Free Banking, Wildcat Banking, and Shinplasters

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Shinplasters, shingles, stump tails, and *red dogs* are some of the colorful names given to paper money issued by U.S. state banks during what is known as the Free Banking Era, the 26 years from 1837 to 1863. During this period, U.S. banks were restricted by laws and regulations much less than ever before. And as the somewhat derogatory names for their currency imply, allowing such freedom in banking did not work very well: many free banks closed, and many of their notes lost value.

The conventional explanation for why this happened is fraud. Little government intervention is said to have encouraged dishonest bankers to form *wildcat banks.* These were banks formed only to defraud the public by issuing notes they would never redeem in specie (gold or silver). There are several versions of how banks are supposed to have managed this fraud, but one popular story is that they discouraged attempts at redemption by setting up redemption offices in areas populated only by wildcats, in areas, that is, hard to get to or far away from the communities in which they circulated their notes. Wildcat bankers reputedly profited, then, by quickly closing the banks after all the notes were circulated and disappearing with the banks' assets.

Until recently this view of the Free Banking Era was based on little more than anecdotal evidence, yet it has remained the generally accepted view for more than a century.[1] Our close look at the period challenges this view and leads us to suggest that there is a better explanation than fraud for free banking's problems. Specifically, we argue that the bank closings and noteholder losses of the period were caused not by banks cheating their noteholders, but rather by banks and their noteholders simply responding to capital losses sustained because of market forces. The detailed data we collected on several free banking states support this argument. Very few free banks that closed fit a testable definition of a wildcat bank. But periods of substantial declines in the prices of state bonds—which were large parts of free bank portfolios—correspond to periods when most free bank closings and noteholder losses occurred.

Free Banking Laws Were Popular . . .

The door was opened to free banking in 1836, when Congress closed the Second Bank of the United States. The Second Bank, much like the First Bank of the United States, had been both a public and a private institution. As a public institution, it helped promote the safety and soundness of banking by regularly presenting for payment the currency of state banks it suspected of overissuing. This forced state banks to keep an adequate supply of specie on hand, thus limiting the amount of notes they

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[1]Rockoff (1974, 1975) was the first to formally test this view, and his work shows that it somewhat overstates the problems with free banking. Specifically, Rockoff found that several states had successful free banking systems. However, he also found that many states experienced at least some problems, and he argued that these problems were due to wildcat banking.

could issue. As a private institution, the Second Bank behaved like any other bank—lending, investing, accepting deposits, and issuing notes. Its expansion into banking and credit markets was so extensive that by the time its charter expired in 1836 it had 25 branches scattered around the country. Since the Second Bank provided a large portion of the nation's banking services, when its charter was not renewed, most states recognized a need to establish new banking facilities.

States also recognized that their chartering systems would not allow a large number of banks to open quickly in response to the void left by the closing of the Second Bank. Until 1836, most states had a very cumbersome, and at times political, bank chartering system. The only way an individual or a group of individuals could start a bank was to have the state legislature pass a specific act. This involved convincing state legislators that more banking facilities were needed and that the management for the proposed bank was competent. Many state legislatures would only charter banks for very specific purposes, for example, to help finance a railroad, a bridge, or some other public enterprise. Not surprisingly, such chartering decisions were time consuming and often more political than economic.

After the Second Bank closed in 1836, therefore, most states began to reform their bank chartering systems so that entry into the banking industry would be easier. States had to temper the goal of easy entry, however, by another goal, one they shared with the First and Second Banks: to provide banking customers with a stable banking environment, in particular, a safe currency. Most states attempted to reach these two goals by enacting what were called *free banking laws.*

The first free banking law was proposed in New York. Its provisions openly aimed at both easy entry and safety. The law allowed anyone to operate a bank as long as two basic requirements were met: all notes the bank issued had to be backed by state bonds deposited at the state auditor's office; and all notes had to be redeemable on demand at par, or face, value. As long as a free bank met these requirements, it could receive the interest on the bonds backing its notes. If it failed to redeem even one note presented for payment, however, the auditor would close the bank, sell the bonds, and pay off the noteholders. If the bond sale did not generate enough specie to redeem the bank's notes at par, noteholders had additional protection by having first legal claim to the bank's other assets. New York's proposed free banking law became the basic blueprint for those which followed—and many did. Laws of this type were eventually passed by a majority of states. (See Table 1.)

. . . But Problematic

When free banking is judged only by the laws' first objective, encouraging more banking, it has to be considered a success. In New York, for example, the total number of banks nearly doubled in the first three years after the law was passed. In less than two years, 120 banks started, and over 50 of these opened very soon after the law was passed (Hammond 1957, p. 596). In Michigan, Indiana, Wisconsin, and Minnesota, respectively, 40, 30, 18, and 16 new banks were established within a year after free banking laws were passed (Hammond 1957, p. 601; Rolnick and Weber 1982b, Appendix).

Free banking, however, must also be judged by the laws' second objective, by how many banks survived and provided their communities with a stable source of banking services, especially a safe currency. Measured by this criterion, free banking is generally considered a failure.

Michigan's disastrous experience with free banking is probably the most famous. Early in 1837, the state legislature passed the first free banking law in America, a law that was modeled after New York's proposal, then still being debated. In most ways the two laws were the same. (The major difference was that under Michigan's law, free bank notes were backed by personal bonds and mortgages, not state bonds.) Like New York's law, Michigan's was designed to both encourage banking and promote stability and a safe currency. Unfortunately, something went wrong in Michigan. By the end of 1839, less than two years after the law was passed, all but four of Michigan's free banks closed (Rockoff 1975, p. 96). Although explicit loss data do not exist, it has been estimated that the total loss to Michigan's noteholders was as high as $4 million. This would have been nearly 45 percent of Michigan's annual income in 1840. (See Rockoff 1975, pp. 17–18.)

Minnesota's experience, while not as famous as Michigan's, was almost as bad. Of the 16 free banks that opened under Minnesota's 1858 law, 11 closed by 1863. And many that closed left their noteholders with very little. In 7 of the 11 closings, the state auditor could pay noteholders no more than 35 cents on the dollar. Holders of notes of the Bank of Rochester received less than 17 cents on the dollar. (See Rolnick and Weber 1982b, Appendix, Table D.)

Indiana's and Wisconsin's experiences were not as bad

Table 1

A majority of the 33 states in the Union in 1860 had some form of free banking.

18 states had explicit free banking laws:

State	Year Passed Law	State	Year Passed Law
Michigan	1837*	Connecticut	1852
Georgia	1838	Indiana	1852
New York	1838	Tennessee	1852
Alabama	1849	Wisconsin	1852
New Jersey	1850	Florida	1853
Illinois	1851	Louisiana	1853
Massachusetts	1851	Iowa	1858
Ohio	1851**	Minnesota	1858
Vermont	1851	Pennsylvania	1860

12 states had no form of free banking:

Arkansas
California
Delaware
Maine
Maryland
Mississippi
New Hampshire
North Carolina
Oregon
Rhode Island
South Carolina
Texas

3 states did not allow free entry, but did have bond-secured note issue:

State	Year Passed Law
Kentucky	1850
Virginia	1851
Missouri	1858

*Michigan revoked this law in 1840, but passed another in 1857.
**In 1845, Ohio passed a law that allowed "Independent Banks" with a bond-secured note issue.
Source: Rockoff 1975, p. 3

as either Michigan's or Minnesota's, but they illustrate why free banking has been considered a failure. Indiana's problems, like Michigan's and Minnesota's, appeared within the first few years after a free banking law was passed. Between 1852 and 1854, 57 (about 80 percent) of the state's 72 free banks went out of business. While the number of closings was quite high, the losses to noteholders were generally not as great as those estimated for Michigan and Minnesota. Indiana's auditor was able to pay noteholders at par in at least 14 of the 57 closings. For at least 20 banks, noteholders suffered losses, but nobody received less than 80 cents on the dollar, with many noteholders receiving over 95 cents. (See Rolnick and Weber 1982a, p. 23, Table 3; 1982b, Appendix, Table B.)

Wisconsin's problems were somewhat novel because they did not develop until the late 1850s, well after its free banking law was passed in 1852. Of the 140 free banks established in Wisconsin, 79 went out of business, and almost all of them did so in the late 1850s and early 1860s. In many of the closings, though, the auditor was able to pay noteholders at par. In 37, the auditor had to pay noteholders at less than par, but noteholders of the majority of these banks received more than 70 cents on the dollar. (See Rolnick and Weber 1982b, Appendix, Table C.)

New York, whose free banking system has been considered a success by most historians, did not escape bank closings either, at least at first. Of the 80 or so free banks that organized under its law in the first year, more than 20 went out of business within three years (Ham-

mond 1957, p. 596). Noteholders of those New York free banks were worse off than noteholders of banks in some other states. The New York auditor could not pay noteholders at par in at least half of the state's 20 early closings. And some noteholders received as little as 25 cents on the dollar. (See Rolnick and Weber 1982b, Appendix, Table E.)

Michigan, Minnesota, Indiana, Wisconsin, and even New York are documented examples of states that had problems with free banking laws. Except for possibly New York's, these laws did not work out as intended. Free banking laws were supposed to produce many new banks while maintaining a stable banking environment and a safe currency. Yet, while many new banks opened under these laws, many also closed, and many noteholders suffered losses. Why did free banking fail?

Was Free Banking Done in by Wildcats?

According to most historians and economists writing about this period, the failure of free banking was due to wildcat banks. Again, generally, these were banks that purposely issued notes far in excess of what they planned to redeem, located redemption offices in remote areas, and then disappeared, leaving the public with notes worth considerably less than their original value.

Dishonesty of this kind was clearly the problem with free banking in Michigan, according to its state bank commissioners, writing in 1839 (p. 13).

> A law which was established upon principles well digested and approved, and hedged round with so much care and guarded with so many provisions . . . became by the base dishonesty and gross cupidity of a few, who had the control of the specie of the country, nothing less than a machine of fraud.

According to John Knox (1903, p. 701), free banking in Indiana was also undermined by fraud.

> The greatest blow . . . to Indiana's credit and the darkest page in her financial history was inaugurated under the general banking law of 1853 [*sic*]. This bill . . . was loosely drawn, and opened wide the door for fraud. It was speedily taken advantage of by daring speculators, and banks sprung up like mushrooms everywhere. Not all those who established banks under this law were corrupt or dishonest, and some of the banks redeemed all their obligations in full, but a great majority of the banks were established without any reliable security for the bill holder, and none at all for the depositor, while others never opened any banking house.

Corruption caused the problems with free banking generally, Milton Friedman (1960, p. 6) says.

> In fraud as in other activities, opportunities for profit are not likely to go unexploited. A fiduciary currency ostensibly convertible into the monetary commodity is therefore likely to be overissued from time to time and convertibility is likely to become impossible. Historically, this is what happened under so-called "free banking" in the United States.

This view is common in money and banking texts as well. Dudley Luckett's (1980, p. 242), for example, describes the free banking experience this way:

> Free banking degenerated into so-called *wildcat banking*. Banks of very dubious soundness would be set up in remote and inaccessible places "where only the wildcats throve." Bank notes would then be printed, transported to nearby population centers, and circulated at par. Since the issuing bank was difficult and often dangerous to find, redemption of bank notes was in this manner minimized. These and similar abuses made banking frequently little more than a legal swindle.

Although corruption, or fraud, has long been accepted as the reason free banking did not work very well, it wasn't until the mid-1970s that this explanation was formally tested. Hugh Rockoff's hypothesis (1974, 1975) was that wildcat banking caused most of the problems with free banking systems. He generally defined a *wildcat bank* as a bank formed to bilk the public. In terms that could be investigated, that meant to Rockoff (1975, p. 8) that a wildcat bank was a bank that opened under a free banking law, that knowingly issued more notes than it planned to redeem, and that closed within a few months.

Rockoff's definition essentially fits the historical notion of wildcat banks. But Rockoff recognized that the definition raises a question. Recall the provisions of free banking laws. They required that all free bank notes be backed by state bonds which wildcats would lose if they didn't redeem their notes. So how could wildcat bankers prosper? Rockoff answered this question by pointing out that in certain states bank notes were not always fully backed by bonds. These were states that allowed banks to issue notes equal to the par (face) value, instead of the market value, of the bonds deposited with the state auditor. When the par value of state bonds was greater than the market value, the notes of free banks located in these par valuation states might not be fully backed; free banks in such states could issue notes with face value greater than the market value of the bonds backing them. Bankers could then profit, Rockoff said, by quickly going out of business and running

off with the bank's assets exchanged for the notes, even though they forfeited the bonds deposited with the state auditor.

According to Rockoff, the wildcat banking scam worked something like this. Wildcat bankers would buy state bonds that had depreciated, say, by 50 percent. They would spend, for example, $50,000 on these state bonds, deposit them at the state auditor's office, and receive $100,000 (the bonds' face value) of the new bank's currency, signed by the state auditor. As soon as the bank had its notes circulating, it would close. If the banker could get away with most of the bank's assets received in return for the notes ($100,000 worth of specie, loans, and investments), the banker would be $50,000 ahead. The bank's creditors would be left holding notes worth only half of what they paid. With easy entry and par valuation, wildcat banking could thrive, at least while the public was still unsuspecting.

After making this argument, Rockoff tested it, primarily by identifying which states had par valuation and which did not, determining which states suffered most from bank closings, and then comparing the lists of states. Rockoff claimed he found wildcats where he expected to find them. In virtually all states that at some time allowed par valuation, he found that a substantial number of banks closed; in states with market valuation, he found relatively few closings.

Michigan, Minnesota, Indiana, and Wisconsin are examples of par valuation states in which Rockoff thought he found evidence of wildcatting. Michigan and Minnesota laws explicitly allowed auditors to accept bonds at par value. While this was not true of Indiana and Wisconsin laws, Rockoff discovered that state auditors in these states illegally accepted bonds at par value for at least certain periods. In Indiana, the auditor reportedly accepted bonds at par value from the time the law was passed in 1852 until it was amended in 1855 to explicitly ban this practice (Rockoff 1975, p. 100). In Wisconsin, par valuation supposedly started sometime after 1857 (Rockoff 1975, pp. 105, 107). In all four states when legal or illegal par valuation was occurring, Rockoff found a large number of bank closings, and he attributed them to wildcatting.

New York, Ohio, and Louisiana are examples of market valuation states in which Rockoff found little evidence of wildcatting. New York's law of 1838 actually allowed par valuation for a while, but it was amended in 1840 to permit only market valuation. Rockoff asserted that in New York "with this modification in place the free banking system was for the most part free of wildcat banking" (Rockoff 1975, p. 119). Rockoff could find no evidence of wildcatting in either Ohio or Louisiana.

A Questionable Explanation

Free banking laws did not work well in many states. Bank closings and losses to noteholders were common among banks established under these laws. And the conventional explanation for the problems, tested and supported by Rockoff, is that dishonest behavior by bankers was responsible. Yet, while such behavior may have occurred, there are several reasons to wonder whether this explanation is appropriate for most of the free banking experience.

One reason is that it assumes the public was very naive. How could this type of behavior have become as pervasive as the problems are said to have been when it was such a clear and open case of fraud? Under free banking laws, noteholders had first claim on all of the bank's assets, not just on the bonds securing the notes at the state auditor. In order to profit from wildcatting, therefore, bankers had to somehow steal the bank's assets (by making a loan to a relative, for example). No doubt instances of such blatant fraud occurred during the Free Banking Era, as they do today. It is difficult to believe, though, that the public fell for this scam for so many years and in so many states. Wildcatting could hardly have been kept secret. Periodicals called *bank note reporters* were published in most major cities expressly to inform the public about depreciated notes, counterfeited notes, and banks that had gone out of business (Dillistin 1949). Surely these publications would also have warned the public of bankers who ran off with their firm's assets, especially if the practice was frequent and widespread.

Another reason to question the wildcat banking explanation is that, on closer examination, the data do not really support it. Recall that, according to Rockoff, if a free bank was a wildcat bank, it not only would close; it also would stay in business only a few months and its noteholders would sustain losses. Rockoff mainly examined data on the first part of his definition, the number of banks that closed. We examined data on his complete definition—with one slight modification. Because of data limitations, we had to lengthen the lives of wildcats from a few months to less than one year. In order to determine how many free banks were in business less than one year and closed *below par,* that is, with losses to noteholders, we collected detailed data on the free banks in four states: New York,

Table 2

Few free banks appear to have been wildcats.

State	Number of Free Banks in 1838–63	Number of Free Banks That: Closed	Closed Below Par	Closed Below Par After Less Than One Year	Percentage of Free Banks That: Closed	Closed Below Par	Closed Below Par After Less Than One Year
New York	449	160	34	16	36%	8%*	4%*
Indiana	104	89	24	23	86	31*	30*
Wisconsin	140	79	37	2	56	26	1
Minnesota	16	11	9	7	69	56	44
Four States	709	339	104	48	48%	15%*	7%*

*Redemption information is not available for 4 New York banks and 27 Indiana banks. These banks are therefore not counted as below-par closings; they are instead simply treated as unknown and not included in the percentage calculations for New York, Indiana, or the four-state total.

Source: Rolnick and Weber 1982a, Tables 2–5

Indiana, Wisconsin, and Minnesota. These are four states for which such data are available and four states that for at least some time allowed par valuation, so that, according to Rockoff, they are supposed to have had many wildcats. However, in all four states, the number of banks that fit his complete definition of a wildcat bank is surprisingly small.[2]

Table 2 summarizes our findings. A glance at the four-state totals shows clearly why free banking has a bad name. Of the 709 free banks that opened in these states, 339, or about half, were not in business in 1863. Nevertheless, few of these closed banks can be labeled wildcats because nearly all were in business longer than one year or fully paid off their noteholders. In New York, for example, 36 percent of the free banks closed, but only 8 percent of the free banks closed below par, and only 4 percent closed below par and were in business less than a year. Of all the free banks in Indiana and Wisconsin, nearly 70 percent went out of business, but less than one-third of Indiana's banks and a mere 1 percent of Wisconsin's might be wildcats. Of our four sample states, Minnesota had the highest percentage of banks that appear to qualify for Rockoff's wildcat label (44 percent). Here, though, there is some doubt about the extent of the fraud. Two of Minnesota's 7 banks that could be classified as wildcats were the Nicollet County Bank and the Bank of the State of Minnesota; yet it has been established that both closed because of capital losses on their assets, not fraud (Patchin 1917, pp.156–57).

Thus, of the 709 free banks in New York, Indiana, Wisconsin, and Minnesota, only 46 might legitimately be classified as wildcat banks. Furthermore, it's possible that some of these bank closings, just like the two we know about in Minnesota, had nothing to do with dishonesty or fraudulent behavior.

A Better Explanation

A final reason to question the wildcat view of free banking

[2]We hoped to get similar data for Michigan, since it is considered to have had the worst bout with wildcat banking. Michigan's bank commissioner records for the Free Banking Era, however, were destroyed in a fire, and so far copies have not been located. Nevertheless, we did find a bank commissioner report dated January 18, 1839, that contains information on over 20 of Michigan's free banks then being liquidated. The three commissioners writing the report were very confident that all but two of the free banks had assets more than sufficient to meet their liabilities. (The two exceptions were the Bank of Washtenaw and the Farmers' and Mechanics' Bank of Pontiac.) Thus, by Rockoff's definition, wildcatting appears to have been rare even in Michigan.

is that there is a better explanation of what went wrong during the Free Banking Era. It is our hypothesis that most free bank closings and noteholder losses were not caused by fraud, but rather by capital losses banks suffered because of substantial drops in the price of the state bonds that made up a large part of bank portfolios. And we find considerable support for this hypothesis in the data we collected on free banks in New York, Wisconsin, Indiana, and Minnesota.

Under our hypothesis, falling bond prices would cause free bank closings, basically, by instigating runs on banks. Suppose there were an economic disturbance which caused the market value of state bonds held by a free bank to fall below the bonds' original purchase price and thus below the face value of the bank's outstanding notes. Assuming at least some of the noteholders were aware of this capital loss and assuming they thought the loss could be large enough to make the value of all the bank's assets less than the value of its liabilities, these noteholders would attempt to go to the bank as soon as possible and redeem notes for specie at par.

If noteholders were right about their bank—if the value of the bank's assets did in fact fall below the value of its liabilities—the bank would probably not redeem its outstanding circulation. To do so would mean that the bankers would have to invest additional capital and so suffer the entire capital loss. Instead, the bankers would more likely do the best they could for themselves by allowing the notes to be protested and the bank to close with below-par note redemption. In this way the bankers could share the loss on the bonds with the noteholders.[3]

Even if noteholders were wrong about their bank's ability to redeem its notes at par, however, their bank's response to a capital loss and an increased demand for note redemption may have been to close. Some solvent free banks may simply have found going out of business more profitable than operating in such turbulent times.

There is good reason to believe that large changes in the prices of state bonds would not have been ignored by free bank noteholders. As we pointed out earlier, all free banks had to hold state bonds to back their notes, and note issuing was a major function of free banking. Therefore, state bonds were a major part of many free bank portfolios. In 1854, for example, while only 4 percent of the free banks in New York held about half or more of their portfolios in state bonds, in Wisconsin 16 percent held that much, and in Indiana 76 percent did. Similarly, in 1859, while again only 4 percent of the free banks in New York held about half or more of their portfolios in state bonds, many more free banks did so in other states: in Wisconsin, 42 percent; in Indiana, 65 percent; and in Minnesota, 77 percent. Any significant drop in the market value of assets that made up such large parts of so many banks' portfolios would surely have caused at least some noteholders to question the solvency of their bank and so demand specie for their notes.

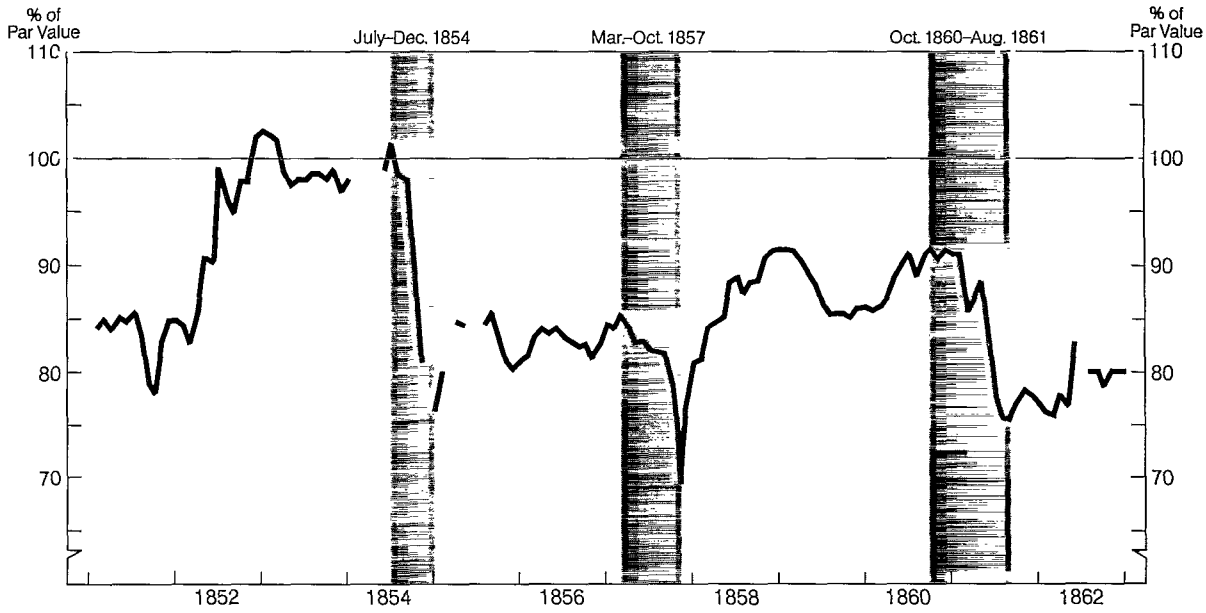
One way to test our falling-bond-price explanation for Free Banking Era problems is to look for a correlation between those problems and periods of large bond price declines. To do that, we must identify when bond prices fell substantially and, as precisely as possible, when free banks closed. Obviously, if falling bond prices were the major cause of free bank closings, most closings would have occurred in periods of large price declines. Unfortunately, state bond price data for the Free Banking Era are only regularly available back to 1851, so we were able to identify periods of large bond price declines only between 1852 and 1863. We were, however, able to pinpoint when during these 12 years most of the free bank closings occurred in our sample states. Our results are presented in the accompanying graph and Table 3.

State bond price data show three periods of large declines. (See the graph. Here we present only Indiana state bond prices, since they are a reasonably good proxy for the prices of bonds held by banks in Indiana, Wisconsin, and New York.[4]) The first period is the second half of 1854 when bond prices fell 25 percent. The second is from March to October 1857 when bond prices fell roughly 20 percent. The third is from October 1860 to August 1861 when bond prices again fell roughly 20 percent. Altogether, these periods account for just over two years, or less than

[3]Notice that for our explanation whether for note-issuing purposes banks had to value their bonds at market or par value is irrelevant. A drop in the market value of bonds could have put a bank out of business either way. All that was required was that the loss be great enough that the market value of all the bank's assets not cover its liabilities. If no such loss occurred, a free bank could have been long-lived, safe for its noteholders, and profitable for its owners regardless of whether or not the bonds backing its notes had been valued above market price.

[4]Minnesota's free banks held primarily Minnesota state bonds. Though we have not been able to obtain a price series on these bonds, our reading suggests that prices on them were markedly different from those on bonds in other states (Patchin 1917, pp. 151–52). Thus, we would not expect Minnesota's below-par closings to occur in the periods in which Indiana's state bond prices declined, and they did not. Nonetheless, since an explicit price series on Minnesota bonds is not available to determine whether or not Minnesota's bond prices truly were unusual, we have included Minnesota's experience in our aggregate statistics.

Indiana bond prices plunged three times between 1852 and 1862.



Note: Plots are monthly averages of available weekly data. Gaps in the line are due to unavailable data.
Sources: *Hunt's Merchants' Magazine and Commercial Review*, 1851–55; *The Bankers' Magazine*, 1855–63.

20 percent of the twelve years for which data are available.

As Table 3 indicates, in our four states, a very large number of the free bank closings—both below-par and par—that occurred after 1851 occurred in these three periods of large bond price declines.[5] Of the 68 banks that closed and did not pay off their noteholders at par, almost 80 percent closed in the declining price periods. And of the 158 banks that closed but did pay off their noteholders at par, nearly half did so in the declining price periods.

Our preliminary conclusion, then, is that for the years from 1852 to 1863 falling bond prices, not wildcat banking, caused most of the free bank problems in our sample states. Advocates of a more conventional view might protest, however, that wildcat banking still could have been the basic culprit. Even if there were only a few true wildcats, they might argue, that would have undermined the public's confidence in free banking and accelerated the demand for note redemption. Many banks then would have forced state auditors to sell their bonds to get specie, thus causing the observed large declines in bond prices.

While this scenario may be plausible, it is not supported by the facts. In New York, wildcatting could not have caused the large bond price declines we identified because that state did not allow par valuation—and so could have had no wildcats—any time after 1840. Par valuation did occur in Indiana between 1852 and 1855, but the state isn't likely to have had any significant wildcatting before bond prices fell in 1854. That is because, for quite some time before the decline, Indiana banks had very little incentive to become wildcats: until the decline, Indiana state bonds sold very close to and sometimes above par. Wildcatting, that is, would simply not have been very

[5]For a more detailed description of when free banks closed and how long they were in business, see Rolnick and Weber 1982b, Appendix.

Table 3

Free bank problems seem to be related to falling bond prices.

Type of Closing	Number of Free Bank Closings in New York, Indiana,* Wisconsin, and Minnesota During Periods of Large Bond Price Declines: July–Dec. 1854	March–Oct. 1857	Oct. 1860–Aug. 1861	All 3 Periods	1852–63	Percentage of 1852–63 4-State Closings in the 3 Periods
Below Par	14	1	39	54	68	79%
Par	30	25	19	74	158	47%
All	44	26	58	128	226	57%

*Numbers do not include 27 Indiana free bank closings for which redemption information is not available.
Source: Rolnick and Weber 1982a, Tables 2–5

profitable in this state until after the bond price decline. The bonds held by Minnesota's free banks are probably not comparable to those held by banks in our other three states (see footnote 4). So that leaves Wisconsin, which had only two potential wildcat banks. Since both of these banks closed in 1861, well after bond prices began to fall, they could hardly have caused the fall.

Ultimately, therefore, we find that large drops in bond prices can explain most of the free bank closings and noteholder losses that occurred between 1852 and 1863 in the four states we examined. Moreover, while declining bond prices may have been induced by any number of economic developments, they were not induced by wildcat banks. In the periods before the substantial bond price declines we identified, our states did not have any wildcat banks that could have caused those declines.

Summary and Conclusion

The Free Banking Era was a time when entry into banking was nearly unrestrained, when banks could issue their own currency, when the government did not insure banks, and when there was little supervision and regulation of bank activity. It was also a time when many banks closed and many noteholders reportedly suffered. The conventional view of this period is that wildcat bankers were roaming the countryside taking advantage of an unsuspecting public by issuing bank notes they had no intention of redeeming. By locating redemption offices in remote areas and absconding with their bank's assets, wildcat bankers supposedly made a hefty profit.

We have no doubt that such bankers existed. A close look at the data from four free banking states, however, shows that a much better explanation of free banking's problems is that they were caused by capital losses that banks suffered when market forces drastically pushed down the prices of state bonds, a significant part of all free bank portfolios. In New York, Indiana, Wisconsin, and Minnesota between 1838 and 1863, almost half the free banks closed, but less than 7 percent of the free banks could possibly have been wildcats. Yet in these states between 1852 and 1863, most of the closings (about 80 percent of those that involved noteholder losses) occurred during periods when bond prices strongly declined. And wildcat banking did not cause the declines.

Some may be tempted to try to draw from this study conclusions about more than just the Free Banking Era, in particular, about the viability of free competition in banking. Such temptations should be resisted. The degree of freedom that was allowed banks during the Free Banking Era has never been allowed since, and that is partly because of the belief that the wildcatting experience of the period would be repeated. But demonstrating as we have that that view of the period is mistaken does not eliminate all major objections to unrestricted banking.

Besides the fear of wildcatting, there has also long been a widely held view that banking as a business is inherently unstable because it relies heavily on the confidence of its customers. This fear is that, without bank regulation and supervision and some form of government insurance, the public could easily lose confidence in the industry. Bank runs and closings would then be common, and financial markets would be in constant turmoil.

The degree of freedom in the Free Banking Era would seem to make the period a good test of this view of banking. But what our study of the period contributes to an evaluation of this view is ambiguous. Some data seem to support it: the many banks that closed without losses to noteholders during the Free Banking Era, for example, would be consistent with a general loss of confidence in the industry producing runs on solvent as well as insolvent banks. Other free bank data, however, seem to contradict the idea that banking is inherently unstable: some free banking states had very few bank closings and managed to maintain a very stable financial environment throughout this period. And even states that had problems with free banking had less severe problems than has traditionally been supposed (Rolnick and Weber 1982b). Whether or not unrestricted competition in banking can work, therefore, must be decided by future research.

References

Dillistin, William H. 1946. *Historical directory of the banks of the state of New York.* New York: New York State Bankers Association.

_____. 1949. *Bank note reporters and counterfeit detectors, 1826–1866, with a discourse on wildcat banks and wildcat bank notes.* Numismatic Notes and Monographs 114. New York: American Numismatic Society.

Friedman, Milton. 1960. *A program for monetary stability.* New York: Fordham University.

Hammond, Bray. 1957. *Banks and politics in America: From the Revolution to the Civil War.* Princeton: Princeton University Press.

_____. 1963. Banking before the Civil War. In *Banking and monetary studies,* ed. Deane Carson, 1–14. Homewood, Illinois: R. D. Irwin.

Kareken, John H., and Wallace, Neil. 1978. Deposit insurance and bank regulation: A partial-equilibrium exposition. *Journal of Business* 51 (July): 413–38.

Knox, John J. 1903. *A history of banking in the United States,* ed. Bradford Rhodes and Elmer H. Youngman. New York: Bradford Rhodes and Co.

Luckett, Dudley G. 1980. *Money and banking.* New York: McGraw-Hill.

Michigan. Bank Commissioner. 1839. *Bank Commissioner's report,* January 18.

Patchin, Sydney A. 1917. The development of banking in Minnesota. *Minnesota History Bulletin* 2 (August): 111–68.

Rockoff, Hugh. 1974. The Free Banking Era: A reexamination. *Journal of Money, Credit, and Banking* 6 (May): 141–67.

_____. 1975. *The Free Banking Era: A re-examination.* Dissertations in American History (rev. Ph.D. diss., University of Chicago, 1972). New York: Arno Press.

Rolnick, Arthur J., and Weber, Warren E. 1982a. A new explanation for free bank closings. Research Department Staff Report 79. Federal Reserve Bank of Minneapolis.

_____. 1982b. The Free Banking Era: New evidence on laissez-faire banking. Research Department Staff Report 80. Federal Reserve Bank of Minneapolis. Also forthcoming, *American Economic Review.*

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