# Who Is That Guy on the \$10 Bill?

by Michael Bryan, Bruce Champ, and Jennifer Ransom

his May, the Federal Reserve issued a new series of \$10 currency bearing Alexander Hamilton's portrait. Regrettably, what is most often remembered about Hamilton is his fateful duel with his political archenemy, Aaron Burr. But Hamilton's importance goes well beyond his compelling life story and its untimely end. In fact, Hamilton's likeness has adorned our national currency more than any other person, and this, in our view, is an entirely appropriate honor. As the first Secretary of the Treasury, Hamilton erected the pillars of the U.S. financial infrastructure, pillars that still support us. In this Economic Commentary, we recount these contributions.

### **■** Hamilton the Revolutionary

Alexander Hamilton, born on the West Indies island of Nevis, was orphaned and left penniless at the age of 13. He supported himself by working for a New York businessman with properties in the area and was educated by a local clergyman. He rapidly became experienced in business. Hamilton's benefactors sent him to America at 15 to be educated at King's College (now Columbia University). Soon after, he became involved in colonial politics. After the Boston Tea Party, a pamphlet attributed to Hamilton called for a boycott of British goods. Later, he advocated war against the British, arguing a naturalrights philosophy.

In January 1776, Hamilton was commissioned as a captain in an artillery unit formed for the defense of New York City, and in 1777, General Washington, Commander and Chief of the Continental Army, invited Hamilton to join his staff. Hamilton served as the general's aide-de-camp, often writing Washington's correspondence.

Hamilton contributed as much to the revolutionary cause by combatting mismanagement of Continental government finances as by fighting on the battlefield. As an artillery unit captain, he frequently chastised the Provisional Congress for not paying the troops, going so far as to claim his men were victims of a breach of contract. When he joined Washington's troops at Valley Forge in January 1778, he was appalled by their lack of supplies. He wrote a scathing letter to the governor of New York, blaming inadequate wartime resources on members of the Continental Congress who were motivated more by "the particular interests of the states to which they belonged than for the common interests of the confederacy." Long after the revolution had ended, he continued to wage his war against what he saw as the nation's ineffectual financial infrastructure.

# **■** Hamilton and Money

President Washington appointed Hamilton the nation's first Secretary of the Treasury in 1789. In this capacity, Hamilton championed his vision for national financial management. Many daunting tasks awaited him. A national monetary standard had to be established and made credible, a new government had to be financed, and the war debt had to be serviced.

The nation had reason to question the government's ability to manage monetary affairs. Some colonial governments and the Continental Congress had undermined the public's confidence before and during the Revolutionary War by greatly overissuing currencies.

Before the war, financing government expenditures in the American colonies was often problematic. Colonists had a strong distaste for taxes, and borrowing Alexander Hamilton is perhaps the least known and most misunderstood of our nation's founders. His contributions include creating a monetary standard, forming the foundation of our banking system, and establishing the creditworthiness of our young nation. This *Economic Commentary* describes the debt our nation's financial strength owes to Hamilton.

was not an option because the colonial governments' credit was unproven. Given the lack of alternatives, colonial governments had frequently relied on seigniorage—revenue from the creation of money—to finance their expenditures.

When the colonists went to war against England, the difficulty of financing government expenditures greatly intensified. The Continental Congress was not given the power to tax, and although states did have the power, tax collection was difficult. Indeed, overtaxation had helped cause the war. Like the colonial governments, the Continental Congress turned to the printing press and issued its own bills of credit, called continentals. Between June 1775 and November 1779, the Continental Congress authorized 42 currency issues, representing a total face value of \$241.6 million.<sup>2</sup> By 1781, the value of the continental currency had depreciated to 1/150th of its face value.<sup>3</sup>

Hamilton also distrusted irredeemable government-issued paper currency. Among his first acts as Secretary was to propose establishing a national mint, with the intent of providing a stable monetary standard. He argued for a bimetallic standard that defined a

"dollar" in terms of a certain quantity of gold or silver. Hamilton claimed that a metallic standard would "render the unit as little variable as possible; because on this depends the steady value of all contracts, and, in a certain sense, of all other property." Gold and silver coined by the mint would engender confidence in the emerging banking system. The potential for overissuance of bank notes could be limited by requiring the redemption of bank notes in specie. Congress accepted Hamilton's arguments and passed the Mint Act of 1792.

# Hamilton and the Bank of the United States

Establishing a strong national bank to facilitate the new nation's growth was perhaps the most controversial proposal made by the young Secretary.

The debate centered on the question of whether a national bank conformed to the newly drafted U.S. Constitution, which enumerated the powers of the federal authority. Article I, Section 8, of the Constitution spells out the powers granted to the federal government, including the power to tax, borrow, regulate commerce, and to coin and regulate the value of money. But Article I, Section 8 also contains a clause allowing the federal government to enact "all laws which shall be necessary and proper, for carrying into execution the [enumerated] powers." The meaning of "necessary and proper" became the focus of the debate over the national bank.

In December 1790, Secretary Hamilton introduced in Congress a plan for incorporating the Bank of the United States. Congressman James Madison opposed the bank, arguing that since states could incorporate banks, a national bank infringed on that right. Madison thought such a broad interpretation of "necessary and proper" would allow the federal government a reach far beyond the intentions of the Constitution's framers. Nevertheless, Hamilton's plan won Congressional approval by a 39-20 vote.

President Washington, also uncertain about the proposed bank's constitutionality, asked members of his cabinet to write arguments for or against the measure. Secretary of State Jefferson opposed the bank along lines similar to Madison's. While a bank may be a convenient means to an end, Jefferson argued, it was not a necessary means.<sup>6</sup>

Hamilton, however, argued that a national bank was justified for the federal government's exercise of its powers of taxation, debt issuance, and the regulation of commerce. President Washington accepted this argument and signed the bill incorporating the Bank of the United States on February 25, 1791.<sup>7</sup>

The Bank of the United States was given a 20-year charter. Its main office was in Philadelphia, although eight branches were established in major commercial areas across the country.8 The bank was capitalized at \$10 million, 20 percent of which could be subscribed by the federal government. Funds of private citizens made up the remainder of the bank's capital, although no individual could own a significant share of the total voting shares. This division of ownership gave the institution a dual character—it was largely a private institution, but it acted in the public interest in many of its responsibilities. Like many of its qualities, the Bank's quasipublic character would eventually be incorporated into the Federal Reserve System.

By most accounts, the Bank of the United States achieved Hamilton's objectives. It served as an important lender to the federal government, and its geographically diverse branches aided the fiscal operations of the federal government. Its branches allowed it to provide for a more elastic financial system. That is, it facilitated the flow of money and credit across the nation in response to changing regional needs because, unlike state banks, the Bank of the United States could operate across state lines. State bank notes often traded at a discount, partially because of the inefficient redemption systems in place. Although notes of the Bank did not represent a truly uniform national currency, they came closer to universal acceptance than any state bank's notes. 9 While not legal tender, the Bank's notes were acceptable in payment of all federal taxes, and by 1811, the last year of its charter, they accounted for about one-third of the money circulating in the country. 10

Because the Bank was relatively large, its influence was considerably greater than that of the typically small state banks. As the government's fiscal agent, the Bank acquired state bank notes when taxes were paid. Because it could refuse to accept the notes of any bank that would not pay out specie on demand, the Bank had a limited regulatory authority over

state-chartered banks. Furthermore, by redeeming state bank notes, it could lower the reserve positions of state banks, thereby directly affecting their lending potential—a form of monetary policy.

The Bank's effectiveness notwithstanding, the debate over renewing its charter in 1811 (seven years after Hamilton's death) was as bitter as the discussions of its initial charter. Indeed, the Bank's constitutionality had not been established in the courts, and there was considerable resentment of the centralized power being wielded by the Bank. Vice President Clinton cast the deciding vote against renewing the Bank's charter, breaking a 17-17 tie in the Senate.

In the years immediately following the demise of the Bank of the United States, the number of state banks exploded—as did their note issuance (see figure 1). Albert Gallatin, former Secretary of the Treasury, estimated that 208 banks had failed by 1815—a rate of around 30 per year. <sup>11</sup> Indeed, many of the problems that the national bank was designed to address resurfaced with its elimination, and in December 1815, President Madison recommended that Congress create a new national bank. <sup>12</sup> The charter for the Second Bank of the United States was approved on April 10, 1816.

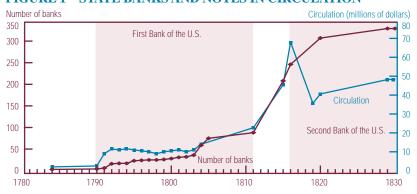
Several states tried to limit the Second Bank's power by taxing its notes and branches. When the Second Bank's cashier, William McCulloch, refused to pay Maryland taxes on the branch in Baltimore, a constitutional challenge to the establishment of a national bank was finally brought before the Supreme Court. In a unanimous 1819 ruling, Chief Justice John Marshall's majority opinion in support of the Bank echoed the arguments that Hamilton made had 28 years earlier:

"Let the end be legitimate, let it be within the scope of the Constitution, and all means which are appropriate, which are plainly adapted to that end, which are not prohibited, but consistent with the letter and spirit of the Constitution, are constitutional." 13

# Hamilton and the Creditworthiness of the New Nation

As Treasury Secretary, Hamilton was also charged with the task of refinancing and repaying the new nation's war debts.

#### FIGURE 1 STATE BANKS AND NOTES IN CIRCULATION



**SOURCE:** Report of the Comptroller of the Currency. Washington, D.C.: U.S. Government Printing Office, 1876.

Hamilton calculated the outstanding debt to be \$78.8 million, \$^{14,15}\$ roughly 31 percent of national income. \$^{16}\$ While it was widely agreed that funds borrowed from foreign governments would be repaid, many in the new Congress, including Jefferson and Madison, argued against repaying some obligations to avoid the difficulties of increased taxation. For example, people who bought heavily discounted government debt in secondary markets were generally considered inferior creditors, and some argued against honoring their claims. \$^{17}\$

But Hamilton was committed to establishing the government's creditworthiness. He knew the dangers of explicitly defaulting on debt (or implicitly defaulting by engineering inflation). He argued forcefully that by taking the expedient course and defaulting on portions of the war debt, Congress would cast doubt on the new government's trustworthiness and drive up the cost of credit by increasing the perceived riskiness of future debt. 18

Hamilton's plan called for repaying federal and state debts, at par and including interest, <sup>19</sup> using income from import tariffs on wine, spirits, tea, and coffee. He also proposed an excise tax to be levied on "pernicious luxuries," such as spirits distilled in the United States. In addition to the monies raised from these sources, he proposed that revenues from post office operations be used to retire war debts.

In a political compromise, Hamilton agreed to endorse a plan to move the nation's capital from New York—first to Philadelphia for 10 years, then to a site on the Potomac—if his debt repayment plan passed Congress. The plan passed, the capital was moved, and the new nation established its creditworthiness.

## ■ Hamilton's Legacy

While mostly remembered as a passionate revolutionary who found his end in a duel with a political enemy, Alexander Hamilton's lasting contribution was his farsightedness in establishing the integrity of the institutions that would become an important part of our nation's financial infrastructure. He emphasized the importance of an efficient system of financing government deficits and of a government honoring its debt commitments. One must question how nineteenth century development might have been affected if lenders had doubted our government's creditworthiness. Today, the U.S. government securities market is arguably the most efficient in the world, and U.S. government debt is among the most secure of all assets—the Treasury has never defaulted on any debt obligation.

The Federal Reserve System also owes much to Alexander Hamilton. His design of a large national bank, with branches located in the major commercial centers to facilitate the nation's payments and credit system, was the model on which the Federal Reserve System was established. His belief that responsibility for money creation should come from the combined wisdom of persons motivated by both public and private interests, and who are separated from the national treasury, is the basis of the Congressional vision that became the Federal Reserve Act in 1913.

Finally, Alexander Hamilton's argument for the importance of a stable purchasing power of money was a clear and powerful anti-inflation sentiment, an idea that has helped to make the U.S. dollar the most widely accepted and trusted medium of exchange in the world. When

we use the notes that bear his portrait—
mere paper that has great power to facilitate national and international commerce—we pay tribute to the man who
played a vital role in laying the foundation for the most effective financial and
monetary system in the world.

#### Footnotes

- 1. Signed "A Friend to America," A Full Vindication of the Measures of the Congress from the Calumnies of their Enemies, In Answer to A Letter, Under the Signature of A. W. Farmer, New York: James Rivington, 1774.
- 2. Charles Jesse Bullock, "The Finances of the United States from 1775 to 1789," in Bulletin of the University of Wisconsin: Economic, Political Science, and History Series. Madison, Wisc.: The University of Wisconsin, 1895, p. 135. Estimates of the amount of continental currency issued vary. James E. Ferguson puts the value at \$226 million. (The Power of the Purse: A History of American Public Finance, 1776-1790. Chapel Hill, N.C.: University of North Carolina Press 1961, p. 30.) Individual state governments issued notes with similar values, although by one estimate, their actual purchasing power was initially less than 20 percent of their face value, and rapidly depreciated further after issuance.
- **3.** See Charles W. Calomiris, "Institutional Failure, Monetary Scarcity, and the Depreciation of the Continental," *The Journal of Economic History*, vol 48, no. 1 (March 1988), pp. 47–68.
- **4.** Hamilton's "Treasury Report on the Establishment of a Mint," cited in Herman Edward Krooss, ed., *Documentary History of Banking and Currency in the United States*. New York: Chelsea House Publishers, 1969, p. 169.
- 5. For a discussion of the discipline imposed on bank note issue by regulations requiring the redemption of notes in specie, see Arthur J. Rolnick, Bruce D. Smith, and Warren E. Weber, "Establishing a Monetary Union: The United States Experience," Federal Reserve Bank of Minneapolis Working Paper, 1994.
- 6. Some historians have argued that Jefferson's opposition to the First Bank probably reflected his general opinion of banking, rather than the question of its constitutionality. Jefferson's contempt of banking is well known, as is his remark that "banking establishments are more dangerous to our liberties than standing armies."
- 7. Not all historians have been so generous regarding Hamilton's support of the Constitution. See Gregory B. Christainsen, "Constitutional and Ideological Influences on State Action: The Case of the First Bank of the United States," in *Money and Banking: The American Experience*. Fairfax, Va.: George Mason University Press.

- 8. The eight branch offices were in New York, Baltimore, Boston, Washington, D.C., Newport, Charleston, Savannah, and New Orleans.
- 9. John Thom Holdsworth and Davis R. Dewey, *The First and Second Banks of the United States*. Washington, D.C.: Government Printing Office, 1910, p. 94. See also Larry Schweikart, "Banking in North America, 1700–1900," in *Banking, Trade, and Industry: Europe, America, and Asia from the Thirteenth to the Twentieth Century*, Alice Teichova, Ginette Kurgan-van Hentenryk, and Dieter Ziegler, eds., 1997, p. 300. A uniform national currency would not exist in the U.S. until 1863.
- **10.** Holdsworth and Dewey, p. 91 (see footnote 9).
- 11. Albert Gallatin, Considerations on the Currency and Banking System of the United States. Philadelphia: Carey & Lea, 1831.
- 12. Reversing his initial opposition to a national bank, Madison said its constitutionality should be affirmed because precedent had already been established by the First Bank of the United States.
- **13.** John Marshall in McCulloch v. Maryland (1819).

Federal Reserve Bank of Cleveland Research Department P.O. Box 6387 Cleveland, OH 44101

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- **14.** Of this amount, \$11.7 million was owed to foreigners, \$40.4 million was owed by the federal government to domestic creditors, and \$26.6 million was owed by the states.
- **15.** Louis Hacker, "Secretary of the Treasury," in *Views of American Economic Growth: The Agricultural Era*, T. C. Cochran and T. B. Brewer, eds., New York: McGraw–Hill, 1966, p. 95.
- **16.** Robert J. Barro, *Macroeconomics*, 2nd ed. New York: John Wiley & Sons, Inc., 1987, p. 373.
- 17. Two years before Hamilton's refunding plan, federal debt sold at a 75 percent discount. See Peter M. Garber, "Alexander Hamilton's Market-Based Debt Reduction Plan," in Carnegie-Rochester Conference Series on Public Policy, vol. 35 (1991), pp. 79–104.
- **18.** Alexander Hamilton, "The Vindication No. III," in *The Papers of Alexander Hamilton*, Harold C. Syrett, ed., New York: Columbia University Press, 1961.
- **19.** Previously issued debt bearing 6 percent interest was refinanced at 3 percent interest. The continentals were redeemed at 3 cents on the dollar.

Michael Bryan is an assistant vice president and economist at the Federal Reserve Bank of Cleveland, Bruce Champ is an economist at the Bank, and Jennifer Ransom is a public information representative at the Bank.

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