

Working Paper No. 17 – 2014:

FROM SOVEREIGN NATIONS TO FEDERAL STATES. CREATING STABLE SYSTEMS OF PUBLIC FINANCE IN AMERICA AND GERMANY: LESSONS FOR THE EUROZONE

James Macdonald

Abstract: The Eurozone crisis has revealed the need for closer union among EMU members; the debate is about how far this union needs to go in order to create financial stability. This paper looks at the history of the United States and Germany to see how they came to establish financially stable forms of fiscal federalism. In each case the process involved the assumption by a central government of the role of "borrower of last resort" to deal with military and economic emergencies. Relying on subnational or constituent governments turned out to be inadequate. Military emergencies led to financial collapse in the absence of a central state with adequate powers of taxation. Local governments did not have the resources to undertake countercyclical borrowing during economic downturns. Moreover, subnational governments have required restraints on their borrowing because of the temptation of relying on central bailouts. The attempt of the Eurozone to circumvent these fiscal and political dynamics has left it without any effective borrower of last resort.

Keywords: Federal systems, monetary union, fiscal stability, subnational governments.

Introduction

One of the commonly repeated criticisms of the European Monetary Union (EMU) is that it attempted to create monetary union without political union. To its early critics this doomed it to failure (Feldstein 1997, Salvatore 1997). Many of the proponents of the Euro were, in fact, federalists who saw monetary union as a step in the direction of a political union for which the population of Europe was not yet ready. However, they reasoned, this was not necessarily a cause for concern. The European project had always operated on a ratchet basis – moving step by step towards the "ever closer union" envisaged by the Treaty of Rome. If one step created a problem, a solution would be proposed which moved the project another rung up the ladder. It would be the same with the Euro. It might be imperfect; but any problems that arose would be ironed out by further steps towards integration.

The problem with this strategy was that it was blindsided by the suspension of disbelief by financial markets which acted as if political union was already in place. Money was lent to the less competitive members of the Eurozone as if there was no longer any meaningful sovereign risk involved. The problem was compounded by banking regulations which classified all EMU member-state debt as 100% risk free and therefore not subject to capital requirements. As a result Greece was able to borrow at only ten basis points more than Germany. In other countries, such as Spain and Ireland, the debt build-up was in the private sector, but the same calculations applied. The local banks were implicitly backstopped by their governments, and those governments were in turn implicitly backstopped by the Eurozone as a whole. The result was that debts in a number of countries rose to levels that were inherently unsustainable even before the crisis broke. When the markets woke up to the scale of the problems in the wake of the Lehman crisis, the resulting rise in interest spreads not only made apparent but exacerbated the unsustainability of these debts.

The Eurozone member states now faced a problem with no easy solution. The financial crisis was so great that it could not be solved by a modest move towards integration, but by a great leap forward. Instead of one step up the ladder at a time, four of five steps

had to be broached all at once. The crisis seemed to prove what the sceptics had said all along: that monetary union without political union was inherently unstable. The only way to re-establish a financially stable system was to either move forwards toward political union, or backwards toward a Europe of monetarily independent states (although the short-term financial costs of the latter would be severe). Yet the populations of the member countries did not want either – their normal predisposition towards further union having been seriously dented, both by the costs imposed on them by the financial crisis, and by their loss of confidence in the leaders who had so blithely led them into it.

Given the inherent difficulties in both paths, the only currently plausible solution is to undertake the minimum further political integration that is compatible with financial stability. It is here that the histories of the United States and Germany are relevant. Both these countries are federal systems which evolved out of independent (or nearly independent) states. In both cases, the political systems that were initially created were financially decentralized. And in both cases, the countries found themselves moving, slowly but ineluctably, towards greater levels of centralization in response to financial crises. The financially stable federal systems that the two countries eventually built, however, were based on different sets of underlying principles.

The American Experience

The United States started its existence, like the European Union, as a confederation of independent states. The Continental Congress, created in 1776, had no powers of taxation and depended entirely on contributions from its member states. The War of Independence led to the creation of levels of debt that the market was unwilling to fund – as was scarcely surprising when the Continental government had no reliable source of income. Yet, the amount of debt involved was not inherently unsustainable. It was politics that made it appear so. Most Americans were suspicious of strong government, and they were reluctant to surrender local sovereignty to a central state with the power to tax.

Nationalists and Federalists, however, believed that without political integration the confederation could not last. Without a central state that could raise taxes and borrow money, America would not be able to defend itself. The war of independence had led to hyperinflation, and in the end had only been won because of French intervention. Moreover, as an economic bloc the confederation was even weaker than the European Union. The individual American states not only issued their own currencies, they also followed their own trade policies. Increasingly they were in competition with each other.

The solution was a great leap forward whereby the loosely confederated states were transformed into a truly United States. Political union was accompanied by fiscal, monetary, and commercial union. The federal government was given the sole right to mint money and the sole right to levy customs duties. This not only prevented commercial rivalry between the states, it also gave the government a source of income that could be used to fund the outstanding debt.

The fiscal purpose of the new constitution was made clear in the statement that the federal government would enjoy the power of taxation "to pay the debts and to provide for the common defence and general welfare of the United States." At the time, it was debt and defence that were the main concerns. The provision for "general welfare" was to become important only at a later date.

To further cement the fiscal union, the federal government took over the debts of the states. The assumption of state debts was highly controversial. The amounts outstanding were not evenly distributed. Some states had borrowed using paper money that had become worthless. Other states had already settled much of their debt at a discount. There were therefore winners and losers in the pooling of obligations. Massachusetts was the biggest winner, Virginia and Maryland among the major losers. In the end the assumption was only able to go through by a piece of behind-the-scenes horse-trading which moved the capital to a new city on the banks of the Potomac. However, the United States had one great advantage over the European Union: its

debts had all been incurred in the common cause of fighting for independence. The consolidation of the public debt, although contentious, was part of a process that was already under way to equalize the financial costs of the war among the states.

The operation of consolidation and refunding was remarkable. Alexander Hamilton, the Secretary of the Treasury, managed to restructure a debt, much of it hitherto in default, at a lower cost than it had originally been contracted. He was not aided by "collective action clauses" to force dissentients into acquiescence. His only carrot, other than his persuasive powers, was that only the restructured debt would benefit from the security of the new federal tax revenues. In the end, the new consolidated debt amounted to around 40% of GDP, and was funded at an interest cost of around 1.5% of GDP. This was not a heavy burden, even for objectors to a tax-levying central government.

Hamilton's conversion created three large issues of government debt out of a myriad of old claims. This helped create a liquid market which contributed to keeping yields down. It also created a large body of public creditors with a financial attachment to the federal government. One of Hamilton's arguments for consolidating the debt is that it would help cement the union. His opponents disliked his scheme for the same reason.

The new constitution was far better designed than the old one. The defence of the nation could now be undertaken without financial meltdown. However it did not resolve the question of the balance of fiscal responsibility between the states and the federal government. The states had lost the right to mint money and to collect customs, as well as the ability to conduct foreign policy; but they retained most of their other powers and still saw themselves as largely sovereign entities. They were still able to raise taxes and borrow money, and they managed to circumvent some of the limitations on their monetary powers by setting up state banks which could issue notes backed by state bonds.

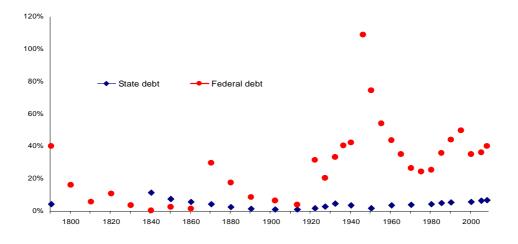
In the 1830s a wave of state borrowing raised the total level of state debt to close to \$200 million, over 10% of GDP (Ratchford 1941). At this point it was higher than the

federal debt, which was rapidly falling towards zero as a result of growing customs revenues and minimal government responsibilities. The frontier states in particular took upon themselves the funding of infrastructure projects to develop the wilderness. In the 1840s many states found themselves in serious financial straits. Once again there was a movement for the federal government to take over the local debt; but this time it did not work. The biggest reason may have been that, unlike the debts of the 1780s, the state debts of the 1830s were not incurred in some national emergency, but for often ill-considered projects for purely local benefit. If financial discipline was to be maintained, the states would have to sort out their own affairs.

The upshot was that nine out of twenty-one states defaulted. And in the wake of this disastrous experience, most states realized that only self-imposed rules would avoid a repeat performance. In the 1840s and 50s, eighteen states imposed restrictions on borrowing, and their number has continued to grow. Currently forty-six states have debt limitations, and forty-two have balanced budget requirements (Conti-Brown and Skeel 2012). The heyday of state borrowing passed in the 1840s, and state debts are now a small fraction of federal debts. (Fig. 1)

Figure 1.

State and Federal Debt as a percentage of GDP, 1790-2008



Source: Historical Statistics of the United States of America

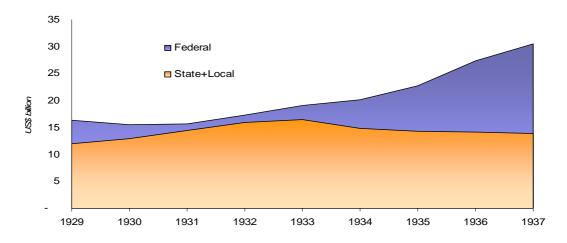
Yet that was not the end of the story. The states may have accepted that their fiscal reach was inherently limited. But their ambition was taken up by cities and towns. In the late nineteenth and early twentieth centuries, it was municipalities which were the largest borrowers in the Union. While the federal debt fell continuously from its Civil War peak to a mere 1% of GDP by 1913, municipal debt rose from 1% of GDP in 1840 to 13% in 1913.

Much of this borrowing was for urban infrastructure and amenities. However, the municipalities also took responsibility for such welfare measures as existed prior to the New Deal. In the early years of the Great Depression from 1929 to 1931, while the Hoover government was running a surplus and paying down debt, the municipalities were borrowing heavily. By 1932 municipal debt had reached 28% of GDP, a level that proved to be beyond their inherent fiscal capacity. By 1934, 37 out of 310 towns with population of over 30,000 were in default. A total of 3,250 local governmental bodies of all kinds defaulted during the Depression (Hart 1938).

Since the financial debacle of the War of Independence it had been understood that the country needed a "borrower of last resort" to deal with national emergencies. The constitution had specified that the federal government's powers of taxation, inherently necessary to support a public debt, were there to "provide for the common defence and the general welfare of the United States." At the time, the first objective was all that counted. The provision for "general welfare" was simply to allow space for unimagined eventualities. Now, in the 1930s, a new doctrine grew up that an economic crisis could be just as threatening as a military one; and that the government should respond, as in time of war, by acting as a borrower of last resort. The demonstration of the fiscal limits of state and municipal borrowing capacity showed that only the federal government could take on this role.

With the election of Franklin Roosevelt and the arrival of the New Deal in 1933, the new balance of fiscal responsibility became clear. Local borrowing stopped while federal borrowing rose sharply, with federal debt doubling between 1932 and 1940. (Fig. 2)

Figure 2. Federal, State and Local Debt, 1929-1937

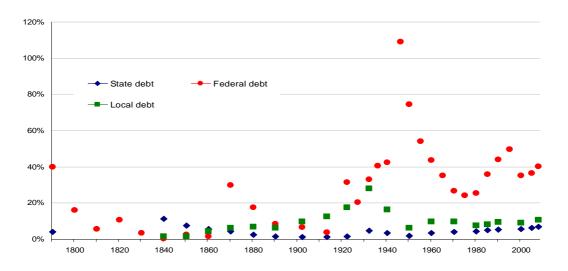


Source: Hart (1938)

After the unsustainable peak of the early 1930s, municipal debt fell back to the more modest levels at which it had been stable in the late nineteenth century. (Fig. 3)

Figure 3.

Federal, state, and local debt as a percentage of GDP, 1790-2008



Source: Historical Statistics of the United States.

The current American system of fiscal federalism is stable in terms of its balance of powers and responsibilities. This does not mean that the system is necessarily financially stable at the different levels of government taken individually (all levels of government have taken on liabilities, especially for pensions, that it is not clear that they can easily fulfil as the population ages), but rather that the division of power between the different levels is clear.

The federal government has unlimited borrowing power and is the only "borrower of last resort" capable of dealing with emergencies. The states and cities have limited borrowing power and their debts are largely confined to capital investment. The states do take some responsibility for countercyclical spending in downturns through their role in food stamps and Medicaid, both of which rise in recessions and fall in periods of growth. However, they receive substantial transfers from the federal government for this purpose, amounting to around 15% of combined state and local budgets. They are not expected to undertake countercyclical deficit spending.

The issue of moral hazard, whereby the localities indulge in unsustainable borrowing on the assumption of a federal bail-out, was answered by the refusal of the federal government to take over the debts of the states in the 1840s. It was also made clear by the reaction in Washington to the financial difficulties of New York City in the 1970s. An initial approach for support in October 1975 was rejected outright, giving rise to the famous "FORD TO CITY: DROP DEAD" headline in the *New York Daily News* (October 30, 1975). One month later the federal government relented because of fears of the consequences if the country's financial centre was allowed to default, but imposed terms so harsh that no city would ever willingly contemplate asking for aid again (Dunstan 1995).

The German Experience

In the 1860s and 70s two European countries were created by uniting a number of states with long histories of independence. Both countries established central

governments with parliaments presided over by constitutional monarchs. However one, Italy, became a fiscally centralized state, while the other, Germany remained a fiscal federation. Why was this?

One partial answer may be that Italy became a united kingdom in March 1861, before the outbreak of the American Civil War. The lessons of that war about the cost of attempting to reassert independence from a unitary state made Bavaria, at least, insist on the retention of many privileges, among them the right of secession, when it joined the German Empire in 1871.

A more important answer lies in the financial cost of unification. In Italy, Piedmont incurred almost the entire cost of unifying the country. Its public debt grew by more than seven times between 1847 and 1861. By that time, its debt constituted 55% of the Italian total, whereas its population was only 20% (Plebano 1899-1902). It therefore had a large incentive to create a fiscally centralized state which would consolidate the debt of all its constituent members. And as in the case of the United States, Piedmont could make a strong argument that the majority of its debt had in any case been assumed in the common cause of national liberation.

In Germany, by contrast, the cost of unification was paid for by the indemnity imposed on France at the end of the Franco-Prussian War in 1871. The total debt of all the German states in 1871 amounted to 3.7 billion marks, while the French indemnity came to 4 billion marks. Moreover Prussia, by far the dominant state in the union, had a debt that, unlike Piedmont's, was lower than the national average. Consolidation of the debt would therefore have disadvantaged Prussia for the same reasons that it benefited Piedmont.

Because it comprised more than 60% of its land mass and population, Prussia dominated Germany without the need for a centralized state. Decentralization allowed it to maintain a number of privileges that it might otherwise have had to give up. As a result, the Reich had limited tax powers consisting largely of customs duties, certain tolls and excises, and the income from the postal system. The states were committed to

making up budget shortfalls, but as a quid pro quo, the "Frankenstein" clause of 1879 committed the Reich to returning any surplus customs and excise income over a certain threshold to the states.

By contrast, the states themselves had a privileged position within the union, enjoying considerable tax revenues and relatively few responsibilities. Among their sources of income were the railways the state-owned railways which by this stage were profitable businesses. In Prussia's case, income from the state railway was higher than the interest on the state debt.

In 1913, Reich income represented no more than 30% of total central and local government revenue (Schremmer 1989). The system was stable only because the responsibilities of the government were still modest. It remained to be seen how it would cope in an emergency.

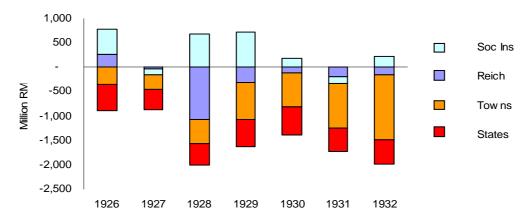
The First World War provided just such a test, and it stretched the system beyond its capabilities. The customs income of the state collapsed as a result of the Allied blockade, and while other sources of revenue rose, in real terms the Reich's overall income declined. The result was that the cost of the war was covered entirely through borrowing. The public debt of the central government rose to thirty-two times its prewar level; and whereas in 1913 it had represented only 17% of the total public debt, it now constituted 80% (Schremmer 1989). This massive rise in debt, unsupported by adequate taxation, was one of the main causes of the post-war inflation.

The First World War, like the American War of Independence, demonstrated that large scale wars required a properly funded central government which could act as borrower of last resort. The result, in Germany, was a centralization of fiscal powers under the Weimar Republic. The Reich gained the power of direct taxation, and also took over the railways.

The next step in fiscal centralization came as a result of a process that in many ways mirrored events in the United States. During the late 1920s the German states and

towns went on a borrowing spree which weakened their financial position. The law of 1924, designed as part of the Dawes Plan to re-establish financial stability after the hyperinflation of the early post-war years, put strict limits on the ability of the central bank to finance the government. At the same time, a law of 1927 placed additional obligations on local governments to support the unemployed. After 1929, and particularly under the Brüning government from 1930-32, local governments were the only ones to undertake countercyclical borrowing. The central government was running an overall surplus after factoring in the Social Insurance fund. (Fig. 4)

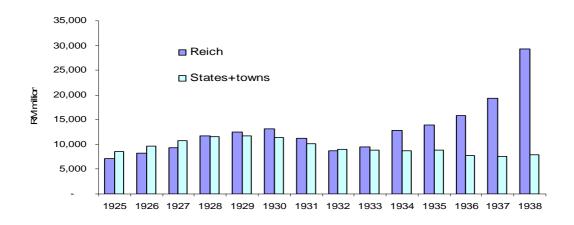
Figure 4. Budget Balances in Germany, 1926-1932



Source: James (1986)

By 1932 many states and cities had defaulted on their debts in order to continue funding welfare provision. The result was further central limits on the autonomy of local government. Under Hitler, almost all fiscal power was centralized, and under the radical new economic policies of Hjalmar Schacht, the state took over responsibility for countercyclical spending. (Fig. 5)

Figure 5. Central and Local Government Spending, 1925-1938

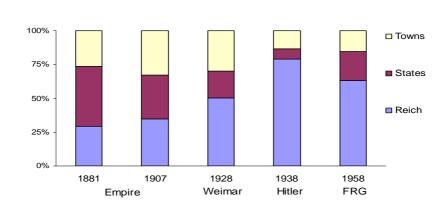


Source: Andic and Ververka (1964)

The Nazi period was the high water mark of government centralization in Germany. After the war a federal democracy was put in place in West Germany. Its level of fiscal centralization, although reduced from Hitler's day, was still greater than that of the Weimar Republic. (Fig. 6)

Percentages of total spending

Figure 6. The Centralization of Fiscal Power in Germany

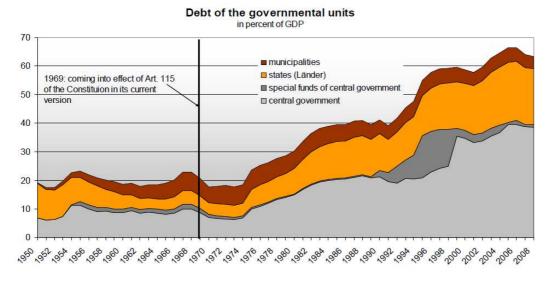


Source: Andic and Ververka (1964)

The German federal system operates on different principles from the American one. Instead of relying on self-contained areas of responsibility enforced largely by market discipline, Germany has a highly complex system of overlapping responsibilities kept in balance by rules. Most taxes are established at the federal level; and revenues are then redistributed both to the Länder and between the Länder. The result is that the Länder have little tax autonomy, but considerable spending power. The Lander receive around 40% of total government revenues, but they are independently able to set less than 5% of the total.

Unlike in the United States where each level of government is "on its own" in terms of solvency, the principle of "solidarity" is incorporated into the German constitution. In order to offset the risk that states and cities would act irresponsibly in the expectation of a central bailout, strict limitations on borrowing power were established. In 1969 the constitution was amended to allow greater fiscal freedom, with the inevitable result that borrowing increased at all levels of government. And given the considerable spending power available to the Länder, they were able to build up debts that were higher than those of the American states. Total state debt is around 25% of GDP in Germany, compared to under 10% in the United States. (Fig. 7)

Figure 7. Public Borrowing in the Federal Republic of Germany, 1950-2008



Source: Federal Ministry of Finance, Public Finance and Economic Affairs Directorate, Reforming the Constitutional Budget Rules in Germany, Berlin, 2009.

Even before the Great Recession hit in 2008, it was becoming clear that the system needed reforming. The federal government had almost no power to control the states' borrowing, and while many states had rules that limited their borrowing to "investment purposes," these were often interpreted very loosely. By the 1990s two states – Bremen and Saarland – had run up unsustainable debts and were able successfully to sue the federal government for support on the basis of the constitutional obligation of solidarity. The German Länder were the largest subnational borrowers in Europe, and it was clear that their ability to borrow on such a scale was based in large part on the assumption that they would be supported by the federal government. In the late 1990s, the American states had debts that were equal to 51% of their total income (including federal transfers), or 66% of their independent tax revenue. The German Länder had debts that were 175% of their total income, or 1926% or their independent tax revenue. Yet the average S&P rating for the American states was AA, compared to AA+ for the German Länder (Rodden 2006).

The Great Recession was a catalyst for reform. The financial crisis called into question the sustainability of government debts; and the Eurozone crisis highlighted the risks of implicit guarantees within federal systems. The result was the 2009 "debt brake" law which reinforced the role of rules within the system. Under these rules, after a lead-in period the Länder governments have to balance their budgets under normal circumstances. The federal government may run a deficit of no more than 0.35% of GDP under normal circumstances. In an economic emergency, as declared by the federal government, countercyclical borrowing is allowed. However it must be offset by subsequent surpluses.

Even with the debt brake law there remain some reasons to question the stability of the German system of fiscal federalism. The central government does not have a monopoly of borrowing for economic emergencies, and there remains an implicit bailout provision in the German constitution. Taken together, these could lead to the possibility of the "tail wagging the dog." However, there are a number of offsetting characteristics which should prevent this from happening.

In the first place, the federal government has a preponderant position in the system. It sets tax levels, and it determines the rules that govern borrowing at all levels of government. It is the central government that decides if there is an emergency that warrants overriding the normal operations of the debt-brake law. The fiscal autonomy of the local governments is therefore inherently limited.

In practice, moreover, the federal government already has the preponderant role in countercyclical borrowing. In 2010, out of a total budget deficit of 4.1% of GDP only 0.7% was attributable to the Länder.

Since the financial crisis hit, the spread between federal and Länder borrowing costs, although relatively modest, has doubled, as has the spread between the different Länder (Deutsche Bank Research 2011, 2012). This implies the existence of some market-based incentives to maintain fiscal discipline. However, the principle buttress of stability in the German system of fiscal federalism is the application of rules imposed from the centre.

Lessons for the Eurozone

History shows that fiscal systems need borrowers of last resort to deal with military and economic emergencies. It has also shown that this function cannot be carried out by subnational governments. In the first place, such governments have inbuilt financial limits. Their powers of taxation are usually limited to a greater or lesser extent, and more importantly they do not control all the levers of macroeconomic policy, in particular the power to control money. Markets are therefore less willing to lend large sums to them, all other things being equal, than to governments with unlimited powers of taxation and full control of macroeconomic levers. Moreover, while subnational governments have inbuilt fiscal limits, they also have an inherent tendency to overborrow in the expectation of a central bailout. Therefore their ability to run deficits needs to be held in check by some combination of market forces, self-limiting statutes, centrally imposed rules, and credible no-bailout

provisions. Governments subject to this combination of internal and external constraints are never going to be good borrowers of last resort.

In the absence of a central government with borrowing powers, the EMU member states were (and still are) the theoretical borrowers of last resort within the Eurozone. The Stability and Growth Pact enshrined in European Monetary Union was supposed to ensure that their fiscal behaviour under normal economic conditions was sufficiently sound that they would not run out of borrowing power during an economic downturn even though they no longer had the support of domestic central banks that could act as lenders of last resort. The discipline was reinforced by explicit no-bailout provisions and a prohibition on the European Central Bank from financing government deficits.

However, the financial crisis exposed a number of flaws in this arrangement. First, a number of states started EMU from positions far weaker than were originally supposed to be acceptable. Second, the some countries ignored the provisions of the Pact, and one, Greece, went so far as to present false accounts to hide its fiscal excesses. Third, in Ireland and Spain, fiscally responsible policies masked underlying private sector credit booms which destroyed the appearance of public solvency when they burst, taking down domestic banking systems with them. The result was that these states started to find it impossible to borrow in the market, and they were therefore no longer able to act as "borrowers of last resort" to support their economies.

The response of the Eurozone member states was reluctantly to break the no-bailout provisions of EMU, first by setting up the European Financial Stability Facility (EFSF) and the European Financial Stabilization Mechanism (EFSM), and when that proved insufficient, by allowing the ECB to declare its willingness to act as a lender of last resort for member governments. The quid pro quo of these arrangements, however, was the imposition of a level of fiscal retrenchment that, while less severe than would have occurred in the face of a complete loss of credit, was sufficiently great to offset the automatic fiscal stabilizers that would normally have operated in a recession. The result was that the economies of these countries suffered greater economic downturns after they were "bailed out" than before.

At the same time, all countries in the Eurozone were required to sign up to a reinforced program of fiscal discipline that would ensure that such a crisis never recur, and there would never again be the risk of national governments looking for central bailouts. As a result, countries whose credit was still sound, like Germany, were obliged by the new EU provisions (and in Germany's case by its own 2009 "debt brake" law) to run a "balanced budget" (defined as a structural deficit no greater than 0.5% of GDP) except in the face of a serious domestic economic downturn. They had no remit to respond to economic conditions in the Eurozone as a whole. Since economic conditions in Germany were good, with unemployment falling to 5.1%, there was no way for the country to run a deficit within the rule book even had it wanted to.

The EMU member states are therefore treated, in terms of their relation with the Eurozone, as is they are subnational governments in need of strict fiscal discipline. Only in relation to their own economies do they have any, albeit limited, ability to pursue countercyclical deficit spending. The result for the Eurozone has been the de facto disappearance of any borrower of last resort, even though economic conditions in the EMU area as a whole would require one. Since the Eurozone crisis struck in 2010, unemployment in the member states has risen from 10% to 11.8%. Yet at the same time, the combined budgetary deficit of the Eurozone countries has fallen from 6.2% of GDP to 3.1% (Eurostat). In the United States, by contrast, budget deficits and unemployment have risen and fallen more or less in tandem, as would be expected if automatic fiscal stabilizers followed their normal course. The U.S. budget deficit fell from 9% of GDP in 2010 to 4.1% in 2013, while unemployment fell from 9.1% to 6.7% (Federal Reserve Bank of St. Louis, FRED).

The outcome bears out concerns expressed as long ago as 1994 by Barry Eichengreen and Tamin Bayoumi.

If U.S. experience is any guide, the fiscal restraints of the Maastricht Treaty....if vigorously enforced could significantly diminish the stabilization capacity of national budgets....EC member states should no more assume principal responsibility for fiscal

stabilization in Europe than do state governments in the United States. But...while there is no question that fiscal stabilization is more appropriately handled at the EC level, the treaty makes no provision for expanding the Community's fiscal role...[V]igorously applying the deficit excessive deficits procedures of the treaty to the national budgets of member states would leave post-Maastricht Europe with significantly less automatic stabilization than the U.S. economic and monetary union.

Events of the past four years have proved even worse than Eichengreen and Bayoumi had foreseen. The Eurozone has not only had less automatic stabilization than the United States, its system of fiscal federalism has resulted in policies that have been procyclical rather than countercyclical.

The Eurozone is faced with a number of choices, none of them easy, and all of which (other than the dissolution of monetary union) require greater levels of fiscal integration than are currently considered politically acceptable. A partial solution might involve altering the Stability and Growth Pact to encourage, and possibly even require, governments to take budgetary decisions based on economic conditions within the Eurozone as a whole as well as within domestic economies individually. However, this would not get round the problem that the member states would remain inherently less-than-ideal borrowers of last resort for the reasons outlined previously. More plausibly, the Eurozone should move towards political union, establishing a central government with powers of taxation and borrowing so as to provide itself with a functioning borrower of last resort. Failing such moves towards integration, the Eurozone will continue to live with a system with an inbuilt tendency to fiscal crisis that can only be contained at the cost of high levels of unemployment.

References:

Andic, Suphan, and Jindrich Veverka, "The Growth of Government Expenditure in Germany," *Finanzarchiv* XVIII, 1964.

Conti-Brown, Peter, and David A. Skeel Jnr., eds., When States go Broke: The Origins, Context, and Solutions for American States in Fiscal Crisis, Cambridge University Press, 2012.

Craig, Gordon Alexander, Germany 1866-1945, Oxford University Press, 1978.

Dunstan, Roger, "Overview of New York City's Fiscal Crisis," CRB Note, Vol. 3 No. 1, March 1995, California Research Bureau, California State Library.

Eichengreen, Barry, and Tomin Bayoumi, "The Political Economy of Political Restrictions: Implications for Europe from the United States," *European Economic Review* Vol. 38 (1994).

Federal Ministry of Finance, Public Finance and Economic Affairs Directorate, Reforming the Constitutional Budget Rules in Germany, Berlin, 2009.

Feldstein, Martin, "The Political Economy of the European Monetary Union: Political Sources of a Economic Liability," *The Journal of Economic Perspectives*, Vol. 11, No. 4 (Autumn 1997).

IMF Staff Dicsussion Note, Toward a Fiscal Union for the Euro Area, September 2013.

Hart, Albert Gaylord, Debts and Recovery: A Study of Changes in the Internal Debt Structure from 1929 to 1937 and a Program for the Future, Twentieth Century Fund, New York, 1938.

James, Harold, The German Slump: Politics and Economics 1924-1936, Oxford University Press, 1986.

Plebano, Achille, Storia della Finanza Italiana nei Primi Quarant'anni dell'Unificazione, Torino, 1899-1902.

Ratchford, Benjamin Ulysses, American State Debts, Duke University Press, Durham, N.C., 1941.

Rodden, Jonathan A., *Hamilton's Paradox: The Promise and Peril of Fiscal Federalism*, Cambridge University Press, 2006.

Salvatore, Dominick, "The Common Unresolved Problems with the EMS and EMU," *The American Economic Review*, Vol. 87, No. 2, (May, 1997).

Schremmer, D. E., "Taxation and Public Finance: Britain, France, and Germany," *Cambridge Economic History*, Vol. VIII, Cambridge University Press, 1989.

Schultz, Alexander, and Guntran B. Wolff, *The German Sub-national Government Bond Market: Evolution, Yields, and Liquidity*, Deutsche Bundesbank Discussion Paper, Series 1: Economic Studies, No. 6/2008.

Schutz, William J., "Limitations on State and Local Borrowing Powers," Annals of the American Academy of Political and Social Science, Vol. 181, (September 1935).

Seitz, Helmut, "Deficits and Politics of Subnational Governments: The Case of the German Lander," *Public Choice*, Vol. 102, no. 3/4 (2000).

Wallis, John Joseph, Constitutions, Corporations, and Corruption: American States and Constitutional Change, 1842-52, NBER Working Paper 10541, National Bureau of Economic Research, April 2004.

Wallis, John Joseph, Richard E. Sylla, and Arthur Grinath III, Sovereign Debt and Repudiation: The Emerging Market Crisis in the U.S. States, 1839-1843, NBER Working Paper 10751, National Bureau of Economic Research, September 2004.

Zipfel, Frank, German Finances: Federal Level Masks the Importance of Lander, Deutsche Bank Research, May 2011.

_____, Debt Structure of the Federal States, Deutsche Bank Research, March 2012.