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**AN ANALYSIS OF THE BALANCE
SHEET OF THE FIRST BANK OF
THE UNITED STATES**

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Johns Hopkins Institute for Applied Economics,
Global Health, and Study of Business Enterprise



An Analysis of the Balance Sheet of the First Bank of the United States

By Adil Javat

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About the Series

The Studies in Applied Economics series is under the general direction of Professor Steve H. Hanke, Co-Director of the Institute for Applied Economics, Global Health and Study of Business Enterprise (hanke@jhu.edu). The authors are mainly students at The Johns Hopkins University in Baltimore. Some performed their work as summer research assistants at the Institute.

About the Author

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Abstract

The First Bank of the United States was established in 1791 and was chartered for 20 years. Analysis of its balance sheet (digitized for the first time in an accompanying spreadsheet workbook) allows us to paint a picture of the landscape of the economy and significant financial events that occurred during its existence. This paper shows how the composition of the bank's assets and liabilities changed over time and how their geographical distribution changed.

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JEL codes: E58, N21.

Introduction

The First Bank of the United States (BUS) was established in 1791 by an act of the U.S. Congress for a term of 20 years and was in operation until 1811, after which Congress did not renew its charter. The Bank had its headquarters in Philadelphia, where its predecessor the Bank of North America had been based (see the appendix), and was the only bank that had had during its lifetime a direct relation to the federal government. Philadelphia was the capital of the United States from 1790 to 1800, and moreover was the most populous city in the country after New York.

Additional branches opened in Baltimore, Boston, Charleston and New York in 1792 and later in Norfolk (1800), Savannah (1802), Washington (1802) and New Orleans (1805). Geographically dispersed branches afforded more general accommodation and lessened the danger of a run on the bank arising from localized declines in assets, such as property crashes. But mismanagement of any branch, whose officers were necessarily entrusted with considerable discretion because of the slow transportation and communications of the time, might endanger the interests of the whole system, as the branches were interdependent to an extent.

Alexander Hamilton, originator of the Bank and first Secretary of the U.S. Treasury, claimed many advantages for the First Bank, such as “the augmentation of the active or productive capital of a country.” He meant by this not the creation of additional capital, but more effective utilization of capital, by which scattered and otherwise idle amounts could be concentrated and made to serve the uses of business. This would “quicken” the circulation of money, as the Bank could channel capital from savers to investors. Without notes, coin had to be remitted from place to place with “trouble, delay, expense, and risk.” Bank notes, however, could be transmitted by post or other convenient conveyance. Hamilton laid great stress upon the advantage of a bank in making loans to the Government, especially in sudden emergencies, and in facilitating the payment of taxes.¹ (When capitalized, “Government” here refers to the federal government.)

The main opposition to the bank arose from concern that the Constitution of the United States conveyed no authority to form a bank or any other kind of corporation, and that by chartering one, the federal government would be disregarding the limitations of its powers and interfering with the rights of the states.²

The bill for the charter of a national bank passed the Senate on January 20, 1791 with minor adjustments. It was later passed on February 8, 1791 by a 39 to 19 vote in the House of Representatives. President George Washington received critical comments on the constitutionality of the bank from Secretary of State Thomas Jefferson and Attorney General Edmund Randolph. Hamilton replied with a memorandum that became a classic of the “broad

¹ Holdsworth and Dewey (1910:14, 36)

² Hammond (1957:115)

construction” view of the powers of the Constitution. Hamilton’s reasoning convinced Washington, who signed the bill on February 25.

There was to be \$10 million of capital issued (equivalent of roughly \$260 million in today’s real prices)³, which was approximately 5 percent of GDP in 1791. The capital was divided into 25,000 shares of \$400 each, of which four-fifths was for public subscription and the rest for the government. One-fourth of all subscriptions, private and corporate, was to be paid in specie (gold and silver), and three-fourths in United States securities (then called “stock”) bearing 6 per cent interest, payable in four equal semiannual payments.⁴ This was done so Government bond prices would be supported as individuals bought securities to turn into the Bank. Next, the Bank would issue paper notes, all notionally backed 100 percent by specie. (“Notionally” backed 100 percent because specie was not held exclusively as a specially segregated reserve against notes, but was available to meet all demands for payment against the Bank.) These notes, in turn, would become the nation’s principal currency. In this fashion, the banking and funding system would work together to produce growth. Prices of receipts for the right to buy stock (i.e., not the stock itself) known as scripts, were driven from an initial public offering (IPO) price of \$25 per share to the unsustainable height of over \$300, and then tumbled to \$150 within days, causing alarm in markets. Congress realized that strong interest in the IPO existed and therefore a March 2, 1791 supplemental bill reduced the maximum number of shares any one individual could tender for from 1,000 to 30, with the same payment structure as beforehand.⁵

For the \$2 million of capital that the Government bought, the United States Treasurer drew bills on the American commissioners in Amsterdam for the amount of the subscription. These bills were bought by the bank, and warrants on the Bank in favor of the Treasurer placed the proceeds in the Treasury. Warrants were then issued on the Treasury in favor of the bank and the amount of the subscription was accounted for as paid. Simultaneously with this transaction, the bank lent \$2 million to the Government, which sum was paid by the redelivery of the Amsterdam bills. The Government paid for its stock in bills of exchange on Amsterdam, then it borrowed these bills and gave its note for \$2 million, payable in ten equal annual installments of \$200,000 each, with interest at 6 per cent.

On December 12, 1791, ten months after receiving its charter, the bank opened for the regular transaction of business. At the end of the first year, the bank had lent the Government over \$2.5 million. By January 31, 1795, when Hamilton resigned, the total loan amounted to \$4.7 million. This indebtedness increased under Hamilton’s successor as Secretary of the Treasury, Oliver Wolcott, Jr., until it finally amounted to \$6.2 million at the close of the year 1795. Within four years the federal government had borrowed nearly two-thirds of the entire capital of the bank, amounting to roughly a third of the Bank’s total assets and roughly 15 percent of domestic U.S. public debt. This concentration of lending crippled the bank’s services to commerce and manufactures and made it difficult to “facilitate the financial operations of the

³ Johnston and Williamson (2016)

⁴ Holdsworth and Dewey (1910:19)

⁵ Cowen (2000:12, 35-37)

Government by temporary loans." The bank needed more available funds to serve more generally the interests of commercial and manufacturing customers, and also to be in a position to aid the Government by temporary loans. The president of the Bank at the time, Thomas Wiling, therefore requested that the United States should extinguish the loans already due, as well as provide for those maturing during the year 1796. The bank's advances amounted to \$6 million, of which \$4.4 million was due or payable during the year 1796.

Jonathan Fisk, a Republican representative from New York, estimated that the exports of the country, which when the bank was established amounted to \$18 million, had risen by 1804 to \$76 million, an increase due in large part to the increased activity of capital created and promoted by the Bank of the United States. The bulk of the country's trade was conducted on a paper basis, specie having largely disappeared from hand-to-hand circulation.⁶

Being the main government depository and having offices in the principal commercial cities, the Bank of the United States was the general creditor of the other, state-chartered banks in the financial system. It had the account of the largest single transactor in the economy – the federal government. The receipts of the Government were mostly in the form of notes of state banks, and these notes being deposited in the Bank of the United States, it could not help being their creditor. The more any state bank lent beyond what the public was willing to hold, the more it went into debt. The larger the volume of notes and checks outstanding against it, the greater the pressure to which it became subjected.⁷ A number of state-chartered banks and their political supporters did not want the close check on the expansion of their credit that the Bank of the United States imposed, and were therefore critical of the Bank.

In 1811 the charter of the Bank of the United States came up for renewal. Secretary of the Treasury Albert Gallatin favored renewal, but President James Madison and other members of the Democratic-Republican party adhered to the critical view of the bank that Thomas Jefferson had voiced 20 years earlier. Additionally, the increasing foreign ownership of Bank's shares generated opposition to the Bank recharter. In 1798 foreigners held roughly half of the shares outstanding; in 1809 their share had risen to over 70 percent. In the U.S. Senate, the vote for renewal was tied. Vice President George Clinton broke the tie and voted against renewal. The bank closed its doors for business on the afternoon of March 3, 1811, and trustees were appointed to liquidate its affairs.

Balance Sheet Composition

The original data for the balance sheet of the First Bank were obtained from James O. Wettereau's book *Statistical Records of the First Bank of The United States*. The Bank's charter required it to submit a financial statement to the Treasury as often as weekly if requested. Unfortunately, a fire at the Treasury building in 1833 destroyed many of the primary records of the institution. In the late 19th century John Jay Knox, Comptroller of the Currency, made a

⁶ Holdsworth and Dewey (1910:31, 32, 44, 45, 87)

⁷ Hammond (1957:198)

search in the Treasury archives for surviving records of the Bank and found that the existing records gave no evidence that it had ever submitted formal reports to the Treasury. Wettereau discovered much primary source material in the Oliver Wolcott Papers at the Connecticut Historical Society and in the University of Amsterdam Library. The Bank ledgers, along with the records found at the Connecticut Historical Society, were published posthumously under Wettereau's name by Professor Stuart Bruchey of Columbia University. Bruchey published the balance sheets in 1985; this relatively recent publishing date explains why many earlier economic historians did not analyze those records.⁸ *There are no data available from 1802-1808.* Due to the nature of the time period, there is limited statistical material available on the economic events that occurred.

Simplified Balance Sheet of the First Bank of the United States

Assets	Liabilities
Cash on hand: Specie	Foreign liabilities (Amsterdam loan and bills)
Foreign assets (other than specie)	Notes in circulation
Owed by state banks or State of New York	Deposits – United States government
Owed by US government (debt, loans, cash advances)	Other liabilities to US government
Bills and notes discounted	Deposits – State of New York
Other bills and bills of exchange	Deposits - Individuals
Prepaid expenses	Due to state banks
Intra-bank debits and note holdings	Unpaid expenses
Other assets	Intra-bank credits
	Other liabilities
	Capital
	Contingent fund

To better analyze the balance sheet, it is consolidated by rearranging the original data into a simplified format, shown above. Many of the components are in an inconsistent form, so the simplified balance sheet has been standardized as best as possible. The original balance sheet categories that appeared in each asset and liability category of the standardized balance sheet are as follows:

Correspondence between simplified and original asset categories

- Cash on hand: Specie: without alteration from original.
- Foreign assets: remitted to foreign agents (unspecified), foreign transactions, foreign transaction and loss on exchange, miscellaneous foreign transactions, amounts remitted to Willinks (foreign agents).
- Owed by state banks or State of New York: due from state banks, state banks notes, New York paper currency, Bank notes of other banks.
- Owed by U.S. government (debt, loans, cash advances): certificates of U.S. funded debt, loans to the United States, cash advanced to government, due from U.S. for “stock,” 6

⁸ Cowen (2000:12)

per cent securities and advances to government, government funded debt, government temporary loans.

- Bills and notes discounted: without alteration from original.
- Other bills and bills of exchange: government bills (on hand or sold on credit), bills of exchange.
- Prepaid expenses: expenses paid.
- Intra-bank debits and note holdings: intra-bank debits, intra-bank notes.
- Other assets: real estate and banking houses, loss on exchange (Philadelphia head office), notes receivable on interest for funded stock sold, etc.

Correspondence between simplified and original liability categories

- Foreign liabilities (Amsterdam loan and bills): Amsterdam loans, Amsterdam bills, foreign transactions, due to foreign agents.
- Notes in circulation: without alteration from original.
- Deposits – United States government: without alteration from original.
- Other liabilities to U.S. government: United States for bank stock sold, sales of bank stock on account of government.
- Deposits – State of New York: without alteration from original.
- Deposits – individuals: without alteration from original.
- Due to state banks: without alteration from original.
- Unpaid expenses: payments on shares, balance of dividend payable to government, balance of dividend due to the government, dividends unpaid, unpaid dividends (payable at Boston).
- Intra-bank credits: intra-bank credits, banks debt, balance of outstanding drafts on bank and branches.
- Other liabilities: discount received, interest on public debt, net profits of Boston Office, balance of cashier's account, etc.
- Capital: capital stock, capital stock (not including certificates).
- Contingent fund: without alteration from original.

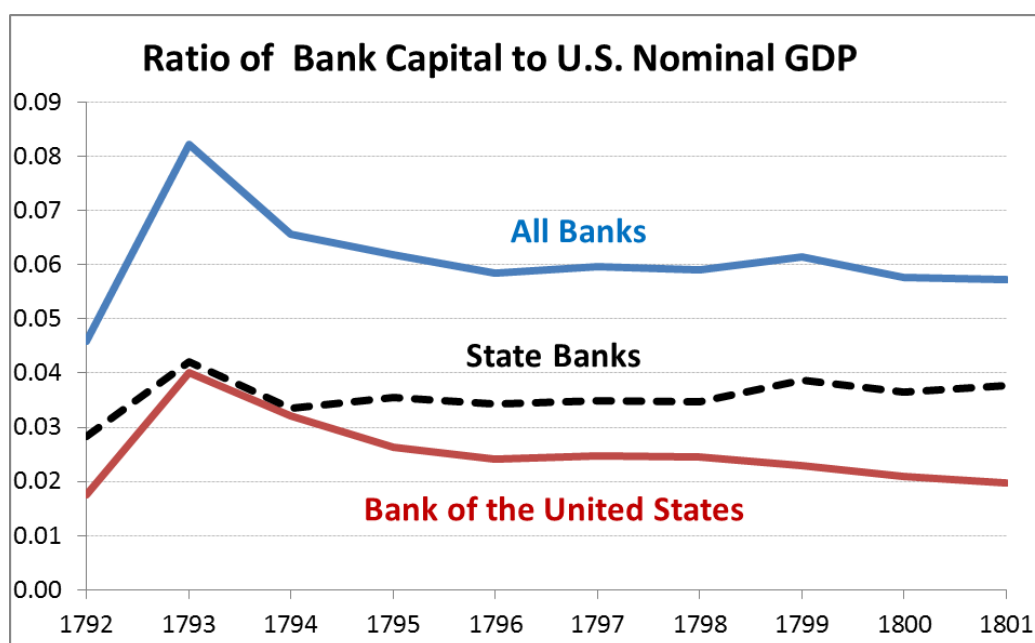
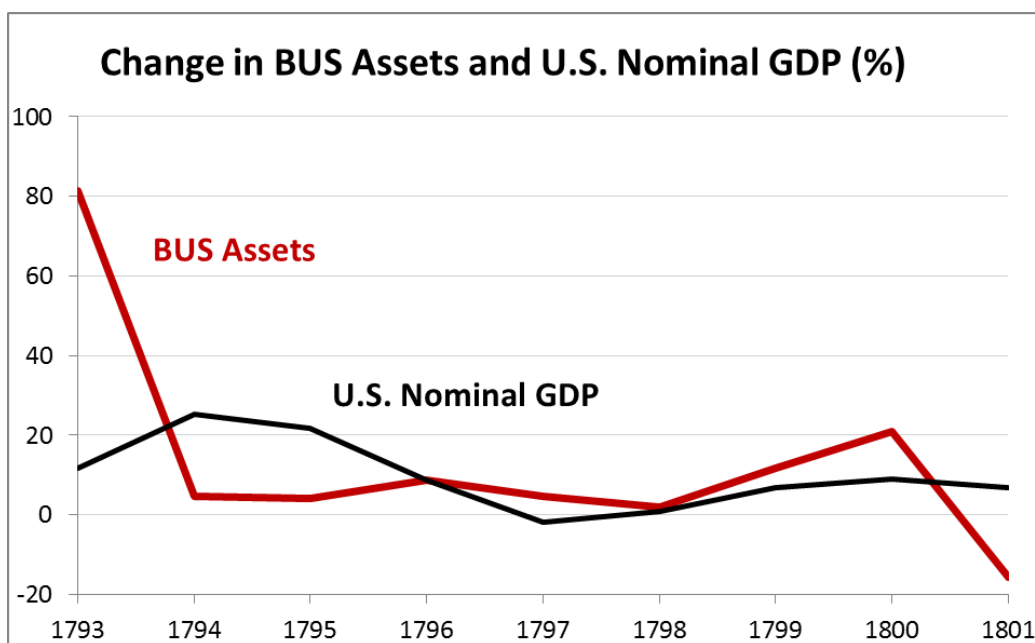
An accompanying spreadsheet workbook shows the original balance sheets, the simplified balance sheet, and other data used in this paper.

The First Bank of the United States in the U.S. Economy

Let us now proceed to some analysis using the balance sheet data to show the place of the Bank of the United States in the U.S. economy and to describe the Bank's internal workings.

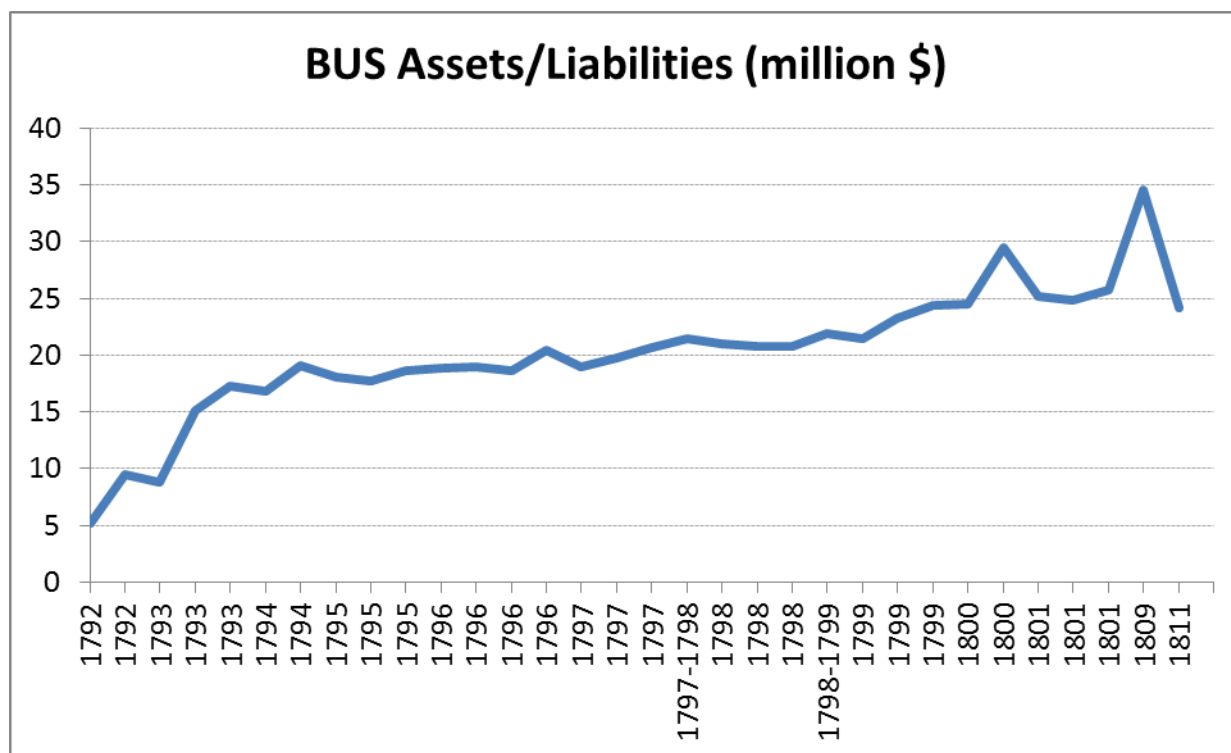
The first chart compares the growth rate of the First Bank's assets (and liabilities) to that of national income. Initially, there is a drastic increase in Bank assets of roughly 80 percent, attributable to the fact that the First Bank had not acquired all of its funds from selling shares until mid-1793. The high ratio of BUS capital to GDP in the second graph confirms this notion. From 1797-1800, the Bank of the United States grew faster than the economy, which even

contracted in 1797 by 1.94 percent. As statistics on the assets of the banking system as a whole do not seem to exist, the amount of authorized bank capital is used as a rough proxy for bank performance versus GDP. Total capital did not increase as fast as GDP, but the total capital to GDP ratio hovered around 0.06 from 1795 to 1801. State banks' capital, however, increased faster than GDP as the number of bank increased from 12 to 32 and authorized capital stock increased three times over the period shown.



The BUS Balance Sheet: Assets

Now let us examine the balance sheet with a view to the inner workings of the Bank of the United States, considering assets first, then liabilities.



The First Bank of the United States changed its focus over its lifetime. From 1793 to 1796, a high proportion of the assets (an average of about 50 percent of total assets across the three years) involved government transactions. Until 1795, Alexander Hamilton was Secretary of the Treasury and had a comprehensive program to fund the national debt. The idea was to suspend principal repayments more or less indefinitely except for token retirements designed to create favorable publicity and to enhance thereby the reputation, not to mention the market prices, of U.S. public securities. The essence of Hamilton's fiscal program was to hold federal taxes to the minimum level required to pay the annual interest on the government debt, plus all military and other incidental expenses.⁹ After Hamilton's departure, the Bank was not so focused on keeping this perpetual debt cycle going and felt it was necessary that the government repay its obligations. Naturally, with falling government debt there was more capital available for the commercial sector and so the proportion of bills and notes discounted increased. Commercial customers accounted for somewhere around 40 percent of earning assets in 1793, more than 55 percent in 1799 and more than 85 percent by 1809. Between 1794 and 1801, interest earnings from government loans dropped by 40 percent. During those same seven years, loans

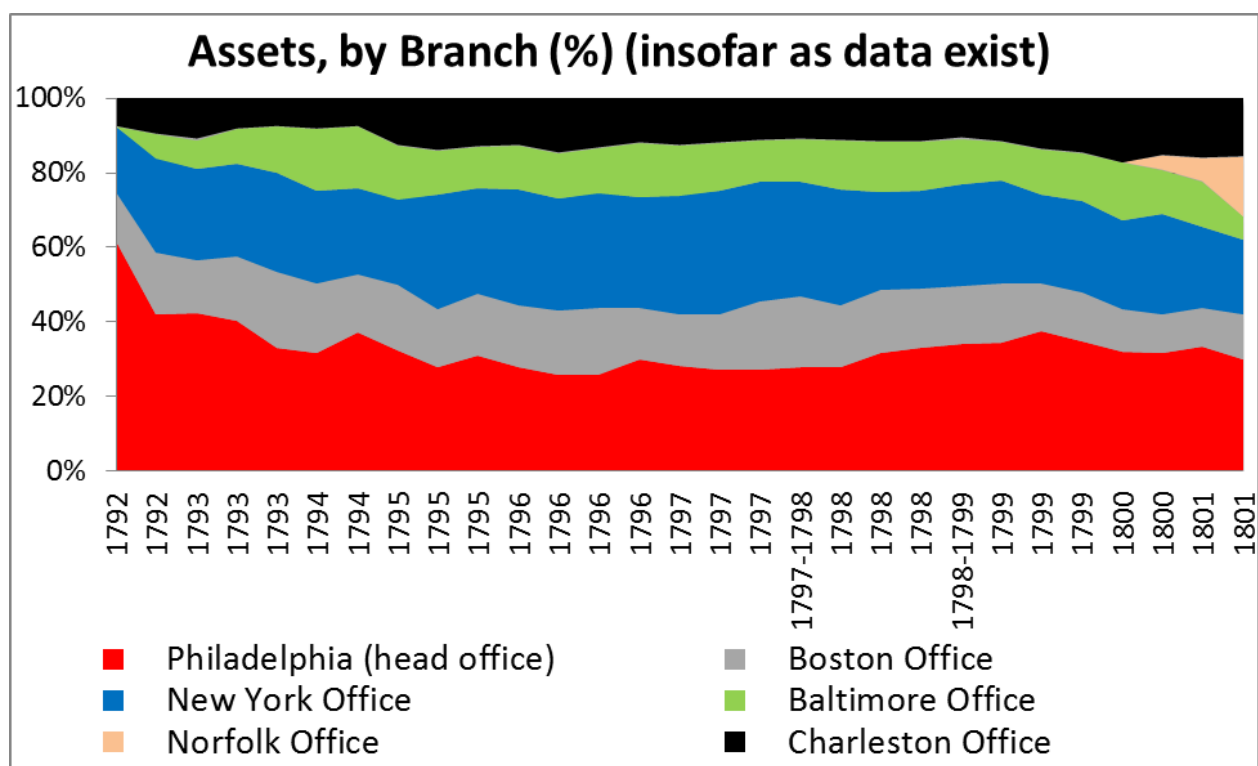
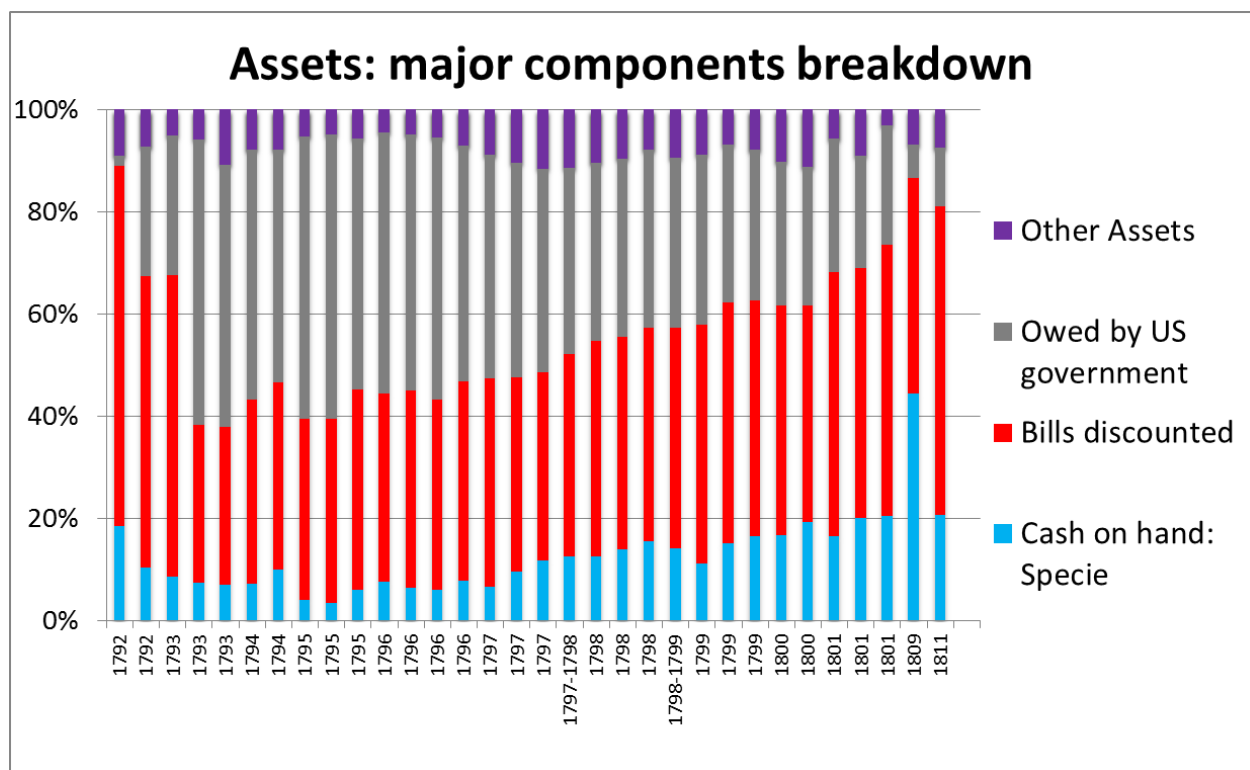
⁹ Perkins (1994:217, 260)

outstanding to merchants and landowners with solid collateral or reliable endorsers more than doubled, from \$6.4 million to \$13.3 million. Under President Thomas Jefferson (1801-1809) and his Treasury secretary, Albert Gallatin, the government borrowed only rarely from the Bank. In 1809 the only federal obligations listed on the Bank's balance sheet were \$2.2 million in long-term bonds.¹⁰ The discount to specie ratio was 8.56 in 1794, which was above the initial limit of discounts to specie of 5:1 established by the Bank's board. This is an indication of the leverage and instability that the Bank had during that year. It could be expected that the trend exhibited in the latter half of the 1790s would continue through for the next decade and in November 1809, specie accounted for almost half of all Bank assets. The Bank built up specie reserves in preparation for liquidation, which occurred in 1811.

The geographical composition of assets was constantly changing, too. Initially, Philadelphia (the head office) had the majority of the Bank's total assets. In 1793, the Bank of Pennsylvania was chartered with \$3 million of authorized capital, significantly more than any other state bank at the time. Competition for loans to merchants meant that bills and notes discounted by the head office fell from \$2,335,918.95 at the close of 1792 to \$1,737,719.34 in mid-1793. Philadelphia's assets and capital relative to the other branches fell, arguably due to constant pressures from Republicans like James Madison and Thomas Jefferson to spread the benefits of the Bank. The decentralization of capital was evident in that from the initial allocation of \$1.28 million in 1792, aggregate branch capital climbed to \$3.85 million by 1800, with nearly half of that figure assigned to the New York office.¹¹ New York therefore had more funds available for loans, than any other branch as its capital rose more than three-fold since its inauguration. The Norfolk branch opened in 1800 and contained 16 percent of the total assets after just a year. It is understandable that the Baltimore branch saw a drastic fall in assets during this same time, because both branches serviced trade in Chesapeake Bay.

¹⁰ Perkins (1994:255, 256, 260)

¹¹ Perkins (1994:263)

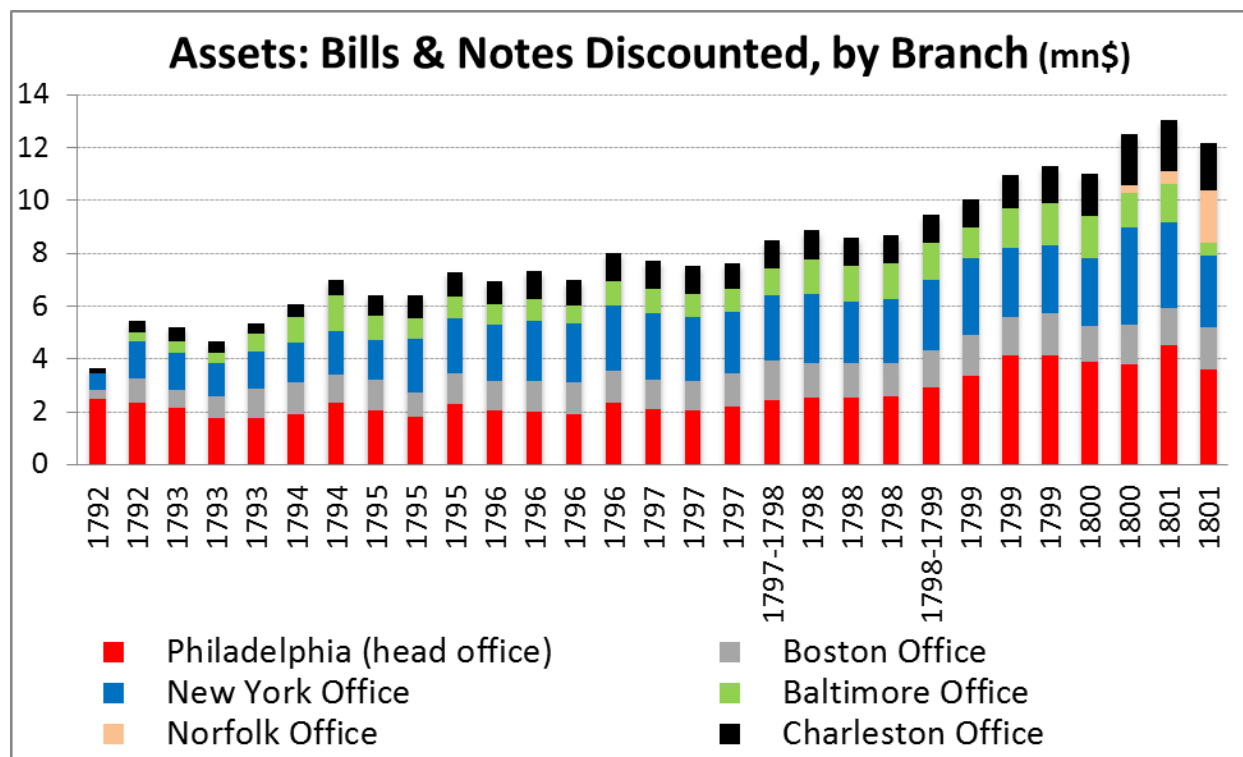
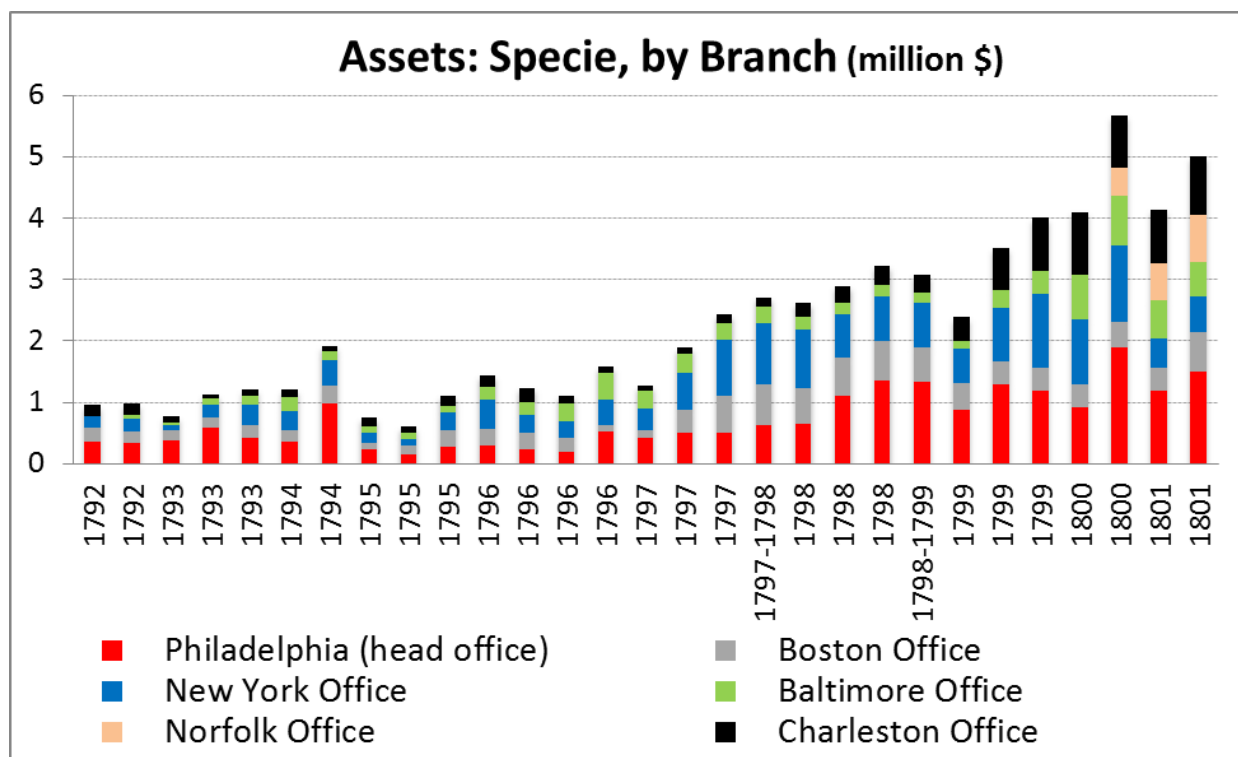


To get a closer look at liquidity, it is necessary to analyze the specie available at the Bank's branches. Total specie in the Bank was quite constant until April 1797, when it started to increase. The increase in specie can be attributed to the Federal Government paying back its loans from the bank. Over \$1 million was paid back in the fourth quarter of 1796, and this led to a jump in specie at the time. During some years, the New York branch had more cash on hand than the head office in Philadelphia. The two cities were locked in rivalry to be the financial center of the country. The Bank of the United States, one-fifth of whose capital should have been held in specie, did not in fact hold that much, according to the records, until 1797. After 1798 its specie was about half the amount of its total capital, more or less.

Because of slowness of transportation and communications at the time, branches could not easily be subjected to frequent oversight by the head office. They operated in partly autonomous fashion, being allocated a specified amount of the capital of the whole bank and being expected to tailor their lending and other activities to avoid overextending their own capital and running out of their own specie. The specie in Charleston increased in later years as the amount of capital allocated to the branch doubled between August 1795 and April 1800, to \$600,000.

Discounts, or loans, were often made against trade, as a merchant, expecting to receive payment for goods shipped, would present an IOU drawn on the buyer of his goods to the Bank. The Bank would then "discount" the paper. For instance, a merchant might go to the Bank with a thirty-day note in the amount of \$100 and be offered a 6 percent discount rate; if accepted, he received \$99.52, or the present value, that day.¹² The initial limit set by the board for discounts to specie in the branches was a ratio of 5:1. This value was only ever breached significantly during the end of 1794. The Baltimore branch had a reduction in discounts in 1795 due to the charter of the Bank of Baltimore. Bank of Maryland chartered this bank in order to enlarge the capital it could have. The total value of loans increased at a steady rate until 1799, when it began to increase at a faster rate as significantly more capital was available for the commercial loans, when government deposits began to increase drastically.

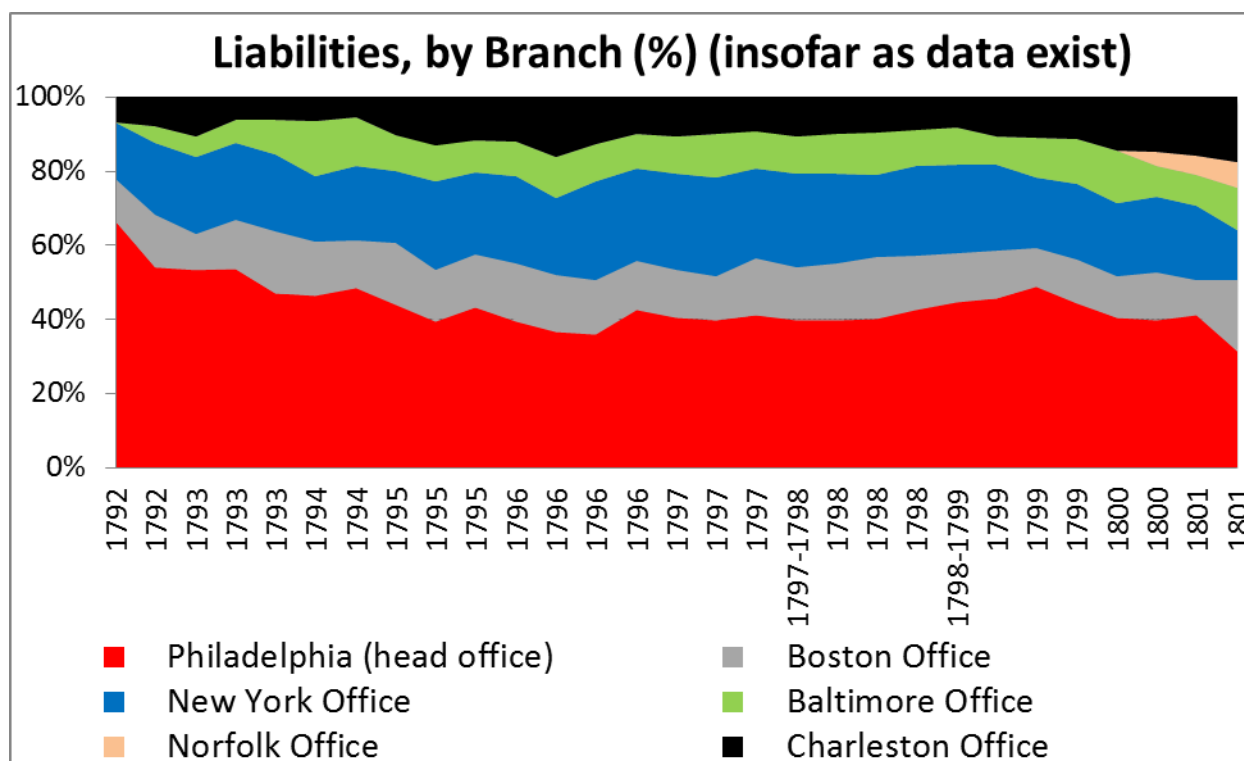
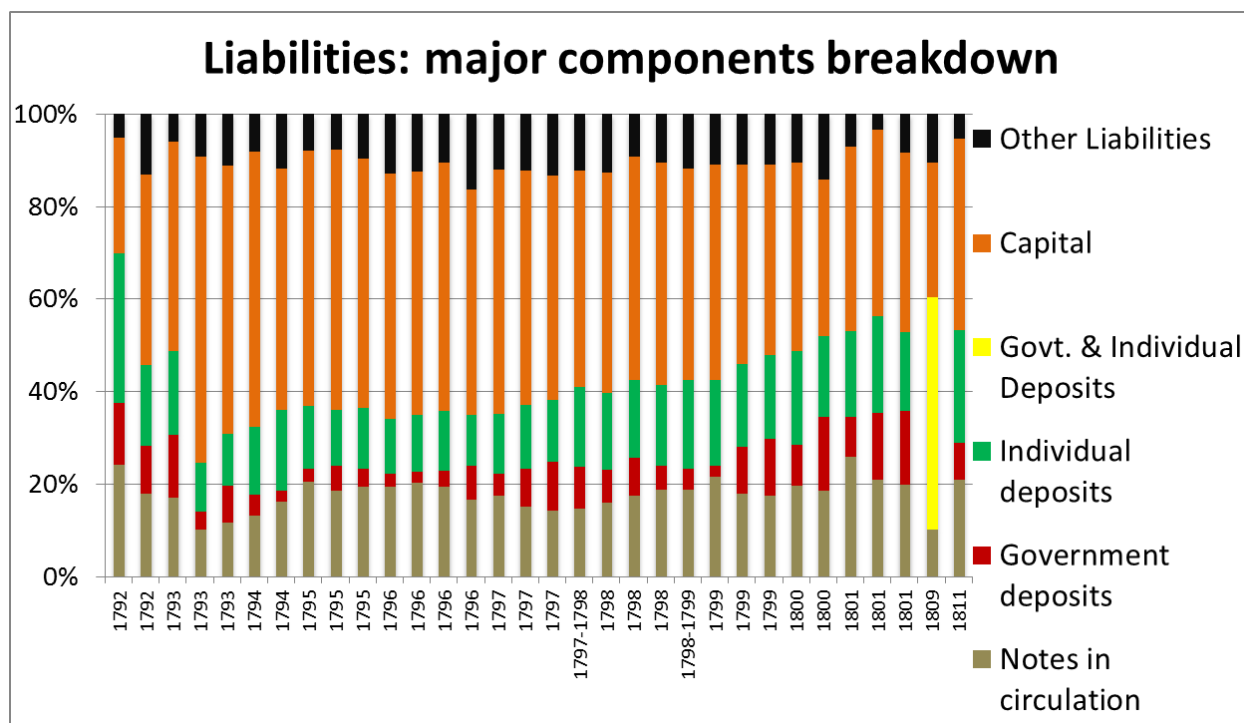
¹² Cowen (2000:59)



The BUS Balance Sheet: Liabilities

The Bank had a capitalized limit of \$10 million; however, these funds were not attained immediately. In March 1793, only 40 percent of the total capital was available to the bank; almost all the capital had been presented just three months after. Barring the first three periods (when the capital was not maximized), a noticeable trend can be seen in the government deposits. To keep the anti-Federalists somewhat content, Hamilton promised them low federal taxes in exchange for agreement on his perpetual government debt-funding program. Once Hamilton resigned, the Republicans' determination to reduce the national debt, and a less troublesome economy, led to the government receiving more revenue. For the Bank, individual deposits composed a much higher proportion of assets than did government deposits; at some points the ratio of individual to government deposits was over 7. This feature highlights that although the Bank displayed central bank-like characteristics (such as acting as a lender of last resort and at times forgiving its profit motive willingly), it was also an important cog in the commercial sector. The deposits of individuals correlate with the notes in circulation, as one would expect; more savings means more loans. As stated in the introduction, one of the propositions for the Bank was to provide notes as an alternative to coin to increase the efficiency of money. Through giving out loans, the First Bank attempted to reduce the economy's dependence on coin and improve stability through the issuance of notes.

A comparison of assets by branch with liabilities by branch gives insight into the net position of each office. The head office has a noticeably larger proportion of liabilities than assets, with the former never going below 40 percent of the Bank-wide total. This suggests that the head office had to borrow money from other branches to fund federal spending. The Boston office had a widening of liabilities in 1801, which is largely a result of sizeable government deposits (see the "Government deposits by branch" graph). The Norfolk branch had a more than double the amount of resources than what it owed, possibly since capital was given to the newly established branch for nothing in return. The assets and liabilities for each office are, for the most part, equal.



Bank notes (paper currency) most commonly entered circulation as part of the loan process rather than through the purchase of U.S. Government securities. At first the Bank established the rule of making notes payable only at the places where they were issued, which is why so few notes were in circulation during the first couple of years. Subsequently, it undertook to receive them in Philadelphia or at any branch. This rule protected the bank from the effects of a sudden demand for payment, at any of its offices, of a large accumulation of its bills.¹³ In the earlier years, the Philadelphia branch issued a large portion of the total notes in circulation. In 1800, Charleston had a quick increase in notes circulating due to its rapid growth in trade activity.

The Boston and Charleston branches had noticeably large increases in individual deposits in November 1801, while deposits in the New York branch fell drastically. Until 1799, the Bank of New York and the local office of the Bank of the United States were the only banks in the city (which at the time consisted only of the lower tip of Manhattan). During that year, the Manhattan Company established itself with \$2 million in capital, making it the second biggest state bank, after the Bank of Pennsylvania. As a result, competition may have caused movement of deposits from the New York branch to the Bank of the Manhattan Company. It is worth noting that the individual deposits and discounts correlate, as more deposits means a greater pool of funds available to loan.

As a graph below shows, deposits of individuals generally increased steadily, with a minimum of \$1,593,325.66 in mid-1793 and a maximum of \$5,240,000.00 in November 1801. In 1809, total deposits in the Bank were \$17,323,477, suggesting that government deposits increased rapidly (assuming that individual deposits grew at a steady and constant rate). However, it is likely that individual deposits increased at a slower rate after 1801, as the number of state banks increased from 32 in 1801 to 117 by the end of the charter. Individuals therefore had more options for placing their deposits as the years passed, whereas the government was committed to keeping its deposits at the Bank of the United States.

One of the Bank's main mandates was to collect the government's tax revenues, so that they could be stored in federal deposit accounts. A prime source of federal tax monies was a tariff on imported merchandise and tonnage. The main aim was to generate revenues equal to about 10 percent of import values. The rates initially enacted failed to generate sufficient funds for the Government to pay the interest on the outstanding debt and other incidentals, however. Customs receipts were so low in 1791 and 1792 that Hamilton convinced Congress to approve a slight increase in overall rates. In 1793 tariff revenues jumped by a quarter, up to \$4.3 million.¹⁴ In 1798 and mid-way through 1799, there was sharp fall in customs revenues after a relatively strong performance in 1797, when customs duties had grown about 15 percent. The figure fell from \$7,549,650 in 1797 to \$6,610,449 almost two years later. Government deposits fell by three-quarters during this period, to \$530,710, as can be seen in the graph.¹⁵

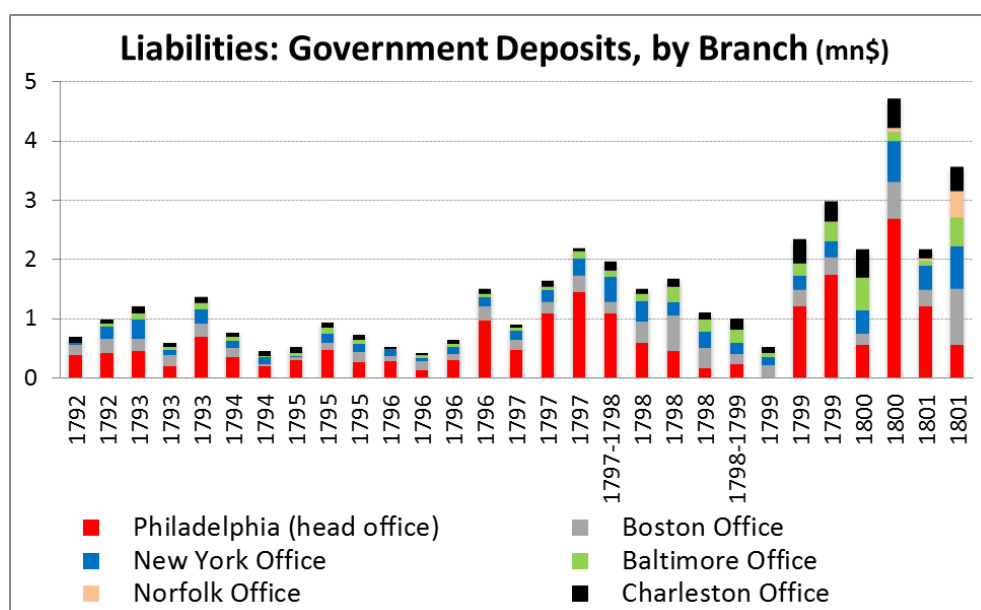
¹³ Holdsworth and Davis Dewey (1910:50)

¹⁴ Perkins (1994:232, 233)

¹⁵ Griswald (1800: 666, 667)

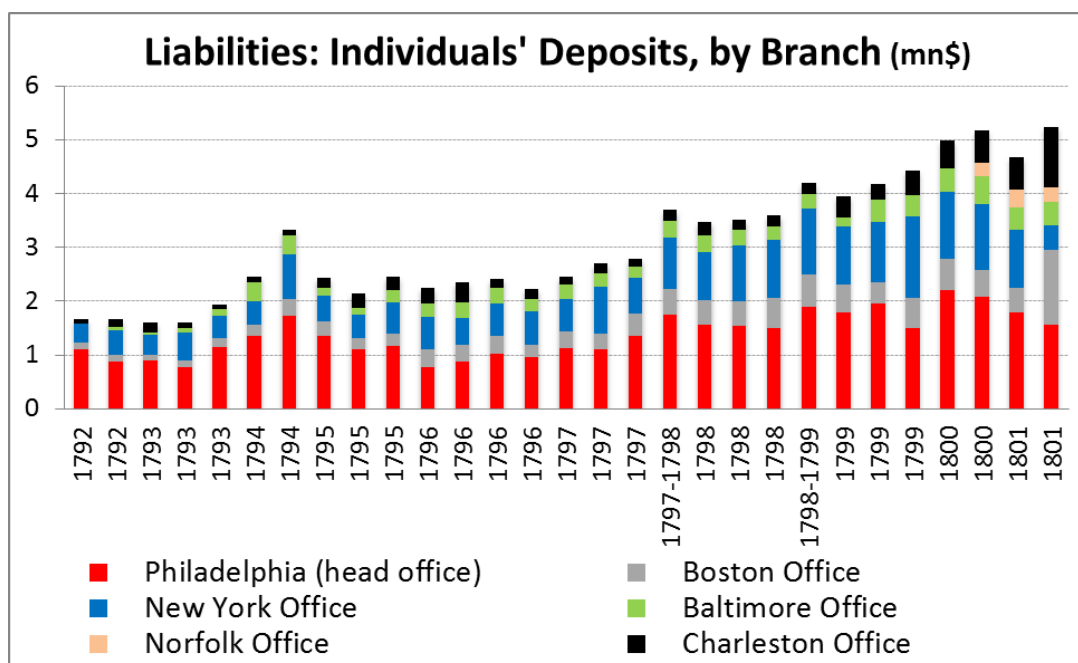
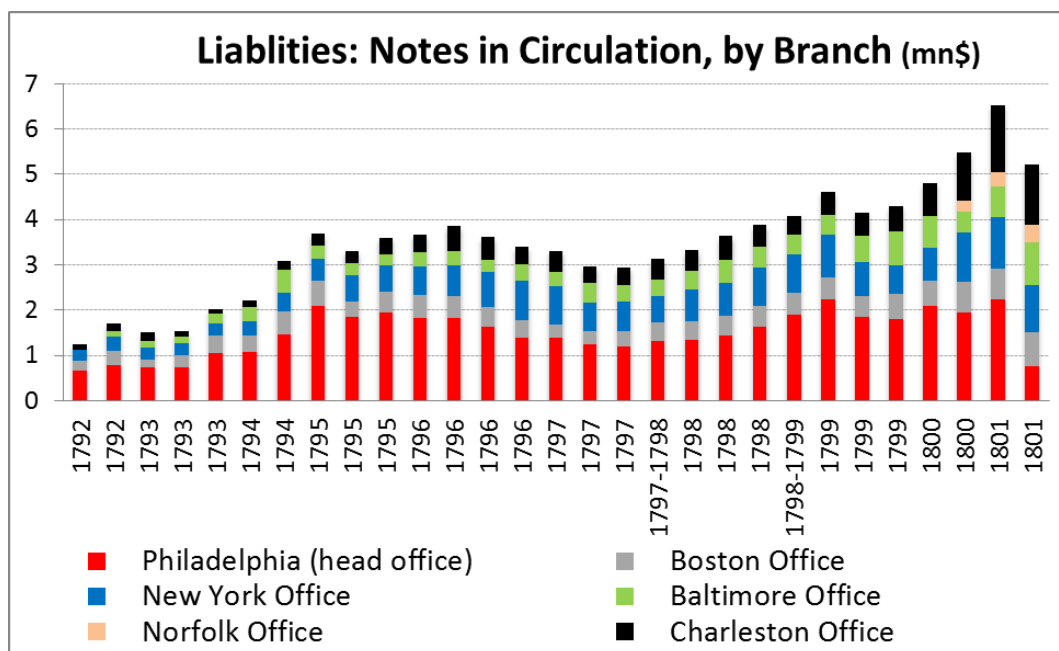
However, the pressure to refinance loans put pressure on the Treasury to issue more bonds. In 1799, the Treasury Secretary, Oliver Wolcott, Jr., sold \$5 million in bonds to private parties. Wolcott had hoped to place the bonds at 6 percent, but after lengthy negotiations with potential investors, he reluctantly agreed to raise the nominal rate to 8 percent to float the entire issue at par.¹⁶ Receipts for the government increased significantly that year, causing the government deposits to spike. The year 1800 saw a great improvement in trade after the years of declining trade inflows. Customs receipts increased by over a third, from \$6.6 million to a little over \$9 million. Total government deposits increased by roughly the same proportion, from \$2,985,093 in December 1799 to \$4,703,145 in November 1800. In 1801, Thomas Jefferson's appointment as President and Albert Gallatin's position as Secretary of the Treasury would have caused government deposits to be redistributed more evenly between branches, given their Democratic-Republican viewpoints.

The New York branch had a rise in government deposits in early 1793, which correlates with a sharp rise in customs revenues during the same period. Duties rose most at this branch (both in absolute and relative terms), with over \$300,000 more in customs receipts in 1793 compared to 1792. In the period from 1797 to 1799, the district of Philadelphia saw almost a 50 percent reduction in customs revenue from \$1,916,298 in the former year to \$1,027,788 in the latter year. In 1799, Charleston had a large increase in customs receipts, which increased by 80 percent. Government deposits in the Charleston branch more than doubled during this period to \$427,847 (December). By 1796, New York emerged as the biggest income source and the gap with the previously incumbent customs receipts leader, Philadelphia, increased. This impact is not reflected in the government deposits of the Bank, since Philadelphia was the head office and so proceeds from bonds issued by Wolcott would end up there primarily.¹⁷



¹⁶ Perkins (1994:328)

¹⁷ Griswald (1800: 666,667)



The Panic of 1792

Having given a general view of the Bank's assets and liabilities over its lifetime, it is also worth discussing a few specific episodes. In the first few years of the Bank of the United States the country experienced two significant economic upheavals. The Bank made a large impression on the economy within months of opening its doors in late 1791. Initially it flooded the market with its notes and credits. The initial credit expansion had helped push an already rising securities market to new highs. Then, in February 1792, it sharply reversed course and curtailed credit to avoid becoming overextended. The curtailment of credit caused a market crash, the first in U.S. history, by forcing speculators to sell securities.

The Philadelphia office was restricting credit in early or mid-February, which is accredited as the start of the Panic. The bank's liquidity drain was the cause for the stock market's slide in February, which led buyers of government securities to feel the pinch. The subsequent liquidation of securities by market participants, in response to the drain of credit by the bank, caused those with the most interest in higher prices to feel the most pain. One of the nation's most prominent bankers, William Duer, had bought securities with borrowed money. Despite his attempts to maintain the bull market in February with more purchases, he was wounded by the Bank's credit curtailment and market selloff. His failure triggered a snowball effect on other security holders.

This situation arose because the Philadelphia office discounted without bounds at first, thinking that their notes would circulate as cash over all the United States. Discovering their error, they refused without mercy applications for renewals, which been the means of bringing a quantity of paper into the market. Credit suddenly tightened and of course lowered security prices.

Balance Sheet, Selected Items, Philadelphia, December 1791-March 1792

	29 Dec 1791	31 Jan 1792	9 Mar 1792
Outstanding Notes	134,268	886,684	891,873
Bills Discounted	964,260	2,675,441	2,051,564
Cash on Hand	706,048	510,345	244,371
Deposits			
Total	1,031,125	1,279,041	1,169,419
Individual	898,125	811,863	569,550
Government	133,000	467,178	599,869
Capital	496,550	993,775	993,775

Source: Cowen, David Jack. *The Origins and Economic Impact of the First Bank of the United States, 1791-1797*. New York: Garland Publishing, 2000. Print

The bank aggressively discounted in January, leading to an infusion of bank notes to the market, then reversed course sharply in February.¹⁸ The U.S. Treasury under Secretary Alexander Hamilton then entered the market to purchase securities and restore stability.

On March 9 discounts were \$2,051,564 and on March 30 they were \$1,983,668. The next balance sheet is not until June 22, when discounts increased to \$2,461,623 in the head office. Discounting as usual is thought to have occurred sometime near the end of April.

The Whiskey Rebellion of 1794

The Government imposed an excise tax on distilled liquors in 1791. It was the first tax the Government imposed on domestic as opposed to imported goods. The tax was particularly unpopular and some recalcitrant settlers did not pay it until appeased by legislation or threatened. In July 1794, when the Washington administration again attempted to enforce the tax, farmers who distilled their corn and grain into whiskey openly resisted, leading to riots that spread from Pennsylvania to western Virginia. On August 7, President Washington began raising a militia of almost 13,000 troops from Pennsylvania, New Jersey, Maryland and Virginia. He also dispatched three commissioners to negotiate with the rebels. The insurrection was suppressed without a shot being fired. The overwhelming shadow of force caused the rebellion to fizzle and the farmers retreated.

Before the fiscal problems caused by the rebellion, the government had already borrowed from the Bank in 1794, each time receiving \$1 million. In March, Hamilton received a \$1 million bridge loan to fund an expected revenue shortfall, which was received before the Whiskey Rebellion commenced. In June, he negotiated another \$1 million loan, with the payout scheduled between September and December. Hamilton approached the Bank on Christmas Eve for an additional \$2 million loan, half to be received immediately and half in the second quarter of 1795. At the January 6, 1795 board meeting, the directors ordered that \$2 million in capital stock of 6 percent bonds be sold for cash. In 1794 alone, loans to the government had amounted to \$4 million, of which \$2 million was issued to pay back old loans.¹⁹

The most important number in examining these transactions is “net new cash to government in period,” which eliminates loans taken to repay old loans. The fourth quarter of 1794 was the period with the greatest volume of fresh lending (\$1,200,000) and the impact can be seen in the table below. From July 1794 to January 1795, there was a steep rise in funds owed by the government to the Bank.

¹⁸ Cowen (2000:89-92)

¹⁹ Cowen (2000:182-186)

Cash Flow of Bank Loans, 1794-1795

	Total Bank Loans to Government Outstanding	New Govt Loans Negotiated	Net New Loans to Government in Period	Total New Loans to Federal Government
1794 Qtr 1	2,100,000	1,000,000		
Qtr 2	2,700,000	1,000,000	600,000	600,000
Qtr 3	3,100,000	0	400,000	1,000,000
Qtr 4	4,300,000	2,000,000	1,200,000	2,200,000
1795 Qtr 1	4,700,000	2,300,000	400,000	2,600,000
Qtr 2	5,000,000		300,000	2,900,000
Qtr 3	5,500,000		500,000	3,400,000

Source: Cowen, David Jack. *The Origins and Economic Impact of the First Bank of the United States, 1791-1797*. New York: Garland Publishing, 2000. Print

The impact of the largest financial institution of the day redirecting 34 percent of its capital (\$3.4 million of \$10 million) of its capital in fifteen months from private lending to meet the needs of the federal government was not lost on the Bank's leadership: it would come at the expense of private businessmen, who would have to find alternate financing.

With respect to private loans, or discounts, in July 1794, prior to the Whiskey Rebellion, discounts were almost \$7 million, having increased by 15 percent from March 1794: however, by January, discounts were reduced 8.4 percent, to less than \$6.4 million. Thus there is a clear correlation between loans to the government and decrease in private lending.

From July 1794 to January 1795, discounts fell from \$2,304,909 to \$2,055,571 at the head office. Both New York and Baltimore had restrictive lending policies. The percentage decrease in discounts between pre- and post-Whiskey Rebellion levels for New York is also roughly 10 percent, but Baltimore had a larger curtail of lending with 30 percent less (see "Bills and Notes Discounted by Branch" graph, above).

We would expect deposits to fall when loans are called in as individuals would draw on their bank accounts. The impacts of this can be seen on the large drop in individual deposits on the "BUS Deposits" graph above, showing that individual deposits fell from \$3,318,092.40 in July 1794 to \$2,142,944.39 in May 1795.

Specie for the BUS was also greatly affected, as the sudden requirement of loans from the government meant that there was less cash on hand. This value fell from \$1,916,296.39, in July 1795, to less than a third of that in May 1795 (see the "Assets: Specie, by Branch" graph above).

The Bank Board Decision to Curtail Discounts in 1795

In 1792 Europe began a decade of war centered on France and the consequences of its recent revolution. French forces occupied Amsterdam on January 19, 1795. The French occupation of Holland caused consternation in American financial circles because Dutch banks often raised funds for the Americans and “the province of Holland was considered as bankrupt.”²⁰

These events led to a drain in specie as specie fell from all the Bank’s branches except Charleston from July 1794 to May 1795. The most drastic fall occurred in the Philadelphia branch, which had over an 80 percent drop (see the “Assets: Specie, by Branch” graph above). Complicating the specie problem was that five state banks opened during the course of the year. These banks would add more paper money into the economy. These were the first new banks since 1793.

The Bank board ordered credit restriction in late October. It appears as if only the main branch made any significant reductions. The amount of reduction in Philadelphia was 12 percent compared to the average of 3.5 percent from August 1795-January 1796. Other branches did not follow the lead of the head office (See the “Assets: Bills and Notes Discounted, by Branch” graph above).

The Bank Board Decision to Call in the Government Loans, 1796

BUS loans to the Government peaked by year-end 1795. While no new loans had been negotiated since March, 1795, the Bank was still paying out cash from the old loans, and therefore the last \$500,000 was actually not delivered until the fourth quarter of 1795.²¹ By January 1, 1796 the Bank therefore had lent \$6 million to the United States. During the course of the next year \$4,400,000 in loans would come due, and the bank wanted part or all of its money returned. The economy was doing well and the bank needed funds so it could lend to the government in the future if an emergency arose. The bank wanted the funds returned in order to lend to their private customers. Treasury Secretary Wolcott proposed issuing bonds to raise capital from which to repay the bank.

However, the bonds sold below par, as the debt was already very high. Furthermore, the Bank did not want to wait for repayment until when and if the bonds were sold. A bill was therefore altered in the Senate in two important aspects before passing on May 31, 1796. First, the commissioners of the sinking fund were allowed to sell half the bond issue below par; and second, if bond sales failed, the commission was allowed to sell part of the Government’s 20 percent equity position in the Bank.²²

²⁰ Wolcott (1795:193)

²¹ Cowen (2000:272)

²² Cowen (2000:213)

By June 28, 1796 Secretary Wolcott had informed Hamilton that the bond sales were not promising. The federal government therefore sold its stock in the Bank to raise funds. The aggregate loan outstanding fell from \$6 million to \$4,800,000 by the end of the year.

The increase in bills discounted almost equaled, dollar for dollar, the decrease in Government loans during the period. From July-December 1796, bills discounted increased by about \$1,050,000.

Recession of 1797

Beginning in 1796, output in the U.S. began a period of stagnation that lasted for over two years. Growth in real GDP per capita, which had averaged a stout 3.22% per year from 1790 to 1795, declined, turning negative in 1797 and averaged an anemic 13 basis points for the 1796-1798 period. The fledgling American nation was experiencing an economic recession.

The downturn was predominantly due to the inflationary practices of the First Bank that created an unsustainable investment boom, which necessitated an inevitable bust as slow-moving market forces worked to correct the monetary disturbance. During the early 1790s, the First Bank engaged in monetary expansion resulting in overinvestment from entrepreneurs, due to low interest rates. As monetary influences take time to transmit through the economy, the consequences of the low interest rates was not apparent until 1796. Excess demand for investment increased the price level from 113, the year the Bank opened, to 159 in 1796 (using 1860 as the base year). The U.S. lost its global competitiveness and the disparity in prices led to an average net balance in goods deficit of \$21 million from 1795-1797. Consequently, there was a specie drain as more coin flowed out of the American economy in exchange for goods (see the “Assets: Specie, by Branch” graph above).

The loss of specie overseas caused American banks to rein in their credit for fear of insolvency. At this point in 1795-1796, the growth rate of the money supply slowed. This is evident as the First Bank experienced a decline of over \$1 million in assets (see the “BUS Assets/Liabilities” graph). The lack of exports contributed to the price level fall as an automatic economic stabilizer, causing the real interest rate to rise sharply.

In the ensuing credit crunch, businesses reliant upon rolling over short-term debt were rendered unsustainable. At this point many investments that had appeared reasonable when they were undertaken were revealed to be errors.²³

Government Debt Summary

During Hamilton’s service as Secretary of the Treasury, he had plans to continuously maintain the principal outstanding, focusing on only paying off interest in a timely manner, so as to keep

²³ Currot and Wats (2016:1, 2, 13, 14)

bond yields low. The Bank continued to finance the Government in this way until 1795, when Hamilton resigned.

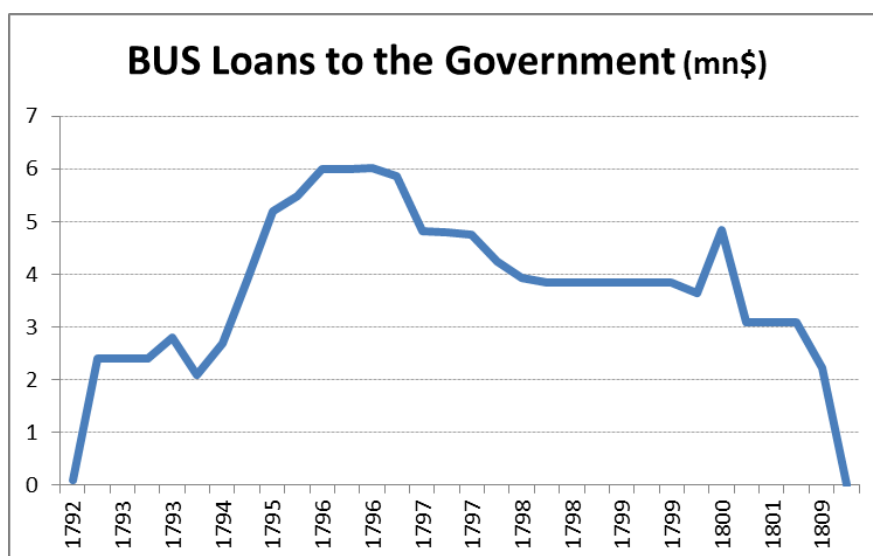
By the end of 1795, in addition to the original \$2 million term loan extended to purchase Bank stock, the Government had outstanding loans of more than \$4 million that were routinely rolled over on their assigned maturity dates. In an effort to reduce its holdings of Treasury obligations and thereby to free more loanable funds for private customers, the directors decided to sell \$2.4 million in long-term Government bonds, leading to a reduction of 40 percent from its opening position in 1791. By November 1801, long-term Government bonds in the bank's portfolio had dropped to \$3 million. Thereafter, the directors reduced their holdings only slightly. The next surviving date is February 1809, when \$2.2 million was still on the books.

The reductions were possible because of the sharp jump in customs revenues, which averaged \$12.2 million from 1801 to 1811 after hitting an earlier high point of \$7.5 million in 1797. Treasury surpluses averaged \$4.2 million annually during Thomas Jefferson's two terms as president. Under Jefferson and his Treasury secretary, Albert Gallatin, the government borrowed only rarely from the Bank. In 1809 the only federal obligations listed on the bank's balance sheet were \$2.2 million in long-term bonds.

In 1800, there was a rise in government loans as funds were obtain for making appropriations for the military and naval establishment of the United States.

The U.S. national debt fell from a high of \$83.8 million in 1795 to \$45.2 million when the Bank's assets were liquidated.

When the First Bank wound up its affairs in 1811, its capital accounted for less than 15 percent of the aggregate American investment in the commercial banking sector.²⁴



²⁴ Perkins (1994:254,255,263)

Conclusion

The First Bank of the United States played an integral part in developing the American economy in the early years of the Republic. The inauguration of the Bank fostered rapid increases in nominal GDP initially as the government had an agent to assist its expenditure programs. In its earliest few years, the Bank was largely involved with providing loans to the Treasury to deal with the fiscal situation at the time. There was a significant transition phase once the anti-Federalists gained power, with Thomas Jefferson as President and James Madison as Secretary of State. The Hamiltonian public debt program had ended. The Government began repaying the principal on outstanding loans, more funds were available for the Bank to channel into private investment, and this led to greater profitability. There is a clear correlation with the value of customs receipts and the amount of government deposits in each branch. More customs duties in the late 1790s, and early 1800s facilitated greatly the Government's paying off the principal on its debt. The growth of state banks also had a large impact on the performance and activities of the branches of the Bank. The rise in competition meant total deposits and discounts would be diluted across all banks. The Bank was not re-chartered in 1811 due to great opposition from state banks. Although it seems unlikely that other balance sheet data for the bank will be found, data for the missing years could provide valuable insight into the importance of the Bank's role in the economy, as the number of state banks grew.

Appendix: The Bank of North America

The Bank of North America (BNA) was chartered on May 26, 1781, by the Continental Congress under the Articles of Confederation. The bank, based in Philadelphia, was the first created by the national government to do business with and for it. Robert Morris, congressional Superintendent of Finance (the predecessor position to Secretary of the Treasury), crafted the charter, stabilized the national currency and saved the Confederation from bankruptcy.

Opponents of The Bank of North America felt that it was an overreach of congressional power. These concerns were eased when bank directors secured a Pennsylvania state charter, giving the BNA the unique distinction of holding two charters simultaneously. When the Confederation ceased, the national charter vanished and the bank operated under its state charter until 1864.

The BNA was partly created to help with funding the later parts of the American Revolutionary War. The Superintendent of Finance subscribed \$250,000 to the BNA's stock on behalf of the Government, but the national finances were so far exhausted that the bank was subsequently obliged to release \$200,000 of the subscription. In the first six months of operation, the bank had lent the Government \$400,000 and the State of Pennsylvania \$80,000.

The legislature of Pennsylvania granted the company an act of incorporation of perpetual duration on April 1, 1782, which was repealed in 1785, but the bank continued its business under the act of Congress. A change of parties in 1787 brought with it a renewal of the charter by the State of Pennsylvania, limited, however, a fourteen-year term, with a capital of \$2 million. In 1790, Hamilton realized the need for a national bank after the BNA had been rendered the bank of an individual state, with insufficient capital to support the nation.

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During the second decade of the Bank's existence, the party in power was that which had resisted the Bank's establishment under the administration of Thomas Jefferson and James Madison, who had led that resistance. This possibly led to improper bookkeeping and inefficiency in the Bank, resulting in no balance sheet data for the years 1802-1808. Also, as mentioned in the text, fire destroyed what records the U.S. Treasury may have had.

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