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The Jacksonian Economy

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Peter Temin, *The Jacksonian Economy*. New York: W.W. Norton & Company, 1969. 208 pp.

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Jackson and Biddle Exonerated?

Peter Temin's *The Jacksonian Economy* represented a major triumph of cliometrics in the heady early years of that quantitative, theory-informed approach to economic history. Before Temin, generations of U.S. historians — whether they admired Andrew Jackson's presidency or did not — agreed that Jackson's economic policies engendered the inflationary boom of the mid-1830s, ended it by causing the commercial and financial panic of 1837, and perhaps even had a role in plunging the U.S. economy into a long depression lasting from 1839 to 1843.

Temin argued that each of these elements of the traditional consensus was wrong: "First, the boom did not have its origins in the Bank Wars. Second, the Panic of 1837 was not caused by Jackson's actions. And third, the depression of the early 1840's was neither as serious as historians assume nor the fault of Nicholas Biddle" (pp. 22-23). Temin was in 1969 — and he remains today, nearly a third of a century later — most convincing with respect to the first and most important element, namely in denying that Jackson's "war" against the Bank of the United States (the BUS) set off the inflationary boom, the initiator of a chain of events that led subsequently to panic and depression. In contrast, Temin's exoneration of Jackson (and Biddle) from complicity in the panic of 1837 and the depression of 1839-1843, both of which happened after Jackson had left the presidency, has proven to be less convincing to subsequent investigators.

What were the reputedly misguided Jacksonian policies? First and foremost was Jackson's 1832 veto of a bill passed by Congress to recharter the BUS, the twenty-year charter of which would expire in 1836. The Bank's congressional supporters could not muster enough votes to override the veto. When Jackson was re-elected later in 1832, he took it as a mandate to order removal of government balances from the BUS; government funds were then deposited in state-chartered banks, the "pet banks" politically friendly to the Jacksonians.

The BUS, by far the largest bank in the country and one that unlike any other bank operated a nationwide branch system, was what today would be called a central bank. It served as the bank of the federal government, which owned twenty percent of its capital stock. This special relationship with the government conferred on the BUS a power to regulate the currency and the banking system in the interest of financial and economic stability. The source of the Bank's regulatory and stabilizing power was quite different from that of the modern-day Federal Reserve, which has caused some confusion as to whether it was really a central bank (see Temin, Chapter 2). The Fed regulates banks essentially by holding their reserves, which it has the power to increase or decrease. In other words, the Fed regulates banks by being in debt to them. The BUS, in contrast, regulated banks by being their creditor. As state bank notes and checks were paid in to the federal government as public revenue, they were deposited in the BUS, which could then restrain or expand credit by varying the speed with which it presented the liabilities of the state banks to them for payment in specie, the monetary base. Although the regulatory mechanisms of the two central banks were different, there is ample evidence that leaders of the BUS, particularly Nicholas Biddle, its president from 1823 through Jackson's administration, understood their power to regulate the banking system and promote stability as much as Fed leaders would a century later.

The Inflationary Boom, 1832-1837

Given the central-bank nature of the BUS, it is easy to understand why Jackson's actions could be interpreted for thirteen decades as unleashing the inflationary boom of the 1830s. By removing the government's balances from the BUS, the Jackson administration undercut its power to regulate and stabilize the currency and banking system. And when those balances were placed in the "pet banks," these state-chartered banks had the ability to expand their creation of credit without having to fear BUS calls for redemption of their note and deposit liabilities.

There was in fact a rapid expansion of the US money stock and bank credit during 1832-1836, as documented by Temin (Chapter 3) in a careful reconstruction of primary data that has proven of great use to subsequent investigators. During the four years from 1832, the year of the veto, to 1836, the US money stock rose from $150 million to $276 million, and the bank-money component of it (bank notes and deposits) rose from $119 million to $203 million. Fueled by the rapid expansion of money, an index of wholesale commodity prices rose by some 50 percent in these four years. There was an inflationary boom. The prima facie case pointing to Jackson's destruction of the BUS as the initiator of the boom was strong enough to convince generations of historians.

Temin, however, demonstrated convincingly that this prima facie case was flawed. Following the pioneering study of Milton Friedman and Anna Schwartz (*A Monetary History of the United States, 1867-1960*, Princeton, 1963), Temin decomposed his estimates of the money stock into its three proximate determinants: specie (the monetary base), the reserve ratio of the banks (the banks' specie reserves as a percent of bank monetary liabilities), and the public's currency ratio (the ratio of public's holdings of base-money specie to its holdings of bank notes and deposits). If history's indictment of Jackson's economic policies were well grounded, the money stock should have expanded mainly because state banks, freed from BUS regulation, reduced the banking system's reserve ratio as they created more and more bank credit in relation to their holdings of specie reserves. In fact, there was no change in the reserve ratio between 1832 and 1836, and indeed, the reserve ratio of the US banking system was as low or lower in 1831 and 1832 — *before* Jackson's veto and removal of federal balances from the BUS — as it was in any year from 1820 to 1858, the period of Temin's annual money stock estimates.

So what generations of historians had believed about economic events of the 1830s turned out to be wrong. I think it was Herbert Spencer who defined a tragedy as a beautiful theory killed by an ugly fact. On that definition, Peter Temin is a master tragedian of cliometrics and economic historiography.

If banking suddenly uninhibited by central bank regulation did not cause the monetary expansion and inflationary boom of the 1830s, then what did? Temin supplied an answer to this question, and the overall story he told is a most interesting one. His data and analysis of the determinants of the money supply showed that expansion of the specie base was more than sufficient to explain all of the monetary expansion. So why did the specie base of the money stock rise so much? The main cause was imports of silver from Mexico, supplemented to an extent by imports of gold from Europe, for example, the payment in 1836 of an indemnity owed by France to the United States for that country's Napoleonic-era predations on US international commerce.

Of course, the United States for a long time had imported silver from Mexico and other Latin American sources, and almost as quickly had exported it to China and other Asian countries to pay for Asian imports. What changed in Jacksonian era was something largely unrelated to US events. The British, clever merchants that they were, introduced opium produced in their Asian dominions to the Chinese market, and suddenly the Chinese needed a way to pay the British for their new habit. Because the Americans were selling much cotton to the British, they built up claims in the form of bills of exchange, obligations of British cotton importers to pay American cotton producers. With the Chinese, because of their opium imports, now in need of a way to pay the British opium merchants, the Americans quickly realized that they no longer needed to carry silver to China to pay for imports of Chinese goods. They could substitute bills of exchange drawn on British cotton importers for silver, and the Chinese would have a nearly ideal way to pay for their opium — the British opium merchants would receive in payment promises of their own countrymen to pay pounds sterling. The net result of this substitution was that Mexican silver swelled the US monetary base. In what is perhaps the most memorable sentence of his book, Temin wrote (p. 82), "It would not be too misleading to say the Opium War was more closely connected to the American inflation than the Bank War between Jackson and Biddle."

That could not be the whole story, Temin realized, because ceteris paribus the money-fueled inflation of prices in the United States should have corrected itself as Americans and foreigners bought less of American high-priced goods and more of cheaper foreign goods, leading to an outflow of specie from the US. That did not happen in the 1830s inflationary boom because British and other foreign investors were so attracted to the actual and prospective returns on US bonds, stocks, and other assets that they transferred large amounts of capital to the United States. In essence, foreign investors were willing in the 1830s to underwrite a US trade deficit and keep the American boom going well beyond the time it would have gone on without the capital transfers. In this sense, the 1990s US boom bore some similarity to that of the 1830s.

The Panic of 1837

The 1830s boom did come to an end in 1837, at least temporarily, in a commercial crisis and banking panic that led to a nationwide suspension of the convertibility of bank money into base money (specie) in May of that year. The suspension lasted for approximately a year, and by preventing many banks from closing their doors, as Temin noted (Chapter 4), it likely hastened the economic recovery later in the year and extending through 1838 and into 1839.

What caused the banking panic and suspension of convertibility of 1837? Many US historians since that era have pointed to two policies of the Jackson administration. One was the Specie Circular of August, 1836, requiring that land purchases from the federal government, which had soared to high levels during the boom, be paid for in specie rather than bank money, as had been customary before the Specie Circular went into effect. The other was the distribution of a mounting federal surplus, after the national debt had been entirely paid off by 1836, to the states in 1837, as required in the Deposit Act of June 1836. The surplus-distribution legislation passed by Congress was not strictly a policy measure of Jackson, although his administration went along with and administered it. Proponents of the theory that one (or possibly both) of these measures was the trigger of the financial panic argued that they increased the demand for specie by the public and caused specie reserves of banks to be reallocated around the country in ways that increased the fragility of the banking system, leading to the panic of May 1837.

Continuing on his revisionist bent, Temin examined the two measures and found them wanting as causes of the panic, mostly on grounds that amounts of specie required for land purchases and the movements of specie required to distribute the federal surplus to the states starting on January 1, 1837, were too small to have caused the panic.

However, a recent paper by Peter Rousseau ("Jacksonian Monetary Policy, Specie Flows, and the Panic of 1837," forthcoming, *Journal of Economic History*) takes a closer look at the evidence and suggests that Temin may have been too quick to discount the importance of the Jacksonian measures. Rousseau shows that the Specie Circular did not end the land-purchase boom, as Temin supposed, so it therefore most likely did promote a drain of specie from eastern banks to accommodate continued frontier land purchases from the federal government after August 1836.

Even more important, according to Rousseau, preliminary transfers of federal balances among banks in various regions of the country during the last half of 1836, made to prepare for the surplus distributions of 1837, had the same effect. Banks in New York City, already the financial center of the country, lost more than $10 million in federal deposits between August 1836 and July 1837, and saw their specie reserves drop from $5.9 to $3.8 million from August to December 1836, before the first surplus distributions, and from $3.8 to $1.5 million from December 1836 to May 1837, just before they suspended convertibility. Although Temin allowed that the Specie Circular and surplus distribution might have produced banking strains, he did not envision that they were as severe as Rousseau's data indicate.

Be that as it may, having rejected the Specie Circular and surplus distribution as causes of the 1837 panic, Temin needed another explanation. He found it in the money-tightening policies of the Bank of England, commencing in mid-1836, in response to its declining gold reserves. Tight money in England soon became tight money in the United States, given the extensive commerce between the two countries, and it also caused a drop in the price of cotton by early 1837. The drop in cotton prices threatened the solvency of commercial firms on both sides of the Atlantic, and when they began to fail in 1837, the banks that had lent to them were also threatened, leading to runs on their reserves and the suspension of convertibility in the United States. By finding the source of the US panic of 1837 in Bank of England policies and related cotton-price fluctuations, Temin continued his exoneration of Andrew Jackson's policies from responsibility for the inflationary boom and its end.

The Crisis of 1839 and Depression of the 1840s

In the penultimate chapter of the book, before the summary and conclusions, Temin discusses the recovery from the panic of 1837, the crisis of 1839, and the long depression that followed. The treatment is more cursory than the previous discussion of events through 1837, but the story is much the same.

According to Temin, in response to a loss of reserves, the Bank of England doubled its discount rate from mid-1838 to late 1839, cotton prices fell, and the flow of capital from Britain to America declined even more and for a longer period than it did during and after the 1837 panic. Neither Andrew Jackson nor his successor as US president, Martin Van Buren, had much to do with this.

Nor, Temin contends, did Nicholas Biddle and his new Bank of the United States (chartered by Pennsylvania), the successor institution to the second BUS after its federal charter expired in 1836. Freed from central banking responsibilities, Biddle converted the BUS into a universal bank, doing a commercial business in the United States, speculating in the international cotton market, and acting as an underwriter and marketer of US securities, primarily state bond issues, in Europe. The BUS suspended convertibility in 1839, and it failed in 1841. As with the Jacksonians, international forces beyond their control determined Biddle's, the Bank's, and the US economy's fate. The Bank of England and the world cotton market undid them.

Like Peter Rousseau with respect to the panic of 1837, John Wallis in a recent paper challenges Temin's exoneration of the Americans (John Joseph Wallis, "What Caused the Crisis of 1839?", NBER Working Paper Series, Historical Paper 133, April 2001). According to Wallis, the huge federal land sales and the soaring property values of the 1830s boom, which continued in the recovery from the panic of 1837, led frontier states to go on a borrowing binge for banking and transportation improvements, in anticipation of future bank and property tax revenues that would service the state debts. Biddle's bank and lesser ones like it were heavily involved in marketing the state securities on both sides of the Atlantic, and they overextended themselves. When in 1839 these investment banks could not meet their obligations to borrowing states, the states ceased work on their transportation improvements and their own banks were strained. Property values collapsed, there were runs on frontier-state banks, and ultimately nine states, mostly southern and western, defaulted on their debts.

The pattern of events leading to the crisis of 1839, as documented by Wallis, was thus, contra Temin, quite different from that leading up to the panic of 1837. The banking problems that began in 1839 were in the South and the West, and did not greatly affect banks in the Northeast, apart from Biddle's bank, whereas in 1837, as Rousseau showed, the problems began in New York City and New Orleans, financial centers, and spread to the rest of the country.

One can interpret the Rousseau and Wallis critiques (or extensions) of Temin's work as challenging *The Jacksonian Economy's* exoneration of the Jacksonians, Biddle, and Americans in general from the inflation, panic, crisis, and depression that beset them in the 1830s. And one can predict that future work will continue to address the relative importance of domestic and international factors in the sequence of events during the 1830s.

Wider Implications

Although Temin convincingly refuted the long-standing idea that Jackson's destruction of the BUS as a central bank unleashed the inflationary boom of the 1830s, he was perhaps too quick to conclude that the Bank War was irrelevant to the economic instability that followed in its wake. To his credit, Temin (p. 73) did draw attention to an important issue here: "[T]he reserve ratio of the American banking system as a whole did not fall below its 1831 level throughout the 1830s. Banks were enabled to hold low reserves because the Second Bank of the United States was an effective policeman, not because it had vanished. As discounts on notes decreased in the 1820's, the public increasingly was willing to hold them in place of specie."

But he did not follow up on this lead. Stanley L. Engerman ("A Note on the Economic Consequences of the Second Bank of the United States," *Journal of Political Economy*, Vol. 78, 1970, 725-28) did. Temin's monetary analysis, Engerman argued (p. 726), showed that the American public's confidence in the banking system, as indicated by its willingness to hold bank money in relation to specie, declined just as the fate of the BUS as a central bank became sealed: "After 1834 ^? the decline [from 1822 to 1834] in the proportion of specie held as money was reversed. Its rise began before the Panic of 1837, so that declining confidence in banks occurred before, not after, the actual large-scale bank failures." Americans, Engerman showed, paid a price for getting rid of their central bank; they had to spend real resources amounting to 0.1 to 0.15 percent of GNP in the 1840s and 1850s, to obtain money that might more cheaply have been obtained by engraving paper banknotes and writing checks. Engerman has pointed out to me that William Gouge, a contemporary writer, estimated an even larger saving of 0.5 percent of GNP in 1830, although since Gouge was against banks and bank money he regarded the saving as small (Gouge, *A Short History of Paper Money and Banking in the United States*, Philadelphia, 1833, pp. 65-66). These savings from using bank money became the long-term costs of having less confidence in a banking system without a central bank. The short-term cost in the 1830s was increased vulnerability to just the sorts of panics and crises that occurred in that decade.

Before Jackson, Americans with their First and Second Banks of the United States had managed to create a superb financial system, one with few banking panics and financial crises between 1790 and 1837. Starting in 1837, panics and crises became more frequent, until at last the Federal Reserve System, which can be thought of as the Third Bank of the United States, appeared in 1914. After the advent of the Fed, US financial panics and crises again became less frequent. Moreover, now that specie has lost its role in our monetary system, the annual saving from using bank money, perhaps 2 to 3 percent of GDP depending on the measure of money selected, is far greater than it was in Jackson's era. This should serve to remind us that our economic and financial systems might indeed be improved; the Jacksonian era should remind us that they also might get worse.

If the test of an important book is that it changes the way all subsequent visitors to its subject think about it, *The Jacksonian Economy* is surely an important book. For its explanation of the causes of the inflationary boom of the 1830s, it will stand the test of time. But it is equally important for providing less than convincing answers on the causes of the 1837 panic, the 1839 crisis, and the depression of the 1840s, as well as the wider ramifications of removing a pioneering and pretty good central bank from the scene. Others have been pursuing Peter Temin's leads for three decades, and they are likely to continue to do so.

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Subject(s): Macroeconomics and Fluctuations

Geographic Area(s): North America

Time Period(s): 19th Century

Antebellum Banking in the United States

Howard Bodenhorn, Lafayette College

The first legitimate commercial bank in the United States was the Bank of North America founded in 1781. Encouraged by Alexander Hamilton, Robert Morris persuaded the Continental Congress to charter the bank, which loaned to the cash-strapped Revolutionary government as well as private citizens, mostly Philadelphia merchants. The possibilities of commercial banking had been widely recognized by many colonists, but British law forbade the establishment of commercial, limited-liability banks in the colonies. Given that many of the colonists' grievances against Parliament centered on economic and monetary issues, it is not surprising that one of the earliest acts of the Continental Congress was the establishment of a bank.

The introduction of banking to the U.S. was viewed as an important first step in forming an independent nation because banks supplied a medium of exchange (banknotes[1] and deposits) in an economy perpetually strangled by shortages of specie money and credit, because they animated industry, and because they fostered wealth creation and promoted well-being. In the last case, contemporaries typically viewed banks as an integral part of a wider system of government-sponsored commercial infrastructure. Like schools, bridges, road, canals, river clearing and harbor improvements, the benefits of banks were expected to accrue to everyone even if dividends accrued only to shareholders.

Financial Sector Growth

By 1800 each major U.S. port city had at least one commercial bank serving the local mercantile community. As city banks proved themselves, banking spread into smaller cities and towns and expanded their clientele. Although most banks specialized in mercantile lending, others served artisans and farmers. In 1820 there were 327 commercial banks and several mutual savings banks that promoted thrift among the poor. Thus, at the onset of the antebellum period (defined here as the period between 1820 and 1860), urban residents were familiar with the intermediary function of banks and used bank-supplied currencies (deposits and banknotes) for most transactions. Table 1 reports the number of banks and the value of loans outstanding at year end between 1820 and 1860. During the era, the number of banks increased from 327 to 1,562 and total loans increased from just over $55.1 million to $691.9 million. Bank-supplied credit in the U.S. economy increased at a remarkable annual average rate of 6.3 percent. Growth in the financial sector, then outpaced growth in aggregate economic activity. Nominal gross domestic product increased an average annual rate of about 4.3 percent over the same interval. This essay discusses how regional regulatory structures evolved as the banking sector grew and radiated out from northeastern cities to the hinterlands.

Table 1

Number of Banks and Total Loans, 1820-1860

Year	Banks	Loans ($ millions)
1820	327	55.1
1821	273	71.9
1822	267	56.0
1823	274	75.9
1824	300	73.8

1825	330	88.7
1826	331	104.8
1827	333	90.5
1828	355	100.3
1829	369	103.0
1830	381	115.3
1831	424	149.0
1832	464	152.5
1833	517	222.9
1834	506	324.1
1835	704	365.1
1836	713	457.5
1837	788	525.1
1838	829	485.6
1839	840	492.3
1840	901	462.9
1841	784	386.5
1842	692	324.0
1843	691	254.5
1844	696	264.9
1845	707	288.6
1846	707	312.1
1847	715	310.3
1848	751	344.5
1849	782	332.3
1850	824	364.2
1851	879	413.8
1852	913	429.8
1853	750	408.9
1854	1208	557.4
1855	1307	576.1
1856	1398	634.2
1857	1416	684.5
1858	1422	583.2
1859	1476	657.2
1860	1562	691.9

Sources: Fenstermaker (1965); U.S. Comptroller of the Currency (1931).

Adaptability

As important as early American banks were in the process of capital accumulation, perhaps their most notable feature was their adaptability. Kuznets (1958) argues that one measure of the financial sector's value is how and to what extent it evolves with changing economic conditions. Put in place to perform certain functions under one set of economic circumstances, how did it alter its behavior and service the needs of borrowers as circumstances changed. One benefit of the federalist U.S. political system was that states were given the freedom to establish systems reflecting local needs and preferences. While the political structure deserves credit in promoting regional adaptations, North (1994) credits the adaptability of America's formal rules and informal constraints that rewarded adventurism in the economic, as well as the noneconomic, sphere. Differences in geography, climate, crop mix, manufacturing activity, population density and a host of other variables were reflected in different state banking systems. Rhode Island's banks bore little resemblance to those in far away Louisiana or Missouri, or even those in neighboring Connecticut. Each state's banks took a different form, but their purpose was the same; namely, to provide the state's citizens with monetary and intermediary services and to promote the general economic welfare. This section provides a sketch of regional differences. A more detailed discussion can be found in Bodenhorn (2002).

State Banking in New England

New England's banks most resemble the common conception of the antebellum bank. They were relatively small, unit banks; their stock was closely held; they granted loans to local farmers, merchants and artisans with whom the bank's managers had more than a passing familiarity; and the state took little direct interest in their daily operations.

Of the banking systems put in place in the antebellum era, New England's is typically viewed as the most stable and conservative. Friedman and Schwartz (1986) attribute their stability to an Old World concern with business reputations, familial ties, and personal legacies. New England was long settled, its society well established, and its business community mature and respected throughout the Atlantic trading network. Wealthy businessmen and bankers with strong ties to the community — like the Browns of Providence or the Bowdoins of Boston — emphasized stability not just because doing so benefited and reflected well on them, but because they realized that bad banking was bad for everyone's business.

Besides their reputation for soundness, the two defining characteristics of New England's early banks were their insider nature and their small size. The typical New England bank was small compared to banks in other regions. Table 2 shows that in 1820 the average Massachusetts country bank was about the same size as a Pennsylvania country bank, but both were only about half the size of a Virginia bank. A Rhode Island bank was about one-third the size of a Massachusetts or Pennsylvania bank and a mere one-sixth as large as Virginia's banks. By 1850 the average Massachusetts bank declined relatively, operating on about two-thirds the paid-in capital of a Pennsylvania country bank. Rhode Island's banks also shrank relative to Pennsylvania's and were tiny compared to the large branch banks in the South and West.

Table 2

Average Bank Size by Capital and Lending in 1820 and 1850 Selected States and Cities

(in $ thousands)

	1820Capital	Loans	1850 Capital	Loans
Massachusetts	$374.5	$480.4	$293.5	$494.0
except Boston	176.6	230.8	170.3	281.9
Rhode Island	95.7	103.2	186.0	246.2
except Providence	60.6	72.0	79.5	108.5
New York	na	na	246.8	516.3
except NYC	na	na	126.7	240.1
Pennsylvania	221.8	262.9	340.2	674.6

except Philadelphia	162.6	195.2	246.0	420.7
Virginia1,2	351.5	340.0	270.3	504.5
South Carolina2	na	na	938.5	1,471.5
Kentucky2	na	na	439.4	727.3

Notes: 1 Virginia figures for 1822. 2 Figures represent branch averages.

Source: Bodenhorn (2002).

Explanations for New England Banks' Relatively Small Size

Several explanations have been offered for the relatively small size of New England's banks. Contemporaries attributed it to the New England states' propensity to tax bank capital, which was thought to work to the detriment of large banks. They argued that large banks circulated fewer banknotes per dollar of capital. The result was a progressive tax that fell disproportionately on large banks. Data compiled from Massachusetts's bank reports suggest that large banks were not disadvantaged by the capital tax. It was a fact, as contemporaries believed, that large banks paid higher taxes per dollar of circulating banknotes, but a potentially better benchmark is the tax to loan ratio because large banks made more use of deposits than small banks. The tax to loan ratio was remarkably constant across both bank size and time, averaging just 0.6 percent between 1834 and 1855. Moreover, there is evidence of constant to modestly increasing returns to scale in New England banking. Large banks were generally at least as profitable as small banks in all years between 1834 and 1860, and slightly more so in many.

Lamoreaux (1993) offers a different explanation for the modest size of the region's banks. New England's banks, she argues, were not impersonal financial intermediaries. Rather, they acted as the financial arms of extended kinship trading networks. Throughout the antebellum era banks catered to insiders: directors, officers, shareholders, or business partners and kin of directors, officers, shareholders and business partners. Such preferences toward insiders represented the perpetuation of the eighteenth-century custom of pooling capital to finance family enterprises. In the nineteenth century the practice continued under corporate auspices. The corporate form, in fact, facilitated raising capital in greater amounts than the family unit could raise on its own. But because the banks kept their loans within a relatively small circle of business connections, it was not until the late nineteenth century that bank size increased.2

Once the kinship orientation of the region's banks was established it perpetuated itself. When outsiders could not obtain loans from existing insider organizations, they formed their own insider bank. In doing so the promoters assured themselves of a steady supply of credit and created engines of economic mobility for kinship networks formerly closed off from many sources of credit. State legislatures accommodated the practice through their liberal chartering policies. By 1860, Rhode Island had 91 banks, Maine had 68, New Hampshire 51, Vermont 44, Connecticut 74 and Massachusetts 178.

The Suffolk System

One of the most commented on characteristic of New England's banking system was its unique regional banknote redemption and clearing mechanism. Established by the Suffolk Bank of Boston in the early 1820s, the system became known as the Suffolk System. With so many banks in New England, each issuing it own form of currency, it was sometimes difficult for merchants, farmers, artisans, and even other bankers, to discriminate between real and bogus banknotes, or to discriminate between good and bad bankers. Moreover, the rural-urban terms of trade pulled most banknotes toward the region's port cities. Because country merchants and farmers were typically indebted to city merchants, country banknotes tended to flow toward the cities, Boston more so than any other. By the second decade of the nineteenth century, country banknotes became a constant irritant for city bankers. City bankers believed that country issues displaced Boston banknotes in local transactions. More irritating though was the constant demand by the city banks' customers to accept country banknotes on deposit, which placed the burden of interbank clearing on the city banks.[3]

In 1803 the city banks embarked on a first attempt to deal with country banknotes. They joined together, bought up a large quantity of country banknotes, and returned them to the country banks for redemption into specie. This effort to reduce country banknote circulation encountered so many obstacles that it was quickly abandoned. Several other schemes were hatched in the next two decades, but none proved any more successful than the 1803 plan.

The Suffolk Bank was chartered in 1818 and within a year embarked on a novel scheme to deal with the influx of country banknotes. The Suffolk sponsored a consortium of Boston bank in which each member appointed the Suffolk as its lone agent in the collection and redemption of country banknotes. In addition, each city bank contributed to a fund used to purchase and redeem country banknotes. When the Suffolk collected a large quantity of a country bank's notes, it presented them for immediate redemption with an ultimatum: Join in a regular and organized redemption system or be subject to further unannounced redemption calls.[4] Country banks objected to the Suffolk's proposal, because it required them to keep noninterest-earning assets on deposit with the Suffolk in amounts equal to their average weekly redemptions at the city banks. Most country banks initially refused to join the redemption network, but after the Suffolk made good on a few redemption threats, the system achieved near universal membership.

Early interpretations of the Suffolk system, like those of Redlich (1949) and Hammond (1957), portray the Suffolk as a proto-central bank, which acted as a restraining influence that exercised some control over the region's banking system and money supply. Recent studies are less quick to pronounce the Suffolk a successful experiment in early central banking. Mullineaux (1987) argues that the Suffolk's redemption system was actually self-defeating. Instead of making country banknotes less desirable in Boston, the fact that they became readily redeemable there made them perfect substitutes for banknotes issued by Boston's prestigious banks. This policy made country banknotes more desirable, which made it more, not less, difficult for Boston's banks to keep their own notes in circulation.

Fenstermaker and Filer (1986) also contest the long-held view that the Suffolk exercised control over the region's money supply (banknotes and deposits). Indeed, the Suffolk's system was self-defeating in this regard as well. By increasing confidence in the value of a randomly encountered banknote, people were willing to hold increases in banknotes issues. In an interesting twist on the traditional interpretation, a possible outcome of the Suffolk system is that New England may have grown increasingly financial backward as a direct result of the region's unique clearing system. Because banknotes were viewed as relatively safe and easily redeemed, the next big financial innovation — deposit banking — in New England lagged far behind other regions. With such wide acceptance of banknotes, there was no reason for banks to encourage the use of deposits and little reason for consumers to switch over.

Summary: New England Banks

New England's banking system can be summarized as follows: Small unit banks predominated; many banks catered to small groups of capitalists bound by personal and familial ties; banking was becoming increasingly interconnected with other lines of business, such as insurance, shipping and manufacturing; the state took little direct interest in the daily operations of the banks and its supervisory role amounted to little more than a demand that every bank submit an unaudited balance sheet at year's end; and that the Suffolk developed an interbank clearing system that facilitated the use of banknotes throughout the region, but had little effective control over the region's money supply.

Banking in the Middle Atlantic Region

Pennsylvania

After 1810 or so, many bank charters were granted in New England, but not because of the presumption that the bank would promote the commonweal. Charters were granted for the personal gain of the promoter and the shareholders and in proportion to the personal, political and economic influence of the bank's founders. No New England state took a significant financial stake in its banks. In both respects, New England differed markedly from states in other regions. From the beginning of state-chartered commercial banking in Pennsylvania, the state took a direct interest in the operations and profits of its banks. The Bank of North America was the obvious case: chartered to provide support to the colonial belligerents and the fledgling nation. Because the bank was popularly perceived to be dominated by Philadelphia's Federalist merchants, who rarely loaned to outsiders, support for the bank waned.5 After a pitched political battle in which the Bank of North America's charter was revoked and reinstated, the legislature chartered the Bank of Pennsylvania in 1793. As its name implies, this bank became the financial arm of the state. Pennsylvania subscribed $1 million of the bank's capital, giving it the right to appoint six of thirteen directors and a $500,000 line of credit. The bank benefited by becoming the state's fiscal agent, which guaranteed a constant inflow of deposits from regular treasury operations as well as western land sales.

By 1803 the demand for loans outstripped the existing banks' supply and a plan for a new bank, the Philadelphia Bank, was hatched and its promoters petitioned the legislature for a charter. The existing banks lobbied against the charter, and nearly sank the new bank's chances until it established a precedent that lasted throughout the antebellum era. Its promoters bribed the legislature with a payment of $135,000 in return for the charter, handed over one-sixth of its shares, and opened a line of credit for the state.

Between 1803 and 1814, the only other bank chartered in Pennsylvania was the Farmers and Mechanics Bank of Philadelphia, which established a second substantive precedent that persisted throughout the era. Existing banks followed a strict real-bills lending policy, restricting lending to merchants at very short terms of 30 to 90 days.6 Their adherence to a real-bills philosophy left a growing community of artisans, manufacturers and farmers on the outside looking in. The Farmers and Mechanics Bank was chartered to serve excluded groups. At least seven of its thirteen directors had to be farmers, artisans or manufacturers and the bank was required to lend the equivalent of 10 percent of its capital to farmers on mortgage for at least one year. In later years, banks were established to provide services to even more narrowly defined groups. Within a decade or two, most substantial port cities had banks with names like Merchants Bank, Planters Bank, Farmers Bank, and Mechanics Bank. By 1860 it was common to find banks with names like Leather Manufacturers Bank, Grocers Bank, Drovers Bank, and Importers Bank. Indeed, the Emigrant Savings Bank in New York City served Irish immigrants almost exclusively. In the other instances, it is not known how much of a bank's lending was directed toward the occupational group included in its name. The adoption of such names may have been marketing ploys as much as mission statements. Only further research will reveal the answer.

New York

State-chartered banking in New York arrived less auspiciously than it had in Philadelphia or Boston. The Bank of New York opened in 1784, but operated without a charter and in open violation of state law until 1791 when the legislature finally sanctioned it. The city's second bank obtained its charter surreptitiously. Alexander Hamilton was one of the driving forces behind the Bank of New York, and his long-time nemesis, Aaron Burr, was determined to establish a competing bank. Unable to get a charter from a Federalist legislature, Burr and his colleagues petitioned to incorporate a company to supply fresh water to the inhabitants of Manhattan Island. Burr tucked a clause into the charter of the Manhattan Company (the predecessor to today's Chase Manhattan Bank) granting the water company the right to employ any excess capital in financial transactions. Once chartered, the company's directors announced that $500,000 of its capital would be invested in banking.7 Thereafter, banking grew more quickly in New York than in Philadelphia, so that by 1812 New York had seven banks compared to the three operating in Philadelphia.

Deposit Insurance

Despite its inauspicious banking beginnings, New York introduced two innovations that influenced American banking down to the present. The Safety Fund system, introduced in 1829, was the nation's first experiment in bank liability insurance (similar to that provided by the Federal Deposit Insurance Corporation today). The 1829 act authorized the appointment of bank regulators charged with regular inspections of member banks. An equally novel aspect was that it established an insurance fund insuring holders of banknotes and deposits against loss from bank failure. Ultimately, the insurance fund was insufficient to protect all bank creditors from loss during the panic of 1837 when eleven failures in rapid succession all but bankrupted the insurance fund, which delayed noteholder and depositor recoveries for months, even years. Even though the Safety Fund failed to provide its promised protections, it was an important episode in the subsequent evolution of American banking. Several Midwestern states instituted deposit insurance in the early twentieth century, and the federal government adopted it after the banking panics in the 1930s resulted in the failure of thousands of banks in which millions of depositors lost money.

"Free Banking"

Although the Safety Fund was nearly bankrupted in the late 1830s, it continued to insure a number of banks up to the mid 1860s when it was finally closed. No new banks joined the Safety Fund system after 1838 with the introduction of free banking — New York's second significant banking innovation. Free banking represented a compromise between those most concerned with the underlying safety and stability of the currency and those most concerned with competition and freeing the country's entrepreneurs from unduly harsh and anticompetitive restraints. Under free banking, a prospective banker could start a bank anywhere he saw fit, provided he met a few regulatory requirements. Each free bank's capital was invested in state or federal bonds that were turned over to the state's treasurer. If a bank failed to redeem even a single note into specie, the treasurer initiated bankruptcy proceedings and banknote holders were reimbursed from the sale of the bonds.

Actually Michigan preempted New York's claim to be the first free-banking state, but Michigan's 1837 law was modeled closely after a bill then under debate in New York's legislature. Ultimately, New York's influence was profound in this as well, because free banking became one of the century's most widely copied financial innovations. By 1860 eighteen states adopted free banking laws closely resembling New York's law. Three other states introduced watered-down variants. Eventually, the post-Civil War system of national banking adopted many of the substantive provisions of New York's 1838 act.

Both the Safety Fund system and free banking were attempts to protect society from losses resulting from bank failures and to entice people to hold financial assets. Banks and bank-supplied currency were novel developments in the hinterlands in the early nineteenth century and many rural inhabitants were skeptical about the value of small pieces of paper. They were more familiar with gold and silver. Getting them to exchange one for the other was a slow process, and one that relied heavily on trust. But trust was built slowly and destroyed quickly. The failure of a single bank could, in a week, destroy the confidence in a system built up over a decade. New York's experiments were designed to mitigate, if not eliminate, the negative consequences of bank failures. New York's Safety Fund, then, differed in the details but not in intent, from New England's Suffolk system. Bankers and legislators in each region grappled with the difficult issue of protecting a fragile but vital sector of the economy. Each region responded to the problem differently. The South and West settled on yet another solution.

Banking in the South and West

One distinguishing characteristic of southern and western banks was their extensive branch networks. Pennsylvania provided for branch banking in the early nineteenth century and two banks jointly opened about ten branches. In both instances, however, the branches became a net liability. The Philadelphia Bank opened four branches in 1809 and by 1811 was forced to pass on its semi-annual dividends because losses at the branches offset profits at the Philadelphia office. At bottom, branch losses resulted from a combination of ineffective central office oversight and unrealistic expectations about the scale and scope of hinterland lending. Philadelphia's bank directors instructed branch managers to invest in high-grade commercial paper or real bills. Rural banks found a limited number of such lending opportunities and quickly turned to mortgage-based lending. Many of these loans fell into arrears and were ultimately written when land sales faltered.

Branch Banking

Unlike Pennsylvania, where branch banking failed, branch banks throughout the South and West thrived. The Bank of Virginia, founded in 1804, was the first state-chartered branch bank and up to the Civil War branch banks served the state's financial needs. Several small, independent banks were chartered in the 1850s, but they never threatened the dominance of Virginia's "Big Six" banks. Virginia's branch banks, unlike Pennsylvania's, were profitable. In 1821, for example, the net return to capital at the Farmers Bank of Virginia's home office in Richmond was 5.4 percent. Returns at its branches ranged from a low of 3 percent at Norfolk (which was consistently the low-profit branch) to 9 percent in Winchester. In 1835, the last year the bank reported separate branch statistics, net returns to capital at the Farmers Bank's branches ranged from 2.9 and 11.7 percent, with an average of 7.9 percent.

The low profits at the Norfolk branch represent a net subsidy from the state's banking sector to the political system, which was not immune to the same kind of infrastructure boosterism that erupted in New York, Pennsylvania, Maryland and elsewhere. In the immediate post-Revolutionary era, the value of exports shipped from Virginia's ports (Norfolk and Alexandria) slightly exceeded the value shipped from Baltimore. In the 1790s the numbers turned sharply in Baltimore's favor and Virginia entered the internal-improvements craze and the battle for western shipments. Banks represented the first phase of the state's internal improvements plan in that many believed that Baltimore's new-found advantage resulted from easier credit supplied by the city's banks. If Norfolk, with one of the best natural harbors on the North American Atlantic coast, was to compete with other port cities, it needed banks and the state required three of the state's Big Six branch banks to operate branches there. Despite its natural advantages, Norfolk never became an important entrepot and it probably had more bank capital than it required. This pattern was repeated elsewhere. Other states required their branch banks to serve markets such as Memphis, Louisville, Natchez and Mobile that might, with the proper infrastructure grow into important ports.

State Involvement and Intervention in Banking

The second distinguishing characteristic of southern and western banking was sweeping state involvement and intervention. Virginia, for example, interjected the state into the banking system by taking significant stakes in its first chartered banks (providing an implicit subsidy) and by requiring them, once they established themselves, to subsidize the state's continuing internal improvements programs of the 1820s and 1830s. Indiana followed such a strategy. So, too, did Kentucky, Louisiana, Mississippi, Illinois, Kentucky, Tennessee and Georgia in different degrees. South Carolina followed a wholly different strategy. On one hand, it chartered several banks in which it took no financial interest. On the other, it chartered the Bank of the State of South Carolina, a bank wholly owned by the state and designed to lend to planters and farmers who complained constantly that the state's existing banks served only the urban mercantile community. The state-owned bank eventually divided its lending between merchants, farmers and artisans and dominated South Carolina's financial sector.

The 1820s and 1830s witnessed a deluge of new banks in the South and West, with a corresponding increase in state involvement. No state matched Louisiana's breadth of involvement in the 1830s when it chartered three distinct types of banks: commercial banks that served merchants and manufacturers; improvement banks that financed various internal improvements projects; and property banks that extended long-term mortgage credit to planters and other property holders. Louisiana's improvement banks included the New Orleans Canal and Banking Company that built a canal connecting Lake Ponchartrain to the Mississippi River. The Exchange and Banking Company and the New Orleans Improvement and Banking Company were required to build and operate hotels. The New Orleans Gas Light and Banking Company constructed and operated gas streetlights in New Orleans and five other cities. Finally, the Carrollton Railroad and Banking Company and the Atchafalaya Railroad and Banking Company were rail construction companies whose bank subsidiaries subsidized railroad construction.

"Commonwealth Ideal" and Inflationary Banking

Louisiana's 1830s banking exuberance reflected what some historians label the "commonwealth ideal" of banking; that is, the promotion of the general welfare through the promotion of banks. Legislatures in the South and West, however, never demonstrated a greater commitment to the commonwealth ideal than during the tough times of the early 1820s. With the collapse of the post-war land boom in 1819, a political coalition of debt-strapped landowners lobbied legislatures throughout the region for relief and its focus was banking. Relief advocates lobbied for inflationary banking that would reduce the real burden of debts taken on during prior flush times.

Several western states responded to these calls and chartered state-subsidized and state-managed banks designed to reinflate their embattled economies. Chartered in 1821, the Bank of the Commonwealth of Kentucky loaned on mortgages at longer than customary periods and all Kentucky landowners were eligible for $1,000 loans. The loans allowed landowners to discharge their existing debts without being forced to liquidate their property at ruinously low prices. Although the bank's notes were not redeemable into specie, they were given currency in two ways. First, they were accepted at the state treasury in tax payments. Second, the state passed a law that forced creditors to accept the notes in payment of existing debts or agree to delay collection for two years.

The commonwealth ideal was not unique to Kentucky. During the depression of the 1820s, Tennessee chartered the State Bank of Tennessee, Illinois chartered the State Bank of Illinois and Louisiana chartered the Louisiana State Bank. Although they took slightly different forms, they all had the same intent; namely, to relieve distressed and embarrassed farmers, planters and land owners. What all these banks shared in common was the notion that the state should promote the general welfare and economic growth. In this instance, and again during the depression of the 1840s, state-owned banks were organized to minimize the transfer of property when economic conditions demanded wholesale liquidation. Such liquidation would have been inefficient and imposed unnecessary hardship on a large fraction of the population. To the extent that hastily chartered relief banks forestalled inefficient liquidation, they served their purpose. Although most of these banks eventually became insolvent, requiring taxpayer bailouts, we cannot label them unsuccessful. They reinflated economies and allowed for an orderly disposal of property. Determining if the net benefits were positive or negative requires more research, but for the moment we are forced to accept the possibility that the region's state-owned banks of the 1820s and 1840s advanced the commonweal.

Conclusion: Banks and Economic Growth

Despite notable differences in the specific form and structure of each region's banking system, they were all aimed squarely at a common goal; namely, realizing that region's economic potential. Banks helped achieve the goal in two ways. First, banks monetized economies, which reduced the costs of transacting and helped smooth consumption and production across time. It was no longer necessary for every farm family to inventory their entire harvest. They could sell most of it, and expend the proceeds on consumption goods as the need arose until the next harvest brought a new cash infusion. Crop and livestock inventories are prone to substantial losses and an increased use of money reduced them significantly. Second, banks provided credit, which unleashed entrepreneurial spirits and talents. A complete appreciation of early American banking recognizes the banks' contribution to antebellum America's economic growth.

Bibliographic Essay

Because of the large number of sources used to construct the essay, the essay was more readable and less cluttered by including a brief bibliographic essay. A full bibliography is included at the end.

Good general histories of antebellum banking include Dewey (1910), Fenstermaker (1965), Gouge (1833), Hammond (1957), Knox (1903), Redlich (1949), and Trescott (1963). If only one book is read on antebellum banking, Hammond's (1957) Pulitzer-Prize winning book remains the best choice.

The literature on New England banking is not particularly large, and the more important historical interpretations of state-wide systems include Chadbourne (1936), Hasse (1946, 1957), Simonton (1971), Spencer (1949), and Stokes (1902). Gras (1937) does an excellent job of placing the history of a single bank within the larger regional and national context. In a recent book and a number of articles Lamoreaux (1994 and sources therein) provides a compelling and eminently readable reinterpretation of the region's banking structure. Nathan Appleton (1831, 1856) provides a contemporary observer's interpretation, while Walker (1857) provides an entertaining if perverse and satirical history of a fictional New England bank. Martin (1969) provides details of bank share prices and dividend payments from the establishment of the first banks in Boston through the end of the nineteenth century. Less technical studies of the Suffolk system include Lake (1947), Trivoli (1979) and Whitney (1878); more technical interpretations include Calomiris and Kahn (1996), Mullineaux (1987), and Rolnick, Smith and Weber (1998).

The literature on Middle Atlantic banking is huge, but the better state-level histories include Bryan (1899), Daniels (1976), and Holdsworth (1928). The better studies of individual banks include Adams (1978), Lewis (1882), Nevins (1934), and Wainwright (1953). Chaddock (1910) provides a general history of the Safety Fund system. Golembe (1960) places it in the context of modern deposit insurance, while Bodenhorn (1996) and Calomiris (1989) provide modern analyses. A recent revival of interest in free banking has brought about a veritable explosion in the number of studies on the subject, but the better introductory ones remain Rockoff (1974, 1985), Rolnick and Weber (1982, 1983), and Dwyer (1996).

The literature on southern and western banking is large and of highly variable quality, but I have found the following to be the most readable and useful general sources: Caldwell (1935), Duke (1895), Esary (1912), Golembe (1978), Huntington (1915), Green (1972), Lesesne (1970), Royalty (1979), Schweikart (1987) and Starnes (1931).

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1 Banknotes were small demonination IOUs printed by banks and circulated as currency. Modern U.S. money are simply banknotes issued by the Federal Reserve Bank, which has a monopoly privilege in the issue of legal tender currency. In antebellum American, when a bank made a loan, the borrower was typically handed banknotes with a face value equal to the dollar value of the loan. The borrower then spent these banknotes in purchasing goods and services, putting them into circulation. Contemporary law held that banks were required to redeem banknotes into gold and silver legal tender on demand. Banks found it profitable to issue notes because they typically held about 30 percent of the total value of banknotes in circulation as reserves. Thus, banks were able to leverage $30 in gold and silver into $100 in loans that returned about 7 percent interest on average.

2 Paul Lockard (2000) challenges Lamoreaux's interpretation. In a study of 4 banks in the Connecticut

River valley, Lockard finds that insiders did not dominate these banks' resources. As provocative as Lockard's findings are, he draws conclusions from a small and unrepresentative sample. Two of his four sample banks were savings banks, which were designed as quasi-charitable organizations designed to encourage savings by the working classes and provide small loans. Thus, Lockard's sample is effectively reduced to two banks. At these two banks, he identifies about 10 percent of loans as insider loans, but readily admits that he cannot always distinguish between insiders and outsiders. For a recent study of how early Americans used savings banks, see Alter, Goldin and Rotella (1994). The literature on savings banks is so large that it cannot be be given its due here.

3 Interbank clearing involves the settling of balances between banks. Modern banks cash checks drawn on other banks and credit the funds to the depositor. The Federal Reserve system provides clearing services between banks. The accepting bank sends the checks to the Federal Reserve, who credits the sending bank's accounts and sends the checks back to the bank on which they were drawn for reimbursement. In the antebellum era, interbank clearing involved sending banknotes back to issuing banks. Because New England had so many small and scattered banks, the costs of returning banknotes to their issuers were large and sometimes avoided by recirculating notes of distant banks rather than returning them. Regular clearings and redemptions served an important purpose, however, because they kept banks in touch with the current market conditions. A massive redemption of notes was indicative of a declining demand for money and credit. Because the bank's reserves were drawn down with the redemptions, it was forced to reduce its volume of loans in accord with changing demand conditions.

4 The law held that banknotes were redeemable on demand into gold or silver coin or bullion. If a bank refused to redeem even a single $1 banknote, the banknote holder could have the bank closed and liquidated to recover his or her claim against it.

5 Rappaport (1996) found that the bank's loans were about equally divided between insiders (shareholders and shareholders' family and business associates) and outsiders, but nonshareholders received loans about 30 percent smaller than shareholders. The issue remains about whether this bank was an "insider" bank, and depends largely on one's definition. Any modern bank which made half of its loans to shareholders and their families would be viewed as an "insider" bank. It is less clear where the line can be usefully drawn for antebellum banks.

6 Real-bills lending followed from a nineteenth-century banking philosophy, which held that bank lending should be used to finance the warehousing or wholesaling of already-produced goods. Loans made on these bases were thought to be self-liquidating in that the loan was made against readily sold collateral actually in the hands of a merchant. Under the real-bills doctrine, the banks' proper functions were to bridge the gap between production and retail sale of goods. A strict adherence to real-bills tenets excluded loans on property (mortgages), loans on goods in process (trade credit), or loans to start-up firms (venture capital). Thus, real-bills lending prescribed a limited role for banks and bank credit. Few banks were strict adherents to the doctrine, but many followed it in large part.

7 Robert E. Wright (1998) offers a different interpretation, but notes that Burr pushed the bill through at the end of a busy legislative session so that many legislators voted on the bill without having read it thoroughly or at all.

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History of Property Taxes in the United States

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Taxes based on ownership of property were used in ancient times, but the modern tax has roots in feudal obligations owned to British and European kings or landlords. In the fourteenth and fifteenth century, British tax assessors used ownership or occupancy of property to estimate a taxpayer's ability to pay. In time the tax came to be regarded as a tax on the property itself (*in rem*). In the United Kingdom the tax developed into a system of "rates" based on the annual (rental) value of property.

The growth of the property tax in America was closely related to economic and political conditions on the frontier. In pre-commercial agricultural areas the property tax was a feasible source of local government revenue and equal taxation of wealth was consistent with the prevailing equalitarian ideology.

Taxation in the American Colonies

When the Revolutionary War began, the colonies had well-developed tax systems that made a war against the world's leading military power thinkable. The tax structure varied from colony to colony, but five kinds of taxes were widely used. Capitation (poll) taxes were levied at a fixed rate on all adult males and sometimes on slaves. Property taxes were usually specific taxes levied at fixed rates on enumerated items, but sometimes items were taxed according to value. Faculty taxes were levied on the faculty or earning capacity of persons following certain trades or having certain skills. Tariffs (imposts) were levied on goods imported or exported and excises were levied on consumption goods, especially liquor.

During the war colonial tax rates increased several fold and taxation became a matter of heated debate and some violence. Settlers far from markets complained that taxing land on a per-acre basis was unfair and demanded that property taxation be based on value. In the southern colonies light land taxes and heavy poll taxes favored wealthy landowners. In some cases, changes in the tax system caused the wealthy to complain. In New York wealthy leaders saw the excess profits tax, which had been levied on war profits, as a dangerous example of "leveling tendencies." Owners of intangible property in New Jersey saw the tax on intangible property in a similar light.

By the end of the war, it was obvious that the concept of equality so eloquently stated in the Declaration of Independence had far-reaching implications. Wealthy leaders and ordinary men pondered the meaning of equality and asked its implications for taxation. The leaders often saw little connection among independence, political equality, and the tax system, but many ordinary men saw an opportunity to demand changes.

Constitutionalizing Uniformity in the Nineteenth Century

In 1796 seven of the fifteen states levied uniform capitation taxes. Twelve taxed some or all livestock. Land was taxed in a variety of ways, but only four states taxed the mass of property by valuation. No state constitution required that taxation be by value or required that rates on all kinds of property be uniform. In 1818, Illinois adopted the first uniformity clause. Missouri followed in 1820, and in 1834 Tennessee replaced a provision requiring that land be taxed at a uniform amount per acre with a provision that land be taxed according to its value (*ad valorem)*. By the end of the century thirty-three states had included uniformity clauses in new constitutions or had amended old ones to include the requirement that all property be taxed equally by value. A number of other states enacted uniformity statutes requiring that all property be taxed. Table 1 summarizes this history.

Table 1 Nineteenth-Century Uniformity Provisions

(first appearance in state constitutions)

	Year	Universality Provision
Illinois	1818	Yes
Missouri	1820	No
*Tennessee1	1834	Yes2
Arkansas	1836	No
Florida	1838	No
*Louisiana	1845	No
Texas	1845	Yes
Wisconsin	1848	No
California	1849	Yes
*Michigan3	1850	No
*Virginia	1850	Yes4
Indiana	1851	Yes
*Ohio	1851	Yes
Minnesota	1857	Yes
Kansas	1859	No
Oregon	1859	Yes
West Virginia	1863	Yes

Nevada	1864	Yes5
*South Carolina	1865	Yes
*Georgia	1868	No
*North Carolina	1868	Yes
*Mississippi	1869	Yes
*Maine	1875	No
*Nebraska	1875	No
*New Jersey	1875	No
Montana	1889	Yes
North Dakota	1889	Yes
South Dakota	1889	Yes
Washington	1889	Yes
Idaho6	1890	Yes
Wyoming	1890	No
*Kentucky	1891	Yes
Utah	1896	Yes

*Indicates amendment or revised constitution.

1. The Tennessee constitution of 1796 included a unique provision requiring taxation of land to be uniform per 100 acres.
2. One thousand dollars of personal property and the products of the soil in the hands of the original producer were exempt in Tennessee.
3. The Michigan provision required that the legislature provide a uniform rule of taxation except for property paying specific taxes.
4. Except for taxes on slaves.
5. Nevada exempted mining claims.
6. One provision in Idaho requires uniformity as to class, another seems to prescribe uniform taxation.
Source: Fisher (1996) 57

The political appeal of uniformity was strong, especially in the new states west of the Appalachians. A uniform tax on all wealth, administered by locally elected officials appealed to frontier settlers many of whom strongly supported the Jacksonian ideas of equality, and distrusted both centralized government and professional administrators.

The general property tax applied to all wealth — real and personal, tangible and intangible. It was administrated by elected local officials who were to determine the market value of the property, compute the tax rates necessary to raise the amount levied, compute taxes on each property, collect the tax, and remit the proceeds to the proper government. Because the tax was uniform and levied on all wealth, each taxpayer would pay for the government services he or she enjoyed in exact proportion to his wealth.

The tax and the administrative system were well adapted as a revenue source for the system of local government that grew up in the United States. Typically, the state divided itself into counties, which were given many responsibilities for administering state laws. Citizens were free to organize municipalities, school districts, and many kinds of special districts to perform additional functions. The result, especially in the states formed after the Revolution, was a large number of overlapping governments. Many were in rural areas with no business establishment. Sales or excise taxes would yield no revenue and income taxes were not feasible.

The property tax, especially the real estate tax, was ideally suited to such a situation. Real estate had a fixed location, it was visible, and its value was generally well known. Revenue could easily be allocated to the governmental unit in which the property was located.

Failure of the General Property Tax

By the beginning of the twentieth century, criticism of the uniform, universal (general) property tax was widespread. A leading student of taxation called the tax, *as administered,* one of the worst taxes ever used by a civilized nation (Seligman, 1905).

There are several reasons for the failure of the general property tax. Advocates of uniformity failed to deal with the problems resulting from differences between property as a legal term and wealth as an economic concept. In a simple rural economy wealth consists largely of real property and tangible personal property — land, buildings, machinery and livestock. In such an economy, wealth and property are the same things and the ownership of property is closely correlated with income or ability to pay taxes.

In a modern commercial economy ownership and control of wealth is conferred by an ownership of rights that may be evidenced by a variety of financial and legal instruments such as stocks, bonds, notes, and mortgages. These rights may confer far less than *fee simple* (absolute) ownership and may be owned by millions of individuals residing all over the world. Local property tax administrators lack the legal authority, skills, and resources needed to assess and collect taxes on such complex systems of property ownership.

Another problem arose from the inability or unwillingness of elected local assessors to value their neighbor's property at full value. An assessor who valued property well below its market value and changed values infrequently was much more popular and more apt to be reelected. Finally the increasing number of wage-earners and professional people who had substantial incomes but little property made property ownership a less suitable measure of ability to pay taxes.

Reformers, led by The National Tax Association which was founded in 1907, proposed that state income taxes be enacted and that intangible property and some kinds of tangible personal property be eliminated from the property tax base. They proposed that real property be assessed by professionally trained assessors. Some advocated the classified property tax in which different rates of assessment or taxation was applied to different classes of real property.

Despite its faults, however, the tax continued to provide revenue for one of the most elaborate systems of local government in the world. Local governments included counties, municipalities of several classes, towns or townships, and school districts. Special districts were organized to provide water, irrigation, drainage, roads, parks, libraries, fire protection, health services, gopher control, and scores of other services. In some states, especially in the Midwest and Great Plains, it was not uncommon to find that property was taxed by seven or eight different governments.

Overlapping governments caused little problem for real estate taxation. Each parcel of property was coded by taxing districts and the applicable taxes applied.

Reforming the Property Tax in the Twentieth Century

Efforts to reform the property tax varied from state to state, but usually included centralized assessment of railroad and utility property and exemption or classification of some forms of property. Typically intangibles such as mortgages were taxed at lower rates, but in several states tangible personal property and real estate were also classified. In 1910 Montana divided property into six classes. Assessment rates ranged from 100 percent of the net proceeds of mines to seven percent for money and credits. Minnesota's 1913 law divided tangible property into four classes, each assessed at a different rate. Some states replaced the town or township assessors with county assessors, and many created state agencies to supervise and train local assessors. The National Association of Assessing Officers (later International Association of Assessing Officers) was organized in 1934 to develop better assessment methods and to train and certify assessors.

The depression years after 1929 resulted in widespread property tax delinquency and in several states taxpayers forcibly resisted the sale of tax delinquent property. State governments placed additional limits on property tax rates and several states exempted owner-occupied residence from taxation. These homestead exemptions were later criticized because they provided large amounts of relief to wealthy homeowners and disproportionally reduced the revenue of local governments whose property tax base was made up largely of residential property.

After World War II many states replaced the homestead exemption with state financed "circuit breakers" which benefited lower and middle income homeowners, older homeowners, and disabled persons. In many states renters were included by provisions that classified a portion of rental payments as property taxes. By 1991 thirty-five states had some form of circuit breakers (Advisory Commission on Intergovernmental Relations, 1992, 126-31).

Proponents of the general property tax believed that uniform and universal taxation of property would tend to limit taxes. Everybody would have to pay their share and the political game of taxing somebody else for one's favorite program would be impossible. Perhaps there was some truth in this argument, but state legislatures soon began to impose additional limitations. Typically, the statutes authorizing local government to impose taxes for a particular purpose such as education, road building, or water systems, specified the rate, usually stated in mills, dollars per hundred or dollars per thousand of assessed value, that could be imposed for that purpose.

These limitations provided no overall limit on the taxes imposed on a particular property so state legislatures and state constitutions began to impose limits restricting the total rate or amount that could be imposed by a unit of local government. Often these were complicated to administer and had many unintended consequences. For example, limiting the tax that could be imposed by a particular kind of government sometime led to the creation of additional special districts.

During World War II, state and local taxes were stable or decreased as spending programs were cut back because of decreased needs or unavailability of building materials or other resources. This was reversed in the post-war years as governments expanded programs and took advantage of rising property value to increase tax collections. Assessment rose, tax rates rose, and the newspapers carried stories of homeowners forced to sell their homes because of rising taxes

California's Tax Revolt

Within a few years the country was swept by a wave of tax protests, often called the Tax Revolt. Almost every state imposed some kind of limitation on the property tax, but the most widely publicized was Proposition 13, a constitutional amendment passed by popular vote in California in 1978. This proved to be the most successful attack on the property tax in American history. The amendment:

1. limited property taxes to one percent of full cash value

2. required property to be valued at its value on March 1, 1975 or on the date it changes hands or is constructed after that date.

3. limited subsequent value adjustment in value to 2 percent per year or the rate of inflation, whichever is lesser.

4. prohibited the imposition of sales or transaction taxes on the sale of real estate.

5. required two-thirds vote in each house of the legislature to increase state taxes

and a two-thirds vote of the electorate to increase or add new local taxes.

This amendment proved to be extremely difficult to administer. It resulted in hundreds of court cases, scores of new statutes, many attorney generals' opinions and several additional amendments to the California constitution. One of the amendments permits property to be passed to heirs without triggering a new assessment.

In effect Proposition 13 replaced the property tax with a hybrid tax based on a property's value in 1975 or the date it was last transferred to a non-family member. These values have been modified by annual adjustments that have been much less than the increase in the market value of the property. Thus it has favored the business or family that remains in the same building or residence for a long period of time.

Local government in California seems to have been weakened and there has been a great increase in fees, user charges, and business taxes. A variety of devices, including the formation of fee-financed special districts, have been utilized to provide services.

Although Proposition 13 was the most far-reaching and widely publicized attempt to limit property taxes, it is only one of many provisions that have attempted to limit the property tax. Some are general limitations on rates or amounts that may be levied. Others provide tax benefits to particular groups or are intended to promote economic development. Several other states adopted overall limitations or tax freezes modeled on Proposition 13 and in addition have adopted a large number of provisions to provide relief to particular classes of individuals or to serve as economic incentives. These include provisions favoring agricultural land, exemption or reduced taxation of owner-occupied homes, provisions benefiting the poor, veterans, disabled individuals, and the aged. Economic incentives incorporated in property tax laws include exemptions or lower rates on particular business or certain types of business, exemption of the property of newly established businesses, tax breaks in development zones, and earmarking of taxes for expenditure that benefit a particular business (enterprise zones).

The Property Tax Today

In many states assessment techniques have improved greatly. Computer assisted mass appraisal (CAMA) combines computer technology, statistical methods and valve theory to make possible reasonably accurate property assessments. Increases in state school aid, stemming in part from court decisions requiring equal school quality, have increased the pressure for statewide uniformity in assessment. Some states now use elaborate statistical procedures to measure the quality and equality of assessment from place to place in the state. Today, departures from uniformity come less from poor assessment than from provision in the property tax statutes.

The tax on a particular property may depend on who owns it, what it is used for, and when it last sold. To compute the tax the administrator may have to know the income, age, medical condition, and previous military service of the owner. Anomalies abound as taxpayers figure out ways to make the complicated system work in their favor. A few bales of hay harvested from a development site may qualify it as agricultural land and enterprise zones, which are intended to provide incentive for development in poverty-stricken areas, may contain industrial plants, but no people — poverty stricken or otherwise.

The many special provision fuel the demand for other special provisions. As the base narrows, the tax rate rises and taxpayers become aware of the special benefits enjoyed by their neighbors or competitors. This may lead to demands for overall tax limitations or to the quest for additional exemptions and special provisions.

The Property Tax as a Revenue Source during the Twentieth Century

At the time of the 1902 Census of Government the property tax provided forty-five percent of the general revenue received by state governments from their own sources. (excluding grants from other governments). That percentage declined steadily, taking its most precipitous drop between 1922 and 1942 as states adopted sales and income taxes. Today property taxes are an insignificant source of state tax revenue. (See Table 2.)

The picture at the local level is very different. The property tax as a percentage of own-source general revenue rose from 1902 until 1932 when it provided 85.2 percent of local government own-source general revenue. Since that time there has been a significant gradual decline in the importance of local property taxes.

The decline in the revenue importance of the property tax is more dramatic when the increase in federal and state aid is considered. In fiscal year 1999, local governments received 228 billion in property tax revenue and 328 billion in aid from state and federal governments. If current trends continue, the property tax will decline in importance and states and the federal government will take over more local functions, or expand the system of grants to local governments. Either way, government will become more centralized.

Table 2

Property Taxes as a Percentage of Own-Source General Revenue, Selected Years

Year	State	Local
1902	45.3	78.2
1913	38.9	77.4
1922	30.9	83.9
1932	15.2	85.2
1942	6.2	80.8
1952	3.4	71.0
1962	2.7	69.0
1972	1.8	63.5
1982	1.5	48.0
1992	1.7	48.1
1999	1.8	44.6

Source: U. S. Census of Governments, *Historical Statistics of State and Local Finance, 1902-1953;* U. S. Census of Governments, *Governments Finances for (various years)*; and http://www.census.gov.

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Antebellum Banking in the United States

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The first legitimate commercial bank in the United States was the Bank of North America founded in 1781. Encouraged by Alexander Hamilton, Robert Morris persuaded the Continental Congress to charter the bank, which loaned to the cash-strapped Revolutionary government as well as private citizens, mostly Philadelphia merchants. The possibilities of commercial banking had been widely recognized by many colonists, but British law forbade the establishment of commercial, limited-liability banks in the colonies. Given that many of the colonists' grievances against Parliament centered on economic and monetary issues, it is not surprising that one of the earliest acts of the Continental Congress was the establishment of a bank.

The introduction of banking to the U.S. was viewed as an important first step in forming an independent nation because banks supplied a medium of exchange (banknotes1 and deposits) in an economy perpetually strangled by shortages of specie money and credit, because they animated industry, and because they fostered wealth creation and promoted well-being. In the last case, contemporaries typically viewed banks as an integral part of a wider system of government-sponsored commercial infrastructure. Like schools, bridges, road, canals, river clearing and harbor improvements, the benefits of banks were expected to accrue to everyone even if dividends accrued only to shareholders.

Financial Sector Growth

By 1800 each major U.S. port city had at least one commercial bank serving the local mercantile community. As city banks proved themselves, banking spread into smaller cities and towns and expanded their clientele. Although most banks specialized in mercantile lending, others served artisans and farmers. In 1820 there were 327 commercial banks and several mutual savings banks that promoted thrift among the poor. Thus, at the onset of the antebellum period (defined here as the period between 1820 and 1860), urban residents were familiar with the intermediary function of banks and used bank-supplied currencies (deposits and banknotes) for most transactions. Table 1 reports the number of banks and the value of loans outstanding at year end between 1820 and 1860. During the era, the number of banks increased from 327 to 1,562 and total loans increased from just over $55.1 million to $691.9 million. Bank-supplied credit in the U.S. economy increased at a remarkable annual average rate of 6.3 percent. Growth in the financial sector, then outpaced growth in aggregate economic activity. Nominal gross domestic product increased an average annual rate of about 4.3 percent over the same interval. This essay discusses how regional regulatory structures evolved as the banking sector grew and radiated out from northeastern cities to the hinterlands.

Table 1
Number of Banks and Total Loans, 1820-1860

Year	Banks	Loans ($ millions)
1820	327	55.1
1821	273	71.9
1822	267	56.0
1823	274	75.9
1824	300	73.8
1825	330	88.7

1826	331	104.8
1827	333	90.5
1828	355	100.3
1829	369	103.0
1830	381	115.3
1831	424	149.0
1832	464	152.5
1833	517	222.9
1834	506	324.1
1835	704	365.1
1836	713	457.5
1837	788	525.1
1838	829	485.6
1839	840	492.3
1840	901	462.9
1841	784	386.5
1842	692	324.0
1843	691	254.5
1844	696	264.9
1845	707	288.6
1846	707	312.1
1847	715	310.3
1848	751	344.5
1849	782	332.3
1850	824	364.2
1851	879	413.8
1852	913	429.8
1853	750	408.9
1854	1208	557.4
1855	1307	576.1
1856	1398	634.2
1857	1416	684.5
1858	1422	583.2
1859	1476	657.2
1860	1562	691.9

Sources: Fenstermaker (1965); U.S. Comptroller of the Currency (1931).

Adaptability

As important as early American banks were in the process of capital accumulation, perhaps their most notable feature was their adaptability. Kuznets (1958) argues that one measure of the financial sector's value is how and to what extent it evolves with changing economic conditions. Put in place to perform certain functions under one set of economic circumstances, how did it alter its behavior and service the needs of borrowers as circumstances changed. One benefit of the federalist U.S. political system was that states were given the freedom to establish systems reflecting local needs and preferences. While the political structure deserves credit in promoting regional adaptations, North (1994) credits the adaptability of America's formal rules and informal constraints that rewarded adventurism in the economic, as well as the noneconomic, sphere. Differences in geography, climate, crop mix, manufacturing activity, population density and a host of other variables were reflected in different state banking systems. Rhode Island's banks bore little resemblance to those in far away Louisiana or Missouri, or even those in neighboring Connecticut. Each state's banks took a different form, but their purpose was the same; namely, to provide the state's citizens with monetary and intermediary services and to promote the general economic welfare. This section provides a sketch of regional differences. A more detailed discussion can be found in Bodenhorn (2002).

State Banking in New England

New England's banks most resemble the common conception of the antebellum bank. They were relatively small, unit banks; their stock was closely held; they granted loans to local farmers, merchants and artisans with whom the bank's managers had more than a passing familiarity; and the state took little direct interest in their daily operations.

Of the banking systems put in place in the antebellum era, New England's is typically viewed as the most stable and conservative. Friedman and Schwartz (1986) attribute their stability to an Old World concern with business reputations, familial ties, and personal legacies. New England was long settled, its society well established, and its business community mature and respected throughout the Atlantic trading network. Wealthy businessmen and bankers with strong ties to the community — like the Browns of Providence or the Bowdoins of Boston — emphasized stability not just because doing so benefited and reflected well on them, but because they realized that bad banking was bad for everyone's business.

Besides their reputation for soundness, the two defining characteristics of New England's early banks were their insider nature and their small size. The typical New England bank was small compared to banks in other regions. Table 2 shows that in 1820 the average Massachusetts country bank was about the same size as a Pennsylvania country bank, but both were only about half the size of a Virginia bank. A Rhode Island bank was about one-third the size of a Massachusetts or Pennsylvania bank and a mere one-sixth as large as Virginia's banks. By 1850 the average Massachusetts bank declined relatively, operating on about two-thirds the paid-in capital of a Pennsylvania country bank. Rhode Island's banks also shrank relative to Pennsylvania's and were tiny compared to the large branch banks in the South and West.

Table 2
Average Bank Size by Capital and Lending in 1820 and 1850 Selected States and Cities
(in $ thousands)

	1820 Capital	Loans	1850 Capital	Loans
Massachusetts	$374.5	$480.4	$293.5	$494.0
except Boston	176.6	230.8	170.3	281.9
Rhode Island	95.7	103.2	186.0	246.2
except Providence	60.6	72.0	79.5	108.5
New York	na	na	246.8	516.3
except NYC	na	na	126.7	240.1
Pennsylvania	221.8	262.9	340.2	674.6
except Philadelphia	162.6	195.2	246.0	420.7

Virginia1,2	351.5	340.0	270.3	504.5
South Carolina2	na	na	938.5	1,471.5
Kentucky2	na	na	439.4	727.3

Notes: 1 Virginia figures for 1822. 2 Figures represent branch averages.

Source: Bodenhorn (2002).

Explanations for New England Banks' Relatively Small Size

Several explanations have been offered for the relatively small size of New England's banks. Contemporaries attributed it to the New England states' propensity to tax bank capital, which was thought to work to the detriment of large banks. They argued that large banks circulated fewer banknotes per dollar of capital. The result was a progressive tax that fell disproportionately on large banks. Data compiled from Massachusetts's bank reports suggest that large banks were not disadvantaged by the capital tax. It was a fact, as contemporaries believed, that large banks paid higher taxes per dollar of circulating banknotes, but a potentially better benchmark is the tax to loan ratio because large banks made more use of deposits than small banks. The tax to loan ratio was remarkably constant across both bank size and time, averaging just 0.6 percent between 1834 and 1855. Moreover, there is evidence of constant to modestly increasing returns to scale in New England banking. Large banks were generally at least as profitable as small banks in all years between 1834 and 1860, and slightly more so in many.

Lamoreaux (1993) offers a different explanation for the modest size of the region's banks. New England's banks, she argues, were not impersonal financial intermediaries. Rather, they acted as the financial arms of extended kinship trading networks. Throughout the antebellum era banks catered to insiders: directors, officers, shareholders, or business partners and kin of directors, officers, shareholders and business partners. Such preferences toward insiders represented the perpetuation of the eighteenth-century custom of pooling capital to finance family enterprises. In the nineteenth century the practice continued under corporate auspices. The corporate form, in fact, facilitated raising capital in greater amounts than the family unit could raise on its own. But because the banks kept their loans within a relatively small circle of business connections, it was not until the late nineteenth century that bank size increased.[2]

Once the kinship orientation of the region's banks was established it perpetuated itself. When outsiders could not obtain loans from existing insider organizations, they formed their own insider bank. In doing so the promoters assured themselves of a steady supply of credit and created engines of economic mobility for kinship networks formerly closed off from many sources of credit. State legislatures accommodated the practice through their liberal chartering policies. By 1860, Rhode Island had 91 banks, Maine had 68, New Hampshire 51, Vermont 44, Connecticut 74 and Massachusetts 178.

The Suffolk System

One of the most commented on characteristic of New England's banking system was its unique regional banknote redemption and clearing mechanism. Established by the Suffolk Bank of Boston in the early 1820s, the system became known as the Suffolk System. With so many banks in New England, each issuing it own form of currency, it was sometimes difficult for merchants, farmers, artisans, and even other bankers, to discriminate between real and bogus banknotes, or to discriminate between good and bad bankers. Moreover, the rural-urban terms of trade pulled most banknotes toward the region's port cities. Because country merchants and farmers were typically indebted to city merchants, country banknotes tended to flow toward the cities, Boston more so than any other. By the second decade of the nineteenth century, country banknotes became a constant irritant for city bankers. City bankers believed that country issues displaced Boston banknotes in local transactions. More irritating though was the constant demand by the city banks' customers to accept country banknotes on deposit, which placed the burden of interbank clearing on the city banks.3

In 1803 the city banks embarked on a first attempt to deal with country banknotes. They joined together, bought up a large quantity of country banknotes, and returned them to the country banks for redemption into specie. This effort to reduce country banknote circulation encountered so many obstacles that it was quickly abandoned. Several other schemes were hatched in the next two decades, but none proved any more successful than the 1803 plan.

The Suffolk Bank was chartered in 1818 and within a year embarked on a novel scheme to deal with the influx of country banknotes. The Suffolk sponsored a consortium of Boston bank in which each member appointed the Suffolk as its lone agent in the collection and redemption of country banknotes. In addition, each city bank contributed to a fund used to purchase and redeem country banknotes. When the Suffolk collected a large quantity of a country bank's notes, it presented them for immediate redemption with an ultimatum: Join in a regular and organized redemption system or be subject to further unannounced redemption calls.4 Country banks objected to the Suffolk's proposal, because it required them to keep noninterest-earning assets on deposit with the Suffolk in amounts equal to their average weekly redemptions at the city banks. Most country banks initially refused to join the redemption network, but after the Suffolk made good on a few redemption threats, the system achieved near universal membership.

Early interpretations of the Suffolk system, like those of Redlich (1949) and Hammond (1957), portray the Suffolk as a proto-central bank, which acted as a restraining influence that exercised some control over the region's banking system and money supply. Recent studies are less quick to pronounce the Suffolk a successful experiment in early central banking. Mullineaux (1987) argues that the Suffolk's redemption system was actually self-defeating. Instead of making country banknotes less desirable in Boston, the fact that they became readily redeemable there made them perfect substitutes for banknotes issued by Boston's prestigious banks. This policy made country banknotes more desirable, which made it more, not less, difficult for Boston's banks to keep their own notes in circulation.

Fenstermaker and Filer (1986) also contest the long-held view that the Suffolk exercised control over the region's money supply (banknotes and deposits). Indeed, the Suffolk's system was self-defeating in this regard as well. By increasing confidence in the value of a randomly encountered banknote, people were willing to hold increases in banknotes issues. In an interesting twist on the traditional interpretation, a possible outcome of the Suffolk system is that New England may have grown increasingly financial backward as a direct result of the region's unique clearing system. Because banknotes were viewed as relatively safe and easily redeemed, the next big financial innovation — deposit banking — in New England lagged far behind other regions. With such wide acceptance of banknotes, there was no reason for banks to encourage the use of deposits and little reason for consumers to switch over.

Summary: New England Banks

New England's banking system can be summarized as follows: Small unit banks predominated; many banks catered to small groups of capitalists bound by personal and familial ties; banking was becoming increasingly interconnected with other lines of business, such as insurance, shipping and manufacturing; the state took little direct interest in the daily operations of the banks and its supervisory role amounted to little more than a demand that every bank submit an unaudited balance sheet at year's end; and that the Suffolk developed an interbank clearing system that facilitated the use of banknotes throughout the region, but had little effective control over the region's money supply.

Banking in the Middle Atlantic Region

Pennsylvania

After 1810 or so, many bank charters were granted in New England, but not because of the presumption that the bank would promote the commonweal. Charters were granted for the personal gain of the promoter and the shareholders and in proportion to the personal, political and economic influence of the bank's founders. No New England state took a significant financial stake in its banks. In both respects, New England differed markedly from states in other regions. From the beginning of state-chartered commercial banking in Pennsylvania, the state took a direct interest in the operations and profits of its banks. The Bank of North America was the obvious case: chartered to provide support to the colonial belligerents and the fledgling nation. Because the bank was popularly perceived to be dominated by Philadelphia's Federalist merchants, who rarely loaned to outsiders, support for the bank waned.[5] After a pitched political battle in which the Bank of North America's charter was revoked and reinstated, the legislature chartered the Bank of Pennsylvania in 1793. As its name implies, this bank became the financial arm of the state. Pennsylvania subscribed $1 million of the bank's capital, giving it the right to appoint six of thirteen directors and a $500,000 line of credit. The bank benefited by becoming the state's fiscal agent, which guaranteed a constant inflow of deposits from regular treasury operations as well as western land sales.

By 1803 the demand for loans outstripped the existing banks' supply and a plan for a new bank, the Philadelphia Bank, was hatched and its promoters petitioned the legislature for a charter. The existing banks lobbied against the charter, and nearly sank the new bank's chances until it established a precedent that lasted throughout the antebellum era. Its promoters bribed the legislature with a payment of $135,000 in return for the charter, handed over one-sixth of its shares, and opened a line of credit for the state.

Between 1803 and 1814, the only other bank chartered in Pennsylvania was the Farmers and Mechanics Bank of Philadelphia, which established a second substantive precedent that persisted throughout the era. Existing banks followed a strict real-bills lending policy, restricting lending to merchants at very short terms of 30 to 90 days.[6] Their adherence to a real-bills philosophy left a growing community of artisans, manufacturers and farmers on the outside looking in. The Farmers and Mechanics Bank was chartered to serve excluded groups. At least seven of its thirteen directors had to be farmers, artisans or manufacturers and the bank was required to lend the equivalent of 10 percent of its capital to farmers on mortgage for at least one year. In later years, banks were established to provide services to even more narrowly defined groups. Within a decade or two, most substantial port cities had banks with names like Merchants Bank, Planters Bank, Farmers Bank, and Mechanics Bank. By 1860 it was common to find banks with names like Leather Manufacturers Bank, Grocers Bank, Drovers Bank, and Importers Bank. Indeed, the Emigrant Savings Bank in New York City served Irish immigrants almost exclusively. In the other instances, it is not known how much of a bank's lending was directed toward the occupational group included in its name. The adoption of such names may have been marketing ploys as much as mission statements. Only further research will reveal the answer.

New York

State-chartered banking in New York arrived less auspiciously than it had in Philadelphia or Boston. The Bank of New York opened in 1784, but operated without a charter and in open violation of state law until 1791 when the legislature finally sanctioned it. The city's second bank obtained its charter surreptitiously. Alexander Hamilton was one of the driving forces behind the Bank of New York, and his long-time nemesis, Aaron Burr, was determined to establish a competing bank. Unable to get a charter from a Federalist legislature, Burr and his colleagues petitioned to incorporate a company to supply fresh water to the inhabitants of Manhattan Island. Burr tucked a clause into the charter of the Manhattan Company (the predecessor to today's Chase Manhattan Bank) granting the water company the right to employ any excess capital in financial transactions. Once chartered, the company's directors announced that $500,000 of its capital would be invested in banking.[7] Thereafter, banking grew more quickly in New York than in Philadelphia, so that by 1812 New York had seven banks compared to the three operating in Philadelphia.

Deposit Insurance

Despite its inauspicious banking beginnings, New York introduced two innovations that influenced American banking down to the present. The Safety Fund system, introduced in 1829, was the nation's first experiment in bank liability insurance (similar to that provided by the Federal Deposit Insurance Corporation today). The 1829 act authorized the appointment of bank regulators charged with regular inspections of member banks. An equally novel aspect was that it established an insurance fund insuring holders of banknotes and deposits against loss from bank failure. Ultimately, the insurance fund was insufficient to protect all bank creditors from loss during the panic of 1837 when eleven failures in rapid succession all but bankrupted the insurance fund, which delayed noteholder and depositor recoveries for months, even years. Even though the Safety Fund failed to provide its promised protections, it was an important episode in the subsequent evolution of American banking. Several Midwestern states instituted deposit insurance in the early twentieth century, and the federal government adopted it after the banking panics in the 1930s resulted in the failure of thousands of banks in which millions of depositors lost money.

"Free Banking"

Although the Safety Fund was nearly bankrupted in the late 1830s, it continued to insure a number of banks up to the mid 1860s when it was finally closed. No new banks joined the Safety Fund system after 1838 with the introduction of free banking — New York's second significant banking innovation. Free banking represented a compromise between those most concerned with the underlying safety and stability of the currency and those most concerned with competition and freeing the country's entrepreneurs from unduly harsh and anticompetitive restraints. Under free banking, a prospective banker could start a bank anywhere he saw fit, provided he met a few regulatory requirements. Each free bank's capital was invested in state or federal bonds that were turned over to the state's treasurer. If a bank failed to redeem even a single note into specie, the treasurer initiated bankruptcy proceedings and banknote holders were reimbursed from the sale of the bonds.

Actually Michigan preempted New York's claim to be the first free-banking state, but Michigan's 1837 law was modeled closely after a bill then under debate in New York's legislature. Ultimately, New York's influence was profound in this as well, because free banking became one of the century's most widely copied financial innovations. By 1860 eighteen states adopted free banking laws closely resembling New

York's law. Three other states introduced watered-down variants. Eventually, the post-Civil War system of national banking adopted many of the substantive provisions of New York's 1838 act.

Both the Safety Fund system and free banking were attempts to protect society from losses resulting from bank failures and to entice people to hold financial assets. Banks and bank-supplied currency were novel developments in the hinterlands in the early nineteenth century and many rural inhabitants were skeptical about the value of small pieces of paper. They were more familiar with gold and silver. Getting them to exchange one for the other was a slow process, and one that relied heavily on trust. But trust was built slowly and destroyed quickly. The failure of a single bank could, in a week, destroy the confidence in a system built up over a decade. New York's experiments were designed to mitigate, if not eliminate, the negative consequences of bank failures. New York's Safety Fund, then, differed in the details but not in intent, from New England's Suffolk system. Bankers and legislators in each region grappled with the difficult issue of protecting a fragile but vital sector of the economy. Each region responded to the problem differently. The South and West settled on yet another solution.

Banking in the South and West

One distinguishing characteristic of southern and western banks was their extensive branch networks. Pennsylvania provided for branch banking in the early nineteenth century and two banks jointly opened about ten branches. In both instances, however, the branches became a net liability. The Philadelphia Bank opened four branches in 1809 and by 1811 was forced to pass on its semi-annual dividends because losses at the branches offset profits at the Philadelphia office. At bottom, branch losses resulted from a combination of ineffective central office oversight and unrealistic expectations about the scale and scope of hinterland lending. Philadelphia's bank directors instructed branch managers to invest in high-grade commercial paper or real bills. Rural banks found a limited number of such lending opportunities and quickly turned to mortgage-based lending. Many of these loans fell into arrears and were ultimately written when land sales faltered.

Branch Banking

Unlike Pennsylvania, where branch banking failed, branch banks throughout the South and West thrived. The Bank of Virginia, founded in 1804, was the first state-chartered branch bank and up to the Civil War branch banks served the state's financial needs. Several small, independent banks were chartered in the 1850s, but they never threatened the dominance of Virginia's "Big Six" banks. Virginia's branch banks, unlike Pennsylvania's, were profitable. In 1821, for example, the net return to capital at the Farmers Bank of Virginia's home office in Richmond was 5.4 percent. Returns at its branches ranged from a low of 3 percent at Norfolk (which was consistently the low-profit branch) to 9 percent in Winchester. In 1835, the last year the bank reported separate branch statistics, net returns to capital at the Farmers Bank's branches ranged from 2.9 and 11.7 percent, with an average of 7.9 percent.

The low profits at the Norfolk branch represent a net subsidy from the state's banking sector to the political system, which was not immune to the same kind of infrastructure boosterism that erupted in New York, Pennsylvania, Maryland and elsewhere. In the immediate post-Revolutionary era, the value of exports shipped from Virginia's ports (Norfolk and Alexandria) slightly exceeded the value shipped from Baltimore. In the 1790s the numbers turned sharply in Baltimore's favor and Virginia entered the internal-improvements craze and the battle for western shipments. Banks represented the first phase of the state's internal improvements plan in that many believed that Baltimore's new-found advantage resulted from easier credit supplied by the city's banks. If Norfolk, with one of the best natural harbors on the North American Atlantic coast, was to compete with other port cities, it needed banks and the state required three of the state's Big Six branch banks to operate branches there. Despite its natural advantages, Norfolk never became an important entrepot and it probably had more bank capital than it required. This pattern was repeated elsewhere. Other states required their branch banks to serve markets such as Memphis, Louisville, Natchez and Mobile that might, with the proper infrastructure grow into important ports.

State Involvement and Intervention in Banking

The second distinguishing characteristic of southern and western banking was sweeping state involvement and intervention. Virginia, for example, interjected the state into the banking system by taking significant stakes in its first chartered banks (providing an implicit subsidy) and by requiring them, once they established themselves, to subsidize the state's continuing internal improvements programs of the 1820s and 1830s. Indiana followed such a strategy. So, too, did Kentucky, Louisiana, Mississippi, Illinois, Kentucky, Tennessee and Georgia in different degrees. South Carolina followed a wholly different strategy. On one hand, it chartered several banks in which it took no financial interest. On the other, it chartered the Bank of the State of South Carolina, a bank wholly owned by the state and designed to lend to planters and farmers who complained constantly that the state's existing banks served only the urban mercantile community. The state-owned bank eventually divided its lending between merchants, farmers and artisans and dominated South Carolina's financial sector.

The 1820s and 1830s witnessed a deluge of new banks in the South and West, with a corresponding increase in state involvement. No state matched Louisiana's breadth of involvement in the 1830s when it chartered three distinct types of banks: commercial banks that served merchants and manufacturers; improvement banks that financed various internal improvements projects; and property banks that extended long-term mortgage credit to planters and other property holders. Louisiana's improvement banks included the New Orleans Canal and Banking Company that built a canal connecting Lake Ponchartrain to the Mississippi River. The Exchange and Banking Company and the New Orleans Improvement and Banking Company were required to build and operate hotels. The New Orleans Gas Light and Banking Company constructed and operated gas streetlights in New Orleans and five other cities. Finally, the Carrollton Railroad and Banking Company and the Atchafalaya Railroad and Banking Company were rail construction companies whose bank subsidiaries subsidized railroad construction.

"Commonwealth Ideal" and Inflationary Banking

Louisiana's 1830s banking exuberance reflected what some historians label the "commonwealth ideal" of banking; that is, the promotion of the general welfare through the promotion of banks. Legislatures in the South and West, however, never demonstrated a greater commitment to the commonwealth ideal than during the tough times of the early 1820s. With the collapse of the post-war land boom in 1819, a political coalition of debt-strapped landowners lobbied legislatures throughout the region for relief and its focus was banking. Relief advocates lobbied for inflationary banking that would reduce the real burden of debts taken on during prior flush times.

Several western states responded to these calls and chartered state-subsidized and state-managed banks designed to reinflate their embattled economies. Chartered in 1821, the Bank of the Commonwealth of Kentucky loaned on mortgages at longer than customary periods and all Kentucky landowners were eligible for $1,000 loans. The loans allowed landowners to discharge their existing debts without being forced to liquidate their property at ruinously low prices. Although the bank's notes were not redeemable into specie, they were given currency in two ways. First, they were accepted at the state treasury in tax payments. Second, the state passed a law that forced creditors to accept the notes in payment of existing debts or agree to delay collection for two years.

The commonwealth ideal was not unique to Kentucky. During the depression of the 1820s, Tennessee chartered the State Bank of Tennessee, Illinois chartered the State Bank of Illinois and Louisiana chartered the Louisiana State Bank. Although they took slightly different forms, they all had the same intent; namely, to relieve distressed and embarrassed farmers, planters and land owners. What all these banks shared in common was the notion that the state should promote the general welfare and economic growth. In this instance, and again during the depression of the 1840s, state-owned banks were organized to minimize the transfer of property when economic conditions demanded wholesale liquidation. Such liquidation would have been inefficient and imposed unnecessary hardship on a large fraction of the population. To the extent that hastily chartered relief banks forestalled inefficient liquidation, they served their purpose. Although most of these banks eventually became insolvent, requiring taxpayer bailouts, we cannot label them unsuccessful. They reinflated economies and allowed for an orderly disposal of property. Determining if the net benefits were positive or negative requires more research, but for the moment we are forced to accept the possibility that the region's state-owned banks of the 1820s and 1840s advanced the commonweal.

Conclusion: Banks and Economic Growth

Despite notable differences in the specific form and structure of each region's banking system, they were all aimed squarely at a common goal; namely, realizing that region's economic potential. Banks helped achieve the goal in two ways. First, banks monetized economies, which reduced the costs of transacting and helped smooth consumption and production across time. It was no longer necessary for every farm family to inventory their entire harvest. They could sell most of it, and expend the proceeds on consumption goods as the need arose until the next harvest brought a new cash infusion. Crop and livestock inventories are prone to substantial losses and an increased use of money reduced them significantly. Second, banks provided credit, which unleashed entrepreneurial spirits and talents. A complete appreciation of early American banking recognizes the banks' contribution to antebellum America's economic growth.

Bibliographic Essay

Because of the large number of sources used to construct the essay, the essay was more readable and less cluttered by including a brief bibliographic essay. A full bibliography is included at the end.

Good general histories of antebellum banking include Dewey (1910), Fenstermaker (1965), Gouge (1833), Hammond (1957), Knox (1903), Redlich (1949), and Trescott (1963). If only one book is read on antebellum banking, Hammond's (1957) Pulitzer-Prize winning book remains the best choice.

The literature on New England banking is not particularly large, and the more important historical interpretations of state-wide systems include Chadbourne (1936), Hasse (1946, 1957), Simonton (1971), Spencer (1949), and Stokes (1902). Gras (1937) does an excellent job of placing the history of a single bank within the larger regional and national context. In a recent book and a number of articles Lamoreaux (1994 and sources therein) provides a compelling and eminently readable reinterpretation of the region's banking structure. Nathan Appleton (1831, 1856) provides a contemporary observer's interpretation, while Walker (1857) provides an entertaining if perverse and satirical history of a fictional New England bank. Martin (1969) provides details of bank share prices and dividend payments from the establishment of the first banks in Boston through the end of the nineteenth century. Less technical studies of the Suffolk system include Lake (1947), Trivoli (1979) and Whitney (1878); more technical interpretations include Calomiris and Kahn (1996), Mullineaux (1987), and Rolnick, Smith and Weber (1998).

The literature on Middle Atlantic banking is huge, but the better state-level histories include Bryan (1899), Daniels (1976), and Holdsworth (1928). The better studies of individual banks include Adams (1978), Lewis (1882), Nevins (1934), and Wainwright (1953). Chaddock (1910) provides a general history of the Safety Fund system. Golembe (1960) places it in the context of modern deposit insurance, while Bodenhorn (1996) and Calomiris (1989) provide modern analyses. A recent revival of interest in free banking has brought about a veritable explosion in the number of studies on the subject, but the better introductory ones remain Rockoff (1974, 1985), Rolnick and Weber (1982, 1983), and Dwyer (1996).

The literature on southern and western banking is large and of highly variable quality, but I have found the following to be the most readable and useful general sources: Caldwell (1935), Duke (1895), Esary (1912), Golembe (1978), Huntington (1915), Green (1972), Lesesne (1970), Royalty (1979), Schweikart (1987) and Starnes (1931).

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1 Banknotes were small demonination IOUs printed by banks and circulated as currency. Modern U.S. money are simply banknotes issued by the Federal Reserve Bank, which has a monopoly privilege in the issue of legal tender currency. In antebellum American, when a bank made a loan, the borrower was typically handed banknotes with a face value equal to the dollar value of the loan. The borrower then spent these banknotes in purchasing goods and services, putting them into circulation. Contemporary law held that banks were required to redeem banknotes into gold and silver legal tender on demand. Banks found it profitable to issue notes because they typically held about 30 percent of the total value of banknotes in circulation as reserves. Thus, banks were able to leverage $30 in gold and silver into $100 in loans that returned about 7 percent interest on average.

2 Paul Lockard (2000) challenges Lamoreaux's interpretation. In a study of 4 banks in the Connecticut

River valley, Lockard finds that insiders did not dominate these banks' resources. As provocative as Lockard's findings are, he draws conclusions from a small and unrepresentative sample. Two of his four sample banks were savings banks, which were designed as quasi-charitable organizations designed to encourage savings by the working classes and provide small loans. Thus, Lockard's sample is effectively reduced to two banks. At these two banks, he identifies about 10 percent of loans as insider loans, but readily admits that he cannot always distinguish between insiders and outsiders. For a recent study of how early Americans used savings banks, see Alter, Goldin and Rotella (1994). The literature on savings banks is so large that it cannot be be given its due here.

3 Interbank clearing involves the settling of balances between banks. Modern banks cash checks drawn on other banks and credit the funds to the depositor. The Federal Reserve system provides clearing services between banks. The accepting bank sends the checks to the Federal Reserve, who credits the sending bank's accounts and sends the checks back to the bank on which they were drawn for reimbursement. In the antebellum era, interbank clearing involved sending banknotes back to issuing banks. Because New England had so many small and scattered banks, the costs of returning banknotes to their issuers were large and sometimes avoided by recirculating notes of distant banks rather than returning them. Regular clearings and redemptions served an important purpose, however, because they kept banks in touch with the current market conditions. A massive redemption of notes was indicative of a declining demand for money and credit. Because the bank's reserves were drawn down with the redemptions, it was forced to reduce its volume of loans in accord with changing demand conditions.

4 The law held that banknotes were redeemable on demand into gold or silver coin or bullion. If a bank refused to redeem even a single $1 banknote, the banknote holder could have the bank closed and liquidated to recover his or her claim against it.

5 Rappaport (1996) found that the bank's loans were about equally divided between insiders (shareholders and shareholders' family and business associates) and outsiders, but nonshareholders received loans about 30 percent smaller than shareholders. The issue remains about whether this bank was an "insider" bank, and depends largely on one's definition. Any modern bank which made half of its loans to shareholders and their families would be viewed as an "insider" bank. It is less clear where the line can be usefully drawn for antebellum banks.

6 Real-bills lending followed from a nineteenth-century banking philosophy, which held that bank lending should be used to finance the warehousing or wholesaling of already-produced goods. Loans made on these bases were thought to be self-liquidating in that the loan was made against readily sold collateral actually in the hands of a merchant. Under the real-bills doctrine, the banks' proper functions were to bridge the gap between production and retail sale of goods. A strict adherence to real-bills tenets excluded loans on property (mortgages), loans on goods in process (trade credit), or loans to start-up firms (venture capital). Thus, real-bills lending prescribed a limited role for banks and bank credit. Few banks were strict adherents to the doctrine, but many followed it in large part.

7 Robert E. Wright (1998) offers a different interpretation, but notes that Burr pushed the bill through at the end of a busy legislative session so that many legislators voted on the bill without having read it thoroughly

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Understanding Long-Run Economic Growth: Geography, Institutions, and the Knowledge Economy

Reviewer(s): Bodenhorn, Howard

Published by EH.Net (August 2013)

Dora L. Costa and Naomi R. Lamoreaux, editors, *Understanding Long-Run Economic Growth: Geography, Institutions, and the Knowledge Economy*. Chicago: University of Chicago Press, 2011. x + 390 pp. $110 (hardcover), ISBN: 978-0-226-11634-1.

Reviewed for EH.Net by Howard Bodenhorn, Department of Economics, Clemson University.

Economic history lost one of its best and brightest with Ken Sokoloff?s death in May 2007. To celebrate and commemorate his contributions to economics, Dora Costa and Naomi Lamoreaux collected an impressive and diverse group of essays contributed by Ken?s friends, colleagues, coauthors, and classmates. Ken?s interests were wide-ranging ? he wrote on early industrialization and heights and health, but his signal contributions concerned invention and innovation, as well as the complex connections between geography, institutions and long-run economic growth. Fittingly, the essays are equally wide ranging.

The first article is an essay Ken was working on with Stan Engerman and advances the initial conditions-geography-institutions approach explored in their earlier research. The central argument is that differences in initial conditions between North America and Central and South America set those regions on markedly different social, economic and political trajectories. With its relative shortage of indigenous labor, early settlers recognized that North America would prosper only through European settlement and they adopted institutions in which new arrivals were welcomed (eventually) into the polity and might, with good fortune and hard work, rise in society. Blessed with an abundance of indigenous workers, the earliest settlers in South and Central America adopted institutions that discouraged European immigration by restricting economic and political privilege. Moreover, the nature of staple crop production pushed the returns to unskilled labor so low that few Europeans came. The argument, briefly stated, is that early inequality begat later inequality through endogenously arising institutions that favored the few, the elite.

Sokoloff and Engerman?s research raises fundamental questions: Are institutions exogenously determined by idiosyncratic events, such as the arrival of British rather than Spanish colonizers, as the legal origins approach posits?[1]? Are institutions, once established, persistent, as the colonial origins approach contends?[2]? Or, are institutions endogenous to geographies as societies struggle with how best to deal with the challenges of environments, technologies, and factor endowments? Sokoloff and Engerman are clearly in the endogenous institutions camp.

It is fitting, then, that the next two articles take on the exogeneity/endogeneity debate from alternative perspectives. Camilo Garcia-Jimeno and James A. Robinson explore the long-run implications of Frederick Jackson Turner?s thesis that the American frontier shaped its egalitarian representative democracy. Garcia-Jimeno and Robinson recognize that the U.S. was not the only New World country with a frontier and offer the ?conditional frontier hypothesis,? which posits that the consequences of the frontier are conditional on the existing political equilibrium when settlement of the frontier commences. They consider 21 New World countries and, from a series of regressions, conclude that if political institutions were bad at the outset (which they define as 1850) the existence of a frontier may have made them worse. The oligarchs divvied up the frontier among themselves, which further entrenched their economic and political power. Exogenous institutions rule.

Or do they? Stephen Haber next explores banking and finance in three countries ? the U.S., Mexico and Brazil ? but starts from a very different, very Sokoloff-ian (if I may) perspective. For Haber, as for Sokoloff, the task facing the economic historian interested in institutions involves tracing the many and complex ways in which economic and political power becomes embedded in institutions, how those institutions influence the formation of competing coalitions, and how competition between them either entrenches or alters the original institutions. Pursuing these connections is, Haber (p. 90) argues, ?a task better suited to historical narratives than to econometric hypothesis testing.? What connects banking in these three countries is that the elite used their existing power to rent seek ? to elicit government sanction of limited entry and privileged monopoly. What separated the three countries was that rent seeking efforts largely failed in the U.S. If Jackson?s war on the Second Bank was emblematic of anything it was that U.S. populists had little tolerance for government-sanctioned economic privilege. Haber doesn?t, and I doubt that Ken would, attribute the Jacksonian attitude to an accident of history. It was organically, indelibly American.

Joel Mokyr summarizes Ken?s approach to his other great intellectual passion: invention and innovation. Innovation was the consequence of purposive, rational behavior. Inventors, at least at some level, were motivated and directed by costs and benefits. Ken also recognized that inventive activity was sensitive to the institutions that generated markets that defined the rewards for innovation. Zorina Khan takes these issues head on in her analysis of patents versus prizes. At the risk of gross oversimplification, the English and the French preferred prizes for inventions believing that what motivated inventive genius was the esteem of one?s peers. Americans proceeded under the pragmatic and republican belief that profits motivated and markets would ?allow society to better realize its potential? (p. 207). Prizes were subject to momentary whims, were idiosyncratic, difficult to predict, and therefore less useful in pushing out the frontiers of useful knowledge. Markets elicited more innovation, at least as markets were organized in America.

The second article in the volume to which Ken directly contributed is coauthored with Naomi Lamoreaux and Dhanoos Sutthiphisal. They, too, explore the connection between markets and inventions in the ?new economy? of the 1920s. They argue that the rapid expansion of equity markets afforded many small enterprises on the technological frontier access to finance that was unavailable a generation earlier. Big firms dominated patenting in the Northeast. In what became the Rust Belt, small, entrepreneurial firms with new products or processes issued equities or attracted the venture capital necessary for them to bring their products to market. Markets influence innovation in all kinds of direct and indirect ways.

The constraints of a book review, unfortunately, preclude a discussion of the many other very good essays in the volume but which venture so far afield that they are not readily condensed. They are all worth reading; I was particularly fascinated by Dan Bogart and John Majewski?s article comparing the British and American transportation revolutions, and touched by Manuel Trajtenberg?s reflections on Ken as scholar and friend.

On a personal note, I am a beneficiary of Ken?s gentle but firm guidance. It was inadvertently revealed to me that Ken was one of the anonymous reviewers of my *State Banking in Early America* (2003). While the manuscript was well outside his research interests, he offered several insightful comments, one of which forced me to think more deeply about a central idea. My book is better for Ken?s advice. Many of the chapters included in this volume are undoubtedly better for Ken?s prodding, pushing and provocation. He is missed.

Notes:
1. See, for example, Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny.? 1998. ?Law and Finance.? *Journal of Political Economy* 106(6).

2. See, for example, Daron Acemoglu, Simon Johnson and James A. Robinson. 2001. ?The Colonial Origins of Comparative Development.? *American Economic Review* 91(4).

Howard Bodenhorn is currently studying early corporate governance in the United States.???

Subject(s):	Economic Development, Growth, and Aggregate Productivity Education and Human Resource Development Financial Markets, Financial Institutions, and Monetary History Historical Demography, including Migration Historical Geography History of Technology, including Technological Change Urban and Regional History
Geographic Area(s):	General, International, or Comparative
Time Period(s):	17th Century 18th Century 19th Century 20th Century: Pre WWII 20th Century: WWII and post-WWII

The Baltimore Bank Riot: Political Upheaval in Antebellum Maryland

Author(s): Shalhope, Robert E.

Reviewer(s): Bodenhorn, Howard

Published by EH.NET (April 2010)

Robert E. Shalhope, *The Baltimore Bank Riot: Political Upheaval in Antebellum Maryland*. Urbana, IL:

University of Illinois Press, 2009. x+ 196 pp. $50 (hardcover), ISBN: 978-0-252-03480-0.

Reviewed for EH.NET by Howard Bodenhorn, Department of Economics, Clemson University.

On March 24, 1834 the Bank of Maryland, the oldest chartered bank in the state, closed its doors. Because the bank had paid interest on deposits, it had held the accounts of widow and orphan trusts, of mechanics, and of small retailers. Hezekiah Niles, published of *Niles? Weekly Register*, had been suspicious of the bank for some time and had confidentially warned friends before the failure to withdraw their money. After its failure, he was convinced that a great fraud had been perpetrated and that the working classes would bear the costs while the wealthy would suffer not at all.

Where Niles shared his suspicions about the bank directors? fraudulent practices with a few friends, Samuel Harker, editor of the *Baltimore Republican*, portrayed the bank?s directors, with typical Jacksonian literary flourish, as a species of swindlers who, through their frauds, had become tyrants, moneyed aristocrats and, ultimately, enemies of the people. When a report made clear the extent of the directors? speculations, a pamphlet war broke out between the former directors who initiated the speculations and those that had unsuccessfully tried to rein in the bank?s more egregious speculations. In modern parlance, the bank failure went viral. Circulars naming the guilty and exposing their frauds were posted in taverns and oyster cellars. Those same circulars claimed that the law could or would do little to hold the responsible directors accountable. The only practical solution was the Lynch law, the tar and feathers, and the rail. In the meantime, Harker?s *Baltimore Republican* continued to stir the pot and his language fueled a ?visceral rage among a great many Baltimoreans intent upon bringing such shameless men and institutions to justice? (p. 26).

Following three nights of public officials dispersing restive mobs, a riot broke out on August 8. One fascinating feature of the Baltimore riot, as with most early nineteenth-century riots, was the selective nature of the destruction and the mob?s use of popular democracy in choosing whose property to destroy. Once the Baltimore mob learned, for example, that the residence of one of the bank?s directors was owned by a widow and that the director was only a boarder, the mob elected to spare the widow?s house and move on. Similarly, the mob spared the house of a director who had publicly disclosed the other directors? fraud, crying out ?No! No! We have naught to do with honest men? (p. 66). The other directors? homes were not spared.

In the aftermath of the riot, Baltimore?s press turned from attributing blame for the bank?s failure to partisan exchanges about the social, political and economic conditions that had laid the foundation for the riot. To Whigs it was populist Jacksonianism run amuck. To Democrats the riot was indicative of the dislocations inherent in the market system and popular dissatisfaction with the market as arbiter. To the casual historian, the rhetoric is familiar and too easily dismissed as so much nineteenth-century partisan hyperbole. To thoughtful students of the era, episodes like the Baltimore bank riot afford opportunities to explore the extent to which political hyperbole had real meaning to the typical American of the day. Shalhope is clearly the latter type of historian and it is in his connection of the riot with larger contemporary themes that his book succeeds.

Historians have generally adopted one of three approaches in their studies of the Jacksonian populism. The first emphasizes ethnic and cultural conflict: the conflict between natives and immigrants, for example, or rural Protestants and urban Catholics. A second approach emphasizes the dislocations arising from the market revolution and Shalhope readily concedes the appropriateness of this interpretation at several points in the book. Early in the volume he tells us that violence erupted, in part, due to tensions ?between those adhering to traditional communal values and others immersed in business practices associated with an emergent market economy? (p. 2). The idea that nineteenth-century Baltimore working men shared some fundamental communal ethos follows, I think, from an overly romanticized interpretation of eighteenth-century American urban society. The hypothesis of a workingman?s backlash against the market is both too sweeping and too simplistic to have much meaning. This is why, like John Majewski, I remain skeptical of a Jacksonian ?commercial revolution,? or the utility of such a construction in advancing our understanding of the era.[1] Shalhope is on firmer ground, however, when he places the bank riot within the third interpretation of the era: Jacksonian politics followed from popular demands for fundamental constitutional and electoral reform.

Maryland?s Jackson era political debate focused on the 1776 state constitution, which envisioned a confederation of equal counties rather than an electoral system of proportional representation. Each county elected four representatives; Annapolis and Baltimore elected two each. Further, two electors from each county selected a fifteen-member senate. In joint session, the senate and assembly elected a governor who had appointive power. Once it became clear that, after the election of senate electors in September 1836, the Whig minority would have nearly as many votes as the Democratic majority a call went out for a constitutional convention. It was not long before discussions of the bank riot and the need for constitutional reform intersected.

Democrats took their charge to be the elimination of privilege, whether economic or political. When privilege could not be reined in through appropriate legal channels, it was right and proper to use extralegal methods (like riots) to eliminate it. Whigs found this argument ludicrous, and the idea that a riot spoke to the need for popularly elected government specious. It was nonsense, in republican Maryland, to invoke Locke?s admonition that people must resist tyranny by force when necessary. Nevertheless, the Whigs acquiesced to constitutional reform, including the popular election of senators and more proportional representation.

As much as I like Shalhope?s book, it is not without its shortcomings. First and foremost, he does not convincingly connect the dots between the bank riot and constitutional reform. Urban riots were common in the late eighteenth through the mid-nineteenth centuries and constitutional reforms occurred throughout the era. That a reform followed a riot does not, of course, imply that a riot caused a reform. Historians have investigated nineteenth-century constitutional reform and the causes are complex and remain incompletely understood. It is not surprising that an historian is unfamiliar with John Wallis?s recent studies of state constitutional reform, which is more the shame.[2] Wallis?s idea of the emergence of open order societies and the public backlash against government-subsidized economic development programs, including the privileged position of banks and bankers, may have gone a long way in connecting riot and reform in this instance. Despite this shortcoming, Shalhope has provided a valuable study of a previously understudied event and connected it to larger themes in contemporary politics. Anyone interested in the intersection of economic and political change in the era of Jackson would profit from reading this book.

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Constitutions, Corporations, and Corruption: American States and Constitutional Change, 1842 to 1852,? *Journal of Economic History* 65 (2005).

Howard Bodenhorn is the author of two books and two dozen articles on early American banking, including ?Federal and State Banking Policy in the Federalist Era and Beyond,? in *Founding Choices*, edited by Douglas Irwin and Richard Sylla (University of Chicago Press, forthcoming 2011).

Subject(s):	Government, Law and Regulation, Public Finance
Geographic Area(s):	North America
Time Period(s):	19th Century

Virginia and the Panic of 1819: The First Great Depression and the Commonwealth

Author(s):	Haulman, Clyde A.
Reviewer(s):	Karmel, James

Published by EH.NET (June 2009)

Clyde A. Haulman, *Virginia and the Panic of 1819: The First Great Depression and the Commonwealth*. London: Pickering & Chatto, 2008. xi + 197 pp. $99 (hardcover), ISBN: 978-1-85196-939-5.

Reviewed for EH.NET by James Karmel, Department of History, Harford Community College.

Clyde Haulman?s new book on the Panic of 1819 and Virginia is a thorough treatment of the Panic?s economic impact on the state. It is chockfull of tables, charts, and statistics that describe the state?s economy from approximately 1816 through 1823. Indeed, the book is very heavy on numbers, though the qualitative story is not neglected entirely. It is an important contribution to early American economic history and provides an interesting and far-reaching perspective on the significance of the first major financial crisis and recession of early Republic. Moreover, the financial crisis and ?Great Recession? of 2007-09 necessitate a greater understanding of historical declines and recoveries, making Haulman?s book timely.

The book?s first two chapters provide a summary of the post-War of 1812 American economy and a broad overview of the Panic. Haulman explains that the American and Virginia economies boomed from 1815 to 1819, with increases in land sales, strong commercial exchange, and efforts to stabilize the money supply via the Second Bank of the Unites States (SBUS). Yet, the boom turned into a big bust by mid-1819: a phenomenon explained in various ways by specialists in the context of other similar economic crises in American history. Mainly, they have characterized the Panic of 1819 by noting 1) a sharp decline in demand for American exports to Europe, 2) an extensive financial contraction, and 3) the ?debt-deflation? theory favored by current Federal Reserve Chairman Ben Bernanke (among others), in which bad debt-asset ratios lead to a deflationary, downward spiral. Haulman applies each of these theories in his narrative on Virginia. Yet, he clearly favors the ?debt-deflation? theory to explain the severity of the Panic of 1819 and his assessment that it ?ranks with the depression of 1839-1843 as the worst of the contractions experienced by the United States in that century? (p. 33). The Bernanke and Haulman-favored explanation has particular resonance for its parallel to the recent global recession.

Haulman?s narrative addresses the role of the SBUS in the third chapter, where he argues that the national bank was pivotal in both the post-war boom (1816-18), panic and recession (1818-23). In Virginia?s case, the SBUS?s decision to cal in loans precipitated a state-wide dearth of specie by 1819. Significantly, this hampered the ability of the otherwise sound lending policies of the Old Dominion?s state banks to make loans. However, they drew the wrath of the public and politicians who shifted towards a hard money position by 1820 and ratcheted up anti-banking rhetoric. A very similar pattern occurred in Pennsylvania, which had increased its state-chartered banks ten-fold in the years following the war, only to see many crash and burn via the SBUS contraction and extreme specie policy beginning in mid-1818. Haulman?s analysis continues in chapters four and five by comprehensively reviewing the Panic?s impact on Virginia?s agriculture and business sector. Haulman?s analysis here relies upon an examination of factors such as agricultural prices and wages, land values, business licenses issued, and fluctuations in the number of retail and wholesale merchant partnerships.

An important component to the book is a long analysis of Virginia?s poor relief efforts that took place in the years of the Panic and ensuing depression (chapter six). Indeed, Virginia developed an extensive relief network in these years, and rose above states such as New York and Rhode Island in its legal framework for support to both ?poorhouses? and ?outdoor relief? (for paupers not residing in poorhouses). Where other states decreased financial resources for the poor in the Panic years, most areas of Virginia increased support for paupers and poorhouses. The analysis of the downtrodden and efforts to help them is one of the more interesting parts of the book. Haulman effectively uses data to show the regional breakdown of the Panic?s impact across the state. The hardest hit area was the older, developed and export-dependent Tidewater region as measured by poor relief data. By contrast, the western Trans-Allegheny region suffered less ? probably owing to its relative economic self-sufficiency and regional independence. This regional analysis provides an interesting juxtaposition to other financial analyses of the Panic, in which speculative western banks are often placed at the center of the crisis. The Virginia pauper and relief data also showed that there was an urban-rural dichotomy to the Panic?s impact, with urban Virginians more severely affected by the downturn than rural Virginians. Consequently, counties with substantial towns and cities provided much greater poor relief than rural counties.

Finally, the book concludes (chapter 7) with a sweeping essay that utilizes the Virginia experience to demonstrate the Panic?s powerful legacy for the early American republic. The concluding chapter ties the Panic to the ultimate demise of the SBUS in the 1830s, and emphasizes how it sharpened both hard money and soft money ideologies that persisted through the first half of the nineteenth century. Virginia?s devotion to poor relief also set a precedent that other states eventually followed as the boom-and-bust cycle took its periodic toll on Americans in these years. They enacted legislation to provide more direct relief beyond poorhouses, curtailed debtors? prisons and increased public safety expenditures. In addition, the Panic intensified the protectionist wave of the 1820s, culminating in the 1828 ?Tariff of Abominations.? Finally, it directly fed the economic and democratic populism of the Jacksonian years (and Andrew Jackson himself) by bringing into question the financial policies of the Republican establishment represented by the presidencies of Virginians James Madison and James Monroe. In Haulman?s view, the Panic?s popular impact helped create the political conditions that energized the states? rights approach to slavery issues and criticism of government finance beholden to private interests.

In summary, *Virginia and the Panic of 1819* is a valuable, well-documented case study of this significant phase of American economic history. It should have particular appeal to historians comfortable with statistical analysis and quantitative determinism. At times, the narrative could really use a personal perspective: who are some of the actual persons behind the voluminous data presented? Otherwise, there?s not much to criticize: this is a very good study and an important addition to the literature.

James Karmel is an Associate Professor of History at Harford Community College in Bel Air, Maryland. He is the author of *Gambling on the American Dream: Atlantic City and the Casino Era* (2008). He can be reached via e-mail at jkarmel@harford.edu.

Subject(s): Macroeconomics and Fluctuations

Geographic Area(s): North America

Time Period(s): 19th Century

A Nation of Counterfeiters: Capitalists, Con Men, and the Making of the United States

Author(s): Mihm, Stephen

Reviewer(s): Knodell, Jane

Published by EH.NET (January 2008)

Stephen Mihm, *A Nation of Counterfeiters: Capitalists, Con Men, and the Making of the United States*. Cambridge, MA: Harvard University Press, 2007. ix + 457 pp. $30 (cloth), ISBN: 978-0-674-02657-5.

Reviewed for EH.NET by Jane Knodell, Department of Economics, University of Vermont.

Stephen Mihm, Assistant Professor of History at the University of Georgia, has written a fascinating and original history of bank note counterfeiting in the antebellum U.S. Mihm draws on a wealth of innovative primary historical materials to identify the names, locations, and business methods of those who made their livelihood within the "counterfeit economy." He has also written a cultural history of money during the "market revolution" of the antebellum period. Here, Mihm explores contemporary ideas, sharply contested at the time, about what kind of money was "real." Mihm argues that the line between lawful and illegal money was wide and blurry, as, indeed, was that between capitalism and the counterfeit economy itself. Economic historians are apt to be more satisfied with Mihm's history of the counterfeit economy than with his interpretation of its meaning and significance.

Counterfeiting flourished, according to Mihm, at the country's northern and western geographic and political borders, and during the years following the closures of the First and Second Banks of the United States in 1811 and 1836, events which triggered sharp increases in the number of state-chartered and unincorporated banks. State-chartered banks, and to a much lesser extent private banks, issued their own currency; barring the occasional issue of large-denomination Treasury notes that assumed some of the functions of money, none of the demand for money was met with fiat money. Mihm believes that counterfeit notes comprised a "significant" share of the bank currency in circulation, and that "every bank note had its counterfeit counterpart," quantitative claims that are hard to evaluate. The pervasive uncertainty about the value of a stock of bank currency that was issued by hundreds of different banks made counterfeiting possible and profitable. Counterfeiting subsided after the Civil War, stymied by the nationalization of the currency and the determined prosecution of counterfeiters by a new federal agency, the U.S. Secret Service.

Mihm shows that counterfeiting was organized along the same principles as legitimate business, and involved, like the circulation of legal bank money, networks connecting different cities and regions. In the 1810s and 1820s, the center of counterfeit production was the small town of Dunham, Quebec. The technology of bank note production in this early period allowed counterfeiters to manufacture their ware deep in the woods using technology accessible to wheelwrights and blacksmiths. Counterfeit notes were distributed using a network of couriers to wholesalers and dealers in eastern cities, with dealers typically paying $10 "real," meaning legal, money for $100 of counterfeit money. As the notes moved further down the retail chain, they finally ended up in the hands of "shovers," marginalized individuals who were expert in the art of passing counterfeit notes into the hands of retail merchants, restaurateurs, and petty entrepreneurs.

Local law enforcement efforts were generally ineffectual at shutting down the counterfeit economy. However, the theory of free banking as developed by Laurence White (1984) predicts that in a competitive money regime, banks will invest in assets that enhance their reputation, including the production of more intricately designed bank notes to frustrate counterfeiting. As Mihm carefully details in one of the book's strongest chapters, bank note production was mechanized in the 1840s and 1850s, resulting in more elaborate, finer-detail bank notes. However, the mechanization of bank note engraving actually facilitated counterfeiting by reducing the number of dies required to produce very many different varieties of bank currency. There were various ways that counterfeiters could get hold of the dies (such as buying them from failed banks' liquidators), and once they did, they could produce bank notes which were virtually identical to those commissioned by the banks themselves.

This is all original, well-documented historical research, and it is the solid core of Mihm's book. But sprinkled throughout Mihm's history of the counterfeit economy are some claims and interpretations that go too far, at least for this reviewer. At times, Mihm seems to agree with Hezekiah Niles, early-nineteenth-century banking journalist, that there was no "real difference … between a set of bank directors … and a gang of fair, open, honest counterfeiters" (p. 8). Niles's theses on money captured the views of many, such as the hard-money Jacksonians, that bankers' promises to pay "real money" (specie) in exchange for their bank notes were fraudulent, since they held only a fractional specie reserve against these notes. In such a world, the value of a bank note, counterfeit or legitimate, was purportedly nebulous, and ultimately depended on whether A, to whom a bank note was offered in exchange, had confidence in B, who offered it in exchange. Counterfeit detectors, according to Mihm, were not very helpful in discerning which notes were good and which were not. Mihm concludes that "at its core, capitalism was little more than a confidence game" (p. 11) ? hence the title.

This conclusion, that the acceptability of bank notes as "real money" boiled down to a highly contingent confidence game, places too much emphasis on the person-to-person circulation of bank notes. The acceptability of bank notes was also, and more significantly, established through their circulation in redemption networks organized by banks, discussed in Redenius (2007). Notes that fell outside of these networks were bought and sold in bank note markets organized by dealers, which Gorton (1996) argued were informationally efficient (work that Mihm cites but does not engage). That professional "shovers" generally avoided trying to pass counterfeit notes on banks and bank note dealers suggests that it was possible, at least for banks and dealers, to make and enforce meaningful distinctions between good, bad, and unknown bank notes.

Putting aside the analogy between capitalism and a confidence game, economic historians, particularly financial historians, will find much to learn from Mihm's beautifully written book. We have always known that counterfeiting was a problem in the antebellum economy, but we didn't know very much about who produced the notes, who circulated the notes, and why law enforcement was relatively ineffectual in bringing counterfeiters to justice. Mihm's book contributes significantly to our knowledge, and also challenges us to think differently about legitimate and illegitimate money issuance in nineteenth century U.S. economy and society.

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Jane Knodell is an Associate Professor of Economics at the University of Vermont. She recently published "Rethinking the Jacksonian Economy: The Impact of the 1832 Bank Veto on Commercial Banking," _Journal of Economic History, September 2006, pp. 541-74. Her new research explores the economic factors determining the growth and location of unincorporated banks in the U.S. between the closure of the Second Bank and the formation of the national banking system.

Subject(s):	Financial Markets, Financial Institutions, and Monetary History
Geographic Area(s):	North America
Time Period(s):	19th Century

Pricing Theory, Financing of International Organisations and Monetary History

Author(s):	Officer, Lawrence H.
Reviewer(s):	Sylla, Richard

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Lawrence H. Officer, *Pricing Theory, Financing of International Organisations and Monetary History*. London: Routledge, 2007. xii + 324 pp. $135 (cloth), ISBN: 978-0-415-77065-1.

Reviewed for EH.NET by Richard Sylla, Department of Economics, Stern School of Business, New York University.

"As they contemplate mortality and immortality," the late Charles Kindleberger (1985, 1) once wrote, “many economists … think it useful to gather their scattered academic detritus into packages, organized either chronologically or by subject.” Kindleberger was a master of the genre, producing several such packages, which he described as exercises in tidying up things for one’s literary executor. In case you hadn’t guessed from the title of Lawrence Officer’s new book, it is a recent addition to the genre.

Officer, Professor of Economics at the University of Illinois at Chicago, is probably best known to economic historians for his work on purchasing power parity, the operation of the gold standard, and dollar-sterling exchange rates, all of which are treated in an earlier book (Officer, 1996). The current collection, written over the forty years 1966 to 2005, deals mostly with different but sometimes related topics, the three mentioned in the book’s title, and a final brief one entitled “Gold.” Each of the four parts ends with an afterword reflecting on and extending the papers collected under that topic. The first section, “Pricing Theory,” contains four papers, all written more than three decades ago, dealing with “firm and market behavior under conditions of joint supply” and developing “a multidimensional approach to pricing.” These are contributions to microeconomics, but probably will be of limited interest to economic historians.

“Financing of International Organizations,” part II, contains three papers on how the IMF sets its quotas of contributions and drawing rights for member nations, how the UN assessed member states to cover its expenses, and how both organizations might have done a better job of allocating their costs and benefits. Officer’s focus is on the tensions between developed and developing countries over the costs and benefits. Both international organizations tended to base their charges on members’ relative GDPs, made comparable by exchange-rate conversions. Such conversions tend to make developing countries appear smaller, economically, relative to developed countries than would purchasing-power-parity (PPP) comparisons. In the case of the UN, the developing countries liked this method because it resulted in lower assessments. But as regards the IMF, the method reduced the drawing rights of the developing countries compared to alternative methods of determining quotas, so it was less acceptable to them. Such is the stuff of political economy. Officer’s discussion is remindful of the debates over slavery at the U.S. constitutional convention, in which the northern-state delegates argued that slaves ought to be counted for purposes of taxation but not representation, and the southern delegates argued for just the opposite ? or of the debates between Britain and its colonies in the heyday of the empire, in which the British wanted the colonies to be economically independent but politically dependent, whereas the colonies wanted just the opposite. Officer’s treatment of the IMF and UN financing issues is as thorough as one is likely to find anywhere.

Economic historians, or at least financial historians, are likely to gravitate toward part III on “Monetary History,” which contains three fine papers published between 2000 and 2005. One is on the long British episode of sterling inconvertibility ? the paper pound of 1797-1821 ? and the related, so-called bullionist controversy. In that debate, which Officer terms “the most famous monetary debate in the history of economic thought,” the bullionists, forerunners of later monetarists, argued that excessive note issues by the Bank of England led to price-level inflation, a deteriorating exchange rate, and a premium on gold. On the other side, the anti-bullionists argued for a balance-of-payments theory of the exchange rate, in which Napoleonic-War trade interferences, British military spending outside of Britain, and poor wheat harvests led to a deteriorating exchange rate and the gold premium, higher import prices, and general price inflation, whereupon the Bank of England rather passively printed more notes to accommodate supplies of and demands for bills of exchange at the 5 percent usury limit. Officer models and tests both theories with improved data he painstakingly constructed (not included in the original paper, but included in the book in the afterword to part III), using up-to-date econometric techniques. The results are fairly decisively in favor of the anti-bullionist position. Officer ends the chapter on a thoughtful note worth quoting:

Monetarism sees its origin in the bullionist model; and the antibullionist approach to the exchange rate (a flow theory) and monetary policy (passive, and accommodating to the price level) has gone out of fashion. It may be humbling to the macroeconomist that these theoretical developments are contravened by the preponderance of empirical results for the Bank Restriction Period (178).

Chapter 11, "The U.S. Specie Standard, 1792-1932: Some Monetarist Arithmetic," is one that intrigued me when it first appeared in 2002, and it still does. Among other things, careful data work ? a mark of all of Officer's scholarship ? produces "a monetary base series that is consistent, complete in coverage, and continuous over a long period of time" (185). One intriguing argument of the chapter is that the two Banks of the United States (BUS) in early U.S. history were indeed central banks; Officer points to substantial evidence that BUS note and deposit liabilities were held as reserves by state and other banks. This is in contrast with analyses by Temin (1969) and others, which view the monetary base as specie (gold and silver) and the BUSs as very large banks but in other respects just like all the other banks in the system. Whether the two BUSs were central banks adding to the monetary base or ordinary banks operating on a specie base obviously bears on how one might model the U.S. money supply and its proximate determinants. It is safe to say that future work in this area will have to build on, or at least contend with, Officer's data and insights. Officer himself uses the data to study eight different regimes during the 140 years covered in the study, and concludes that the classical gold standard regime (1879-1913) was superior to the others in most respects. One oddity of Officer's monetary base series is that it grows by 64 percent in 1874, the first of several consecutive years of price deflation. Perhaps this is another triumph of non-monetarists over monetarists.

But wait. In Chapter 12, "The Quantity Theory in New England, 1703-1749: New Data to Analyze an Old Question," Officer demonstrates that both the classical quantity theory of money and Milton Friedman's modern version of the quantity theory test out quite well. For Officer, various economic theories are tools to be applied, not articles of faith, and that is rather refreshing. The afterword to part III is full of substance, extensions, and wise commentary on the three provocative papers preceding it.

The short part IV on Gold contains a guide to various documentary collections relating to that subject, and study of reserve-asset preferences of countries when the Bretton Woods System was moving into its crisis period of 1958-1967. In the latter, Officer develops a political-power approach to the proportions of reserve assets consisting of dollars and gold various countries maintained. The United States wanted countries to hold dollars, of course, and used its clout in attempts to achieve that objective. Officer's political-power model works to his satisfaction, and perhaps even better than standard alternative approaches based on portfolio-management concepts. Bretton Woods was a different world from our current one with market-determined exchange rates for the principal countries. But it seems the United States still has problems getting others to hold all the dollars out there at a non-depreciating exchange rate. Officer's essay, written a third of century ago and republished here, indirectly sheds some light on a problem that has not gone away.

As one who has been stimulated by Officer's work and who has relied on some of it in my own, I welcome this collection of articles from a researcher who richly deserves the accolade, "a scholar's scholar."

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Subject(s):	Financial Markets, Financial Institutions, and Monetary History
Geographic Area(s):	General, International, or Comparative
Time Period(s):	20th Century: WWII and post-WWII

Founding Corporate Power in Early National Philadelphia

Author(s): Schocket, Andrew M.

Reviewer(s): Adams, Sean Patrick

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Andrew M. Schocket, *Founding Corporate Power in Early National Philadelphia*. DeKalb, IL: Northern Illinois University Press, 2007. xiii + 274 pp. $42 (cloth), ISBN: 978-0-87580-369-2.

Reviewed for EH.NET by Sean Patrick Adams, Department of History, University of Florida.

In January of 1827, citizens from Mount Carbon, Pennsylvania wrote a joint letter to the editors of the *Miner's Journal* in nearby Pottsville to protest the influence of corporate mining enterprises in the anthracite coal fields of Pennsylvania. "This system of monopoly if not strangled in the cradle," the letter went, "will one day render our republican form of government even worse than monarchy." Even though Mount Carbon's coalfields remained the province of individual proprietors, the threat of incorporated mining companies posed a worrisome threat to not just the individual miners, but to the future of the nation itself. In order to ram this point home, the letter concluded that if corporations were allowed to run unchecked in the area, then "we shall be the shadow without substance." [1]

Such unbridled fear of incorporated enterprises seems na?ve, even quaint, to the ears of a modern American. In an era when anyone can incorporate for a small fee, it might seem absurd to argue that the corporate form of organization only serves as the vehicle for the rich and powerful. After all, entities ranging from ExxonMobil, international charities, and even local churches have incorporated these days. And yet, if you read about the emerging political struggles over environmental protection, health insurance, or the influence of political lobbyists and you'll find "corporations" still the central targets for public condemnation. Throughout American history, then, the parallel development of an increasingly expansive democratic form of government and the intimidating concentration of economic power facilitated by business corporations appear to be at odds with one another. This is the specter that the Mount Carbon miners feared in 1827; in an era of expanding suffrage among the white male population, the opportunity for those same voters to prosper in the business world appeared limited by the growth of "soulless" corporations.

Andrew Schocket tackles this apparent paradox head on in his new book, *Founding Corporate Power in Early National Philadelphia*. Schocket argues that a "corporate class" of Americans stood at odds with democratic principles during the nation's formation and that although weaker and less developed than their modern manifestations, corporate enterprises helped build the foundation for American economic growth during the Early Republic and beyond. Rather than view large corporations as an emergent force in the years following the Civil War, as most narratives of business history are wont to do, Schocket claims that "the founding and development of corporations and corporate power were bound inextricably with the founding and development of American democracy" (p. 13). In this regard, *Founding Corporate Power* is an innovative work that seeks to place the political origins of the corporation on equal footing with its economic utility. Schocket has produced a solid work of scholarship that chronicles the rise of corporations during the Early Republic and offers a provocative view of Philadelphia's elites that formed them.

Founding Corporate Power injects some familiar and widely-known national figures like Robert Morris into a narrative that otherwise is quite narrowly focused on Philadelphia's upper crust. Corporations in the Early Republic, Schocket argues, slipped into a no-man's land between private and public initiative at a time when internal improvement projects and banking ventures lay beyond the ability of private proprietors. State officials wary of doing such business in the political realm only too happily passed off these activities to corporations like the Bank of North America or the Schuylkill Navigation Company. Although Schocket is careful to chronicle the strong opposition to the increased use of corporate chartering during this period, he finds that by the first decade of the nineteenth century, corporations and their creators became a permanent fixture on Philadelphia's economic landscape.

Founding Corporate Power employs an interesting chapter structure which follows the use of the corporate form through various manifestations. After a few chapters establishing the origins of the corporation in Philadelphia, Schocket traces the institution's impact upon banking, city governance, and canal construction. Along the way, a familiar cast of characters weaves their way through each distinct phase of corporate development. These actors cast a huge shadow over early Philadelphia. Joseph S. Lewis, for example, served on the boards of large banks, canal and insurance companies, and as chair of the Watering Committee he oversaw the construction of the city's groundbreaking public works project, the Fairmount Waterworks. This interconnectivity was no coincidence and had a major impact on the city's economic development. If corporations simply acted as big proprietors did, then we would expect them to compete not only with non-corporate firms, but also with each other. This, Schocket maintains, was not the case, as about 300 individuals emerged during the 1810s and 1820s as a distinct "corporate class." He argues that successful cooperation between this "small corporate oligarchy of several hundred men" pushed Philadelphia's economic development forward and allowed them "to put themselves in position to reap disproportionately the rewards of that growth, and to use their leverage to further their greater class, economic, and policy goals" (p. 173) *Founding Corporate Power* then ends with an eye toward the present-day ubiquity of corporate institutions. As the story of Philadelphia during the Early Republic demonstrates, corporations were hardly interlopers in the political and economic history of the United States; they were present at the creation.

Schocket's exploration of the early corporation provides a much-needed corrective to the instrumentalist view sometimes employed by economists and economic historians. Far too often, the political nature of corporations drops from the equation as we focus on the many efficiencies brought by the corporate form, such as limited liability of shareholders or the ability to raise unprecedented sums of capital. Although at times his "corporate class" sometimes comes across as conspiratorial and self-serving, Schocket employs ample evidence to demonstrate the effective ways that these insiders negotiated the tangled web of Pennsylvania's legislative and municipal political structure.

But in its zeal to demonstrate the self-interested agenda of Philadelphia's corporate class, *Founding Corporate Power* may run afoul of some recent trends in economic history. The depictions of banks here offer a key example. In his recent work on antebellum banking in the United States, Howard Bodenhorn makes the case that American banks served as energetic and creative actors in constructing the financial system of the United States.[2] In his depiction of Philadelphia's banking community, Schocket finds banks to be no less energetic, but with another purpose in mind. "Regardless of party," he argues, "early republic banks were state-sanctioned institutions used by the rich to make themselves richer using methods that no elected legislature would ever undertake directly" (p. 84). The neo-Beardian implications of documenting a "corporate class" certainly adds a good historical counterbalance to overly theoretical models of economic growth. But the argument is less persuasive when framed in such stark terms, and at times *Founding Corporate Power* veers in this portentous direction.

The idea of a "corporate class" lording it over Philadelphia's economy in the Early Republic is an interesting, if a bit overdrawn, approach to a familiar subject of scholarship. In addition to informing our view of Philadelphia's early economic growth, Schocket's work has implications for the modern day. Today's global corporations seem less and less accountable to a single governing body and the multinational elites staffing those organizations probably have more in common with each other than fellow citizens lower down the socio-economic scale. Many critics wonder if nation-states ? no matter how democratic or well-meaning ? are even capable of regulating these new extra-national corporate bodies. As economic power outpaces the political authority to control its excesses, the Jacksonian visions of corporations as "soulless monsters" or "many-headed hydras" might haunt the public sphere once again. Were the good folks of Mount Carbon so far off the mark when they worried about becoming "shadow without substance"?

References:

1. *Miner's Journal* (Pottsville, PA), 20 January 1827.

2. Howard Bodenhorn, *State Banking in Early America: A New Economic History* (New York: Oxford University Press, 2003).

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Subject(s):	Transport and Distribution, Energy, and Other Services
Geographic Area(s):	North America
Time Period(s):	19th Century

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