

# LESSONS FOR THE EURO FROM EARLY AMERICAN MONETARY AND FINANCIAL HISTORY

by

Jeffry Frieden

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## FOREWORD

It is widely appreciated that Europe's monetary union is incomplete. Economists in particular are impatient at Europe's slow progress in advancing banking and fiscal union. But what is often under-appreciated is the extraordinary degree of complexity that forming a 'complete' monetary union entails. Often, the discussion loses sight of the fact that building a monetary union is not just about technical solutions but is rather about reconciling different interests.

Jeff Frieden's essay summarises some of the central themes that were fundamental in the creation of the United States' monetary union. Irrespective of whether one ultimately is in favour of 'complete' European monetary union or not, it is useful and important to grasp what those fundamental themes were. The first theme is one of time. The US 'monetary union' was not finished with the work of Alexander Hamilton, the first Secretary of the US Treasury, who is widely credited with the creation of the US fiscal union. On the contrary, many years of deep conflict followed Hamilton's period. The second theme relates to the nature of these conflicts. The conflicts were essentially about the right mix between bail-in and bail-out of federal states and banks, and about the appropriate monetary policy stance in a union of creditors and debtors. The third theme is the importance of federal institutions pursuing the common interest and demonstrating that the whole is more than the sum of its parts.

For anyone following the European policy debate, this essay will provide many insights from the US. Ultimately, it will be up to Europe's

citizens to decide its destiny. This essay helps us understand that the conflicts our continent is encountering have happened in quite a similar way in the United States. Let me thank Professor Frieden for telling this fascinating story.

*Guntram Wolff, Director, Bruegel  
Brussels, May 2016*

## LESSONS FOR THE EURO FROM EARLY AMERICAN MONETARY AND FINANCIAL HISTORY

Europe's central goal for several decades has been to create an economic union that can provide monetary and financial stability. This goal is often compared, both by those that aspire to an American-style fully federal system and by those who would like to stop short of that, to the long-standing monetary union of the United States. The United States, after all, created a common monetary policy, and a banking union with harmonised regulatory standards. It backs the monetary and banking union with a series of automatic fiscal stabilisers that help soften the potential problems inherent in inter-regional variation.

Easy celebration of the successful American union ignores the fact that it took an extremely long time to accomplish. In fact, the completion of the American monetary, fiscal, and financial union is relatively recent. Just how recent depends on what one counts as an economic and monetary union, and how one counts. Despite some early stops and starts, the United States did not have an effective national currency until 75 years after the Constitution was adopted, starting with the National Banking Acts of 1863 and 1864. And only after another fifty years did the country have a central bank. Financial regulations have been fragmented since the founding of the Republic; many were federalised in the 1930s, but many remain decentralised. And most of the fiscal federalist mechanisms touted as prerequisites for a successful monetary union date to the 1930s at the earliest, and in some

cases to the 1960s. The creation and completion of the American monetary and financial union was a long, laborious and politically conflictual process.

The historical American experience is relevant because, as Mark Twain is said to have remarked “*history does not repeat itself, but it does rhyme*”. In this essay, I summarise and analyse the American experience with creating a monetary and financial union in the late eighteenth and early nineteenth centuries. This was a period of massive macroeconomic divergences between the regions of the country. The states pursued extraordinarily uncoordinated, even contradictory, fiscal policies; and bank regulations were highly fragmented, with some states pursuing extremely conservative and restrictive regulatory policies and others pursuing virtually no regulation at all.

I focus on the political conflicts over national monetary policy, and over the relationship between national (federal) and subnational (state) fiscal and financial policies. These issues have been central to political conflicts over Economic and Monetary Union in the European Union, and while the American trajectory is not well known to Europeans (or Americans), the story is quite relevant to current problems in the EU.

## ANALYTICAL PRINCIPLES AND DISTRIBUTIONAL DIVISIONS

The creation of a national monetary and financial union raises important analytical questions. Inasmuch as everyone is in favour of monetary and financial stability, we might ask why it might be difficult to obtain. The answer is simple: there are many possible ways of defining financial stability, there are various ways in which this stability can be delivered, and this delivery involves trade-offs with other values. This problem exists in any economic union, national, subnational or federal. The members of the union typically share at least some common overarching goals, otherwise there would not be a



union. Nonetheless, differences in people's interests lead to differences of opinion on how the union's macroeconomic goals should be achieved<sup>1</sup>.

We can start with one simple way of thinking about the divisions within any political jurisdiction that has responsibility for monetary, fiscal, and financial policies. On the one hand, there are those who favour relatively expansionary monetary and credit conditions: low interest rates, relatively lax regulatory standards and perhaps more aggressive government spending. Typically, such interests are to be found in rapidly growing areas: they want to be able to expand their activities more easily to take advantage of new opportunities. By the same token, economic agents in fast-growing regions are more likely to be debtors, whose real debt burden is lessened by lower real interest rates (whether with lower nominal rates or higher inflation). In the historical American setting, this position was called 'easy money', which meant loose monetary policy, pro-debtor financial policies and expansionary fiscal policies.

On the other hand, there are economic interests in more established and stable regions or segments of the economy, which are more likely to be savers and creditors. These groups favour what was known in the historical American parlance as 'hard money'. That is, they want less expansionary monetary policies and lower inflation. They also typically prefer more pro-creditor financial policies and more limited government spending.

The division between rapidly growing and stable (even stagnant) regions, and between their economic-policy preferences, is common to many historical and contemporary experiences. The American example is, I believe, important and relevant to the problems facing the European Union. In the United States of the late eighteenth and early nineteenth centuries, the relatively more established regions of the Northeast favoured a more moderate monetary, fiscal and financial stance, while the rapidly growing frontier regions wanted much

looser macroeconomic and regulatory policies. Americans fought nearly constant battles over these issues from the adoption of the Constitution until the Civil War (and beyond), and the political conflicts were often among the central divisions facing the nation.

### ALEXANDER HAMILTON BUILDS A MORE PERFECT UNION

The American Revolution was financed largely by the issuance of debt that could not be serviced and through money that could not be redeemed – in other words, by inflationary means. The thirteen states and the Continental Congress incurred substantial obligations, both to actual holders of bonded debt and to soldiers and suppliers who were paid in unsecured obligations for their services.

In addition to incurring debts it could not pay, the new country issued money it could not back. The Continental Congress, which was the representative agent of the thirteen colonies, issued a currency called the Continental Dollar (see Figure 1, a \$50 continental bill). This paper money is best known in the context of the expression “*worthless as a Continental*”, which Americans still use. Figure 2 shows why. The relationship does not seem particularly troubling until one realizes that the left (face-value) scale of Figure 2 is ten times that of the right (specie-value) scale, so that when the lines cross around 1778, the Continental was worth about ten cents on the dollar, and by 1780 it was worth about two cents on the dollar. Most of what circulated in this period was foreign currency, especially Spanish silver dollars, the famous ‘pieces of eight’, whose common use explains why Americans still talk in terms of ‘bits’, such as two bits being two-eighths (one-quarter) of the Spanish dollar.

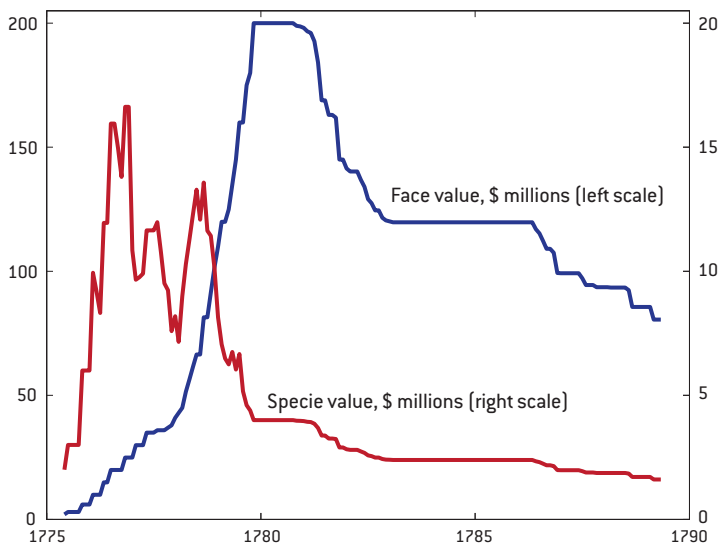
The Continental currency was indeed essentially worthless, and with the Constitution adopted, the new administration of President George Washington had to face the problems associated with the absence of monetary credibility. The country’s monetary and financial problems

Figure 1: A Continental 50-dollar note



Source: <http://diplomacy.state.gov/documents/organization/101209.pdf>

Figure 2: Face and specie value of Continental dollars



Source: Hall and Sargent [2014].

were addressed by Alexander Hamilton, organiser of the Bank of New York and the most economically sophisticated of the Founding Fathers. In 1789, President Washington appointed Hamilton, his principal aide during the War for Independence, as the country's first Secretary of the Treasury. In his first two years in this position, Hamilton wrote three extraordinary tracts: two *Reports on the Public Credit*, and a *Report on the Manufactures*<sup>2</sup>. The latter is of great importance on many aspects, but addresses only monetary or financial issues obliquely; the first two are directly concerned with them.

Hamilton had long thought about the country's financial difficulties and how to build the new nation's financial reputation. Writing in 1781 to Robert Morris (who shared both Hamilton's concern for public finance and his private financial expertise and interests) he argued that "*a national debt, if it is not excessive, will be to us a national blessing... a powerful cement of our Union*" (Hamilton, 1850, p257). He recognised that the country's lack of creditworthiness posed an impediment to financial independence.

Hamilton argued, in the *First Report on the Public Credit*, that the country had to establish its fiscal and financial credibility: "*to be able to borrow upon good terms, it is essential that the credit of a nation should be well established... States, like individuals, who observe their engagements, are respected and trusted: while the reverse is the fate of those, who pursue an opposite conduct*"<sup>3</sup>.

While the debts in default stood in the way of being "*able to borrow upon good terms*", these were mostly debts of individual states, not of the new Federal government. Hamilton proposed to have the Federal government recognise the state debts and exchange them for Federal obligations, which would be serviced. This meant that the Federal governments would assume the debts of the several states and pay them off at something approaching face value. Continentals would be redeemed at a penny on the dollar (details of the financial arrangements are described in Hall and Sargent, 2014).

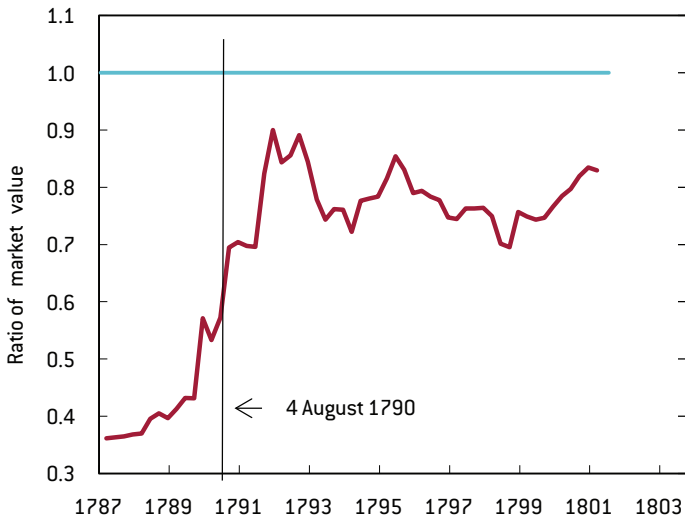
The arrangement was known as 'Assumption', because the federal government 'assumed', or took on, the states' debts. The policy was highly controversial, for a myriad of reasons. The original creditors no longer held most of the debts. Speculators we would now call vulture capitalists had bought up worthless paper at a deep discount in the hope that they would eventually get more for it. Economically, the states varied widely in their financial rectitude: some had paid back much of their debt, others none. Politically, it was clear that a centralisation of power would give the Federal government unprecedented authority in financial matters. Thomas Jefferson and James Madison forcefully opposed the plan; their opposition was reflective of their general identification with agrarian – as opposed to urban, financial and industrial – interests. Hamilton overcame this obstacle through an agreement: trading Assumption for placing the nation's capital on the banks of the Potomac River, in the South.

Congress accepted Assumption and put it in place in August 1790. It almost immediately established the creditworthiness of the new Federal government. As Figure 3, overleaf, shows, while the obligations were trading at about a 60 percent discount in 1788, once Assumption was enacted, existing obligations traded nearly at par (the remaining discount reflected the haircuts imposed on creditors). The federal government regained access to international and domestic financial markets.

Hamilton next turned to the country's monetary problems. He recognised the connection to public debt in his *First Report on the Public Credit*:

*In countries in which the national debt is properly funded, and an object of established confidence, it answers most of the purposes of money. Transfers of stock, or public debt, are there equivalent to payments in specie. The same thing would, in all probability, happen here, under the like circumstances<sup>4</sup>.*

Figure 3: Ratio of par value to market value for government debt  
(4 August 1790 was the date of the Funding Act)



Source: Hall and Sargent (2014).

In addressing the monetary aspect of the problem, Hamilton proposed a central bank; indeed, the *Second Report on the Public Credit* is often called *The Report on a National Bank*. In it, Hamilton called for the establishment of the Bank of the United States, patterned largely on the Bank of England. In his later *Report on Manufactures*, Hamilton wrote:

*The tendency of a national bank is to increase public and private credit. The former gives power to the state, for the protection of its rights and interests: and the latter facilitates and extends the operations of commerce among individuals. Industry is increased, commodities are multiplied, agriculture and manufacturers flourish: and herein consists the true wealth and prosperity of a state (Report on Manufactures, 1790).*

However, once again controversy greeted the proposal for a central bank, drawing the ire of those opposed to centralisation, and especially financial centralisation. Nonetheless, the bank – typically called the First Bank because, as we will see, there was eventually another – opened for business in 1791 in Philadelphia.

The Bank of the United States acted in many ways like a typical central bank of the era. It had the right to issue notes, and although it did not have a monopoly on note issuance, eventually its banknotes became the effective legal tender of the United States. It acted as the fiscal agent of the Federal government, which also held equity in the bank, and it was responsible for domestic and international financial ties. Its size – it was one of the country's largest corporations, and by far its biggest financial institution – meant it had a powerful impact on macroeconomic conditions. Specifically, it used its holdings of, and operations with, the notes of state-chartered banks to affect monetary conditions, and to exercise a great deal of quasi-regulatory control over the state banks. Although the founders may not have foreseen this exact role, the bank also acted as the rough equivalent of a lender of last resort, notably in the Panic of 1792. All in all, it exercised a generally cautious monetary and financial policy<sup>5</sup>.

With Assumption and the First Bank, Hamilton went a long way toward solving the new nation's monetary and financial problems. The government's credit was good, and it could borrow both at home and abroad. There was a nationally circulating medium issued by a central bank, which exerted substantial control over monetary and credit conditions.

### HAMILTON'S PLANS MEET AMERICAN POLITICS

However, the bank's operations were as controversial as its establishment. It was not coincidental that it was headquartered in Philadelphia, which was, along with New York and Boston, a major commercial and financial centre. Although New York's economic elite regarded the bank as too much a tool of its rivals in Philadelphia, the bank was generally controlled by the established financial and commercial elites in the big north-eastern cities. And the bank generally acted to restrain credit creation more than was desired by Americans in more rapidly expanding regions, especially on or near the frontier.

After all, the United States in this period was growing very rapidly. People in the most dynamically expanding regions of the country, especially in the South, believed that the policies put in place by Hamilton were limiting economic opportunity. The bank's relatively restrained monetary policies made credit scarcer and more expensive, while the bank's financial policies limited the expansion of banking and credit. These policies restricted the ability both of state governments to borrow to build the infrastructure needed by the rapidly growing frontier regions, and the ability of farmers and others on the frontier to borrow to expand their private endeavours. Here again we see the classic division between the more established financial centres and their interests, on the one hand, and the rapidly growing regions and their interests, on the other. The clash was between creditors and debtors, fiscal conservatives and expansionists, monetary hawks and doves.



In 1811, the bank's charter came up for renewal. Despite the recommendation of Secretary of the Treasury Albert Gallatin (and the support, now, of Thomas Jefferson), the Congress refused to renew the charter. The timing could not have been worse, for in 1812 the United States embarked upon an ill-advised war against Great Britain. The new nation did not fare well, seeing its capital city burned and effectively losing the war. In the absence of the National Bank, the Federal government had grave difficulties borrowing to finance the war effort (Hall and Sargent, 2014, pages 156-158, and Rockoff, 2015). The end of the First Bank, in addition to its impact on public finances, led to substantial disruptions in what had become a more developed financial system.

With the end of the War of 1812 in 1815, Congress reversed course and established a new national bank, the Second Bank of the United States. The Second Bank, chartered in 1816, was somewhat more sophisticated than the First Bank, in part reflecting the more developed nature of the country's economy. For much of its existence it was run by a very well trained American, Nicolas Biddle, who was the originator of much of American thinking on central banking. Biddle also influenced the thinking of such people as Walter Bagehot, writer on politics and finance and founder of *The Economist*, because Biddle's policies were explicitly articulated in the context of a rapidly growing new republic.

## FROM THE WAR OF 1812 TO THE BANK WAR

It may have seemed that the monetary and financial issues were settled once more, but in fact problems were only beginning. Economic conditions began changing very rapidly almost as soon as the Second Bank was founded. From 1789 to 1815, when Europe (in other words, the relevant world economy) was completely absorbed by the Napoleonic Wars, economic policy was relatively simple. American policymakers did not have much to do, especially on the external

front: international capital markets were largely closed, and Continental export markets were embargoed for much of the period.

After 1816, however, economic conditions began to change dramatically. A few years earlier, the cotton gin, a machine to process cotton, had been introduced, and suddenly the South could spectacularly expand production of the world's most important raw material. Soon after, a boom in canal building began, to open up newer areas of the South, eventually followed by the railroad. Transportation advances also opened up much of what we would now call the Midwest (then called the West or Northwest), especially for the production of grain, which could soon be shipped profitably to the rest of the country and eventually to Europe.

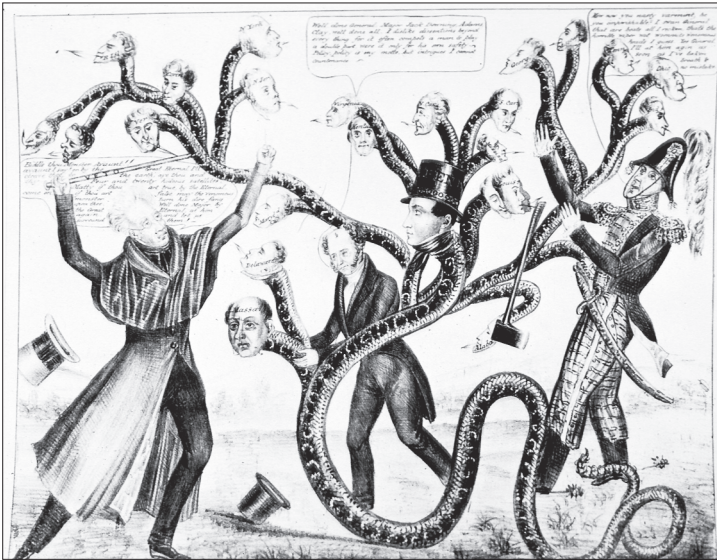
The American frontier was booming, and settlers pushed very rapidly westward. Before 1820 the country had effectively stopped at the Appalachians, a couple of hundred miles from the Atlantic coast. In 1810, of the country's more than seven million people, fewer than a million were west of the Appalachians, most of them in Kentucky. Starting around 1820, the frontier moved rapidly, perhaps 20 miles a year. By 1850 the country had over 23 million people, half of them west of the Appalachians.

In this period of extraordinary growth, the most rapidly growing areas on the American frontier chafed at the bit of the restrictive monetary policies put in place by the Second Bank. Different regions of the country experienced substantial divergences in their macroeconomic conditions. The traditional, established Northeast was stable and growing steadily: the principal concerns of Northeasterners had to do with managing their maturing urban industrial centres. Meanwhile, the South and Midwest were growing at a staggering pace, with a seemingly limitless need for capital and people.

This macroeconomic divergence led to what has gone down in American history as the Bank War, pitting supporters of the Second

Bank against its opponents, most prominently President Andrew Jackson. Figure 4 is an anti-bank political cartoon. Andrew Jackson, on the left, is slaying the multi-headed monster of the creditor classes, which includes people like British prime minister Robert Peel, the Crown of England, the Rothschilds and a wide variety of domestic and international bankers.

Figure 4: The Bank War



Source: <http://publicdomainclip-art.blogspot.be>.

Again, the backdrop to this was the conflict of interests that grew out of the very different macroeconomic and financial realities of the established East and the frontier periphery. Jackson was from a frontier state, Tennessee. The periphery wanted easy money and pro-debtor policies. They were concerned about what at the time was called a shortage of money – restricted supplies of both credit and of banknotes. The Second Bank's financial operations did in fact limit the ability of state-chartered banks to issue paper currency (banknotes) not sufficiently backed by gold or other reliable assets, just as its policies made credit more costly than borrowers might have liked.

This conflict between a pro-debtor, easy-money periphery and a more conservative and pro-creditor centre was one of the central disputes of antebellum American politics. Andrew Jackson's rhetoric was typical. When, in 1832, he vetoed the Congressional effort to re-charter the bank, he said:

*The rich and powerful too often bend the acts of government to their selfish purposes.... If Congress has the right under the constitution to issue paper money, it was given them to be used by themselves, not to be delegated to individuals or corporations [Veto Message, 1832].*

And a couple of years later, he told supporters of the Bank:

*I have been a close observer of the doings of the Bank of the United States....You have used the funds of the bank to speculate in the breadstuffs of the country. When you won, you divided the profits amongst you, and when you lost, you charged it to the bank....You are a den of vipers and thieves. I have determined to rout you out, and by the Eternal, I will rout you out! [To Bank supporters, 1834].*

The defenders of the bank were largely from the Northeast, and from other areas interested in Whig (Republican) policies. Daniel Webster,

a representative from Massachusetts, reflected the views of these interests.

*Credit is the vital air of the system of modern commerce. It has done more, a thousand times, to enrich nations, than all the mines of all the world. It has excited labour, stimulated manufactures, pushed commerce over every sea.... It has raised armies, equipped navies, and, triumphing over the gross power of mere numbers, it has established national superiority on the foundation of intelligence, wealth, and well-directed industry [In the Senate, 18 March 1834].*

The Bank War was largely a battle between those who wanted easy money and a pro-debtor policy in the fast-growing periphery and those who wanted pro-creditor policies and tight money, in the stable financial and commercial centre<sup>6</sup>. It is worth noting that this conflict still resonates for some Americans. Many on the conservative wing of the Republican Party regard Andrew Jackson as their intellectual and political forefather. His anti-central bank views presaged their hostility to the Fed. Robert W. Merry put it very clearly in the *American Spectator* of October 2011, in an article titled ‘Andrew Jackson: Tea Party President’:

*Who among past presidents should Republicans turn to for lessons and guidance? Who is the Tea Party progenitor? Who offers the insight, outlook, and rhetoric for today’s GOP?*

*The answer is Andrew Jackson. Jackson was the great conservative populist of American history, and his story bears study at a time when the country seems receptive to a well-crafted brand of conservative populism [Merry, 2011].*

A popular Tea Party poster, titled ‘End the Fed’, features a picture of Andrew Jackson and a Jackson quote on the Second Bank. As William Faulkner has one of his characters say, “*the past is never dead. It’s not even past*”.

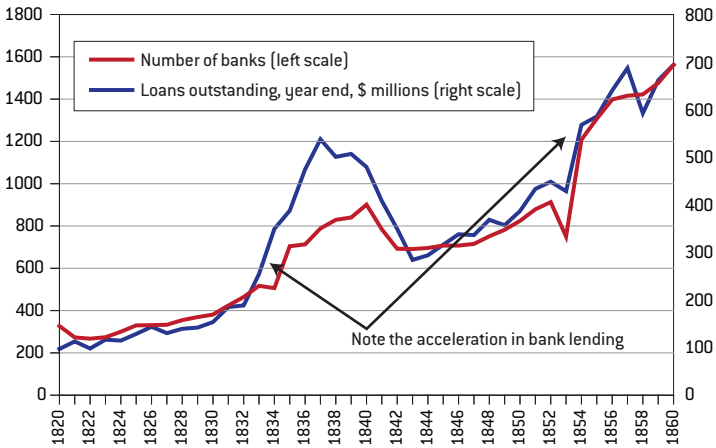
When Jackson and his supporters effectively ended the Second Bank's ability to act as a central bank, the impact was felt in several ways. First, there was no longer an institution to make effective national monetary policy. The bank had affected the growth of the money supply by dealing in the notes of state-chartered banks to ensure appropriate backing. With the bank closed, there was no central public institution to oversee the quality of banknotes. Second, states were now able to charter banks without the Second Bank constraining the banks' behaviour. This mattered to states for several reasons. For one, the more fiscally strapped banks typically sold bank charters – and the earnings could be a substantial part of state revenue. In addition, many states earned substantial income from their holdings of equity in state-chartered banks. Earnings from state-chartered banks allowed some states to engage in more expansive spending. With respect to general economic conditions, expanding the number of banks typically was a way of expanding access to credit – and thus of the effective state money supply. Finally, each state government typically required its banks to buy substantial amounts of its own state government debt. In modern terms, the removal of the Second Bank meant that there was no national institution to provide and oversee regulatory and monetary policies.

#### FROM THE SECOND BANK TO FREE BANKING

As the Second Bank period came to an end, it was succeeded by an era of 'free banking'. In a somewhat simplistic sense, the easy-money frontier had won, as the peripheral states were now free to set their own bank regulations, and by extension effective monetary policies (Rockoff, 1991). Rapidly growing states that wanted to expand credit could charter a large number of banks, with limited restraints on their lending and banknote issuance. On the other hand, conservative states could maintain relatively tight control on their own banks. The role of notes issued by state-chartered banks was crucial, as in the absence of a central bank there was no centrally issued national ban-

knote. To be sure, there was specie, but notes were far more convenient and circulated very widely. Overall, the period saw a dramatic expansion of banks and bank lending, especially in the 1830s, when the number of banks doubled and the quantity of bank loans increased fourfold (see Figure 5).

Figure 5: Bank numbers and loans outstanding, 1820-60



Source: Bruegel based on Bodenhorn (2001).

States such as Georgia, Alabama and Michigan, largely controlled by the easy money groups, made it very easy to set up a bank, and easy for banks to issue banknotes with limited reserve requirements. Some banks maintained adequate reserves, but some had insufficient backing for the notes they issued. In addition, reserves were typically in state government bonds, which were of varying degrees of reliability: the banknotes of a bank with reserves in questionable state bonds were worth less than those of a bank with reliable reserves. This meant that a dollar note issued by one bank could, in effect, be worth less than a dollar note issued by another bank.

The result was that there were effectively a variety of state currencies – all called dollars, but trading at different values depending upon how much faith people had in the backing of the banknotes issued by the state's banks (Gorton, 1996). Where state bank regulation was strict, a dollar banknote was worth a dollar; where it was lenient, a dollar banknote would trade at a discount from a dollar. The country's financial publications compiled the discounts on state banknotes, as for example in Figure 6, from *Van Court's Banknote Reporter*. In this particular instance, banknotes from the New England states and New York were effectively at par (between 0.5 and 1 percent discount), while banknotes from Indiana and Tennessee traded at a 10 percent discount, from Illinois and Alabama at 30 percent, and for such states as Mississippi and Michigan there was, ominously, “no sale”.

The banknotes circulated as money, and the banks that issued them were active in lending to locals. This created a very substantial and real monetary divergence between the states. The supply of money and credit in some states grew much more rapidly than in others. This may of course have been appropriate from a broader perspective: faster-growing regions needed more expansionary monetary conditions. Perhaps the country should have had separate currencies for each state, or region. However, the states were still all part of the same country, and their actions could impose costs on each other. These costs became clear when macroeconomic conditions turned down.



Figure 6: A bank note list

RATES OF DISCOUNT.	
<b>OHIO.</b>	
Bank of Chillicothe, pay at Philadelphia,	30
Bank of Cleveland, pay at Philadelphia,	30
Bank of Cleveland, do. pay at Philadelphia,	30
Bank of Chillicothe, do. pay at Farm & Mech. bk. Philad.,	30
Bank of Circleville, do. pay at Philadelphia,	30
H. Lawrence, cash, do. pay at Philadelphia,	7 1/2
Bank of Circleville, do. pay at Philadelphia,	unc
H. H. Warren, cash, do. pay at Philadelphia,	unc
Bank of Maquon, do. pay at Philadelphia,	7 1/2
Bank of Mt. Pleasant, do. pay at Philadelphia,	7 1/2
Bank of Norwalk, do. pay at Philadelphia,	do
Bank of Marietta, do. pay at Philadelphia,	do
Bank of Wooster, do. pay at Philadelphia,	do
Bank of Wooster, do. pay at Philadelphia,	do
Bank of Hamilton, do. pay at Philadelphia,	do
Bank of Xenia, do. pay at Philadelphia,	7 1/2
Belmont bank, do. pay at Philadelphia,	do
Bank of Gallipolis, do. pay at Philadelphia,	do
Bk of Steubenville, (old) do. pay at Philadelphia,	failed
Bk of Steubenville, (new) do. pay at Philadelphia,	—
Bank of Sandusky, do. pay at Philadelphia,	unc
Clinton bank, do. pay at Philadelphia,	7 1/2
Columbian bank, do. pay at Philadelphia,	do
Commercial bank, do. pay at Philadelphia,	do
Commercial bk of Sciota, do. pay at Philadelphia,	7 1/2
Com. bank of Lake Erie, do. pay at Philadelphia,	do
Dayton bank, do. pay at Philadelphia,	60
Farm & Mechanics' bk., do. pay at Philadelphia,	7 1/2
Franklin bank, do. pay at Philadelphia,	do
Franklin bk of Columbus, do. pay at Philadelphia,	6
Farmers' bk. of Canton, do. pay at Philadelphia,	30
German bk. of Wooster, do. pay at Philadelphia,	unc
Granv. Alexandrian Soc., do. pay at Philadelphia,	35
Lancaster Ohio bank, do. pay at Philadelphia,	do
Lafayette bank, do. pay at Philadelphia,	6
Muskingum bank, do. pay at Philadelphia,	7 1/2
Miami Exporting Co., do. pay at Philadelphia,	unc
do. branch, do. pay at Philadelphia,	unc
Mech. & Traders' bank, do. pay at Philadelphia,	unc
Mechanics' Sav. Instit., do. pay at Philadelphia,	do
Ohio Life In. & Trust Co., do. pay at Philadelphia,	6
Ohio Rail Road, do. pay at Philadelphia,	—
Urbana Banking Co., do. pay at Philadelphia,	do
Western Reserve bank, do. pay at Philadelphia,	7 1/2
Western Banking Co., do. pay at Philadelphia,	do
All notes under 65,	10
<b>INDIANA.</b>	
State bank, do. pay at Philadelphia,	10
do. branch at Bedford, Evansville, Indianapolis, Lawrenceburg, Lafayette, Madison, Michigan City, New Albany, Fort Wayne, Richmond, South Bend, Terre Haute, Vincennes,	10
<b>ILLINOIS.</b>	
Bank of Illinois, do. pay at Philadelphia,	30
do. branch, do. pay at Philadelphia,	30
do. branch, do. pay at Philadelphia,	30
do. branch, do. pay at Philadelphia,	30
do. branch, do. pay at Philadelphia,	30
Bank of Cairo, do. pay at Philadelphia,	30
State bank of Illinois, do. pay at Philadelphia,	30
do. branch at Alton, Belleville, Ch...	—
<b>KENTUCKY.</b>	
Bank of Louisville, do. pay at Philadelphia,	6
Bank of Kentucky, do. pay at Philadelphia,	6
do. branch at Bowling Green, Danville, Frankfort, Greensburg, Hopkinsville, Mayfield,	6
Hotel Company, do. pay at Philadelphia,	6
Louisville Sav. Institution, do. pay at Philadelphia,	—
Louisville Gas Light and Water works, do. pay at Philadelphia,	—
Northern bk of Kentucky, do. pay at Philadelphia,	6
do. branch at Lexington, Louisville, Paducah, Richmond,	6
Savings Institution, do. pay at Philadelphia,	6
All other banks in this State uncertain,	—
<b>TENNESSEE.</b>	
Bank of Tennessee, do. pay at Philadelphia,	10
do. branch at Athens, Columbus, Clarksville, Rogersville, Sommersville, Shelbyville, Trenton,	10
Farmers' & Merch. bk., do. pay at Philadelphia,	10
Nashville Banking Co., do. pay at Philadelphia,	10
Planters' bk of Tennessee, do. pay at Philadelphia,	10
do. payable in New Orleans,	10
do. branch at Athens, Clarksville, Franklin,	10
S. W. R.R. bank branch, do. pay at Philadelphia,	10
Union bank & branches, do. pay at Philadelphia,	10
do. payable at Baltimore,	10
do. payable at Philadelphia,	10
do. payable at New York,	10
do. branch at Columbia, Jackson, Knoxville,	10
Yostman, Wood & Co.'s checks, do. pay at Philadelphia,	10
do. payable at Philadelphia,	10
do. payable at New Orleans,	10
All notes under 65,	20
<b>OTHER STATES.</b>	
We give below the general rates of discount on the notes of the banks in good standing of the different States. For the broken ones, or those in bad repute and funds, (as also for the same class in New Jersey, Delaware, Maryland, District of Columbia, Virginia, North Carolina, South Carolina, Ohio, Indiana, Illinois, Kentucky, and Tennessee,) the reader is referred to the monthly Detector.	
Maine, 1 dis	Louisiana, 15 to 50 dis
New Hampshire, 1	Mississippi, no sale
Vermont, 1	Michigan, no sale
Massachusetts, 1	Arkansas, no sale
Connecticut, 1	Missouri State Bk, 10 dis
Rhode Island, 1	Texas, no sale
New York City, 1	Wisconsin, no sale
N. Y. Country, 2	Iowa Territory, no sale
Alabama, 30 dis	Canada, 7 to 15 dis
American Gold and Silver, 20 dis	Georgia, 8 to 30 dis
	Nova Scotia, 20 dis
<b>A COUNTERFEITER CAGED.</b>	
Washington Taylor, charged with being concerned in counterfeiting, was committed by the Recorder last week, in default of other security.	

Source: Gorton [1989].

This brings us to the fiscal side of the story. As in today's euro area, the monetary divergences were related to the fiscal divergences. Even while the Second Bank was operational, the states had substantial interests in banking for fiscal reasons, with variation between the states. As mentioned, there were relatively direct channels: the revenue from selling bank charters or from some states' equity holdings in the newly chartered banks. But especially after the end of the Second Bank, the main channel by which financial activity related to state fiscal policy was through state bank reserves. The Second Bank had served, among other things, to impose some discipline on banks by implicitly regulating their reserves. In the absence of such mechanisms, the solidity of banks in a state related closely to the creditworthiness of the state's government. The reserve assets of banks in a state were heavily weighted toward the bonds of that state's government; so the more reliable a state's government, the more reliable were the state's banks. New York State banks held reserves in profoundly creditworthy New York State bonds. On the other hand, Mississippi state banks held their reserves in Mississippi state bonds, which nobody trusted<sup>7</sup>.

With the constraints imposed by the Second Bank lifted, the states were effectively free to borrow whatever they could, and to require state banks to hold at least some of the bonds as reserves. The Second Bank had exercised a check on state borrowing by monitoring the quality of bank reserves, including state debt. Without this check, states that wanted to were better able to float new bonds – even if their fiscal capacity was lacking.

Thus began the first major borrowing spree in American history. Starting in 1837, the first year after the Second Bank's charter expired, the states started borrowing quantities that were enormous for the time. Once more there were major divergences. States controlled by interests that wanted a rapid expansion and easy money were the big borrowers; the more conservative states – New York, Massachusetts, Rhode Island – borrowed in much more conservative quantities.

To be sure, there were reasons for the borrowing. The country certainly needed a dramatic expansion of its infrastructure as the population on the frontier grew rapidly. This need was increased when Jackson vetoed the Maysville Road, a project to use Federal funds to help extend the national road across the Appalachians. The veto signalled a Democratic unwillingness to allow the Federal government to pay for needed infrastructure, forcing the states to develop these projects. Yet given the track record of the Erie Canal, which was financed abroad and was an immediate success even before completed in 1825, it was reasonable for states to promote canals, roads and eventually railroads, as their economies expanded.

State governments and state-chartered banks, especially those in the most rapidly expanding regions, also borrowed in anticipation of a continuation of the trend of land prices rising at a breakneck pace. This was associated both with the expectation that the new regions would need more banking services, and that the states would be able to raise more money with both land sales and property taxes. While neither of these expectations was completely foolish, many of the states borrowed far beyond their means.

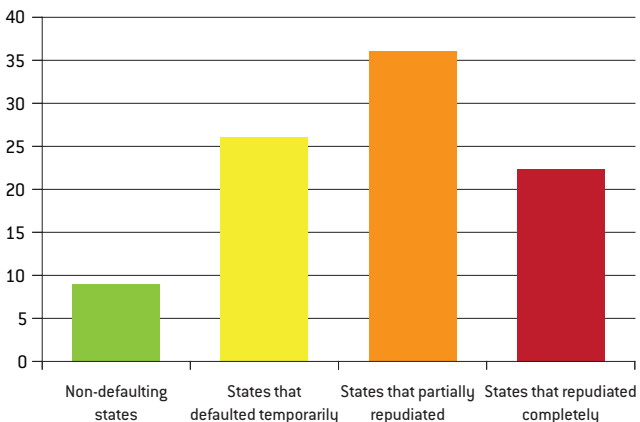
Although it is hard to find specific evidence to this effect, commentary at the time and after indicates that one reason the states were able to borrow so much was the expectation that state debts were backed by the full faith and credit of the Federal government. After all, the national government had assumed state debts before, and there was little reason to expect a different outcome in the event of a new default.

And – as has been the case in many recent experiences – the borrowing spree had something of an upward spiral to it. As states and state-chartered banks borrowed more heavily, in large part to finance land purchases, real estate prices rose along with economic activity. Rising land prices encouraged more borrowing, and so on. By 1841, state government debt was 12 percent of GDP. This may not sound like much, but governments were small at the time. In fact, American

state government debt today is 7 percent of GDP and some people regard that as a problem. In any case, state government debt had risen to equal a very substantial part of GDP, and continued rising – until eventually the merry-go-round stopped.

In the event, when the Panic of 1837 turned into a much longer slow-down – lasting some five years – the more precarious states defaulted. The eight states and one territory that defaulted on or repudiated all or part of their debts had state debts that averaged almost \$34 per inhabitant, equal on average to 40 percent of their state income (that is, the income of the state’s inhabitants – roughly comparable to GDP). This was an extremely high number for the standards of the day, when governments were small and tax revenues limited. The market sell-off was quick and massive, with yields on the bonds of defaulting states reaching nearly 40 percent. However, states that maintained debt service had much more manageable finances, averaging less than \$8 in debts per person, equal to about 9 percent of state income (for comparison, GDP per capita was about \$90 at the time) (English, 1996). It is not hard to see how states with four times the debt per capita were more likely to default (see Figure 7 for details).

Figure 7: US state debt as a share of state income, 1840s, %



Source: Adapted from English (1996).

Creditors expecting a bailout were disappointed. While eight states defaulted, twelve did not. The non-defaulters, led by New York and Massachusetts, were adamant in resisting attempts to bail out the defaulters – and they prevailed. The result was that most of the debts were eventually restructured, while some were completely repudiated. Creditors of the defaulting states took substantial losses. A further result was that the states gradually developed institutional and other mechanisms to try to shore up their creditworthiness<sup>9</sup>.

The period after the winding up of the Second Bank has some parallels with the recent European experience. The various states differed in significant ways in their monetary and financial conditions, and in the patterns of state government spending. Some encouraged a rapid expansion of credit, including credit financed by foreign borrowing, while others were much more constrained. Those that expanded most rapidly found themselves in something of a bubble, inflated by land prices, which eventually burst and led to a round of debt and banking crises and eventual defaults. In the aftermath of the crisis – as had been the case before – the country was divided between those who wanted more expansionary, pro-debtor policies, and those who favoured more conservative, pro-creditor policies.

#### MONETARY UNION COMPLETED, ALMOST

In the American case, the eventual result was two-fold. On the one hand, once the debts were restructured and the states resumed normal operations, they were substantially more careful about their own financial and fiscal policies. On the other hand, pressure grew for a more effective centralisation of monetary and financial policies. The former trend developed gradually but steadily, because the states had strong incentives to restore and maintain their creditworthiness. The latter trend was much more uneven. The Southern states generally continued to resist greater Federal control in monetary and financial matters, as they did in most other areas of economic policy, such as the tariff.

Southern resistance to Federal centralisation became irrelevant when the Southern states seceded in 1861. Two years later, Congress (minus the South) passed the National Banking Act of 1863, which created a single issuer of national bank notes, the independent treasury. Bank-specific banknotes required that the banks have a national charter and follow strict reserve requirements, so that the banknotes were of the banks in name only; in reality they were a national currency. And this was very relevant at the time, for the United States went off gold during the Civil War, so that it was on a fully paper fiat-currency standard at the time. It was not until 1879 that the dollar was pegged to gold at a fixed rate.

### AMERICAN LESSONS FOR EUROPE?

The march from the Articles of Confederation to a national currency was protracted and difficult. And it continued long after 1863 or 1879: the country did not have a central bank until the founding of the Federal Reserve in 1913. And the full panoply of fiscal federalist spending programmes only began to operate in the 1930s, and were not fully in place until the 1970s. This need not suggest that a functioning single market in Europe will take 150 or more years to create; but it does suggest the political difficulties that will be encountered along the way.

While America in the eighteenth and nineteenth centuries is hardly an appropriate model for the European Union today, there are some parallels in the current attempt to mould an economic and monetary union out of disparate entities, making it worthwhile to extract some lessons. Here are just a few.

The simplest lesson is that, to paraphrase Abraham Lincoln, policy-makers cannot satisfy all of the people all of the time. Even on a normative basis, there are many views of what constitute appropriate monetary, financial and fiscal regimes. From a political economy per-

spective, normative principles aside, there are many different interests at play in the design of the institutions of economic policy, not to speak of in the design of the policies themselves. The first principle of political economy – that where you stand depends on where you sit – applies here as elsewhere. Whether in terms of region or sector, income group or class, different groups have different policy preferences. This is true even in the case of something so seemingly simple as monetary stability. After all, in the 1890s in the United States, the Populists called for monetary stability; for them, stability, quite reasonably, meant going off gold to halt the decline in farm and other prices that had been hurting them for decades. Stable prices were prices that did not decline; gold led to deflation; hence silver and paper money would bring price stability – at least to farmers and miners.

Countries are made up of people with divergent interests, and finding a monetary and financial policy regime that can adapt itself to these divergent interests presents great political difficulties. On what is perhaps the most prominent issue, we can stylise, as I have done here, the kinds of interests at stake as divided between easy- and tight-money camps. On the one hand, there are those who would benefit from looser credit conditions and a weaker currency, with relatively high tolerance for inflation: farmers, manufacturers, debtors. On the other hand, there are those who want tighter money, a strong currency and low rates of inflation: the creditor classes, commercial and financial groups.

The divisions in society are as important today as they have been in the past. They persist in the United States, as they do within the European Union, between regions that are rapidly growing and want easier money and those that are more stable. As a result, designing a monetary policy for a disparate union will always be political, and politically charged. There is unlikely to be one unambiguously desirable policy for all of the members of a very disparate union. This is just as true of the United States as it is of the euro area – and these days

monetary and financial policies can be as hotly contested in the United States as they are in Europe.

The American experience is different from the European process in many respects, but it is still relevant. Apart from the most general implication – that monetary and financial union are politically difficult – there are some more specific ones.

Hamilton's reforms aimed at establishing the credibility of the central, Federal, government. While the direct relevance of Hamilton's reforms may have faded, the broader point remains crucial. Hamilton and his allies recognised the need for an authoritative, consistent approach to the new republic's financial and monetary problems. A continuation of the bitter sectional debates threatened the reputation of the new nation at home and abroad. The Federal government needed to establish its authority, and it did so with Assumption and the establishment of the First Bank.

Any union depends on the standing of its central authorities, and the European Union is no exception. This is true whether one's goal is a truly federal Europe, or something short, even far short, of this. No matter how federal the EU becomes, it will have Union-wide policy-making institutions, and for these institutions to function they need to be seen as trustworthy. Failure to resolve a union-wide problem can have serious repercussions, if it is taken to mean that the union is incapable of overcoming the more parochial concerns of its members.

For any economic union to be successful, the union's members – member states and member citizens – need to believe that the union's institutions are capable of confronting and resolving problems more effectively than individual member states could alone. This is essential to any sort of economic union among states, federal or otherwise. Americans have long argued about the appropriate division of responsibility between the states and the federal government; but, since Hamilton, there has rarely been any doubt that the federal



government is capable, at least in principle, of resolving problems that the individual states could not on their own. In today's European Union, is a similar conviction widely held?<sup>9</sup>

Although the European Union is not a federal union such as the United States was trying to be, a great deal of economic policy is made at the level of the EU (or the euro area). One of the problems that Europe has faced in the past decade is the relative weakness of European institutions. Americans and foreigners had little reason to trust the willingness or ability of the new United States government to honour its obligations. Likewise, many in Europe and elsewhere have doubts about the seriousness with which EU and euro-area commitments can be taken.

Just as Hamilton and the Americans had to establish the authority and reliability of the central, Federal, government, the leaders of the European Union, and of its member states, have to establish the trustworthiness of the EU's institutions. And the record of the past ten years points to an apparent inability of the region's political leaders to arrive at a conclusive resolution of the debt crisis that has bedevilled Europe since 2008.

There are striking similarities between today's problems in the euro area and those of the United States at its founding. But perhaps it is not so surprising. Crafting a broader economic and monetary union out of sovereign states raises important issues about the relationship between the creditworthiness of the central and decentralised governments. The central authorities – the Federal government in the American case, the institutions of the euro area and the EU in the European case – have to establish their ability to address crucial monetary and financial issues in a way acceptable to all member states. This requires some measure of responsibility for the behaviour of the member states themselves, which the central authority must counter-balance against the moral hazard that it creates.

In the American case, the country dealt with these linked problems over a sixty-year period. Assumption established the seriousness of the central government, but also created moral hazard. The refusal to assume the debts of defaulting states in the 1840s established the credibility of the Federal government's no-bailout commitment. Europe today faces both of these problems, and the attempt to resolve them simultaneously has so far failed. Proposals to restructure debts are rejected as creating too much moral hazard, but the inability to come up with a serious approach to unsustainable debts has sapped the EU of most of its political credibility. Both aspects of central policy are essential: the central authorities must instil faith in the credibility of their commitments, and do so without creating unacceptable levels of moral hazard.

This is not, of course, to suggest that the European Union should assume the debts of its member states. Europe's national governments have far greater capacity, and far greater resources, than did the nascent American states. But the lack of credibility of Europe's central institutions is troubling, and is reminiscent of the poor standing of the new United States before 1789. The European Union does not need to demonstrate its creditworthiness in international financial markets, as the new United States did in Hamilton's time. The EU's institutions need to demonstrate that they are capable of overcoming the reticence of creditors and creditor states, to undertake the obviously necessary restructuring of the debts that have constrained the region's growth for almost a decade<sup>10</sup>.

Another lesson that might be learned – and that many Europeans appear to resist – is that an apolitical monetary policy is a meaningless chimera, as are apolitical monetary policy institutions. Central banks are created by governments, in order to carry out the desires of elected politicians. *In extremis* they can be reined in by governments – or, as in the early American experience, shut down by them. The notion that a written rule will somehow insulate a monetary authority from all of a country's, or a region's, political realities has no basis in

theory, history or current experience.

It makes far more sense to recognise the political-economy reality than to pretend that politics does not exist by insisting on the technically superior policy proposal. Insisting on an unattainable first-best policy almost always leads to an outcome far worse than the second-best: a politically infeasible path is usually replaced by the line of least political resistance.

In the European context, the European Central Bank seems quite cognisant of its responsibilities to the variegated constituencies of the euro area. But some member states seem to believe that any consideration of political realities is inappropriate. Of course, this is usually coupled with an insistence that the ECB bend to the political realities of the member state in question. So creditor countries with large communities of savers complain bitterly and criticise the ECB about the losses their people are suffering; but a hint from a debtor country of the need for more aggressive policies to lighten the burden of accumulated debts is met with howls about the independence of the central bank. Monetary policy, like all policies, creates winners and losers; any member state or interest group that expects that it will always win, or that formal rules will ensure that it always wins, will be disappointed. Worse, it is likely to impede the proper functioning of the central bank itself.

The American experience indicates that crafting an economic union of any sort is a long, hard road. The reasons are not technical: it is not too much of an exaggeration that Alexander Hamilton had a technical solution to all of them. He knew how to create a functioning federal union with a common monetary and financial policy, and a stable fiscal regime. However, his creations turned out to be politically unsustainable and political realities eventually undermined his achievements. Only after 80 years – and a civil war – did the country devise politically sustainable compromises, and even these were subject to continual challenges for another 80 years. One might have

said that by the 1950s, we in the United States had arrived at a stable set of arrangements over macroeconomic policy, financial policy, and the role of the state in the economy. And yet those arrangements were fundamentally challenged in the 1980s, and substantially revised; and the revisions themselves are being challenged again today. In this context, it should not surprise us that the road to economic and monetary union in Europe has been full of twists and turns and fraught with obstacles — and that the continent is still not close to its destination.

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## NOTES

- 1 Certainly, with historical comparisons it is important not to impute modern motives and understanding to historical figures. For the purposes of this essay, I will undoubtedly over-emphasise the similarities of disparate historical periods. However, I believe that the comparisons remain legitimate. I should also note that the academic literature on this period is enormous. For present purposes I cite only as necessary.
- 2 The full texts of the two *Reports on the Public Credit* are contained in the Library of Congress' *A Century of Lawmaking for a New Nation: U.S. Congressional Documents and Debates, 1774-1875*, American State Papers, House of Representatives, 1st Congress, 2nd Session Finance: Volume 1, available at <http://memory.loc.gov/cgi-bin/ampage?collId=llsp&fileName=009/llsp009.db&recNum=20>.
- 3 See <https://memory.loc.gov/cgi-bin/ampage?collId=llsp&fileName=009/llsp009.db&Page=15>.
- 4 See <https://memory.loc.gov/cgi-bin/ampage?collId=llsp&fileName=009/llsp009.db&Page=16>.
- 5 See Sylla (2010), Cowen (2000), and Hammond (1957) for details on the First Bank. See also Broz (1998, pp251-261), for an interesting interpretation of the politics of both the First and Second Banks. For a more general overview of the development of American finance and its effects, see Rousseau and Sylla (2005). I am well aware that the politics and economics of money and finance in early America is hotly contested among scholars. Most of the debates, however, are about issues that do not challenge the general overview given here. Those interested in more detail can look at the works cited here.
- 6 As usual, things are more complicated than this simple picture would imply. Many in the New York financial and commercial communities were hostile to the Bank because it was seen as a major competitor (based in Philadelphia) to their private businesses. A much more detailed and nuanced view can be found in the extant literature, starting with Hammond.
- 7 Sylla *et al* (1987) is a good overview of the issue in perspective.
- 8 Wallis (2005) summarises the institutional changes.
- 9 Frieden (2016) presents evidence to this effect.
- 10 Some may infer a stronger view about 'fiscal union', based on the American experience. Despite the claims of many Europeans, the American monetary union did not require fiscal union in the form of large-scale Federal

spending or automatic stabilisers. Neither existed in the nineteenth century. What worked was, after the 1840s, a highly credible commitment not to bail out the states, so that states undertook their spending and fiscal policies on their own. The country had decentralised fiscal policies with no central controls, and a common currency. The issue is controversial enough in today's Europe that I note it only in passing.