An Historiographical Overview of Early U.S. Finance (1784-1836): Institutions, Markets, Players, and Politics

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11 OCTOBER 1999
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Part One: Statement of Purpose, Importance, and Introduction to Major Terms

Purpose and Plan of the Study

The purpose of this study is to introduce nonspecialists to early national U.S. financial history, broadly conceived. The first section of Part One, an attempt to motivate readers, explains the importance of studying early U.S. finance. The balance of Part One introduces readers to two key concepts, commercial banking and secondary securities (or stock) markets. (Additionally, a glossary at the end of the paper provides definitions and examples for further reference.) Part Two and Part Three provide an historiographical overview of the major questions facing scholars interested in early U.S. finance. Historiography is the history of ideas and conclusions about history, an intellectual survey of scholars' interpretations of the past. Like any other type of history, historiography is partly an assessment of the past and partly a narration of key events and people. In areas where their research in primary sources, i.e. the actual documentary evidence of the past, allows them to write with authority, the authors of this essay¹ have actively assessed previous scholarship. Where they have little documentary knowledge, the authors have narrated the main themes of some of the major historical studies. Where too many sources exist to even list, much less describe, the authors have endeavored to describe the major strengths and weaknesses of the genre. In any and every case, the extensive bibliography serves as an entry

¹ For more information about the authors, see the "About the Authors" section at the end of this essay.
point for further research. Finally, Part Four provides a brief, sweeping overview of major shifts in the historiography concerning early U.S. finance.

**Introduction: Why Study Early U.S. Finance?**

A knowledge of banking and finance is absolutely crucial to scholarly understanding of early American economic, political, social, and even cultural history for three important reasons. First, privately-owned banks, not the national government, created most of the nation's early money stock. Second, banks and bank money deeply influenced the development of America's early economies, the nature of its democratic spirit, and the institutions of its governance. Third, secondary securities (stock) markets helped to establish the credit of the federal, state, and local governments and to finance important businesses. Finally, financial institutions and issues influenced a variety of major aspects of early national life, including minority rights, materialism, religion, social mobility, community, political party formation, the Industrial Revolution, and the emergence of the middle class and of organized labor.

The traditional historical literature regarding banking and finance in early America is, in some respects, extremely rich. Recent researchers, however, digging into larger numbers of records even more deeply than their predecessors, are currently revising many older assumptions and conclusions so thoroughly that a school of "New Financial History" has clearly taken form. The goal of this essay is to survey the traditional literature by topic or question, assess its

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2 Throughout the notes and text, sources are cited parenthetically. To find the full citation, refer to the bibliography under the surname and date of publication.
strengths and weaknesses, and sketch recent research directions.³ Before embarking on the
survey, however, some readers may benefit from a brief introduction to the principles of
commercial banking and secondary securities markets.

Introduction to Commercial Banking: What Characterized Early Commercial Banking?

Although most late twentieth century Americans use banks, it is necessary to describe the
functioning of early banks for two reasons.⁴ First, some aspects of banking have changed since
the Early National period. Second, many people, scholars included, misunderstand or do not
appreciate many of those aspects of banking that remain unchanged.⁵ This section, then, will
describe the similarities and differences between early commercial banks and today's banks in an

³ For another somewhat recent view of U.S. banking historiography, see Schweikart, 1991. Other historiographical treatments include Hummel (1978) and Sylla (1971). A good bibliography of pre-World War II sources on money, banking, and financial history is Westerfield (1940).

⁴ For another discussion of the differences between today's banks and early banks, see Lamoreaux (1994).

⁵ For example, have you ever wondered why you get charged when someone else's check
that you have tried to deposit bounces (i.e. is "protested" or "returned")? When you gave the
check to the bank, the teller made certain that you endorsed it by signing the back. In so doing,
you pledged that it would be paid. You have recourse against the maker (drawer/signer) of the
check. This is why retail shopkeepers often have signs that read "$15 charge for all returned
checks." Their bank charges them and then they charge you.
effort to introduce readers to technical terms and themes important to understanding the
historiography.6

In the Early Republic there were two very distinct types of banks, commercial and savings. Today, the same bank will perform many different economic functions. Present banks will accept all three types of lodged deposits: time (certificates of deposit and other high interest but illiquid7 savings), demand (checking and low interest but withdrawable or liquid savings), and special (safe deposit box). They will create deposits by loaning money on security of vacant land, improved land, personal property, or a customer's promissory note (a written promise to repay the obligation). Many offer a revolving, unsecured type of credit, at extremely high rates of interest, that customers activate by a plastic card embossed with special numbers. Today's banks will also make exchanges by allowing customers to buy and sell foreign currencies. Finally, one bank, the Federal Reserve, issues bank notes, the green pieces of fiat paper bearing portraits of Presidents, or important financial theorists like Alexander Hamilton or Benjamin Franklin, that pass so easily among us.

6For other detailed discussions of colonial and early national finance, see Wright1996a, Doerflinger 1986, McCusker 1978, or Ernst 1973.

7"Liquid" in this context simply means easily convertible into something else. Gold is usually very liquid, since it can be used to buy just about anything, at any time. Stocks are also usually liquid, since there is a constant demand for them, except during panics. Land is much less liquid. Although demand for a certain plot might be high, sales take a long time to complete because of the necessary surveys, title searches etc. Ground rents are a little studied exception.
In the Early Republic banking functions were not integrated. Distinct institutions performed different banking functions. Today, it makes little difference to most people whether their money is in a savings bank, a credit union, a brokerage firm, or a commercial bank. In the Early Republic, savings banks only maintained lodged time deposits for individual use. Loans or credits to purchase unimproved land came from the land owner, be it an individual, a large company such as the Holland Land Company, or the government. Sometimes, wealthy personal friends supplied funds. Country banks, which were nominally commercial banks, but which broke many of the rules of strict commercial banking, also loaned money for real estate. Insurance and trust companies did likewise. Individuals, country banks, and city banks made personal loans backed only by promissory notes, though the banks usually tried to hide the fact. While many honest brokers existed, some unscrupulous brokers and "monied" individuals violated usury laws to supply short-term unsecured credit at high interest rates. Merchants, brokers, and commercial banks conducted currency exchanges. Commercial banks accepted

8Several other scholars have divided banks into types. The most common of these typologies is to distinguish between banks of deposit, banks of discount, and banks of circulation (issue). For the classic example see Raguet 1840, 68-71. These descriptions are a bit misleading, however, as what is described are banking functions that certain banks may or may not have performed. Roughly, savings banks were banks of deposit, private banks were banks of discount, and commercial banks were banks of issue or circulation.

9Savings banks did not make loans. All deposits were lodged or physically deposited in the bank, and not created by a book or account credit. Deposits could be withdrawn, but only with notice, and not without forfeiting interest, which generally ran around 5% per annum. Deposits were often capped at $500 or $1,000 and so were of little use to businesses.
special and demand deposits but paid no interest upon them. They also created deposits by lending "money of account" that could be drawn on by check or draft. Finally, commercial banks, and sometimes other corporations, both public and private, used loans to issue their own promissory notes payable to the bearer on demand.

The nature of those bank notes was quite different from today's Federal Reserve notes. The notes of commercial banks were redeemable in specie. By presenting the note at the bank of issue, the bearer received the note's face value in gold or silver.¹⁰ Merchants considered bank notes the equivalent of specie. A bank that could not convert its notes into gold or silver was considered insolvent and could lose its charter. Although physically similar to the notes of the Early Republic, today's Federal Reserve notes¹¹ are inconvertible. They can be used to purchase gold and silver, but no one is under any obligation to make the sale at any given price. To make up for the lack of convertibility, Federal Reserve notes have been given legal tender status. (Pull one out and see that the fine print on the front reads: "This note is legal tender for all debts, public and private.") Although some bank notes were acceptable payment for certain debts to government, early national bank notes were NOT a legal tender. In other words, no one was under an obligation to accept them in payment of debts.

¹⁰ Under normal circumstances, bank notes were redeemable only locally or regionally, depending upon the efficiency of the extant banknote clearing systems. The notes of sound banks passed at a discount equivalent to the cost of remitting the note for payment. The notes of shaky banks passed an additional discount because of the risk that payment would not be made.

¹¹ Several decades ago Federal Reserve notes were stamped "Silver Certificate" and supposedly represented silver "on deposit in the Treasury of the United States of America." At the bottom the bills read "in silver payable to the bearer on demand."
Commercial loans were different from the typical consumer loan of today. Bankers called these loans "discounts" because the bank took the interest up front. A commercial bank making a $1,000 loan at 6 percent interest per annum payable in three months would give the borrower something like $985.54, or the present value of $1,000 for three months.\(^{12}\) At the end of the three months the borrower would have to pay the full $1,000. Today borrowers repay the loan amount plus the interest.

The forms of collateral security for loans or discounts were also different. Bankers made discounts on evidences of commercial transactions called "commercial paper." The most common type of commercial paper was the draft or bill of exchange, a written order or request by one person to another, for the payment of money. The use of bills evolved over centuries for the convenience of merchants and the safety of their specie. For example, suppose a New York merchant owed an English manufacturer for some goods shipped to America. At the same time, an English food importer owed the same New York merchant for flour shipped to the West Indies. It would be dangerous, costly, and unproductive for the merchant to ship specie to the manufacturer and receive specie from the food importer. Instead, the merchant could pay the manufacturer [his creditor] by drawing a bill of exchange on the importer [his debtor]. The manufacturer could get his specie from the food importer, while the latter would deduct the amount of the bill from the New York merchant's credit in his account books.

In this transaction, the New York merchant is called the "maker" or "drawer" of the bill. The food importer, the merchant's debtor, is called the "payer," "drawee," or, after the amount of the bill has been accepted or acknowledged, the "acceptor." The debt expressed on a bill of

\(^{12}\) The equation was \(S/(1+i)^t\) where \(S\) = the loan amount, \(t\) = the time of the loan (days/360), and \(i\) = the rate of interest.
exchange does not have to be admitted or accepted, in which case the bill is "returned" or "protested." The "payee," in this case the manufacturing firm, is the person or firm receiving the money. The bill is said to be drawn "in favor of" the payee. Transactions were rarely this simple, however, because the manufacturing firm was obliged to pay for the raw materials of the goods it shipped to New York. Also, bills of exchange were rarely payable "at sight" or "on demand" but had time "to run" before payment was due. Instead of waiting to get specie from the food importer, which might be payable at an inconvenient time or place, our hypothetical payee, the manufacturer, could "indorse" the bill by signing the back of it and use it to pay one of his creditors. The party taking the bill in payment is called the "indorsee." An indorsee could, in turn, become an "indorser" by signing the back of the bill and proffering it for payment to yet another party. The bill, in other words, served to cancel debts as if it were currency.

As the bill came close to its due date it was likely to be remitted or sold to someone able to receive payment for it. In most cases the acceptor paid the bill and this mercantile instrument served as a type of currency, helping to cancel a number of debts. If the bill was protested for nonpayment, however, a legal nightmare ensued. The lex mercatoria, or law of merchants, considered the payer of the bill the original and principal debtor, and primarily liable. The drawer and all indorsers were sureties. If the payer would not or could not pay, the bearer, the last to receive the bill in payment, could sue each of the indorsers and even the drawer of the bill.

A bill can be protested for several reasons. The payer may be bankrupt. Or, more likely, the drawer may not have enough on deposit with the payer. Think of the bill as a check, the payer as a bank, and the drawer as a checking account holder. A protested bill is the same thing as a bounced check.
There was often a flurry of letters and sometimes a chain of lawsuits until all the debts, once thought canceled, were again made good.

Commercial banks interceded in this process, ameliorating and rationalizing the use of bills of exchange. Instead of holding a bill until it came due, or indorsing and passing it, a merchant in a town with a commercial bank could offer the bill for discount. If the bank felt the acceptor was likely to pay the bill on time without complications, the bank would have the bearer or discounter become an indorser by signing the back of the bill and take possession of it; in turn, the bank gave the discounter, in the bank’s own notes, specie, or money of account, the face value of the bill of exchange minus the interest.

Dealers offering bills for discount were willing to suffer the loss of the interest for several reasons. For some transactions, like the lucrative East Indies trade, specie was often the least expensive means of payment. For other transactions, like paying one’s hired help or buying a little food at market, bills of exchange were much too large. Bank notes, with their varying denominations, were ideal for making numerous, small, local remittances. Also, bills discounted by banks were somewhat less likely to come back to haunt the discounter because banks usually held on to them until they became due, reducing the number of litigants in case of protest. Most importantly, discounts made merchants more liquid, giving them cash in hand to make remittances or extend advances immediately. Liquidity was a crucial factor in business in early national America.

The discounting of bills of exchange and other forms of commercial paper, then, characterized and defined commercial banking. The issue of bank notes and the creation of
demand deposits supplemented and facilitated this special form of loan activity. Private merchants also made discounts but savings banks and land offices never did so.  

Those interested in general treatments of early commercial banking, and the basic functionings of banks, should consult Knox (1903), which is still informative for being almost a century old. Dunbar (1929), the first edition of which (1891) is over a century old, is good too, despite its strong emphasis on the "soundness" or credit quality of banks. Klebaner's (1974) account is short and readable. Finally, Trescott (1963) urged historians to study banks' role in capital formation, not just their monetary functions, and his survey reflected that belief.

**Secondary Securities (Stock) Markets: What Were Their Structure and Functions?**

Today's stock and bond markets originated in the early national period, when commercial and governmental interests devised ways to loan money through the sale of negotiable securities. When businesses sought long-term loans, they turned not to banks but to the equities market. Entrepreneurs, in other words, sold shares of their businesses to investors. The payments for those shares constituted the concern's working capital, a loan that in most instances was never to be repaid. Investors were willing to enter into such arrangements because they realized that

14 For more on savings banks, see Keyes (1876), Manning (1917), Horne (1947), Payne and Davis (1956), and Olmstead (1976). Studies of savings banks tend to be merely descriptive and narrative. It is well understood that savings banks are important insomuch as they increase the savings rate by inducing people to save more than they would otherwise. Books on savings banks, then, tend to describe how the institutions attracted depositors. Also, savings banks did not become major political issues until late in the twentieth century. More recent works, like Thompson (1977), therefore tend to stress the origins of the institutions, and to discuss the reasons why many of the first ones were mutual companies, not stock companies.
they could sell their shares at fair prices to other investors virtually at will in the secondary securities or "stock" markets.\textsuperscript{15} Similarly, governments, federal, state, and local, found they could defer taxes by selling interest bearing debt certificates to investors. Although the public's confidence in government debt was badly shaken during the Revolution and Confederation eras, Alexander Hamilton's financial reforms in the early 1790s restored the public's confidence in the national government's debt, and subsequently national, state, and even city governments issued long term debt in order to finance wars, territory purchases, and infrastructure projects like water works and canals. By the 1830s, corporations, especially transportation companies like railroads, utilized the idea and commenced raising capital by issuing corporate bonds in addition to the usual sales of equities. Bonds, unlike common stocks, did not confer voting privileges and hence came to be preferred by the managers of businesses who did not want to lose or dilute their control of the corporation.

The amount of money raised through sales of equity and debt was truly enormous by the standards of the day. By 1836, hundreds of companies, banks, insurance companies, transportation concerns, factories, mining companies, hotels, and even theaters, had borrowed hundreds of millions of dollars, for indefinite periods, to finance their operations.

Early America's advanced financial intermediaries (commercial banks, savings banks, insurance companies, stock brokers) spurred economic development by increasing the rate of

\textsuperscript{15}In the early national period government securities and bonds (six percent, three percents, deferred) were called "stocks." Corporate stocks [equities] were also called "stocks" or sometimes "scrip." "Scrip" was not actual corporate stock but the right to buy a share.

Commissioners issued it during subscriptions when the buyer made a small down payment on each share.
investment and by mobilizing capital (Davis 1956). Secondary securities markets increased the investment rate, the percentage of income that people invest for the future rather than spend for the present, by making savings instruments liquid, or easily saleable. Although the investment rate is not yet known with precision, scholars do know that Americans' investments were much more liquid than those in other countries. In the first decade and a half of the nineteenth century, Americans held 10 percent of their total financial assets as liquid corporate stock, while Britons held only 3 percent of their wealth in such form. By 1850, 18 percent of American financial wealth lay in corporate stock, compared to 11 percent for Great Britain, 6 percent for France, and 3 percent for pre-unification "Germany" (Sylla 1998).

The higher the rate of savings, the larger the number of businesses that could borrow, the larger the sums they could borrow, and the better the terms upon which they could borrow. If a local economy heated up, capital flowed in from elsewhere to help meet the increased demand. Liquid investment instruments, mostly bonds but also the equities of well-known companies like the Bank of the United States, flowed freely from state to state, region to region, and even nation to nation. Consider what occurred when business activity increased in a particular area, say, Philadelphia. At first, because entrepreneurs sought more capital than was available, loan interest rates increased. Increased rates decreased the prices of financial securities. (The prices of securities and interest rates are inversely proportional. As interest rates go up, prices sink to keep yields in line with interest rates. The yield of a security is its rate of return, its interest payments in relation to its purchase price. The yield of a 100 dollar debt instrument that pays 6 percent simple interest once a year purchased at its face value is 6 percent. That same instrument, purchased at half of its face value, yields to the purchaser twice the instrument's interest rate, in this case, 12 percent. This is because the purchaser paid only $50 for an instrument that pays $6
per year.) Securities dealers who made profits by capitalizing upon price differentials of identical securities in different markets, also known as arbitrageurs, saw the price decrease as a buying opportunity. They bought the securities low in Philadelphia for resale in their home markets, say New York and Baltimore. Because of those purchases, several things happened. First, the increased demand for securities in Philadelphia tended to raise their price. Second, the increased supply of securities in Baltimore and New York tended to decrease securities prices in those places. Finally, money (in the form of specie, bank notes, or, in most cases, simply credits) flowed from Baltimore and New York to Philadelphia. That money, of course, eased interest rates in Philadelphia by increasing the money supply there. Philadelphia entrepreneurs then acquired the loans they needed in order to make their businesses more efficient. Similar scenarios played themselves out many times in Early America and involved the capital markets of Europe, especially London and Amsterdam, as well as those in the U.S. The net effect of the transfers was to provide money, in a timely fashion, to where it would do the most good, for the lowest cost then possible.


Part Two: Historiography of Money, Banking, and Credit

Origins of U.S. Commercial Banking: When and Why Did Banks Form?

The origins of early U.S. banking have until recently been little investigated since the publication of Eliason's slim 1901 dissertation, "The Rise of Commercial Banking Institutions in the United States." Eliason concluded that the "tardy rise of banking institutions was due to the peculiar conditions of colonial trade and industry." "Commercial banking institutions," he
claimed, "did not arise until there was a change in these conditions which made the rise and growth of banks necessary." Eliason's view long held sway. In a seminal work, Davis (1917) followed Eliason's scheme, though he pointed out some factual errors in Eliason's text. Although the first volume of her New York Money Market was subtitled Origins and Development, Margaret Myers (1931) generally ignored the colonial period, but her contemporary, Joseph Hedges (1938), followed Eliason closely, as did Crowder (1942) in his study of state regulation of banking in New York. Thirty years later, Douglass (1971), in Eliason-like fashion, argued that "commercial banks ... did not exist in colonial America, mainly because there was no need for them."

But McCusker and Menard (1985) portrayed the colonial economy as extremely active and vibrant. Additionally, in the early 1980s, Seavoy (1982) and other scholars realized that "the banking business was not entirely unfamiliar" to colonists. Indeed, Perkins (1994), in his survey of colonial and early national financial systems, noted that the reasons "why more extensive financial services never materialized in the domestic market [during the colonial era] remains a profound mystery, especially in light of the general entrepreneurial instincts of numerous merchants in thriving port cities such as Philadelphia, New York, Boston, and Charleston."

One reason that Eliason's view held sway for so long was that scholars often overlooked the fact that colonial land offices, like Pennsylvania's General Loan Office, were effective and significant long term lenders (Schweitzer 1987). Ground rents also met long term credit needs (Rilling 1993; Wright 1998b). By meeting the needs of farmers, millers, iron masters, and artisans for long term credit, loan offices and ground rents increased liquidity throughout the economy, thereby decreasing the need for specialized short term lenders.
Further complicating the issue of origins were the recent discoveries of two colonial commercial banks. Robert E. Wright (1996b) showed that Thomas Willing and Robert Morris, America's two most prominent early national financiers behind Alexander Hamilton, operated an unnamed bank in Philadelphia in 1766. Royal decrees, and not economic conditions, squelched the institution. Ronald Michener (1992, 1997) discovered that in the late 1730s a bank in South Carolina met a similar fate after it came to the attention of the Crown. Those discoveries, combined with Gordon Wood's interpretation of the American Revolution as a radically transformative period, suggest that legal and political, and not economic, conditions impeded the growth of commercial banking. According to the new view, commercial banks arose to fill political, cultural, and monetary vacuums created during the Revolution (Wright 1996a, Rappaport 1996, Karmel 1999), a view that some earlier studies, especially Gras (1939), seem to support.

The Functioning of Early Banks: What Did Banks Do and How Did They Do It?

The classic work on early American banking practices is Fritz Redlich's *Molding of American Banking*. First published in 1947, a second edition appeared in 1951. The work proved popular enough to be reprinted, with a new introduction, by Johnson Reprint Corporation in 1968. The book, which combines a thorough mix of intellectual, business, and economic history, with strongly-worded conclusions, is the source for those interested in the details of the early banking business, including bank organization, personnel functions, and transaction types. Redlich also described early banking philosophies, but he is not as authoritative in this area as Conkin (1980), Dorfman (1946-1959), Mints (1945), or perhaps even Miller (1927). His discussions of the Suffolk, Safety Fund, and Free Banking systems, the central banking question,
the bank war, banking in the south, and savings banks, can still be profitably read but are no
longer definitive.

Recent work has drawn some of Redlich's most strongly worded and defended
conclusions into serious doubt. For example, his contention that merchants generally owned the
stock of most early banks is incorrect; studies by Lamoreaux (1994), Crothers (1997, 1999)
Wright (1996a, 1999), Bodenhorn (1999) and Karmel (1999) show that significant percentages
of persons from non-merchant occupations, including farmers, artisans, mechanics,
professionals, women, and other corporations, owned bank stock. Those studies also cast doubt
on Redlich's presumption that banks did most of their lending to merchants. Redlich's contention
that early U.S. businessmen drew checks on their bank accounts very infrequently (see also
Christman and Redlich 1967) is now considered completely erroneous (Baughman 1967, Wright
1996a, 1998; Lamoreaux 1994). Checks, then as now, were important but uncontroversial parts
of the money supply.

**Sources of Long Term Credit: How Could Individuals Borrow Money for More
Than a Year?**

Individuals in search of long-term sources of credit to purchase land, or make capital
improvements, could turn to a number of sources. Private lending, though little studied, remained
widespread throughout the eighteenth and nineteenth centuries (Gwyn 1973; Morrison 1973). In
addition to the private mortgage market (Sparks 1932), rural borrowers could turn to state-run
land banks (Perkins 1994), similar to those of the colonial (Schweitzer 1987) and confederation
(Kaminski 1972) periods but without the right to issue their own notes. Savings banks, insurance
companies, and trust companies also invested portions of their portfolios in individual
mortgages.
Especially in the urban areas of Pennsylvania, Maryland, Delaware, and New Jersey, the institution of ground rents provided long term financing options for buyers. In a typical "straight sale" deed, the seller or grantor conveys all or part of his or her rights in a certain lot or tract of land in return for some valuable consideration that the buyer or grantee pays all at once. Most residential homes today are transferred by this straight sale mechanism. The buyer's mortgage company pays the seller the full price of the home and the buyer repays the mortgage company over a specified number of years. Occasionally, today's sellers will "hold the mortgage" and allow the buyer to pay for the home in installments. In these circumstances the seller earns interest as well as the price of the house. Regardless of the type of financing employed, most sales today are in *fee simple*. In other words, sellers give buyers the right to alter, divide, devise, lease, or sell the property at the buyers' will.

In most points of detail, ground rent contracts were almost identical to straight-sale deeds. Ground rent contracts, after all, granted land in *fee simple*. The grant was conditioned, however, on the payment of an annual rent or the payment of a specific principal sum. The ratio between the rent and the principal sum (ground rent extinguishment value) is an implicit rate of interest. The ratio, expressed as an interest rate, was most often six percent (sixteen years' purchase). Some were contracted at five percent (twenty years' purchase). Sometimes, the buyer had a certain term of years, often seven, in which to extinguish the ground rent by paying the principal sum. The contracts also often detailed the grantor's rights to collect the rent and specified which party was to pay the property taxes.

Ground rent contracts were "win-win" scenarios in which both the grantor and grantees gained. A perpetual lien on the real estate and a right to seize the personal property of the owner in case of default made ground rents relatively safe investments. To ensure there was something
to seize for payment, and to increase the value of surrounding lots, ground rent sellers often included a deed clause forcing the purchaser to build improvements on the lot within a few years. To protect against currency depreciation, though not true inflation, virtually all of the deeds stipulated that if the purchaser could not procure the specified type of coin, he could tender other types of money, as long as the type tendered was sufficient to buy the stipulated amount and type of specie. The ground rent landlord, not the ground tenant, made the decision. If so inclined, landlords could refuse legal tender notes like Continentals, Greenbacks, and national bank notes.

Ground rent incomes were more liquid than the land itself. Ground rent landlords could sell or mortgage their right to receive the ground rent stream. In other words, there was no possibility that recipients of ground rent streams were vulnerable to currency depreciation. With the low rates of inflation that prevailed in colonial and early national America, it took decades for ground rents to lose significant amounts of buying power.

The purchasers benefited too, and at least one student has argued that ground rent purchasers benefited more than sellers. Unlike typical tenants (to wit "renters"), ground tenants held the property in fee simple, and thus could divide, devise, or sell the property. Also, they could not be "evicted," even for nonpayment, and did not have to worry about new lease terms. The ground rent landlord, as the recipient of the ground rent was termed, could distrain the personal property of the ground rent tenant but could reclaim title only if the delinquent had no personal property for the sheriff to seize, a relatively rare occurrence. Though the deed terms ensured purchasers could not meet their obligations with depreciated currency, the ground rent rate was not linked to any price or interest rate index. Thus, over time, as price levels and interest rates rose, the fixed annual payment decreased in real terms. If purchasers wished to remove the perpetual liens and payments, moreover, many deeds stipulated they could do so by paying 16 to
20 times the ground rent, representing an interest charge of six percent and five percent respectively, to the ground rent landlord within 7 to 10 years from date of purchase. Regardless of the original contract, purchasers or interested later parties could, and did, make separate contracts to "extinguish" the ground rent, often after it had sunk to a nuisance level in real terms. Interestingly, many early Philadelphia ground rents continued to be paid until at least the Great Depression, and many Lancastrians continued to pay ground rents to the estate of James Hamilton until at least the 1960s.

There is little practical difference between purchasing real estate by ground rent or by bank mortgage. They are simply different ways of financing fee simple ownership. In fact, Thomas Doerflinger (1986) referred to ground rents as "perpetual mortgages" in his classic Vigorous Spirit of Enterprise. In both cases, the purchaser receives the benefit of full ownership without eliminating his/her capital base. The capital can then be used to make improvements on the lot and to purchase tools or stock. (Wright 1997). Urban Building and loan associations began to spring up in the 1830s (Bodfish 1931), first in conjunction with ground rents (Rilling 1993), and later with mortgages.

**Competition, Entry, and Exit: Was It Easy to Start a New Bank?**

Economic theory predicts that optimal banking capitalizations and practices will be reached in a perfectly free market. The early bank market, however, was hardly free. Significant barriers, some legal, some political, and some economic, prevented prospective banks from beginning operations (entry) and from ceasing operations once they began (exit).

Anna Schwartz (1947) showed that early bankers thought that local bank competition would hurt banks' businesses and the economy and hence interfered with bank entry attempts, a point amplified by Stuart Bruchey (1970), Wright (1998), and others. For entry statistics and
analysis see Fenstermaker (1965). Norris (1998) recently studied early bank failures. For full analysis of exit numbers and causes, scholars should consult local or regional studies like that of Holl (1989).

A major problem with most such studies, however, is their focus on incorporated banks. Many private, i.e. unincorporated, banks also operated and even emitted notes or other bearer liabilities and hence should be accounted for in the statistics. Some famous private banks include Brown Brothers Harriman (Kouwenhoven, 1968; Brown 1970; Perkins 1975), Prime, Ward, and Sands, and the Baring Brothers. Howard Bodenhom (1997, 1999, 2000) has recently shed important light on the operations and importance of several private banks, while the best overview and estimates of their numbers remains Sylla (1976), who drew on studies of private banking firms like Larson (1956).

**Early Bank and Securities Statistics: How Many and How Much?**

The source for early banking statistics remains Fenstermaker (1965). In 18 charts, 18 tables, 8 plates, and 136 pages of appendices, Fenstermaker presented an awesome array of statistical data including lists of (nearly) all the nation's incorporated banks by state, aggregated tables of authorized capitalizations, annual balance sheets, and sundry other financial and legal information. Fenstermaker et al (1984) also assembled the extant balance sheets of New England's commercial banks from 1785 to 1837. Almost four out of every five of the expected balance sheets were discovered and presented, along with estimated figures for the missing sheets, making New England the most statistically complete region in early American financial historiography.

For a more econometric presentation and analysis of banking statistics after 1835, scholars should look at Ng's 1988 dissertation. Although many other secondary sources contain
banking statistics, other treatments are dated (Smith and Cole 1935; Evans 1948), ultimately derived from Fenstermaker's research, or limited in scope to a particular issue (cf. Holl 1989; Norris 1998), bank (cf. Smith 1953), state (cf. Karmel 1999), or system (cf. White 1993). A number of books, like Westerfield's study of branch banking (1939), and Evan's (1948) counts of corporate charters, cover the early national period in only a cursory manner.

Statistical treatments of financial securities have been relatively neglected (but see Smith and Cole 1935; Martin 1975; Schwert 1990) until of late. Again, smatterings of statistical information are available on bank equity prices (Wright 1996a), ground rents (Wright 1998b), and interest rates (Homer and Sylla, 1991), but until the database recently described in Sylla, Wilson, Wright (1997) becomes available (Sylla, Wilson, Wright 2000), scholars interested in early U.S. securities markets have little recourse except to turn to primary records for answers.

Money Supply: How Much and What Types of Money?

Specie (gold and silver), bank notes, and bank credit, which could be drawn upon with checks, formed the bulk of the early national money supply. The size and composition of the money stock are complicated, technical issues and hence mostly the realm of economists (cf. Gurley and Shaw 1957), but there exist readable general histories of money, like Weatherford (1997). Knowing the size of the money supply is important because too much money often leads to nominal price inflation that, if unchecked, could lead to real productivity declines, while too little money often leads to nominal price deflation and real productivity declines.

For the colonial, revolutionary, and confederation periods, Michener (1987), Michener (1988), and Nuxoll (1984; 1997), respectively, are good, readable introductions. After about 1800 (Grubb 1997), most non-farm businesses began to keep accounts in the new national money of account, the dollar. (The dollar was not, indeed still is not, a particular coin or note but
a unit of measurement of value. Just as length can be measured in inches or centimeters, and weight in ounces or grams, so too can value be measured in dollars, pounds, or other money of account.) Those interested in the dollar's history should see Nussbaum (1957), or, for an older, but somewhat more technical account, Hepburn (1924).

By most accounts, while specie still circulated to some extent, bank money, both bank notes and bank deposits created in the discount or lending process, composed most of the nation's money stock in the first three decades of the nineteenth century. Understanding banks' lending strategies, i.e. the situations in which banks were more likely to create money, is, therefore, important to estimating the total money supply. Glasner (1992) recently convincingly showed that individual banks had incentives to discount mostly "real bills," i.e. evidences of debt created in the actual course of business, and to eschew most "accommodation notes," i.e. mere promissory notes or uncollateralized loans. If that view is correct, then early national banks probably largely succeeded in keeping the money supply at about the right size. But Timberlake (1974, 1993) reminded scholars that the denominations of bank notes were also an important consideration because the "velocity," or turnover, of larger bills will be slower than that of smaller bills, but the conversion rate of larger bills will be much faster. Whether $1,000,000 of bank notes were composed mostly of $100s, or $10s, or $1s, in other words, was an important issue because the smaller notes cancelled debts more quickly than larger notes and because larger notes returned to banks much more quickly than smaller ones. (You can pay a $1,000 debt with 1,000 $1 notes easier than you can pay a $1 debt with a $1,000 note; there is little incentive for converting a $1 note into specie but a large one for converting a $1,000 note.)

Although many states legislated against the issue of small notes, such laws were often ignored. Incorporated banks, unchartered banks, nonbank corporations, municipalities, and even
private merchants issued "chits," "shinplasters" and other small denomination notes. Those notes, initially issued as substitutes for specie change, which was sometimes in low supply, and always in great demand, often drove the remaining specie out of circulation through the process known as "Gresham's Law." "Bad money," i.e. money of dubious value, drives "good money" of undoubted value out of circulation because holders prefer to rid themselves of the dubious money before parting with their assets of known and stable value. The implication of Timberlake's study is that banks did not fulfill all of the nation's monetary needs in optimal fashion. Stevens (1971) showed that specie change remained in short supply during the period of this study, and that foreign coins and bullion composed a sizeable percentage of the nation's specie stock until the California Gold Rush. Macesich (1960) concurred and therefore pinned most of the blame on U.S. monetary disturbances in the 1830s on external causes like European capital market disturbances, but admitted that Jackson's monetary policies, namely the destruction of the S.B.U.S., his insistence that federal lands be paid for in specie, the revaluation of gold, the complete repayment of the national debt, and the distribution of the federal surplus to the states, probably exacerbated an already delicate situation.

The Mint: When, Where, and How Were U.S. Coins Produced?

Though dated, Evans (1888) and Stewart (1924) provide good introductions to the early history of the mint. More recent studies, like Wolman (1987) and Taxay (1983) are also good, but popularized, accounts of mint practices and procedures. The branch mint at Dahlonega, Georgia, which began operations during the Jackson administration, has drawn attention from three authors (Head 1986, Birdsall 1984, Cavasher 1975) in the last quarter century. For early mint directors and other mint-related personalities, like David Rittenhouse, see Horle et al
(forthcoming) and Garraty (1999). The best critical, scholarly treatments of the mint usually appear as sections or chapters in books on money or finance, like Nussbaum (1957).

**Exchange, Domestic and Foreign: What Is It and Why Is It Important?**

Exchange is simply the process of changing one type of money into another, usually in the process of remitting it to a distant geographical point. There are two major types of exchange, foreign and domestic. Foreign exchange entails turning domestic money of account into a foreign money of account, U.S. dollars, for example, into British pounds sterling. The source on colonial exchange rates is McCusker (1978). The source for later periods is Officer (1996). Foreign exchange is an important regulator of international trade. When the cost of exchange is high, the price of foreign goods is proportionally higher, and the demand for those goods therefore declines. When the cost of exchange is low, however, the price of foreign goods is lower, and therefore more are imported.

Domestic exchange entailed the costs of remitting funds from one part of the country to another. Knodell (1988) showed that as the economy grew more sophisticated, bank notes were used less frequently to make interregional balance of payments adjustments. Technological and institutional (Garbade and Silber 1979) improvements, including the Second Bank of the United States (a.k.a. S.B.U.S.) under Nicholas Biddle (Kilbourne 1999; Knodell 1998), decreased domestic exchange costs. Unfortunately, no single, definitive study of domestic exchange rates in the early national period exists, but for the antebellum era, scholars should start with Cantrell (1983). The price of domestic exchange, like foreign exchange, affected interregional trade; the higher the cost of exchange, the lower the volume of interregional trade. Highly volatile exchange costs can also impede interregional trade.
The nation's first financial panic occurred in 1792 and was described in rich detail by Davis (1918). Matson (1989) added to the story by concentrating on the role of William Duer, the largest speculator ruined in the panic. Both scholars concentrated their analyses on the behaviors and motivations of individuals rather than the movements of markets. According to Matson and most earlier treatments, prices of securities in New York and Philadelphia dropped precipitously on news of the bankruptcy of Duer, a major securities dealer deeply engaged in forward and futures securities contracts. A recent study by Cowen (1999) added that Duer's failure was not the root cause of the drop, but rather the restriction of bank credit, first by the Bank of the United States (a.k.a. B.U.S.), and soon after by the rest of the nation's banks, forced speculators like Duer to sell their securities. Matson and others also argued that the Panic led to a relatively long and deep recession. Wright (1996a) showed that to be erroneous. Cowen (1999) explained that simple arbitrage stopped the spread of the Panic. After prices plummeted in New York and Philadelphia, securities dealers in Baltimore, Boston, and Charleston remitted funds to purchase securities at "bargain" prices. Those funds, combined with Hamilton's timely purchase of securities and sale of guilder bills, bills of exchange drawn on the proceeds of a U.S. loan in Amsterdam, added liquidity to the system and prevented bankruptcies outside of Duer's inner circle. So, far from being a sign of America's financial weakness, the Panic of 1792 was actually a sign of its great strength, a view held by top financiers like Hamilton and stockbroker Clement Biddle of Philadelphia.

The nation's financial system, however, was not so strong in 1819, the date of the nation's next major peacetime financial crisis. Timberlake (1993) laid blame on the federal government
for issuing too many treasury notes. Nevins (1934) argued that state banks caused the Panic of 1819 by issuing too many notes; he underestimated the depth of the subsequent depression, however, and did not adequately explain how simple inflation could wreak such havoc. Rothbard (1962) also blamed state banks for issuing too many notes, but carried the analysis further, arguing that the subsequent inflation induced businessmen to import too much and to lay productive endeavors aside to engage in speculative, but macroeconomically worthless, buying and selling. Such conditions forced the Second Bank of the United States to restrict credit, leading to a liquidity crisis and lack of confidence that disrupted all financial contracts. Temin (1969) picked up on the last point, arguing that the Second Bank should have expanded credit rather than restricting it. Recent attempts to reinterpret the role of banks in the panic include Blackson (1989). Most studies of the Panic of 1819 generally ignore the economic causes of the dislocation, concentrating instead on its political consequences. Lehman (1992) investigated the role of the panic in Pennsylvania politics, Bonelli (1976) examined New York, while Jones (1968) studied the entire west, and Rothbard (1962) the entire nation. An in-depth economic analysis of the Panic of 1819 is sorely needed.

A long line of important studies claimed that Jackson's policies, especially the destruction of the S.B.U.S. and the "Specie Circular," caused the Panic of 1837. Bourne (1885), Schlesinger (1945), Hofstader (1948), Meyers (1960), and Hammond (1957), among others, contended that the S.B.U.S. kept state banks from issuing too many notes. The destruction of the S.B.U.S. led to rampant abuses, an expansion of credit, and a speculative bubble that Jackson burst asunder with the "Specie Circular," which drained specie out of eastern banks to the west by mandating the payment of specie for federal land, most of which was west of the Appalachians.
Temin (1969), elaborating on the work of Parsons (1958), Macesich (1960), Williamson (1961), North (1961), and Hidy (1949), vigorously disputed that view, arguing that "the economy was not the victim of Jacksonian politics; Jackson's policies were victims of economic fluctuations." Using S.B.U.S. balance sheets, domestic exchange rates, cotton prices, the price and distribution of specie, and the volume of federal land sales, Temin argued that three major flaws mar the view that Jackson's policies led to depression. First, he argued that "the boom did not have its origins in the Bank War" but rather in "large capital imports from England" and decreased need for silver in the China trade. Second, the Specie Circular and the distribution of the federal surplus, Temin contended, "did not have the effects attributed to them." Third, the depression was not Biddle's fault and the downturn was not "as serious as historians assume."

Temin's last point was debatable. Many historians described the after effects of the Panic as a major depression. Studies by Murphy (1945), Adams (1995), and Hubbard (1968) showed how the depression destroyed the economy of Buffalo, New York, right down to its educational system. McLear (1977) detailed the troubles in Chicago, Trufant (1918) in New Orleans, and Simonton (1979) in Maine, while Peevy (1940) took the entire nation as his domain. McGrane (1924), the classic descriptive study of the Panic, argued that the Panic killed many poor people through starvation, hypothermia, and immunosuppression. Other challenges to Temin's thesis, particularly his underestimation of the S.B.U.S.'s crucial role in domestic exchange, include several recent studies (Walters 1997; Knodell 1998; Kilbourne 1999).

In addition to destroying the S.B.U.S., Jackson paid off the national debt. Evidence of that debt, in the form of interest-bearing bonds, had served as a type of "floating capital" that had helped to stabilize the nation's economy since the founding of the Republic (Sylla, Wilson, Wright 1997; Wright 1978). The loss of two pillars of stability led to speculation in real estate
and secondary equities markets, large investments in state bonds soon discovered to be inferior to the extinguished federal obligations, and erratic and inefficient internal exchange. The resulting lack of confidence lead to a liquidity crunch that no institution or market had any power to alleviate. The Panic was indeed devastating (Sylla, Wilson, Wright 2000).

**The First and Second Banks of the United States: What Were Their Economic Roles?**

For almost half a century, James O. Wettereau was the historian of the First Bank of the United States (hereafter B.U.S., 1791-1811). Unfortunately, Wettereau, who never landed a tenure-track job spent many years in a fruitless search for the holy grail of B.U.S. research, the bank's internal account books. Those records would have allowed Wettereau to determine who borrowed from the bank, when they borrowed, how much they borrowed, when they repaid, and how much the discounts cost. Using the bank's daily balance sheets, he could have made definitive statements about the bank's leading role in the economy. Those records would also show how the First Bank interacted with state banks, secondary securities markets, and inland and foreign exchange markets. So, although he uncovered much important primary evidence regarding the bank and its functioning, including scores of balance sheets, Wettereau declined to publish a monograph about the nation's first national bank. His legacy, therefore, comes to scholars in the form of several important articles about the B.U.S., and a collection of his papers and notes, lodged in Columbia University's special collections, thoroughly catalogued by Stuart Bruchey, and a book (Wettereau 1985) containing all of the bank's known balance sheets, also
compiled by Bruchey. Wettereau's painstaking research, and Bruchey's organization thereof, combined with modern financial analysis, have recently made possible the publication of a significant monograph on the B.U.S.'s first years, David Cowen's *The Origins and Economic Impact of the First Bank of the United States, 1791-1797* (1999).

In addition to extensively mining the Wettereau Papers, Cowen utilized Wettereau's classic articles, including "Branches of the First Bank of the United States," "New Light on the First Bank," and "The Oldest Bank Building in the United States." In the first of those articles, Wettereau described the formation of branches and their relationship to the Mother Bank in Philadelphia. In the second, he shared some of his path breaking new research on the B.U.S. But, for all his meticulous research, Wettereau could not synthesis his findings in the manner that he wished. Yielding the tools of a Wharton MBA and historian, Cowen moved far beyond Wettereau, analyzing the B.U.S.'s balance sheets, the records of other banks, securities prices, government documents, and brokers' records with the eye and insight of a modern international banker. The result was a technically sophisticated, yet highly readable, account of the B.U.S.'s large, and positive, impact on the early U.S. economy.

The literature on the Second Bank of the United States (1817-1836) is much larger, and older, than that of the B.U.S. The most definitive work on the economic features of the S.B.U.S. remains Smith (1953), which drew somewhat on earlier studies like those of Brown (1912) and Walters (1945), but which was essentially an original effort. After outlining the major features of the U.S. economy from 1816 until 1841 in Part One, Smith in Part Two chronicled the history of
the Bank from its "Bad Start" (1816-1818) through its recovery (1819-1822) and "Golden Age" (1823-1829) to its losing fight against Andrew Jackson (1830-1836), its metamorphosis into a state-chartered bank, and its spectacular failure (1836-1841). Then, in Part Three, Smith brings the most salient portions of the first two parts together in a sweeping analysis of the Bank's economic roles and functions supported by the text's 10 charts and 21 tables of financial and economic data. His treatment is balanced, but ultimately in favor of the S.B.U.S. "The constructive achievements of the Bank from 1819 to 1834," he noted, "were of a high order." Had the Bank been allowed to develop, he argued, "the United States would have had an effective banking system long before it did." Smith's overall view of the Bank's development has held up well over the years. Although in its early years the S.B.U.S. may have created rampant inflation (Shur 1960), and then devastating deflation (Tanner 1991), the Bank soon came to have a large, positive influence on the economy (Engerman 1970), including a salubrious effect on domestic exchange (Fraas 1974).

There have also been written on the Second Bank a number of dissertations and monographs of varying qualities, including Womak (1971), which stressed the Bank's monetary functions, Larew (1978), which studied the effects of the Cincinnati branch on the local economy, Fraas (1973), which studied the Bank's effect on the entire Ohio Valley, Brown (1998), an assessment, aided by Bogart (1912), of the rocky relationship between the S.B.U.S., its Cincinnati branch, and Ohio politicians, and Dent (1983) on the Bank's relationship with the federal district court of Kentucky.

**Central Banking: Were the First and Second Banks Central Banks?**

A central bank is an institution that has a unique government charter, aids government finance, supervises non-government commercial banks, for example keeping their note issues at
safe levels, and serves as a lender of last resort during financial panics because of a commanding capital position.

According to Redlich (1968), Wettereau (1953), Hammond (1957), Timberlake (1978, 1993), Perkins (1994), and Klebaner (1974), the B.U.S. and S.B.U.S. both fit, or almost fit, the definition of a central bank. They argue that B.U.S. evolved into the role of central bank as the number of U.S. banks grew. The S.B.U.S., though probably not conceived as a central bank either, also soon began to fulfill most central banking functions, especially under the direction of Nicholas Biddle. Other scholars, especially those who, like Smith (1936), Dowd (1993), and Collins (1993), wrote comparative histories, have been more skeptical, noting that the national banks did not, indeed could not, act as lenders of last resort because they were predominately privately-owned institutions that had to consider the interests of their stockholders before the interests of the community (Temin 1969).

David Cowen (1999), elaborating on and refining the work of Taus (1943), has recently clarified this debate by drawing a distinction between a central bank and a central banker. The B.U.S., and by extension the S.B.U.S. until William H. Crawford’s illness and Biddle’s ascendancy, was the nation’s central bank, but the Secretary of the Treasury, not the president of the B.U.S., was the nation’s central banker. The Treasury Department, in other words, set policies that the national banks implemented. Cowen showed, for example, that the Treasury Department, through the B.U.S., aided several distressed banks and frequently added liquidity to the credit system when securities prices flagged. In other words, because the Secretary of the Treasury was essentially running the show when circumstances warranted his intervention, the stockholders had little say over the Bank’s actions during crises. Cowen’s view of the essentially cooperative nature of the Treasury and B.U.S., and those institutions and state banks, fits well
with Elazar's (1965) interpretation of banking and federalism in the early American republic. Both see the early U.S. government as federal, as opposed to centralized, in nature, and hence not in need of a strictly government controlled national bank in the European style.

Recently Broz (1997) offered an interesting view. Although Broz took an international view of central banking, unlike most who do comparative banking history, he argued that the B.U.S. and S.B.U.S. were indeed central banks because the political and economic histories of those two banks closely followed the predictions of his theory of the evolution of central banking. In his view, both national banks would have been rechartered had they not been central banks.

**Forms of Political Economy in the Early National Period: What Did Americans Want From the Economy and Did They Get It?**

Political economy is the study of how governmental policies influence the economy. Chock full of complex issues at the junction of theories of politics and economics, political economy is a hotly contested topic. Most scholars suggest that two forms of political economy existed, one "agrarian" or Republican, the other "commercial" or Federalist (Ferguson 1961). The Revolution (Riesman 1983) and Constitution (McDonald 1958) are usually taken to be victories for the latter, and the election of Jefferson to the presidency in 1800, and subsequent Republican national electoral successes, as victories for the former (McCoy 1980). According to Watts (1987), Siry (1990), and Wermuth (1991), the distinction between democratic agrarians, who sought "yeoman independency," and aristocratic merchants, who sought to increase foreign trade, persisted through the War of 1812 and the so-called Era of Good Feelings to the Jacksonian era, and according to Ashworth (1983), through that era to the sectional crises of the 1850s.
Nelson (1987) rightly argued that matters were not so simple. A third type of political economy, that of commercial Republicans, also existed and exerted considerable influence. But Nelson overstepped his evidence, asserting that the commercial Republicans, and not the Federalists, deserve credit for America's early economic development. Because Nelson's view is now widely accepted, a detailed examination of it is in order. According to Nelson, Alexander Hamilton's main goal was to induce moneyed men to support the national government by stabilizing the price of government securities. This would give the rich a steady income and provide liquid capital for further investment and keep them loyal to the government. To do this, Hamilton allegedly thought, the securities had to stay at or near par. Prices too low would not have the requisite binding force or salubrious effect on public credit. Prices too high would lead to ruinous speculative bubbles. The way to keep securities' prices up was to provide adequate revenues to make interest payments and redeem a small part of the principal each year. The only way to keep revenues up, according to Nelson, was to ensure British imports, and their concomitant duties, were maintained at adequate levels. This necessity forced Hamilton to support a pro-British foreign policy. The funding of the debt and the encouraging level of the revenue made the price of securities jump -- too high. To depress the price of stocks Hamilton created other investment opportunities, Nelson contended. Hamilton concocted the Society for

Nelson's book received solid reviews from Richard E. Ellis, Stuart Bruchey, and James Henretta. Recently two prominent scholars, Gordon Wood and Edwin Perkins, used *Liberty and Property* to supplement their respective interpretations of Federalism. That such an influential group of historians have at least partially accepted Nelson's work suggests that it continues to be quite influential (Wood 1996; Perkins 1994). Authors of textbooks have also relied on Nelson. A lengthy excerpt from *Liberty and Property*, for example, appears in Smith and Clancey (1998).
the Establishment of Useful Manufactures (SEUM), in this view, solely to channel funds away from public securities speculation. Hamilton meant it to be temporary. He did not want indigenous manufactures to succeed because they would supplant English imports and thereby lower the precious custom duties. The Secretary of the Treasury, in other words, was much more interested in maintaining a slavish reliance on Britain than on fostering manufacturing, a subject which Hamilton never liked or understood anyway.

Throughout all, Nelson chided Hamilton for not being more radical. Every instance of Hamilton's natural cautiousness and conservatism Nelson took as evidence of the Secretary's disdain for manufactures. It is almost as if Hamilton should have re-created the American economy root and branch. That attitude does not give credit to Hamilton's thought or his actions.

Hamilton's goal was not "economic and political stability," as Nelson theorized. Hamiltonian Federalists wanted political stability, but only because it fostered their main goal -- economic growth. Many Republicans, like Albert Gallatin, Tench Coxe, and Mathew Carey, were also interested in fostering growth. Some Federalists, and a fair chunk of Republicans, supported economic "stability." So, despite Nelson's belief, the parties did not cleave because of competing sets of means created by divergent world views. That oversimplified framework forced Nelson to look for differences between Hamilton and the moderate Republicans. There were differences, but they did not lie in the ends or means of political economy.

Hamilton opposed speculative bubbles of stock and had effective methods for influencing securities' prices. Even if he had had no influence, the nation's early capital markets were efficient enough to keep prices in line. English imports indeed were a major component of U.S. revenue, but other revenue sources were growing and the Secretary explored them systematically. Hamilton was not a slave to Britain. His foreign policy is best described as one of
real politik. Hamilton wanted to build an American Empire, an important component of which was a strong manufacturing base, a subject he well understood and that had always held his interest. He wanted the SEUM and other manufacturing projects to succeed because they were essential to public security. SEUM failed to live up to its expectations for structural reasons.

The best discussions of political economy have avoided political ideology and have concentrated instead on governance. Gunn (1988), for example, persuasively argued that as state political systems became more democratic in 1820s and 1830s, elites shifted the decision-making process on questions of resource allocation from legislatures to bureaucracies or the private sector. The net result was to insulate the economy from "democratic control." Another nonpartisan study, Seavoy (1982), demonstrated that New York forged itself into the "Empire State" through the implementation of a judicious political economy that stressed economic growth through the encouragement of individual enterprise, like the general manufacturing incorporation law of 1811, and through programs with widespread benefits, like its internal improvements system.

**Banks and Politics: What Was At Stake?**

For almost half a century, Bray Hammond's enormous *Banks and Politics in America* was probably the most widely cited book dealing with early national and antebellum banking. The book remains extremely popular and continues in print with a renewed copyright. Hammond's interpretations have become part of historical canon; many general historians look only to him for their understanding of early banking. While Hammond's book is praiseworthy, it stands in need of revision. Like almost all historical interpretation, Hammond's views were a function of

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18 For able, but now very dated, historiographical overviews of banks' political roles, see Sellers (1958) and Cave (1964).
his times. In much the way the interwar depression (1929-1941) and Second World War affected
Arthur Schlesinger Jr.'s classic *Age of Jackson* (1945), the postwar milieu and its radical
international financial triumphs, particularly the International Monetary Fund, caused Hammond
to concentrate on the concept of central banking. Though for a time (1944-1950) Assistant
Secretary of the Board of Governors of the Federal Reserve, Hammond was not much of a
banker and admitted as much in his Preface. Today, financial historians usually own a copy of
*Banks and Politics*, but use it only as a starting point for their own work. Recent work has shown
that several of Hammond's ideas need revision. For instance, Hammond's contention that
commercial banks did not help manufacturers has not held up under recent scholarship. True,
commercial banks could not secure long-term loans from banks, but few expected or wanted
them to. Securities markets provided long-term credit; banks made short-term liquidity loans,
even to manufacturers (Davis 1960; Lamoreaux 1994; Wright 1996a, 1998, 1999). Naomi
Lamoreaux, in fact, showed that New England manufacturers established, ran, and of course
extensively utilized many of the region's banks.

Hammond's most important contribution was his sweeping interpretation of the interplay
between the nation's banking and political systems. Rejecting Schlesinger's (1945) contention
that the Jacksonians were "liberals" bent on checking "the political ambitions of business,"
Hammond argued that a group of self-made men fomented the "Jacksonian revolution,"
destroying the S.B.U.S. because it restrained their access to bank credit. "Their rebellion was a
popular and democratic one," he admitted, "but not agrarian." But just as Hammond dismantled
Schlesinger's thesis within 15 years of its publication, several scholars attacked Hammond's
thesis, known as the "entrepreneurial thesis," about 15 years after the publication of Banks and Politics.19

Sharp (1970) led the charge against the entrepreneurial thesis, arguing that, in fact, Jacksonians offered "a plaintive warning against the increasing commercialization and vulgarization of American life." Built on in-depth, nation-wide, but state-level, research, and important dissertations like Barton (1968) and Ericson (1967), Sharp's conclusion that the Democratic party was not "the party of the entrepreneur in an age of enterprise" is more convincing and detailed than Hammond's interpretation, which was based on an analysis of national, and not state, politics. Two other studies published soon thereafter, Shade (1972) and McFaul (1972), cast further doubt on the entrepreneurial thesis. By closely examining the banking issue in the Old Northwest, Ohio, Illinois, Indiana, Wisconsin, and Michigan, Shade demonstrated that stances on bank issues were a function of party affiliation and that party choice was largely a matter of an individual’s cultural, not socioeconomic, background. McFaul, drawing on Wilburn (1967), noted that Hammond's contention that state banks opposed the S.B.U.S. was incorrect. Until Jackson's reelection made it politically expedient to support Old Hickory, many state banks sided with Biddle, noting that the S.B.U.S. brought stability to the banking system. McFaul, like Shade and Sharp, and also Royalty (1972), discovered that Jacksonians did stand for real issues, and that their stances were more a rejection of capitalism than the emulation of it. Sellers combined these theses in his forceful recent contribution, The Market Revolution (1991). Sellers's constant juxtaposition of capitalism and democracy is reminiscent of Schlesinger's Age of Jackson.

19 For other views of Jacksonian historiography, see Remini (1967) and Formisano (1976).
The political histories of banking have gotten more sophisticated but the interpretations tend to be cyclical, mirroring the political climate of the times. Several recent studies, (Wright 1996a, Wright 1998a, Karmel 1999, Russell 1995) while critical of some of Hammond's conclusions, especially his analysis of pre-Jacksonian politics, tend to support the entrepreneurial thesis. By investigating a single state or election in great detail, those studies uncovered a much more complicated political terrain than Hammond depicted, revealing several important factual and interpretive errors, but all the while supporting a qualified version of the entrepreneurial thesis. Wright (1996a), taking his lead from Ellis (1971), found that Jefferson's Republican party was composed of two factions, a pro-bank commercial wing, and an anti-bank agrarian wing. By reconstructing the lending patterns of early seaport commercial banks, he (1998) showed that Jefferson owed his election in 1800 to the commercial wing of the party, which disliked the credit restrictions that usury laws forced those institutions into making, and the Federalists' reluctance to charter more banks (Schwartz 1947).

The banking issue in Pennsylvania, Karmel (1999) made clear, was extremely intricate. A closer look at Pennsylvania therefore is in order. According to Hammond (1957), and Rappaport (1996), voting divisions concerning the creation, destruction, and re-creation of the Bank of North America in the 1780s revolved around differing ideologies of political economy. Agrarians voted against the bank while commercial elites voted for it. Later, an empirical study by Main (1973) and ideological studies by Pocock (1975) and Banning (1978) reinforced Hammond's view. But Karmel's research indicates that the fight over the Bank of North America was essentially sectional and, following Ireland (1995), religio-ethnic, and not ideological. Western Pennsylvanians wanted, above all, economic independence from Philadelphia Anglicans and Quakers and those groups proclivity for overtaxing western counties. Westerners also hated
Philadelphian's attempts to turn trade to Philadelphia instead of its natural outlets in Baltimore, via the Susquehanna River, and New Orleans, via the Ohio-Mississippi River system. Such sectional animosity, Karmel argued, affected Pennsylvania politics through the destruction of the Second Bank.

**Banking Systems: What Were the Safety Fund, Free Banking, and the Suffolk Systems?**

Several significant treatments have studied the three major early U.S. banking systems -- New York's Safety Fund (1829), which forced new banks to pay creditor insurance in case of failure, the free banking system of New York (1837) and other states, which sought to ease entry into banking by basing note issues on public securities instead of specie and by making incorporation merely a bureaucratic, and not a political, process, and New England's Suffolk System, a private (i.e. nongovernmental) market effort to force regional banks to keep note issues in check. Also, most general treatments of early banking, like Redlich (1968) and Hammond (1957), contain chapters or sections on one or more of those three systems.

Chaddock (1910) is the classic study of the Safety Fund, the nation's first deposit insurance scheme and the first major systematized regulatory scheme that attracted entrants. Wright (1996a), following Root (1896), suggested that the Safety Fund and New York's Free Banking system, once early glitches were worked out, inadvertently combined to form a very good banking system. The Safety Fund banks provided note elasticity. In other words, those banks could expand or contract portions of the money supply quickly. Free banking, on the other hand, allowed for the easy entrance of new market participants when permanent new demands for additional credit arose. Sylla (1985) described the Safety Fund as a reaction to much "bad banking" in the Empire State in the 1820s.
Free banking began in New York, and at the tail end of the period under study, so much less attention will be paid here than the overall importance of the system merits. Suffice it to say here that relatively easy, bureaucratic (or non-politicized) entry into the banking business, bond-backed capitalization, and note issue regulations characterized free banking systems. Bodenhorn (1998), Economopoulos (1985), and Haupert (1990) are among the best econometric studies of free banking, while Shade (1972) and Daniels (1997) offer solid narrative economic and political discussions of free banking in the West and South, respectively. Smith (1936) is the classic comparative study of free banking in the U.S., Britain, Scotland, France, and Germany. For other comparative histories of free banking, see White (1993) and Dowd (1993).

New England's Suffolk System, by contrast, began in 1824 and remained in place through the Civil War. Named after the Suffolk Bank (chartered 1818), the system's key component, the Suffolk System was essentially a private clearinghouse for the notes of regional country banks. As Boston commercial banks collected the notes of the many country banks, the accumulation of which the course of trade made inevitable, those banks turned the notes over to the Suffolk Bank, which quickly redeemed them. The net effect of the system was to keep the notes of all sound New England banks at par, even during financial dislocations. Classic book-length treatments of the Suffolk System include Whitney (1878) and Trivoli (1979), while the best recent treatment is Rolnick, Smith, and Weber (1998), who showed that the Suffolk Bank also acted as the major regional interbank lender. Finally, Fenstermaker and Filer (1984) investigated the impact of the national banks on the Suffolk System.
Regional Banking Studies: How Did Banks and Banking Vary From Place to Place?

Based on studies like Schweikart (1983) and Feiner (1981), as well as extensive archival materials, scores of government documents, and over 50 newspapers, Schweikart (1987) is the book on banking in the antebellum South. He rejected the long-held notion that the structure of Southern banking encouraged and perpetuated slavery, but did argue that banking "reflected the political paradoxes involved in trying to meet egalitarian ends within the context of freedom as much as did the slavery issue." Kilbourne (1995) rejected that view, showing very clearly how, in Louisiana anyway, banks indirectly supported slavery by making mortgages on slaves an important type of collateral security. But Schweikart has made his mark, inspiring young scholars like Crothers (1997) to study southern banking in detail. Crothers (1999) showed that north of the Rappahannock the Virginian economy, including bank loan portfolios and securities markets, as well as internal improvements, crop strategies, etc., was quite like that of the Middle Atlantic States, a similarity not hitherto appreciated.

Other regional studies include Lamoreaux (1994), a path breaking study of bank lending patterns in New England, Lewis (1954), an analysis of ways that banks helped industry to develop in Pennsylvania's Wyoming Valley, and Golembe's (1953) analysis of state banks and the economic development of the West during the Jacksonian era. Helderman (1931), a series of regional studies of the banking systems of the East, Old Northwest, and the Lower South beginning in the early antebellum period, is dated but not without value.

State Banking Studies: Why Were There So Many?

During the period under study, all banks, save the B.U.S. and S.B.U.S., fell under the control of state, and not federal, government. For that reason, most studies of early banks take
the state as the proper level of analysis. Indeed, state-level studies form the backbone of early bank historiography. Almost every state has been scrutinized at least once.


In the Midwest, Esarey (1912) detailed state banking in Indiana, Wendell (1902) studied the banks and bankers of Michigan, while Coover (1906) and Huntington (1915) analyzed banks
in Ohio from 1803 until the Civil War. Scheiber (1969) described the interplay between public canal finance and state banking in Ohio between 1825 and 1837.

Local Histories: What Good Are They?

Scholars, and a good number of non-scholars, have also written extensive local histories of banking. Such studies are important because, taken in conjunction, they often serve to help scholars to write state or regional banking histories. For example, Wilson (1970) detailed the history of banking in Pulaski County, Kentucky, over some five decades. Similarly, Stevens (1955) described the actions of bank enterprisers in an Ohio town shortly before, during, and shortly after the Panic of 1819.

Most of the major commercial centers have had specialized studies devoted to them. Mooney (1913) discussed the financial institutions of Baltimore, while Stone (1894) handled Boston banking, and Homans (1861/62) and Hardenbrook (1897) took on all of financial New York. Peltz (1955) described both the commercial and savings banks of Albany, New York. Even out of the way places, like Canandaigua (Hayes 1951) and Binghamton (Chittenden 1986), two small cities in upstate New York, have been the subject of short books, but Philadelphia still awaits its banking history to be told.

Bank Histories: Are They Worth the Trouble?

Just about every early bank in New England that survived to the early part of the twentieth century produced an historical study to commemorate an important anniversary. The Harvard social history/business preservation microfilm project (Harvard ongoing) is in the process of cataloging and preserving them. Some are trite pieces of advertising and hence practically worthless for scholars' understanding of early banking. Many, however, contain
important primary source material. For example, the National Bank of Middlebury (1931) contained the initial list of bank officers and directors from 1831 until 1865, a partial list of representative early stockholders, and highlights of the bank's history. Banks in regions outside of New England also published short histories, like Diffenderffer's (1910) history of the Farmers' Bank of Lancaster, Lancaster, Pennsylvania. For a bibliography of individual bank histories, see Muscalus (1942).

Many of the early major urban commercial banks have been the subject of full-length scholarly treatments, including The Bank of New York (Domett 1884; Nevins 1934), the Merchants' Bank of New York (Hubert 1903), the Commercial Bank of Albany (Kimball 1950), the Massachusetts Bank (Gras 1939), the Philadelphia National Bank (Wainwright 1953), the Bank of North America (Lewis 1882), the Trenton Banking Company (Tomlinson 1929), the Bank of the State of South Carolina (Smith 1936) and the Bank of Mississippi (Weems 1952). Recent studies include in-depth, modern analyses of Citibank (Cleveland, Huertas et al 1985), Chase Manhattan (Hunter 1989), and Stephen Girard's bank (Adams 1978, a vast improvement on Brown 1942).

**Biographies of Bankers, Financiers, and Government Financial Officers: Who Were the Major Financiers and What Were They Like?**

Biographies of bankers, financiers, and government financial officers are other important sources of information and interpretations on early finance. Unlike bank histories, which tended to be written by people with much expertise in banking but little in history, biographies tend to be composed by those conversant with history but shaky on banking. For example, see Boton and Cortelyou (1955) on Ezra Ames, an Albany banker, and Flick (1947) on Elkanah Watson, another Albanian financier. But there are plenty of good biographical studies that also show
understanding of technical financial matters. Venit (1945) and Morrison (1973), for instance, do justice to New York financier and financial theorist Isaac Bronson. Platt's (1955) study of federalist entrepreneur Jeremiah Wadsworth is also worthwhile, as is Davis's (1957) treatment of William Constable, a major player in early financial circles. Jones (1992) and Matson (1989) do an impressive job with the infamous William Duer, but Davis (1917) should still be consulted. Adams (1978) is a better, albeit more focused, study of Stephen Girard than Wilson (1995). The life and economic thought of Hamilton's important advisor Tench Coxe has been the subject of at least two studies (Hutcheson 1938; Cooke 1978). Recent biographies of many minor figures, like Alexander McDougall, first president of The Bank of New York, Manhattan Company director William Few, and financial theorist Eleazar Lord, can be found in the *American National Biography* (Garraty 1999).

Book-length biographies of some government officials abound. Alexander Hamilton is a perennial topic, but few studies have approached those of McDonald (1979) and Miller (1959). Historiography awaits definitive treatments of other important Secretaries of the Treasury. For the other Federalist Secretary of the Treasury, Oliver Wolcott, see Hamilton (1988) and Schmauch (1970). For the Republicans' most important Secretary, Albert Gallatin, see Cachia-Riedl (1998), Kuppenheimer (1996), Burrows (1974), Walters (1969), Mai (1930), Stevens (1900), Lodge (1879), Adams (1879), but not necessarily in that order. None of the studies adequately treat Gallatin's second career as a Manhattan banker. The earliest studies, by Henry Cabot Lodge and Henry Adams, two of late nineteenth-century America's most eminent historians, are in some ways still the best treatments.

Alexander Dallas, William Crawford, Richard Rush, and Levi Woodbury have drawn limited scholarly attention. Besides standard reference works like the *American National

For Thomas "Bullion" Benton, an important Jacksonian U.S. Senator from Missouri, see McCandless (1953), Roosevelt (1924), Chambers (1956), or Smith (1958). Daniels (1968) is the best we have on Jacksonian financier and cabinet member Amos Kendall, but Shoptaugh (1984) should also be consulted.

No banker save Nicholas Biddle himself has drawn more attention than Langdon Cheves. From Gee (1931) to Huff (1970) to Huff (1977) to Perkins (1984), scholars have been unable to decide whether the South Carolinian helped or hurt the S.B.U.S. and, by extension, the U.S. economy, during his brief tenure as president from 1819 to 1822. Treatments of Biddle include Govan (1959), still the most important study, Konkle (1928), which is laudatory and uncritical, and Meerman (1961), which concentrated on Biddle as a central banker. More recent biographies of bankers, like Todd and Sonkin on Alexander Bryan Johnson (1977), Ferguson, Catanzariti, Nuxoll, Gallagher et al (1973-1999) on Robert Morris, and Wright on Thomas Willing (1996b) utilize banking and economic theories more frequently and thoroughly than earlier treatments (For Morris see Sumner 1891; Oberholtzer 1903. For Willing see Konkle 1937).

Art and Architecture: What Did Banks Look Like and What Difference Did It Make?

Illustrations of early banks can illuminate scholars' understanding by depicting loans in negotiation, the dress and demeanor of customers and employees, and sundry other details that would otherwise be lost (Green 1989). Similarly, as Lamoreaux (1994) showed, bank architecture can be quite revealing. Early banks tended to be simple affairs, often just a few rooms in a rented building, often on the second floor. Only when banks sought to attract
depositors, or when a bank's seeming strength was important to its economic and/or political power, as in the cases of the First (Wettereau 1953) and Second Banks of the United States, or Stephen Girard's personal bank,\textsuperscript{20} did bankers invest large sums to create or acquire imposing edifices. Historians not conversant with architectural issues can consult technical studies of bank architecture, like Lay (1986-1988).

\textit{Minorities and Early Finance: Could Blacks and Women Participate?}

Although the role of women (Waciega 1987) and blacks (Walker 1986) in the early American economy is becoming increasingly well understood, their roles in finance have only recently attracted the serious attention of scholars (compare Wright 1996a to Harris 1970). Blacks and women indeed participated in early financial markets; they received bank discounts, maintained checking and savings accounts, and owned securities. More studies are in progress.

\textbf{Part Three: Historiography of Nonbank Finance}

\textit{Origins of the Business Corporation: When and Why Did the Corporate Form Emerge?}

In the colonial, revolutionary, and confederation periods, only a handful of business corporations operated. According to Baldwin (1902), it was "not until the new government under our present Constitution came into active operation, in the spring of 1789, [that] a fair field opened for the permanent investment of capital in large operations." Indeed, most of the first financial firms in the U.S. were corporations, fictitious "persons" with certain legal rights and obligations, not private associations as in Britain and elsewhere. Livermore (1939) pointed out

\textsuperscript{20} Girard "purchased from the Trustees of the late Bank of the United States, their Banking House and appurtanances {sic} situated in this City [Philadelphia], South Third Street and there intend to transact on my private account the Banking business." Stephen Girard to Governor Simon Snyder, 23 May 1812, as quoted in Adams (1978), 18.
that the U.S. corporate form did not spring into existence fully formed. The process of corporate
development, he argued, was best understood by analyzing the transition of early land companies
from non-corporate to quasi-corporate to full corporate form. Handlin and Handlin (1945) argued
that the rapid proliferation of corporations in the early U.S. (cf. Evans 1943) resulted from
"American democratic conceptions of the state" and not from the traditional business reasons for
incorporating, namely, the acquisition of perpetual rights, limited liability of stockholders, and
simplified management structure. Maier (1993) concurred, arguing that the legacy of the
Revolution was mixed because while it freed states to create corporations its democratic rhetoric
also led to the formation of strong anti-corporate doctrines, like those used in Pennsylvania to
strike down the allegedly monopolistic charter of the Bank of North America. But Seavoy
(1982), who analyzed the development of corporations in New York, arguably the early nation's
most economically important state, showed that such doctrines were relatively rarely invoked in
commercial centers where most business corporations thrived. Sylla (1985) explained that in a
capital-deficient economy, the corporate form allowed some types of businesses, like banks and
other "moneyed" concerns, to raise long-term capital more efficiently than non-corporate forms,
like the partnership models that worked well in capital-rich Great Britain. Shares of stock in U.S.
corporations were typically $100 or less, allowing a much broader section of the population to
invest than in Britain, where only the rich could afford an equity stake in a business.

Life, Fire, and Marine Insurance: How Were Risks Spread?

Insurance in all its forms is simply a means of spreading risks. In its usual form, the
insurer, in exchange for a premium, promises to reimburse the insured for losses incurred.
Marine, fire, and term life insurance each had colonial roots. Whole life insurance, which

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Girard paid $115,000 for the building, grounds, and appurtenances, a sum higher than the total capitalization of most
compensates those who died too early, as well as those who died too late, developed in Philadelphia early in the nineteenth century but did not catch on until after the period of this study. Because they were not usually highly-charged political topics, because their role in economic development is far from clear, and because there are few controversial topics to generate scholarly debate, the early history of insurance, like the early history of savings banks, has been relatively little studied. The best studies of early life insurance include O'Donnell (1936), Stalson (1942), Mackie (1956), Zelizer (1979), Pritchett (1985), Collier (1985), and Perkins (1994). The source for early marine insurance companies is Ruwell (1993), but see also Kotsovilis (1984) and James's (1942) study of the Insurance Company of North America. Bainbridge (1952) tells the story of mutual fire insurance.

**Bankruptcy and Regulation: What Was the Role of Government?**

Coleman (1974) remains the most important source on bankruptcy in early America, but recent studies by Mathews (1994), a general history of bankruptcy and insolvency in America from the late colonial period through the Panic of 1837, and Ciment (1992), an in-depth study of financial failures in New York in the first seven decades of the nation's existence, portend the arrival of a new general synthesis that will probably focus less on the moral dimensions of bankruptcy, which Huston (1998) has recently described in telling detail, and more on how bankruptcy laws affected business decision-making.

Other forms of commercial regulation have also received scholarly attention. Crowder's (1942) study of the regulation of banks in New York was in large measure superseded by Reubens' (1960) study of state financing of private enterprise in early New York. Handlin and Handlin (1947) is the classic study of government regulation of the economy in Massachusetts,
and Hartz (1948) is the starting point for Pennsylvania. White (1971) discussed state regulation of commercial banks throughout the nation from the confederation, through the early national, to first part of the antebellum period.

Recently, scholars have shown that state public finance was the most important determinant of state regulatory decisions (Sylla, Legler, and Wallis 1987; Wallis, Sylla, and Legler 1994). States that received much of their revenue from bank dividends, for example, were reluctant to charter additional banks that might compete with existing banks and decrease their profitability.

The most important source on securities regulation is Banner's (1998) innovative and comparative study of the cultural and political roots of economic regulation in the United States and Great Britain from Britain's Glorious Revolution (1688) to the U.S. Civil War (1861-1865).

**Secondary Securities Instruments and Markets: What Were the Major Stock Markets and How Did They Function?**

Hedges (1938) surveyed early stock markets, as did Perkins (1994). There exist a few good histories of individual stock exchanges. Martin (1975) is the classic treatment of the early Boston stock exchange. It went through several editions in the second half of the nineteenth century and was reprinted in 1975. The most important source on the New York stock exchange is Werner and Smith (1991), which provided some important early stock volume figures. The histories of other early stock markets will be updated as a consequence of Sylla, Wilson, and Wright's (2000) study. That study will also update the stock market indices of Smith and Cole (1935). Though not about securities markets per se, Pred (1973) supplied important data regarding the travel times of information that helped scholars to understand how the major stock
markets in Boston, New York, Philadelphia, Baltimore, and Charleston interacted with each other.

A good popular discussion of the national debt is Gordon's (1998) history, *Hamilton's Blessing*. A more scholarly treatment, full of primary sources, is Elliott's (1845) massive study of *The Funding System of the United States and of Great Britain*. For more details about the size, characteristics, and origins of particular federal debt instruments, refer to Bayley (1882).

The best recent treatment of foreign investment in the U.S. are Davis and Cull (1994) and Wilkins (1989). For early Dutch investments, which were heavy, and quite important to the nation's early fiscal stability, see Riley (1978).

**Banking, Securities, and Economic Growth: How Did Financial Institutions Make the Economy More Efficient?**

Scholars are now in the process of recasting the role of banking and securities markets in the story of U.S. economic development. Economic historians have long been interested in the roots of American economic growth (Bruchey 1965). Few, however, have stressed finance as an important component of growth. Horwitz (1977) stressed legal developments, Licht (1995) and Rostow (1960) industrialization, Lindstrom (1978) internal development, and North (1961) the role of foreign trade. Taylor (1958) found the transportation revolution to be paramount, while Kulikoff (1992) stressed the agricultural origins of American capitalism. Combining the view of Lindstrom, Taylor, Kulikoff, and, to some extent, North, Rothenberg (1992) demonstrated that the transition from market-places to a market economy was a crucial step towards economic growth. She showed that, over time, the wholesale prices of commodities and foodstuffs in New England increasingly converged and moved more synchronically, indicating that the regional economy had become an integrated whole.
But how did the transition to an integrated economy occur? Over time, with the creation of turnpikes, bridges, railroads, and canals, produce moved more efficiently. Similarly, the creation of more newspapers, better postal routes, and telegraphs sped the flow of price and other business information (Pred 1973). Finance made both of those steps possible. Historians traditionally chastised early banks for not making long term loans, for printing too many bank notes, and for engaging in other economically unsound practices. Taking inspiration from Trescott (1963), but drawing more on Williamson (1944) and Cameron (1967), scholars, spearheaded by Richard Sylla, have come to see early financial markets and institutions as necessary prerequisites for the market, transportation, and industrial revolutions that characterized the U.S.'s nineteenth-century economic growth spurt or "take off."

Bodenhorn (2000) demonstrated that antebellum banks spurred economic growth because they were efficient intermediaries good at matching investors with entrepreneurs young and old. Wright (1997) argued that banks formed an integral part of a positive feedback cycle which sped the young nation towards "modernity" in the first few decades of the Republic.

Sylla's work is a particularly important break with traditional banking historiography, which usually treated banks in isolation from the rest of the financial sector, because of its emphasis on the interaction between banks and securities markets. Sylla (1998) and Sylla (1999) showed that it was the "Federalist Financial Revolution," the combination of strong national banks, many local state banks, the rapid integration of secondary securities markets, and the firm guidance of the first Secretaries of Treasury, that led American economic development.
Part Four: Conclusions, References, and Definitions

Broad Concluding Remarks

The historiography of early U.S. finance is currently in flux and will continue so for some years. There are several reasons for this. First, the entire American history profession is in some turmoil. The 1990s job crunch, the rise of a new professional organization, The Historical Society, as a viable rival to the venerable American Historical Association, and the seeming rejection of the "New Left" and "Linguistic Turn" paradigm that has dominated historiography since the late 1960s, in addition to the tremendous technological changes daily changing the face of research, writing, and teaching, all forebode a major restructuring of the entire discipline.

Second, within the smaller world of early American historiography, changes are also afoot. The "Republican Synthesis" has, after over twenty years of dominance, finally worn itself out. Several competing paradigms, including the New Financial History, now vie for control.

Third, most of the studies described herein, particularly those concerned with politics and political economy, fit into one of the traditional historiographical "schools" of Progressive, Consensus, and New Left. Bray Hammond's work, for example, is a clear example of Consensus historiography. Many of the economic studies were also tied to the prevailing Zeitgeist, or spirit of the times in which they were produced. Most of the studies of money and banking produced in the late nineteenth century, for example, were either hard (gold) or soft (greenback) money diatribes, thinly veiled. There is little reason to believe that the major themes and news of the times will not influence current or future historians too.

Finally, early financial historiography has long been influenced by two key thinkers, Adam Smith and Karl Marx. Smith, author of the Wealth of Nations (1776), is the champion of modern capitalism and its proponents. Much of modern economics is merely the mathematical reiteration of Smith's work; public policy debates often revolve around the validity of Smith's
notion of an "invisible hand" that guides unfettered markets. Marx, author of the Communist Manifesto (1848) and many other books, is the champion of the critics of modern capitalism because he argued that capitalists essentially steal the lives and labor of the workers. Starting at the height of the Cold War in the early 1960s, much of historiography has been part of a larger ideological battle between Smithian capitalists and Marxian socialists. (It is no coincidence that the subtitle of Rostow's 1960 study was A Noncommunist Manifesto!) Now, a full decade after the fall of the Berlin Wall, the voices of the socialists are beginning to falter.

What the next major struggle in historiography will be only time will tell. But if a long Pax Americana ensues, interest in finding the causes of early U.S. economic development will wax strong. It is a good bet that leading that search will be scholars of early U.S. financial institutions, markets, players, and politics.
Bibliographic Abstract

The following references, as of 1999, were listed in the text as generally important or important for specific aspects of financial history and are abstracted into this section for the reader’s convenience.

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Glossary of Economic and Banking Terms

Accounting:

General Accounting Terms

Account - A statement of all the debits and credits between any persons or things.
Account Current - An itemized running account of the business transactions between two persons or firms by date, showing the balance owing or due.
Assets - The obligations owing to a firm or individual.
Credit - To whom or to what something is due. The right side of accounts.

non-accounting definitions: 1) time granted to a debtor to repay 2) trustworthiness or financial integrity
Credited, or to credit - The act by which an bookkeeper acknowledges his firm's receipt of money, goods, or services from a specific source.
Creditors - Some person, property, or thing, to whom or to which something is owing. Whoever has a claim upon us, is our creditor. Whomever or whatever the business or firm owes is a creditor and must be credited.
Debit - Who or what owes. The left side of accounts.
Debited, or to debit - The act by which an bookkeeper acknowledges his firm's disbursement of money, goods, or services from a specific source.
Debtors - Some person, property, or thing, who owes. Whomever we have a claim upon, is our debtor. Whomever and whatever owes the business or firm is a debtor and must be debited.
Insolvency - 1) the indebtedness of a firm or individual in excess of resources.
2) temporary appearance of 1) due to extreme illiquidity of resources and the pressing nature of liabilities.
Liabilities - The debts or obligations a firm or person owes.

Types of Accounting

Double entry bookkeeping - A method of accounting by systematically classifying debits and credits. Accounts are kept for both persons and things. A monetary equilibrium is kept for each transaction; every debit has a corresponding credit and vice versa. Each transaction is listed twice; hence the name. By this system the resources and liabilities, or gains and losses, can be determined.
Single entry bookkeeping - A method of accounting only with persons and where only a debit or credit is made for each transaction. This system is usually deprecated because it does not allow the account keeper to ascertain the sources of his profits or losses.
EXAMPLE: A personal checkbook register.

Accounting Books and Concepts

Day book - An account book containing full statements of each transaction expressed clearly and briefly but fully and in chronological order.
EXAMPLE: A cash register roll.
Journal - An account book in which day book entries are described in terms of debits and credits.
Journalizing - Determining the debtor or credit nature of entries in the day book and recording them in the Journal.
Ledger - The most important account book. It contains the debits and the credits resulting from all the business transactions classified under their respective headings or titles. From legere, the ledger is a pool
into which the aggregated debit and credit results of the business' transactions. From this book, and an inventory of property, profit and loss may be determined.

*Letterbook* - A book containing copies of important outbound correspondence.

*Waste book* - Another name for the *day book*.

**Banking**

**General Banking Terms**

*Bank* - An institution that trades in money. Bank profits come from interest on loans and differences in rates of exchange between different currencies.

**Types of Banks:**
- commercial - a bank designed to help businessmen by discounting their bills and notes.
- country - a bank not located in a major center of trade.
- deposit - a bank that accepts only lodged deposits, a fraction of which it lends.
- discount - a bank that lends money on the security of commercial paper, but takes the interest up front.
- issue - a bank that creates its own money, usually made of paper bearing the bank's name and insignia.
- mutual - a not-for-profit bank, usually of the savings variety, that is owned by depositors for the sole benefit of the depositors.
- private - 1) an unincorporated bank 2) an incorporated bank owned by private persons (stockholders)
- public - 1) an incorporated bank 2) a bank owned by a public corporation or government
- savings - a bank that pays interest on lodged deposits

*Bank note* - A promissory note issued by banks designed to circulate as "cash" or money.

**Types of Bank notes:**
- bearer - Bank promissory notes payable to the bearer on demand.
- post - Bank promissory notes payable to some person or order after a specified date.

*Bank system* - The group of laws and regulations controlling the rights and responsibilities of a polity's or economy's banks.

*Deposit* - The creation of a credit in a bank's account books.

**Types of deposits:**
- Created -A credit created through the act of discount or loan.
- Demand - A credit that the accountholder may withdraw at his/her will.
- Lodged - A credit created by physically giving money or a good check to a teller.
- Time - A credit that the accountholder may withdraw only under specific terms and conditions.
- Special - A "credit" that the accountholder may retrieve in exactly the same form as "deposited." A good example is an item placed in a safe deposit box.

*Depositor* - An accountholder who earns a credit on the account books of a bank.

*Land bank* - A person, association, or corporation that lends specie, banknotes, or, most commonly, bills of credit on the security of land. Some land banks were authorized by government, others were not.

*Loan office* - 1) A land bank. 2) A person or group of creditors, usually authorized by government, who lends money or bills of credit on the basis of some security, often mortgages. [EXAMPLE: General Loan Office of Pennsylvania] 3) A person or group of debtors, usually authorized by government, who borrow money or bills of credit, giving certificates or "stock" for the same as security. [EXAMPLE: Continental Loan Office]

*Noteholder* - A person who owns or bears bank notes.

*Stockholder* - A person who owns one or more shares in a bank or other corporation.
Withdrawal - An accountholder who earns a debit on the account books of a bank is said to have made a withdrawal.

Lending terms and concepts

accommodation discount/loan - 1) a discount that is renewed 2) a discount of a promissory note 3) a discount of any commercial paper created specifically to be discounted

Collateral - Security a borrower "posts," or temporarily assigns to a lender to be liquidated to repay the loan, if necessary. Types of collateral include: endorsements, bonds, notes, mortgages, liens on portable property. EXAMPLE: Leaving a gold watch with a pawnbroker.

Commercial Paper - Bills of exchange, promissory notes and other written instruments for the payment of money arising out of business transactions.

Discount - A type of secured loan, usually for a short duration, where the interest is taken first, deducted from the face value of the security, usually a bill or note.

Endorsement - The signing of a security in order to change its ownership or to promise its payment.

Hypothecation - The temporary assignment of a security as collateral for the repayment of a loan.

Indorsement - Same as endorsement.

Interest - The cost of money over time. The amount of money it requires to borrow a sum of money.

Mortgage - A security pledging a piece of property, usually real, but also slave, for repayment of a loan.

Negotiable - A security is negotiable if it can be bought, sold, or ownership otherwise changed through endorsement or some proper transfer procedure, such as signing a corporate stock transfer book.

Security - Any of a number of paper instruments used to secure the repayment of money, including: bonds, notes, mortgages, corporate stocks, governmental loans.

Self-liquidating - A type of security that will be paid when due because it is based on an actual transaction or exchange of goods, such as a bill arising from an insured shipment of goods.

Usury - The act of charging a higher rate of interest than the law allows.

Commercial Paper:

Bill of Lading - A written commercial instrument specifying the quantity, quality, and cost of goods loaded for shipment.

Bill of Exchange - A written order directing a third party, usually overseas, that a specified sum of money be paid to a specified person, or that person's order, at a specified date. Bills of exchange were often sent in sets of 3 or 4 by different conveyances. Only the first set presented to the payer (i.e. the person on whom the bill was drawn) was valid. The payee (i.e. the person to whom the bill was payable) presented the bill to the payer for acceptance. The payer had to decide whether or not to "honor" (i.e. pay) the bill. The payer had to decide if s/he owed the drawer (i.e. maker) money, or, if not, if s/he was willing to extend credit to the maker for all or a part of the bill. If accepted, the payer paid the face of the bill at the time specified by the tenor of the bill. Bills payable "at sight" had to be paid soon after acceptance. Most bills were payable at some future date, usually between 30 and 90 days, after acceptance. Holders of bills of exchange, then, could "protest" the bill for nonacceptance and/or non-payment. This was roughly similar to bouncing a "check" today, but the penalty for "bouncing" a bill of exchange was usually a percentage of the value of the bill, not a flat fee. Also, payers were usually individuals, not banks.

Bond - A solemnly signed and sealed, written obligation for the repayment of money, often specifying the rate of interest, a repayment schedule, and a clause binding the debtor's estate to repay the money due should s/he die before the bond's fulfillment.

Check - A draft drawn on a bank. Though usually made on a printed form, checks could also be entirely epistolary (i.e. written out longhand).

Draft - Any general written instrument ordering the payment of money.

Inland draft - A bill of exchange drawn on a person or institution within the general vicinity (i.e. state, nation, region) of the maker.
Promissory Note - A written promise to pay to the order of a certain party or bearer at a certain time a specified sum of money where the maker is also the payer.

Economics

Conditions

bubble - A term used to describe the growth of prices of a certain commodity, usually paper securities or land, beyond a reasonable expectation of their "real" worth (effective yield), often caused by a market frenzy. EXAMPLE: the South Sea Bubble
deflation - Sinking prices caused by a shrinking money supply.
depression - A period of decreased production and low demand. Depressions can be inflationary or deflationary.
inflation - Rising prices caused by an expanding money supply.
liquidity crisis - A panic or "credit crunch" when it is impossible to borrow at legal rates, and difficult to borrow at usurious rates. Many individuals and firms with high ratios of illiquid assets often fail during such crises, causing a ripple of failures that can reach even healthy firms.
panic - Strictly speaking, a panic is a liquidity crisis. The term sometimes refers to both the crisis and the subsequent depression, however, as with the Panic of 1819.
speculation - The buying and selling of a commodity in anticipation of a subsequent higher price, easy liquidation, and consequent capital gain. As opposed to an investment, purchased to create a long-term revenue stream and possible long-term capital gain.
stringency - Not yet a panic, a stringency is a tightening of credit markets. Unlike a liquidity crisis, funds are still available, albeit at usurious rates, or for large pledges of security.

English Currency

farthing - 1/4th of an English penny
guinea - 1 pound 5 pence, [£1 0/ 5d]
pence (penny) - 4 farthings, or 1/12th of a shilling, [1d]
pound - 20 shillings - [1£, or 20s, or 20/]
shilling - 12 pence, or 1/20th of a pound, [1s, or /]
sterling - British money of account; standard fineness of silver .500, of gold .91666; coins or other articles of this fineness [i.e. an alloy of 92.5% silver]; THERE WAS NO SUCH THING AS A COIN CALLED A "STERLING."

Trade

Trade Goods

dealer - A trader; a person who buys and sells for a living
dry goods - Fabrics, utensils, hardware, and other inedible, imported, manufactured goods.
groceries - Foodstuffs EXAMPLES: limes, teas.
grocers - A trader of groceries or foodstuffs.
mantuamaker - A maker of fancy dresses. Often a women with her own business.
miller - A fancy sewer. Often a women with her own business.
merchant - A wholesaler; a trader who sells to retailers; an import and/or export trader.
retailer - A trader who sells directly to the consumer.
shopkeeper - A dry goods retailer.
trader - A dealer; a person who buys and sells for a living.
wet goods - Alcohol.
Means of Payment

barter - The exchange of one commodity for another.
cash - A stable, current medium of exchange
credit - The process of allowing a customer to pay for goods and services at a later date.
means of payment - The way in which debts are canceled.
"on time" - To buy on credit.
price - The abstraction of a value of a good or service into a form understood by both the buyer and seller.

Trade Balances

Balance of Payment - What most people mean when they use the term balance of trade. The aggregate sum a nation, state, or colony owes, or is owed, by a foreign country, state, or colony. America typically ran a balance of payments deficit with Great Britain, but compensated with a favorable balance of payments with the West Indies.
Balance of Trade - Often confused with the term balance of payment. The difference between the monetary value of goods imported and exported between two colonies, states, or nations. Countries that import goods of more dollar value from another nation than they export are said to have a negative or unfavorable balance of trade with that nation. Countries whose exports exceed the dollar value of their imports are said to have a positive or favorable trade balance with its trading partner.

At first glance balance of payments and balance of trade seem synonymous. Balance of trade figures, however, are not reliable indicators of debt owing to or from foreigners because of the way the trade aggregates are calculated -- by the value of the goods at the home port, not the wholesale price actually paid or received. For example, the merchants of Country A export goods valued in Country A at $100,000 to Country B. Country A's merchants then import goods from Country B worth $120,000 in Country A. Country A, then, is running a $20,000 balance of trade deficit with Country B. However, merchants of Country A did not ship $100,000 worth of goods to Country B to sell at the purchase price. They sold the goods for say $130,000. The $120,000 worth of imported goods the merchants ordered from Country B, likewise, did not cost them the $120,000, which is the value they hoped to sell the wares in Country A for, but cost only say $105,000. Country B, then, actually owes Country A $25,000 ($130,000 - $105,000). Despite its trade deficit, then, Country A actually has a favorable balance of payments with Country B.

Banknote Issue and Trade Theories

"Real Bills" theory - A banking theory that argues bankers could not issue too many banknotes if they discount only self-liquidating commercial paper, bills and drafts arising from actual transactions, and eschew accommodation notes.
"Reflux" theory - The notion that the laws of supply and demand maintain trade in a state of dynamic equilibrium "like the flux and reflux of the ocean." If, for example, prices in Country A sank, money would eventually pour into it to purchase the bargains. Soon, however, the increased demand, sinking commodity supply, and growing monetary supply would raise prices. Money would cease to flow in as soon as the price rose to eliminate the bargains. When applied to banking, "reflux" theory suggested banks could never issue too many banknotes because any "excess" or "redundant" notes would immediately be returned to the bank for redemption in specie.
Investment:

*arbitrage* - The purchase of securities on one market for immediate resale on another in order to profit from a price discrepancy.

*bond* - A solemn corporate or government obligation to repay investors' loans.

*capital* - Any form of wealth used in the creation of additional wealth.

*dividend* - A type of income stream created when an institution divides its profits for distribution to its stockholders.

*income stream* - Periodic payments arising from the investment of capital.

*investor* - An individual or institution that lends money or capital in hopes of periodic interest payments and possibly some capital gain.

*liquid* - The ability to turn a good into "cash."

*par* - Face value.

*premium* - Above par or face value.

*securities* - Any of a number of written obligations for the repayment of money with interest.

**Specific Types of Securities:**

- **Canal stock** - interest bearing bonds or "stock" issued by the State of New York to fund the building of the Grand Canal and its laterals.
- **Government** - interest bearing bonds or "stock" issued by federal, state, or local governments to individuals who lend money, goods, or services to the said government.
- **Personal** - usually bonds and mortgages, but also collateralized promissory notes.
- **U.S. 6%s** - United States securities bearing 6% interest per annum.
- **U.S. 3%s** - United States securities bearing 3% interest per annum.
- **U.S. deferreds** - United States securities, like 6%s and 3%s created by Hamilton's funding of the national debt, bearing no interest until 1800.

*stock* - 1) obsolete term for a government bond 2) a share of a corporation or association.

**Legal Terms:**

*fieri facias* - A writ of execution commanding a sheriff to seize the property of a debtor to fulfill a judgment against him/her.

*lex mercatoria* - The "law merchant"; that set of mercantile customs and laws dictating proper procedures and punishments to solve disputes or torts between merchants of different nations or cities.

**Monetary Terminology:**

*account money* - A standard of value; a debit or credit in an account book; money that exists not so much as a physical form but as a relation between men.

*bank notes* - Promissory notes issued by a bank redeemable to the bearer in specie on demand.

*bills of credit* - Promissory notes issued by a government, usually payable for taxes or other debts owing to the government.

*bullion* - Uncoined precious metals such as gold and silver.

*Continents* - Congress' bills of credit issued during the Revolutionary War.

*counterfeit* - Fake, falsified money. Both coins and paper could be counterfeit.

*currency* - Money that passes "current" i.e. that is actually in use as a medium of exchange.

*depreciation* - When commodities' prices rise only when a specific type of money is tendered in payment.

*exchange rate* - The price differential between two moneys of account or standards of value.

*facility notes* - A type of bank note payable in nothing but taken by the bank of issue in payment of debts due the bank.

*hard money* - Another term for *specie* -- gold, silver, and copper coins.

*inflation* - When commodities' prices rise no matter the type of money tendered in payment.
money - Anything intended to serve as a medium of exchange.

money of account - see account money above

paper money - Broadly, and later, money made out of paper; early, "paper money" referred only to bills of
credit, because, unlike bank notes, they were not redeemable in specie.

postnotes - A type of bank note payable only after the date specified on the note. Though similar to a
postdated check, and often made out to a specific person, postnotes sometimes were bearer instruments
like normal banknotes. They were used for making remittances by mail because theoretically payment
could be stopped if lost or stolen. Banks sometimes abused this noninterest bearing promissory note by
issuing large amounts simply to put off the day of redemption.

specie - Gold, silver, and sometimes copper coins.

Examples of Specie:
Portuguese - pistoles
Spanish - pieces of eight (i.e. dollars)
United States - eagles

velocity - The speed at which money travels through the economy; the number of remittances a particular
piece of money makes over a given amount of time.

Real Estate Terminology:

fee simple - A type of land tenure wherein the purchaser owns the land legally and absolutely and can
grant it to heirs.

ground rents - A way of purchasing land in fee by making small annual payments forever.

quit rents - A small annual rent some landowners were bound to pay to the Crown, province, or
proprietor; a cash vestige of feudal duties that evolved into a type of land tax.