Free Banking and Financial Entrepreneurship in Nineteenth Century New York: The Black River Bank of Watertown

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Though the literature on nineteenth-century American free banking is voluminous, the free banker remains a shadowy figure. Little is known about the men who organized and operated America's free banks, or about their banking philosophies and practices. While we know something of the macroeconomic consequences of free banking, the microeconomics of free banking has been inferred from bank balance sheets.[1] Although balance sheets may provide clues about a bank's decision making process, it does not provide the richness of detail required to understand a banker's motivations, his philosophies, or his lending practices.

Utilizing the records of one New York free bank, this essay offers some preliminary answers to some interesting microeconomic questions surrounding nineteenth-century banking. The records of the Black River Bank of Watertown, New York are unusually complete and offer a rare richness of detail. Loveland Paddock founded the Black River Bank in late 1844 under New York's Free Banking Act of 1838. Among the carefully preserved records are three discount books detailing every loan made between 1844 and 1859. Recording the name(s) of the borrower(s), the name of any endorsers or co-signors, the length of the loan, the size of the loan, where the loan was payable, the interest rate, and several other characteristics, the loan books provide the details of the bank's lending practices. Combining this information with data from other sources, a picture of one free banker's lending practices emerges. Clearly, the activities of a single banker cannot be taken as representative of free bankers generally, but an analysis of even a single banker contributes to our understanding of an important sector at a critical period in American economic development.

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[1] The classic microeconomic motive is the "wildcatting" hypothesis related in Hammond [1959]. Modern studies include Rockoff [1974] and Rolnick and Weber [1982]. Bodenhorn and Haupert [1995] consider the microeconomics of note issue, but also rely on balance sheet data.

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Ultimately then, this study addresses several macroeconomic issues. A well functioning financial sector represents a critical component of the changing sectoral nature of production and employment emerging in the nineteenth century. Agriculture was giving way as the dominant employer even while the Northeast was giving way as the geographic center of production. These fundamental economic developments placed severe strains on the financial sector as it was asked to effect geographic and sectoral reallocations of capital and credit. My previous [1992] research suggests that early American banks facilitated the geographic movement of capital. This study suggests that they may have also facilitated sectoral shifts.

Loveland Paddock: Farmboy to Financier

Loveland Paddock was born on March 15, 1795, in Middletown, Connecticut, son of John Paddock, a Revolutionary naval officer who later captained a West Indies merchant packet.[2] Two years after Loveland's birth, his father apparently tired of the sea and purchased a farm near Utica, New York. Loveland received an irregular education, attending school when it did not interfere with the routine of the farm. By his mid-teens, Loveland was already going into Utica to conduct family business. Buying for the farm or disposing of its produce, Loveland became acquainted with several merchants and, having caught "some of their business spirit...earnestly requested his father to allow him to learn a trade or to become a clerk in some store..." [Paddock, undated, p. 2]. Loveland had an inclination toward business, and a Utica merchant agreed to apprentice him as a clerk.

John Paddock, Sr. encouraged Loveland's mercantile ambitions, but not by apprenticing him to a Utica merchant. Loveland's elder brother, John Jr., and his brother-in-law, William Smith, had recently established the firm of Smith & Paddock that shipped potash down the St. Lawrence River to Montreal [Emerson, 1898, pp. 277-78]. It was agreed that Loveland would apprentice with John, Jr. who took Loveland in, but more often put him to work filling barrels with potash than teaching him the trade. Nevertheless, Loveland gradually learned the business and, though a tolerably good salesman, he was unusually good at keeping the books (what better skill for a would-be banker). By 1812, John Jr. had gotten involved in two other mercantile partnerships and was elected sheriff of Jefferson County. These obligations drew John Jr.'s attention from his Watertown store and he relinquished its day-to-day operations to Loveland and his brother-in-law. Within the year Loveland demonstrated a budding mercantile acumen. With soldiers mustering at Sacket's Harbor (10 miles west of Watertown) in late 1812, Loveland recognized the profits to be had in provisioning loitering soldiers. After convincing his brother and brother-in-law to entrust him with $400 in goods, Loveland set out for

[2] Details of Loveland Paddock's life is drawn from Paddock [undated] and *Watertown Times* [June 25, 1872; March 7, 1952].

Sacket's Harbor, leased a store front, and within three months parlayed the initial $400 in goods into a $600 profit.

In 1816 at age 21, Loveland took his share and headed for New York City where he called on several merchants and drummers whose acquaintance he had made as they passed through Watertown. He procured $700 in goods suitable for stocking a dry goods store on consignment, insured them, arranged for transportation, and leased a storefront in Watertown. Within a year, Loveland repaid his creditors and ordered more goods. His business prospered until the autumn of 1820, when he found New York wholesalers reluctant to forward him goods on credit. While their reluctance almost surely reflected the onset of a sharp recession, Loveland was convinced that jealous competitors had spread false rumors about his financial status.[3]

Paddock's dry goods business survived the recession of the early 1820s, but this and other experiences convinced him that local merchants needed a local source of credit, namely, a bank. The Jefferson County Bank was chartered in 1816, but was located in Adams, New York (a few miles south of Watertown). As Watertown grew into the county's commercial center, the bank moved there in 1824. It seems likely that Paddock's association with the bank predated its move to Watertown, as his brother had been an original shareholder and director, but the first extant record of Paddock's association occurs in 1828 when he took a large stake in the bank and was elected a director. Having seen his retail dry goods business grow as large as he wished, Paddock apparently considered banking a promising outlet for his capital.

New York enacted free banking in 1838, and in 1839 Paddock joined with several others to organize the Bank of Watertown. The bank opened in 1840 with Paddock as its first president [*Albany Argus*, June 17, 1840]. He continued as president until 1842 when, after a series of disagreements with the other directors and officers, he resigned as both president and director and sold his shares. Having learned the business of banking as a director of three banks and president of one, Paddock turned his attention exclusively to banking. In 1844 he closed his dry goods business, invested $40,000 in mortgages and New York state bonds, deposited them with the state comptroller and announced his attention to open the Black River Bank of Watertown under the terms of the 1838 act [*Albany Argus*, February 19, 1845]. Paddock controlled 90% of the bank's shares with the remainder divided between two of his three sons [Emerson, 1898, p. 336]. His eldest son, Oscar, acted as the bank's vice-president; his second son, Edwin, as cashier. The Black River Bank – known simply as Paddock's Bank by local residents – prospered, surviving the great Watertown fire of 1849 which left the bank building in ashes, the panic of 1857, and the financial dislocations arising out of the Civil War.[4] In 1863 the

[3] Loveland's brother was forced into bankruptcy at about this time, so it is understandable that New York merchants would have some concerns about Loveland's finances.

[4] Most of the records of the bank were saved. Some of the earliest records are lost, but it is not known whether they were taken by the fire, lost, or discarded.

bank reorganized as the First National Bank of Watertown. Loveland died in 1872, but his bank continued until 1880 when his sons voluntarily liquidated it.

Lending Practice at the Black River Bank

By the end of the antebellum era there were five commercial and two individual banks supporting Watertown's thriving commercial sector. As the largest among them, Paddock's Black River Bank was probably *the* prominent player in the Watertown market. In December 1855 it had extended 26% of the total $1.85 million in outstanding loans at Watertown's banks [New York Assembly, 1857]. Between November 1845 and April 1859, it loaned a total of $15.6 million.

Two questions surrounding nineteenth century banks have vexed generations of banking historians: 1) to what extent did the banks follow the real-bills doctrine, and 2) did banks act as Schumpeterian engines of growth? Evidence gathered from a single bank cannot provide definitive answers, but can nevertheless provide clues and suggest further lines of research. The remainder of this essay explores the answers to these two questions using the records of the Black River Bank.

The real-bills doctrine defined the banker's role by establishing very specific criteria for proper lending. Espoused by most mid-nineteenth century banking theorists, the real-bills doctrine held that the extension of business credit should be in the form of short-term loans to finance the production, storage, or shipment of goods. These loans were viewed as self-liquidating because the loan was collateralized by goods actually in the hands of a merchant or mechanic. The bank was to bridge the gap between the purchase of raw materials and the sale of the finished product, between when the wholesaler accepted delivery and the retailer took possession. In addition, it was critical that the banker lend only to those deserving of credit. A well-managed bank confined its discounts to those engaged in the regular course of business and "refuse[d] accommodations to the rash, adventurous, and over-sanguine..." [Tucker, 1839, p. 189].

A true real-bills banking system was passive, reflecting the underlying "level of commercial activity, contracting and expanding the supply of credit in concert with the underlying rhythm of the economy" [Adams, 1978, p. 92]. Schumpeter [1934], on the other hand, envisioned capitalist development as a series of sharp disruptions to the equilibrium circular flow; it meant the introduction of innovations, and often unexpected or surprise shifts in the production function [Kirzner, 1997]. Realizing these shifts in the production function required two things: a competitive environment that elicited an entrepreneurial search for superior products or processes, and financiers willing to interrupt the equilibrium by channeling credit into untested but promising

enterprises.[5] Schumpeter's banker, like his entrepreneur, was a "distinctly heroic figure, prepared (unlike most mortals) to venture forth boldly into the unknown" [Rosenberg, 1982, p. 106]. Schumpeter's banker was not rash or careless, he spent most of his day avoiding risk but was occasionally persuaded to set aside his rational calculating manner and venture forth into the realm of pure uncertainty.

What type of banker was Loveland Paddock? Was he a real-bills banker or a Schumpeterian banker? Information drawn from the *Discount Books* of the bank offers an insight into Paddock's banking practice. Those series that appear to best inform about Paddock's lending philosophy include the term structure of loans, the size distribution of loans, interest rates charged, the nature of the banker's relationship with the borrower, and the occupations and other personal characteristics of the bank's borrowers.

Table 1 reports the average maturity of bills of exchange and promissory notes discounted at the Black River Bank between 1845 and 1859. Several features are immediately apparent. The first is that the average term to maturity for bills of exchange was significantly shorter than promissory notes, an average of about 12 days over the entire period. These differences in maturity between the two types of lending demonstrate why real-bills supporters stressed the importance of lending against real transactions. Bills of exchange were usually drawn to finance the shipment of goods between distant points and represented a "real" transaction. Promissory notes might represent a legitimate transaction, but were far more likely to become so-called accommodation loans because they were not always drawn to finance a specific transaction. They were sometimes drawn to finance production runs or inventory investments, activities without an easily specified term. Because production or inventory run-downs were sometimes unpredictable, promissory notes were more likely than bills to be renewed at maturity.

Table 1: *Average Maturity of Bills of Exchange and Promissory Notes Discounted at the Black River Bank, Selected Years, 1845-1859*

	Bills of Exchange	Promissory Notes
1845†	72.3 days	85.5 days
1847	81.9	87.5
1849	76.9	85.5
1851	72.6	84.5
1853	73.7	84.5
1855	58.0	73.2
1857	55.1	69.9
1859‡	62.3	77.9

Sources: JCHS, *Discount Book #2*, *Discount Book #3*.
Notes: † includes only October-December.
‡ includes only January-April. Bills of exchange include all notes payable outside Watertown area.

[5] The former element of Schumpeter's theory – "creative destruction" – is the one on which most writers focus. The latter element – complementary financial entrepreneurship – is often overlooked.

Paddock apparently rarely allowed promissory notes to devolve into pure accommodation lending. Paddock's bookkeepers failed to record which notes were renewed until 1854 and after. In those years, at least, Paddock was loathe to renew either bills or notes. The renewal rate for bills never exceeded 2.5% and was usually less than 1.0%. Renewal rates on promissory notes was somewhat higher, averaging about 7.0% until the panic of 1857/58 when they reached 23.3% [JCHS, Black River Bank *Discount Book #3*].

The other notable feature of the term structure of loans at Paddock's Bank was the declining maturity. In 1845 the average promissory note ran for 85 days. By 1857 the average declined to about 70 days. Average maturities for bills of exchange fell in roughly similar proportions, from about 72 to about 55 days. Underlying this declining average term was a changing distribution of loan maturities. In 1846, for example, 73.8% of the bank's discounts had maturities of 90 to 120 days, while only 23.3% matured in less than 90 days. A decade later the proportions were nearly reversed with 69.9% of all loans maturing in less than 90 days, while 28.5% matured in 90 to 120 days. It seems clear that Loveland Paddock strove to hold a portfolio composed principally of short-term assets. Throughout the 1850s, the typical loan matured in less than 90 days and was unlikely to be renewed. In implementing this policy, Paddock guaranteed a constant turnover of loans that allowed him to regularly monitor his borrowers.

Table 2: *Average Dollar Value of Bills of Exchange and Promissory Notes Discounted at the Black River Bank, selected years, 1845-1859*

	Bills of Exchange	Promissory Notes
1845	$573	$196
1847	743	220
1849	895	237
1851	777	237
1853	1,218	252
1855	1,540	395
1857	1,496	427
1859	672	352

Sources and Notes: see Table 1.

Just as there were sharp differences in the maturities of bills of exchange and promissory notes, there were equally sharp differences in average dollar amounts. Table 2 shows that the average promissory note in the second half of the 1840s was drawn for about $200, the average bill of exchange was drawn for nearly four times that amount. Despite a notable increase in the size of notes, the relative ratio remained nearly constant until 1858. Between 1845 and 1857, the average promissory note doubled from about $200 to about $400; bills of exchange more than doubled, increasing from about $575 to $1,500 or more. It was probably no coincidence that loan maturity and loan size moved in opposite directions. Paddock accepted the greater risk of larger loans only in return for having them repaid with greater frequency. And as with maturities,

the underlying distribution of loan sizes changed markedly. In 1846, for example, 42.1% of the notes and bills were less than $100, with 87.8% less than $500. Within a decade these values fell by one-half, with only 20.2% of discounts less than $100 and 58.7% less than $500.

It seems likely that as his banking business matured, Paddock turned to borrowers operating relatively large scale enterprises with corresponding credit needs. Though the demarkation between small and large notes was drawn at $100 for analytical convenience, the question arises of whether a $100 loan in 1850, in fact, represented a "small" loan. Weiss's [1992] careful research suggests that per capita GDP in 1850 ranged from $100 to $111. By this benchmark a $100 loan was indeed a large loan. But it is not clear that average per capita income is the relevant standard. Assuming that most borrowers were merchants or manufacturers, a better comparison would be the incomes of these groups. There is little direct evidence on the annual incomes of merchants for the antebellum era, but Margo and Villaflor [1987, p. 893] found that the annual wages of skilled artisans in the northeastern United States averaged about $500 in the early 1850s. Measured against this standard it is not obvious that a $100, or even a $500, loan represented a large loan relative to the scale of the borrower's business. Suppose a representative borrower earned about $500 in the early 1850s. If the proprietor's return on a typical transaction was 10%, the firm's annual sales were about $5,000. A $250 loan, then, represented only about 5% of the proprietor's annual gross revenue. By this standard a majority of Paddock's loans – of which 60% were less than $250 in the early 1850s – represented a rather small fraction of the typical merchant's or artisan's annual transactions.

Though Paddock demonstrated a preference for large notes as his banking business matured, he occasionally loaned small amounts to those seemingly in dire straits. In 1846, with an average discount of $172 and the largest of $2,700, he discounted one note for $14. In 1858 he discounted one for $3.38, suggesting that he was assisting a small business or, perhaps, a household keep itself afloat. This accords with the observation that Paddock "was very liberal with his customers, and...some of them speak feelingly of the assistance he gave them at trying periods in their business career" [Haddock, 1894, p. 217].

But it need not have necessarily been compassion that drove Paddock to grant small loans, be they $5, $50, or $500. Good banking practice required that the banker's risks be spread over a large number of borrowers. The central limit theorem – the law of large numbers – suggests that predicting the probability of default for a single borrower is problematic. Predicting the average number of defaults from a representative sample of borrowers, on the other hand, is relatively straight-forward. For Stephen Girard, who operated one of the country's most prestigious private banks in the early nineteenth century, this was the guiding principle of his operation and he preferred small notes to large because a given capital could discount more small than large notes and thereby "divide the risks for the security of the banker" [Adams, 1978, p. 75]. Like Girard, Paddock divided his risk between both small and large borrowers,

discounting as many as 2,500 notes per year, with one or two for as little as $3 or $4 and one or two for as much as $10,000.

Table 3 reports interest rates charged on bills of exchange and promissory notes. The data suggest a regime change, of sorts, occurring about 1850. In the 1840s, discounters of bills of exchange at the Black River Bank paid slightly lower rates than discounters of promissory notes. This reversed in the 1850s as discounters of bills paid slightly higher rates than discounters of notes, suggesting perhaps that Paddock viewed bills as riskier than notes. It is more likely, however, that the higher rate on bills reflected the fact that bills carried two distinct charges – interest and exchange charges – that were not separated in the bank's books. A typical exchange charge between northern New York and New York City or Boston in the 1850s was probably about one-quarter to one-half percent and the rate differential between bills and notes is consistent with those charges.

Table 3: *Average Interest Rates on Bills of Exchange and Promissory Notes Discounted at the Black River Bank, selected years, 1845-1859*

	Bills of Exchange	Promissory Notes
1845	NA	NA
1847	6.61%	6.76%
1849	6.85	6.88
1851	7.14	7.05
1853	7.07	6.95
1855	6.98	7.09
1857	7.39	7.12
1859	6.81	7.11

Notes: Interest rate calculated from note amount, discount amount, and term to maturity using the equation: r = (discount/note amount)*(365/days to maturity)*100
Sources: see Table 1.

So far, the evidence is generally indicative that Paddock followed real-bills tenets. He loaned at short term, with most discounts running less than 90 days. He rarely renewed a note at maturity. He preferred small notes to large, but discounted larger bills of exchange. Still, the majority of all notes and bills discounted were less than $500 and 20 to 40% were less than $100. And while credit rationing may have limited the extent to which differential interest rates reflected differential risks between borrowers, the risks Paddock perceived surely influenced the rates he charged a borrower. Those with a history at his bank, those discounting bills payable at an eastern financial center, and those discounting a note or bills with longer to run paid lower rates.[6] A remaining question is whether Paddock, operating within a real-bills framework, could be a Schumpeterian engine of growth. Answering this requires a detailed look at the professional and personal characteristics of those who borrowed from his bank.

[6] Regression analysis (not reported, but available upon request) provide support for these interpretations.

Financing Entrepreneurship: Paddock the Promoter

Lamoreaux [1994] characterized the nineteenth century bank as an exercise in nepotism. Banks were founded to finance the ventures of their founders. Not until banking became more professional and banks less closely associated with their original founders did their insider nature disappear. It is not obvious how insider preferences would affect a banker's adherence to the real-bills doctrine nor is it clear how pervasive insider lending would affect the banker's role as an engine of growth. Insider preferences may have limited the banker's entrepreneurial importance if, as was often alleged, they were organized and owned by a clique of prominent merchants who wielded their bank as a weapon. If upstarts who threatened the status quo were regularly shunned, it reduced the likelihood that the upstart could mount a competitive threat. And the more monopolized the banking sector, the more probable this was. Lamoreaux and Glaisek [1993], however, noted that exclusionary practices by existing bankers prompted young businessmen to establish their own banks so that they became, in effect, self-financing.

Paddock's bank fell into neither category: it did not cater exclusively to the already established; nor was it founded by upstarts. It is clear, however, that the Black River Bank was not founded to promote the founder's mercantile enterprise. Paddock was 50 years old when he founded the bank and he closed his dry-goods store before opening the bank. His sons, shareholders, and officers, rarely borrowed from the bank. Loans to individuals with the surname Paddock were few (a half-dozen or so), though some were quite large (Oscar took a single loan for $12,000 in 1855). Nevertheless, the dollar value of loans to family members was small, usually less than 1% of the total. The year 1855 was exceptional in that the Paddock family members accounted for 2.22% of the bank's loans.

So who were the principal borrowers at the Black River Bank? In order to learn something of the characteristics of Paddock's customers, the names of borrowers in 1855 were linked with two independent sources: the 1855 New York manuscript population census and a Watertown city directory [Huntington, 1856]. Merchants received the lion's share of the bank's loans, accounting for 41.6% of the loans granted.[7] Manufacturers represented the next most active borrowers, accounting for 25.6% of loans. Though agriculture was the largest employer in northern New York in the 1850s, only 9.2% of Paddock's loans went to farmers. That most of Paddock's borrowers were merchants also suggests that he was a real-bills lender. Mercantile activities met the real-bills criteria far more often than manufacturing or agriculture, which involved more round-about methods, were less predictable processes, and were more likely to tie up credit for long periods. Nevertheless, loans to other than merchants accounted for nearly 60% of Paddock's portfolio in 1855.

[7] Percentages refer to those borrowers matched to either the census or the city directory (about 25%). It should also be kept in mind that many had their hands in more than one business. It was assumed that the occupation reported for the individual was the principal occupation.

Table 4 presents some other personal characteristics of Paddock's borrowers. While the average borrower was 41.0 years, Panel A shows that a bare majority were in their twenties and thirties. Having not forgotten what it was to be smart, twenty-five, and short of credit, nearly as many of Paddock's borrowers were in their twenties as in their fifties. Although many of Paddock's borrowers were relatively young, it is not clear that they were young relative to businessmen generally. The interpretive problem is that little information exists about the age at which men entered business on their own account. One thing we do know is that most northern farmers acquired their own farms by age 40 [Atack, 1989]. If farm ownership represented a step up the agricultural ladder equivalent to a series of steps up the commercial ladder, it seems that in lending to men in their twenties and thirties Paddock was promoting some men just embarking upon a mercantile career.

Table 4: *Characteristics of Borrowers at the Black River Bank, 1855*

Panel A: Age

20-29	30-39	40-49	50-59	60+
12.3%	39.6%	26.0%	13.6%	8.4%

Panel B: Wealth

< $500	$500-999	$1000-4999	$5000+
9.2%	16.3%	66.0%	8.5%

Panel C: Length of Residence in Watertown

< 1 year	1-5	5-10	10-20	20+
3.2%	13.0%	13.6%	17.5%	52.6%

Sources: JCHS, Black River Bank Records, *Discount Book #3*; New York State Census [1855], manuscript records; Huntington [1856].

Though Paddock loaned to young entrepreneurs, he demanded that they have personal and professional ties. Statistics in Panel B suggest that Paddock preferred borrowers who had accumulated some wealth. The average borrower held $2,320 in real estate; nearly three-quarters had accumulated more than $1,000. Every borrower owned some real estate. Not only were his borrowers property owners, they were largely long-time residents. More than half of Paddock's customers had lived in Jefferson County for 20 or more years; three-quarters had lived there more than five years. Given the volume of bills of exchange discounted at the Black River Bank, it is clear that Paddock did not limit his discounts to Watertown residents as drawers of bills were seldom local residents. It seems likely, however, that distant drawers displayed personal characteristics similar to those of local borrowers.

The personal and professional characteristics of Paddock's customers seemingly supports the conclusion that he adhered to real-bills tenets. But a preference for real-bills lending was not necessarily inconsistent with Schumpeterian entrepreneurship. A banker could not rashly underwrite every unproved project. On a daily basis he remained in the world of objective risk, avoiding Knight's pure uncertainty. Schumpeter's banks, however, had to

demonstrate an occasional willingness to upset the existing circular flow and provide capital and credit to an unproved enterprise. While Paddock was generally avoided pure uncertainty, there are a handful of instances demonstrating Paddock's entrepreneurial role.

In 1848 Moses Eames, a cheese maker in Rutland, New York, seeing the value of industrial steam engines, came upon the idea of a small-scale engine generating a few horse power that might be useful to farmers and small businesses. Eames took his idea to Gilbert Bradford, foreman at George Goulding's machine shop. Though Bradford thought Eames's idea worthy of development, Goulding opposed the idea. Rather than assisting farmers, a portable steam engine, said Goulding, would be more likely to "kill every farmer there is around here" [Horton, 1890, p. 778].

Bradford ignored the advice, spending his spare time constructing prototypes of a portable steam engine in Goulding's shop. By 1849 Bradford had a working model which generated about one-half horse power. He demonstrated its usefulness by installing it in Major Haddock's newspaper office where it powered the printing press. Bradford applied to Goulding and William Smith (Paddock's brother-in-law) for financial and mechanical assistance. Goulding and Smith refused, believing the engine more dangerous than useful. In 1850, Horace Greeley visited Watertown where he observed the engine operating Haddock's printing press. Impressed by its ingenuity, Greeley wrote of it in the *New York Tribune* in July 1850 and mentioned it in his capacity as a U.S. commissioner to the London Crystal Palace exhibition in 1851 [Emerson, 1898, p. 364].

Encouraged by Greeley's admiration, Bradford searched out financial and technical assistance. In 1851 he and Charles B. Hoard set up shop. In discounting a number of notes, Loveland Paddock provided financial assistance. Over the next two years Paddock discounted about a half-dozen additional notes for the firm. These events provide an object lesson in the link between banking and entrepreneurial success. While it is impossible to know if Paddock's assistance was critical to the survival of Hoard & Bradford, his support of a fledgling firm reflects well upon his own entrepreneurial spirit. And the effects on the region's economy were unequivocal. By 1857, Hoard and Bradford employed 150 machinists working nights and weekends filling orders for portable steam engines. The firm merged with the Watertown Steam Engine Company in 1873 at which time it was "one of the leading industrial concerns of northern New York" [Emerson, 1898, p. 365].

Though Paddock's assistance to Hoard & Bradford was not typical it was not unique. Benjamin Hotchkin established a tannery and harness manufactory in Watertown in late 1854 [Emerson, 1898, p. 360]. In January 1855 Paddock discounted a note for $54, the first of several offered by Hotchkin. In 1853, J.D. Crowner began construction on the Crowner House Hotel, a three-story brick building that would accommodate more 100 guests with an attached stable for 400 horses [Horton, 1890, p. 773]. By October 1853, Crowner was discounting notes at the Black River Bank. Similarly, I.N.

Remington established the Remington Paper Mill in early 1853 and the bank was discounting his notes by July [Emerson, 1898, p. 355].

Conclusions

Loan records of the Black River Bank, combined with evidence from other sources, provides a portrait of Paddock's banking practice. He was a real-bills banker, loaning short term, on high-grade paper, offered by men of substantial means and established reputations. Although he set himself in the mold of the classic real bills banker, Paddock's desire for security, safety, and solvency did not inhibit his entrepreneurial spirit when an appropriate opportunity presented itself. His financial support of fledgling firms, like Hoard & Bradford, suggests that early American bankers may have played an important, even critical, role in early nineteenth century development.

This finding is in sharp contrast to the commonplace that Anglo-American bankers offered little assistance to early manufacturing firms as real bills bankers regularly refused manufacturers long-term loans for fixed capital. It has become clear, however, that early nineteenth century manufacturing was not as capital intensive as it became by the end of the century. Early American manufacturers, in fact, closely resembled contemporary merchants in that working capital was of far greater importance than fixed capital [Pollard, 1964; Sokoloff, 1984]. Things were not much changed since Adam Smith [1937 (1776), Book II, Chapter i] gave "circulating" or working capital such a prominent role in his work. Early American manufacturers, then, faced financing decisions and constraints not unlike those facing merchants whose fixed capital remained modest. And finding that working capital weighed more heavily than fixed capital in the financing problems of early industrial firms opens up a whole new field of inquiry, one apt to reinterpret both the nineteenth-century industrial transformation and the role of Anglo-American banks in supporting it. Under the established view, like that offered by Court [1962, p. 92], banks did little to support the transformation because they were reluctant to offer any credit to enterprising risk-takers "in the new, fast-moving and unstable economy which had begun to develop." This and similar studies finds the traditional interpretation lacking [Bodenhorn, forthcoming]. While firm conclusions should not be drawn from a few instances, these studies do suggest an alternative interpretation of early American banks. Bankers such as Loveland Paddock held a significant share of their portfolios in loans to young manufacturers. In providing short-term industrial finance, banks facilitated the sweeping sectoral shifts occurring in nineteenth century America.

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