US Precedents for Europe

4.1 Introduction

The discussion of European integration – both in the past and in the future – has largely been driven by analyses of how precedents on the other side of the Atlantic have worked. At the highest political level, such reflection concerns the constitution, with the US precedent encouraging European leaders to contemplate (rather unproductively to date) the possibility of drafting a European constitution. At the time of US independence in 1776, the thirteen former colonies were widely thought of as independent and sovereign entities; and Americans did not want the United States simply to be another conventional state like France or Britain. The US constitution was not drawn up until 1787, and was really only completed in 1791 with the Bill of Rights. Modern European attempts to follow the eighteenth century US constitutional path were suspended after the proposed constitutional treaty was rejected in referenda in France and the Netherlands in the summer of 2005. That was not, however, the end of the discussion. In the wake of the financial crisis, some – including Chancellor Merkel – suggested that, in the long run, a new constitutional settlement is the only acceptable way of defining the claims and obligations of member states. This is a convincing argument. If the path laid out in this section – whereby monetary union is followed by the development of some measure of fiscal federalism – were to be taken, a constitutional solution laying out clearly the extent and limits of European member states' commitment would be an essential condition.

The aftermath of the recent financial crisis has prompted another sort of European reflection on how a workable federal fiscal system arose in the United States. Again, this system was not introduced until 1790, some fourteen years after the Declaration of Independence. Fiscal federalism actually took much longer to work its nation-building magic. It was not until the middle of the nineteenth century that “the United States is” became the accepted grammatical form (rather than “the United States are”). The federal state did not expand beyond a rather modest peacetime share of 3 percent of GDP until the middle of the twentieth century. Strikingly, that ratio of 3 percent was the size of the EU budget envisaged by European Commission President Jacques Delors at the time of the Maastricht Treaty, at a moment when the actual size of the budget was the 1 percent that it remains today.

Those who (like Jacques Delors) would like to see Europe moving in a federal direction see the long (and often tumultuous) development of the United States as a precedent. But is this development a helpful example or a grim warning? Each episode in the creation of a modern federal US state offers analogies to the painful and politically contentious road to European integration.

This chapter investigates two of the most widely debated aspects of US fiscal and financial integration: (1) the responsibility of the federation for state-level debts and for the creditworthiness of states; and (2) the working of a federal central bank. Today’s fiscal federalism in the United States is relatively robust, but the road from 1790 was rocky; and the first two decades of the Federal Reserve as rife with monetary mistakes as the first fifteen years of the European Central Bank.

4.2 Assumption of state debts

The search for a solution to Europe’s post-2008 debt crisis has awakened European interest in American precedents for federal finance. As a result, Alexander Hamilton has become the hero of contemporary Europe. Hamilton’s 1790 negotiation of a federal assumption of the high levels of state debt in the aftermath of the War of Independence looks like a tempting model for European states groaning under unbearable debt burdens. It was cited as a helpful precedent in Thomas Sargent’s Nobel Prize acceptance speech (2011) and, for example, in the annual report of the German Council of Economic Advisors (2011). The back-

ground to the assumption was a no-blame principle. The thirteen states had not been responsible for the poor fiscal performance, which was deemed a consequence of the external circumstances of the War of Independence. After all, much of the debt resulted from financing the war against Britain, and it was more or less a matter of chance in which state that war was waged and consumed financial resources.

Hamilton's eventually successful proposal for the assumption of state debt accumulated due to the War of Independence was certainly a decisive initial step in the creation of a real union – and it accompanied the constitutionalisation of the American experiment. This assumption, however, did not produce a responsible system of state finance, and during the half century that followed there were numerous state-level defaults and a debate about new debt assumptions and/or new ways of blocking state indebtedness. The irresponsibility of individual states also gravely damaged the reputation of the federal government and made external borrowing prohibitively expensive.

Hamilton argued – against James Madison and Thomas Jefferson – that the war debt accumulated by the states in the War of Independence should be assumed by the federation. There were two sides to his case, one practical, the other philosophical. Initially the most appealing argument was that a federal takeover of war-related state debt was an exercise in providing greater security, and thus reducing interest rates from the 6 percent at which the states funded their debt to 4 percent. This was the practical side. Hamilton emphasised the importance of a commitment to sound finance as a prerequisite to public economy. "When the credit of a country is in any degree questionable, it never fails to give an extravagant premium upon all the loans it has occasion to make." Reduced borrowing costs and a lower drain on resources arising from the need to service debt would allow the state governments to "furnish new resources," to uphold public order and to protect the security of the Union against foreign attacks. There would be concrete benefits, accruing "to every member of the community." Land values would increase from their post-war lows.

The historical case of the United States looks like an attractive precedent for today's Europe, where proponents need to sell a solution as holding out gains for both debtors and creditors.

As for the philosophical side, Hamilton also insisted on a stronger reason for following good principles than merely the pursuit of expediency. There existed, he stated, "an intimate connection between public virtue and public happiness." That virtue consisted of honouring commitments. Extended to a political body, it would build solidarity. Those principles made the fiscal union what he called "the powerful cement of our Union" (Hamilton, 1790). The promise to honour our obligations had already been clearly set out during the War of Independence as a foundation of a new American identity: in Congress's address to the states of April 18, 1781, it had stated that: "A bankrupt, faithless Republic would be a novelty in the political world, and would appear, among reputable nations, like a common prostitute among chaste and reputable matrons."

The state debt of around 25 million US dollars at this time was smaller than the federal debt, also incurred almost entirely as a result of the war, which consisted of 11.7 million US dollars of foreign-owned federal debt (on which at that time default was unthinkable) and 40.4 million US dollars of domestically-owned debt. To put these figures into context, a modern estimate of GDP in 1790 is 158 million US dollars (see Mitchell, 1983).

The condition for success in the American case was that the Union raised its own revenue, initially mostly through new excises and federally administered customs houses. The logic of a need for specific revenue also applies in modern Europe, where the sources of funding for bank rescues or for a recapitalization fund should be clearly spelled out. This consideration has produced an initiative to impose a small levy or tax on financial transactions. In the longer term, and after the foundation of a common state with a common army, parliament and government, the analogy with Hamilton's system would require a more extensively reformed fiscal system that might include a common administration of customs or of value added tax (with the additional benefit in both cases of eliminating a great deal of cross-border fraud).

Would an expansion of European federal fiscal capacity represent a massive transfer of power from member states to EU authorities? It is significant that the 1790 assumption of state debt occurred in the context of an understanding that federal powers should be few and limited. In Federalist paper 46, James Madison had made it clear that central authority should be carefully circumscribed, and had concluded

that: "The powers proposed to be lodged in the federal government are as little formidable to those reserved to the individual states, as they are indispensably necessary to accomplish the purposes of the Union." (Madison, 1788).

There were two problems with the Hamilton proposals, both of which gave rise to immediate and violent political controversy. Firstly, state debt had been extensively traded on a secondary market at a deep discount. Relatively few of the original purchasers, who had acted out of patriotism, still held the debt; instead, the debt had been bought up by speculators – financial intermediaries – who hoped that something like the Hamilton scheme might be realized. A settlement that imposed no haircut and treated the debt at nominal value would, in effect, reward speculation. James Madison disliked the idea of what would effectively constitute a subsidy for Northern financiers. However, Hamilton argued that any discrimination between creditors based on the moment when they had bought debt would represent a breach of contract.

Secondly, some states had already made great efforts to pay off their wartime debt and would not benefit from the federal bailout. Virginia and Maryland in particular had largely paid off their debts, and the Virginian representatives in Congress consequently pressed for a precise calculation of the level of state debt outstanding (Mitchell, 1962, p. 70). Madison, in particular, pressed for a compensation for states that had already discharged their debt. Politically, a straight forward debt assumption was unworkable.

Initially, assumption was rejected by Congress, with potentially catastrophic consequences. Thomas Jefferson, who was opposed to the Hamilton proposal, wrote to his fellow Virginian James Monroe about the possibility of failure as Congress was split. "Unless they can be reconciled by some compromise, there will be no funding bill agreed to, our credit will burst and vanish, and the states separate" (Mitchell, 1962, p. 81).

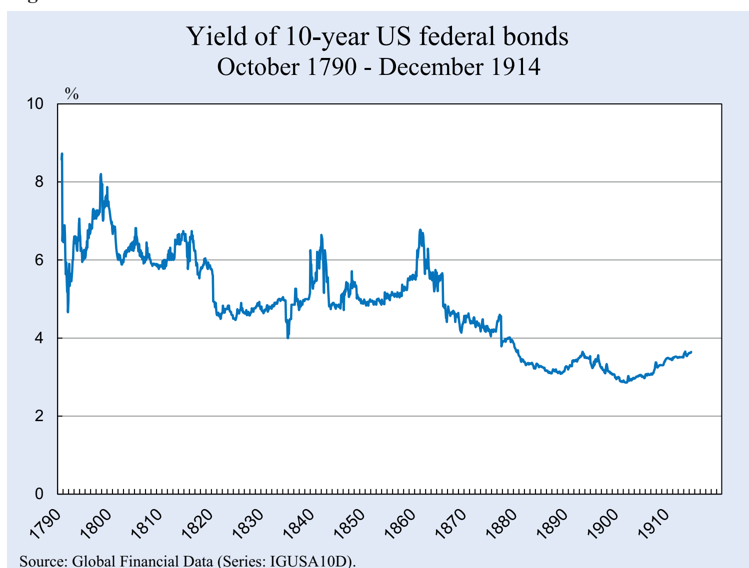
Eventually the Union was bought, at a price, and there was a compromise. Since the financial arrangement favoured the Northern states, the South and its landed elite needed symbolic, as well as practical compensation. There were financial clauses that limited the liability of the Southern states. The exposure to the common liability of Virginia, the most politically powerful state in the Union, was limited with a ceiling. Only this inducement moved Madison to drop his opposition and agree to assumption. However, there was also a symbolic and political concession. The historic compromise also led to the capital being moved to the new site of Washington, on the border of Virginia and Maryland, rather than staying in Philadelphia. Some states, such as Georgia, opted out of the assumption.

4.3 Problems of state debt

The US experiment in federalized finance was not immediately successful from the point of view of driving economic growth in the young republic. Two important parts of Hamilton's financial architecture were not realized at all, or only imperfectly. He proposed a model of joint stock banking on a national scale, which ran into immediate opposition, and which, curiously, was much more influential in Canada than in the United States. Secondly, the proposal for a national central bank, based on the model of the Bank of England, was eventually blocked by political opposition. The charter of the First Bank of the United States was allowed to lapse in 1811; then, one generation later, the charter of the Second Bank of the United States was successfully opposed by Andrew Jackson after 1832.

The fiscal side did not bring long-lasting relief either. Yields on US government debt fell immediately, showing the new confidence produced by the debt arrangement. By the beginning of 1792, they had fallen to 4.6 percent; but the cost of borrowing subsequently rose sharply again (see Figure 4.1). Neither did the Hamiltonian scheme of federal finance guarantee a peaceful commonwealth in the longer term. The immediate consequence of the new excise was a revolt in Pennsylvania (the Whiskey Rebellion of 1794 and four years later the Fries Rebellion). In the longer run states were divided over the shape of tariffs, which Southern states saw as disadvantageous to them since they relied on cotton exports and the import of British manufactures. In fact, the fiscal union turned out to be dynamite, rather than cement, because the tariff dispute turned into a constitutional struggle by the 1830s in which Southern states claimed that the Constitution was merely a treaty between states and that the Southern states could ignore federal laws that they deemed to be unconstitutional. The fiscal mechanism designed to allow servicing of a common liability raises inherently explosive distributional issues.

Figure 4.1



Source: Global Financial Data (Series: IGUSA10D).

The distributional consequences between states of a fiscal mechanism would also be a potentially divisive mechanism in contemporary Europe. The most popular suggestions currently under discussion are a general financial transactions tax, which would fall heavily on major financial centres (and for this reason is resolutely blocked by the United Kingdom); or a European payroll tax, which would raise problems of different implementation and coverage in the various European states.

The fiscal union was also dangerous because it allowed states to recommence their borrowing. As with the dispute over the tariff, this problem became very apparent in the 1830s. As international capital markets developed in the first decades of the nineteenth century, American states used their newfound reputation to borrow on a large scale, and ruined their creditor status fairly quickly as a result. At first, the North American states looked to British banks and investors as more appealing debtors than the newly independent South American republics, which merely wanted to borrow in order to buy weapons. Agents of the American states swarmed over Europe in order to sell their debt. A key part of the argument for the foreign investors was that the American state borrowing was sanctioned and approved by the US government. A characteristic statement was that of the London *Morning Chronicle* in 1839 and 1840 that: "Persons desirous of investing money in any of the principal American securities will find on inquiry that we have never over-rated the honour and good faith which have always been shown by the United States government." Even "the newest and smallest states" were satisfactory for Washington (McGrane, 1933, p. 677).

In addition, the difficulties of the states became acute due to banking issues. In the longstanding conflict about the Hamiltonian concept, President Andrew Jackson launched a Bank War, in the course of which he vetoed the renewal of the charter of the Second Bank of the United States, but also encouraged the establishment of other banks. The result was successful in achieving Jackson's immediate objective, in that it decentralized credit. However, the new banks subsequently immediately started to expand their lending, above all to the states and the political elites that had facilitated their establishment. The upshot was an orgy of bank credit to individual states, often structured in a complex way so that debt securities could be repackaged and sold on foreign markets.

When in 1841 the first state, Mississippi, reneged on its debt, disingenuously claiming that its law allowing state bond issuance had been unconstitutional, the major British bank involved in the issuance of American state debt in London, Barings, counselled against a panic response: "Is it wise for this single instance of dishonesty in a remote and unimportant state to endeavour to brand the whole of the United States as wanting in good faith? We think not." (McGrane, 1933, p. 683). But the foreign creditors also tried to push the US government into a new federal assumption of state debts, and the case was actively pushed by the anti-Jacksonian party, the so-called Whigs (while Jacksonian Democrats saw the campaign as a conspiracy to get the American taxpayer to bail-out individual states, but above all the foreign creditors).

The practice of default spread in 1841–42, with Florida, Michigan, Pennsylvania, Maryland, Indiana, Illinois, Arkansas and Louisiana all announcing their unwillingness or inability to pay. At this time, a whole palate of responses was contemplated, ranging from the expulsion of defaulters from the Union to the repetition of the Hamiltonian assumption. The situation was so precarious because of its

international consequences: not just exclusion from the European capital markets that were needed to finance American development, but also a real security threat. The federal government could not even sell bonds yielding 6 percent, while – as the US Treasury bitterly complained, "Nations with not a tithe of our resources, and with large public debts, have been able to effect loans at 3 percent per annum" (Bolles, 1885, p. 580). But the consequences of default also included the risk of international conflict, as Britain was widely thought to be willing to use naval and military power to enforce credit claims. In response to the danger of military conflict with the principle creditor country, Congressman John Quincy Adams even introduced a proposal to make the repudiation of any debt to foreigners "a violation of the Constitution of the United States" and which stipulated that any state involved in a war as a consequence of repudiation should cease to be a state of the Union (Scott, 1893, p. 248–9).

Inevitably, the Hamiltonian option was floated again. In 1843, a congressional committee recommended a new assumption, on the grounds that the debts incurred had been mostly to fund infrastructure, which was, "calculated to strengthen the bonds of Union, multiply the avenues of commerce, and augment the defences from foreign aggression" (Scott, 1893, p. 251). But this proposal was rejected, primarily on moral hazard grounds: if states were freed of present debt, they would only be likely to get into debt very quickly again. The measure also would have imposed a clear and heavy cost on the non-indebted states. The outcome of the 1840s debate was laissez-faire: no federal intervention to punish defaulters, but no bailout either.

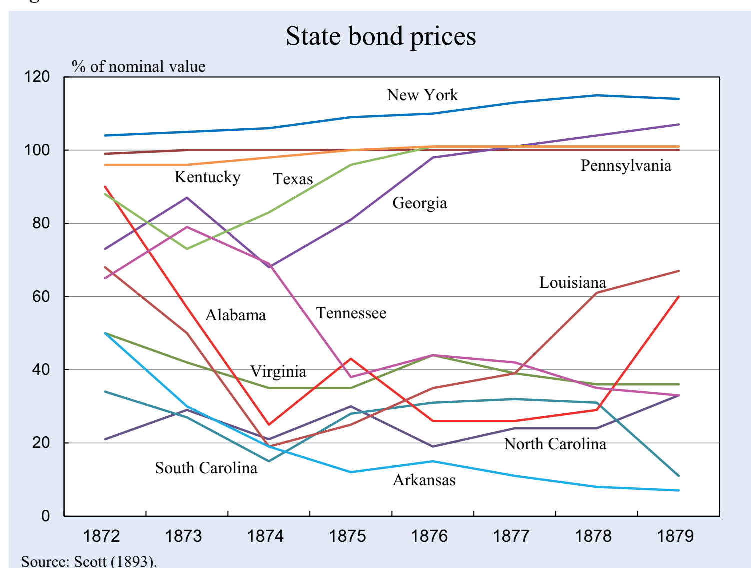
The question of how the Union should respond to a state default inevitably hinged on the degree of responsibility of the defaulters. Subsequently, it was sometimes claimed that the US crisis had come about because of tightening credit conditions in Europe, and especially due to interest rate hikes by the Bank of England (Temin, 1969). Econometric analysis, however, shows that the surge in state yields in 1841–42 occurred first on the domestic US markets, and only with a lag (due to the slow communications technology at the time) on European exchanges (Kim and Wallis, 2005).

There are strong parallels between the development of American states in the 1830s and that of modern Europe. The American states that borrowed most heavily and then ran into problems were the less developed states that saw borrowing as a way of financing development infrastructure, especially in transport. The borrowing states were also keen to encourage the development of domestic financial institutions in order to stimulate growth and development. When problems appeared, there could be a debate as to whether they were due to external circumstances (a crisis in the world's financial centre, the United Kingdom then, the United States now), or to a flawed development strategy, or to governance problems and corruption in both state governments and banks. These issues were extensively debated in the 1840s, and a contrast was drawn with the position of state finances in the aftermath of the War of Independence. In the case of the state defaults of the early 1840s, as in that of contemporary Greece, the problems stemmed primarily from misguided policies, and cannot be blamed on external circumstance, war or global crisis.

One generation after the era of defaults, in the 1860s, the country was torn apart by the Civil War as a result of what was largely a dispute about states' rights and about the character of financial burdens. In a bid to end the immoral practice of slavery, Abraham Lincoln originally proposed that the slave-owners should be compensated by the public purse. But such a buy-out would have been unacceptably expensive for the non-slave states. So in the end, the Virginians (and the rest of the South) were expropriated by the Union – at least that is the way they interpreted events. The Civil War arose out of longstanding tensions between the North and the South, and was largely driven by Southern hostility to the revenue stream chosen to service the federal debt (the Hamiltonian tariff, which protected Northern manufacturers and penalized Southern exporters), as well as by the deeply problematic issue of whether and how slave-owners might be compensated for abolition.

A second wave of state defaults occurred in the 1870s in the South (and in Minnesota), in the aftermath of the Civil War and of Reconstruction. Some Southern policy-makers – and the broader public – took as their example the Fourteenth Amendment to the Constitution, which repudiated debts that had been contracted in the interest of rebellion. Southerners disliked the new debt incurred in the process of Reconstruction – and all the more so since it was owed to Northern creditors. In addition, interest payments had risen during the war and accrued interest increased overall debt levels, while tax revenues had

Figure 4.2



Source: Scott (1893).

collapsed. For the most severely affected of the states, Arkansas, bonds were trading at 7 percent of their nominal value by the end of the 1870s (see Figure 4.2). Unlike the defaults of the early 1840s, the problems of a specific group of Southern states no longer affected the cost of borrowing of other states or of the United States.

The eventual solution lay in the adoption of debt restraint or balanced budget laws. At the end of the nineteenth century, many states set a very low ceiling on permissible state debt, and other states limited indebtedness to a (small) share of total taxation. Only the Northern states (New Hampshire, Vermont, Massachusetts, Connecticut and Delaware), which had never really experienced the debt problem, allowed their legislatures to contract unlimited debt. By the early twenty-first century, such legislation limits state indebtedness in all but one of the 50 states.

4.4 Federal central banking

How centralized should the operation of a central bank be? The early central banks – in Sweden, England, and France – were unitary institutions that corresponded precisely to unified and centrally directed states, with a powerful capital that was also the main financial centre. The models for federal central banking came rather later, with Germany (1875), Switzerland (1907) and the United States (1914). Such a federal central bank required complex rules to ensure that there was no direction by the federal government, and that policy operations reflected the diverse conditions of a federation.

The central banking side of the US federal model, the Federal Reserve System, has often been held up as a model for the European System of Central Banks. Indeed the Federal Reserve had an impact on the development of European central banking in two ways: firstly, indirectly, in its influence on German central bank design. Allied suggestions on how to reform German central banking and free it from its previous dependence on the central German state (the *Reich*) drew on the US model and shaped banking law during the allied occupation. The Deutsche Bundesbank evolved out of a federal *Bank deutscher Länder*. It retained that federal organization, in which a board *(Direktorium)* met with regional heads of the *Landeszentralbanken* in the policy-making Bundesbank Council *(Zentralbankrat)*. Thanks to the Bundesbank's successful policy, especially in providing for a greater degree of price stability than any European central bank except for the Swiss National Bank, the Bundesbank's design, in turn, heavily influenced the debate on the governance and policy-orientation of the future European Central Bank (ECB).

The US model also directly impacted the ECB's design. When it came to designing European institutions, European federalists also consistently looked directly and explicitly to the American model. In the 1960s, the Vice-President of the European Commission, Robert Marjolin, who had pushed for the institutionalization of a Committee of ECB Governors saw that body as the "embryo of a Community Federal Reserve Board." In 1970, German Economics Minister Karl Schiller drew up a four stage plan for increasing economic and monetary coordination, which he believed would lead to a "sort of Federal Reserve System." The 1970 Werner Plan envisaged two parallel Community "organs" as indispensable for European stability: a centre of decision-making for economic policy and a Community system for the central banks. When in 1972, in accordance with the Werner recommendations, a European Monetary Cooperation Fund was established, its designers talked ecstatically about it becoming a new Federal

Reserve, even although the new body had only very limited routine tasks in practice. In the early 1990s, the Federal Reserve System, and its relationship to federal political authority in the executive and the legislature, was conceived of as an explicit model for European emulation. The European Commission, in particular, liked to refer to the future ECB as a "Eurofed" in the early 1990s (James, 2012).

Both the European Commission and the existing national central bankers saw an attraction in the US institutional model. The board or council of the central bank had a permanent core, as well as some way of securing an alternation of National Central Bank (NCB) representatives analogous to that of the Federal Reserve districts, whose presidents all attend, but do not all vote in the Open Market Committee (there is a rotating voting system, for all except the president of the New York Bank). Since at the time of drawing up the ECB draft statute and negotiating the Maastricht Treaty it was unclear how many countries would initially participate in the monetary union (and that number might have been relatively small), no solution involving a rotation of committee members was adopted. By the time the euro area had increased to a membership of 17, the large number of NCB representatives had become a problem for the effective operation of the ECB Council.

Interest in learning from the Federal Reserve and its policy stance remains intense. By 2012, with the new ECB government bond purchasing program, many commentators suggested that the ECB had, at last, become more like the Fed. For some, this meant praise of institutional flexibility; for others, it meant that central banking principles had been replaced by politically driven expediency.

4.5 The Federal Reserve System

As in the case of fiscal federalism, the American precedent is filled with a legacy of policy mistakes and of bitter controversies. The question of the relationship of a central federal bank to local banking systems – and to the patronage systems built up by local elites – has always been a highly contentious issue in American politics. The feeling that local interests would be sacrificed to a Massachusetts and New York banking elite was a strong driver of opposition to Alexander Hamilton's plans of 1790. It was also at the core of Andrew Jackson's campaign against Nicholas Biddle and the Second Bank of the United States in the 1830s; and his attempt to establish an alternative banking system, answerable to and controlled by local elites (the so-called "pet banks").

Initially, as a response to the US financial panic of 1907, the National Monetary Commission looked at the models of the leading institutions of the time, namely the Bank of England, the Banque de France, and the Reichsbank, and recommended a federally dominated state central bank (in the form of the Aldrich bill). That proposal was rejected by the Democrats. The alternative scheme – which was eventually adopted – was engineered to give a great deal of power and autonomy to the Reserve Banks in the individual Reserve Districts, whose boards banks were largely chosen by the regional banks. Until 1933, the power of the Washington Board was very limited, and it met and interacted relatively rarely with the Committee of Governors representing the individual Reserve Banks. After 1933, the Open Market Committee acted as the key policy-making organ of a more centralised system.

The Federal Reserve System relied on a complicated governance system that was designed to preserve checks and balances, and to ensure that the system could be neither dominated by the powerful East Coast financial community nor by the federal government in Washington. The regional Federal Reserve Banks corresponded to what were felt to be logical economic areas, which did not necessarily overlap with state boundaries. A separate Reserve Bank for each state would have created an over-complicated system, with a large and unwieldy central committee (originally termed the Federal Reserve Advisory Council). The majority on the boards of the Reserve Banks were selected by the local nationally chartered banks, which composed the US financial system and which were required to subscribe to the capital of the Reserve Bank. This principle continues to the present day. Three directors were chosen by the banks of the district to reflect the financial community, and another three to represent the general community ("commerce, agriculture or some industrial pursuit"); with a final group of three being selected by the Washington Board. The seven member Board in Washington was the political counterpart, and five members were appointed by the President with the advice and consent of the Senate. In the original Federal Reserve Act, the Treasury Secretary and the Comptroller of the Currency were also members of the Board. The twelve regional banks represented coherent regional economies. The Reserve Banks were required to pay a

6 percent dividend on the capital subscribed by the banks, but profits above this level (and potential losses) went to the federal government, which in this sense became the ultimate backstop of the system. To highlight the surprising character of this feature, a mental experiment might be helpful. A modern European equivalent to the Federal Reserve would be to create private sector-based regional central banks, for instance with Alpine, Baltic, North Sea, Atlantic, Danubian, and Mediterranean banks.

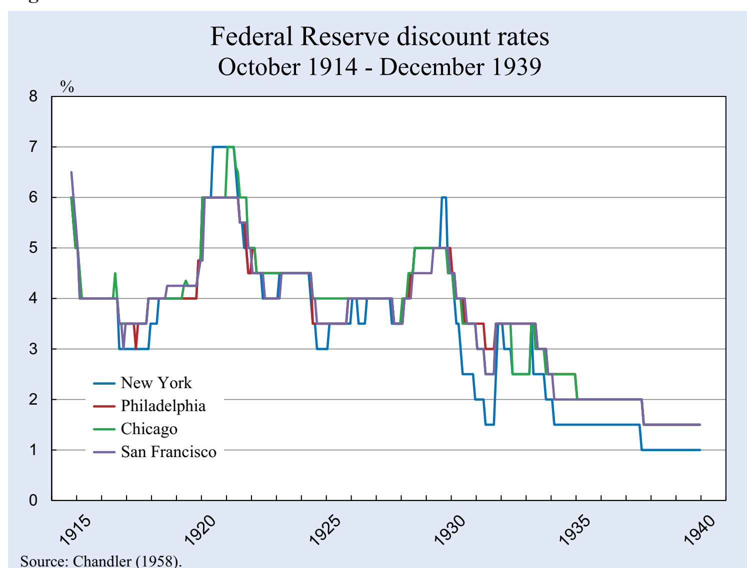
The original (1914) Federal Reserve System in many ways more closely resembles the interaction of national central banks in the international system of the gold standard. The system as a whole was not like that of a bank with its own balance sheet. The twelve Reserve Banks controlled their own operations, and had their own discount policy. Any transactions with other Reserve Banks had to be settled in the same way as those with foreign central banks were. Section 17 of the 1913 Act deterred the individual Reserve Banks from issuing each other's notes by imposing a fine, and notes from one bank were to be returned to the issuing bank: "Whenever Federal Reserve notes issued through one Federal Reserve Bank shall be received by another Federal Reserve Bank they shall be promptly returned for credit or redemption to the Federal Reserve Bank through which they were originally issued. No Federal Reserve Bank shall pay out notes issued through another under penalty of a tax of 10 per centum upon the face value of notes so paid out (…). The Federal Reserve agent shall hold such gold, gold certificates or lawful money available exclusively for exchange for the outstanding Federal Reserve notes when offered by the Reserve Bank of which he is a director. Upon the request of the Secretary of the Treasury the Federal Reserve Board shall require the Federal Reserve agent to transmit so much of said gold to the Treasury of the United States as may be required for the exclusive purpose of the redemption of such notes." The mechanism was known as the Gold Settlement Account.

The individual banks were also required to hold gold in order to allow for the clearing of debit balances. The loss of gold would affect their reserve ratio, meaning that they would presumably also need to reduce credit to banks, and would thus shrink the regional money stock. In this regard, the system seemed to reproduce the pre-1914 characteristics of the National Banking Era (following the 1863 Banking Act), which in practice made for regional contractions as banks contracted loans when their reserves fell (these were maintained by law at very high levels, as 15 or 25 percent of deposits). A similar mechanism operated for one episode in the history of the Fed, in the severe deflation at the end of the First World War in 1920/21. The agricultural districts were affected more strongly than the industrial districts, and payments to farmers were slow and at low prices. The consequence was a balance of payments deficit. As the reserves fell, the district Reserve Banks were under pressure, but they borrowed from other Reserve Banks with large surpluses so as to minimize the impact. There was thus substantial interdistrict bank borrowing, but the outcome was still that credit restrictions were believed to have hit the agricultural areas and made for a faster recovery from the deflation in the manufacturing districts (Goldenweiser, 1925, p. 36). By the time of the Great Depression, however, when a similar effect might have been expected to operate, the district shortfalls as a result of regional balance of payments deficits were made good, not by interdistrict accommodation, but by federal fiscal transfers made through the Federal Reserve System (Burgess, 1936, p. 123–4). The Federal Reserve System in practice during the Great Depression also moved away from its previous practice of limiting loans to credit secured by commercial bills (the so-called real bills or Burgess-Riefler doctrine) to operating much more with government securities as collateral, and subsequently to the direct purchase of government securities. The expansion of the federal budget avoided the need for big financing operations by the central bank through the interdistrict settlement account, and the alteration in the credit practice of the system in practice removed monetary policy from being driven by regional imbalances. Large interdistrict surpluses and deficits only appeared again after 2008, in the aftermath of the failure of the private interbank market. Then, as in Europe, the Federal Reserve System substituted for a failure of private sector bank intermediation.

Immediately after the Federal Reserve Act took effect, the outbreak of the European War made the question of international gold movements highly sensitive, and the most important financial figure in dealing with international issues, the New York Governor Benjamin Strong, pressed for a centralization of reserves, and New York in practice became the dominant holder of gold assets in the US system. The Board was pleased with the easing of interest rates in the United States after 1915 and claimed that it was the result of the new institutional regime (Meltzer, 2003, p. 79–80).

Like national central banks in the international gold standard order, the various American Reserve Banks had their own discount policies and applied different rates – especially at moments of strain. Globally, despite the theoretical possibility of capital being sent over vast distances to other parts of the world, much capital remained local. Creditors and banks often preferred to do business with known borrowers, and where local jurisdictions could settle disputes. In particular, a critical part of the international gold standard was that individual national central banks set their own interest rates, with the aim of influencing the direction of capital movements. This became the central feature of the gold-standard world: a country that was losing gold reserves would tighten interest rates in order to attract money. Central bank discount rates (the policy rate) in France and Great Britain, major capital exporters, were constantly lower than in Germany, which had no major current account surplus, even although there was never any market expectation of a parity alteration. France and Britain in practice placed a floor under rates, and their choices affected other countries because of the possibility of arbitrage. Italy, where there were expectations of parity changes in the 1870s and 1880s, needed much higher rates.

Figure 4.3



Source: Chandler (1958).

We can see the same differentiation of interest rates in the early history of the Federal Reserve System. Individual Reserve Banks set their own discount rates. Under Section 14(b) of the 1913 Federal Reserve Act, their rates were "subject to review and determination of the Federal Reserve Board." The Board also (section 13) had the "the right to determine or define the character of the paper thus eligible for discount." The individual Reserve Banks had different collateral requirements and accepted differing kinds of securities. In smooth or normal times, the rates tended to converge; but in times of shocks, they could move apart (see Figure 4.3). In the summer of 1929, at the height of the credit boom, New York tightened, while the other banks left rates unchanged; in 1932, New York went much faster and further in lowering rates than other banks. This created scope for major policy conflicts. In 1919, the Attorney General ruled that the Board could change rates for a Bank; and in 1929, there was an acute conflict when the Board voted 4:3 to impose a reduction on the Chicago Bank (Chandler, 1958, p. 44; Meltzer, 2003, p. 221–3).

By the late 1930s, the rate differences were disappearing, but they only vanished completely during the Second World War, for the simple reason that operating with federal bills (a single instrument) in open market operations, rather than with a multiplicity of differently valued private securities, became the primary tool of US monetary policy. When it came to monetary policy instruments, the makers of the ECB took the practice of the post-war Federal Reserve, and assumed that the debt instruments of different member states could fill the monetary policy role of a single financial instrument (federal government securities) in the case of the Federal Reserve's open market policy.

The gold-standard rules look very different from the modern practice of monetary union, which relies on a single uniform interest rate. That one-size-fits-all approach meant that in the 2000s interest rates in Southern European countries were too low, and in Northern Europe they were too high. Identical nominal rates with divergent real rates produced unsustainable credit booms in the South. By contrast, a gold-standard rule would have produced higher rates for the Southern European borrowers, which would have attracted funds to where capital might be productively used, and at the same time acted as a deterrent against purely speculative capital flows. A modern equivalent to the gold standard/early Federal Reserve approach would require differing (higher) lev-

els of collateral requirement for central banks operating in countries with a housing and credit boom (pre-2007 Spain or Ireland) than in countries with no credit boom (pre-2007 Germany), see Brunnermeier (2012).

The early history of the Federal Reserve is rarely seen as a productive source of lessons for central bank policy because it is overshadowed by dramatic policy mistakes that did not follow automatically from its design, but were probably intensified because of the governance structure and the conflicts of the different powerful Reserve Banks (especially New York, as the international financial centre and Chicago as the hub of the domestic trading system). In 1920/21, and more disastrously in 1930–33, the Federal Reserve System engineered a pernicious deflation (Friedman and Schwartz, 1963). Reform suggestions consequently focused on coordinating policy more centrally.

4.6 Reform of the Federal Reserve System

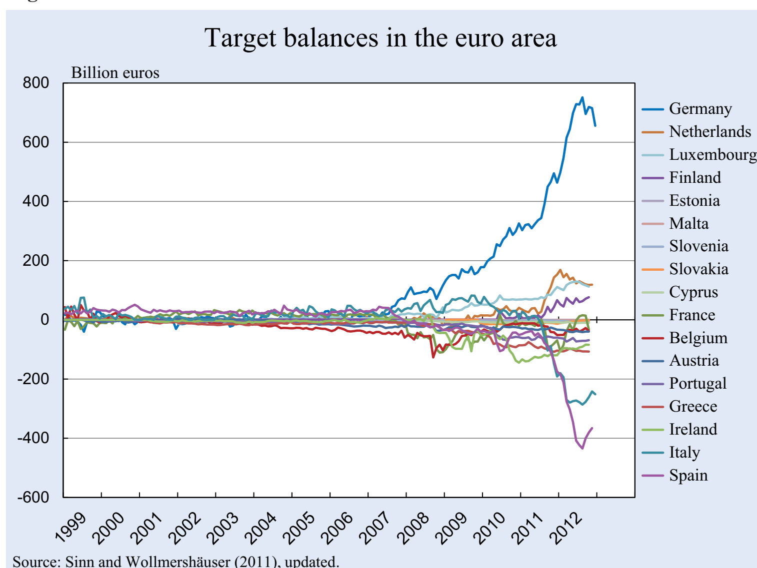
It was only in the 1930s, with the new Bank Law of 1933, that the Federal Reserve System really started to act as a modern central bank. That legislation was the result of the Great Depression, a profound disruption of economic life in which it was generally felt that both American banking and American central banking had failed.

The mechanism of settlement changed in the 1930s, and was renamed from the Gold Settlement Account to the Interdistrict Settlement Account (ISA). The change in nomenclature was necessary in that the dollar value of gold or gold certificates was arbitrarily set after 1933 by the US Treasury. In April 1975, with much larger international transactions occurring through New York, the Federal Reserve Open Market Committee agreed to institute an annual settlement (in April) of the ISA balances of the Federal Reserve Banks in terms of reallocating the ownership shares in the open market portfolio, including interest, acquired by the system in the process of money creation. From the 1970s to 2008, the balances were of small size and limited importance, because inter-district transfers occurred primarily through the interbank market. After 2008, with the seize-up of the interbank market, the ISA became very significant.

Figures 4.4, 4.5 and 4.6 compare the ISA balances in the US with the Target balances in the euro area, which have a very similar definition and which were discussed extensively in last year's report (EEAG, 2012, Chapter 2). Basically, these are net payment orders through the common reserve system that require one District Fed or one National Central Bank to credit payment orders on behalf of other such institutions, and that hence lead to the building up of local debt and asset positions. Figures 4.4 and 4.5 show the balances in absolute terms, and figure 4.6 shows the sum of the respective gross claims relative to the GDP of the US or the euro area, respectively.

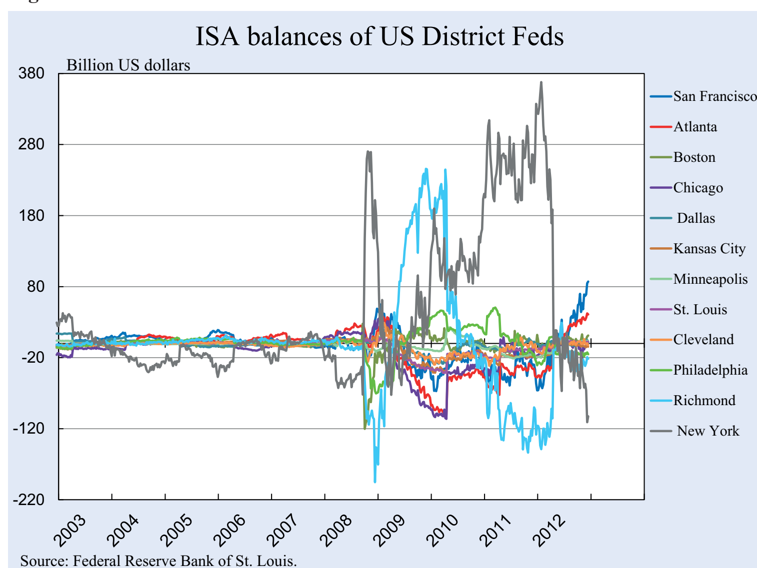
As in the case of the ECB, the Fed's settlement mechanism did not appear to be problematic or controversial until the 2008 financial crisis. After 2008, large and persistent imbalances appeared, however, with the large liabilities of the San Francisco and Richmond banks, and the large asset balances of New York. The highest levels of deficits for San Francisco were 67 billion US dollars (February 3, 2010) and 66 billion US dollars (December 28, 2011); and the maxima for the New York surpluses were 270 billion US dollars on November 12, 2008, in the aftermath of the Lehman collapse, and 368 billion US dollars on January 12, 2012. These are relatively small figures compared with the overall expansion of

Figure 4.4



Source: Sinn and Wollmershäuser (2011), updated.

Figure 4.5

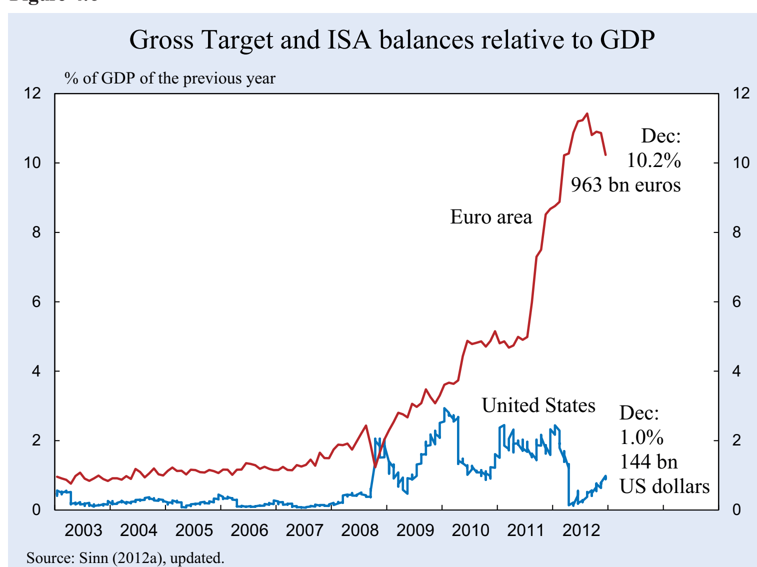


Source: Federal Reserve Bank of St. Louis.

the Federal Reserve System's balance sheet, but they are not insignificant. They are comparable to European Target imbalances in that they arise from very large movements of funds out of some commercial banks that operate across the whole of the United States, but have their headquarters (and thus their financial location) in a particular place within one of the twelve Federal Reserve districts. The most plausible explanation involves the head office location of large banks in the San Francisco district (Wells Fargo) and in the Richmond district (Bank of America), with the Federal Reserve Bank keeping claims against these banks, rather than selling them in the settlement process. Since the ISA imbalances reflect fundamentally changing market perceptions of US private financial institutions, rather than current account imbalances between the various regions of the United States, and as local District Feds being private institutions are not vulnerable to local political pressure aiming at state finance with the printing press (Garber, 2010), they do not display the permanence that has characterized their European equivalents, where banks in deficit countries are paralyzed because of the ties between banks and sovereigns (with banks holding the paper of the sovereigns that bail them out).

The most pronounced difference between the United States and the European system (highlighted in Sinn and Wollmershäuser, 2011, and Sinn, 2012a) is, however, that only the United States has a settlement system that requires the debtor District Feds to securitize their ISA debt, i.e. to redeem their liabilities with interest bearing, marketable assets. In the euro area, by contrast, the debt is simply kept in the books and carried forward year by year with interest being added. Figure 4.6 shows that during the crisis, around the month of settlement (April), the US balances normally go down significantly. An exception was 2011. In that year, settlement was postponed by a year to give the deficit District Feds more time to react. In April 2010 and 2012 settlement actually took place in the United States and reduced the balances. In April 2009, by contrast, the balances came down in the months before April and rose in the months thereafter. Presumably, the District Feds in deficit had tried to avoid the transfer of interest bearing assets upon settlement by reducing their local credit supply and hence attracting private capital inflows from other regions, which reduced the ISA balances. They did this despite the fact that the system is underwritten by the US government, perhaps because only the revenue after cost is transferred to the government, while cost includes local ameni-

Figure 4.6



Source: Sinn (2012a), updated.

ties, above all the widely differing local salaries.[1] At present (November 2012), the gross sum of the US ISA balances is 0.8 percent of GDP, while the euro area's gross sum of Target balances has risen to 11 percent of GDP.

In addition to generating useful incentives to keep the interdistrict imbalances small, the settlement does protect local central banks more effectively against the break-up of the system. In Europe, the creditor central banks would probably lose their claims against the debtor central banks should the euro break up, as these are claims against a system that no longer exists. This makes the national governments that own the central banks vulnerable to political pressure to participate in further bail-out activities like government bond purchases and the establishment of intergovernmental rescue programs, which both reduce the Target imbalances. Had the euro area adopted a system of securitizing the Target claims with marketable interest bearing assets that would retain their value even after a break-up of the system, the incentive to participate in bail-out activities contrary to the Maastricht Treaty (no-bail-out clause, article 125 Union Treaty, and ban on state finance with the printing press, article 123 Union Treaty) would have been lower.[2]

4.7 Conclusions

The US example is often cited to make the sensible point that, in the long run, any monetary union also requires some sort of a fiscal union. That demand appeared frequently in the political rhetoric of the early 1990s, when the German government in particular insisted that economic and monetary union needed to be accompanied by political union. The interconnections of state debt and (private) banking sector liabilities produce intense conflicts about who – which political authority – is the ultimately debtor. Without a political mechanism for allocating fiscal responsibility, it is hard to imagine long-term stability.

Sometimes a move to political union is suggested simply as a pragmatic solution to the borrowing incapacity of some states. In an extreme example, early in the First World War, the Russian Imperial government believed that it would be able to borrow if it declared a union with its political allies France and Great Britain. The proposal was absurd, and merely highlighted the absurd incompatibilities of very different political systems. The political union can only succeed on the basis of a constitutionalisation, as in the American example, which, in turn, depends on the recognition and acceptance of common identity, as well as of some shared interests.

There is certainly an interest-based case to be made for greater integration. When the European Monetary Union was created, no adequate provision on a European basis existed for banking supervision and regulation, which like fiscal policy, was left to rather diverse national authorities. An explosion of banking activity occurred simultaneously with the transition to monetary union and may well have been stimulated by the new single money. A "banking glut" led to a new challenge to monetary policymaking. Neither of these problems, fiscal and banking, was uniquely European, but the complexity of interaction between different levels of authority and different interests produced a coordination problem that was uniquely difficult to deal with in the European context.

In this context, it is not surprising that Europeans turn to examples of how political institutions have evolved elsewhere that solve the problem of federalism (as well as looking to the history of European federal systems, such as that of the German state system since 1806). But it is a mistake to think that the United States holds out a very simple or easy to apply model. American history shows how difficult and obstacle-filled the path to federalism can be.

[1] See "Fed Salaries: It Pays to be Private," Wall Street Journal, Real Time Economics, 24 May 2010.
[2] See Sinn (2012b, c) for a discussion of the potential break-up losses related to the Target balances and the resulting path dependence of rescue operations.

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