"Running the 'Machine": How Greenbacks Funded the Union and Nationalized Its Currency

As the Confederacy rallied troops and fretted over its finances, the Union confidently entered the Civil War with an established Treasury, a functional system of taxation, and three-fourths of the nation smoney supply. Even so, by the winter of 1861-1862, it faced bankruptcy. Out of desperation, Congress passed the Legal Tender Act of 1862, authorizing Treasury Secretary Salmon P. Chase to print \$150 million of United States Notes, later dubbed "greenbacks." That amount eventually increased to \$450 million, ultimately funding 15% of the Union's war costs. Despite being unprecedented and widely criticized, greenbacks achieved remarkable success: saving the Union from immediate financial ruin, boosting bond sales for the rest of the war, and nationalizing America's currency system.

In July 1861, Chase estimated that the war would cost \$320 million, expecting, like most northerners, that it would end quickly. Of the three options of funding any war—borrowing, increasing taxes, or printing money—he decided to rely on the first two. Accordingly, Congress authorized the Treasury to sell \$250 million of bonds and decided to raise the remaining \$70 million by increasing tariff rates and implementing new taxes.⁴

Of the \$250 million of bonds, Chase sold \$150 million to northern banks, which purchased them with gold and then resold them to the public. However, Union defeats in 1861, coupled with the disastrous *Trent* affair, caused public confidence to plummet, weakening the bond market. At that point, most people traded with state bank notes, since the federal government had yet to issue a widespread paper currency. Those state bank notes derived their value from gold by being exchangeable into gold specie—gold coins. Now, northern fear over

¹ McPherson, Battle Cry of Freedom, 442.

² "Facts - The Civil War," National Park Service.

³ Fishback, Government and the American Economy, 199.

⁴ Cimbala, An Uncommon Time, 94-95.

the war's outcome sparked a run on banks, with people attempting to exchange their state bank notes for gold. In December 1861, with their gold reserves dipping to critical levels, northern banks suspended specie payments.⁵

The suspension of specie payments demonstrated the limited supply of gold and thereby signaled an end to the Treasury's borrowing efforts, since gold was the only national currency and thus the only acceptable payment for government bonds. Meanwhile, the earlier tax bills proved inadequate.⁶ Even as Chase's financial plan crumbled, government spending rose to \$2 million a day by the end of 1861,⁷ more than 10 times greater than the rate of prewar spending.⁸ In February 1862, the British publication *The Economist* wrote of the Union's finances:

At the outset of the American struggle it was believed that money would be the strong point of the Federal states; it is now believed that it is precisely their weak point. ... Taxation to such an extent is out of the question. Even in England we could not probably raise taxation by so large an amount. And loans will not be easily obtained. ... In every new country capital [gold] is scarce and valuable. 9

The world's premier financial newspaper deduced that the Union must resort to printing fiat money—paper notes unbacked by gold—but that even so, it was doomed for fiscal ruin: "According to all probability, the present gigantic struggle will come to an end." In January 1862, while visiting his quartermaster general, President Abraham Lincoln uttered in despair, "General, what shall I do? The people are impatient: Chase has no money and he tells me he can raise no more ... The bottom is out of the tub. What shall I do?" International and domestic opinion seemed to converge in predicting the Union's doom.

⁵ Unger, *The Greenback Era*, 14.

⁶ Spaulding, *History of the Legal Tender Paper Money*, 17.

⁷ Ibid., 14.

⁸ Gordon, "The High Cost of the U.S. Civil War."

⁹ "Will the State of the Federal Finances Bring the American Civil War to an End?" *Economist*.

¹⁰ Donald, *Lincoln*, 330.

Heeding the British financial pundits while ignoring their prophecies, Congress passed the Legal Tender Act on February 25, 1862, authorizing the Treasury to issue \$150 million of



A \$1 United States Note with Chase's portrait, showing the green ink which led to the nickname "greenbacks" 11

United States Notes.¹¹ These would be unbacked by gold and would also be "lawful money and a legal tender in payment of all debts, public and private, within the United States."¹² In addition, the Treasury could reissue

United States Notes received from bond sales.

Since greenbacks would be unbacked by gold, the Treasury could print them for next to nothing and then use them to pay soldiers and purchase goods, all without ever having to worry about people trying to exchange the greenbacks for gold. Thus, United States Notes constituted free money to the government, a last resort when the Union needed money. To compel people to accept them, Congress declared greenbacks to be legal tender—payable in all transactions and unable to be denied throwing its legal authority behind what would be the first fiat money as well as the first widespread paper currency issued by the federal government since the Continental notes printed during the American Revolution. Now, the public could trade with paper currency issued by the federal government instead of by state banks.

Being so unprecedented, the Legal Tender Act drew immediate domestic and international criticism. In Congress, Senator George H. Pendleton compared United States Notes to the earlier fiat Continental notes. Those had rapidly depreciated—lost their value—inflating

¹¹ "1862 One Dollar Legal Tender Note." World Banknotes & Coins.

¹² "An Act to Authorize the Issue of United States Notes."

¹³ McPherson, Battle Cry of Freedom, 445.

¹⁴ Dealy, "Currency, Finance, and the Civil War," Geneva Historical Society.

prices. In 1779, just halfway through the American Revolution, General George Washington had complained to John Jay, president of the Continental Congress, "A wagon-load of money will scarcely purchase a wagon-load of provisions." Politicians supporting the Legal Tender Act countered Pendleton's criticism with two main arguments. First, United States Notes would avoid depreciation by being different from Continental notes: they would be limited in amount and would be legal tender. Second, as articulated by *The Economist*, there was simply no other option. In early February of 1862, Chase wrote to Congressman Elbridge G. Spaulding, author of the Legal Tender Act, "Immediate action is of great importance. The Treasury is nearly empty." When introducing the bill, Spaulding himself declared:

Our finances deserve our most serious attention. ... We were never in greater peril than at this moment. ... The bill before us is a war measure, a measure of necessity, and not of choice ... These are extraordinary times, and extraordinary measures must be resorted to in order to save our Government, and preserve our nationality. ¹⁷

The argument of necessity secured the passing of the Legal Tender Act. Even so, in June 1862, The Economist sided with Pendleton, predicting that "the issue of an inconvertible currency must some time end in the worthlessness of the paper. The end is distant, but it must be sure." The British newspaper thus reasserted its belief that fiat money could not save the Union.

Soon, \$150 million of United States Notes proved inadequate. In November 1862, a soldier's wife appealed to *The New York Times*, "Many of the regiments at Suffolk ... have received no pay for over four months." Still lacking money, the Union resorted to its only viable short-term measure, passing two more legal tender acts in July 1862 and March 1863. Each authorized the printing of \$150 million more of United States Notes, bringing the total to

¹⁵ Sparks, The Writings of George Washington, 229.

¹⁶ Spaulding, *History of the Legal Tender Paper Money*, 59.

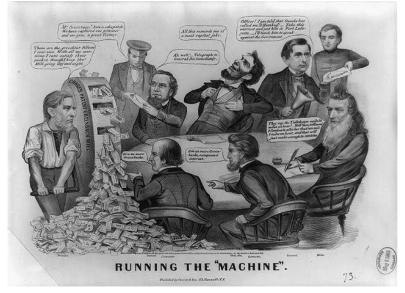
¹⁷ Ibid., 29.

¹⁸ "The Bearing of Federal Finance on the Political Position," *Economist*.

¹⁹ "Soldiers' Pay--An Appeal from the Wife of a Soldier," New York Times.

\$450 million.²⁰ Desperate circumstances thus convinced Congress to pass not just one but three legal tender acts, even despite its deep reservations.

While many northerners accepted the argument of necessity, most still viewed the legal tender acts as excessive. This opinion was common enough to be conveyed in an 1864 cartoon by Currier & Ives, one of the most prolific and popular American printmaking firms during the 19th century.²¹ Titled "Running the 'Machine," this cartoon portrayed Lincoln and his



"Running the 'Machine,'" an 1864 cartoon²²

administration as inept fools
making a mess of the Union.²² On
the left is the cartoon's
centerpiece—"Chase's Patent
Greenback Mill," run by Treasury
Secretary William Fessenden,
who had succeeded Chase that
summer. As Fessenden grimly
toils with unbuttoned shirt and

rolled up sleeves, greenbacks pour out from the mill onto an ever-increasing mound, illustrating the reckless persistence of the Treasury in printing fiat money. As two contractors in the foreground clamor for more greenbacks, Fessenden remarks, "These are the greediest fellows I ever saw. With all my exertions I can't satisfy their pocket, though I keep the Mill going day and night." The title of the cartoon, "Running the 'Machine," reinforces the message that greenbacks were flooding the economy. By 1864, \$415 million of United States Notes circulated throughout

²⁰ "Abraham Lincoln and Civil War Finance," Abraham Lincoln's Classroom.

²¹ "Currier & Ives," Encyclopædia Britannica.

²² "Running the 'Machine."

the North, more than twice the amount of state bank notes in the entire nation at the start of the war.²³ By specifically focusing on greenbacks, this satirical cartoon expressed the popular belief that the legal tender acts had been the Union's chief failure.

However, Pendleton, the pundits, and the public proved mistaken, for greenbacks were not a failure but a critical success in three major roles: First, as America's first fiat money under the Constitution, greenbacks enabled the Treasury to pay off its bills, preventing a Union bankruptcy without even causing runaway inflation. Second, as an abundant currency supply, greenbacks funded bond sales, sustaining the Union throughout the war. Third, as America's first widespread national paper currency since the Revolution, greenbacks nationalized America's currency system, fueling newfound prosperity.

Greenbacks outperformed Continental as well as Confederate fiat money, granting both the federal government and the northern public a stable currency with which to conduct business. During the war, the Confederacy also resorted to printing fiat money. Yet those Confederate notes rapidly depreciated like the previous Continental notes, which Mercy Otis Warren, an early historian of the American Revolution, had bluntly called "immense heaps of paper trash."²⁴ Greenbacks avoided such a fate. Though the Confederacy printed more than twice as much fiat money as the Union, it experienced exponentially more inflation.²⁵ By the end of the war, Union inflation stood at a mere 80 percent, compared to 9,000 percent for the Confederacy.²⁶

Though similar in many aspects, greenbacks and Confederate notes differed in one key regard: while United States Notes were legal tender, Confederate bills were not.²⁷ A Union

²³ Anderson, Some Tables of Historical U.S. Currency and Monetary Aggregates Data, Table 1.

²⁴ Warren, History of the Rise, Progress, and Termination of the American Revolution, 287.

²⁵ Fishback, Government and the American Economy, 201-202.

²⁶ McPherson, *Battle Cry of Freedom*, 447.

²⁷ Ibid., 445.

soldier paid with greenbacks could use them to pay off debt or buy groceries, and neither the creditor nor the shopkeeper could charge extra or refuse to accept the payment. Forced to circulate, greenbacks maintained their value. Meanwhile, southern sellers often charged higher prices for customers paying with Confederate notes, causing hyperinflation. Even then, some recognized the advantage of the Union approach. In April 1862, the Richmond newspaper *The* Daily Dispatch recommended that "it would be a very wise measure to declare the issues of the Confederate Government a legal tender."28 Unconvinced, however, the Confederacy decided to stand by its earlier policy, preferring to back its notes with public confidence alone and not with governmental authority. After all, Confederate bills were to be redeemable in gold specie within two years of the end of the war. Southern politicians thought that creating a legal tender law would only undermine confidence and hasten depreciation.²⁹ Though greenbacks also carried an assumption of future exchangeability, northern politicians took the opposite view toward invoking governmental authority, believing that promises alone could not prevent depreciation even with the North's stronger economy and better war fortunes. 30 To that end, the U.S. Congress had declared United States Notes to be legal tender, ensuring their success by adding compulsion to promise.

Compared to Confederate bills, greenbacks were so stable and trustworthy that even southerners traded with them, causing the Confederate Congress to outlaw such use.³¹ In 1863, *The New York Times* related this anecdote about a Confederate soldier illegally using greenbacks:

In Mobile, last week, a Vicksburgh soldier went ... to purchase a shirt. The soldier selected a shirt and inquired the price. He was told [by the clerk] that he could have it for

²⁸ "Confederate Money a Legal Tender," *The Daily Dispatch* (Richmond).

²⁹ McPherson, Battle Cry of Freedom, 439.

³⁰ Ibid., 447.

³¹ "A Bill to Prohibit Dealing in the Paper Currency of the Enemy."

\$25 in Confederate money, or \$2 50 in greenbacks. The soldier paid him with the latter, and immediately afterward reported the case to Maj. DENIS, ... who ordered [the clerk's] arrest.³²

Despite only being twice as common as greenbacks, Confederate notes were worth ten times less, at least according to the clerk's prices. Ironically, the Confederate soldier somehow possessed greenbacks and paid for his shirt with them before reporting the clerk, revealing his greater confidence in greenbacks, the money of his enemies. This story illustrates the massive depreciation of Confederate bills and the comparative stability of United States Notes, a difference due to the latter's status as legal tender. While Confederate inflation eventually dampened southern spirits and devastated the southern economy, greenbacks allowed northern optimism and growth to continue unabated. Furthermore, in their first major role as fiat money, greenbacks saved the Union by allowing it to pay off its immediate bills during the turbulent years of 1862 and 1863.

Greenbacks funded the Union throughout the rest of the war by revitalizing Chase's borrowing efforts. Before the Legal Tender Act, the Treasury could only accept gold and not state bank notes for bond purchases, since gold was the only national currency. But bond sales were hamstrung by the limited circulation of gold, as demonstrated by the banks' suspension of specie payments in December 1861. Congress hoped to change this with United States Notes. As Senator John Sherman confidently predicted:

The circulation of [greenbacks] will enable capitalists to buy your bonds. ... Now they cannot ... give you gold, and so they cannot buy your bonds. If you give them a circulating medium, ... you may be able to reach the purse of the capitalist, you may be able to reach the stocking of the poor but patriotic citizens, you may be able to gather in from all this broad extent of country the savings of your people.³³

³² "Penalty for Trading in Greenbacks," New York Times.

³³ Congressional Globe, 791.

Greenbacks were to supersede gold by acting as an unrestricted national currency which could be used to purchase bonds. Theoretically, once the public bought bonds with greenbacks, the Treasury could reissue the greenbacks and thus restart the cycle. The result would be a constant supply of greenbacks and a massive increase in bond sales.

Sherman's predictions did eventually come true. At first, bond sales continued to lag, even after the Legal Tender Act. As prominent economic historian Wesley C. Mitchell noted, "It became necessary to issue more greenbacks to compensate for the small demand for bonds." Hence, Congress passed the second and third legal tender acts, which many northerners denounced as "Running the 'Machine." However, like the critical mass needed to start a nuclear reaction, greenbacks finally hit a critical volume, sparking a frenzy of bond purchasing. By January 1864, \$500 million of bonds sold out. In fact, as Spaulding recollected, "the rush was so great near the closing out of the loan that nearly \$11,000,000 extra had been subscribed and paid for before notice could be given to sub-agents that the amount authorized by that act had been taken up." In their second major role as an abundant currency supply, greenbacks enabled the purchase of over \$1 billion of Union bonds during the Civil War, providing the Union with enough funds to prosecute the war.

Greenbacks were a widespread national paper currency—the first issued by the federal government since the Revolution. Between the ratification of the Constitution and the passing of the Legal Tender Act, the federal government had only minted gold and silver coins and occasionally issued bonds in the form of treasury notes. In 1861, America had created a primitive form of national currency in the form of Demand Notes, but those never circulated very widely.³⁷

³⁴ Mitchell, "History of the Legal-Tender Acts," 90.

³⁵ Spaulding, *History of the Legal Tender Paper Money*, 189.

³⁶ McPherson, Battle Cry of Freedom, 443.

³⁷ Tarnoff, "The Man Who Financed the Civil War," New York Times.

As a result, before 1862, America lacked an effective national paper currency. Instead, short-lived but widespread state banks issued their own notes, turning the nation's currency system into a chaotic mess. Economist Richard Sylla noted that before the Civil War, almost 10,000 different kinds of bank notes circulated throughout America, all of which "circulated at discounts the farther they were from the issuing bank. ... This was not an efficient payments system for an expanding economy." 38

As America's first national paper currency, Greenbacks revolutionized the country's currency system, fueling economic growth. Unlike state bank notes, greenbacks were not backed by local banks but by the federal government itself—which had also declared greenbacks to be legal tender—thereby retaining their value everywhere. This uniform system of United States Notes soon proved superior to the hodgepodge of state bank notes. This streamlining of trade, combined with the wide circulation of greenbacks, contributed to the rapid economic growth of the North even during the Civil War. As the *American Railroad Journal* declared in October 1863, "The activity which money encourages is the secret of our prosperity." 39

Greenbacks achieved such success in nationalizing America's currency system that

Congress passed the National Banking Act in 1863, which created a system of national banks

that printed a national paper currency in the form of National Bank Notes. 40 Just as United States

Notes had begun to replace state bank notes, National Bank Notes would eventually supersede

both United States Notes and state bank notes. The Legal Tender Act thus prefigured the

National Banking Act in the specific idea of a national paper currency and in the more general

idea of nationalization. In that, the spirit of greenbacks lived on. As Sherman later wrote

³⁸ Sylla, "The US Banking System: Origin, Development, and Regulation," Gilder Lehrman.

³⁹ "The Issue of National Money," *American Railroad Journal*.

⁴⁰ "Abraham Lincoln and Civil War Finance," Abraham Lincoln's Classroom.

regarding the National Banking Act of 1863: "The policy of this country ought to be to make everything national as far as possible. If we were dependent on the United States for a currency and a medium of exchange, we would have a broader and more prosperous nationality."⁴¹

Created out of desperation, greenbacks defied the prophecies of domestic doomsayers and overseas analysts, rescuing the Union from financial ruin and weathering the war without causing hyperinflation. Their ubiquity, most criticized by the public, ultimately formed part of the foundation for their success. Continually reissued, greenbacks fueled incredible bond sales that funded the Union throughout the war. And as greenbacks poured out of the "machine," they found their way into the pockets of every citizen, nationalizing America's currency system and forever altering the way Americans dealt business.

⁴¹ Sherman, John Sherman's Recollections of Forty Years, 298.

Bibliography

Primary Sources

- "1862 One Dollar Legal Tender Note." World Banknotes & Coins. Accessed February 26, 2018. http://www.worldbanknotescoins.com/2014/10/1862-one-dollar-legal-tender-note.html.
- "A Bill to Prohibit Dealing in the Paper Currency of the Enemy." Confederate Congress, December 22, 1863. http://docsouth.unc.edu/imls/house3/house3.html.
- "An Act to Authorize the Issue of United States Notes, and for the Redemption or Funding Thereof, and for Funding the Floating Debt of the United States." 37th Cong., 2nd sess., February 25, 1862. https://www.loc.gov/law/help/statutes-at-large/37th-congress/session-2/c37s2ch33.pdf.
- "Confederate Money a Legal Tender." *The Daily Dispatch* (Richmond), April 11, 1862. http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A2006.05.0447%3Aar ticle%3Dpos%3D9.
- Congressional Globe, 37th Cong., 2nd sess. https://books.google.com/books?id=EkTqxPGEFn0C&printsec=frontcover#v=onepage&q&f=false.
- "Penalty for Trading in Greenbacks." *New York Times*, August 8, 1863. http://www.nytimes.com/1863/08/08/news/penalty-for-trading-in-greenbacks.html.
- "Running the 'Machine." New York, NY: Currier & Ives, 1864. http://www.loc.gov/pictures/item/2003689257/.
- Sherman, John. *John Sherman's Recollections of Forty Years in the House, Senate and Cabinet.*Chicago IL: Werner Company, 1895. https://archive.org/details/johnshermansreco00sher.
- "Soldiers' Pay--An Appeal from the Wife of a Soldier." *New York Times*, November 28, 1862. https://www.nytimes.com/1862/11/28/archives/soldiers-payan-appeal-from-the-wife-of-a-soldier.html.
- Sparks, Jared. *The Writings of George Washington*. Vol. 6. Boston, MA: American Stationers' Company, 1838. https://books.google.com/books?id=7To6AQAAMAAJ&printsec=frontcover#v=onepage &q&f=false.
- Spaulding, Elbridge G. *History of the Legal Tender Paper Money Issued During the Great Rebellion*. Buffalo, NY: Express Printing Company, 1869.

- https://fraser.stlouisfed.org/files/docs/publications/books/1869histlegaltender/historyofleg altender.pdf.
- "The Bearing of Federal Finance on the Political Position." *Economist*, June 28, 1862.
- "The Issue of National Money--How it Effects [sic] our Prosperity." *American Railroad Journal*, October 3, 1863.

 https://books.google.com/books?id=IzUyAQAAMAAJ&printsec=frontcover#v=onepage &q&f=false.
- Warren, Mercy Otis. *History of the Rise, Progress, and Termination of the American Revolution in Two Volumes*. Bedford, MA: Applewood Books, 1805. https://books.google.co.th/books?id=Y9_SbYjHe1gC&printsec=frontcover&redir_esc=y #v=onepage&q&f=false.
- "Will the State of the Federal Finances Bring the American Civil War to an End?" *Economist*, February 22, 1862.

Secondary Sources

- "Abraham Lincoln and Civil War Finance." Abraham Lincoln's Classroom. Accessed February 26, 2018. http://www.abrahamlincolnsclassroom.org/abraham-lincoln-in-depth/abrahamlincoln-and-civil-war-finance/#63bl.
- Anderson, Richard G. *Some Tables of Historical U.S. Currency and Monetary Aggregates Data.* St. Louis, MO: Federal Reserve Bank of St. Louis, 2003. https://files.stlouisfed.org/files/htdocs/wp/2003/2003-006.pdf.
- Bianchi, Nicole, and John Bianchi. "Funding the American Civil War (1861): A Revolution in Government Finance." YouTube video, 33:59, January 28, 2014. https://www.youtube.com/watch?v=Rp6YkLD0Qew.
- ------. "The Civil War Legal Tender Acts (1862-1865): A Revolution In U.S. Monetary Policy." YouTube video, 40:34, May 19, 2014. https://www.youtube.com/watch?v=Rp6YkLD0Qew.
- Carson, Thomas, and Mary Bonk. *Gale Encyclopedia of U.S. Economic History*. Vol. 1. Detroit MI: Gale Group, 1999.
- Cimbala, Paul Alan, and Randall M. Miller. *An Uncommon Time: The Civil War and the Northern Home Front.* New York, NY: Fordham University Press, 2002. https://books.google.com/books?id=8ZKybV1mPbcC&printsec=frontcover#v=onepage&q&f=false.

- "Currier & Ives." Encyclopædia Britannica. Accessed February 26, 2018. https://www.britannica.com/topic/Currier-and-Ives.
- Dealy, Anne. "Currency, Finance and the Civil War." Geneva Historical Society. August 8, 2014. https://genevahistoricalsociety.com/business-and-labor/currency-finance-and-the-civil-war/.
- Donald, David Herbert. *Lincoln*. New York, NY: Simon & Schuster Paperbacks, 1995. https://books.google.com/books?id=fuTY3mxs9awC&printsec=frontcover#v=onepage&q&f=false.
- Egnal, Marc. "The Greenback Is Born." *New York Times*, February 27, 2012. https://opinionator.blogs.nytimes.com/2012/02/27/the-greenback-is-born/? r=0.
- "Facts The Civil War." National Park Service. Accessed February 26, 2018. https://www.nps.gov/civilwar/facts.htm.
- Fishback, Price V. *Government and the American Economy: A New History*. Chicago, IL: University of Chicago Press, 2007. https://books.google.com/books?id=knd1d13HzdEC&printsec=frontcover#v=onepage&q&f=false.
- Gordon, John Steele. "Paying for the War." *American Heritage*, March 1990. https://www.americanheritage.com/index.php/content/paying-war.
- ——. "The High Cost of the U.S. Civil War." *Barron's*, April 9, 2011. https://www.barrons.com/articles/SB50001424052970203990104576191061207786514.
- McPherson, James M. Battle Cry Of Freedom. New York, NY: Oxford University Press, 1988.
- Mitchell, Wesley Clair. *A History of the Greenbacks*. Chicago IL: University of Chicago Press, 1903. https://archive.org/details/historyofgreenba00mitcrich.
- ——. "History of the Legal-Tender Acts." PhD diss., University of Chicago, 1903. https://archive.org/details/historyoflegalte00mitc.
- Sidhu, Dawinder S. "The Birth of the Greenback." *New York Times*, December 31, 2013. https://opinionator.blogs.nytimes.com/2013/12/31/the-birth-of-the-greenback/? r=0.
- Sylla, Richard. "The US Banking System: Origin, Development, and Regulation." Gilder Lehrman Institute of American History. Accessed February 26, 2018. https://www.gilderlehrman.org/history-now/us-banking-system-origin-development-and-regulation.
- "The Civil War." Tax History Project. Accessed February 26, 2018. http://www.taxhistory.org/www/website.nsf/Web/THM1861?OpenDocument.

- Tarnoff, Ben. "The Man Who Financed the Civil War." *New York Times*, July 16, 2011. https://opinionator.blogs.nytimes.com/2011/07/16/the-man-who-financed-the-civilwar/? r=0.
- Unger, Irwin. *The Greenback Era*. Princeton, NJ: Princeton University Press, 1964. https://books.google.com/books?id=WTPWCgAAQBAJ&printsec=frontcover&source=g bs_atb#v=onepage&q&f=false.