

Political Economy of US Financial Development

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1. Introduction

Why do some nations grow faster economically and therefore become richer than others? That is a pressing question in a world that today features more economic inequality across nations and major geographical regions than at any time in the past half-millennium, and perhaps in all of history. Economic historians studying the long-term development of nations and economists analyzing more recent data from a much larger set of countries are converging on an answer: Nations that have modern, more effective financial systems grow faster than those that do not.

As is often the case, the answer to one question leads to others. What is a modern financial system? Why do some countries have them and while others do not? How did those countries having effective financial systems manage to get them?

Nations are polities. Governments themselves require financing and therefore have an interest in financial systems. What are the relationships between political development, financial development, and economic growth?

The early history of the USA provides abundant materials for answering such questions. This essay examines how, in the first years of US history, political and financial developments interacted, leading to improved political and financial systems. One immediate consequence was a higher rate of economic growth. The examination confirms that limited government achieved with horizontal and vertical separations of powers can facilitate achieving a more effective financial system and faster economic growth. But it also suggests that limited government by itself is not sufficient. Other countries—perhaps neighboring Canada and Mexico, for example—had what appear as limited governments, but had nothing like the financial development of the USA in the 19th century. Moreover, the horizontal and vertical separations of powers that may have facilitated financial development in the early USA on more than one occasion led to difficulties in sustaining an effective financial system. In the early USA there are examples of what some in other contexts have called “great reversals” in financial-system

development.¹ They appear to have resulted from the very separation of powers that encouraged financial modernization. This suggests that favorable outcomes in financial development may depend as much or more on enlightened financial leadership as on limited government, federalism, and separations of powers per se.

2. The US Financial Revolution and Economic Growth

During the first decade of independence, the 1780s, the USA had a political system that limited the discretion of government, which some analysts contend is necessary for effective financial systems and economic growth. But that limited government was, at the national level, an ineffective government tottering on the edge of, if not actually in, bankruptcy. At the state level, political stability and finances were only marginally better. And the US financial system was primitive and pre-modern in comparison with those of the British and the Dutch at the time. Economic growth was also pre-modern, but in that respect the USA was like most of the world. Since the 1775 outbreak of revolution, which cut off Americans from the external markets they had under British rule, growth most likely was negative.

Then, miraculously, everything changed. The constitution transformed the limited, ineffective national government of the 1780s confederation into the limited, effective federal government of the 1790s. By 1795, the USA had all the key institutional components of a modern financial system—strong public finances and debt management, stable money, a central bank, a banking system, thriving securities markets, and a host of corporations. In 1788, when the new constitution was ratified, it had none of these components. In short, between 1788 and 1795 the USA had what economic historians term “a financial revolution,” the creation in a short period of time of a vastly improved and modern financial system.² Two centuries earlier, the Dutch Republic had a financial revolution. A century earlier, Great Britain also had one. John Law tried—and

¹ Rajan and Zingales, “The great reversals: the politics of financial development in the twentieth century,” *Journal of Financial Economics* 69 (2003), 5-50.

² Sylla, “U.S. Securities Markets and the Banking System, 1790-1840, *Federal Reserve Bank of St. Louis Review* 80 (May/June 1998), 83-98; Sylla, “Financial Systems and Economic Modernization,” *Journal of Economic History* 62 (June 2002), 277-92; Rousseau and Sylla, “Financial Systems, Economic Growth, and Globalization,” in M. Bordo et al., *Globalization in Historical Perspective* (Chicago: University of Chicago Press, 2003), 373-413; Rousseau and Sylla, “Emerging Financial Markets and Early U.S. Growth,” *Explorations in Economic History* (2005 forthcoming).

failed—to lead France to one between 1715 and 1720. The US financial revolution was based to an extent on these earlier positive and negative experiences. Its leader, Alexander Hamilton, knew about the historical precedents and drew on them to create a modern financial system for the new nation.

US economic growth accelerated at the time of the 1790s financial revolution. For the next century it likely was at the highest rate of any country. Good finances combined with good luck and a few doses of imperialism to triple the territory of the country between 1803 and 1853. By the 1890s, US population had grown so much that it exceeded that of any of the old European powers and overseas European offshoots. The country had become the world's largest national economy, the leader in manufacturing, and probably the equal of Britain, the “first industrial nation,” in real income and output per person.

The “big bang” that gave the USA a modern financial system in the early 1790s cannot, of course, account for all of these developments. But it was a more important source of them than most of the history books indicate. When the industrial and transportation revolutions of early US history took place, a modern financial system was there to finance them. The westward movement—territorial acquisitions, land purchases, settlement and property development—had to be financed, often externally from the formal financial system. In the 19th century nothing like the economic expansion that occurred in the USA happened in other “large” countries—in Canada, Latin America, Russia, China, India, Australia and Africa—despite the availability of industrial and transportation technologies and a lot of land.

The big difference between the USA and the other nations and regions was in political and financial systems. Moreover, in the US case, as in earlier cases of successful and unsuccessful financial revolutions, political and financial reforms were intimately bound up with one another. How did the intimate relationship between political and financial change unfold at the birth of the USA? Did getting the politics right allow the USA to get its finances right? Or did a need for better finance promote a better politics? The US case, we shall see, is consistent with an answer of “yes” to both questions.

3. Political Origins of the US Financial Revolution

The origins of political and financial change at the start of the USA as a nation can be found in the difficulties of financing the revolt against British rule. Those difficulties led to the financial messes of the late 1770s and 1780s when the Confederation congress saw its paper money become worthless and, having no taxing powers, it had to struggle to find ways to pay its army and service its debts. Financial messes for governments and countries are common, however, whereas financial revolutions are few. The roots of the US financial revolution were more specific.

Given what happened subsequently, we may trace the roots to three letters, which are really essays on political economy, penned between late 1779 and early 1781 by Alexander Hamilton when he was an officer in the Continental Army. Since early 1777, after demonstrating unusual military competence during the battles of New York, Trenton, and Princeton, he served as a principal aide de camp to the US military commander, General George Washington. In the early letter-essays, Hamilton, who was only in mid 20s at the time, reveals an unusual grasp of financial history. The grasp included knowledge of the successful financial revolutions of the Dutch and the British, and the aborted one of John Law in France. Hamilton applies what he learned from the European precedents to the situation of the USA, in the process formulating plans for political and financial changes in which he would be a leading actor during the 1780s and 1790s.

The setting for Hamilton's three letter-essays was the dire situation of the American revolutionaries during 1779-1781. The war had dragged on for five years. Continental paper money was well on its way to becoming worthless. State paper monies were not much better. Tax revenues were inadequate and mostly retained by states. Borrowing at home and abroad was difficult. From his central position in the army, Hamilton drew several conclusions from his direct military experience. First, Congress and the states were not providing the army with the resources of manpower and materiel it needed to have any chance of success. Second, both Congress and the states complicated the war effort by greatly over-issuing paper money, to the point where hardly anyone trusted it or would accept it. Lastly, as a consequence, the army had to resort to large-scale impressments, that is, confiscations and seizures, of resources to

maintain itself as a viable force, and that such involuntary grabs of resources were hardly a way to maintain for long the support and confidence of the people. Most historians take a rosy view of US history and thus tend to ignore these less than glorious aspects of what it took to achieve independence.³ To a soldier such as Hamilton, they were a frequent occurrence.

Since war in that era was a seasonal affair with long lulls between campaigns and battles, Hamilton apparently used his free time to study whatever he could lay his hands on that might explain why the revolutionary cause was so ill-served by political and financial institutions that should have rendered more support, but didn't. He gave himself a crash course in economic, political, military, and especially financial history, the first prescient results of which appeared in the three letter-essays of 1779-1781.

In the first letter (only an undated, unaddressed draft survives, and seems to have been written between December 1779 and March 1780), Hamilton says that the only solution to US financial problems is a foreign loan. Part of that loan could be used to buy up and retire superfluous paper currency, but a better idea would be to use it to purchase and import military supplies from overseas. The more innovative part of Hamilton's plan was to have Congress charter what he calls a "Bank of the United States," and use part of the foreign loan to capitalize the bank, with another part of the capital to come from stock subscriptions by private investors. Hamilton reasoned that the only way to create a good currency was to make it in the interest of "the monied men" to support it. That could be accomplished by having the bank's notes be convertible into a specie base, and replace the existing and rapidly depreciating national and state fiat paper moneys. The US government in the plan Hamilton outlines would take a stake in the bank and share in its profits. And it would receive a large loan from the bank. Unlike the Bank of England, Hamilton's Bank of the United States was not to have exclusive banking privileges. This is interesting because in 1780 there were no banks at all in the USA, and yet Hamilton even then envisioned a competitive banking system. Hamilton further suggested that his

³ A notable exception is E. James Ferguson, *The Power of the Purse: A History of American Public Finance, 1776-1790* (Chapel Hill: University of North Carolina Press, 1961), chap. 4.

proposed Bank of the United States could be tied to a market for public debt securities by having public securities become a part of the bank's capital, as was done in England.⁴

Hamilton's second letter-essay, dated September 3, 1780, is addressed to James Duane, a New York delegate to the Continental Congress. In it, Hamilton's political economy advances to a higher plane. The fundamental defect of the USA is that the national government does not have sufficient vigor, and especially sufficient means, to provide for public exigencies. The lack of vigor resulted from weak administration by committees of Congress; Hamilton contended that responsible individuals, not committees, should lead administrative departments of government. The results of weak administration were that the army had a fluctuating constitution and was poorly supplied.

Hence, Hamilton tells Duane, the national governmental structure needs to be altered. The national government has to have the power of the purse, "for without certain revenues a government can have no power; that power, which holds the purse strings absolutely, must rule." There were two possible of remedies. First, since a national government worthy of the name must have powers competent to meet public exigencies, Hamilton boldly asserts that Congress already had such powers. The problem was that Congress was too timid to use them. Realizing that not all would agree with this bold approach, Hamilton proposes as an alternative that Congress call immediately for a constitutional convention, the outcome of which would be to grant Congress competent powers. This, in September 1780, may be the first mention by any American leader of the need for the sort of constitutional restructuring of US government that came seven years later.

In the interim, Congress should appoint single executive officers to administer its great departments. It should recruit troops for the duration of the war, or at least 3 or more years. To supply the army, Hamilton again calls for a foreign loan, and he proposes money taxes on the market economy along with in-kind taxes on the non-market economy. Finally, he again calls for a national bank founded on public and private credit. In connection with the bank proposal, Hamilton discusses the origins of modern banking in Italy, the Bank of Amsterdam, the Bank of England, and the flaws in John Law's

⁴ H. Syrett, ed., *The Papers of Alexander Hamilton* (hereafter PAH), 27 vols. (New York: Columbia University Press, 1961-87), II, 234-51.

system in France. He especially admires the Bank of England, which united public authority and private credit to create a vast structure of reliable paper credit convertible into a specie base. The bank he outlines to Duane is similar to the Bank of the United States proposed in the earlier letter, but now Hamilton introduces a new feature by saying that the bank should have three branches, in Virginia, Philadelphia, and Boston.⁵

Hamilton's third important letter-essay of the war period, dated April 30, 1781, is to Robert Morris, shortly after Congress had appointed Morris to be its Superintendent of Finance. Hamilton takes some credit in the letter for recommending that Congress appoint single executives to lead key departments. It seems that Hamilton himself had been considered for the post, for a congressman had asked General Washington what he thought about his young aide de camp as a candidate for the contemplated position. At that time, Washington responded that Hamilton certainly had many talents and merits, but he had not realized they encompassed finance. It is evident that none of the aide's financial ideas came from his chief.

Hamilton says he will share with Morris some ideas he has on financial administration, as well as a plan that while "crude and defective" might be a "basis for something more perfect." First, he says the revenue capacity of the country has to be estimated, and he does that. Next, he estimates necessary civil and military expenses. These greatly exceed revenue capacity, leaving a shortfall that had to be financed. Foreign loans could help, but could not provide all the needed means. So a plan must be devised.

Hamilton's plan, of course, calls once again for establishing a national bank. He discusses the pros and cons of national banks, in theory and in history. Much of the remainder of the long letter-essay is devoted to proposing and discussing, point by point, twenty articles, "only intended as outlines", that would comprise the bank's charter. The bank, for example, would be in law a corporation, which—at a time when there were precious few corporations in America—seemed so obvious to Hamilton and perhaps to his addressee that he said it "needs no discussion." The letter ends with a brief discussion of the national debt once the war is over. It would not present a problem, Hamilton says,

⁵ PAH, II, 400-18.

because the country's growth and a good financial administration would easily enable the USA to pay it. In fact, properly managed, it would be "a national blessing."⁶

Morris replied to Hamilton that he had been thinking along similar lines, although the Bank of North America (BNA) that he soon would propose to Congress was much less ambitious in scale and scope than the bank Hamilton recommended.⁷ Congress approved Morris's proposal, chartering the BNA as a corporation late in 1781, and the BNA opened for business in early 1782. It was the USA's first modern bank. Although Morris had hoped that private investors would step forward to purchase the stock that would capitalize the BNA, such subscriptions were slow in coming. Interestingly in view of Hamilton's proposals, Morris therefore used the proceeds of a foreign loan (from France) to subscribe on behalf of Congress for most of the BNA's capital.

In the interim between the three letter-essays of 1779-1781 and the opening of the BNA at the start of 1782, Lt. Col. Hamilton led a bayonet charge that eliminated the last redoubt protecting Cornwallis's inner fortifications at Yorktown in October 1781. He might have been killed, as were nine of the men he led over the parapet, but he suffered only wounds. In view of what Hamilton was to do during the remainder of his life, the possibility that he might have been killed at Yorktown could suggest some interesting counterfactual speculations, as could the course of American history had he lived beyond 1804.⁸

In any case, when Hamilton a decade later became the first Secretary of the Treasury of the new government created by the US constitution, the plans for financial reform that had begun to take shape in 1779 had become more refined. In part the refinements came from additional experience. After Yorktown, Hamilton left the army and began the study of law. He was admitted to the New York bar within a year. Robert Morris in 1782 appointed him continental receiver of taxes for New York State. When the New York legislature did not provide much to be collected, the experience heightened Hamilton's appreciation of the imbecility of the Confederation's fiscal arrangements. He

⁶ PAH, II, 604-35.

⁷ PAH, II, 645-46.

⁸ Historian Thomas Fleming posed and answered the latter counterfactual in 2004, on the 200th anniversary of the famous duel. In his account, Hamilton becomes president in 1809 in a popular backlash against Jefferson's embargo. With a strong military leader as commander in chief, the USA decisively wins the War of 1812, incorporating into it Canada. Hamilton, like FDR later, is elected and re-elected until he dies in office in the 1830s. For Hamilton's own account of the Yorktown campaign, see PAH, II, 675-83.

served in Congress in 1782-1783, where he and a new acquaintance, James Madison, worked with Morris and others, but without much success, to improve fiscal and governmental underpinnings. In 1784, he helped found the Bank of New York, writing its constitution. In 1786, he was a delegate to and drafted the report of the Annapolis convention, which called for the Philadelphia convention of 1787. Serving in the New York legislature, he was appointed as one of three New York delegates to the 1787 convention. After the constitution was written and adopted by the convention, he conceived of the so-called Federalist Papers and wrote the majority of them, recruiting Madison and John Jay to write the others. He pressured Washington to accept the presidency.

In 1789, Hamilton found himself—and had worked hard to place himself—in the key position to implement his plans for a stronger national government and what we now know was a financial revolution. Implementation was not to prove easy because it involved passing legislation, and Bismarck’s later observations about making sausage and legislation clearly were applicable. But it happened, and in a brief period. The US financial revolution of the early 1790s was neat and quick. It did not take the decades that were required in its Dutch and English antecedents. The reason is that the plans for had been formulated over a decade, and then, in can be regarded as a triumph of enlightened political economy, the plans were well executed.

4. The Political Economy of Financial Modernization

As mentioned earlier, in 1788 the USA had none of the key components of a modern financial system, whereas by 1795 it had every one of them. The change is summarized and amplified in Table 1.

Table 1. US Financial System, 1788 and 1795

	<u>1788</u>	<u>1795</u>
PUBLIC FINANCES, National	Bankrupt	Thriving
CENTRAL BANK	No	Yes, with 5 branches
MONEY	Fiat state paper, foreign coins	Convertible US \$
BANKS	3, no system	20 state, 5 BUS branches, system
SECURITIES MARKETS	Trivial, sporadic	Several cities, organized
BUSINESS CORPORATIONS	Few	Many more

How did all this change happen so quickly during Hamilton’s years as Secretary of the Treasury, 1789-1795? As the finance minister of new the federal government, Hamilton could exert direct influence only in three areas, namely, public finance, the central bank, and money. The first two were extremely controversial, and so change was accomplished by “backroom” political deals.

The Treasury could exert only indirect evidence on the last three developments. Chartering banks (apart from the central bank) and business corporations was a jealously guarded prerogative of state legislatures. And, as neither federal nor state governments took any overt actions to establish securities markets, that was left to private business parties. Nonetheless, as discussed below, the impetus for these changes also emanated from the federal Treasury Department and its hyperactive leader.

Public Finance and the National Debt. During the 1780s, the Confederation government’s inability to provide for interest and principal payments on its domestic and foreign debts was one of the stronger arguments for constitutional reform. The new federal government finally obtained the power of the purse, which it implemented with duties on imports and tonnage in 1789. Shortly after Hamilton took over an empty

Treasury in September 1789, Congress asked him to prepare a plan for reforming public credit. Congress received the report in January 1790.⁹

Hamilton's debt restructuring plan, which included a promise to pay interest in hard money (or equivalent) starting in 1791, and assuming the war-related debts of the states and incorporating them into the national debt with interest commencing in 1792, was a bold gamble for a government that was just beginning to build a revenue system. Indeed, it was Hamilton's boldest gamble, and the one that occupied most of his attention during his term at Treasury. The problem he faced was that providing for ordinary federal expenses and paying interest on the national debt would require more than \$5 million per year if interest on the full debt were paid at promised rates. No one could predict in 1789, for a new government that had almost no revenue, it might be able to collect such a sum. In fact, it was not until 1794 that it did. So Hamilton proposed that domestic creditors voluntarily accept a reduced rate of interest—what today would be called a “haircut”—on a fully funded debt. That reduced the revenues required to operate the federal government and pay interest on the debt to about \$3.6 million, a sum that would in fact be raised, just barely, in 1792. Hence, assuming Congress adopted Hamilton's plan, the years 1789-1792 would require deft financial management, borrowing in one place to meet payments in another, and so on, to create and maintain the illusion that public credit was stronger than in fact it was.

But that is getting ahead of the story. James Madison, Hamilton's friend and collaborator, surprised the Treasury Secretary and leading Federalists in Congress in the initial debates in early 1790 on Hamilton's public credit proposals. Madison called for *discrimination* in the treatment of the original debt holders—those who had lent money and other resources to government during the revolution—and subsequent purchases of those securities. Since the Confederation government was essentially bankrupt, many of the original holders had sold their securities at small fractions of face value. Enactment of Hamilton's plan would raise the value of public securities—indeed, values had been rising for more than a year in recognition of the possibility—and Madison thought (or at least argued) that “justice” required paying the current holders (“speculators”) the highest

⁹ The full Report, with editors' introductory notes and Hamilton's appendices is in PAH, VI, 51-181.

market value below par that they had paid, with the remaining difference between par and that highest market value allocated to the original lenders.

The problem with Madison's proposal is that after the fact, and therefore probably unconstitutionally, it would have violated the terms of the debt contracts between security holders and the government. Moreover, the proposal seemed inconsistent with Madison's earlier views, but it likely shored up his political base in Virginia, which he represented in the House.¹⁰

In any case, the proposal was quickly and easily defeated. But what if it had passed? Domestic and foreign holders of US debt would have learned that they could not trust the new government of the USA to live up to its contracts, as in fact it had not done up to 1790. In that case, the overall plan for financial reform, if not stillborn, would have suffered a drastic setback before it could get off the ground. Consider what happens today when emerging-market countries for whatever reasons decide to alter the terms of their contracts with creditors. The results are not usually happy ones for the creditors or the countries.

Assumption of state debts was a far more controversial feature of Hamilton's plan. Why not let the states provide for their own debts, as some were already doing, and let the federal government provide only for its debts? Later, after he had stepped down as Treasury Secretary, Hamilton would write that this was "in truth the most plausible argument which was used against assumption," and if it had been adopted his work as Treasury Secretary would have been easier because the debt he had to manage would have been smaller. Hamilton says he rejected the idea for several reasons. The plan would have left citizens in different states with unequal debt burdens. It would have left the country with fifteen different systems of finance, and if one or more states defaulted, the national character and credit would be stained—as actually happened half a century later after many states renewed borrowing on a large scale. It would have put the states and the federal government in competition for revenue bases and revenues. All of these outcomes would inevitably produce "collisions." Hamilton's assumption plan avoided that while at the same time lightening the financial burdens of states and expanding the

¹⁰ For accounts of the discrimination issue, see Forrest McDonald, *Alexander Hamilton: A Biography* (New York: Norton, 1982), chap. VIII, and Ron Chernow, *Alexander Hamilton* (New York: Penguin, 2004), chap. 15.

financial responsibilities of the federal government. He regarded the expansion of federal responsibility as an advantage for the country's "defence and safety."¹¹

Despite Hamilton's arguments, assumption came close to defeat. Many southern and some northern leaders and congressmen, jealous of eroding states' rights and enhancing federal responsibilities and powers, were adamantly opposed. One of the engaging stories of US history is that assumption was saved at the last moment when Jefferson invited Madison and Hamilton to dinner at his house in New York, then the capital, in June 1790. At the dinner, in return for Madison agreeing to switch enough southern votes to pass assumption, Hamilton agreed to move the capital of the USA from New York to the banks of the Potomac, after it resided for a decade in Philadelphia (a feature of the deal that would garner support in Pennsylvania for assumption), allowing time for a new capital city to be built.

The whole deal may have been more complex than this simple version. A number of public characters, including Washington and Madison, would receive personal financial benefits from these moves of the capital. The actual deal probably involved passage of a resolution saying that the House would refrain thereafter from discussing the emancipation of slaves.¹² And it almost certainly involved Virginia getting a sweetheart deal in the settlement of Revolutionary War state accounts that was underway at the time.¹³

Why Jefferson, who had brokered at least part of the assumption deal, later said that it was one of great regrets of his life and that Hamilton had duped him has puzzled historians. Jefferson's friends, the state of Virginia, and the South as whole gained a lot from the deal. Perhaps the acceptance of this first piece of Hamilton's financial plan, which dealt with an existing national problem that most agreed needed attention, did not yet suggest the changing balance of federal and state powers that would be evident a year later, by the middle of 1791, as implementation of the plan further unfolded. That change in balance would prove upsetting to proponents of powers reserved to the states in the new constitutional system.

¹¹ See "The Defence of the Funding System," an essay of July 1795 that was never finished, in PAH, 19,1-73.

¹² Joseph Ellis, *Founding Brothers* (New York: Knopf, 2000), chap. 3.

¹³ McDonald, *Hamilton*, chap. VIII.

Once the residence (of the capital) deal was done, several acts of Congress during the summer of 1790 endorsed virtually the whole of Hamilton’s public credit plan. The voluntary exchange of old domestic securities for three new issues of Treasury bonds—the birth of the current Treasury debt market—commenced in the Fall of 1790, as did quarterly interest payments on the new bonds in 1791. In New York, Philadelphia, and Boston, active secondary trading markets for the new securities emerged (discussed further below), providing financial historians with a good record of newspaper price quotations.

Despite his reputation as an advocate of energetic, even “big,” government, as well as constitutionally *implied* (see below) as well as explicit powers at the federal level, Hamilton on several occasions showed himself as proponent of what today would be called time-consistent financial policies. In the January 1790 Public Credit Report, he propounded the principle that public credit could be made “immortal” if a government always connected to its borrowing a set of tax increases sufficient to pay not only the interest on the debt but also a little more that would allow the debt eventually to be redeemed. The idea first surfaced in his *Continentalist IV* essay published in 1781 as he was heading to Yorktown with the Continental Army.¹⁴ And it was reiterated again in what some call his valedictory report as Secretary of the Treasury in January 1795.¹⁵ Related ideas are discussed by Adam Smith in *The Wealth of Nations*, although it is not clear that Hamilton had read Smith as early as 1781.¹⁶ Neither the US nor the British government appears ever to have adopted such a policy, but New York State when it first borrowed to construct the Erie Canal.¹⁷

The Bank of the United States (BUS). Since Hamilton by 1790 had been considering a national bank for at least a decade, it could hardly have been a surprise that it became a key component of his plan. He mentioned in the Public Credit Report of January 1790 that he soon would make a national bank recommendation. He did that in December 1790, and there is nothing in records of 1790 to indicate that his cabinet

¹⁴ PAH, II, 669-74.

¹⁵ PAH, XVIII, 46-148.

¹⁶ Adam Smith, *The Wealth of Nations*, Book V, chap. III.

¹⁷ John Joseph Wallis, Richard Sylla, and Arthur Grinath III, “Sovereign Debt and Repudiation: The Emerging-Market Debt Crisis in the U.S. States, 1839-1843,” NBER Working Paper 10753 (September 2004).

colleagues and congressional leaders were against a national bank. The Senate passed the bill on January 20, 1791; the vote is not known, but judging by a vote the same day on an amendment to limit the charter to 10 rather than 20 years, the vote was on the order of 16-6.

Given the earlier lack of controversy, it must again have been a surprise to many in the administration and Congress when Madison in the subsequent House debates over the bank bill contended that the bank was unconstitutional. Madison contended that the Constitution had said nothing about such a bank, much less authorizing the federal government to charter one. Despite Madison's constitutional concerns, the House passed the legislation by a vote of 39-20. But the president had to act on the bill, and a strong cast of characters—Madison, Secretary of State Jefferson, and Attorney General Edmund Randolph, advised him to make (or threaten to make) the bill his first veto on grounds of non-authorization by the Constitution. Washington asked Madison to draft a veto message. He also referred the opinions of the two cabinet officers to Hamilton, and asked for his opinion and his response to theirs. Hamilton quickly produced one of his finest and most influential public documents contending that constitutions have implicit as well as explicit powers, and that the Bank legislation fell under the implicit category. He effectively, and perhaps excessively—it was his style to leave no stone unturned and no stone tossed his way unreturned—demolished the strict-construction arguments of his cabinet colleagues. Washington read Hamilton's argument and approved the bill.

Once again, there may have been more to this than Hamilton simply carrying the day by dint of his powers of reasoning and persuasion. Why did Madison and Jefferson, after knowing of Hamilton's forthcoming plan for a bank for at least a year, suddenly come out to oppose it? Why did Washington contemplate vetoing the bank legislation? Forrest McDonald provides an intriguing political-economy interpretation missed by other scholars of the period. Jefferson and Madison, on returning to the capital at Philadelphia in early 1791, discovered according to McDonald, that Pennsylvanians were scheming to undo the residence deal of the previous summer and planned to keep the capital at Philadelphia permanently instead of having it move to the Potomac. That led to their opposition to the Bank bill. Moreover, President Washington had a problem, since he had unilaterally moved the site of the projected Potomac capital closer to his home at

Mt. Vernon and outside of the Potomac range in which commissioners were supposed to select a site. All of these Virginians wanted to make sure that the capital moved to the Potomac in 1800, and Washington wanted his unilateral decision to be retroactively approved by Congress to avoid personal embarrassment. By threatening to torpedo the Bank bill, the Virginians might be able to get what mattered more to them. A bill to approve the site Washington had selected, and ensure also that the capital to move to the Potomac, was introduced. McDonald persuasively argues that each bill was held hostage to the other, and that in the end, although it is not clear which side blinked first, Congress approved both bills on the same Friday afternoon in late February 1791.¹⁸

If the national bank had been aborted, so would the US financial revolution. Given the precariousness of the country's finances, the Treasury needed to draw on the credit of a large bank as soon as possible. Given the time it took to organize the BUS, the Treasury would not be able to do this for a year. In 1792-1793, the Treasury in fact received four loans from the BUS totaling \$1 million. The BUS became for the Treasury a reliable source of short-term credit, a depository for public revenues, a mover of government funds through its nationwide branch network to where they were needed, it issued convertible dollar banknotes used throughout the country. It was even a modest source of income since the federal government owned 20 percent of the stock and the dividends were greater than the interest on the loan from the BUS that had enabled it to buy BUS stock. The alternative of relying on state banks—collectively far smaller in capital and resources than the BUS in 1792—for these advantages would have been decidedly inferior. Events were to prove this when the two central banks of early US history were not re-chartered. Moreover, the stimulus the BUS gave to bank and other corporate chartering by the states (see below) would have been lost.

Money—the dollar. Creating the convertible dollar was the least controversial aspect of the US financial revolution at the national level. Most national leaders were fed up with the inflationary experiences of state fiat paper moneys by the late 1780s. The Constitution thus banned the states from further issues. Congress was given the power to coin money and regulate its value, although federal paper money was not explicitly prohibited. Some scholars of the debates at Philadelphia in 1787 nonetheless argue that

¹⁸ McDonald, Hamilton, chap. IX.

banning the federal government from ever issuing inconvertible fiat paper money was intended by the delegates, and hence a part of “original” meaning or intent.¹⁹

It is evident that Hamilton, who was member of the Philadelphia convention but not present at every debate, did not agree that this was original intent. He did, however, think it a good idea. In the Bank Report of December 1790, he wrote:

The emitting of paper money by the authority of Government is wisely prohibited to the individual States by the National Constitution. And the spirit of that prohibition ought not to be disregarded by the Government of the United States. Though paper emissions under a general authority might have some advantages, ... yet they are of a nature so liable to abuse, and it may be affirmed so certain of being abused, that the wisdom of the Government will be shown in never trusting itself with the use of so seducing and dangerous an expedient.

Hamilton instead advocated, as he had done in the letter-essays of 1779-1781, a bank-issue paper currency convertible into a specie base, as was the practice of European financial leaders. He argued that the relative demands for bank notes and specie inherently limited over-issue of bank paper, while “the discretion of the government is the only measure of the extent of the emissions by its own authority.”²⁰ Once again, as in his advocacy of tying tax increases to service and redeem debts to every debt issue, Hamilton comes across as wanting the federal government to avoid the temptations of pursuing time-inconsistent financial policies.

In the Mint Report of February 1791, Hamilton recommended the gold and silver contents of the US dollar, essentially defining it as a unit of account for the USA. His predilections were for a gold dollar, but he ended up recommending bimetallism as a way of increasing the money supply and because he thought the market gold-silver ratio had been stable for a considerable period. The broad outlines of the plan drew heavily on earlier writings of Jefferson, who got an advance copy of the report and was pleased with it. It was about the last time the two leaders saw eye to eye on an issue.²¹

Banks and Banking Systems. In 1789, the USA did not have a banking system. It did have three banks, the BNA in Philadelphia, the Bank of New York in New York City,

¹⁹ Bray Hammond, *Banks and Politics in America, from the Revolution to the Civil War* (Princeton: Princeton University Press, 1957, chap. 4; Farley Grubb, working paper....

²⁰ The Report on a National Bank of December 1790, including editors’ notes and drafts, is in PAH, VII, 237-342.

²¹ The Mint Report of January 1791, with editors’ notes and drafts, is in PAH, VII. 463-607. Jefferson’s letter to Hamilton after his advance look at the report is on p. 451.

and the Massachusetts Bank in Boston. These were isolated institutions serving the mercantile communities of their respective cities. Two of the banks were corporations chartered by governments with privileges of limited shareholder liability. The Confederation Congress chartered the BNA at Philadelphia on Robert Morris's recommendation (discussed above), as a measure to aid war financing. It opened in 1782, and soon received charters from several state governments as well. These were not acts of endorsement, but rather expressions of doubt about whether the national Congress had any right to charter a bank. The war was pretty much over when the BNA opened, so it quickly became an ordinary commercial bank of discount, deposit, and note issue.

Hamilton and others founded the Bank of New York in 1784. The founders applied for a charter of incorporation from the New York State legislature, but—in another sign of state governments' doubts about banking corporations—they were rebuffed that year and in several later applications. The New York legislature finally granted the bank a charter in 1791, an event that is interesting in connection with the advantages of federalism in supporting financial development (see below).

Massachusetts chartered its bank in 1784. Compared to the Philadelphia and New York banks, its early years were uneventful.

By 1795, the two incorporated banks of 1789 had become 20. One of these was the Bank of New York with its 1791 charter. Philadelphia, Boston, and Baltimore (which had not a bank in 1789), now had two state-chartered banks each. Rhode Island had two, in Providence and Newport. Besides the Bank of New York, the state of New York had chartered banks in Albany and Hudson. Connecticut had banks in New London, New Haven, Hartford, and Middletown. New Hampshire had chartered a bank. The District of Columbia had two banks by 1795, well before the national capital would move there in 1800.

In addition to these state banks, by 1795 the BUS had not only its home office in Philadelphia, then the seat of the federal government, but branches (“offices of discount and deposit”) in Boston, New York, Baltimore, and Charleston. Since the BUS carried on a commercial banking business along with being the federal government's bank, there were actually 25 corporate banks (including BUS branches) in 1795, compared to the 2 or 3 (counting the yet to be chartered Bank of New York) of 1789.

By 1805, the Bank of the United States would have four more branches, in Norfolk, Savannah, Washington DC, and New Orleans. Albert Gallatin, President Jefferson's Treasury Secretary, had specifically requested that the BUS establish the two latter branches. And the states by 1805 had chartered 51 more banks. There were thus 80 banks by 1805, including 9 offices of the BUS. The momentum of financial development did not end in 1795.

Why were so many banks founded after 1790 and so few before? A peculiar consequence of the BUS (in both its first, 1791-1811, and second, 1816-1836, manifestations) was to stimulate the growth of US banking both when it appeared on the scene and when it departed from it. The latter is easy to understand, since if federally sponsored banking facilities were removed (for political instead of economic reasons, it seems), states and individuals would act to replace them (for both economic and political reasons). In 1791, when the BUS was chartered, it also stimulated the chartering of state banks. How did that happen? New York's experience is instructive.

The New York legislature, after defeating several charter applications, finally chartered the Bank of New York in 1791, right after President Washington approved the bill calling for creation of the BUS. That law, drafted by Hamilton, allowed the BUS to open branches throughout the country. It was deemed likely that the BUS would open branches, and that one of them would be in New York City. If New York State did not have a bank or banks beholden to it from having obtained a state charter, it would be ceding the ground of banking to the new federal government, about which the politicians controlling the state's government had deep suspicions. State legislator James Kent (later Chancellor Kent) said as much when he at that time told a correspondent, "It is a requisite to have a state bank to control the influence of a national bank as for a state government to control the influence of a general government."²² Hence, not to be co-opted by the BUS, New York finally granted the Bank of New York a charter of incorporation. Thus, the competitive rivalry of federal and state governments in the US federal system fostered faster financial development in the first years.

²² Quoted by Robert E. Wright, "Banking and Politics in New York, 1784-1829," PhD diss., SUNY-Buffalo (1996), 144.

A more positive variation of the stimulus the BUS gave to state-chartered banking played out in Rhode Island. There the first state bank was chartered in 1791 in the hope—unrealized—that it would help attract a branch of the BUS to Providence. That hope was unrealized, possibly because Rhode Island earlier had been among the states most reluctant to support a federal union with expanded powers.

Tables 2 and 3 summarize the growth of state banking in the early decades of US history. The banking system grew especially rapidly during 1791-1795 (Table 2), and after the two BUS charters were not renewed (1810-1815, 1830-1835). Table 3 omits the two national banks, which with their 9 and 25 branches gave the early USA nationwide branch banking, something it had for most of the period 1792-1836 and then would not have again until the 1990s. Could the US banking system grown even more rapidly? Undoubtedly, as restrictions on the growth of state banking in these decades are well documented. The states, having lost the right to issue fiat paper money in the Constitutional settlement, quickly discovered that they had not lost much since they could invest in and tax the banks they chartered. When states invested in banks, their fiscal interest (dividends) sometimes dictated that they charter new banks slowly, to protect their investments.²³

But there are always at least two ways to view history. One is to compare the present with the past—what might be called the “time series” approach—which almost always, certainly in US history, leads to conclusion that the past, especially the distant past, was pretty backward and undeveloped compared to what came later. It sometimes leads also to a conclusion that history is irrelevant.

The other way of viewing history might be termed the “cross section” or comparative approach. How did the USA compare with other countries in a given era? Canada did not have a chartered bank until 1817. It had 6 banks in 1830 and 16 in 1840.²⁴ Compare those figures with the US tables. Mexico did not have a chartered bank

²³ See R. Sylla, J.B. Legler, and J.J. Wallis, “Banks and State Public Finance in the New Republic: The United States, 1790-1860,” *Journal of Economic History* 47 (June 1987); and J.J. Wallis, R. Sylla and J.B. Legler, “The Interaction of Taxation and Regulation in Nineteenth Century U.S. Banking,” in C. Goldin and G. D. Libecap, eds, *The Regulated Economy: A Historical Approach to Political Economy* (Chicago: University of Chicago Press, 1994), 122-44.

²⁴ Robert E. Wright, “Early U.S. Financial Development in Comparative Perspective: New Data, Old Comparisons,” Working Paper dated 11/03/2003, presented at NBER Conference, “Developing and Sustaining Financial Markets, 1820-2000, Dec. 5-6, 2003.

until 1863. It had 8 banks in 1883, and 46 in 1911.²⁵ In contrast, the US had 80 banks and branches in 1805. In England until 1825, all banks apart from the Bank of England had to be unlimited-liability partnerships with no more than six partners, of which there were several hundred. By 1825, the USA had 330 far larger and better-capitalized state banking corporations (mostly in the northeastern states) as well as a central bank with 25 branches—the Bank of England had no branches then—carrying on interstate banking throughout the country.

Securities Markets. The federal debt restructuring of late 1790, including assumption of state debts, and the initial public offering of rights to purchase shares of the Bank of the United States in July 1791, together were seminal events in bringing modern securities markets to the USA. Three new federal debt securities, easily understood and hence relatively easy to value, replaced a wide variety of old national and state issues. One was a standard 6 percent bond. The other two, a 3 percent bond and a deferred 6 percent bond that was a zero coupon bond until 1801 when it would pay 6 percent interest, represented the “haircut” implicit in Hamilton’s plan and necessitated by the time it would take to build up revenues after starting in 1789 with an empty Treasury. Holders of domestic US debts received one package of the new securities, with interest

²⁵ Stephen Haber, “Political Institutions, Bankers, and Economic Growth: Evidence from the United States and Mexico,” Working Paper dated October 25, 2004.

The First US Banks, 1781-1801

Year of charter	Bank	State-Place	Opened, if diff. from charter
1781 ['82, '86, '87]	North America	PA-Philadelphia	1782
1784	Massachusetts	MA-Boston	
1790	Maryland	MD-Baltimore	
1791	United States	US-Phila.; Bost., NY, Balt., Charleston, 1792; Norfolk, 1800; Wash. DC, 1801; Savannah, 1802; New Orleans, 1805.	
	New York	NY-NYC	F1784
	Providence	RI	
1792	New-Hampshire	NH	
	Albany	NY	
	Hartford	CT	
	Union	CT-New London	
	Union	MA-Boston	
	New Haven	CT-New Haven	
	Alexandria	VA	
	Richmond	VA	(did not open)
1793	Columbia	NY-Hudson	
	Pennsylvania	PA-Phila.	
	Columbia	DC	
1795	Nantucket	MA	
	Merrimack	MA-Newburyport	
	Middletown	CT	
	Rhode Island	RI-Newport	
	Baltimore	MD	
1796	Delaware	DE-Wilmington	
	Norwich	CT	
1799	Portland	ME/MA	
	Essex	Salem	
	Manhattan Co.	NY-NYC	
1800	Gloucester	MA	
	Bristol	RI	
	Washington	Westerly	
1801	South Carolina	Charleston	1792

Table 3. US State-Chartered Banks: Numbers and Authorized Capital, by Region and National Total, 1790-1835

(Capital in millions of dollars)

Region	New Engl		Mid-Atl		South		West		US	
Year										
	No.	Cap.	No.	Cap.	No.	Cap.	No.	Cap.	No.	Cap.
1790	1	0.8	2	2.3					3	3.1
1795	11	4.1	9	9.4					20	13.5
1800	17	5.5	11	11.9					28	17.4
1805	45	13.2	19	21.7	6	3.5	1	0.5	71	38.9
1810	52	15.5	32	29.4	13	9.1	5	2.2	102	56.2
1815	71	24.5	107	67.1	22	17.2	12	6.4	212	115.2
1820	97	28.3	125	74.4	25	28.6	80	28.4	327	159.6
1825	159	42.2	122	71.2	32	33.3	17	9.4	330	156.6
1830	186	48.8	140	73.8	35	37.3	20	10.5	381	170.4
1835	285	71.5	189	90.2	63	111.6	47	35.0	584	308.4

payments commencing in 1791. Holders of assumed state debts got a different package of the three new issues, and interest starting in 1792.

The exchange was voluntary, but virtually all security holders took advantage of it. The alternative involved standing in line behind those who took it and hoping enough additional revenue would come in to allow Congress and the states to appropriate interest payments according to the original contracts by means of annual appropriations. As liquid markets were organized in New York, Philadelphia, and Boston to trade the new issues, the disadvantages of standing in line were increasingly apparent. Roughly half of the domestic national debt was converted from old to new securities within a year (by September 1791), and almost all the rest (including many state debts) by the end of 1794. That the massive conversion proceeded smoothly and all interest due on the new securities was punctually paid speaks highly of the efficiency with which the Treasury Department was administered.

The Bank IPO was more controversial because it engendered a speculative bubble. It began with “scrips”—rights representing a downpayment of \$25 to purchase full \$400 full shares in the Bank in installments sequenced over two years—offered and selling out quickly on July 4, 1791. Speculation pushed scrip prices up to about \$300 in roughly a month, so an IPO purchaser who sold at the top, before the market fell back, could have multiplied his money twelve-fold in that time. Such rampant speculation in paper was something new in America. It was repeated in the early months of 1792, when prices of US 6 percent debt securities, which could be tendered to make installment payments on Bank shares, rose to well above par before crashing in March and April. The crash was felt most severely in New York City, where numerous bankruptcies occurred.

New York’s legislature reacted to the crash of 1792 by passing in April a law banning public auctions of securities and making unenforceable in the courts contracts for selling securities one did not own, that is, short sales. Pennsylvania’s legislature debated but failed to pass similar legislation. The result was to drive securities trading indoors, into private clubs of brokers, who would make and enforce their own rules. New York’s most famous club, the one that evolved into the New York Stock Exchange, began not

long after the April 1792 law. In May, a group of brokers met under a buttonwood tree in Wall Street, according to legend, and formed such a club. Philadelphia claims to have started on even earlier, in 1790. Short sales continued in these clubs, enforced by private sanctions rather than the official court system. Legal historians demonstrate that judges in the official court system came gradually to recognize the customs of brokers as having the force of law. They suggest that this flowed from the obviously utility of securities markets, and perhaps because many judges themselves were investors in securities.²⁶

However sustained, US securities markets expanded steadily after the big bang of 1790-1791. The markets were born with the creation of some \$60 million of national debt securities in the form of three simple and liquid bond issues, and rights to \$10 million in shares of the Bank of the United States. They were sustained when other corporations would use them to access capital. Initially, foreign investors provided a lot of that capital; in roughly a decade after 1790, European investors purchased about half of the US national debt and BUS shares.²⁷ Not long after, state and local governments would enter the markets to raise money for a variety of public purposes by issuing securities.

The events of 1790-1792 produced a political backlash that extended well beyond initial forays into securities-market regulation. The break between Hamilton and his colleagues Madison and Jefferson that began to appear in 1790-1791 became complete in 1792. Securities speculation probably encouraged the break, particularly when it became clear that many members of Congress profited handsomely from rises the prices of public debt securities and Bank scrips and stock that they had voted to create. This smacked of “corruption,” and there was an extensive body of 18th-century political writing about it emanating from English “country party” opposition to the “court party” financial policies of Walpole and other leaders that seemed to describe all too well the “corrupt” practices that suddenly appeared to be invading the USA. A similar literature quickly came from American pens, embodying the ideology of a new Republican political party led by Jefferson and Madison that arose to protest the allegedly “corrupting” policies of

²⁶ Stuart Banner, *Anglo-American Securities Regulation: Cultural and Political Roots, 1690-1860* (Cambridge: Cambridge University Press, 1998), chaps. 5, 7,8.

²⁷ R. Sylla, J.W. Wilson, and R. E. Wright, “Integration of Trans-Atlantic Capital Markets, 1790-1845,” Working Paper, December 2004.

Hamilton. He and supporters of those policies simultaneously formed a Federalist party to defend their financial reforms and nation building. For the rest of the 1790s, US politics would not be pretty.²⁸

Although the issues in the bitter political debates of the 1790s were many and complex, at their heart were supposed conflicts between two types of property, one old and one new. The Republican charge of “corruption” against the Federalists was that they had used government created a new kind of artificial property, namely public debt and corporate shares, and were using it to undermine republicanism and restore monarchy. How? One way was mentioned above. Congressmen would support the creation of artificial forms of property and the political goals of its proponents because they themselves stood to benefit personally. Another way was also obvious. The wealthy owners of the new property and the speculators who dealt in it would both support the government and influence it in their own pecuniary interests. Further, the new property would create a mass of officeholders or, in the rhetoric of English 18th – century republicanism, “placemen,” who would owe their jobs to system organized to transfer wealth from the many to the few, and hence would support the nefarious goals of a government that provided them with those jobs.

Republicans said less about the old property, perhaps because it was obvious to all that it included what all were familiar with, namely real property such as land and buildings. To a Republican theorist such as John Taylor of Caroline, these were “natural property,” and not the “artificial property” being created to “corrupt” government and society.²⁹

In the US context, it is curious that the debates hardly ever mentioned another form of property, slaves, apart—ironically—from Republicans often using the term “slavery” to describe what would be the outcome for most Americans if the Federalists succeeded. Federalists, having learned that any notion of ending of slavery would have torpedoed the Constitution and further that, after the adoption of the Constitution, any further questioning of it at the national level would lead to moves for secession, seemed

²⁸ See Lance Banning, *The Jeffersonian Persuasion: Evolution of a Party Ideology* (Ithaca: Cornell University Press, 1978).

²⁹ Banner, *Anglo-American Securities Regulation*, chap. 6.

to conclude that to keep open the possibility of a unified nation they had to keep shut their mouths and pens on slavery.

What makes this especially curious is that the human property of American slave owners in the 1790s had a market value approximately twice as great as the \$70-some million bonds and stocks at par value (market value was lower) created by the new federal government. Moreover, the value of slave property increased as time went on, unlike federally created securities. Were not slaves a property interest to be defended? Of course they were. How best to defend that interest? Perhaps by attacking, in the name of states' rights, any new property interest that might arise to question that vested interest. And by attacking particularly a new and stronger federal government that might one day, if not kept in its place or co-opted by slave interests, threaten those interests.

In the modern USA, slaves are long gone, and the value of stocks and bonds vastly exceeds the value of land and buildings. That should not prevent us from seeing what the political economy of financial modernization most likely was really about two centuries ago, when the value of slaves alone greatly exceeded the value of stocks and bonds. Most likely it was not really about the “corruption” inherent in corporate stocks and public debts. For when the slave owners came to power in 1801 and held it until 1861, further discussions of about the corrupting nature of stocks and bonds became muted at the federal level, even as those financial instruments increased greatly in numbers and value, right along with the numbers and values of slaves.

Corporations. The most distinctively “American” feature of the early US financial development was the proliferation of corporations. The other features—restructured public finances, a new and stable currency, a central bank, a banking system, and securities markets—had appeared in the earlier Dutch and British financial revolutions. But those earlier financial revolutions produced nothing like the number of corporations that multiplied in the USA during the financial revolution of 1789-1795, and continued to multiply thereafter. When European nations began to allow incorporation of business under general laws after mid-19th century, the USA had had such laws for two or more decades, and even before it had them there were thousands of corporations formed by special acts of state legislatures.

In large measure, the appearance of so many corporations in the USA before they appeared elsewhere has to be attributed to the federal structure of the country, which left virtually all chartering of corporations in the hands of state governments. Nonetheless,

Colonial era	7		
1781	1	1791	9
1782	0	1792	31
1783	1	1793	15
1784	3	1794	17
1785	3	1795	42
1786	2	1796	32
1787	6	1797	41
1788	5	1798	36
1789	3	1799	33
1790	4	1800	39
1781-1790	28	1791-1800	286

Table 4. Number of Business Corporations Chartered in the USA, 18th Century

the record makes it clear that the impetus for increased corporate chartering came from the federally sponsored financial revolution. This is evident in Table 4, which shows when business corporations were chartered before 1801. There were only 7 charters in the colonial era. During the decade 1781-1790, 28 more companies received corporate charters.

During the next decade, 1791-1800, when the financial revolution of the Federalists was accomplished, more than ten times as many business corporations were chartered. In the midst of that revolution, more corporations were chartered in the USA in the two years 1791 and 1792 than had been chartered in all the previous years of American history up to 1790.

Increased corporate chartering by states was no coincidence. As noted above, after Congress chartered the BUS, states began to charter more banks for “defensive” and other reasons. That was easier to do because liquid securities markets, another creation of the financial revolution, created a 1790s securities “ownership culture” receptive to new-venture IPOs.

Representative government and frequent elections in states made extending corporate privileges to constituents a good strategy for getting into office and being re-elected. Economic competition between states in a federal system encouraged neighboring states to emulate one another's chartering activities. Hence, the momentum established in the early 1790s carried on. The New England states chartered more than 1,700 business corporations between 1800 and 1830, without the benefit of general incorporation acts. In these three decades, New York chartered nearly a thousand business corporations, Pennsylvania more than 400, New Jersey and Maryland more nearly 200 each, and Ohio more than a hundred.³⁰ These are the states we know about from previous studies. We should learn more about them, and about the others. In corporate chartering, something different was happening in the USA from anything, anywhere that had happened in previous history. This explosion of corporation chartering began to happen during the financial revolution of the early 1790s, and it likely was conceived by an unusually fertile financial mind at some army encampment a decade earlier. Old Europe with a considerable lag could only emulate it.

5. The Political Economy of Reversals

[To come: A brief discussion of how the first and second central banks were killed, to the detriment of an efficient financial system and probably to the detriment of US growth (a case harder to make, given continuing rapid growth) by the very forces of federalism and balances of powers that had encouraged financial development. The first central was killed despite a Republican administration that wanted it to continue, a case of weak leadership. The second was killed by a presidential veto, after the House and Senate had decided that it should continue, by votes of 107 to 85 and 28 to 20, a case of strong but misguided leadership.]

6. Summary and Conclusion

[To come: Early US financial development may warn us not to jump too quickly to a conclusion that some political arrangements foster finance and growth, whereas others do

³⁰ Banner, *Anglo-American Securities Regulation*, chap. 6, summarizes the known evidence on early 19th century corporate chartering by US states.

not. The US experience was more complex than that. If anything, it argues that leaders who understand finance and its relationship to growth, and who are also skilled in getting things done politically may matter as much as political structures in producing good outcomes. Hamilton was such a leader, and there were others before and after him in a variety of political systems.]