THE MICHIGAN FREE BANK EXPERIENCE: WILD CAT BANKING OR INTERFERENCE WITH CONTRACT?

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Wild Cat banking was only one of the factors behind the collapse of Michigan's banking system and the state's subsequent fall into a deep and prolonged depression. The Wild Cat period was brief, less than a year; the number of Wild Cat banks was small, perhaps a dozen; losses to note holders due specifically to Wild Cat banking would have been only about $350,000 had it not been for an interference with contract; and, there is little evidence that Wild Cat bank notes ever had a general circulation. This study argues that the Wild Cats gained the level of notoriety that they did mainly because of other events, including the state's interference with contract. The interference first delayed and then completely undermined the collection of the debts owed to the Free Banks of the state and, in so doing, undermined all the Free Banks of the state, whether reckless or not.

The new monetary history has demonstrated that the Free Banking era (1834-1863) was not as volatile as had previously been portrayed. The early studies emphasized that Free Bank failures tended to occur because of decreases in the intrinsic value of the collateral posted to “back” their notes (Hugh Rockoff 1972, 1974, Arthur J. Rolnick and Warren E. Weber 1982, 1983, 1984, 1986, Andrew J. Economopoulos 1988, Iftekhar Hasan and Gerald P. Dwyer, Jr., 1994). Economopoulos (1990) and Matthew Jaremski (2010) show that Free Banks with more diversified portfolios were more resilient. Dwyer and Hasan (2007) and Dan Du (2010) examine the vulnerability of Free Banking during suspensions of specie payment. Dwyer (1996, pp. 12-13) traces the failures of Indiana’s Free Banks to a prohibition of small notes in Ohio.

Michigan’s experience is arguably the most colorful episode of the Free Banking era. Alpheus Felch (1880, pp. 121-122), a future Governor, who served as one of its bank commissioners during the Wild Cat period, provides a vivid account. Some banks, when inspected, were found to have grossly insufficient books, or to have transferred their notes to agents without obtaining proper security. One bank was found to have no assets at all. Another was found to present as boxes of coins, boxes filled with nails and glass with only a top layer of coins. And, in examining a series of three banks, the same coins were presented as belonging to each.

When a bank was found to have violated the requirements set by law, the bank commissioners were empowered to issue an injunction on the bank, or to place it in receivership. Although the commissioners sometimes acted with forbearance, they usually acted quickly to shut banks, preventing them from becoming much of a threat to the public. For example, when Digby V. Bell made the initial inspection of the Peoples Bank of Grand River, he found that the bank’s required specie consisted of a sum of borrowed coin and drafts for the balance. The bank was found, furthermore, to have already issued some of its notes. The commissioner put the bank into receivership; and, during the rest of the summer, the receiver was engaged in winding up the bank (Ernest B. Fisher, 1918, pp. 89-94).

At other times when a bank was shuttered, the bank or someone associated with it was subsequently reported as illegally putting the notes of the bank into circulation. In one such case, it was reported that the president of the bank traveled the state, buying whatever he could, such as horses, cattle, sheep, swine and produce, with the notes of the bank. He then converted these goods into coin or the notes of other banks in later transactions (James Cook Mills, 1918, p. 742). Accordingly, two very different problems beset the value of the notes of the state's Free Banks: First, the illegal issue of bank notes; and, second, the redemption of bank notes legally put into circulation (either routinely in the course of a bank's business or in the winding up of a bank). To distinguish between these two problems, this study reserves the term "Wild Cat" for those Free Banks for which there is reason to believe operated in a reckless, if not a criminal manner.[1]

Unfortunately, the history of the period is short on specifics, such as the number of banks organized under the General Banking Act that acted recklessly or illegally. Instead, there are vague statements, such as "A good percentage of them were organized in good faith and with honest intent, but with others, the base deceptions resorted to, the dishonest devices invented to mislead the people and evade the plain provisions of the law, would leave no room to doubt the purpose of their promotion." (Washington Gardner, 1918, p. 106)

Even the new monetary history can be said to be wanting. Rockoff (1974, p. 146) simply says that Michigan's law was badly designed (allowing mortgages on land to be accepted by the state auditor at appraisal value, when their market value may have been much less) and poorly timed (becoming operational during a general suspension of specie payments). In an extended comment in which he focuses on the Michigan Free Bank experience, Rockoff (1985, p. 887) estimates that the losses suffered by note holders due to the failures of the state's Free Banks would have been $1 million if the state Supreme Court had not terminated the process of winding down the affairs of the Free Banks in receivership. In a "brief digression," he (1986, p. 623) alludes to the role of market institutions in disciplining banks to question how Michigan's Free Bank losses could have been so large.

This study assembles enough information to recount Michigan's Wild Cat period with some precision. It demonstrates that the losses to the holders of bank notes specifically due to Wild Cat banks, while substantial, were much less than previously stated. It identifies another important cause of losses to note holders—the state's interference with contract, which culminated in the voiding of the law by which Free Banks were organized and resulted in their notes become worthless legal nullities. The state's interference with contract, as well as its grave fiscal imbalance, must be included in any account of the economic problems of Michigan during this era.

Prelude to the Wild Cats

In 1837, the new state of Michigan passed the nation's first Free Banking act.[2] At the time, the country was experiencing a land bubble and undertaking vast programs of public works which were financed through an expansion of money, credit, and the issuance of state bonds. Michigan's territorial legislature had itself chartered about a dozen new banks in the year prior to statehood. Upon gaining statehood, Michigan approved an extensive program of public works—canals, river improvements and railroads—to be financed by the issuance of state bonds.[3]

Table 1
Acres of Public Land Sold in Michigan, By Decade.

Decade ending	Federal Government land sales	State Government land sales
1819	470,529	
1829	390,904	
1839	8,320,583	71,573
1849	419,184	498,666
1859	4,201,171	544,758

Source: Greffenius (1968, p. 219)

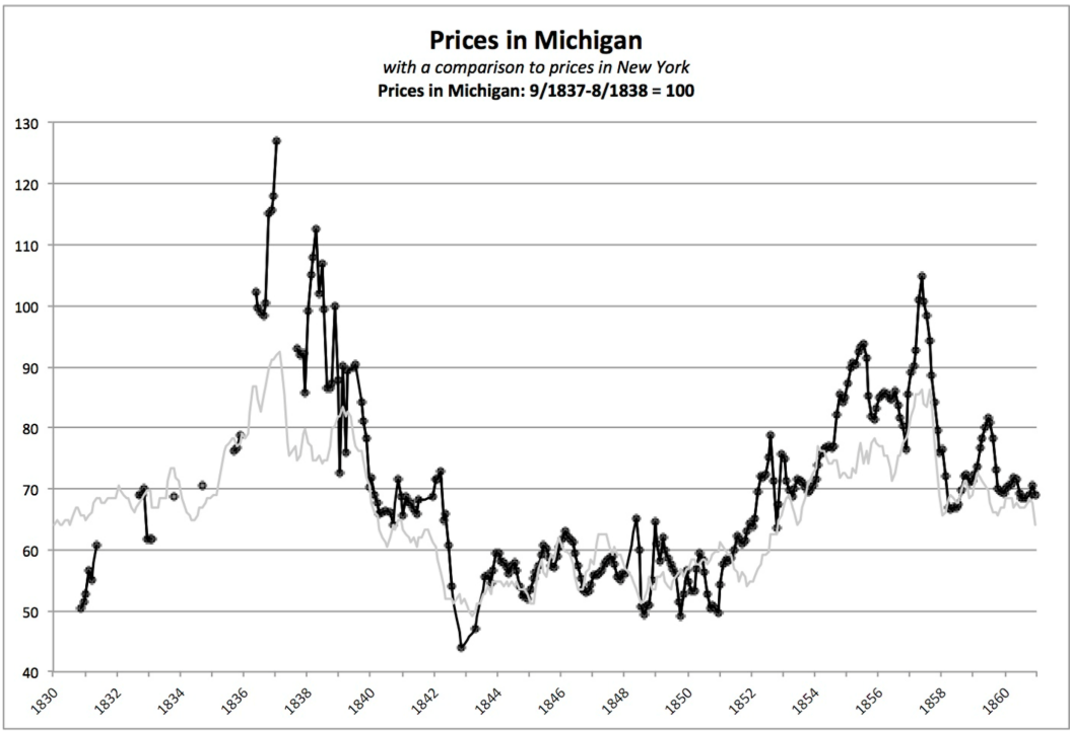
As Table 1 shows, there was a tremendous increase in public land sales in Michigan during the 1830s. Most of these sales were of federal land, at the fixed price of $1.25 an acre, and most of these sales were to speculators. Sales peaked in 1836, but remained robust the next year (Willis F. Dunbar, 1970, p. 230-31). As an indication of the profit potentially available to speculators, in 1836, state school land sold on average for $15.62 per acre (*Detroit Free Press*, hereafter *FP*, July 27, 1837). Primarily as a result of these land sales, the state's two federal depositories (or, "pet banks")–the Bank of Michigan and the F&M Bank of Detroit–had public deposits of $430,000 (Harold Reinholds, 1975, pp. 41-42).

The expansion of money and credit leading up to the Wild Cat period is reflected in the course of commodity prices in the state, as shown in Figure 1. From 1830 to 1837, commodity prices more than doubled. Judging by the Warren and Pierson index, commodity prices were also increasing in New York, but only by about 50 percent.

By 1836, there were indications in both Michigan and the country as a whole that the land bubble was about to burst. In that year, the federal government issued its specie circular requiring that land purchases be made in coin. The federal government also announced a distribution of the surplus it had accumulated in state bank depositories to the states on the basis of population. Also in that year, the Bank of England raised its discount rate and enacted certain restrictions on the financing of trade with the United States. The communication of monetary conditions in New York to Michigan during 1836 can be seen in Figure 2. The discount on Detroit bank notes in the New York market rose that year to 7.5 percent, from a prior level of less than 2 percent.

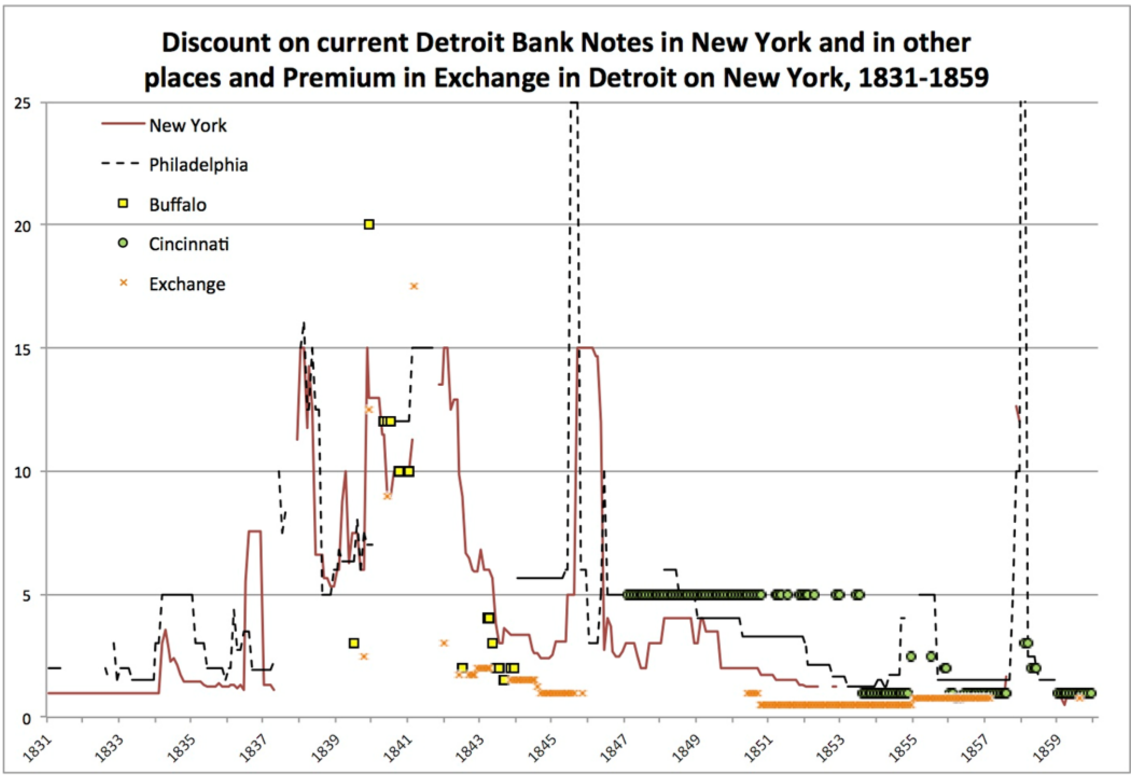
In Michigan, it was reported, "The banks of Detroit do not discount the best paper which is offered. This has been the case for several months past." (*Detroit Daily Advertiser*, October 15, 1836) Early the next year, the Bank of Monroe, Michigan, became one of the first banks of the country to suspend specie payments (*FP* March 29, 1837). Tight money extended from the banks to the extension of credit from city to country merchants. "It is no use for any merchant from the country to come here, unless he is prepared to pay all his former debts. The merchants here are determined to curtail their credits." (*FP* April 25, 1837)

Figure 1
Wholesale Prices in Detroit and Eastern Michigan,
9/1837-8/1838 = 100
(Prices in New York are Light Gray for Comparison)



Source: The underlying data are from price currents, market commentaries, advertisements, news stories and editorial comments in newspapers, for 52 commodities. Manuscript sources were relied upon during 1841-43, when newspapers proved insufficient. Prices are observed relatively frequently 1837-40, 1844-45, and 1853-60. Retail prices and prices in western Michigan converted to wholesale prices in Detroit and eastern Michigan by their average ratio when simultaneously observed. The price index is formed by the average of price relatives method. For each commodity for each month, a price relative is formed as the price of that commodity for that month relative to the average price of the commodity during the base period. Then, for each month in which at least ten price relatives are observed, a price index is formed as the average of the price relatives. The New York price index is that of Warren and Pearson. It is set equal to the Michigan price index during 1844-50.

Figure 2
Discount on Current Detroit Bank Notes in New York and Other Places, and Premium in Exchange in Detroit on New York, 1831-1859



Source: Discount on current Detroit bank notes in New York – average of *Shipping & Commercial List* and through 1838 *New York Journal of Commerce*, and during 1838-1843 *New York Spectator*; afterwards, *Shipping & Commercial List* or *Thompson's Bank Note Reporter*; in Buffalo–*Buffalo Commercial Advertiser* reproduced in various Detroit newspapers; in Philadelphia through 1857–*Bicknel's Bank Note Reporter*; after 1857–*Philadelphia Public Ledger*; in Cincinnati–various Cincinnati newspapers; premium on exchange in Detroit on New York–various Detroit newspapers.

On May 10, 1837, the banks of New York suspended specie redemption of their notes. The cause or causes of the suspension are still a matter of controversy. At the time, speculation in land was widely viewed to be a contributing factor. The *New York Journal of Commerce* (May 3, 1837) blamed the growing panic in the financial community on speculation in land, along with the Bank of England, state indebtedness for public works, the distribution of the surplus revenue, the prohibition of small bills by New York and several other states, the weakened condition of the financial institutions of New York due to the fire of 1835, and the winding down of the Bank of the United States.

For a time, the specie circular came to dominate the histories written of the period (e.g., Bray Hammond 1957, Reginald C. McGrane 1924). Richard H. Timberlake, Jr. (1960) identified the distribution of the surplus as a contributing cause; and, Peter Temin (1969) pointed to the balance of payments as an underlying cause. More recently, Peter L. Rousseau (2003) has advanced the thesis that the specie circular and the distribution of the surplus were crucial insofar as certain transfers of funds were the proximate cause of the suspension. Whatever the cause or causes of the suspension, soon after news of the suspension in New York reached Detroit, on May 17, 1837, the banks in that city also suspended (*FP,* May 24, 1837).

Because of the tightness of money in Michigan, there was a call for a new source of credit. "The banks called in their circulation as rapidly as they could … The consequence was a scarcity of money… not enough to supply the necessary demands of business. The people were clamorous for relief" (H.M. Utley, 1884, p. 211). Felch (1880, p. 115), who was a member of the state legislature at the time, said "The public seemed imbued with the idea that to relieve them from the galling burden of indebtedness and to restore activity and prosperity to the business world, nothing was needed but extensive bank issues."

The new credit was to be advanced by Free Banks organized under the state's General Banking Act. The act allowed associations of persons meeting certain conditions to form banks. Among these conditions was a provision that mortgages on otherwise unencumbered land could be deposited with a state officer, as collateral for the notes of the bank. The Michigan act incorporated this and other provisions from the Free Banking act then under consideration in New York,[4] melding these provisions with those of the Safety Fund act of New York.[5]

Even upon the suspension of specie payments, Democratic sentiment in the state remained optimistic. The economic crisis facing both the country and the state would soon pass, said the *Detroit Free Press* (May

10, 1837). “We think we are warranted in anticipating a quick return of easy and prosperous times,” commented the *Monroe Times* (*FP* May 9, 1837). Democratic sentiment continued, in particular, to be bullish with respect to land. “[R]eal estate in the west must continue to advance until it reaches the value of the same body of land in the same latitude of that prosperous state [New York].” (*FP,* April 28, 1837)

Upon their suspension, the banks of the state (all chartered banks, no Free Banks were yet organized) were examined. The bank commissioner indicated that each of them was solvent and could redeem its circulation. Nevertheless, he recommended a limited suspension so as to enable them to retain their specie within the state; a suspension of one year was subsequently enacted (Felch, 1880, p. 117). To prevent an excess issue of bank notes during the time of suspension, the act authorizing the suspension also restricted the issue of banks notes to a maximum of 1.5 times paid-in capital for the smaller banks, and a maximum of paid-in capital for the larger ones (*Constantine Republican,* July 5, 1837).

Later in the year, when Free Banks started to organize, they were uniformly greeted with enthusiasm. “This new bank [Bank of Oakland] has now gone into operation … we learn that the bank has been liberal in its discounts and will contribute greatly to the general wealth and prosperity of Pontiac,” said the *Pontiac Banner* (*FP,* September 22, 1837). “The Bank of Coldwater has this day gone into operation with every prospect of permanent utility to the stockholders and the community around it,” said the *Coldwater Observer* (*FP,* December 15, 1837). As Figure 2 shows, from 1837 to 1838, the discount on Detroit bank notes in New York fell to 5 percent. But then problems started to surface.

Big Trouble with Little Banks

Retrospective assessments of the abuses of Michigan’s General Banking Act invariably describe the state’s bank commissioners as overwhelmed by schemers. The commissioners were “honest and capable.” (Lawton Thomas Hemans 1906, p. 171) “It was soon found that the law was taken advantage of by dishonest men to practice the grossest frauds and swindles …. [T]he officers of the state [bank commissioners], though striving honestly to do their duty, were powerless to prevent them." (Utley, 1884, pp. 215-16)

Contemporaneous accounts described the situation differently. When he issued the first injunction to a Free Bank, even as Free Bank notes were at a discount in Detroit relative to Detroit funds[6] and as the term "Wild Cat" was starting to be used to describe these banks,[7] the bank commissioner involved wrote to allay the public. "[T]he officers of the Farmers & Merchants Bank of St. Joseph are determined to discharge their duties faithfully and fearlessly to the public." (*FP,* March 12, 1838)

Instead of finding fault with the law, the *Free Press* blamed Whig interests, who had decided "that the general banking system must be destroyed," for the depreciation of Free Bank notes (*FP,* February 10, 1838). The *Pontiac Courier* (February 9, 1838) said the Whigs wanted "first to destroy the banking institutions now in operation under the General Banking Law, and next to create a state moneyed monopoly by which they can control the elections." The *Michigan Argus* of Ann Arbor (May 5, 1838) was almost conspiratorial. Whig monopoly bankers "have found it necessary to make an effort to render the general banking law unpopular with the people, and to produce a political change at the same time, to put into operation some six or eight fraudulent banks."

By May 1838, in anticipation of the resumption of specie payments, a convention was held to secure the support of the country banks of the state by the banks of Detroit (*FP,* May 4, 1838). During June, the *Free Press* (June 18, 1838, June 25, 1838) listed the banks whose notes were accepted on deposit by the banks of Detroit. The *Free Press* (May 2, 1838) continued to advocate for the Free Banks, saying "We venture to say that no law ever before existed to authorize the business of banking, or any other corporate business, which interposed so many barriers to fraud…"

The arrangement for the acceptance of the notes of the country banks by the banks of Detroit did not last long (*Cleveland Herald,* July 27, 1838, *FP,* August 16, 1838). In Detroit, country bank notes fell to a discount of 5 to 8 percent (*Calhoun County Patriot,* June 1, 1838). Instead of circulating freely throughout the state, the notes of the country banks were returned to them for redemption, forcing a total of twelve to close during the quarter. "[M]erchants sent couriers to the banks…that they might exchange them for something else, in which they had more confidence." (Charles H. Ravel, 1910, p. 161)

In spite of the return of notes for redemption, the bank commissioners continued to make positive reports. "Such has been the condition of our exchanges and such the want of confidence in the moneyed institutions of the west that the notes of our banks have been constantly flowing in for redemption … It affords pleasure to the undersigned to be able to state that the banks…have met promptly their paper when presented at their counters, in specie, or some other satisfactory equivalent." (*FP,* September 27, 1838) "All of the banks within the third district, except those in suspense and under injunction, were, at the time of their examination by the commissioner, redeeming their bills in circulation in specie or in funds satisfactory to the bill holders, as he is informed and believes." (*FP* September 20, 1838)

By the end of 1838, the Democrats were no longer interested in propping up the Free Banks. Instead, they turned their attention to a new form of bank: a multi-branch, state-owned bank, similar to state bank proposals in Illinois and Mississippi (*FP,* December 29, 1838). The proposed state bank would enable yet another round of financing, and thus relieve the people of the state from their current debt burdens. In early 1839, the Michigan legislature suspended the operation of the General Banking Act and approved a charter for the proposed state bank. The state, however, could not sell the bonds necessary for the capital of the proposed bank.[8]

Later that year, amidst the Panic of 1839[9] and a continuing collapse of the state's banking system, the Democrats turned against banks entirely.[10] Said the *Free Press* (September 5, 1839), those who advocate paper money "hold out the most fallacious hope of an easy payment of debts and a lighter burden of taxation." This sentiment was reflected in the report of the Attorney General of the state (1839, p. 17) to the Michigan legislature, who referred to "the fact which has become sufficiently notorious, that most of these banks were engendered in fraud, and brought forth in direct and palpable violation of law, and in hostility to every sound principle of business or of banking." No longer interested in supporting banks of any description, Democrats were free to provide relief to debtors by undermining the claims of banks.

During the rule of anti-bank Democrats, from 1841 to the ascension to power of the newly organized Republican Party in 1854, the misfortunes of the state were repeatedly blamed on banking. After 1854, when Republicans governed Michigan, an anti-bank view dominated the first writings of the early history of the state (Silas Farmer 1884, Felch 1880, T.H. Hinchman 1887, M.A. Leeson 1882, Utley 1884). The anti-bank view continued to prevail in the histories of the state written during the early 20th century (Byron M. Cutcheon, 1906; Walter L. Dunham, 1929; Fisher, 1918; George N. Fuller, 1939; Gardner, 1918; Hemans, 1906; Mills, 1918; Ravel, 1910). Aside from the forays into this episode of Free Banking by Rockoff, this particular episode has not yet been investigated by the new monetary history.

Small Banks and their Small Notes

During the Wild Cat period, small-denomination notes of Michigan banks circulated in northern Ohio and western New York. Both of those states effectively prohibited their own banks from issuing notes of less than $5, so out-of-state small notes filled this void.[11] But, while it is clear that small notes issued by Michigan's chartered banks circulated in these places, and that Free Bank notes were *introduced* into New York and Ohio,[12] it is not clear that small notes issued by the state's Free Banks actually circulated in these places.

In northern Ohio, Michigan bank notes were clearly a large part of the circulating medium, passing at par in retail transactions and at a discount of 15 percent against specie (*Cleveland Herald,* October 10, 1837, October 17, 1837, November 11, 1837, November 20, 1837). Similarly, in western New York, Michigan bank notes were also in circulation. The *Buffalo Commercial Advertiser* indicated, "Michigan money is almost the only kind in circulation," with those of chartered banks at a discount of 12½ percent, and those of the Free Banks "not bought by the brokers at any rate." (*Cleveland Herald* November 20, 1837) Not long after this, the *Buffalo Commercial Advertiser* reported "that the notes of the regularly incorporated Michigan banks are at a discount of about 25 percent in [Buffalo] The mushroom banks under the general banking law [i.e., the Free Banks of Michigan] have no credit. Their notes are not bought by the brokers at any rate." (*Cleveland Herald,* November 23, 1837) Following this, the merchants of Buffalo pledged to receive notes from designated Michigan banks at par so as to support a hand-to-hand currency.[13] (*Ohio City Argus,* December 30, 1837)

Quotations for the notes any of the Michigan Free Banks are not found in *Day's Bank Note Reporter* of New York (*Cleveland Herald,* May 18, 1838, June 18, 1838, July 30, 1838, August 3, 1838), the *Shipping and Commercial List and New-York Price Current* or *Bicknell's Bank Note Reporter* of Philadelphia (Weber 2013), or the bank notes lists published by the *New York Journal of Commerce* or *New York Spectator*, each one of which carried quotations for the chartered banks of Detroit and at least some of the chartered country banks of Michigan. The one issue of *Thompson's Bank Note and Commercial Reporter* of the Wild Cat period uncovered by Weber (2013) has a quotation for notes of the Detroit City Bank, at a discount similar to that on the notes of the chartered banks of Detroit. This study's review of the newspapers of the Wild Cat period discovered only one other out-of-state quotation on Michigan Free Bank notes.[14] These two quotations are, therefore, the exceptions that prove the rule: Michigan Free Bank notes did not circulate much out of state.

The *ex ante* Loss to Bank Note Holders

As Table 2 shows, from 1837 to 1839, there was a very substantial contraction of the notes in circulation of the banks of the state. According to the *Daily Advertiser* (September 16, 1839), "The Wild Cat article is all disposed of; and our currency is now composed entirely of Eastern funds and the bills of our own sound chartered institutions." Figure 1 suggests that commodity prices tumbled during these years, and continued to fall for several more years. Land prices may have fallen even more sharply.[15]

Table 2
Selected Items of Michigan Bank Statements

Circa end of	Number of	Specie	Loans and discounts	Circulation	Capital and Surplus
1834	2	72,072	1,100,012	395,862	503,980
1835	7	172,499	2,185,589	1,170,714	1,006,756
1836	10	546,722	3,130,001	1,499,235	1,476,069
1837	17	406,106	3,440,864	1,534,166	1,877,771
1838	28	277,096	3,252,971	975,380	2,065,680
1839	12	165,185	2,334,121	647,108	1,632,716
1840	4	137,194	1,731,273	730,654	1,168,255

Source: Weber's (2011) database of "end-of-year" bank statements (69 bank statements) plus eleven additional "end-of-year" bank statements found in newspapers, not in Weber's database.

"[T]he speculative prices of real estate collapsed, and much of it proved to be unsalable at any price … In Detroit and the larger towns, the decline equaled eighty or ninety percent of previous prices ... fifteen or twenty years elapsed before the prices of 1836-7 were again realized …" (Hinchman 1887, p. 44).

Only part of the contraction of notes in circulation reflected the payout of coin. Much of the contraction was due to the closing of banks. By 1840, only four banks, each a chartered bank, remained open in the state. Most of the others were in receivership. In twenty-one cases, the receivers made full or partial reports to the Attorney General of the state, with estimates of the claims on the bank, and of the bank's assets categorized as "good," "doubtful" or "bad." In seven other cases, receivers had been appointed, but no reports made. In one other case, the receiver reported that he had already fully satisfied the claims on the bank.

At the time, receivers concluded the affairs of banks mostly through a process of offsets: either debtors to the bank acquired its outstanding, usually greatly depreciated, notes to pay off their debts, or third-parties interested in the collateral securing those debts acquired outstanding notes so that they could bid on the collateral at an auction.[16] The process of winding-down a bank sometimes dragged on for years, mostly because of the illiquidity of the land securing the loans of the failed bank. In contrast, pay-outs from the bond collateral required of banks organized under subsequent Free Banking acts in other states were much quicker.

The possibility of winding down failed Free Banks through the so-called "offsetting process" was recognized in Michigan during the period. The Bank Commissioners (1839, p. 195) said, "debtors [are thus] to pay their liabilities in the notes of banks, purchased at a great discount." For example, at the time that the Bank of Saline, a Free Bank, went into receivership, it was said that it possessed ample funds to make good on its debts (*Michigan Argus,* August 23, 1838). Following this, an advertisement indicated that the notes of this bank, along with those of 15 certain other banks in suspension, would be acceptable in barter-like trade for land (*FP,* May 11, 1839), indicating some confidence in an eventual recovery of value. Later, when the receiver made a report, he said that he possessed a dollar in "good assets" for each dollar of bank liability, plus a substantial amount of "doubtful assets." In historical fact, the process of receivership was undermined in Michigan by an interference with contract, so that the notes of this bank became worthless along with the still outstanding notes issued by all the other Free Banks. Because of this interference with contract, what follows is merely a counterfactual exercise.

Let us assume that a bank can realize, possibly through offsets, $1 in value for every $1 in assets deemed "good" by a receiver, 67 cents for every $1 deemed "doubtful," and 33 cents for every $1 deemed "bad." A straightforward calculation delivers the expected recovery per dollar of claim for banks for which receivers made complete reports.[17] For about half of the banks in receivership, the expected recovery is the full $1 per dollar of claim, indicating that these banks were closed because of technical violations of law or because they were illiquid, and not because they were insolvent. For the other banks in receivership, the average expected recovery of value is 54 cents per dollar of claims, with a range from zero to 99 cents.

Table 3
Average Ex Ante Loss on Notes in Circulation, Optimistic Assumption of Recovery on Bank Assets
(See Appendix for entire file)

	Chartered Banks	All Free Banks	Non-Wild Cat Free Banks	Wild Cat Free Banks
Circa Dec '37	0.0%	25.4%	0.8%	50.5%
Circa Jun '38	1.6%	9.9%	2.1%	52.8%
Circa Dec '38	4.0%	4.0%	4.0%	NA

Source: For notes in circulation, we used Weber's (2011) database of bank statements (56 "end-of-half-year" bank statements) plus six additional "end-of-half-year" bank statements found in newspapers, not in Weber's database, or else Bowen's (1956) estimate. For claims upon and assets of banks, and quality of assets we employed the reports of receivers of Michigan banks compiled by the Attorney General of the state (1839). For circulation at par of notes of bank, we used this study's database of bank news items.

Table 3 presents estimates of the average ex ante loss to holders of Michigan bank notes through the end of 1838. Notice that even during the worst of the Wild Cat period, this expected loss is modest for the holders of the notes of both chartered banks and non-Wild Cat Free Banks. But, for holders of the notes of Wild Cat Banks, the expected loss was so great as to negate the money-quality of the notes.

What characteristics cause a Free Bank to be categorized as a Wild Cat? This study's proxy is having at least two of the following three characteristics: (1) the bank issued a large amount of notes, (2) the bank was closed by the bank commissioners either while being organized or soon after commencing business or soon after a change in ownership, and (3) there is no indication that its notes circulated at par within the state. The first of these three criteria speaks to the intent of those who controlled the bank. Clearly, if the bank only issued a small amount of notes, there was no intent to defraud the public. The second criterion speaks to the ability of bank regulators to identify and close unsafe banks. Finally, the third speaks to the ability of market institutions to discipline banks; with the focus, in this case, on those who took the lead in accepting notes as money at a time when banks were not disciplined by having to redeem their notes in specie upon demand. During the Wild Cat period, this lead role in accepting notes as money was mostly played by the banks and brokers of Detroit.[18]

Interference with Contract

Michigan, like several other states during the troubled times that followed the Panic of 1837, undermined the debts owed to its banks by interference with contract.[19] In 1839 and afterword, under Whig as well as Democratic administrations, the state was no longer able to sell bonds out-of-state to finance its (1) internal improvement projects, (2) interest on already outstanding debt and (3) ordinary operating expenses. During this time, the state loaded up its surviving banks with its illiquid debt.[20] In 1841, the state adopted an appraisal law so that the property securing loans could not be sold at auction for less than two-thirds of appraised value. Additionally, the state authorized the issue of up to $1 million in state scrip, in denominations of $1 to $10 (Cutcheon, 1906, pp. 226). The next year, the legislature annulled the General Banking Act, voided the charters of the chartered banks (except that certain of them could have their charters restored), supplemented the appraisal law with a tender law (so that debtors could put property to lenders at two-thirds of appraised value), and began the process of winding-down the state's disastrous program of internal improvements (ibid, pp. 261-62).

Farmer (1884, p. 850) notes that the tender law "lead to mischief such as buying government land, having it appraised at ten times its cost, and then forcing the land onto creditors at six times." Nevertheless, several of the chartered banks were eventually able to make good on the claims placed upon them. Consider the Bank of Michigan, which went into receivership in 1842. It "largely redeemed its liabilities with exchanges for its assets, including real estate the value of which greatly increased when the economy revived." (Hinchman, 1887, p. 19) "As time went on," said Dunham (1929, p. 35), "the memory of the institution became a pleasant one…because…all the bank's debts were paid off in cash or in…real estate."

However, because the act under which the Free Banks were organized was nullified, no action could be taken by their receivers. According to Hinchman, "There was no competent authority to discharge mortgages that had been given as security" (1887, p. 37), The Michigan Supreme Court could have ruled nullification an unconstitutional interference with contract. However in 1844, it found the original act unconstitutional (Hinchman, 1887, p. 37). At that time, the mass of notes "fell in a dead loss on the community" (Felch, 1880, p. 123).

"The law was held void in its inception and the state banks were consequently illegal institutions. The securities given in place of their debts were void, the obligations they placed on individuals were nullities. Even the receivers' issues, which had been created in winding up their concerns, were of no legal standing" (Ravel, 1910, p. 162). "[A]ll hope which the holders of bills may have had of realizing anything upon them vanished forever … Many of the bills…were then given away promiscuously. Children used them to play with and, in the rural districts, where paper hangings were scarce, people used them to paper their rooms" (Utley 1884, p. 221).

Along with the annihilation of the Free Banks, the chartered banks were harried and forced into suspension or dormancy. The economy of the state was reduced to a semi-barter basis. The main media of exchange were the bills of credit issued by the state,[21] George Smith's money[22] and out-of-state bank notes. In the country, transactions were often conducted in "ready pay" (or, farm produce).[23] Farmer (1884, p. 872) indicates that the first private bank was organized in the state in 1843, and that a total of twenty were organized during the antebellum period. Hinchman (1887, p. 59) says that private bankers and note brokers "became indispensable, especially in the interior."[24]

Even with a suspension of its public works and substantial reductions of other expenditures, but with no access to credit, the state was forced to significantly raise taxes, with the consequence of an avalanche of tax sales. "Michigan spent most of its first decade as a state atoning for ill fortune and economic naïveté." (Martin J. Hershock, 2003, p. 2) Later, in the writing of the history of this period, the Wild Cats became the scapegoats. While the excesses of certain banks organized under

Michigan's General Banking Act contributed to the economic calamity suffered by the state, this study suggests that the extent of its depression is better explained by the state's interference with contract.

Concluding Remarks

Rockoff (1986, p. 623) was certainly correct to question the enormous loss attributed to the Wild Cat banks of Michigan. How could bank regulators and market institutions have been incapable of protecting the community from such an enormous loss?-Not only did $1 million of bank notes become worthless, but the state's banking system collapsed contributing to a prolonged depression. It turns out that the losses directly attributable to Wild Cat banks in Michigan, while substantial, were much less than has been previously suggested. The number of Wild Cats among the Free Banks was only about twelve and all of the Wild Cats were closed within a year of the start of the Wild Cat period. Additionally, there is no indication that their notes gained a general circulation, and, according to our estimates, the loss on bank notes might have been only $350,000 if the normal process of winding down closed banks had been followed.

But after a failed attempt to organize a multi-branch, state-owned bank so as to again re-finance the debts of the people of the state, the Michigan legislature moved to undermine debts due to banks by nullifying the act under which the Free Banks of the state were organized; that is, to interfere with contract. Ravel (1910, p. 162) says that this interference "aggravated and prolonged the evils of wild-cat currency." Nevertheless, he notes that the tender law and the federal bankruptcy act of 1841 "relieved debtors of the crushing burden and permitted them … once more to enter the field of industry and activity." A few years after the state of Michigan interfered with contract, the *Daily Advertiser* (February 15, 1843) noticed an appraisal law from the state of Illinois making its way to the U.S. Supreme Court. Naturally, being a Whig organ, the paper supposed that the law would be found unconstitutional. "But, be this as it may, a change has certainly been affected in the pecuniary affairs of the community. The great mass of indebtedness has been wiped out either by voluntary settlements or by the benign operations of the Bankruptcy Act, and our citizens are about to begin again."

The state only recovered years later. Regarding the state's fiscal situation, it sold off its partially constructed railroads, swore off investments in private corporations, and limited its ability to borrow. Regarding its banks, the state, in 1845, issued an injunction against one of its few remaining banks, on the basis that it broke its charter by opening an agency in Chicago, Illinois (*FP,* August 8, 1845). As can be seen in Figure 2, this action spooked note brokers. Subsequently, the state merely required that its surviving banks, and the newly chartered Peninsular Bank, "back" their notes with state bonds.[25]

The Wild Cat bank experience of Michigan speaks to several issues of recurrent interest in monetary economics in addition to the vulnerability of some to the financial schemes of others; namely, the roles of regulation and market institutions in protecting the community from reckless banking, the role of the government in maintaining the rule of law, and the fiscal underpinnings of money and credit. The actual history is as informative as the fanciful history is colorful.

NOTES

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[1] There are at least two definitions of Wild Cat bank. One is the definition used here, alluding to the potential danger of a wild cat, and the other concerns banks organized in inaccessible places, "where only the wild cats roam," so as to make bank notes difficult to present for redemption. For a discussion of the origins of the term, see Lee (2007, p. 13).

[2] Two acts were involved, the first being the Safety Fund Act and the second the General Banking Act. The General Banking Act was suspended after about a year; and, a few years later, annulled by the legislature and declared unconstitutional by the state Supreme Court.

[3] According to Parks (1972, pp. 186-197), Governor Stephens T. Mason, "the Boy Governor," secretly negotiated with and engaged at least three different bond brokers. His double-dealing cost the state in fees and lost

opportunity in marketing the bonds in Europe. He did place portions of the bond issue with the United States Bank of Pennsylvania and the Morris Canal and Banking Company of New Jersey; and, may have attempted to use some of the unissued bonds to deal in Michigan bank notes. The misuse of his authority resulted in a Senate investigation and a public scandal.

[4] New York's original Free Banking law allowed mortgages on real estate, and the bonds of any state government and of the federal government to be posted as collateral. New York, like Michigan, encountered numerous bank failures among its Free Banks, as a result of which it reformed its Free Banking law, restricting backing to New York and U.S. Treasury bonds (Dowd, 1992, p. 208). As Dowd discusses (pp. 2, 207, 231), Free Banking in the United States was "free" with regard to entry, the issue of bank notes of that served as currency, and in not having a lender of last resort; but, was not "laissez-faire" banking, since Free Banks were subject to collateral and other restrictions.

[5] Thus, the banks organized under the provisions of this act were described both as Free Banks and as Safety Fund Banks, as well as banks operating under the General Banking Act. In certain circles, they were described, derisively, as [Martin] Van Buren Banks.

[6] It appears from classified ads that during the early months of 1838 that the par of exchange in Detroit in retail transactions was current Michigan country bank notes, against which Detroit or "bankable" funds exchanged at a premium of 3 percent (*FP,* March 13, 1838, April 10, 1838, May 1, 1838).

[7] E.g., a classified ad, "Wanted on good security a few hundred dollars of wild cat money." (*FP,* February 14, 1838)

[8] With the state government bereft of funds, the legislature would later authorize it to borrow funds from its chartered funds (*FP,* March 24, 1840).

[9] Wallis (2001) controverts Temin's almost casual discussion of the Panic of 1839. Wallis et al (2006) examine the role of state debts in contributing to this panic, and English (1996) examines the burdens placed on the states by their financial embarrassments. John Dove (2012)

and Clifford Thies (2002) explore how most of the states subsequently reestablished relations with their creditors.

[10] In the western states generally, Democrats supported state banks during the 1830s (Shade, 1972, pp. 34-35). Then, during 1839, they shifted to the hard money position (p. 62).

[11] At the time, there were concerns for the effects of small notes driving specie out of circulation, the exposure of the poor to loss, and the reduced likelihood of small notes being returned for redemption (Bodenhorn 1993, p. 813).

[12] The Bank Commissioners Report of 1839 identifies several banks that issued notes to persons from New York and Ohio. Comments in out-of-state newspapers that Free Bank notes were worthless indicate that there were people in the places of those newspapers holding them. As indicated by numismatic catalogs (Bowen, 1956, Lee 2007), the range of notes issued by Free Banks featured lower denominations than the range of notes issued by chartered banks. Not one Free Bank issued a note larger than $20. In contrast, about half of the chartered bank notes in circulation came from banks issuing larger denomination notes.

[13] With irredeemable bank notes serving as the par of exchange in retail transactions, specie would be quoted at a premium. Broker discounts in Buffalo on the notes of Michigan chartered banks remained modest through 1839, during which year Detroit bank notes were at a discount of 3 percent, and Michigan country banks at 6 to 12½ (*FP,* July 27, 1839). From 1840 to early 1841, the discount on Michigan bank notes rose to 10 percent (*FP,* May 11, 1840, June 15, 1840, January 15, 1841). Then, trading in Michigan bank notes was suspended (*FP,* April 10, 1841), presumably on intelligence of the imminent failure of the Bank of Michigan, only to resume a bit later at 25 – 50 percent (*FP,* May 31, 1841).

[14] A classified ad in the *Cincinnati Gazette* (March 13, 1838) by a broker, pegging the notes of a handful of Free Banks at a discount of 25 percent.

[15] Wallis (2003) tracks assessed value per acre of land in Indiana, the only state in the region that attempted to tax land at its market value during this period. From $9.87 in 1837, assessed value per acre fell to

$5.19 in 1843. Also, during the 1840s, the school lands of Michigan sold at their reservation price, which had been lowered from $8 to $4.50 an acre (*FP,* January 9, 1846, January 5, 1847, January 9, 1850). [*Editor's Note:* This footnote was updated in February 2015. The original footnote, which appears in the 2014 printed version of *EEBH*, incorrectly cited a different Wallis paper as the source of the Indiana data.]

[16] In 1848, in Planters Bank v. Sharp and Baldwin v. Payne, the U.S. Supreme Court decided two cases involving an aspect of the offsetting process, finding that the State of Mississippi had unconstitutionally interfered with contract.

[17] Similar calculations were performed under a pessimistic assumption that assets deemed good would fetch $1 in value, doubtful 50 cents and bad zero, with surprisingly similar results. Rockoff (1986) puts the loss at $1 million, reproducing Felch's "venerable conclusion," by assuming zero recovery on doubtful as well as bad assets, and by extrapolating to all banks the losses in banks for which he had reports from receivers, essentially treating all banks as Wild Cat banks. While Rockoff reproduces Felch's "venerable conclusion," his calculation merely reveals how Felch, who had an interest in exonerating himself, a bank commissioner during the time of the Wild Cats and, later, an anti-bank Governor, might have justified his number. One of the two chartered banks in receivership did not have a breakdown of its assets. For this bank, the proportions of its assets that were good, doubtful and bad are taken as the proportions of the other chartered bank in receivership. Similarly, three of the ten non-Wild Cat Free Banks in receivership did not have breakdowns of assets. For these banks, the proportions of their assets that were good, doubtful and bad are taken as the proportions of the other non-Wild Cat Free Banks in receivership. Finally, for the four non-Wild Cat Free Banks in receivership and three Wild Cat Banks in receivership for which there is no report from the receiver, the average expected realization of value of the other non-Wild Cat and Wild Cat Free Banks in receivership, respectively, is used.

[18] Others who, from time to time, played the lead role in making something money were the state government, as when it refused taccept

the notes of the Bank of Michigan (*FP,* May 17, 1841), and the merchants of Detroit, as when the brewers of that city refused to accept the shinplasters, or change notes, issued by the city (*FP,* May 2, 1842).

[19] Skilton (1940, 1946) provides a history of mortgage moratoria in the United States through the 1940s. Feller (1933) discusses specifically interference with contract during the 1840s.

[20] The state of Michigan was able to force its bonds upon banks as a condition for not voiding their charters following their relapse into suspension following the Panic of 1839. The state first turned to the Michigan State Bank, its fiscal agent at the time, borrowing $600,000 using its bonds as collateral (*Daily Advertiser,* October 9, 1839). The bank was subsequently forced to close (Parks 1967, pp. 190-97). The state then turned to the Bank of Michigan (*Daily Advertiser,* June 29, 1840, September 7, 1840). This bank, too, was soon forced to close. (The other chartered bank of Detroit, the F&M Bank, survived the troubled times by curtailing its business.) The state also turned to several of the chartered country banks, e.g., the Bank of River Raisin, which forced them into trouble (*Michigan Whig,* August 28, 1840).

[21] In Detroit, state scrip exchanged for current bank notes at a discount of 12 to 20 percent through 1843. From 1844 to 1846, during which years the scrip was being retired, they exchanged at a discount of 3 to 5 percent.

[22] Small denomination "certificates of deposit" issued by the Wisconsin Fire & Marine Insurance Company that circulated like money (Anderson, 1980; Daley, 1937; Farwell, 1905; Krueger, 1933). In Detroit, during 1843, these exchanged for current bank notes at par or a discount of 1 percent.

[23] For some examples, "beef, pork, … candles, butter, eggs, hams, etc., will be at all time furnished low for ready pay. Philip Finster." "A large stock of goods which they offer low for cash or ready pay. The highest prices paid at all times for produce. Isaac Moffatt, Jr., and Hiram Arnold." (*Kalamazoo Gazette,* May 30, 1842) "Sugar 7 to 10 cents, tea 4 to 8 shillings, … sperm oil 12 shillings per gallon, same prices for cash

or produce. Elisha Clarke." "Sugar 7 cents, coffee 12½ cents, wheat received at 44 cents. Elisha Clarke." (October 14, 1842)

[24] Bodenhorn (2000, p. 80) finds that banking contributing only modestly to economic growth within states, supposing that private banks and brokers were able, in the long-run, to fill any void. For more on private banking, see Knodell (2010).

[25] Therefore, while still chartered banks, they were like the Free Banks of other states with regard to how their notes were backed. This backing effectively forced the banks to suspend during the Panic of 1857, when Michigan's state bonds fell to a large discount. The voters of the state approved a new Free Banking law during 1858, but only two banks were re-organized under it (Hinchman, 1887, p. 78).

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Appendix, part 1 of 2.

	Chartered-Approved	First news Failure	First news Injunction Receiver	Circulat'n circa Jun '37	Circulat'n circa Dec '37	Circulat'n circa Jun '38	Circulat'n circa Dec '38
Chartered Banks							
Calhoun Co. Bk	3/28/36		2/3/40	28,327	55,161	38,183	26,453
Clinton, Bk of	3/28/36		8/28/38	40,900	67,000	73,200	0
Constantine, Bk of	7/25/35		3/8/42	13,913	41,123	54,842	11,287
Erie and Kalamazoo RR Bk	3/26/35	2/3/40	2/3/40	85,435	40,268	48,283	61,070
F&M Bk of Detroit	11/5/29			289,587	148,913	9,961	0
Macomb Co., Bk of	3/28/36			45,173	56,034	0	0
Michigan State Bk	3/26/35	2/8/39		49,066	114,474	55,067	126,172
Michigan, Bk of	12/19/17	5/18/41	6/18/41	359,985	342,573	*235,923*	129,273
Oakland Co. Bk	3/28/36			0	0	0	4,686
Pontiac, Bk of	3/26/35			34,477	0	0	0
River Raisin, Bk of	6/29/32			141,628	90,537	34,110	83,977
Tecumseh, Bk of	7/25/36		2/3/40	81,128	70,010	31,119	72,251
Washtenaw, Bk of	3/26/35	1/2/40	2/3/40	51,700	77,103	60,317	0
Ypsilanti, Bk of	3/28/36	1/25/39	4/2/39	87,768	108,760	99,664	61,648
Non-Wild Cat Free Banks							
Adrian, Bk of	2/1/38		11/12/42	0	0	0	1,667
Battle Creek, Bk of	1/18/38		2/3/40	0	0	20,305	12,528
Berrien Co. Bk	1/27/38		9/20/38	0	0	14,548	0
Brest, Bk of	10/18/37		9/1/40	0	65,448	58,118	38,909
Coldwater, Bk of	11/1/37	1/30/39	3/26/39	0	0	35,521	0
Commercial Bk of St Joseph	12/30/37		2/3/40	0	0	8,113	6,532
Detroit and St Joseph RR Bk	1/9/38		1/4/43	0	0	0	3,138
Detroit City Bk	12/18/37	2/26/39	1/24/40	0	18,602	10,486	14,519
Farmers Bk of Homer	8/8/37		2/3/40	0	16,932	16,186	17,660
Farmers Bk of Oakland	12/23/37		8/8/38	0	3,051	0	0
Farmers Bk of Sharon	12/23/37	6/14/38	2/15/39	0	0	7,100	0
Genessee Co. Bk	12/27/37		2/3/40	0	8,806	3,977	3,351
Gibraltar, Bk of	1/1/38		8/8/38	0	0	17,973	0
Goodrich Bk	1/10/38		1/30/38	0	1,500	1,500	0
Grand River Bk	7/17/37		2/3/40	0	35,109	26,154	16,949
Huron River Bk	1/8/38		2/12/39	0	3,146	3,327	2,855
M&M Bk of Monroe	10/24/37		2/3/40	0	0	12,540	13,030
Manchester, Bk of	11/22/37	3/29/38	1/4/40	0	34,000	45,334	25,514
Marshall, Bk of	10/23/37		2/3/40	0	49,581	59,560	6,549
Merchants Bk of Jackson Co.	1/4/38		8/23/43	0	4,007	4,029	1,441
Millers Bk of Washtenaw Co.	11/15/37		2/3/40	0	282	81	0
Niles, Bk of	12/30/37		2/3/40	0	0	21,249	8,583
Oakland, Bk of	7/28/37		1/1/39	0	23,307	2,146	0
Peoples Bk of Grand River	11/12/37		9/20/38				
Saginaw City Bk	12/14/37	1/5/39	2/5/39	0	0	17,516	0
Saline, Bk of	9/2/37		2/15/39	0	33,369	0	0
Shiawassee, Bk of	12/30/37		1/30/39	0	102	71	0
Singapore, Bk of	12/7/37		12/12/39				
St Joseph Co. Bk	12/21/37		9/20/38	0	19,812	0	0
Superior, Bk of	1/8/38		11/12/42	0	0	199	0
Utica, Bk of	8/31/37		1/30/39	0	14,225	5,050	0
Wild Cat Free Banks							
Allegan, Bk of	12/30/37	9/20/38	5/11/39	0	38,587	0	0
Clinton Canal Bk	11/25/37	8/29/38	11/6/38	0	37,335	10,747	0
F&M Bk of Pontiac	11/15/37		8/8/38	0	0	12,080	0
F&M Bk of St Joseph	3/15/38	3/29/38	4/11/38	0	19,860	0	0
Farmers Bk of Genesee Co.	1/1/38	3/26/38	4/6/38	0	4,371	0	0
Farmers Bk of Sandstone	12/30/37		4/6/38	0	46,933	0	0
Jackson Co. Bk	9/1/37		4/6/38	0	44,940	0	0
Kensington, Bk of	12/29/37		6/19/38	0	10,910	25,455	0
Lapeer, Bk of	12/3/37	3/29/38	4/6/38	0	65,000	0	0
Leenawee Co. Bk	12/23/37		7/13/38	0	0	22,646	0
Shiawassee Exchange Bk	1/31/38		4/6/38	0	25,393	0	0
Wayne Co. Bk	12/12/37		4/6/38	0	31,326	0	0

Appendix, part 2 of 2.

	Liabilities in hands of Receiver or O/S	Good Assets in hands of Receiver	Doubtful Assets in hands of Receiver	Bad Assets in hands of Receiver	Total Assets in hands of Receiver	Recovery per dollar of claim-Optimist	Recovery per dollar of claim-Pessimist
Chartered Banks							
Calhoun Co. Bk							
Clinton, Bk of	65,383	*3,323*	*44,726*	*64,950*	113,000	0.84	0.39
Constantine, Bk of							
Erie and Kalamazoo RR Bk							
F&M Bk of Detroit							
Macomb Co., Bk of							
Michigan State Bk							
Michigan, Bk of							
Oakland Co. Bk							
Pontiac, Bk of							
River Raisin, Bk of							
Tecumseh, Bk of							
Washtenaw, Bk of							
Ypsilanti, Bk of	215,285	8,138	109,521	159,043	276,702	0.62	0.29
Non-Wild Cat Free Banks							
Adrian, Bk of							
Battle Creek, Bk of							
Berrien Co. Bk	29,000	8,000	8,000	19,000	35,000	0.68	0.41
Brest, Bk of	118,912	107,537	29,071	4,050	140,658	1.00	1.00
Coldwater, Bk of	58,000	22,126	61,897	0	84,023	1.00	0.92
Commercial Bk of St Joseph							
Detroit and St Joseph RR Bk							
Detroit City Bk	108,955	126,947	34,319	4,781	166,046	1.00	1.00
Farmers Bk of Homer	33,673	13,175	10,294	1,434	24,903	0.61	0.54
Farmers Bk of Oakland							
Farmers Bk of Sharon	19,000	8,000	22,728	0	30,728	1.00	1.00
Genessee Co. Bk							
Gibraltar, Bk of	21,043	10,835	20,521	19,688	51,043	1.00	1.00
Goodrich Bk						1.00	1.00
Grand River Bk							
Huron River Bk							
M&M Bk of Monroe							
Manchester, Bk of	27,972	38,141	19,626	0	57,767	1.00	1.00
Marshall, Bk of							
Merchants Bk of Jackson Co.							
Millers Bk of Washtenaw Co.							
Niles, Bk of	27,000	30,000	0	0	30,000	1.00	1.00
Oakland, Bk of						0.86	0.81
Peoples Bk of Grand River							
Saginaw City Bk						0.86	0.81
Saline, Bk of	30,000	30,000	54,000	0	84,000	1.00	1.00
Shiawassee, Bk of							
Singapore, Bk of							
St Joseph Co. Bk						0.86	0.81
Superior, Bk of							
Utica, Bk of						0.86	0.81
Wild Cat Free Banks							
Allegan, Bk of	35,000	14,830	29,794	0	44,624	0.99	0.85
Clinton Canal Bk	69,284	0	0	40,000	40,000	0.19	0.00
F&M Bk of Pontiac	24,917	6,364	19,095	0	25,459	0.77	0.64
F&M Bk of St Joseph						*0.50*	*0.34*
Farmers Bk of Genesee Co.						*0.50*	*0.34*
Farmers Bk of Sandstone	38,270	0	0	0	0	0.00	0.00
Jackson Co. Bk	68,371	5,000	0	38,900	43,900	0.26	0.07
Kensington, Bk of	55,725	3,212	0	65,768	68,980	0.45	0.06
Lapeer, Bk of						*0.50*	*0.34*
Leenawee Co. Bk	23,868	0	0	33,700	33,700	0.47	0.00
Shiawassee Exchange Bk	22,261	1,671	0	5,540	7,211	0.16	0.08
Wayne Co. Bk	16,253	4,224	4,226	0	8,450	0.43	0.39

Appendix Sources: First News of Failure or of Injunction/Receivership – this study's database of news items; Circulation – Weber's (2011) database of bank statements (56 "end-of-half-year" bank statements) plus six additional "end-of-half-year" bank statements found in newspapers not in Weber's database, or else Bowen's (1956)