areas in which they
invested are shown in the last column of Table 1.

Real estate, the problem in 2008, featured prominently in the *Panic of 1819*. The
western banks that failed, sparking the panic, had invested heavily in real estate,
typically giving farmers mortgages so that they could buy land from the federal
government. Many of the subsequent nineteenth century failures that precipitated
panics started with investments in railroads. But investments in railroads in the nineteenth century were investments in real estate at one remove.

The crucial failure in 1837 was J.L. and S. Joseph. Rousseau (2002, 480) notes that although the failure of Hermann, Briggs and Company in New Orleans was a blow to J.L. and S. Joseph because the Josephs had lent heavily to Hermann, Briggs, real estate and shares in the Lafayette Bank may have generated larger losses.¹⁴

The trigger for the **Panic of 1839** was the suspension of specie payments by the United States Bank of Pennsylvania in October 1839. The Bank’s problems can be traced in part to Nicholas Biddle’s cotton speculations. Biddle apparently believed that he could singlehandedly restore prosperity to the nation as a whole while making speculative profits for his bank if he could raise the price of cotton (Hammond 1948, Chapter 16, *passim*). When that project failed, the Bank was forced to suspend. Part of the bank’s early difficulties, however, and much of its eventual failure can be traced to its acquisition of a large portfolio of bank stocks and state government bonds (Wallis 2001). The latter, which had been issued to finance internal improvements mainly canals, deteriorated sharply in value when many of the projects were abandoned. Although the bank was not investing directly in real estate, it was doing so indirectly, and thus violating Smith’s classic stricture on investing in real estate. The exact details of the financial instruments that the United States Bank of Pennsylvania relied on were different from the instruments relied on by the investment banks that got into trouble in 2008. The United States Bank of Pennsylvania levered its capital by issuing “post notes”

¹⁴ Rousseau, however, puts less weight than traditional accounts on the failure of J.L. and S. Joseph in precipitating the crisis in part because the bank runs began about six weeks later.
rather than repos; it invested in state government bonds, rather than in privately issued securities backed by real estate mortgages. But viewed from a broader perspective, the stories are similar. In both cases an investment bank came to grief because it relied on short-duration financing and invested in assets that held the illusion that they were highly liquid securities, but rested on unrealistic hopes for real estate appreciation.

The failure of the Morris Canal and Banking Company, as noted above, preceded the failure of the United States Bank of Pennsylvania. Its name tells us its purpose: to help finance canals in New Jersey. Obviously, the bank by construction was intended to violate Smith’s stricture on real estate. The first report for the Morris Canal and Banking Company in Weber (2014) is for March 1836 when the bank is shown with a capital of $1,000,000 and total assets of $1.8 million. In February 1837 total assets reached a peak of $8.9 million, by far the largest total for any bank in New Jersey before the Civil War. The main asset categories were stocks (bonds) $1.0 million, real estate $2.9 million, and loans and discounts of $3.7 million. The leverage ratio at that time was 7.7, although it is possible that not all of the capital had been paid in. The last balance sheet for February 1838 shows total assets of $5.9 million, with the largest subcategories being loans and discounts $2.7 million and state bonds $2.1 million.

The Panic of 1854, like the Panic of 1819, was most severe in the West. Cincinnati was the epicenter. The year 1853 was marked by railway construction in Ohio that “turned into a mania” (Berry 1943, 513). The railroads were unable to raise the cash they needed by borrowing in the eastern United States or Europe, so they turned to local banks. These were, according to Berry, private banks that lent to the railroads who offered equity as collateral. It was a classic case of violating real bills. Interest rates
rose substantially in the latter part of 1853 in response to the growing desperation of the railroads for funds. And then the western financial system was hit by a series of bank failures. On December 1, 1854, according to Berry (1943, 514) “the merchants and manufacturers found no bank accommodations whatsoever.” And according to Smith and Cole (1935, 128) the price of Cincinnati exchange in New York went from a normal discount of 1 - 1½ percent to 2¼ - 2½ in the autumn to 3½ – 3¾ in December. There were also financial troubles in New York (Ó Gráda and White 2003). Berry (1943, 516) describes the situation in the latter half of 1854 as one in which “trouble shot back and forth between New York and the Interior.” The economy recovered in 1855 and 1856, but then was hit by a new and more severe crisis,

The Ohio Life Insurance and Trust Company, the failure that precipitated the panic of 1857, had invested heavily – one is tempted to say foolishly -- in local railroads. The bankruptcy proceedings revealed that 73% of its surviving assets consisted of bonds and shares issued by railroads. Most were issued by railroads in Ohio and Indiana, and several of the railroads were closely tied to one another (Riddough and Thompson 2012, 35; Spiegelman 1948).15

The close relationship between real estate booms and banking panics in the pre-Civil War era is illustrated in figure 1 which plots receipts from the sales of public lands from 1806 to 1860. The series has three sharp peaks each associated with one or two financial panics. A plot of the price of slaves would reveal a similar association except that the price of slaves did not fall after the panic of 1857. That panic was less severe in

15 Riddough and Thompson (2012) explicitly refer to the Ohio Life as a shadow bank and draw a parallel between the Ohio Life and the firms that failed and precipitated the panic of 2008.
the South, an additional factor suggesting to southerners that they would be better off as a separate country.

Jay Cooke and Company, the trigger for the panic of 1873, had also invested heavily in railroads, or rather one railroad, the Northern Pacific. The bonds that Cooke took as collateral for his loans to the railroad and its feeder lines were secured by land grants that were expected to rise in value as the land was settled. One of the main precipitants of the panic of 1884 was the failure of Grant and Ward. Ferdinand Ward had made bad bets on Union Pacific and Western Union.

Decker, Howell, and Company, the brokerage whose failure contributed to the panic of 1890 and the Boston brokerage of C. M. Whitney which also failed had been investing heavily in railroad securities.

The failure of the Wisconsin Marine and Fire Insurance Bank was an important precipitant of the panic of 1893. When it closed the Wall Street Journal (July 29, 1893, 4) reprinted an extract from a market newsletter that began as follows.

This has been the worst week the writer has ever known in Wall Street and that by a long way. The failure of the Wisconsin Marine & Fire Insurance Bank of Milwaukee was of course a shock to Wall Street. It was not only that the Bank was an old one in high credit, but that the big owners has a lot of stock of Northwest and St. Paul which had been coming on the market to provide funds. But its troubles also stemmed from loans to Ferdinand Schlesinger who was trying to dominate Great Lakes iron ore production and personal loans to Senator John L. Mitchell, the son of the founder and the president of the bank.

The Panic of 1907 was precipitated by the suspension of the Knickerbocker Trust on October 22, 1907. Sprague's (1910, 246-56) account of the panic is important because it was fresh in his mind when he began his classic history of financial panics.
According to Sprague (1910, 246) the precipitating event was a “copper gamble,” a failed attempt to corner the copper market. F. Augustus Heinze who was behind the copper speculations had gained control of the Mercantile National Bank. This led to withdrawals by depositors concerned about Heinze’s solvency. The bank requested assistance from the New York Clearing House which was granted on the condition that Heinze and his board resign. The Bank was able to open under these conditions, but was closed in January 1908. In the wake of the troubles at the Mercantile National, the Clearing House was called upon to aid a number of other banks that had suffered withdrawals because of their relationships with Heinze. The aid provided by the Clearing House was successful. There was no panic, but Sprague (1910, 249) adds that these difficulties “doubtless gave rise to a vague feeling of distrust.”

Attention then turned to the Knickerbocker Trust, the third largest Trust in New York. The Knickerbocker, like other Trusts, did a banking business under a state charter, and competed aggressively with the national banks in New York. The trusts were not allowed to issue bank notes, but in general they were less regulated than the national banks. Some underwrote security issues, but they also wrote mortgages and invested directly in real estate, a field where the participation of National banks was limited. The problem for the Knickerbocker was the ties of its President, Charles T. Barney to Charles W. Morse, a financier in turn tied to Heinze and the latter’s attempt to corner the copper market. On Monday October 21, Barney was forced out at a directors meeting closely watched by J.P. Morgan (Tallman and Moen 1995; Washington Post, October 22, 1907, 3). About the same time one of the New York national banks announced that it would not clear for the Knickerbocker. A heavy run which forced the
Knickerbocker to suspend came on Tuesday. From there the panic spread rapidly, although the heaviest damage was done to the Trust Companies (Moen and Tallman 2000). The Knickerbocker was able to resume in March 1908.

Caldwell and Company, whose failure in November 1930, sparked runs in the South was an investment bank that got into trouble through classic violations of the real bills doctrine. It was heavily leveraged: On June 30, 1926 capital was 10.1 percent of total assets; by the end of 1929 it was 4.7 percent. To finance its operations it relied heavily on deposits, particularly from municipalities made as part of deals for help in marketing their bonds, and deposits from Caldwell controlled companies. The largest category of its assets included common stocks of the companies it controlled. These would not have been liquid even in the best of times because controlling interests in unlisted regional firms could not be disposed of on short notice (McFerrin 1969, 119-20).

The story of the failure of the Bank of United States in 1930 is reminiscent of the failure of the Wisconsin Marine and Fire Insurance Company Bank in 1893. The Bank of United States was founded in 1913 by Joseph S. Marcus on New York’s famous Lower East Side, Under Joseph S. Marcus it had done a conventional banking business. But under his son, Bernard K. Marcus, who became president in 1927, it expanded rapidly through mergers and acquisitions establishing branches throughout the city, and began an aggressive investment program. Many of these investments were made by affiliates – including the Bankus Corporation (Bank plus Marcus?) – set up to evade legal restrictions on mortgage lending. According to Peter Temin (1976, 92) most of the bank’s impaired loans were the result of “direct or indirect claims on real estate.” I won’t
restate here the reasons for the failures that sparked the Panic of 2008, but it should be clear that real estate speculation and spectacular failures were not a new phenomena.

8. Conclusions

Reinhart and Rogoff (2009) showed that most financial crises share important common features and Gary Gorton (2010) showed more specifically that the Panic of 2008 is strongly reminiscent of nineteenth century U.S. banking panics. This survey reinforces their point. The failures that ignited America’s panics, from the Panic of 1819 to the Panic of 1930, were similar to the failures that ignited the most recent crisis. Typically, panics were sparked by a cluster of failures that included firms from different parts of the country and different parts of the financial system. Shadow banks played a prominent role. The firms that failed had excellent reputations at the time they failed. But they had made large bets on real estate, railroads, or mines that turned out badly. The failure of these famous firms demoralized financial markets and produced panics. Financial markets were already in trouble when the major failures occurred, but these shocking failures made things worse.

Why so often was it the shadow banks that were the cause of havoc? In part, it was because unregulated or lightly regulated shadow banks could decide to go in for a risky strategy of high leverage and concentration on a small range of long-term assets. More fundamentally, the fragmentation of the American commercial banking system meant that American industrialists had to turn to a largely unregulated network of stock and bond markets, investment banks, and private investors for capital. Fragmentation of American commercial bank regulation goes back to the fundamental constitutional
conflict over state versus federal power, and was reinforced at times by Populist
opposition to control of banking by Wall Street (Calomiris and Haber 2014). The result
was an abundant supply of capital to American industry, but an environment in which
shadow banks could thrive.

Why, given the high frequency of panics in the nineteenth and early twentieth
centuries did we go so long without a crisis after the banking panic of the early 1930s?
One factor that has been cited repeatedly, and undoubtedly played a role, was the
increased regulation of banking that came with the New Deal. Deposit insurance,
importantly, mitigated the tendency of people to run to their bank and demand cash at
the first sign of trouble. But this survey suggests that there was another important factor:
the presence after World War II of a central bank that was able (in part because of the
abandonment of the gold standard) and willing (in part because it had learned the costs
of inaction during the Great Depression) to act as lender of last resort. The United
States had two central banks in the 19th century and during the time they were in
operation the United States was able, for the most part, to avoid financial crises. The
exceptions were the panic of 1819 and the panic (or financial stringency) of 1833-34.
Both panics seem to have begun with contractionary policies adopted by the Bank
itself.16 The First and Second Banks, however, faced considerable opposition. State
chartered banks and the governments that chartered them were jealous of their federal
competitor. Revelations about corruption hurt the Banks. And the North-South divide –
Southerners did not want a central bank headquartered in a Northern city —combined to

16 On 1833-1834 see Meerman (1963).
undermine support for the First and Second Banks. There ensued a long period without a central bank (1837-1913) marked by frequent banking panics.

The creation of the Federal Reserve in 1913 produced an institution with the power to act as lender of last resort. For a number of reasons it did not act in that capacity during the 1930s. The story was different, however, after World War II. There were a number of events in the postwar period – for example, the failures of Continental Illinois in 1984 and Long-Term Capital Management in 1998 – that prior to 1945 might well have precipitated a financial crisis, but these events were prevented from doing so by the timely intervention of the Federal Reserve. In 2008 the Federal Reserve almost pulled off another save, but the decision to let Lehman Brothers go provoked an old school financial panic. Recent financial legislation hopes to prevent a recurrence by identifying “systemically important” financial institutions. But the history U.S. financial panics suggest that this will be a difficult task.
Figure 2

Receipts from the sale of public lands and financial panics before the Civil War.

Figure 1
Deposits in the Postal Savings System, Monthly 1929-32.
Sources: Friedman and Schwartz (1970, 24-26).
Table 1. The failures that ignited America’s most important financial crises.

<table>
<thead>
<tr>
<th>Year of Panic</th>
<th>Level of Panic</th>
<th>Name and location</th>
<th>Type of institution</th>
<th>Excessive investments in …</th>
<th>Reputation prior to failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1819 A</td>
<td>A</td>
<td>Western and southern branches of the Second Bank of the United States</td>
<td>Federal charter</td>
<td>Real estate, stock of the Second Bank</td>
<td>?excellent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bank of the State of Kentucky</td>
<td>State bank</td>
<td>Real estate</td>
<td>?</td>
</tr>
<tr>
<td>1837 A</td>
<td>A</td>
<td>J.L. &amp; S. Josephs, Co. (New York)</td>
<td>Bill broker</td>
<td>Real estate, Cotton</td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hermann, Briggs &amp; Co. (New Orleans)</td>
<td>Cotton factor</td>
<td>Cotton</td>
<td>Excellent</td>
</tr>
<tr>
<td>1839 B</td>
<td>B</td>
<td>The United States Bank of Pennsylvania (Philadelphia)</td>
<td>Investment bank</td>
<td>State government bonds</td>
<td>Mixed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Morris Canal and Banking Company (New Jersey)</td>
<td>Commercial bank</td>
<td>State government bonds</td>
<td>Mixed</td>
</tr>
<tr>
<td>1854 B</td>
<td>B</td>
<td>Ellis &amp; Sturges, Goodman &amp; Co. (Cincinnati)</td>
<td>Private Bank</td>
<td>Railroads (?)</td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Smead and Co. (Cincinnati)</td>
<td>Private Bank</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ohio Savings Bank (Cincinnati)</td>
<td>Savings bank</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kentucky Trust Company</td>
<td>Trust Company</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>1857 A</td>
<td>A</td>
<td>Ohio Life Insurance and Trust Company (Ohio and New York)</td>
<td>Trust Company</td>
<td>Railroads</td>
<td>Excellent</td>
</tr>
<tr>
<td>1873 A</td>
<td>A</td>
<td>Jay Cooke and Company (Philadelphia)</td>
<td>Investment Bank</td>
<td>Railroads (the Northern Pacific)</td>
<td>Excellent</td>
</tr>
</tbody>
</table>
Table 1. The failures that ignited America’s most important financial crises.

<table>
<thead>
<tr>
<th>Year of Panic</th>
<th>Level of Panic</th>
<th>Name and location</th>
<th>Type of institution</th>
<th>Excessive investments in …</th>
<th>Reputation prior to failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1884 A</td>
<td></td>
<td>Metropolitan National (New York)</td>
<td>National Bank</td>
<td>Railroad stocks</td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marine National (New York)</td>
<td>National Bank</td>
<td>Loans to Grant and Ward</td>
<td>Mixed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grant &amp; Ward (New York)</td>
<td>Broker</td>
<td>Union Pacific and Western Union</td>
<td>Mixed</td>
</tr>
<tr>
<td>1890 B</td>
<td></td>
<td>Baring Brothers (London)</td>
<td>Investment Bank</td>
<td>Foreign bonds</td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Charles M. Whitney (Boston)</td>
<td>Broker</td>
<td>Railroads</td>
<td>Excellent ?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Decker Howell and Company (New York)</td>
<td>Broker</td>
<td>Railroads</td>
<td>Excellent</td>
</tr>
<tr>
<td>1893 A</td>
<td></td>
<td>Wisconsin Marine and Fire Insurance Company Bank (Milwaukee)</td>
<td>Private Bank</td>
<td>Mining</td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Herman Schaffner and Company (Chicago)</td>
<td>Private Bank</td>
<td>Real estate</td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>United States Loan and Trust Company (Chicago)</td>
<td>Trust Company</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Columbia National Bank (Chicago)</td>
<td>National Bank</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capital National Bank (Indianapolis)</td>
<td>National Bank</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chemical National Bank (Chicago)</td>
<td>National Bank</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>1907 A</td>
<td></td>
<td>Knickerbocker Trust Company (New York)</td>
<td>National Bank</td>
<td>Rumored to be</td>
<td>Excellent</td>
</tr>
</tbody>
</table>
Table 1. The failures that ignited America’s most important financial crises.

<table>
<thead>
<tr>
<th>Year of Panic</th>
<th>Level of Panic</th>
<th>Name and location</th>
<th>Type of institution</th>
<th>Excessive investments in …</th>
<th>Reputation prior to failure</th>
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<td></td>
<td></td>
<td>York)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mercantile National Bank (New York)</td>
<td>National Bank</td>
<td>Mining</td>
<td>?</td>
</tr>
<tr>
<td>1930 A</td>
<td></td>
<td>Bank of United States (New York)</td>
<td>State bank</td>
<td>Real estate</td>
<td>Mixed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Caldwell and Company (Nashville)</td>
<td>Investment Bank</td>
<td>Real estate bonds, Industrial bonds, and Common stock</td>
<td>Excellent ?</td>
</tr>
<tr>
<td>2008 A</td>
<td></td>
<td>Lehman Brothers (New York)</td>
<td>Investment Bank</td>
<td>Real estate</td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bear Stearns⁸ (New York)</td>
<td>Investment Bank</td>
<td>Real estate</td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fannie Mae and Freddie Mac (Washington DC)</td>
<td>Government sponsored mortgage insurers</td>
<td>Real estate</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Countrywide Financial⁸ (Calabasas, CA)</td>
<td>Mortgage bank</td>
<td>Real estate</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

⁸Sold after problems came to light.

Note: In column 4 financial institutions that were regulated by the federal government are unshaded. Institutions that were regulated at the state level are shown in a lighter shaded of gray. Institutions that were unregulated are shown in a darker shade of gray.

Sources: See the discussions of the individual institutions in the text.
<table>
<thead>
<tr>
<th>Year</th>
<th>Reason for Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1730</td>
<td>Colonial</td>
</tr>
<tr>
<td>1772</td>
<td>Colonial</td>
</tr>
<tr>
<td>1792</td>
<td>Mainly stock market?</td>
</tr>
<tr>
<td>1812</td>
<td>War of 1812</td>
</tr>
<tr>
<td>1825</td>
<td>Important in Europe; Seldom identified as a major U.S. panic</td>
</tr>
<tr>
<td>1833</td>
<td>Contraction due to monetary policy</td>
</tr>
<tr>
<td>1860</td>
<td>Civil War (South)</td>
</tr>
<tr>
<td>1861</td>
<td>Civil War (National)</td>
</tr>
<tr>
<td>1878</td>
<td>Confined mainly to building and loans??</td>
</tr>
<tr>
<td>1896</td>
<td>Seldom mentioned by financial historians</td>
</tr>
<tr>
<td>1903</td>
<td>“Rich Man’s Panic.” Mainly a stock market panic</td>
</tr>
<tr>
<td>1914</td>
<td>World War I</td>
</tr>
<tr>
<td>1920-21</td>
<td>Contraction due to monetary policy</td>
</tr>
<tr>
<td>1937-38</td>
<td>Contraction due to monetary and fiscal policy</td>
</tr>
</tbody>
</table>
Table 3. *Fortune Magazine*’s list of America’s most admired securities firms

<table>
<thead>
<tr>
<th>Rank</th>
<th>March 2006</th>
<th>March 2007</th>
<th>March 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Merrill Lynch</td>
<td>Lehman Brothers Holdings</td>
<td>Goldman Sachs Group</td>
</tr>
<tr>
<td>2</td>
<td>Lehman Brothers Holdings</td>
<td>Bear Stearns</td>
<td>Morgan Stanley</td>
</tr>
<tr>
<td>3</td>
<td>Bear Stearns</td>
<td>Goldman Sachs Group</td>
<td>Lehman Brothers Holdings</td>
</tr>
<tr>
<td>4</td>
<td>Goldman Sachs Group</td>
<td>Legg Mason</td>
<td>Charles Schwab</td>
</tr>
<tr>
<td>5</td>
<td>Franklin Resources</td>
<td>Morgan Stanley</td>
<td>Legg Mason</td>
</tr>
<tr>
<td>6</td>
<td>A.G. Edwards</td>
<td>A.G. Edwards</td>
<td>Franklin Resources</td>
</tr>
<tr>
<td>7</td>
<td>Legg Mason</td>
<td>Merrill Lynch</td>
<td>AXA Financial</td>
</tr>
<tr>
<td>8</td>
<td>AXA Financial</td>
<td>Franklin Resources</td>
<td>Bear Stearns</td>
</tr>
<tr>
<td>9</td>
<td>Charles Schwab</td>
<td>AXA Financial</td>
<td>Merrill Lynch</td>
</tr>
<tr>
<td>10</td>
<td>Morgan Stanley</td>
<td>E*TRADE Financial</td>
<td>E*TRADE Financial</td>
</tr>
</tbody>
</table>

References


Huntington, C. C. 1915; 1915. *A history of banking and currency in ohio before the civil war*. Columbus, Ohio: Heer.


