1-1-2011

The Missing Central Bank: A Case History of the United States of America 1791-1913

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A Case History of the United States of America 1791-1913

by

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A thesis presented to the
Graduate School of Arts and Sciences
of Washington University in
partial fulfillment of the
requirements for the
degree of Masters of Arts

December 2011

Saint Louis, Missouri

Abstract

This paper explores the economic, political, and social motivations for why the United States of America chose not to have a central bank between the years of 1775 and 1913. The paper will explain why in the initial years of the republic there was support for the national bank but over time opinions drastically changed. In addition, it will explore how even after several financial crises during the 1800s, there was still little desire to have a central bank. The paper will conclude by explaining how the presence of a central bank became essential to the U.S. financial markets in the early 1900s.

Dedication

To my wonderful family, dearest friends, and wise mentors:

Without you I could not hope to achieve what I have.

Thank you for your unwavering confidence in my ability

to accomplish what at times has seemed impossible.

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Section I: Introduction

Nearly all nations have found through their evolution that the presence of a national currency and a centralized authority to control the liquidity of this currency, are essential to guaranteeing the economic growth, stability, and prosperity of their nations. Today, all industrialized nations and almost all industrializing nations, have a national currency and a central bank to support this currency. While the evolution of each country's banking system is unique, a central bank has always developed to provide a stable common currency, to regulate banks, to act as a banker for their respective country's government and banks, and as a "lender of last resort" for banks in the case of financial turmoil. However, even though central banks carry out similar functions today, their structure and operation differ as a result of their nation's unique political and economic history.

In particular, the United States has been regarded as one of the greatest economic powers of the twentieth century. Not only has its GDP maintained its spot as the largest in the world for the past hundred years, but its currency is used throughout the world in trade and finance. The US's GDP in 2010 was nearly 15 fold its size in 1910 and almost 1000 times its size in 1810.[1] However, the US did not always enjoy the financial prosperity and stability it takes for granted today. While 2008 brought the unusual terror of a financial panic, the United States was plagued by similar panics since its birth nearly every 20 years until the creation of a stabilizing monetary authority in 1913, the Federal Reserve System.[2]

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[1] Data obtained from the United States Bureau of Economic Analysis.

[2] Financial panics have been recorded in 1812, 1819, 1832, 1837, 1857, 1873, 1893, 1897, 1907, 1929, 1987, and 2008.

It is not by chance that the growth the United States experienced in the twentieth century has coincided with the existence of the Federal Reserve. Only through the Federal Reserve has the nation been able to maintain a stable currency in both its value and availability for use. In fact, the Federal Reserve was a direct response to the volatile banking industry that existed at the end of the nineteenth century. Its presence in the economy not only stabilized the nation's financial markets but also allowed for the economy to readily access currency and credit.

For the 138 years prior to the Federal Reserve however, the US struggled to build a stable financial system. Many scholars have established that the absence of a nationally provided paper currency and the lack of a monetary authority were detrimental to the financial stability and economic growth of the United States during the eighteenth and nineteenth centuries.[3] Lacking from the literature however, is any comprehensive explanation of why the nation went 138 years without a nationally provided paper currency and a central bank, even though all other leading economic powers at the time were thriving with the use of these instruments.

In fact, by the mid-1700s all of the leading European economic powers, including England, France, Germany, Holland, Italy, Portugal, and Spain, had each adopted a national currency and created a central authority who was responsible for managing the currency's supply and value. Through a process of success and failure, the European nations learned from each other and quickly altered the structure and responsibilities of their central banks. Eventually, all of the nation's established central banks with similar

[3] See Dewey (1931), Friedman and Schwartz (1963), and Markham (2002).

key responsibilities, including: the oversight of the national currency, the regulator of domestic banks, banker to the government, and lender of last resort to banks in crisis.

The question of interest is why did the United States chose to ignore the successful models of central banking from its European counterparts and chose instead to go through 138 years of economic turmoil? In the formation of the US Constitution and the nation's basic framework, the Founding Fathers borrowed heavily from European philosophers and experiences.[4] The very system they designed was the culmination of what they had learned from the Europeans. Why the Founding Fathers and subsequent generations ignored the important lessons from the European experiences in central banking when they outlined the nation's currency and financial systems, especially when the presence of a central bank had proven to be an integral component in a nation's growth and financial stability?

Was the US's decision simply a protest against the traditions set by the British Empire and other European powers? Yes and no. It is clear that the colonists were frustrated by their experiences under British rule and sought to establish an innovative structure for their nation's government. In fact, the colonists were so fearful of the tyranny they experienced under the British, that they would take every measure to limit

[4] The Founding Fathers of the United States were great admirers of the European political and economic philosophers including: Locke, Hobbes, Rousseau, Smith, Voltaire, and Physiocrats. Smith was especially popular among the forefathers and was a great advocate of a centralized currency and a monetary authority to govern it. These philosophers clearly impacted the Founding Fathers' choice in government structure, but why didn't they influence the choice regarding the nation's financial structure?

any government entity from obtaining too much power.[5] However, this does not explain the actions of later generations.

What is clear from the analysis of US history is that the American experience with central banking is very complicated. In fact, no author has been able to explain the policy choices made by the various generations of Congress with respect to a central bank in terms of the economic and social context of those periods. This paper seeks to do just this. By analyzing the economic, political, and social factors during the periods leading up to key votes in Congress with respect to the currency and a central bank, this paper hopes to shed light on the evolution of the US's banking system and its eventual adoption of the Federal Reserve System in 1913.

The paper will show that only through the experience of various financial mishaps and periods of economic stress, the American people realized the need for a uniform national currency and the presence of an independent central authority to regulate the banking and financial industries. It will explain how in the late 1700s and early 1800s the people's distrust of a powerful federal government and the desire to increase state wealth, would prompt politicians to give each state the right to regulate banks within their borders. Instead of opting for a nationally provided currency, politicians would give banks the right to print individual currency notes. This form of state banking was feasible when populations and trade between businesses were concentrated within cities that were geographically isolated. However, as production of agriculture and goods expanded, and trade more frequently reached across state borders, the need for a uniform, widely

[5] This fear created the Federalism debate which would continue to shape the nation both politically and economically throughout its history.

available national currency and a national oversight agency trumped the arguments in favor of state regulated banking. As the era of state banking was plagued with bank failures and national banking panics, Americans grew more and more distrustful of their local governments and urged the national government to regulate the banking industry. The result was a push for an independent regulatory agency whose mission would be to support the economic prosperity of the nation, independent of the motivations of politicians and bankers.

The rest of the paper is organized as follows: Section II will discuss the economic, social, and political factors as they evolved by examining each distinct period in US banking history; Section III presents an econometric model to analyze the importance of these factors in deciding whether or not to have a central bank; Section IV concludes.

Section II: The Banking History of the United States, 1775-1913

The British Colonies

Absent on the arrival of the first British immigrants to the North American continent, was any form of functioning currency. In 1605, Queen Elizabeth established that only coins stamped by the Crown could be treated as legal tender.[6] However, the English coffers were limited in their supply of precious metals, including gold, silver, and copper which were the primary metals used as coin currency. The colonies were seen as a means for generating wealth and the English government saw no reason to drain their coin reserves to aid commerce in the American colonies. Thus, the English government discouraged all efforts to bring specie (gold, silver, or any other precious metals) to the colonies including a law in 1695 prohibiting the exportation of specie out of the motherland.

Further complicating matters was the rarity of gold, silver, and other precious metal deposits in the colonies. While limited mining rights were granted to the Virginia and Plymouth settlements under their royal charter, little was found since the East Coast lacked gold and silver deposits. The only source of precious metals came from surpluses in trade with the British, French, and Spanish Empires. The course of trade was such that the Spanish piece of eight, called the Spanish dollar, became the most readily available coin in the colonies.[7] However, the presence of the Spanish dollar did not resolve the colonies' currency issue; there was simply not enough currency to facilitate trade.

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[6] Legal tender is defined as money that could be tendered and had to be accepted for payment of any wages, fees, and debts.

[7] The Spanish dollar became the basis for the US dollar. The US dollar sign resembles the figure eight and the two lines in the dollar sign are found on the reverse side of the old Spanish dollar. The term "buck" was also derived from the Spanish dollar. At that time a large portion of trade involved deerskins. A "buck" was

To further frustrate matters, the colonists chose to retain the English system of pounds, shillings, and pence as their money of account.[8] Since the English system was based on the silver standard and because foreign currency could not serve as legal tender under Queen Elizabeth's 1605 proclamation, it was necessary for the colonists to divide the Spanish dollar into smaller coin denominations, which literally meant that the coin was cut into pieces.[9] The scarcity of coin varied by colony and thus each colony necessarily had to adjust the Spanish dollar conversion based on their needs. In areas such as Massachusetts and Virginia where currency was in high demand, these colonies went as far as to mint their own coins from less valuable metals in order to meet the demand.

The process of foreign coin conversion made trade difficult between the colonies and England. The variation in coin values often left the British merchants and Crown at a loss as the coins were overvalued in the colonies due to their scarcity. In addition, the monarchy feared the power to coin currency would make the colonies too independent. To reduce this threat, in 1695 the English government made the operation of mints in the colonies illegal and through a royal proclamation in 1708, Queen Anne set the rate of conversion on foreign coins "lest the rates should be fixed to the detriment of the King and the merchants." (Saunders, p.152) The foreign coins fixed at this rate became known as "Proclamation Money" and while it served as an alternate to the few English coins circulating in the colonies, this limitation on value of foreign coins further exacerbated the shortage of useable currency in the colonies. As every attempt to create a species

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the standard of trade and by 1750 the term became synonymous in the American colonies with its monetary equivalent, the Spanish dollar. (Nussbaum, p. 10)

[8] Under the English system, twelve pence equaled a shilling and twenty shillings equaled a pound.

[9] The Spanish dollar was converted in England at a rate of 4 shillings and 6 pence.

reserve to support commerce was prohibited by the English government, the colonists grew more frustrated and angry with their situation. They saw these acts as limiting to their rights and freedom and were detrimental to their growth and prosperity.

Without enough circulating coins the colonial governments were unable to pay their bills and taxes, the only option left to them was the creation of paper money. Thus the colonies began to issue currency that consisted of bills of credit, promises to pay, and other debt instruments so that good and credit could be transferred.[10] Massachusetts in 1690 was one of the first colonies to issue bills of credit, which were simply promises to pay at a specific future date. While initially these bills could be used only to pay state debts, in 1712 Massachusetts made its bills of credit legal tender in payment of any private debt. Other colonies soon followed; by 1734, all colonies issued bills of credit that were considered legal tender for all debts, private and public. As there were no taxes to support payment of the bills and there was no interest paid on the early bills of credit, the colonial bills were often unstable in value and frequently sold at a discount. In addition, the colonial legislatures often issued excessive amounts of the bills which added to their depreciation in value.[11] This posed a huge problem for creditors.

In an attempt to dampen these inflationary pressures, the colonies set commodity values as index values on their bills of credit. The problem was that these commodity indexes were often inflated. More importantly, differences in depreciation levels between each colony's bills of credit were troublesome in facilitating trade between the colonies. Exchange rates for various bills issued by the colonies needed to be established daily

[10] This form of payment copied the tradition set by the English monarchy. When coin reserves were low, it was common for the monarchy to issue bills of credit to pay for its operating and military expenses.
[11] Adam Smith and others noted that these economic weaknesses in the bills of credit inevitably would lead to their depreciation and that they were the cause of inflation in the colonies (Markham, pg. 52).

because of their volatility in value. Thus with little to no specie reserves and the complication with bills of credit, the colonies struggled with interregional trade in addition to their trade with England. English merchants were enraged because they believed that these bills of credit had been specifically designed to cheat them.

The colonies urged Parliament to help them with their currency issues and some representatives took up this cause. George Grenville in 1760 proposed to the English Parliament that they should create a single American currency to facilitate commerce and payment of taxes in the colonies but this proposal was never carried out (Markham, pg. 52-54). Instead of heading the requests of the colonies, in 1764 the English Parliament passed a currency act that outlawed the colonial bills of credit as legal tender and required all colonies to withdraw their bills of credit from circulation upon their expiration date. Many merchants in the colonies were frustrated with Parliament's unwillingness to help them and the colonies chose to continue to issue their bills of credit against the wishes of the motherland.

To control this form of mutiny, Parliament took more drastic measures against the colonies they saw as the worst offenders. In 1764, Parliament specifically outlawed bill issues by the Virginia House of Burgesses and ordered merchants to refuse them as payment. As a result Virginians were forced to use what little coin currency they had in reserve and this drained Virginia of all of its specie reserves. This left debtors without a means of paying their debts and many went bankrupt.[12] This move by Parliament was the last straw for many Virginians and it ignited their demands for independence.

[12] Markham notes that the shortage of currency even affected the founding fathers. Thomas Jefferson was so strapped for currency that he had to borrow cash from his servants, relatives, and friends. He was forced

As a respected diplomat, Benjamin Franklin sought to convince the English Parliament of the benefits of allowing the colonies to use bills of credit as there were no other forms of currency to facilitate trade in the colonies. Franklin published his *Remarks and Facts Concerning American Paper Money* in 1767. Parliament responded to Franklin and the growing anger in the colonies, by allowing the use of bills of credit only in payment of taxes and debt due to the colony that issued the bills. However, Parliament reinforced their decision that these bills could not be used as legal tender for private debts between the colonies, nor in payment of taxes to the English Crown. In addition, Parliament declared that silver coins could only be used as legal tender for payments up to £25 and only gold would be accepted for additional amounts. (Markham, pg. 56) This final step made the payment of the colonies taxes and duties impossible, and the colonies were on the verge of bankruptcy.

Thus, every attempt by the colonists to form a method of payment was either made illegal or rejected as legal tender for payment of debt by the English Parliament. With a lack of specie to pay their debts to the British merchants and Crown, the colonists could not pay the taxes and fees that were levied on them. While Parliament could have solved this problem by providing a currency to the colonies, their lack of concern for the economic needs of the colonists galvanized the colonies and made each resent their political situation. It was clear that the economic development and wealth of the colonies was not of central interest to Parliament, and it became clear to the colonies that a break from the motherland was a necessary step to their survival. Thus, it was inevitable that

to barter for goods and services. (Markham, pg. 55). This frustration with obtaining currency further fueled Jefferson's hatred of banks and businessmen, as they were skillful manipulators of the currency.

the financial needs of the colonies and the unwillingness of the Crown to answer these needs would turn into a political movement against the Crown.

The colonists were so distressed by what they say as a tyrannical government, that their fury against England would turn into fear of a powerful central government. This fear would shape the political thought of the American citizenry for generations and spark one of the greatest arguments in US history, the balance between the rights and responsibilities of the States versus those of the Federal Government; what is better known as the Federalism debate. It is this exact debate that would shape the early financial choices of the nation and lead to the nation's first political parties.

The American Revolution

While the Revolution was seen as a chance for new beginnings in the British Colonies in North America, the continued shortage of specie and absence of a uniform currency threatened its success. Thomas Paine noted that the American states were "in want of two of the most essential matters which governments could be destitute of – money and credit."[13]

Following the Battle of Bunker Hill, on June 22, 1775, the Continental Congress took steps to organize funds to battle one of the most powerful nations in the world. Congress authorized 2 million bills of credit valued in Spanish dollars to be issued, referred to as "Continental dollars". The credit of the twelve colonies was pledged to support these bills. The colonists feared that the lack of specie to back up the value of the currency would lead to its failure, and so they undertook extensive efforts to secure

[13] Hammond, p. 43

funding. According to Dewey (1931), Benjamin Franklin and others were able to secure gifts totally $1,996,500 in 1776 from France and Spain to aid the American States. Dewey also reports that the Union secured foreign loans from France, Holland, and Spain in the amounts of: [14]

Table 1: Foreign Loans to U.S. during Revolutionary War

Year	France	Spain	Holland
1777	$181,500		
1778	$544,500		
1779	$181,500		
1780	$726,000		
1781	$1,737,763	$128,804	
1782	$1,892,237	$45,213	720,000
1783	$1,089,000		584,000
1784			1,395,200
1785			53,600
1786			47,200
1787			129,200
1788			270,800
1789			400,000
Total	$6,352,500	$174,017	$3,600,000

Given the gifts from France and Spain at the beginning of the war, the Continental dollar was initially able to maintain its value. However, in the following years as the loan amounts varied with the successes and failures of the American army, the Continental's value became unstable. The uncertainty regarding the ability of Continental to be redeemed for specie caused the currency to depreciate.[15] Additionally, Congress was unable to gain the necessary approval to levy a national level tax on citizens to pay for the war efforts. Without a monetary authority to tighten the reigns, Congress responded

[14] Dewey, p. 47, 57
[15] Benjamin Franklin predicted this outcome because the currency would not bear interest to its holder. Thus its value and use relied on the creditworthiness of the American States.

to the depreciation by allowing additional issues of the Continental dollar. Dewey (1931) reports the issue and amounts authorized were as follows:

Table 2: Issues of Continental Dollars

Year	Number of authorizing issues	Amounts
1775	3	$6,000,000
1776	4	$19,000,000
1777	5	$13,000,000
1778	14	$63,500,300
1779	14	$140,052,480
Total	40	$241,552,780

The depreciation continued despite attempts by Congress to control it, and by 1781 it cost more to print a Continental than it was worth in currency. In addition to the issue of Continentals, the States put out $209,524,776 of their own paper notes.[16] The States were not as restricted as Congress in levying taxes. As under British colonial rule, the States continued to collect taxes from their citizens but these amounts were small. Under the initial assembly rules, the Continental Congress could ask the States to contribute fixed sums to pay for its operating expenses. However these requests had no compelling power to be followed and the actual value of state contributions was far less than what was asked.[17] While some states made donations to the national war efforts, most chose to keep their tax revenue in order to support their local militia.

[16] Dewey, p. 36. Of the $209,524,776, Virginia issues more than one-half totaling $128,441,000, North Carolina issued $33,325,000, South Carolina issues $33,458,926, the rest by New England and the Middle States.

[17] Congress attempted to collect some funds from the States, through what is known as “requisition” or assessment of taxes on the States. The revenue from such attempts was limited. Charles Jesse Bullock, a Professor of Economics at Harvard from 1869-1941, in his book *The Finances of the United States, 1775-89* (1895, p.163) cites that between November 22, 1777 and October 6, 1779 there were four requisitions asking for $95,000,000 in paper money from the States but the payment totaled only $54,667,000 (stated in

Congress sought to overcome its financial limitations through the Articles of Confederation in 1781. The Articles required that only Congress could place duties on goods imported through Congressional treaties with foreign nations. However, to obtain the consent of all States regarding this stipulation, it also became part of the Articles of Confederation that taxes on individuals could only be levied under the direction of State authorities. Thus, the Articles did more to tie the hands of the national government than to give it additional financial power.

During the drafting of the Articles of Confederation, many representatives argued against giving taxation rights to the federal government. They feared that the central government would misuse its authority as the British had. The colonies had rebelled out of the desire to gain commercial freedom without interference and a central taxation authority was seen as a threat. Some states such as Rhode Island, even refused to support Congress's right to set national tariffs because it feared that the tax would not only weigh more heavily on commercial states but it would give Congress the power to collect money indefinitely and without accountability. These arguments were the first in the Federalism debate and would be used later when the Constitution was drafted to try to limit the financial power yielded by the federal government.

Even with the monetary limitations of the rebelling colonies, they eventually triumphed through the war. However, by 1786 the national financial system was weak and further borrowing from home and abroad to fund the young nation was not possible. There was no national tax to support the currency and the Union was in desperate need of

period's nominal dollar rates). In addition, there were three specie requisitions between 1780 and 1781 which amounted to $10,000,000, however only $1,592,222 was actually paid to Congress.

financial reform. It was clear that if the republic were to continue, the government and its finances would have to be remodeled. Thus it was determined by the delegates of the Annapolis Convention of 1786 that a distinct agreement that balanced the rights of the states and federal government must be made. It was agreed that this would be the main topic at the Philadelphia Convention of 1787, or what later became known as the Constitutional Convention.

The New Nation and the First Bank, 1775-1811

The final version of the Constitution placed much of the control regarding the country's finances in the hands of the federal government. It gave Congress the right to impose national level tariffs and taxes to finance the federal government and the responsibility of coining the nation's currency. It prohibited the states from coining money, issuing bills of credit, impairing the obligation of contracts, and declaring anything other than gold or silver as legal tender for payment of debt.

Lacking from the Constitution however, was any clear outline regarding the nation's financial system. In fact, the Constitution remained silent on many financial issues including the issuance of currency and what authority, if any, did the government have to support or regulate business. This absence of specifics was done purposely to address the ongoing debate between the nation's forefathers regarding the balance of power between the States and the federal government. The nation was divided between those who supported a strong federal government and those who supported the rights of the states above all else. The Southern states feared a tyrannical government like that of the British Parliament while many states in the North placed all focus on building a united country under a powerful central government.

It was clear however to all of the delegates at the Constitutional Convention that the nation's prosperity rested on its creditworthiness at home and abroad, and its ability to provide a stable currency. Thus Congress created the Treasury Department in 1789 and sought out the nation's finest minds to suggest a plan to support the nation's financial prosperity. The debate in Congress regarding the creation of the Treasury was extensive. To prevent the power of the nation's finances from being concentrated in the hands of one individual, Congress designed the Treasury so that it would be headed by a group of individuals including the Secretary (who was ultimately responsible for the Treasury's actions), a comptroller, auditor, treasurer, and register. To create accountability, the Treasury heads were required to provide frequent reports to Congress and the President regarding the nation's financial wellbeing.

In following the rules outlined by Congress, the President was responsible for appointing the Secretary of the Treasury. President Washington appointed his trusted friend Alexander Hamilton to serve as the first Secretary of the Treasury. Hamilton's talent with finance made him a popular pick for Treasury Secretary. Hamilton had extensive experience in the banking industry and had a profound understanding of the markets.[18] As many in Congress trusted Hamilton's expertise, their first request was for Hamilton to suggest a plan for the nation's financial prosperity.

[18] Hamilton was born on the British Island of St Croix in 1755. At age 11 he began work in a counting-house in St. Croix which was owned by two wealthy New York merchants. Within short years seven years, his talents in finance and trade quickly lead to his promotion to bank manager.

Hamilton was an ambitious man and he greatly admired strong centralized governments. He felt that a balance of powers was necessary between the executive, judiciary, and legislature but granting power to many individuals such as to each state would cause rivalry and instability. Thus his immediate objectives as Treasury Secretary were to establish credit at home and abroad and to strengthen the national government at the expense of the states. His proposal to Congress was twofold: first that the new federal government should assume the entire debt incurred by the Continental Congress and the States during the Revolutionary War; second, to pay for this debt he suggested the creation of a publically held national bank that would facilitate the issuance of a stable national currency, repay the public debit, and provide capital to new businesses in order to develop the nation's economy. The banking structure he suggested was modeled after the Bank of England. The bank would be capitalized at $10 million and issue shares of which the US government would hold 20 percent. Supporters of his plan argued that these steps would unite the country by eliminating any previous financial burdens and would help to establish the responsibilities of the federal government which were vaguely defined by the Constitution.

While Hamilton's suggestions were popular they also drew immediate opposition from those who supported the rights of the state governments. Heading the opposition was Thomas Jefferson, then Secretary of State, and James Madison, a member of the House of Representatives. Their first argument was against the assumption of the state debt by the federal government. The Southern States were vehemently opposed to the assumption of the state debts because they had incurred less debt than the Northern States during the war and had already repaid most of their debt by 1790. They argued that it was unfair to tax their states to pay for debts incurred by others. In addition, southern states such as North Carolina feared that the federal assumption of debt would reward speculators who had bought debt certificates at a discount during the war; the federal assumption had increased the value of these debt certificates immensely. In addition, these states feared that giving the central government the right to tax would undermine their own tax revenue and would increase the potential power of the federal government.

The opposition also argued against the creation of the national bank as outlined by Hamilton. Chartering the bank raised the constitutional issue of whether Congress possessed this power. During the Constitutional Convention of 1787 James Madison had asked that the representatives given Congress the power to grant charters to corporations. However, the Convention would not expressly grant Congress the power because many feared that this would encourage the creation of monopolies, but they did not deny it either. Since the Constitution did not give Congress this right explicitly, Madison argued that it was not have the implied power to create such an entity. In addition, Madison argued that the Constitution gave the power to coin the nation's currency directly to Congress and this could not be given to a private corporation. Jefferson agreed with Madison's arguments, but his reservation against the bank was more personal.[19] He once stated to a friend that "banking establishments are more dangerous to our liberties than standing armies." (Hixson, pg. 94) Jefferson argued that the national bank would serve only the merchants at the expense of the nation's citizenry who were mostly farmers. The opposition party found most of their support in the Southern States.

[19] Jefferson had experienced serve financial troubles throughout his life and his experience with bankers had always been negative. (Randall, pg. 507)

From the argument over Hamilton's proposals emerged the nation's first political parties. Hamilton deplored parties, equating them with disorder and instability. He had hoped to create a government of "superior person who would be above parties."[20] However, somewhat ironically, Hamilton became the leader of the Federalist Party with the sole purpose of gaining support for his policies and a strong central government. Jefferson and Madison responded by creating the Republican Party which supported the rights of the states.

After extensive negotiations, the States unanimously voted to allow the federal government to assume their debt in 1790. Hamilton was able to do this by promising Jefferson and the Southern States that the nation's capital would lie on the border of Maryland and Virginia. The following year, Congress approved the creation of the First Bank of the United States exactly as Hamilton had outlined for a charter of 20 years. As the vote in Congress was close, Washington was unsure about the bill and he asked his cabinet for their opinions on its constitutionality. Jefferson, with the help of Madison, pleaded with Washington to issue his veto. Washington asked Madison to prepare a veto message but after reading Hamilton's note of support, Washington reversed his decision and approved the bank charter.[21] Jefferson was outraged by this loss to Hamilton and their mutual animosity towards the other would only continue to grow as they continued to pursue their political interests on Washington's cabinet and afterwards. Jefferson

[20] Britannica, pg. 660

[21] Hamilton's note to Washington was one of his most powerful papers. His arguments not only resolved the President's doubts but they were used by future politicians to render a generous interpretation of the Constitution.

vowed that he would use his power to eventually rid the nation of the bank and he eventually succeeded.[22]

By the end of its 20 year charter, the First Bank of the United States had accomplished all that Hamilton had hoped for. It not only paid off the entire war debt but it also greatly advanced the nation's commercial and banking activities. The Bank had been headquartered in Philadelphia and grew to have eight offices in the nation's largest cities. It also succeeded in an unforeseen role, as the regulator of private banks which had been chartered under their respective states. Between 1790 and 1811, 88 banks had sprung up around the nation and each issued their own bills of credit which served as currency. (Smith, pg. 44) This reignited the currency problems experienced under British rule, but the existence of the First Bank helped to regulate the value of these notes. [23]

Even though the Bank was seen as a huge success, it met a wall of opposition upon the renewal of its charter in 1811. By 1811 the Jeffersonian Republicans had replaced the Federalists as the dominant political party in Congress. In addition, the numerous State-regulated banks that had been established since 1790 pushed their congressional representatives to veto the Bank. To support their position, the opposition renewed its argument regarding the constitutionality of the Bank and claimed that the Bank was no longer needed because it had accomplished its main goal of paying off the debt from the Revolution War. An underlying reason for the opposition to the Bank was the large foreign holdings in the Bank's stock nearly 16,000 of the 25,000 shares were

[22] Jefferson's efforts to end the bank became very personal. For the next several years until Hamilton's death in 1804, Jefferson would often issue comments in local papers slandering Hamilton for his political motivations and personal affairs. Hamilton responded to these in kind. For coverage of their conflict see Randall (1993).

[23] The national bank kept reserves of each many of the private bank's bills of credit on hand and could exercise control on the bank's ability to issue additional bills and in the conversion of bills to specie.

foreign held, mostly by British banks. Although foreign stockholders could not vote, they were seen as having "malignant influence" on the Bank's motives. By paying interest to foreigners, the Bank was seen as unpatriotic as it drew funds away from the American citizenry. (Nussbaum, p. 70) The final vote on the issue was close. The House chose to postpone the bill by a narrow margin of 65 to 64. The Senate split evenly on the issue and Vice President George Clinton cast the deciding vote against re-chartering the bank. (Markham, pg. 127)

What was clear from the discussion of the Bank's renewal was that its opposition was completely political. There was no analysis of the economic benefits of the Bank or any consideration to the consequences of eliminating it.[24] This lack of foresight was surprising given the troubles the nation had experienced in the past without a national bank. It seemed that history was doomed to repeat itself.

A Second Chance: The Second Bank of the United States, 1816-1836

It took only one year for Congress to realize the impact of the absence of the First Bank. The War of 1812 left the nation deeply in debt. Congress had eliminated its previous funding source for emergency funds, the First Bank, and it refused to give the federal government the right to levy income taxes on its citizens. Throughout the war, Congressional representatives argued over what types of taxes the federal government could levy but these remained limited to duties on imports. Since the War disrupted much of the nation's trade, the duties collected were small. Thus, much like the War of

[24] Some politicians saw the value in the Bank's existence and helped it to recharter in the state of New York under the name Bank of America. This bank has throughout its history continued as one nation's largest banks.

Independence, the government turned to private loans to pay for its war expenses.[25] Congress not only ordered the Treasury to offer several issues of Treasury securities to the public, but it also borrowed heavily from the State banks.

Without the First Bank, there had been a rapid growth of State banks; in 1811 there were only 88 and by 1816 there were 246. (Dewey, pg. 144) These banks operated with little to no restrictions and there was no system to relay the financial condition of these banks over large distances. The War loans made to the government created new demand for bank notes and the banks answered this by issuing more notes than they could possibly covert with the species they had on hand. This inevitably led to runs on the banks to which the banks responded by suspending their cash-specie conversions. By 1814, almost three-quarters of the nation's banks had suspended their specie convertibility and this caused their notes to decrease in value in discounts of 10 to 30 percent.[26] This left the federal government with useless paper notes and brought much of the nation's commerce to a halt.

The nation's weak finances were a near-disaster for the War of 1812 and caused President James Madison to realize the virtues of a central bank. In 1816, he was able to convince Congress to charter a new national bank for a 20 year period, but Congress set limitations on its operations to prevent it from becoming a commercial entity like the First Bank. The Second Bank was specifically designed to be a banker's bank. It was charged with promoting a uniform currency, acting as a lender of last resort in case of a bank's insolvency, and to act as a clearinghouse for bank notes, which meant that it would hold quantities of each private bank's notes in reserve and could discipline the

[25] Dewey (1931) has extensive details on the loans taken by Congress to fund the War of 1812.
[26] See Gallatin, pg. 42, 45.

bank if it was over-issuing its notes or suspended specie payment.[27] The Second Bank was similar in structure to the First Bank, it was capitalized at $35 million and the US government held 20 percent of the shares. Like the First Bank, it was headquartered in Philadelphia but had offices in 29 major cities around the nation. This allowed it to carry out its clearinghouse functions more effectively. Despite some early mismanagement,[28] the Second Bank began to thrive under Langdon Cheves who headed the bank from 1819-1822 and then under Nicholas Biddle from 1822-1836.

Also of concern to the nation was the possibility of a more stable paper currency. Some States such as Kentucky and Missouri had voiced their concern to Congress over unstable private bank currencies. They were worried that the variation in values would cause similar problems as those experienced by the colonies. This issue even came up for vote in the Senate on March 29, 1830, however it voted against legislating a nationally provided currency.[29] Since Congress was unable to resolve this issue, some States established their own policies to deal with this financial dilemma. Instead of looking at the European models of "Free Banking" most of these states opted to control their banks by requiring the banks to invest in State securities and their note issue would by limiting the capital they had on hand. Some States even went as far to issue their own paper currency, but this was ruled by the courts to be a direct violation of the US Constitution as these were bills of credit. The demand for currency to aid commerce was so strong that

[27] To minimize the likelihood of cash suspensions, or when banks refused to convert their bills for specie, the Second Bank was authorized to impose a penalty on any bank that failed to meet its obligations. The penalty was a hefty 12 percent tax on the amount of default. Secretary of Treasury Gallatin stated that this was one of the reasons State banks resumed their species payments in 1817.

[28] The Bank was nearly insolvent during 1817-1819 and this led to a Congressional inquiry.

[29] The documentation on this vote has been difficult to find. It is not clear what the opposition's argument was. Further iterations of the paper will examine this issue more closely.

States were left with little option but to allow their private banks to issue private currency notes.

Even though the Second National Bank had accomplished its mandates, upon the discussion of its charter renewal, it met hostility from powerful opponents. The Second Bank during its tenure had become well-known for financial scandals and corruption. In fact many Senators and House Representatives had made tremendous profits through their investments in “unique” opportunities with the bank. This abuse of what was supposed to be a government agency led many to doubt the ability of the central government and the public grew fearful of the motivations of powerful merchants and rich politicians.

The opposition to the Second Bank was led again by the last of the Jeffersonian Republicans who had regained their power in Congress. This group had become known as the Jacksonian Democrats, named for their leader, the famous war hero, Andrew Jackson.[30] In his early political career, Jackson was not very concerned with the Second Bank’s existence. However, when he ran for the US Presidency in 1828, most of his support came from the agrarian populations to the West and South. These areas were especially poor and referred to the Second Bank as “the monster” since it was only seen as aiding merchants and bankers and few others.[31] He used the feelings of animosity from the public to champion his campaign against a strong central government and once he was elected in 1829 he dedicated himself to carrying out his promises.

[30] Jackson was born on March 15, 1767 in South Carolina. He served as a lawyer and judge in his 20s and 30s. In 1802 he became a major general in the Tennessee Militia and during the War of 1812 he became famous for his military campaigns against the British army. He was the first US President to be elected from the area west of the Appalachians.

[31] Much of the antagonism towards the bank came from fear of a powerful central government and that it served only the interests of the rich and powerful. Future iterations of this paper will examine the social factors affecting the various populations in the States and how this affected their political and economic preferences.

In 1829, Jackson declared war on the Second Bank. His attacks against the Bank were mostly verbal but he pushed to have the constitutionality of the bank questioned by the Courts. The most pertinent case was *McCulloch v. Maryland*, where the Supreme Court considered a Maryland tax imposed against the Second Bank. The Maryland statute imposed a tax on all banks that were not chartered by its legislature.[32] The Supreme Court found that the Maryland tax was unconstitutional as the Second Bank was a federal level organization and was out of its jurisdiction. Justice Marshall added that Congress had the implied power to create the Second Bank under the US Constitution. While this result frustrated Jackson's efforts, he continued in his quest to close the Bank.

Fearful of the President's power and popularity, Nicholas Biddle, then head of the Second Bank, approached the National Republicans for support. Taking up his cause was Henry Clay and Daniel Webster, leaders of the Whig party in the Senate.[33] With their advice, Biddle applied for a new bank charter even though the Second Bank's charter wasn't to expire until 1836. The recharter bill easily passed both houses of Congress in 1832. However, Jackson issued his veto with a powerful message, "The bank is trying to kill me, but I will kill it." The Whigs refused to give up to Jackson and made the fate of the Bank the central issue of the presidential election of 1832.

However, Clay lost to Jackson and this gave Jackson the conclusion that his victory was a mandate by the people to not only close the Bank but destroy what he called a "hydra of corruption" as soon as possible.[34] Jackson ordered that no government

[32] The issue before the court questioned the validity of Maryland's statue. Maryland claimed that the Second Bank had issued notes to pay a promissory note for one citizen named George Williams, at a discount without paying the required tax to Maryland.

[33] Clay and Webster created the Whig Party, which united the former Federalists and National Republicans. Their main cause was support of the Bank against Jackson's intent to destroy it.

[34] The hydra referred to the fact that many of his political enemies had loans from the Second Bank or were on its payroll.

funds were to be deposited in the Second Bank and that existing deposits would be withdrawn and placed in 89 state “pet banks.” This drew numerous objections from his staff, but Jackson refused to listen. He was forced to reorganize his cabinet twice so that he could place Roger B. Taney, former attorney general, in the position of Secretary of the Treasury. Taney also objected to the existence of the Second Bank and authorized the withdrawal of funds. As funds dwindled, Biddle was forced to call in loans and these actions eventually led to a credit shortage and later the Panic of 1837. In 1836, when the Second Bank’s charter expired, Biddle was able to obtain a state charter from Pennsylvania. The Bank became known as the Bank of the Pennsylvania but it eventually went bankrupt and closed in 1841.

Jackson’s method of closure for the Second Bank and his subsequent financial decisions had disastrous consequences on the nation’s economy. The closure of the Second Bank left the nation with a credit shortage. To respond to this need, hundreds of State banks opened for business and started to issue uncontrolled amounts of paper money. During the 1830s the nation was a speculative fever that affected both land and commodity prices. Individuals and businesses had no choice but to borrow heavily from banks to pay for their investments. To curve this speculation, Jackson issued the Specie Circular in 1836 that required that all public land was to be paid for in specie. In addition, he authorized The Deposit Act of 1836 that required State banks that received government funds to redeem their notes in specie on demand. These Acts severely decreased the supply of specie in the economy and forced the price of specie to skyrocket. This led to widespread bank runs throughout the country, what has been called the Panic of 1837. Hundreds of banks and businesses failed. The depression following the Panic of

1837 was one of the worst in the nation’s history and it would take almost 7 years before it would recover.

At the end of his Presidential term, Jackson was well aware of the impact his policies had on the nation’s economy, however he was unrepentant. In his farewell address, he reissued his warning to the nation regarding the dangers of financiers, paper currencies, corporations, banks, and monopolies. Jackson’s efforts against the banking industry were completely devoid of any economic rationale and the policies he implemented while in office to limit the possibility of a powerful central government, would stunt the growth of the nation for decades. In the end, the citizenry would not blame their beloved hero for the economic downturn of the nation during the 1830s. In his stead, Nicholas Biddle and the Second Bank would be blamed. The resulting hatred and distrust of a national bank would continue for generations and even though hard economic times.

Failed Attempt: The Charter of the Third Bank of the United States, 1841

The Panic of 1837 had a devastating effect on the nation’s economy and made the newly elected President Martin Van Buren very unpopular. When Van Buren took office in 1837 he promised “to follow in the footsteps of his illustrious predecessor", Andrew Jackson. However, losses to the Federal Treasury from private bank currency suspensions from 1836 and 1839 were severe. In response, President Van Buren called for a special session of Congress which would take the final step in President Jacksons’s bank divorce policy. Van Buren wanted the US Treasury to become independent of the state run banks to prevent the future losses caused by a banking panic. Congress approved of the independent treasury on September 4, 1837. However, as earnestly as the State banks had aided President Jackson in destroying the Second Bank, they now fought with equal effort against the Independent Treasury. The Independent Treasury Act of 1837 was repealed only five months after the election of President Harrison.[35]

Even after their battle with President Jackson, the Whig party continued to desire to maintain a National Bank. The Whigs held a large majority in Congress and under the leadership of Henry Clay, sought to pass the charter of the Third Bank of the United States. However, the death of President Harrison on April 13, 1841 and the succession of John Tyler would unexpectedly end all hopes of creating a new banking authority. Tyler who was a Democratic-Republican had obtained his position as Vice-President only through a small coalition of Whigs and a small remnant of the Nullifiers.[36] After a quarrel sprung up between Clay and Tyler, Tyler refused to take orders from the Whig party. The Whigs were ever committed to their cause and sought to pass legislation regardless of President Tyler's decision.

In early August 1841, the House and Senate quickly passed legislation creating the Third Bank of the United States but it was immediately vetoed by President Tyler on August 16, 1841. Tyler offered revisions to the bill[37] and these were passed by the House on August 23 and Senate on September 3. Yet when the bill came again to Tyler, he vetoed it. This time his decision to veto was not based on an objection to the bill but was the result of a promise from the Democratic party that they would support Tyler during

[35] Harrison had been elected by the union of all of the dissatisfied groups in the country in a movement against the central government.
[36] The Nullifiers were a dissatisfied wing of the Democratic Party.
[37] Tyler's main objection was that the establishment of bank branches would unjustly take power from the states.

re-election if he opposed the Whigs. Still virulent in their efforts, the followers of Clay attempted to overthrow the presidential veto, but they failed to obtain the necessary two-thirds majority. The hatred of a strong central government continued and it was evident by the peoples' choice of presidential candidates. It would be another 70 years before a central bank would again be considered by Congress.

"Free Banking" 1837-1863

The absence of the Second Bank of the United States left the nation with a shortage of credit. This provided the opportunity for new banks to enter the market. In 1838, New York introduced a new approach to banking. "Free banking" made it permissible for any person or association to issue notes, provided they had deposited an equivalent amount in the form of securities with the Comptroller of the state. Should the bank default on its notes, the Comptroller would sell the securities held as collateral. Thus it made it possible for banks to open without having to obtain a charter from the state, which was often a long and tedious process as one of the only methods of state regulation. New York's precedence was followed by nearly every state in the union.

While many scholars have advocated the benefits of free banking,[38] the US's approach was not a pure form of free banking. Pure models of free banking were successfully implemented in Canada and Scotland. While it was true in the US that any person or group who followed certain requirements could open a bank that issued currency notes, there were at least three important differences between the US and European model. First, the US banks were not allowed to form bank branches. Thus, banks were limited to a specific geographic region. Second, most banks outside the big

[38] Smith (1990), Markham (2002)

cities acted more or less like local monopolies because corruption of state officials often prevented competition. This will be explained later. Third, the system of note issue used by the state banks was often pegged to the amount of securities they held as collateral with the State Comptroller. This severely restricted liquidity of the bank’s currency. Thus the American banking system during 1837-1913 lacked the advantages of both central banking and of free banking proper.

The actual growth of banks depended on the rules established by each state, which varied in their ease based on the need for banking in the area. The least stringent regulations were in the East, the most liberal policies were in New England, especially Massachusetts and Rhode Island where charters were granted to nearly all who applied for them. New York was more conservative as the already established banks exercised their influence over the legislature and sought to refuse charters to new competitors. The Southern states were more restrictive in their banking regulations. Some states took the completely opposite approach to competition, they founded state banking monopolies. For example, Indiana and Ohio prohibited private banks unless the state established one with its own funds. The Bank of Indiana and the Bank of Ohio were formed in 1834 and 1845 respectively.

No matter their location, the founding of these early banks was more often based on political influence than on real commercial necessity. The banks were seen as a source of income for the States. The banks were required to purchase State and US Treasury bonds to keep as collateral with the State Comptroller. These banks could only issue notes based on the value of collateral they left with the State. In addition, it was common practice for the States to require banks to make loans when necessary to the State which chartered them. This became an easy source of funding for the local governments. In some cases, the banks had leant so heavily to the government that they had little left to loan out for commercial demands. While the collateral requirements were often quite high, most banks had scarcely any capital at all and often issued more notes than they were legally allowed. This was possible for two reasons, one it was difficult for the State to access how many notes were in circulation at a given time and second it was common for the banks to give bribes to State officials.[39] It was possible then for banks to start and cease operations with much ease.

The nature of the free banking in the US during this time left shareholders with little to no protection. The states gave banks the privilege of limited liability; where their liability was limited to a certain multiple of their collateral on deposit with the State. In very few states were banks set up with unlimited liability. Fraud became quite common during this time. Enterprising individuals could simply vocalize their intention to set up a bank, offer a bribe to State officials, draw in shareholder resources, and abscond with the money without leaving much recourse for those cheated.

Even if banks established legitimate operations, they faced huge potential for failure. The system of depositing securities with the State had the effect of tying up bank investments. While banks were able to loan some money to commercial interests such as real estate purchases, these investments were too illiquid to back the redemption of bank notes for specie. It also had the effect of making the amount of note circulation depend on the price of Federal and State bonds. Banks frequently did not have enough specie to redeem their notes and they responded by suspending their currency conversions, which

[39] There has been work done on measuring the amount of these bribes but little has been published. Future iterations of this paper will look into the amount of form of these bribes.

often if not always led to bank runs and the bank's insolvency. Having no entity to lend to it in times of need, such as a central bank, these banks inevitably failed.

As some scholars have noted free banking could potentially have been quite successful in the US had it taken a form similar to the European models.[40] Free banking in the United States was possible for only a limited time. While the United States remained a mostly agrarian society where trade was limited to a specific geographic region due to transportation constraints, banks could easily serve the needs of the area. However, when trade began to expand beyond cities and across state borders banking became more complicated. As bank currencies circulated around the country, they were often converted to specie at a discount. The discount on a given bank's note varied in part with the distance from the issuing bank and in part with the perceived soundness of the bank. It became common for these notes to be redeemed for much less than their face value. This not only complicated trade between regions, but it made the nation's banking system unstable and subject to bank runs.[41]

Some regions thrived under the free banking model, such as New England and New York, because through the natural evolution of banking in the area, one or more private institutions took on the responsibilities of a central bank. For example the Suffolk Bank in New England, kept notes of local banks on reserve and would facilitate the exchange of notes and specie between banks in the area. They also controlled the behavior of banks by disciplining those who over-issued their notes.[42] New York

[40] Dewey (1931), Markham (2002), Smith (1990

[41] Currently, there is data on trade patterns in the United States for this time and it will be analyzed for future iterations of this paper.

[42] Disciplining usually meant that the Suffolk Bank would require the bank in question to redeem the notes held on reserve for specie and this potentially could threaten the solvency of the bank. Thus, banks were given the incentive to behave.

followed this model with the New York Clearinghouse Association which was established in 1853. The bank was established to provide a way for the city's banks to exchange notes and checks and settle accounts. The Clearinghouse was an effective stabilizing force in New York that many of the nation's largest cities adopted similar systems, these included: Chicago, Boston, Philadelphia, Atlanta, Saint Louis, and San Francisco.

Civil War and the National Banks: 1861-1913

The outbreak of the Civil War and the need to finance it led to renewed interest in a national bank. The private banks in the South gave support to secession and ceased their remittances to banks in the North. Many of these banks had large net liabilities to the banks in the North. This would have threatened the solvency of the banks in the North, however, they possessed an expansive reserve of specie and were able to reduce their lending operations to adjust for their losses.

This did not end the pressure on the Northern banks. Secretary of the Treasury Salmon Chase faced immense difficulties in borrowing from the public due to the bad state of finances of the preceding administration. In addition, the loan prospects from Europe were limited because the European sympathies lay with the South as they were the primary source of cotton.

Chase sought the advice of the banking industry in 1860 and called a conference of the New York, Boston, and Philadelphia banks. Fearful of a central bank, the banks offered a new financial system modeled on the free banking system. During their meeting they drew up a plan to loan the government $50 million. In order to further finance the war, the Bureau of Engraving and Printing was established in 1862 to print the Government's first currency, known as greenback because of its color. These were legal tender notes not backed by specie.[43] Additionally, to back the new currency and pay for the Civil War the US government levied the first income tax on its citizens. On all incomes over $800 were taxed at a rate of 3 percent until the year 1872, when the tax was repealed.

The National Banking System was created in 1863 to establish a uniform currency. The new system allowed banks to choose between a national or state charter. With a national charter, banks had to issue government-printed bills for their own notes and the notes had to be backed with federal bonds which would help to fund the war effort.[44] Under the state charter, banks were still required to deposit collateralized US bonds with the US Treasury. The National Banking Act of 1864 corrected limitations of the Act of 1863 by allowing for bank branches and larger issues of the national currency. The government realized the benefits of having private banks deposit bonds and in 1865 they imposed a tax of 10 percent on the notes issued by private banks. This not only was a death blow to some banks but it also taxed state bank notes out of existence. This was the first time a uniform national paper currency was established in the United States.

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[43] Chase disapproved in principle of the legal tender notes; with no requirement for specie backing they could be printed in unlimited quantities and were therefore inflationary. He recognized their necessity in a time of emergency, but later, as Chief Justice of the Supreme Court in 1864, he would declare the notes unconstitutional.

[44] The National Banking Act of 1864 allowed banks of no less than $50,000 to form freely if they collateralized their notes by depositing registered US bonds with the US Treasury. The amount of currency notes that the bank could issue could not exceed 90 percent of the market value of bonds and no more than 100 percent of their par value. If a bank defaulted on its notes, the Treasury would sell the collateralized bonds and pay the notes itself. The Treasury also had a prior lien on the general assets of the failed bank for any claims that could not be made out of the proceeds of the bond sales, and shareholders were subject to double liability. The banks had to keep certain reserve proportion of their notes plus deposits in the form of legal tender currency, which in the years of their foundation meant of course greenbacks as well as specie.

Panics of the Late 19th and Early 20th Century: 1873, 1884, 1893, 1907

While the national banking system was effective in its role in financing the war, the system was unstable. Between 1864 and 1879 the number of national banks increase from 500 to over 2,000 and their capital expanded from around $86 million to $454 million. However, from the Civil War to the end of century, 352 of those banks failed and the depositors of those failed banks were not protected by the government account insurance. (Markham, pg. 282-283) The Act however did not make provisions for the creation of branches. This made interbank payment reconciliations difficult if the distances between them were large. It has been argued that branch banking would have alleviated this problem. (Smith)

The Panic of 1873, 1884, and 1893 all began with speculation on the stock market. Each was made more significant by the public's fear that the Treasury did not have enough gold to pay its legal tender obligations. As bank runs became common, numerous banks and investment firms went bankrupt because there was no lender of last resort to provide necessary liquidity. While the nation recovered from the 1873 and 1884 acts through measures by the government to make its gold holdings known to the public, the panic of 1893 was one of the worst financial disasters in the history of the US. The depression that followed the panic continued for five long years and commodity prices steeply declined.

During this time, the Treasury sought to stabilize the market by depositing funds in selected National Banks and acting as the lender of last resort in times of crisis. In 1873 it bought bonds and sold $5 million worth of gold in order to place deposits in specific large banks. In 1884 it prepaid interest owed on its public debt to inject liquidity into the market. However, in 1893 the Treasury was unable to give any aid at all because it was in deficit. In 1907, it transferred some funds to banks but the amount it had on hand was small. From these acts, the banks began to expect to receive assistance if they got into difficulties and they expanded their business based on this false belief. In fact the Treasury's funds were limited and it was J.P. Morgan who saved the nation during the Panic of 1893 and 1907.[45]

The Federal Reserve System is Created

It was the crisis of 1907 that gave the final push to Congress and bankers to initiate some sort of banking reform. It was still unclear to those involved if the chief failures of the time corresponded to the system of currency note issue, the lack of branch banking, or the legal reserve regulations affecting currency issuance. The majority favored a co-operative organization of existing banks that would provide reserve funds in case of panics. However, this was not feasible in times where the majority of large banks were in crisis, such as in 1907. There was significant opposition to the introduction of a real central bank.

To temporarily resolve the banking panic problem, Congress initiated the Aldrich-Vreeland Act of 1908, which provided for emergency currency issues during crises. The Act allowed commercial bills to be used as an additional basis for note issue and it authorized banks to form voluntary associations under which a bank could deposit

[45] The accounts of the banking panics during this time are conflicting. Future iterations of this paper will look into the documentation more carefully in order to tease out the political and economic factors affecting the financial system during this time.

securities and receive additional currency notes. All banks belonging to a given association were jointly and severally liable for the redemption of the additional circulation. The Act also set up the National Monetary Commission which was to present a long term solution to the nation's banking and financial problems.

In 1912, Senator Aldrich introduced legislation that proposed the creation of a central banking authority. The bill was seen as the result of the Monetary Commission's study, but the bill was actually written at a secret meeting at a gentlemen's club on Jekyll Island, Georgia according to Markham (2002, pg. 43-44). The club was founded by John D. Rockefeller, J. P. Morgan, William K. Vanderbilt, and Silas McCormick. Disguised as a group of wealthy duck hunters, the group met in a private railcar. The group also included: Paul M. Warburg, a partner at Kuhn, Loeb, & Co; Henry Davison, the founder of the Bankers Trust Company and a partner of J.P. Morgan; Frank A Vanderlip, an executive at the National City Bank; Benjamin Strong, the vice-president of the Bankers Trust; and William A. Piatt Andrews, an Assistant Secretary of the Treasury. The group decided that a federal banking system was needed to provide liquidity to private banks in times of stress. Dreading a government controlled agency, they outlined a system that would be controlled by private bankers. When Aldrich proposed the bill to the Senate, it was met with great opposition. There was great fear of an agency controlled by private banks and that Aldrich's close relationship with the Rockefeller family was influencing his decisions.

Then President Woodrow Wilson, a democrat, believed that a sound banking oversight agency would solve the problems of the banking industry. He was however, fearful of Aldrich's plan. Since Wilson was not knowledgeable about banking and financial issues, he solicited the advice of Virginia Representative Carter Glass, who was to become the chairman of the House Committee on Banking and Finance, and from the Committee's expert adviser, H. Parker Willis, formerly a professor of economics at Washington and Lee University. They presented The Federal Reserve Act of 1913.

Willis understood the impact the Federalism argument had on the nation’s previous attempts of central banking and he suggested a unique design for the Federal Reserve System to allay these concerns. The Federal Reserve System would be headed by the Federal Reserve Board who would direct the nation’s monetary policy, however the system would also consist of twelve regional Federal Reserve Banks who would issue currency and respond to any financial issues in their respective regions. These regional Reserve Banks would be able to promptly respond to the financial concerns of private bankers and each state. Congress approved the Act on December 23, 1913. Thus, it was hoped that the Federal Reserve would resolve the problems that had plagued the nation since its beginnings. Not only would it provide a stable paper currency but it would act as a universal regulator of banks, clearinghouse of interbank payments, and lender of last resort in case of crisis.

Section III: Analysis of Political and Economic Factors

The Data Conundrum

Obtaining any sort of microeconomic or macroeconomic data for the United States before 1940 is difficult. This task becomes significantly more challenging for data before 1870. As the fields of Economics and Political Science were still fledgling disciplines before 1940, researchers and government officials had difficulty creating uniform data series; uniform, meaning that the methodology and collection of data were consistent across time. Thus, researchers who wish to examine data during the 18th, 19th, and early 20th century must create their own datasets using assumptions to interpret what, if any, data was collected during these periods.

This data conundrum is the greatest challenge to this paper. To best evaluate the political and economic factors that influenced the decision regarding the central bank, it is necessary to break down the analysis into separate period examinations that can be compared. Thus, the basis of this paper's analysis will focus on voting data obtained from the Congressional Records, for both the House and Senate, regarding significant decisions about the formation of a central bank and creation of a uniform national currency. The dates of interest include: the approval of the charter of the First Bank of the United States in 1791; the failure to renew the First Bank's charter in 1811; the approval of the charter for the Second Bank of the United States in 1816; the rejection of the Second Bank's Charter renewal in 1836, the failed attempt to charter the Third Bank of the United States in 1841; the creation of the "greenback" currency in 1862; the national banking legislation in 1863, 1864, and 1865; the Aldrich-Vreeland Act of 1908; and finally, the approval of the Federal Reserve Act of 1913.

The analysis in Section II has illuminated certain themes and identified specific factors that affected the central bank decision. The rest of this section will evaluate how important these factors were in the House and Senate votes through regression analysis. The factors that will be considered include: population, specifically the percent of state population in urban areas; the geographic region of the state, either Northeast, Southern, Midwest, or Western; the agricultural-manufacturing intensity of the state; the number of state banks and/or national banks in the state; the rate of bank failures by state during a panic preceding a vote, if applicable; the value of deposits at these banks; and the amount of specie on hand at these banks.

Sources and Data Obtained

The collection of supporting data for this paper was by far a complicated task. Not only were sources difficult to locate, but often they conflicted. Many researchers have noted the problems with conflicting data over this period.[46] The author of this paper has sought to isolate the most reputable sources and to construct her own data series.[47] Her sources and reasoning are as follows.

Voting data for the House and Senate was obtained from the House Journal and Senate Journal, respectively, for dates before 1875 and from the Congressional Record

[46] Dewey (1931), Knox (1900), Markham (2002), and Weber (2006)
[47] The author is happy to provide the datasets created upon request.

for dates after 1876.[48] These resources, provided by the United States Government, provide information on floor debates, committee reports, and vote tallies. For each date of interest, voting records were obtained for each representative. Each representative was then matched with the state they represented[49] and self-reported political party, via data from the Office of the Clerk of the U.S. House of Representative's Biographical Directory of the United States Congress, 1774–Present.[50] To support the regression analysis, votes were turned into 1-0 indicator variables, where 1 indicated yes, and 0 indicated no to the proposed legislation. By isolating each congressional representative by their state and political party, it is possible to examine whether these influenced their vote.

States were separated into their geographic region to assess whether congressional representatives voted similarly within their region. The geographic partition follows those used by the U.S. Census Bureau.[51] To statistically analyze whether region affected a representative's decision, dummy variables were created for each regression for the regions of: Northeast, Midwest, Southern, and Western.

Also obtained from the U.S. Census Bureau were figures for the total population of each state and the number of individuals located in an urban area in each state. A variable was constructed for the percent of urban population by dividing the numbers in

[48] The House and Senate Journals are available online at the American Memory Project Website: http://memory.loc.gov/ammem/amlaw/lawhome.html

[49] The author sought to find each House Representative's city/country assignment in their respective state. However, this data is almost impossible to locate for each individual representative and was extremely time-consuming.

[50] The Office of the Clerk of the U.S. House of Representative's Biographical Directory of the United States Congress, 1774–Present can be accessed via http://artandhistory.house.gov/mem_bio/index.aspx. Data from this source may be problematic in regards to dates of service and political party. Additional research on representatives via their biography page on the Clerk's website resolved these problems.

[51] The U.S. Census Bureau's regional breakdown is provided at http://www.census.gov/geo/www/us_regdiv.pdf.

an urban area by the total population of a state for a given year. Since the U.S. Census reports are decennial, the author interpolated yearly urban population statistics via regression analysis.

From historical analysis, it has been suggested that a state's predominant production output, either agricultural or manufacturing, affected its' citizens preference for a central bank. To elaborate, states that were more manufacturing oriented, tended to trade more with regions further away. States that were more agriculturally oriented sold their output locally and left merchants to resell their goods in distant markets. Thus manufacturing states suffered heavier losses from issues with the use of state bank notes being accepted across state borders. Thus manufacturing states were more supportive of a national currency and a central monetary authority.

To test this hypothesis, some comparable measure of each state's agricultural and manufacturing output must be used. While some state level output has been recorded since 1820 by the decennial U.S. Census reports, the measurement each variable varies over time. Thus consistent measures of agricultural and manufacturing production are extremely difficult to create. With an exhaustive list of items to include in each calculation, the author created a consistent time series for agriculture and manufacturing production from the U.S. Census historical reports for the years between 1850 and 1920. This process was by far the most time-intensive project during the construction of this paper. Due to time limitations and data availability, production numbers could not be calculated for years before 1850. As many of the congressional votes occur on dates not coinciding with the decennial Census reports, the author interpolated yearly measures of production via regression analysis.

Since absolute measures of agricultural and manufacturing production vary greatly between states, these variables provide little information in the regression analysis of votes.[52] To create a comparative indicator of how intensive a state was in its agricultural and manufacturing ability, the author divided each state's yearly agricultural totals by its' manufacturing totals.[53] Thus, a value of greater than one indicates a predominately agricultural state and a value between zero and one indicates a predominately manufacturing-oriented state.

Obtaining consistent banking data before 1913 is especially problematic. In 1832, Congress required that the Secretary of the Treasury produce a yearly report on the condition of banks in the United States. As each state regulated its' own banks, little data on private banks was collected before this year.[54] The congressional act required states to provide what data they had on private banks to the Treasury Department, as many states required that banks provide yearly balance sheets to maintain their charter. However, the legislation left self-reporting optional to each bank. This reporting system would have worked, save for the fact that many banks did not supply yearly data or any data at all to the state in which they operated. Thus, banks who consistently reported their financial condition to the state, tended to have better performance and reputation that the average state bank. Given these facts, the Treasury reports clearly under-represent the number of banks in operation and their respective deposits, specie on-hand, and losses incurred. Some researchers such as Warren Weber at the Federal Reserve Bank of Minneapolis have sought to obtain a better count of state banks during the antebellum period of the

[52] Regression analysis including these absolute values provided little information and greatly reduced the R-squared coefficient.
[53] Many have argued that
[54] The U.S. Census collected some data during the 1810 and 1820 census years, but it is neither consistent nor meaningful.

U.S., however his data is still incomplete and impossible to reconstruct due to vague methodology and reference to documents that could not be located.

In 1863, Congress issued new legislation that required the Comptroller of the Currency to produce a yearly report of the condition of banks in the United States. Every bank that operated under the National Banking Act of 1863 was required to provide yearly reports to the Comptroller's office. While these reports were comprehensive in regards to the financial health of the national banks, the requirements of the act were not binding on state banks, private savings banks, loan and trust companies. Thus, a full picture of the banking sector during the period between 1863 and 1913 is still lacking.

As important as these pitfalls might be, the Treasury reports are the only consistent source of banking data for this time period. Since the goal of this paper is to analyze the banking sector's influence on a representative's vote, the values provided in the Treasury reports are sufficient.[55] Data on the number of banks, total deposits at the bank, and specie available in-bank were collected for each year of interest. For each voting year that followed a panic, the number of bank failures during a two-year period after a panic were counted to construct the bank failure rate. To construct the rate, the number of failed banks was divided by the number of banks at the start of the panic.

The First Bank of the United States: 1781 – 1811

The original chartering of the First Bank and the denial of its renewal are the direct results of party politics. As data on state banks and production of states is limited

[55] To state clearly, the goal of this paper is not to provide an absolute measure of the number of banks, amount of deposits, and specie in the U.S. economy. This is left to another research project.

for this time period, a regression did not yield useful results.[56] Analysis of the political votes by region and political party are more fruitful.

Chart 1

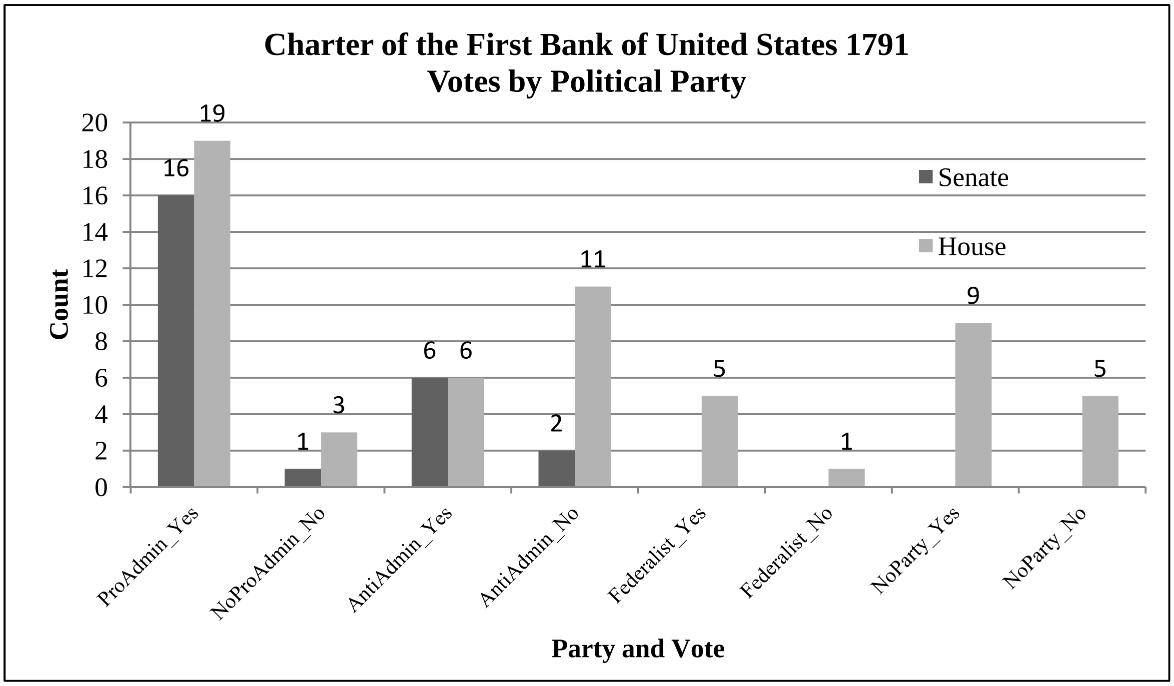
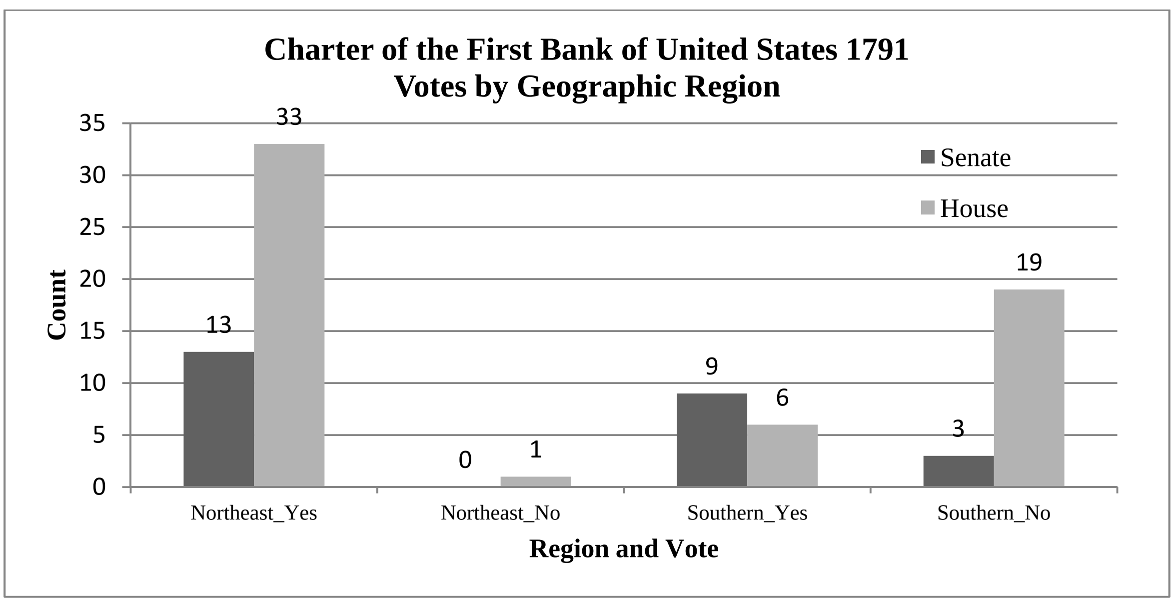


Chart 2



56 Regressions run on this data show no statistical significance and featured a very low R-squared statistic.

Chart 1 shows that most of the First Bank's support came from Pro-Administration and Federalist party members. These parties supported the idea of a strong central government and a financial system as proposed by Alexander Hamilton. Chart 2 clearly demonstrates that at the time of the First Bank, the Northern states were much more supportive of a strong central oversight authority. The Southern states, led by James Madison and Thomas Jefferson, deeply opposed the First Bank due to concerns about its constitutionality.

Charts 3 and 4 provide insight into the votes regarding the renewal of the charter of the First Bank of the United States in 1811. The Federalists unanimously supported the renewal of the charter while the Democratic Republicans and Republicans were mostly disapproving. This follows with the fact that upon renewal of the charter, President James Madison, a Democratic Republican, re-expressed his disapproval of the First Bank. Thus the vote in both the House and Senate fell mostly along party lines. More interesting is the fact the geographic regions were divided in their opinion, except for the Midwest whose representatives unanimously voted in the negative. The representatives from the Midwest represented the state of Ohio. From analysis of the dataset, representatives from the same state tend to vote similarly.

Thus Charts 1 – 4 clearly show that votes were influenced by political party membership. What is unclear is whether geographic region beyond state borders affected voting decisions.

Chart 3

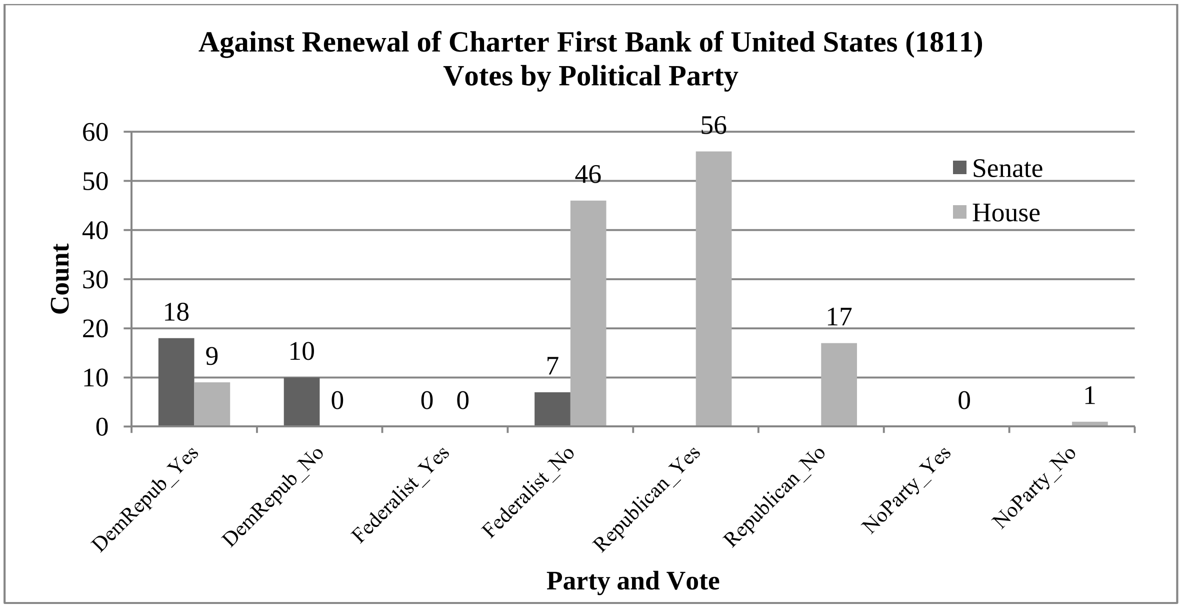
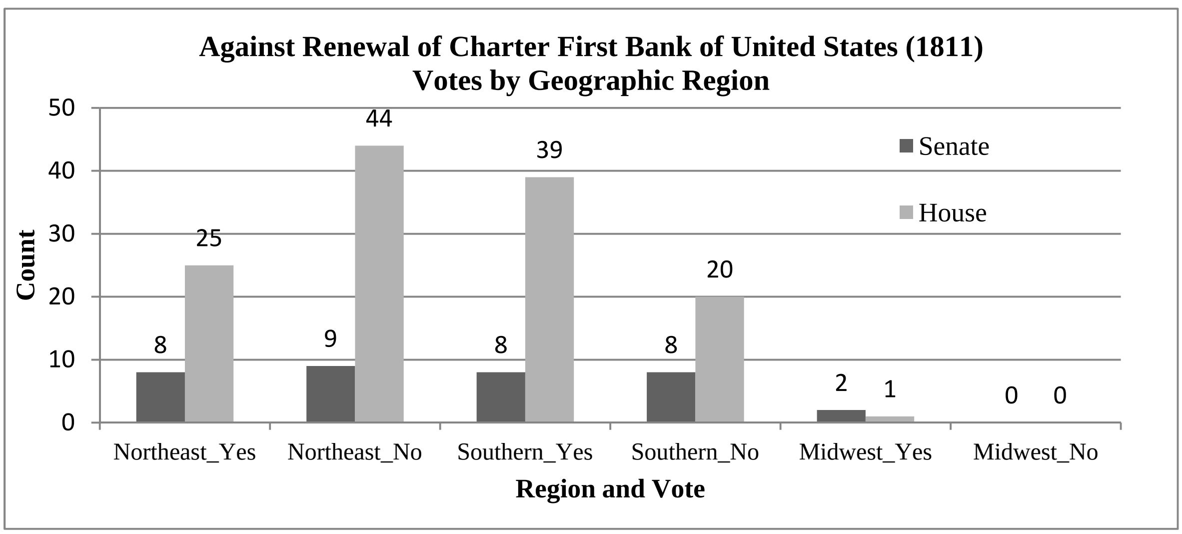


Chart 4



The Second Bank of the United States: 1816 – 1836

Similarly, the Second Bank of the United States was plagued by party politics but quantitative analysis to support this fact has been lacking. Charts 5 and 6 show the vote tallies for the charter of the Second Bank in 1816 by political party and region, respectively. Charts 7 and 8 provide vote tallies for the renewal of the charter of the Second Bank in 1832, also by political party and region. The Second Bank's Charter narrowly passed in the House (80-71) and in the Senate (22-12). What is shocking in this analysis is that Federalists, who had supported the First Bank almost unanimously, were split in this support for the Second Bank. All other parties were similarly divided in their support. The regions were equally divided in their votes.

Chart 5

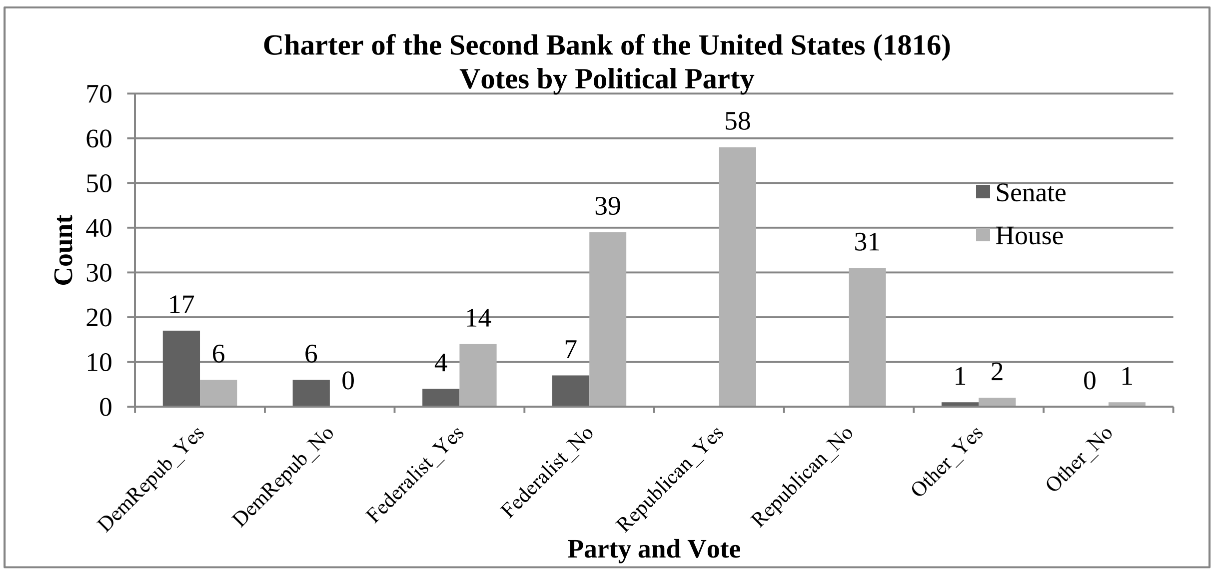
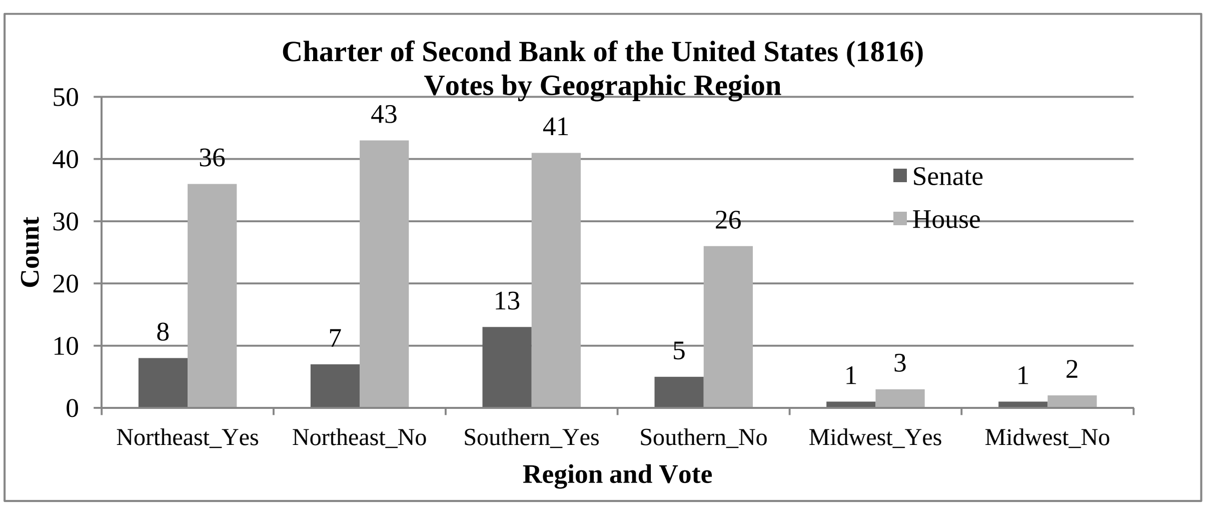


Chart 6



Charts 7 and 8 provide vote tallies for the for the renewal of the Second Bank's Charter in 1832. While the Whigs and Anti-Jacksonians strongly supported the Bank, the other parties were mixed. What is surprising is that some of the Jacksonians supported the Bank even through Jackson was vehemently against it.

Chart 7

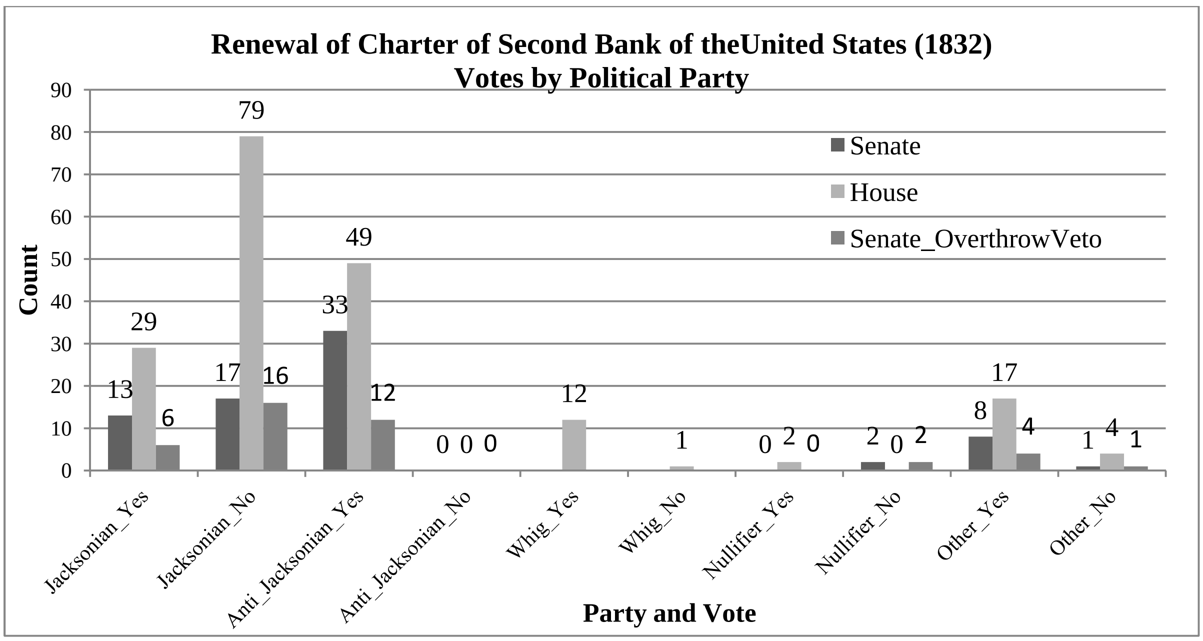
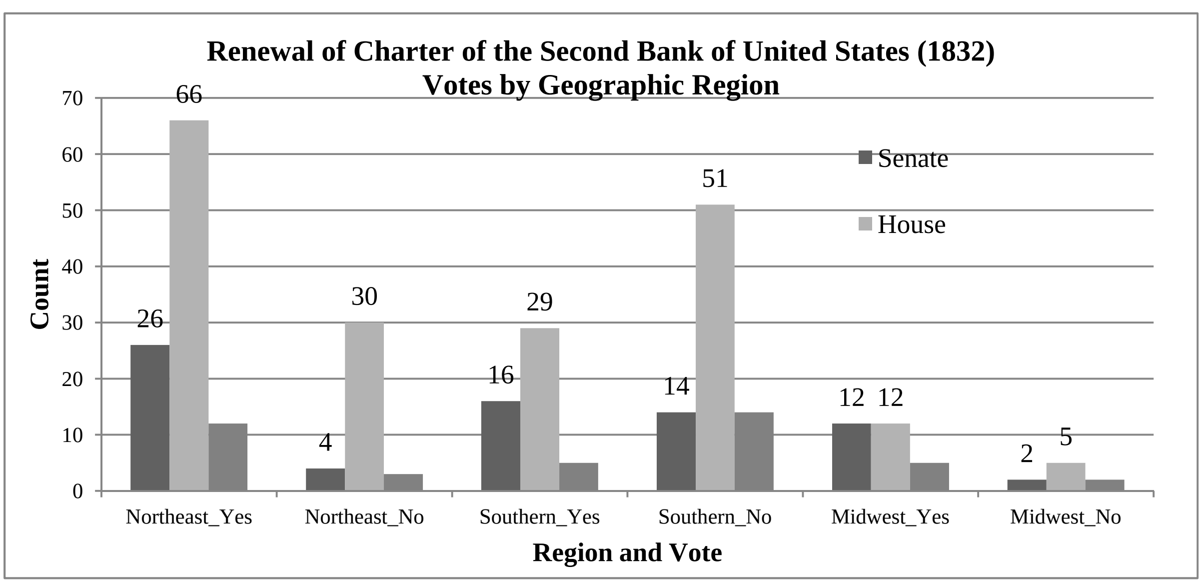


Chart 8



The renewal of the Charter of the Second Bank in 1841 is the first opportunity to examine banking data and its' impact on voting decisions. The results of the regression are provided in Table 3.

Table 3: Regression on Renewal of Charter of Second Bank of United States (1832)

	(1) 1832 Vote Senate	(2) 1832 Vote House
Dummy Northeast	-0.374**	-0.143
	(0.149)	(0.111)
Dummy Southern	-0.429***	-0.361***
	(0.113)	(0.091)
Dummy Jacksonian	-0.393***	-0.427***
	(0.127)	(0.081)
Dummy AntiJacksonian	0.188	0.299***
	(0.137)	(0.093)
Dummy Whig		0.21*
		(0.126)
Dummy Nullifier	-0.989***	-0.81**
	(0.286)	(0.249)
Urban Population	-0.091	0.483
	(0.822)	(0.695)
Banks	0.006	-0.004
	(0.006)	(0.004)
Deposits	0	0***
	(0)	(0)
Specie	0**	0***
	(0)	(0)
Observations		193
R squared	0.557	0.594

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard Error in parentheses

The regression results show that not only did the political parties influence a representative's vote but also their geographical region. The dummy variable for the Midwest was omitted for statistical necessity. It is clear from Chart 8 that representatives from the Midwest varied in their vote. What is interesting to note is the coefficient for the number of banks, deposits and species are nearly zero. This indicates that these variables may have had little impact on the voting decision. However, if these three variables are removed the coefficients on the regional dummies become insignificant and the R-squared statistic falls rapidly. This implies that these variables somehow explain some regional variation in the data and that this impacts indirectly each representative's vote. This occurs more so in the House than the Senate.

The Failed Charter of the Third Bank of the United States: 1841

The charter of the Third Bank as described in the historical section was heavily influenced by party politics. The Whigs led the movement and were directly opposed by the Democratic party. What is interesting to note from Chart 9, is that some Whigs voted against the Third Bank. This would mean that even though Henry Clay and the Whig leaders heavily impacted the votes of fellow party members, this did not affect all members. The other category in Chart 9 includes members of the Nullifier party. The Republican party voted unanimously against the national bank.

Chart 10 offers a fascinating examination of regional voting trends. It appears that votes by region were divided between supporting and opposing the bank. The regression analysis in Table 4 indicates that for the House of Representatives, representatives from the Midwest voted similarly. In 1841, representatives from the Midwest came from the state of Ohio, Indiana, and Missouri. Almost all representatives from Indiana and Missouri voted in support of the Third Bank. Ohio was one of the largest deposit centers in the country in 1841 and had suffered numerous banking failures during the Panic of 1837. Generally, states that had suffered worst through the panic were supportive of a national banking authority.

Indiana's support for the national bank was a result of the Panic of 1837. While other states welcomed private banking, Indiana chose to take another route. The State Legislature created the State Bank of Indiana which would provide all banking services to the state's population. The Bank was so well-run that its notes demanded a premium in other cities. During the Panic of 1837 the State Bank of Indiana almost collapsed due to the demand for its notes and specie in other states. This drew heavily on Bank's resources and almost lead to its bankruptcy. The Bank was saved by the Indiana State Legislature's decision to suspend species payments in 1838. Thus the inhabitants of Indiana were well aware of the danger of state provided notes and they supported a nationally provided currency and a central banking authority.

Table 4 offers additional insight into the 1841 vote. The regression supports that findings in Charts 9 and 10. It shows that being a member of the Republican party and a representative of the Midwest heavily impacted the voting decision. What is also interesting to note is that the coefficient on the number of banks is significant while the number of bank failures as a result of the Panic of 1837 is not. However, when the variable for the rate of bank failures is removed from the regression, all of the variables become insignificant. This would indicate that the number of banks indirectly influences the voting preferences. This might be explained by regional differences in banking practices and failures.

Chart 9

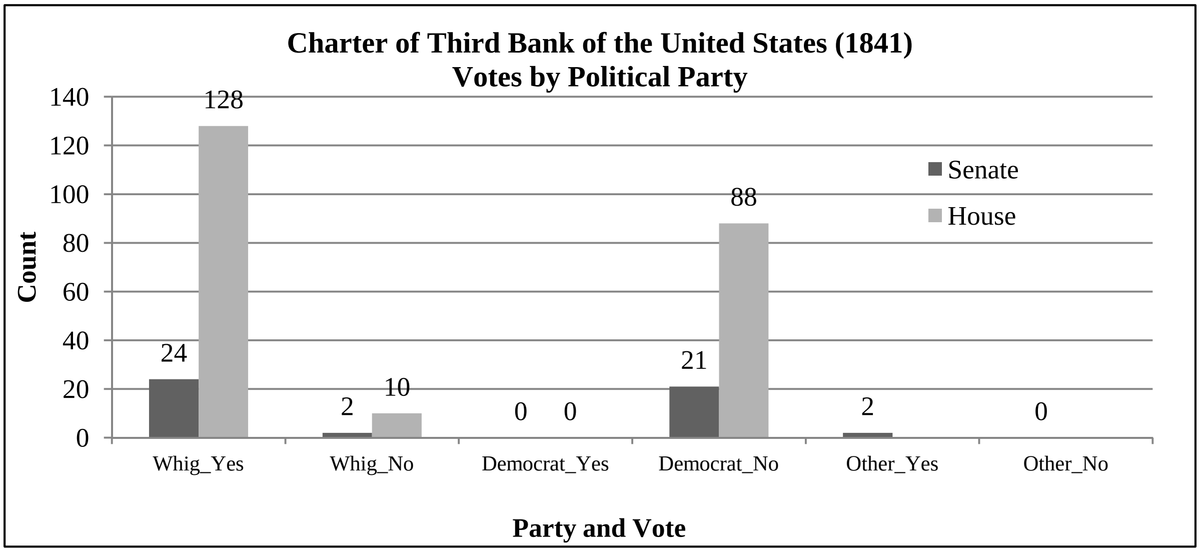


Chart 10

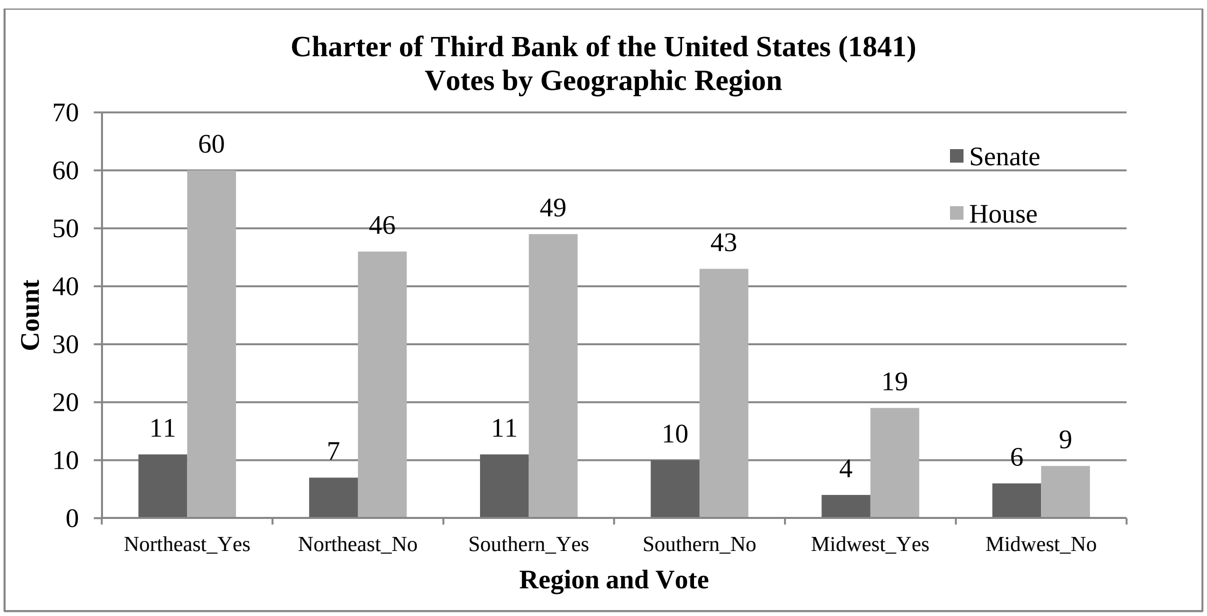


Table 4: Regression on Charter of Third Bank of United States (1841)

	(1) 1841 Vote Senate	(2) 1841 Vote House
Dummy Northeast	0.018	0.059
	(0.103)	(0.044)
Dummy Southern	-0.105	
	(0.084)	
Dummy Midwest		0.103**
		(0.045)
Dummy Whig	-0.043	
	(0.176)	
Dummy Democrat	-0.956***	-0.921
	(0.186)	(0.234)
Urban Population	0.458	0.247
	(0.375)	(0.234)
Banks	-0.003	-0.002**
	(0.002)	(0.234)
Bank Failures Panic 1837	0.161	0.038
	(0.256)	(0.14)
Specie	0	0
	(0)	(0)
Deposits	0	0**
	(0)	(0)
Observations	49	226
R squared	0.869	0.841

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard Error in parentheses

National Banking Legislation 1862-1865

What is clear from the National Banking legislation (including the creation of the Greenback in 1862, the National Banking Acts of 1863 and 1864, and finally the tax on State bank notes in 1865) is that the majority of the Republican Party was in support while the majority of the Democratic Party was against it. Since most of the National Banking legislation sought to resolve the funding problems of the Civil War, it is clear that the Northern states were largely in support of the legislation while much of what was left of the Southern states, was against it. Charts 11through 14 summarize the voting trends by political parties and regions during this time.

Chart 11

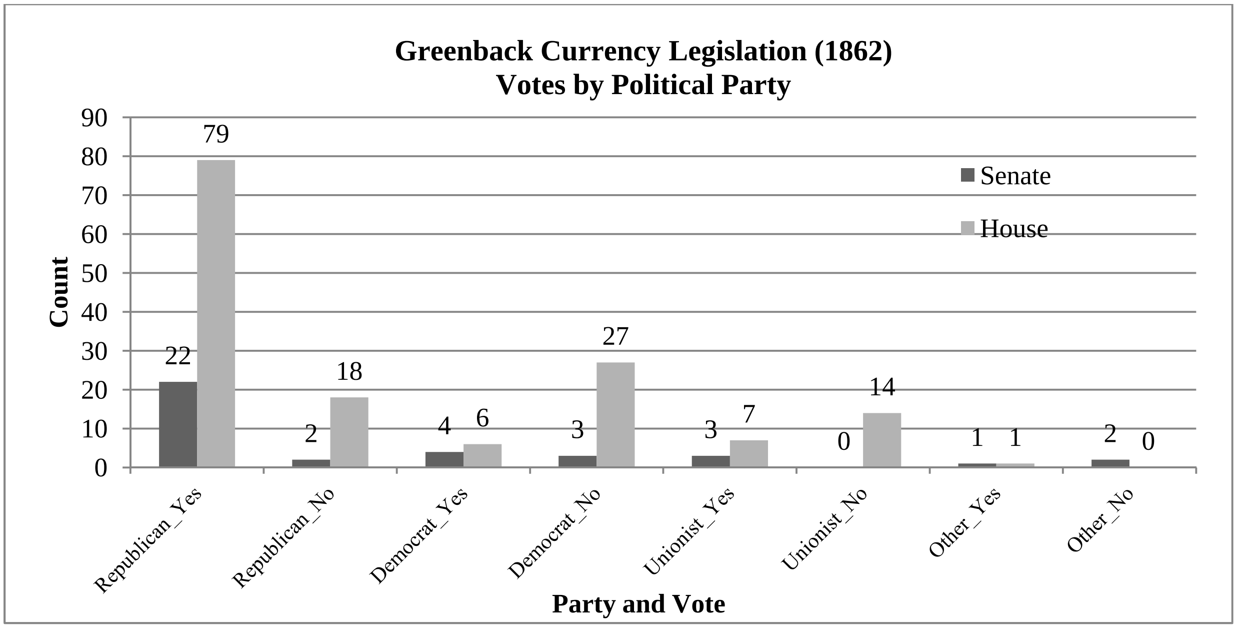


Chart 12

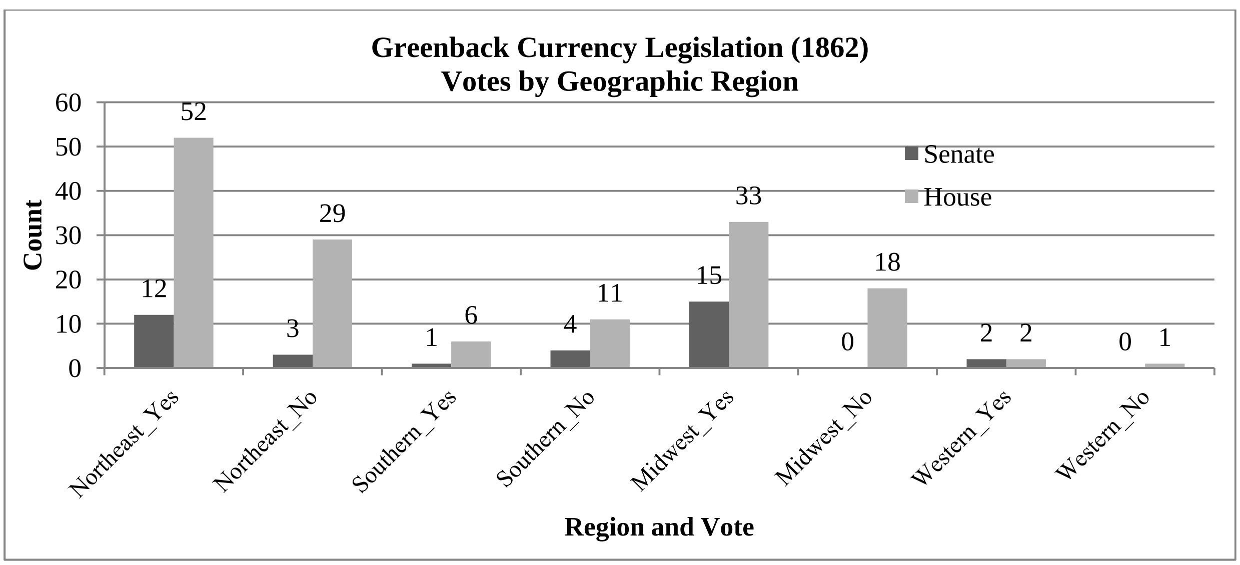


Chart 13

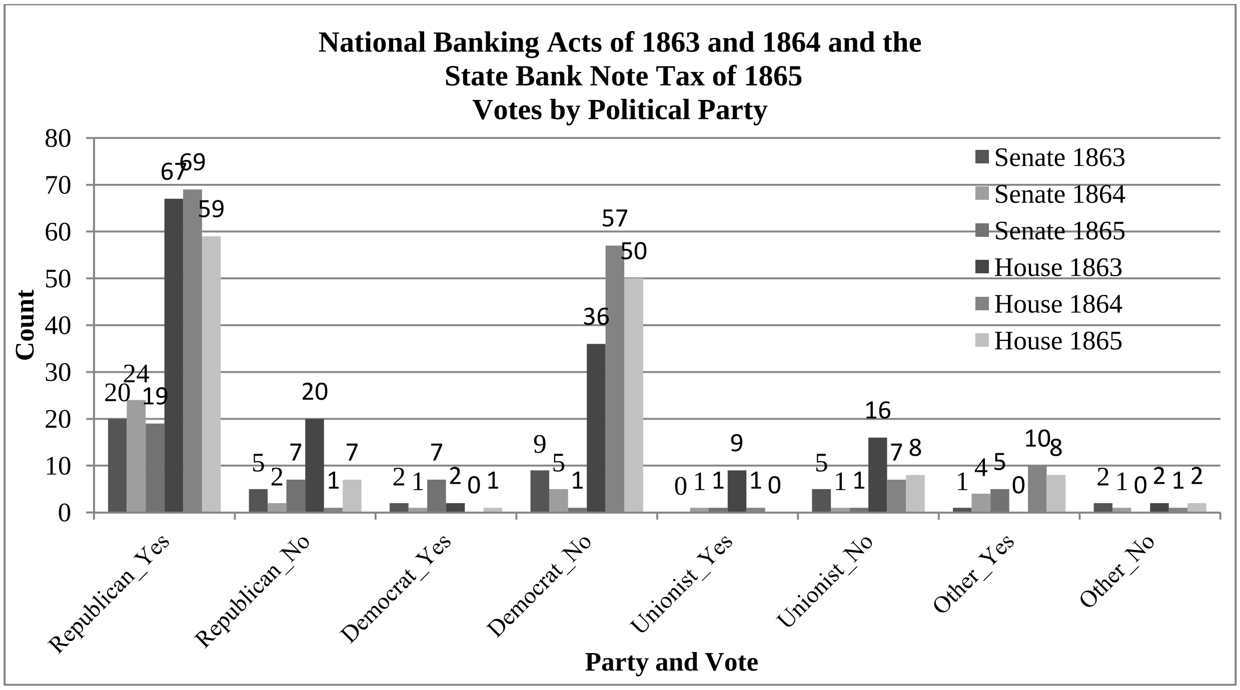
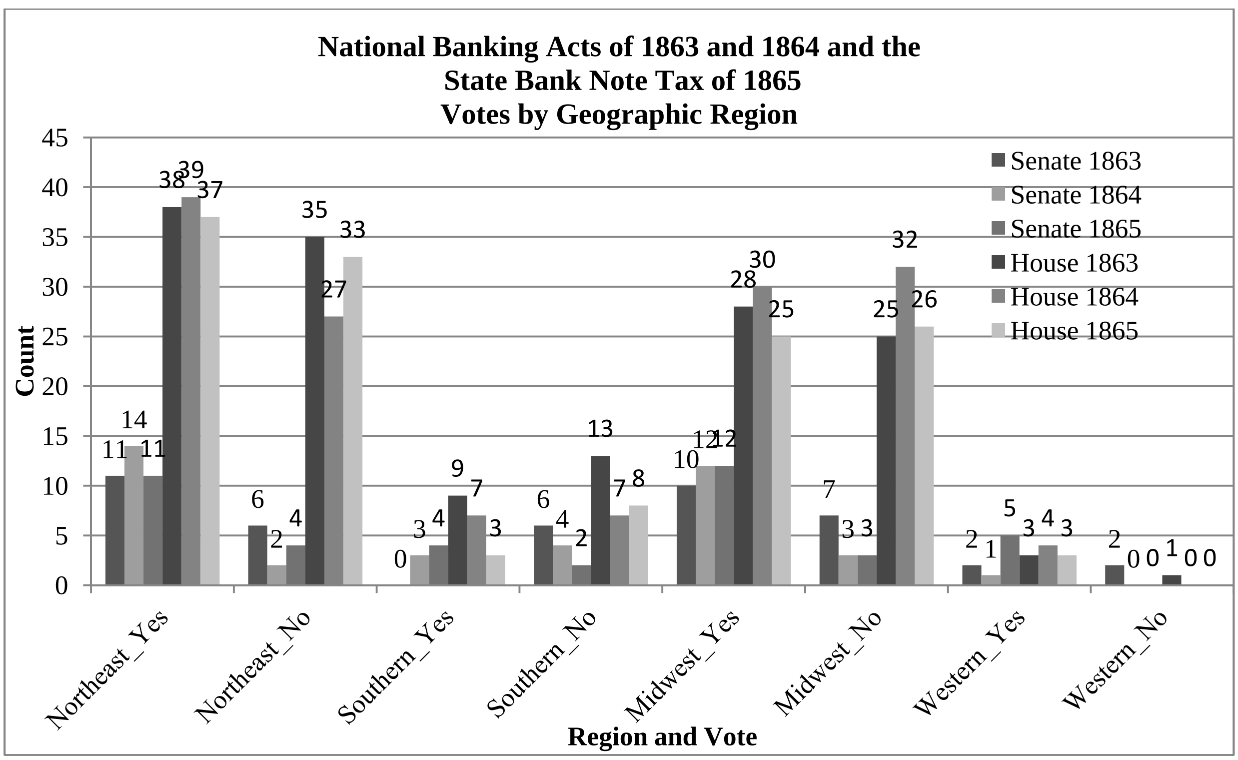


Chart 14



Tables 5 provides support for the influence of the regions on the voting trends of the congressional representatives.

Table 5: Regression on National Banking Act of 1863

	(1) 1863 Vote Senate	(2) 1863 Vote House
Dummy Northeast	-0.806**	-0.202**
	(0.329)	(0.108)
Dummy Southern	-0.592*	0.359*
	(0.304)	(0.263)
Dummy Western	-0.489	-0.016
	(0.275)	(0.216)
Dummy Republican	0.381	0.813
	(0.263)	(0.284)
Dummy Democrat	-0.403	0.073
	(0.29)	(0.287)
Dummy Unionist	-0.409	0.028
	(0.339)	(0.371)
Urban Population	0.068	0.464
	(0.603)	(0.446)
Agri/Manu	-0.036	-0.059
	(0.242)	(0.177)
Banks	0.005	-0.002
	(0.003)	(0.002)
Deposits	0	0
	(0)	(0)
Specie	0	0
	(0)	(0)
Observations	44	152
R squared	0.552	0.435

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard Error in parentheses

The Federal Reserve is Created

Charts 15 and 16 provide the vote tallies by political party and geographical region for the Aldrich-Vreeland Act of 1908 and the Federal Reserve Act of 1913. Tables 6 and 7 help to illustrate the major takeaways from these charts. What is clear is that the House was heavily influenced by not only geographic regions but also by political party membership. The Senate on the other hand was influenced solely by political party membership. What is more interesting is the fact that the House and Senate Democrats voted unanimously against the Aldrich-Vreeland Act in 1908 but unanimously in favor of the Federal Reserve Act of 1913. This was a direct consequence of their objection to Republicans, like Senator Aldrich, who were deeply connected to wealthy, private bankers. Aldrich was a staunch supporter of taxes and this often caused him to conflict with members of the Democratic Party.

Chart 15

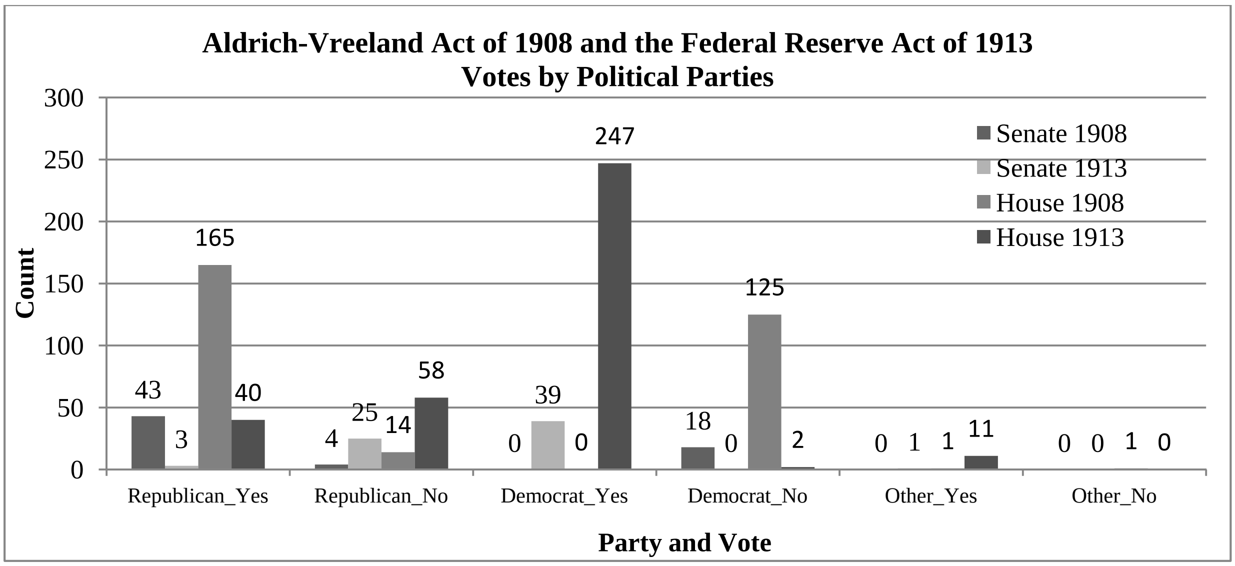


Chart 16

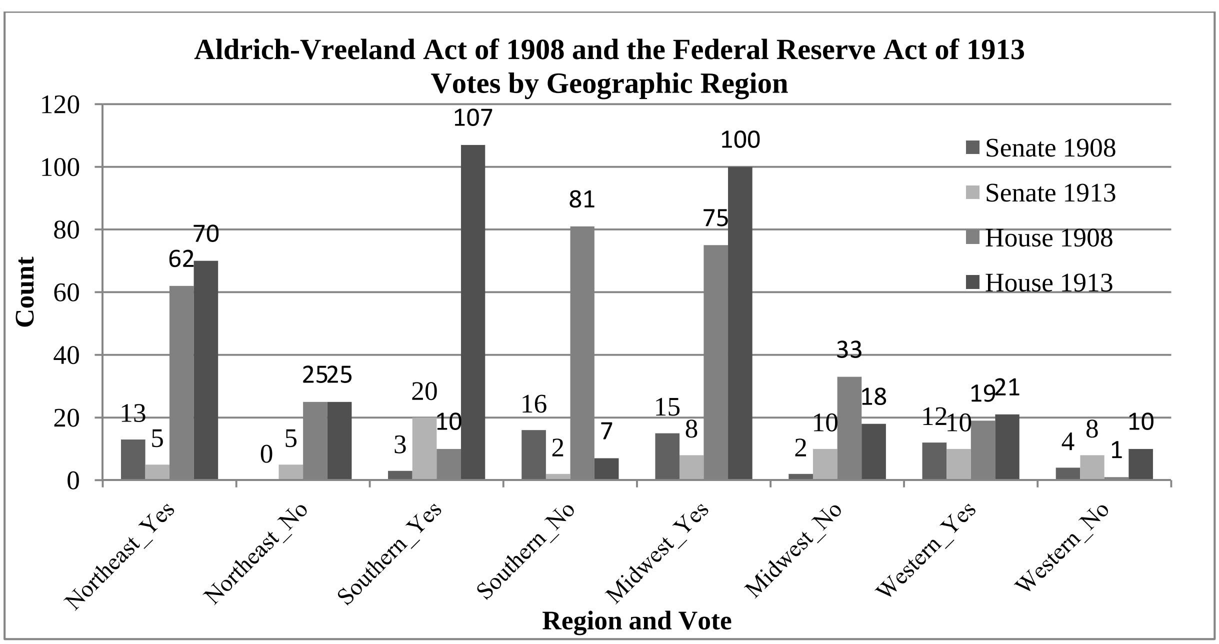


Table 7 offers some additional insights regarding the Federal Reserve Act of 1913. In 1913 the Democrats had earned a majority in the House and Senate. Their election was a direct consequence of the citizenry's distrust of the recently discovered relationship between the Republican Party and wealthy private bankers. The Democrats had opted for a platform of financial reform. Thus, the independent oversight of the Federal Reserve Act was especially attractive to them. From Table 7 it is interesting to note that the coefficients on the specie and bank variables are significant for the House and Senate. From this analysis it is clear that banking conditions in each state and geographic region impacted the central bank vote.[57]

Table 6: Regression Analysis for Aldrich-Vreeland Act 1908

	(1) 1908 Vote Senate	(2) 1908 Vote House
Dummy Northeast	0.031	
	(0.111)	
Dummy Midwest	0	0.093
	0	(0.06)
Dummy Southern	0.146	0.193**
	(0.122)	(0.073)
Dummy Western		0.197***
		(0.073)
Dummy Republican		0.451***
		(0.15)
Dummy Democrat	-0.921***	-0.479***
	(0.122)	(0.152)
Urban Population	0.386	0.181
	(0.264)	(0.137)
Agric/Manu	-0.004	0.023
	(0.024)	(0.017)
Banks	0	0
	(0)	(0)
Failure Rate 1907	0.217	0.049
	(0.28)	(0.151)
Specie	0	0
	(0)	(0)
Deposits	0	0
	(0)	(0)
Observations	65	306
R squared	0.780	0.830

* p < 0.10 , ** p < 0.05 , *** p < 0.01
Standard Error in parentheses

[57] When the specie level and number of banks variables are removed from the regression, almost all of the other explanatory variables become insignificant, except for the Republican coefficient.

Table 7: Regression Analysis for the Federal Reserve Act of 1913

	(1) 1913 Vote Senate	(2) 1913 Vote House
Dummy Northeast	-0.06	-0.155***
	(0.102)	(0.054)
Dummy Southern	0.051	-0.131***
	(0.081)	(0.052)
Dummy Western	0.014	-0.162***
	(0.085)	(0.085)
Dummy Democrat	0.244	-0.015
	(0.21)	(0.085)
Dummy Republican	-0.621***	-0.629
	(0.212)	(0.085)
Urban Population	0.525**	-0.09
	(0.226)	(0.148)
Agric/Manu	-0.019	0.017
	(0.016)	(0.015)
Banks	0.001*	-0.001***
	(0)	(0)
Failures 1913	0.512*	-0.153
	(0.291)	(0.158)
Specie	0**	0**
	(0)	(0)
Deposits	0	0
	(0)	(0)
Observations	68	358
R squared	0.871	0.530

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Standard Error in parentheses

Which Economic and Political Factors are Significant?

From the analysis in Section III, it is clear that data supports the conjecture that political parties and geographic regions heavily impacted the votes of the House and Senate. What is interesting is that the population and agricultural-manufacturing variables were insignificant in all regressions. However, when these variables are removed, this impacts the significance of other explanatory variables. This is similar for the number of banks, specie, and deposits variables. These regressions suggest that some underlying relationship exists between the economic and financial health of a region and the decisions of political representatives. Further research can only help to better understand the relationship between these variables.

Much more can be done in regards to the statistical analysis of the data collected for this paper. This will have to remain for future projects as the time for this paper is extremely limited.

Section IV: Concluding Remarks

By closely examining the long and eventful banking history of the United States, one can see that the financial system was at its weakest when political motivations overwhelmed the underlying economic needs of the nation. Even when a national banking entity proved the economic merits of its existence, these were disregarded when strong political arguments were made.

Also adding to the US's complicated banking history is the nation's apparent forgetfulness. At times of great need for reformed policy, the nation seemed to forget its earlier experiences. It seems that for a time, the nation was doomed to face repeated bouts of financial turmoil. Even though the nation had experienced a tremendous amount of stress without a nationally provided currency during its colonial years, when faced with the opportunity to correct this situation, the nation opted for a decentralized approach. The absence of a uniform currency severely affected the wealth and prosperity of the various regions of the country. However, some regions realized the value of a monetary authority and created entities similar in nature. Areas such as New England and New York experienced tremendous economic growth under their clearinghouses.

However, even with a national paper currency the nation still faced financial crises in the form of banking panics. Without a source of liquidity in case of emergencies the nation's economy was easily unbalanced during bank runs. The nation could have looked to its European trade partners for suggestion on how to build a sound financial system, but it didn't. The nations of Europe thrived during the 19th century not only because of their colonizing efforts and industrial revolutions, but also because each nation adopted a national currency and monetary authority to support trade within its sphere of influence. What is clear is that the US experience with central banking was complicated by the argument over the balance of powers between the state and federal governments. The fear of a powerful government prevented the nation from adopting a central bank for 168 years and played a key role in developing the structure of the Federal Reserve System. It was not until the early 20^{th} century where the economic needs of the nation had become overwhelming did politicians seek to establish a better financial system.

In conclusion, the US is somewhat of an oddity when it comes to the evolution of a central bank. While the US adopted a completely different structure than that of the European nations, it has thrived beyond comparison of those nations. Possibly, only through its tumultuous experience with banking was the US able to define what factors were essential to its prosperity. It is the US's unique model of central banking that so many nations have come to admire and attempted to emulate. However, it is clear that the structure of a nation's central bank is a direct result of its political and economic evolution. Only through the study of our history can we better understand the role of our central bank and what can be done to improve its future policies.

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---. 13 Jul. 1832: 463-464. Print.

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