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Chapter 9

Rethinking the Eurosystem

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Changing Course

There is no alternative to Europe. After centuries of war and tension, the further integration of Europe towards a stronger union is imperative. Winston Churchill's proposal to build 'a kind of United States of Europe' remains valid, despite the fact that public support for the EU has waned during the crisis.[1] The free movement of goods, capital and people, the harmonization of product standards and tax systems, as well as a common foreign policy and defence are important instruments in achieving the goal of securing peace and prosperity in Europe.

However, there are many potential roads that Europe could take towards achieving its goals.[2] The road via a common currency union was obviously stonier than expected, and it is now doubtful whether it will actually lead towards Europe's goals at all. A currency union automatically gives rise to joint liabilities and is therefore prone to moral hazard effects that need to be contained by a strong political power centre. That a currency union without a centralization of power would not succeed has rightly been emphasized by many observers.

Joint liability for the ECB's refinancing credit, combined with local access to the money-printing press, created bigger wealth risks for the European taxpayers than all other rescue operations combined. It fostered an atmosphere of over-confidence among investors that induced reckless lending and borrowing decisions. An excessive amount of money was lying around in the shop window, too much liability could be shifted onto public shoulders, too many risks were taken, and too much capital was flowing across borders. All of this contributed to the inflationary bubbles that ultimately deprived the

[1] See W. Churchill, *Speech at the University of Zurich*, 19 September 1946, Council of Europe, available at: <http://aei.pitt.edu/14362/1/S2-1.pdf>, and I. Traynor, 'Crisis for Europe as Trust Hits Record Low', *The Guardian*, 24 April 2013, available at: <http://www.theguardian.com/world/2013/apr/24/trust-eu-falls-record-low>.

[2] Some are presented by W. R. Cline, 'Alternative Strategies for Resolving the European Debt Crisis', in W. R. Cline and G. B. Wolff (eds), *Special Report 21: Resolving the European Debt Crisis*, Peterson Institute for International Economics, Bruegel, Washington 2012, pp. 197–234; by G. B. Wolff, 'The Euro Area Crisis: Policy Options Ahead', in W. R. Cline and G. B. Wolff (eds), *Special Report 21: Resolving the European Debt Crisis*, 2012, pp. 235–252; or by H. Uhlig, *Exiting the Eurozone Crisis*, Presentation Given at the Advantage Financial Conference in Milan, 13 May 2013, available at: <http://home.uchicago.edu/~huhlig/papers/uhlig.milan.2013.pdf>.

southern European countries of their competitiveness, and other countries of their growth dynamics.

The currency union nevertheless had a theoretical possibility of succeeding if those charged with steering it had abided by the stipulations of the Maastricht Treaty. But they obviously lost sight of their goal after succumbing to temptations encountered along the way. The no-bailout clause was undermined by overly loose and distorting banking regulations, the Stability and Growth Pact was simply disregarded, and when the first state bankruptcy occurred in May 2010, the Maastricht Treaty was reinterpreted, if not downright violated, by the rescue programmes. That seemed the easier choice at the time, but by throwing the roadmap overboard, those in the driving seat lost their bearings.

Economists call this time inconsistency. Firstly, behind the veil of ignorance, some general rules are specified and enshrined in a treaty, but then, along the way, decision-makers prefer to ignore the rules and make decisions at their discretion. Following the rule of law, as Edward Prescott emphasized in his Nobel Prize acceptance speech, may be inconvenient at a given time, but it is better in the long run, as it is the only way to overcome the problem of time inconsistency in policymaking.[3]

Stumbling along and optimizing anew from moment to moment has created a path dependency that the signatories of the Maastricht Treaty had tried to avoid. This path dependency is likely to bring us no closer to the aspired-for United States of Europe, or to the peace and prosperity that everyone yearns for.

The policy decisions taken while stumbling through the euro's dark spell have boiled down to attempts at mutualizing debt and opening taxpayers' wallets to meet immediate or future needs, the decisions being taken or prepared by the ECB Governing Council with little scope left for parliamentary action. This is a perilous course, as the early decades of US history show.

Learning from the United States

In 1790, the first US Secretary of the Treasury, Alexander Hamilton, had the fed-eral government assume the state debts incurred during the revolution. The debt assumption was partly compensated for with the cession of not-yet-settled territories to the federal government (west of the Appalachians), and was to be serviced with the revenues from

[3] E. C. Prescott, *The Transformation of Macroeconomic Policy and Research*, Nobel Prize Lecture delivered at Stockholm University, 8 December 2004, p. 374, available at: <http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2004/prescott-lecture.pdf>; see also F. E. Kydland and E. C. Prescott, 'Rules rather than Discretion: The Inconsistency of Optimal Plans', *Journal of Political Economy* 85, 1977, pp. 473–492.

the joint import duties that the country had decided thenceforth to impose.[4] Hamilton wanted the slate to be wiped clean after the new federal country was founded, and he argued that debt mutualization was the 'powerful cement of our union'.[5]

Many think that this would also be a good model for Europe (leaving aside the cession of territories), and, as argued above, the ECB's OMT programme can be seen as the first step towards a mutualization of public debt in the Eurozone.[6] However, closer inspection reveals that this positive evaluation is less compelling than at first glance.

For one thing, the US state debts had been incurred partly during the revolutionary war to gain independence from Great Britain (1775–1783). It therefore seemed logical to mutualize them. The euro countries' debts, in contrast, did not result from a common struggle, but from the consumption decisions of individual governments. As discussed in Chapter 2, the interest-rate advantage brought by the euro was squandered.

For another, Europe did not found a unitary state; it simply established a common accounting unit for transactions, a view that is starkly highlighted by the Maastricht Treaty's no-bailout clause (article 125 TFEU).[7]7As discussed in Chapter 1, notions of turning the Eurozone into a federal system have been firmly rejected by France.

The US experience with debt mutualization was not good.[8] Mutualization of the initial debt gave rise to the expectation among the federal states that they would also be able to unload their debt onto federal shoulders in the future, which dramatically increased their willingness to borrow—not least because in the years 1812 to 1814 state debts had once again been mutualized in connection with a second war against Great Britain.[9]

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[4] A. Hamilton, J. Jay, and J. Madison, The Federalist: A Commentary on the Constitution of the United States, in J. and A. McLean (eds), *The Federalist: A Collection of Essays Written in Favour of the New Constitution*, New York 1788, reprinted in The Modern Library, New York 2001.

[5] R. E. Wright, 'Cementing the Union', *Financial History*, Spring 2008, pp.14–18, in particular p. 15.

[6] German Council of Economic Experts, *Stable Architecture for Europe—Need for Action in Germany*, Annual Report 2012/2013, pp. 111–113

[7] See EU, 'Treaty on the Functioning of the European Union (TFEU)', *Official Journal of the European Union* C 115/47, 9 May 2008, article 125, available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:115:0058:0199:en:PDF>.

[8] See J. Rodden, *Hamilton's Paradox: The Promise and Peril of Fiscal Federalism*, Cambridge University Press, New York 2006; T. Sargent, *United States Then, Europe Now*, Nobel Prize Lecture delivered at Stockholm University, 8 December 2011, available as video: available at: <http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2011/sargent-lecture.html>; H. James, 'Lessons for the Euro from History', *Julis-Rabinowitz Center for Public Policy and Finance*, 19 April 2012, available at: <http://www.princeton.edu/jrc/events_archive/repository/inaugural-conference/Harold_James.pdf>; H. James, 'Alexander Hamilton's Eurozone Tour', *Project Syndicate*, 5 March 2012, available at: <http://www.project-syndicate.org/commentary/alexander-hamilton-s-eurozone-tour>; EEAG, *The EEAG Report on the European Economy: Rebalancing Europe*, CESifo, Munich 2013, chapter 4: US *Precedents for Europe*, pp. 95–107, available at: <https://www.cesifo-group.de/DocDL/EEAG-2013.pdf>.

[9] See B. U. Ratchford, *American State Debts*, Duke University Press, Durham 1941, in particular p. 74f.

The mechanisms were similar to those observed in the late 1980s in Argentina and Brazil, with excessive borrowing by their regional administrations. The provinces or states, respectively, borrowed to finance major projects, pushing aside repayment considerations in the hope that, if things got tight, the debts would be mutualized.[10] In both countries, the result was debt restructuring approximating a sovereign default of regional entities.

What happened in the US was not much better. State debt remained low until the mid-1820s, but thereafter it started to rise, among other things, because the states had started to issue tradeable bonds which had the advantage of lowering interest rates. The rise in indebtedness resulted primarily from investments in infrastructure such as roads, canals and, later, railroads, that consumed huge resources. In the southern states, a great deal of debt resulted from credit given to the owners of new private banks in order for them to pay in the required capital.[11] While the state economies prospered, bubbles developed, becoming dangerously large in the 1830s, when the debts of individual states increased rapidly. The bubbles eventually burst in 1837. Panic erupted in the capital markets, coinciding with the outbreak of a deep economic crisis that also engulfed the US's European trading partners, Britain in particular, forcing most states to stop sal-ary payments to state employees and payments to suppliers. After the panic sub-sided the markets calmed down somewhat, but by 1839 borrowing in the open market had practically ground to a halt and the economy was in depression.[12]

In this situation, the federal government bought a great deal of bonds from the various states to keep them solvent, in view of their lack of access to the market. The general expectation that the federal government would prove generous towards the overly indebted states, and ultimately assume the debt itself, seemed to be fulfilled.[13]

But the support only lasted for a short time until the federal government lost patience.[14] In 1841, Florida, Mississippi, Arkansas, and Indiana formally filed for bankruptcy. They were followed in 1842 by Illinois, Maryland, Michigan, Pennsylvania, and Louisiana. Other states such as Alabama, New York, Ohio, and Tennessee faced enormous financial strain and came close to bankruptcy. In total, nine

[10] J. Rodden, *Hamilton's Paradox*, 2006, in particular chapter 8; and A. Markiewicz, M. D. Bordo, and L. Jonung, 'A Fiscal Union for the Euro: Some Lessons from History', *CESifo Delphi Conference*, Hydra, 23–24 September 2012, *NBER Working Paper* No. 17380, September 2011.

[11] B. U. Ratchford, *American State Debts*, 1941, p. 89.

[12] B. U. Ratchford, *American State Debts*, 1941, p. 80.

[13] B. U. Ratchford, *American State Debts*, 1941, p. 85, in particular footnote 22.

[14] B. U. Ratchford, *American State Debts*, 1941, pp. 98–100; see also A. Grinath, J. J. Wallis, and R. E. Sylla, 'Debt, Default and Revenue Structure: The American State Debt Crisis in the Early 1840s', *NBER Working Paper* No. 97, March 1997.

of the twenty-nine states and territories existing in 1842 had filed for bankruptcy and four at least were bankrupt or on the brink of bankruptcy.[15]

The hope that the federal government would bail out the states, so that they could forestall bankruptcy, remained unrealized. The capacity of the federal budget proved insufficient, and the imbalances reached unbearable proportions. Tensions and strife among the states were on the rise, which in turn reduced the willingness to provide further support.

US historian Harold James, of Princeton University, observes that what Hamilton meant to 'cement' the US fiscal union eventually turned out to be 'dynamite'. James argues that the unresolved debt problem created tensions among the federal states because the federal debt had to be serviced by means of a politically divisive tariff that harmed the South while benefiting northern manufacturers. Furthermore, he maintains that these tensions fuelled those that resulted from other reasons and ultimately led to the American Civil War from 1861 to 1865.[16]

Hard Budget Constraints

The United States provides very useful lessons for Europe, since the problems with fiscal federalism that it had to solve are similar to those now faced by the Eurozone. The trials and tribulations of the young nation's early decades should serve as a warning to all those who want to reinvent the wheel of history. Europe does not have to invent fiscal federalism, since the USA already did so a long time ago. Through a sometimes painful iteration process that lasted for two centuries, a state has evolved that, apart from its currently high central government indebtedness, appears to function reasonably well. At the very least, it provides some pointers on how Europe could evolve. Before stumbling blindly and leaving things to chance or to the pressure of financial investors, the architects of the new Europe would do well to learn from the US experience.

After an episode in which the USA suffered the consequences of debt mutualization, it was clear once and for all that each state must pay its own debts. The no-bailout principle became the universally accepted pillar of US municipal and state finance. Many states also began to put caps on debt levels and constitutionally prohibited extensive debt issuance. The State of New York was the first to implement a debt

[15] See A. Grinath, J. J. Wallis, and R. E. Sylla, 'Debt, Default and Revenue Structure: The American State Debt Crisis in the Early 1840s', March 1997; and W. B. English, 'Understanding the Costs of Sovereign Default: American State Debts in the 1840's', *American Economic Review* 86, 1996, pp. 259–275.

[16] H. James, 'Lessons for the Euro from History', 19 April 2012; see also EEAG, *The EEAG Report of the European Economy: Rebalancing Europe*, 2013.

ceiling (totalling $ 1 million) in 1846, with other states following suit by 1860.[17] The self-imposed constraints did not prevent another debt crisis in the 1870s, when the world economy again fell into a depression, but this only reinforced and confirmed the austerity attitude that the US state governments, unlike the federal government, have shown ever since.

California was recently on the brink of bankruptcy. The salaries of teachers and other state employees have been deferred on several occasions and state jobs are being given only on a time-limited basis, with a layoff announced from the outset. In summer 2009, the Californian government paid $ 2.6 billion worth of invoices and salaries with IOUs, because it had no funds and the banks were giving it no further credit. The IOUs were used for a while in place of money, since they could be endorsed to third parties.

Minnesota and Illinois are not doing much better. Their finances are in dire straits, affected by severe fiscal crises.[18] In July 2011, the government of Minnesota halted infrastructure projects and closed state parks in the midst of the tourist season because there was no money for park rangers. Thousands of state employees waited for their salaries, which the state was unable to pay.[19] In Illinois, several public facilities were closed and thousands of state workers were laid off in September 2011.[20]

The situation in some US states is far less precarious than it is in Greece today. The reader may recall from Chapter 2 (Figure 2.7) that the Greek state in 2013 had a debt-to-GDP ratio of 176% (despite the fact that in 2012 it enjoyed € 105 billion in debt relief, equivalent to 58% of its 2013 GDP). By contrast, the no-bailout principle of the US kept even the debt-to-GDP ratios of California, Minnesota, and Illinois below 10% in 2013, because investors, who know that no one would help them in the case of bankruptcy, become jittery at much lower debt levels than in the European debt-friendly institutional environment.[21] At a debt level of 10%, a state insolvency is not a big issue and can be

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[17] See A. Grinath, J. J. Wallis, and R. E. Sylla, 'Debt, Default and Revenue Structure: The American State Debt Crisis in the Early 1840s', March 1997; see also J. von Hagen, 'Monetäre, fiskalische und politische Integration: Das Beispiel der USA', *Bankhistorisches Archiv Beiheft* 30, 1996, pp. 35–51; J. von Hagen, 'Monetary Union and Fiscal Union: A Perspective from Fiscal Federalism', in P. R. Masson and M. P. Taylor (eds), *Policy Issues in the Operation of Currency Unions*, Cambridge University Press, Cambridge 1993, pp. 264–296.

[18] For Minnesota, see K. Dolak, 'Minnesota Government Shuts Down Amid Debt Fallout', *abcNews*, 1 July 2012; and for Illinois, see State Budget Crisis Task Force, *Report of the State Budget Crisis Task Force*. Illinois Report, October 2012, available at: <http://www.statebudgetcrisis.org/wpcms/wp-content/images/2012-10-12-Illinois-Report-Final-2.pdf>.

[19] See K. Dolak, 'Minnesota Government Shuts Down Amid Debt Fallout', 1 July 2012.

[20] See also J. Erbentraut, 'Quinn to Announce Thousands of Layoffs, Facility Closures', *Huffington Post*, 6 September 2011, available at: <http://www.huffingtonpost.com/2011/09/06/quinn-to-announce-thousan_n_950654.html>.

[21] See also C. Chantrill, 'Comparison of State and Local Government Spending in the United States. Fiscal Year 2013', *US Government Spending*, available at: <http://www.usgovernmentspending.com/compare_state_spending_2013pH0D>.

easily handled. However, when the debt has reached Greek dimensions, the burden imposed by capital markets is much bigger, and the situation for everyone is much more precarious. Given that the no-bailout principle is firmly anchored in the US, insolvency is possible and punitive for those who depend on government money. Still, no one in the US would ever light upon the idea of organizing a common programme to provide the crisis states with financial support or creating a system of collective bonds that would enable these states, under the shield of joint liability, to regain access to the markets.

A good lesson was provided by the near-bankruptcy of New York City in 1975. The city, due to its economic size, can almost be equated with the state of New York as a whole. In the late 1960s, then-Mayor John Lindsay had tried to set up a European-style welfare state in New York. The consequence was that the poor throughout the US came in droves to New York in order to profit from its social safety net. The city was pushed to the brink of insolvency. Lindsay had to terminate his programme, but the city continued to suffer from the debts that it had accrued. In 1975, New York was practically bankrupt and was saved at the last minute only by a loan from the teacher union's pension fund. The US government refused to come to the rescue. The headline of the New York Daily News became legendary: 'Ford to City: Drop Dead'. It summarized the position of then-President Gerald R. Ford.[22] Ford could not quite hold his hard stance, and in the following year the Congress provided some support from federal funds, but that was vastly insufficient. New York managed to tap fresh money only through the issuance of bonds collateralized with senior claims on future tax revenue.[23]

Other subordinate administrative divisions in the US suffered the same fate as New York City over the years. Time and again some go bankrupt and suspend debt service. In 2012 alone, twelve municipalities filed for bankruptcy.[24] Since the introduction of Chapter 9 of the US Bankruptcy Code in 1937, which provides for the reorganization of municipalities under an ordinary insolvency procedure, there have

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[22] F. Van Riper, 'Ford to New York: Drop Dead. Vows He'll Veto Bail-Out in Speech Attacking City', *Daily News*, 30 October 1975.

[23] New York City tax revenue was declared state tax revenue for this purpose, and it was transferred to a special-purpose organization, the Municipal Assistance Corporation (MAC) as collateral for the emission of securities to provide financing for the city. See L. Capodilupo, 'Municipal Assistance Corporation for the City of New York (MAC)', W*illiam and Anita Newman Library and Baruch College*, City University of New York, April 2002, available at: <http://newman.baruch.cuny.edu/digital/2003/amfl/mac/mac_finding_aid_index.htm> and R. Dunstan, 'Overview of New York City's Fiscal Crisis', *California Research Bureau Note* 3, No. 1, 1 March 1995, p. 4, available at: <http://www.library.ca.gov/crb/95/notes/V3N1.PDF>.

[24] T. Barghini and C. Parsons, 'Factbox: Recent U.S. Municipal Bankruptcies', *Reuters*, 18 July 2013, available at: <http://www.reuters.com/article/2013/07/18/us-usa-detroit-cities-factbox-idUSBRE96H1BR20130718>.

been around 600 such filings.[25] Between 1980 and 2012, 272 filings were tallied; in 2013 there were nine filings.[26] This figure included the city of Detroit, which defaulted on 18 July 2013.[27] After an insolvency is declared, an agreement is sought with the creditors to waive some of the debt, and then the cities can operate again. That raises no hackles, since it is just as common as a company bankruptcy.

Since resources are scarce, the US introduced a system of hard budget constraints, after the failures of the early system of soft budget constraints. It is, of course, painful in every individual case, as painful as economic reality can be in the world, but it works, and also instils debt discipline without leading to a catastrophe. No one in the USA wants to repeat the experiences of the first decades after Hamilton.

The disastrous consequences of soft budget constraints were also evident in the downfall of the Soviet Union. That the soft budget constraints would spell the demise of the URSS was predicted by Hungarian economist János Kornai as early as 1980.[28] If the government wanted something, it was done. Goods were produced without anyone paying attention to the damage caused by withdrawing the factors of production from other uses. Politics was believed to have primacy over the laws of economics, but in fact it was the other way round. The hard laws of economics ultimately made the Soviet System unsustainable.

Hard budget constraints are like the brakes of a car. Going downhill, it is tempting to let the car roll freely instead of moderating its speed, but the consequence can be a hard braking at the end, or even an accident. When the euro was announced and eventually introduced, the Eurozone went through a phase of soft budget constraints. The car hurtled along—and kept going. Even today the driver doesn't dare hit the brakes hard. Some even want the vehicle to keep rushing along. They are calling for Eurobonds, the mutualization of bank debts and other measures to take the pressure off the brakes. They are thereby risking the same type of accidents that the USA experienced in its early decades.

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[25] M. De Angelis and X. Tian, 'United States: Chapter 9 Municipal Bankruptcy— Utilization, Avoidance and Impact', in O. Canuto and L. Liu (eds), *Until Debt Do Part Us: Subnational Debt, Insolvency and Markets*, World Bank Publications, Washington 2013, pp. 311–351, especially p. 312.

[26] American Bankruptcy Institute, Statistics from the Administrative Office of the U.S. Courts, *Chapter 9 Filings (1980-Current)*, available at: <http://news.abi.org/statistics>; and United States Courts, Statistics, *Bankruptcy Statistics*, 2013 Bankruptcy Filings, Filings by Chapter and Nature of Debt, by District (table F-2), available at: <http://www.uscourts.gov/Statistics/BankruptcyStatistics/2013-bankruptcy-filings.aspx>.

[27] M. Dolan, 'Record Bankruptcy for Detroit', *Wall Street Journal*, 19 July 2013, available at: <http://online.wsj.com/article/SB10001424127887323993804578614144173709204.html>.

[28] J. Kornai, ' "Hard" and "Soft" Budget Constraint', *Acta Oeconomica* 25, 1980, pp. 231–246.

Neutral Money

The easy access to the local printing press, which channelled the up to one trillion euros in extra credit from the northern central banks to the GIPSIC countries, as measured by the Target balances, is arguably the key design flaw of the Eurosystem and the feature that most fundamentally sets it apart from the US monetary system. It fits the money-in-the-shop-window theory, which posits that the Eurosystem needs sufficient firing power to stabilize the system, but unfortunately, contradicting the theory's prediction, the money on display has, in fact, been taken. Some of it has been returned in the meantime, to a sizeable extent because public credit, which reduces the Target balances on a one-by-one basis, was provided as a replacement, but as of this writing the stock taken is still about € 600 billion (see Figures 6.2 and 7.1). A substantial part of the extra ECB credit will turn into losses for the taxpayers, given that the write-off losses of the GIPSIC banking systems could be hundreds of billions of euros (see Table 8.3), and because the bank resolution strategy defined by the European Parliament limits the creditor bail-in to a tiny fraction of the banks' balance sheets (see Chapter 8's section Banking Union).

The money in the shop window has helped to make creditors reckless, and played a key role in feeding the inflationary credit bubble that deprived the southern countries of their competitiveness and caused huge structural current account imbalances in the Eurozone (see Chapter 4). The sharing of losses arising from financing zombie banks created strong moral hazard incentives for NCBs to opt for lowering collateral standards in the ECB Governing Council, to individually stretch the limits set by such standards and, as shown in Chapter 5, to extend excessive amounts of ELA credit at their own discretion, given that ELA's exemption from joint liability is a myth. To counteract such incentives, binding rules and strong constraints are needed, but such constraints are missing in the Eurosystem. It is true that without such constraints bankruptcies can be delayed, as was the case in Greece and Cyprus (see Chapter 5), but that bloats the burden of debt even further and shifts even more credit titles from private to public hands, opening a fire bridge from the private to the public economy.

To avoid the crash, the logic of the liability spiral will force member NCBs to buy even more government bonds, bringing the ESM's bonds even closer to Eurobonds, and to press ahead with the mutualization of bank debts to avoid the emergence of new Target credit. This is like trying to stabilize a car without brakes by flooring the gas pedal.

To stop the vicious liability spiral, it is essential to correct its root cause by terminating the ECB's regional fiscal policy that predetermines subsequent

parliamentary rescue decisions and undermines European democracy. To this end, it is crucial to keep the Target balances in check. There are four ways to do this.

The technically simplest option is for the ECB Governing Council to end its policy of allowing low-quality collateral for refinancing credit (see Chapter 5). If refinancing credit were only granted against solid collateral, the banks would see no advantage in drawing credit from the ECB, since with good collateral they can tap the interbank market for cheap credit at any time.

But the Bundesbank has long since pleaded for more stringent collateral standards and has always been outvoted in the ECB Council. It is clearly impossible to reach a solution as long as the countries that profit from Target credit hold a majority in the Council. The issue calls for a more fundamental approach.

In the opinion of former Bundesbank President Helmut Schlesinger, Target credit should bear a punitive interest rate charged to the corresponding NCB, which would, of course, be excluded from the Eurosystem's pooling operations, and which should be high enough to cajole the deficit generating NCBs into reining in the refinancing credit they grant, so that market interest rates rise and the credit that had wandered off to other countries returns.[29] This is tantamount to an attempt to reintroduce the idea of an equilibrium between supply and demand in the local credit markets, something that characterized the internal US system, the Bretton Woods system, and the gold standard systems, as shown in Chapter 7. It would indeed be a suitable means, even one that presumably can be carried out by the Eurosystem's NCBs without having to change EU treaties.

It would be even better, though, to amend the Maastricht Treaty by applying rules similar to those used in the US, particularly as regards the settlement of Target balances. The most natural means of payment between countries, and even states within a currency union, is gold. A country may run a Target deficit for a year or more, but then it should settle its debt with the Eurosystem by redeeming it with gold or tradeable gold-backed securities, to be handed out to the holders of Target claims. Gold has always been used for settling balance-of-payments imbalances between countries, and even between states within a currency union, as the history of the US Federal Reserve, summarized in Chapter 7, has shown, and gold has remained an international means of payment to this day.

It might be argued that some countries do not have enough gold to meet their obligations. However, this is like saying that someone who built a house does not have

[29] H. Schlesinger, 'Die Zahlungsbilanz sagt es uns', *ifo Schnelldienst* 64, No. 16, 31 August 2011, pp. 9–11, in particular p. 11; and for the English version, 'The Balance of Payments Tells us the Truth' in H.-W. Sinn (ed.), The European Balance of Payments Crisis, *CESifo Forum* 13, Special Issue, January 2012, pp. 11–13, in particular p. 13.

enough cash on hand to redeem his debt. Since gold is an internationally liquid asset and a globally accepted unit of account, the debtor country always has the possibility of selling some other assets, say covered bonds or state property, at market prices against gold to fulfil its obligations.

Of course, this may be difficult for a country that is close to insolvency. It would of course be much more convenient to hand over some sort of debentures or to leave the system as is, with credit slumbering on the books, if necessary forever. But that is what hard budget constraints mean. If a country wants to run current account deficits and temporarily absorb resources from the rest of the world, it has to borrow or sell some of its own assets in exchange, and the conditions at which it does so must be mutually agreeable to all parties involved.

That said, the near insolvency of some southern European countries is a fact, and something must be done to clear the air for a prosperous future in a common European house. A joint European debt conference might be needed to forgive part of the crisis-stricken countries' debt. This will be discussed in the next section.

The settlement of balance-of-payments imbalances constrains the possibilities of a country to have net payment orders carried out through the Eurosystem, but not in the sense that individual payments could not be carried out beyond a certain limit. No capital controls would need to be imposed, as was recently the case in Cyprus, and unlike today a euro would have the same value everywhere. The constraint operates only indirectly, in the sense that it becomes less attractive for a given NCB to issue more money than is needed for domestic circulation. If an NCB wants to issue more than this amount, leading to the accumulation of Target balances, it would have to sell marketable assets to buy the gold needed for settlement. Since such a step may prove unattractive, it would put a limit on the issuance of new refinancing credit, the local commercial banks then having no other option but to borrow in the European interbank market at mutually acceptable conditions.

This is not at all a radical or constraining step. It just means imposing budget constraints. Budget constraints do not imply that a market equilibrium with a common currency that has an equal value everywhere is unattainable. To the contrary, it is the prerequisite for such an equilibrium.

Softer budget constraints that allow public borrowing at below-market conditions are dangerous for the stability of an economy, as they are likely to lead to overspending, overheating, and inflationary credit bubbles that undermine the competitiveness of countries. It is remarkable that the USA kept the internal gold standard until 1975, even though the country was a solid political federation, while it is considered self-evident by European politicians that the Eurozone does not need such a standard, even though it is far from becoming anything close to a federal state in the foreseeable future.

Depending on Europe's progress in creating a common federal state with the corresponding enforcement authority, in the distant future the gold standard might be given up and a solution similar to the current US system, based on a mere settlement with marketable assets, could eventually be adopted. As explained in Chapter 7, in the US, settlement is performed by handing over ownership shares in the Federal Reserve System Open Market Account (SOMA). However, there are at least two caveats with such a solution. One is that the US system of public budget constraints may also have become too soft. History will tell whether moving away from the internal gold standard really was a good idea. The other is that the main channel of money provision in Europe is the granting of refinancing credit rather than open-market asset purchases. Thus, there isn't an analogue to the open market clearing portfolio that could be reshuffled for the purpose of settling Target balances.

A possibility would be that all euro countries issue super-safe treasury bills that are collateralized with gold or property, and that bear a market interest rate appropriate for such instruments. A proposal along these lines was made by the European Economic Advisory Group (EEAG) in its 2012 *Report on the European Economy*.[30] The participating countries would apply these bills to amortize the Target liabilities accumulated by their respective NCBs. The bills would have to be market-grade and actually traded, which presupposes that the countries do resort to these instruments in the course of their normal borrowing.

While such measures are indispensable, they would cover only one aspect of the US system. Another important characteristic of the US system is that the Federal Reserve, through the Reserve Bank of New York, buys securities issued by the federal government and federal agencies, but not those issued by individual states, let alone those of troubled ones. As shown in Chapter 7, this precludes the kind of regional fiscal policy that the ECB has been carrying out with its SMP and OMT programmes. Translated into the Eurosystem, the Fed's policy would mean providing all NCBs with fixed refinancing lots according to the size of their jurisdictions' economies and, if at all, buying any national government bonds always in proportion to the size of the economy of the issuing countries.[31] Furthermore, limited additional lots of refinancing credit through systems similar to those available in the US could be introduced to meet

[30] EEAG, *The EEAG Report on the European Economy: The Euro Crisis*, CESifo, Munich 2012, chapter 2: *The European Balance-of-Payments Problem*, in particular pp. 75–79, available at: <http://www.cesifo-group.de/DocDL/EEAG-2012.pdf>.

[31] See M. Feldstein, 'Dos and Don'ts for the European Central Bank', *Project Syndicate*, 29 July 2012, available at: <http://www.project-syndicate.org/commentary/dos-and-don-ts-for-the-european-central-bank>.

emergency liquidity needs. All of this would work to reduce the Target balances in the first place and reduce the amounts that need to be settled.

Unbearable Debt

While a hardening of budget constraints is indispensable for a well-functioning Eurosystem, the introduction of the new rules by themselves would hit the GIPSIC countries hard and exacerbate their economic malaise. Before the new rules for a viable system in the long run can be implemented, the European debt problem needs to be resolved in the short run.

Whether a country's debt is sustainable depends largely on its GDP growth rate. According to the Domar formula, once developed to legitimatize Keynesian deficit spending, a country's public debt-to-GDP ratio, in short its debt ratio, will converge in the long run to the ratio of its deficit share in GDP and the long-term nominal GDP growth rate.[32] Thus, with appropriate assumptions of this growth rate, which no one actually knows or can observe today, unsustainable debt situations can be made to look sustainable. In a remarkable document, the IMF recently acknowledged that it had used this approach to calm the markets and avoid stating that Greek debt is unsustainable, which would have forced it to stop its rescue operations and might have triggered Greece's bankruptcy.[33]

Unfortunately, instead of growing, some of the crisis countries may stagnate in the years to come, or even shrink in nominal terms, because they need to realign their relative prices, as shown in Chapter 4. If realignment takes place rapidly, as could be achieved with courageous labour market reforms, it will involve outright deflation. That would minimize the duration of mass unemployment, but would also imply a period of falling nominal GDP levels. If, on the other hand, prices prove sticky downwards and the ECB is unable or unwilling to inflate the other euro countries, most of the GIPSIC countries will be forced to continue shrinking in real and nominal terms. Thus, whichever of these two scenarios materializes, some countries will experience rising debt ratios.

The truth about the debt problem is bitter, since the artificial and inflationary growth created by the credit bubbles in the GIPSIC countries before the crisis struck concealed

[32] E. D. Domar, 'The "Burden of the Debt" and the National Income', *American Economic Review* 34, 1944, pp. 798–827.

[33] International Monetary Fund, 'Greece: Ex Post Evaluation of Exceptional Access under the 2010 Stand-By Arrangement', *IMF Country Report* No. 13/156, June 2013, in particular pp. 2, 21 and 33, available at: <http://www.imf.org/external/pubs/ft/scr/2013/cr13156.pdf>; see also K. Schrader, D. Bencek and C.-F. Laaser, 'IfW-Krisencheck: Alles wieder gut in Griechenland?', *Kieler Diskussionsbeiträge* No. 522/523, June 2013, in particular figure 17, p. 31.

the debt problem for many years. Because countries over-borrowed, their economies overheated, and because they overheated, their debt-to-GDP ratios remained modest or even fell for some years, as in Spain or Ireland. The overheating increased the denominator of the debt-to-GDP ratios and kept the increments of the numerators small, as it implied ample tax revenue that drove down budget deficits. Both of these effects created the illusion that the debt problem was under control and that the countries would be able to simply grow out of it. In fact, however, the process deprived the countries of their competitiveness and made the debt unsustainable in a number of cases.

Table 9.1 Actual and hypothetical public debt-to-GDP ratios (December 2013, %)

	Actual	Hypothetical correction for deviation from average inflation*	Hypothetical after necessary realignments**
Greece	176	222	237
NB: without haircut	234	294	315
Ireland	124	139	122
Portugal	128	142	180
Spain	95	109	130
Italy	133	164	148
Cyprus	116	144	
NB: GIPSIC	122	145	
Belgium	100	99	
Germany	80	67	67
Estonia	10	21	
France	93	92	117
Luxembourg	25	29	
Netherlands	75	77	
Austria	75	68	
Slovenia	63	67	
Slovakia	54	99	
Finland	58	56	

* Actual public debt level in relation to GDP evaluated at prices that would have prevailed had the country's GDP inflation rate followed the average of the euro countries since 1995 (Madrid Summit).

** Actual debt level in relation to 2013 GDP evaluated at competitive prices according to the study by Goldman Sachs, baseline scenario, Q3 2010, keeping the 2013 average Eurozone price level (GDP deflator) constant. See Table 4.1.

Sources: European Commission, *Economic and Financial Affairs*, Financial Assistance in EU Member States, Greece; H. Pill, K. Daly, D. Schumacher, A. Benito, L. Holboell Nielsen, N. Valla, A. Demongeot, and S. Graves, Goldman Sachs Global Economics, External Rebalancing: Progress, but a Sizeable Challenge Remains, *European Economics Analyst*, Issue No. 13/03, January 17, 2013; Ifo Institute calculations.

Note: Actual public debt 2013: European Commission forecast, November 2013.

To understand the real danger this has engendered, it is useful to correct this distortion by evaluating the countries' GDP levels at competitive prices. An attempt to do this is shown on Table 9.1. The second column gives the actual debt-to-GDP ratios by the end of 2013, as known from Figure 2.7. The third column gives the debt-to-GDP ratios that would have resulted if all countries' price levels (GDP deflators) had grown at the average actual rate since the Madrid Summit in 1995, which marked the beginning of the interest-rate convergence that triggered the credit boom (see Chapter 2). The fourth column gives the debt-to-GDP ratios that would result after the necessary realignment of relative prices, as calculated by the benchmark scenario of the Goldman Sachs study cited in Chapter 4, given the 2013 Eurozone average price level and taking into account that a bit of the necessary price adjustment may already have taken place.[34]

While some countries such as Austria, Belgium, Finland, and Germany would have lower debt-to-GDP ratios today if their relative goods prices had not changed, the GIPSIC countries would have much higher ones. On average, their debt-to-GDP ratio would be 145%, instead of the 122% shown in the official statistics. Italy's would be 164% instead of 133%, Spain's 109% instead of 95%, Portugal's 142% instead of 128%, and Greece's 222% instead of 176%.

Without the haircut of March 2012, which gave the Greek state a debt relief of 54% of its 2012 GDP at the expense of foreign and domestic investors, but at today's prices, Greece's official debt ratio in 2013 would have been 234% of GDP. This is shown in the first field of the second row of the Table. And without both the haircut and the increase in Greek relative prices that took place since the Madrid Summit, the Greek debt-to-GDP ratio would have been 294%, as shown in the next field to the right.

Things look even more dramatic if GDP is evaluated at hypothetical prices after the realignment that would follow from the Goldman Sachs baseline scenario shown in Table 4.1. Without the haircut and after the required deflation, the Greek public debt ratio would have been a whopping 315%. Recall that the Goldman Sachs figures give a favourable impression of the need for a Greek realignment. If the Greek price level were at the level of Turkish prices of 2011–2013, for example, the Greek debt-to-GDP ratio in the absence of the haircut would be 363%, and with the haircut 273%. These figures show with utmost clarity how unbearable the Greek debt situation is.

Portugal's debt-to-GDP ratio would be 180%, and Spain's 130%, if the prices were reduced in line with the Goldman Sachs baseline scenario. For both of these countries

[34] H. Pill, K. Daly, D. Schumacher, A. Benito, L. Holboell Nielsen, N. Valla, A. Demongeot, and A. Paul, Goldman Sachs Global Economics, 'Achieving Fiscal and External Balance (Part 1): The Price Adjustment Required for External Sustainability', *European Economics Analyst* No. 12/01, 15 March 2012; H. Pill, K. Daly, D. Schumacher, A. Benito, L. Holboell Nielsen, N. Valla, A. Demongeot, and S. Graves, Goldman Sachs Global Economics, 'External Rebalancing: Progress, but a Sizeable Challenge Remains', *European Economics Analyst* No. 13/03, 17 January 2013.

the figures look grimmer than in the case where the price-level correction is only made for the actual relative price increase since 1995. Ireland and Italy, in contrast, with ratios of 122% and 148%, would look a little better.

The debt-to-GDP ratios recalculated in Table 9.1 for competitive prices refer to official public debt, which is held by domestic and foreign investors as well as public institutions that have provided rescue funds to the governments of the crisis-stricken countries. A similar calculation is presented in Table 9.2 for the public rescue funds themselves, as analysed in the previous chapter (see Figure 8.2 and Table 8.1), that were made available by foreign countries or multilateral institutions, including the ECB, to the crisis countries' governments and central banks, and via the latter to the respective local commercial banking systems.[35] As broken down in Table 8.1, the rescue funds include the Target debt, the potential debt from an over-proportionate issuance of banknotes (or the potential claim from an under-proportionate issuance), government bonds held by non-GIPSIC central banks and the ECB itself, as well as fiscal rescue credit provided by other countries and multilateral institutions. Note that these items could not reasonably be added to the government debt shown in Table 9.1, since for some countries, Greece in particular, a large fraction of the public debt is held by international public institutions, and because the credit provided to NCBs for distribution to commercial banks overlaps with sovereign debt in the same measure as banks use refinancing credit to buy local government bonds, and then submit these bonds as collateral for the refinancing credit.

While the second column of Table 9.2 simply repeats the figures relative to current GDP from Table 8.1, the third one provides a recalculation based on GDP evaluated at average Eurozone prices, or, to be more precise, at the prices that would have prevailed in 2013 if the countries' GDP deflators had increased in line with the average since the Madrid Summit in 1995. The fourth column, as in Table 9.1, shows the public credit-to-GDP ratios that would result if GDP were to be calculated at Goldman Sachs 'competitive' relative prices as specified above, keeping the Eurozone average GDP deflator constant at its 2013 level.

[35] The percentages shown in Table 9.2 are partly included in the public debt figures of Table 9.1. However, the credit provided to national central banks for distribution to commercial banks, which resulted in Target debt and the debt from an over-proportionate banknote issuance, is not included. This credit established a liability of the respective national central bank and is therefore a sovereign debt. While not included in the official public debt figures, the Target debt (though not the banknote debt) is included in a country's official net foreign asset position (see Chapter 6).

Table 9.2 Public credit provided by other governments or multilateral institutions relative to the recipient country's actual or hypothetical GDP (December 2013, %)

	Actual public-credit-to-GDP ratio	Hypothetical correction for deviation from average inflation*	Hypothetical correction for necessary realignments**
Greece	157	198	212
Ireland	83	92	81
Portugal	67	74	94
Spain	21	24	29
Italy	16	19	17
Cyprus	72	90	–
GIPSIC	32	38	39

* Actual public credit level in relation to GDP, net of the countries' own contributions to collective rescue activities, evaluated at prices that would have prevailed had the countries' GDP inflation rate followed the average of the euro countries since 1995 (Madrid Summit).

** Actual public credit level in relation to GDP, net of the countries' own contributions to collective rescue activities, evaluated at competitive prices according to the study by Goldman Sachs, baseline scenario, Q3 2010, keeping the 2013 average Eurozone price level (GDP deflator) constant. See Table 4.1.

Sources: See Tables 8.1 and 9.1.

Note: For the interpretation and the decomposition of the first column of this table, see Table 8.1. The percentages shown give the sum of Target debt, debt from an over-proportional issue of banknotes, government bonds held by non-GIPSIC NCBs, and intergovernmental fiscal credit, net of own contributions and credit repayments.

Consider Greece. Greece has thus far received public credit from abroad (multilateral, bilateral and ECB), net of its own contributions to international rescue activities, equal to 157% of its 2013 GDP evaluated at actual market prices. It would have a public credit-to-GDP ratio of 198% if its GDP in real terms were the same as in 2013, while its prices had only increased in line with the Eurozone average since 1995. If, on the other hand, Greece's 2013 GDP is evaluated at Goldman Sachs-type competitive prices, this ratio would even be 212%. Portugal would also look worse, albeit much less dramatically, if its GDP were to be evaluated at such prices.

For Ireland, in contrast, the price correction produces a somewhat less problematic result. While Ireland's actual public credit-to-GDP ratio was 83% in 2013 and would have been 92% had Irish prices not increased faster than the Eurozone average since 1995, its public credit-to-GDP ratio would 'only' be 81% if Irish GDP were evaluated at Goldman Sachs competitive prices.

All in all, the calculations presented in this section have a somewhat ambig-uous policy implication. On the one hand, they are based on the view that the path towards foreign debt sustainability goes through a temporary increase in debt-to-GDP ratios,

because a realignment of prices is necessary to generate the structural current account surpluses that would enable the countries to service their foreign debt. On the other hand, some of the resulting figures are truly huge and obliterate the hope that the countries will be able to manage their debt problems without help in the foreseeable future.

Greece in particular may need another haircut, this time at the expense of its public creditors, to reduce its debt burden. The first Greek haircut of March 2012 cost foreign and Greek private investors € 105 billion, and the restructuring of November 2012 meant wealth losses for other Eurozone states amounting to € 43 billion in present-value terms, as shown in Chapter 8,[36] and yet a further restructuring of Greek debt might be in order. Portugal's situation is not quite as bad, but, evaluated at non-distorted competitive prices, it has a public debt-to-GDP ratio of between 142% and 180%, and the public credit it received from other countries is between 74% and 94% of its GDP. Portugal might also be a candidate for debt restructuring.

Restructuring the Debt

Debt restructuring has by no means been unusual in history. Since the 1950s, a haircut forcing private creditors to accept the exchange of their government or bank bonds has been applied no less than 186 times by ninety-five countries.[37] Figure 9.1 provides an overview of haircuts and sovereign defaults since 1978. The vertical axis shows the portion of the claims that were lost as a result of the haircut, while the size of the circles shows the absolute volume of the haircut. The haircuts applied by many developing countries in the early 1980s are clearly evident, as well as the debt restructuring performed by Russia in 1997 and 2000 and the bankruptcies of Argentina in 1987, 1993, and 2005.

[36] See Section *The Liability Risk*.

[37] U. S. Das, M. G. Papaioannou, and C. Trebesch, 'Sovereign Debt Restructurings 1950–2010: Literature Survey, Data, and Stylized Facts', *IMF Working Paper* No. 203, August 2012. For an overview of sovereign defaults over the centuries, see E. Streissler, 'Honi soit qui mal y pense?', *Austrian Academy of Sciences*, Vienna, August 2011. Explicit lessons for the Euro Area from the numerous restructurings in the emerging market countries are drawn in J. Zettelmeyer, 'How to Do a Sovereign Debt Restructuring in the Euro Area: Lessons from Emerging-Market Debt Crisis', in W. R. Cline and G. B. Wolff (eds), *Special Report 21: Resolving the European Debt Crisis*, 2012, pp. 165–186. The legal details of a sovereign debt restructuring are covered in many articles by L. Buchheit. See for example L. Buchheit, 'Sovereign Debt Restructuring: The Legal Context', in W. R. Cline and G. B. Wolff (eds), *Special Report 21: Resolving the European Debt Crisis*, 2012, pp. 187–196.

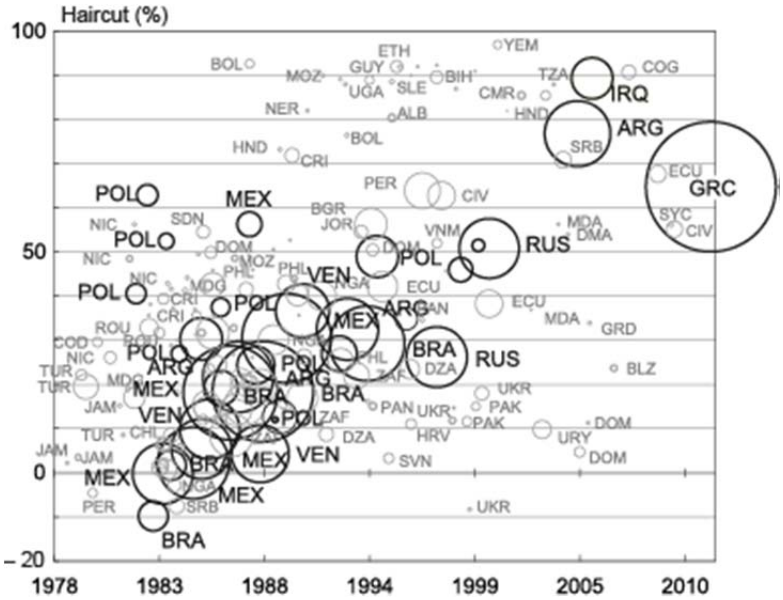

Figure 9.1 Full and partial sovereign defaults (1978–2010/2012)

Abbreviations: ALB: Albania, DZA: Algeria, ARG: Argentina, BLZ: Belize, BOL: Bolivia, BIH: Bosnia-Herzegovina, BRA: Brazil, BGR: Bulgaria, CMR: Cameroon, CHL: Chile, COG: Republic of Congo, CRI: Costa Rica, CIV: Ivory Coast, HRV: Croatia, COD: Democratic Republic of Congo, DOM: Dominican Republic, DMA: Dominica, ECU: Ecuador, ETH: Ethiopia, GRC: Greece, GRD: Grenada, GUY: Guyana, HND: Honduras, IRQ: Iraq, JAM: Jamaica, JOR: Jordan, MDG: Madagascar; MEX: Mexico, MDA: Moldavia, MOZ: Mozambique, NIC: Nicaragua, NER: Niger, NGA: Nigeria, PAK: Pakistan, PAN: Panama, PER: Peru, PHL: Philippines, POL: Poland, ROU: Romania, RUS: Russia, SRB: Serbia and Montenegro/Yugoslavia, SYC: Seychelles, SLE: Sierra Leone, SVN: Slovenia, ZAF: South Africa, SDN: Sudan, TZA: Tanzania, TUR: Turkey, UGA: Uganda, UKR: Ukraine, URY: Uruguay, VEN: Venezuela, VNM: Vietnam, YEM: Yemen,

Sources: J. Cruces and C. Trebesch, 'Sovereign Defaults: The Price of Haircuts', *CESifo Working Paper* No. 3604, October 2011; J. Zettelmeyer, C. Trebesch, and M. Gulati, 'The Greek Debt Restructuring: An Autopsy', *CESifo Working Paper* No. 4333, July 2013.

Note: The chart covers 181 sovereign haircuts over the 1978–2010 period, including the Greek partial bankruptcy of 2012. The vertical axis shows the percentage the haircut amounted to in relation to the market value of the government bonds in question, while the size of each circle denotes the absolute magnitude of each haircut.

Argentina had also demanded debt restructurings in 1956, 1962, and 1965. Its post-war history has been characterized by a long series of similar events. The first Argentine debt restructuring was negotiated by the military dictatorship under Pedro Eugenio Aramburu Cilveti, as soon as the dictatorship came to power in 1956. While it did try to repay the debt, it negotiated better terms than originally agreed. The negotiations with the creditors at the time took place in Paris, and they led to the foundation of the Paris Club. The Paris Club is an informal group of nineteen official creditors that organizes debt restructuring according to a set of rules that have evolved from experience. The

Club has since been often involved in renegotiations between debtors and creditors, the latest event being the debt relief negotiated in January 2013 for Myanmar after the fall of the military junta in 2011. Altogether, 400 debt agreements settled under the guidance of the Paris Club have been recorded.[38]

The Paris Club could also be involved in organizing a debt conference for joint negotiations between the GIPSIC countries and their creditor countries, along the lines of prior debt conferences in the 1920s, 1930s, and 1950s whose task was the settlement of war debt and reparation payments. The task of the new debt conference could be to reset the Eurozone's financial system by clearing the balance sheets and restoring the transparency and trust that the capital market needs to operate smoothly.[39] The debt conference would have to deal with three kinds of debt: state debt, bank debt, and Target debt, since they are all interrelated and have common origins.

Given the huge levels of interrelated debt, a solution that just prolongs matur-ities and reduces interest rates, as was chosen in the case of Greece and Ireland, is not advisable. That is not really a solution, but an attempt at camouflage that allows creditors to avoid write-off losses in their balance sheets and pretend to have more equity than they actually do. While it helps the banks and governments of the debtor countries, it makes the creditors vulnerable by allowing them to conduct their businesses with less capital than they show in their books. They should instead be forced to recapitalize by bringing in more equity capital from outside. The European financial industry could become a hollow shell with the camouflage strategy the EU has begun. It is much better for the long-run stability and prosperity of the European economy if the debt restructuring is honest, in the sense of going for outright debt reductions and imposing a more parsimonious strategy on the economy, with more private savings and investment, and less consumption.

The public debt reductions will not only hit private investors but also creditor governments and their ESM and EFSF rescue funds, which will have to be recapitalized with more equity injections by governments. In the early stages of the crisis,

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[38] See U. S. Das, M. G. Papaioannou, and C. Trebesch, 'Sovereign Debt Restructurings 1950–2010', 2012, appendix.

[39] This proposal was made in H.-W. Sinn in his article, 'Rescuing Europe from the Ground Up', *Project Syndicate*, 21 December 2013, available at: <www.ifo.de/rescuing_europe/w/SvTE7mC2>. See also T. Beck and C. Trebesch, 'A Bank Restructuring Agency for the Eurozone – Cleaning Up the Legacy Losses' *VoxEU*, 18 November 2013, available at: <http://www.voxeu.org/article/eurozone-bank-restructuring-agency>. In the early stages of the crisis it had seemed that a gradual process of moving from liquidity help to piecemeal debt restructuring through maturity extensions would be effective, being expected to create proper incentives for governments to stop borrowing. See EEAG, *The EEAG Report of the European Economy*, CESifo, Munich 2011, chapter 2: *A New Crisis Mechanism for the Euro Area*, pp. 71–96. Time has moved beyond this proposal. Today, a more radical reset approach seems advisable.

governments could have avoided these losses, but now that they have bailed out private investors and taken over large parts of their portfolios, they will have to foot the bill. Nowadays, 80% of the Greek public debt is held by external public institutions and only 20% privately.[40] Moreover, the privately held debt is nearly exclusively located in the balance sheets of Greek commercial banks, which have used it as collateral for drawing refinancing credit from the Greek NCB.[41] This shows the nature of the problem. Taxpayers are already trapped. They should acknowledge this fate and write off their losses, rather than let their politicians continue along this path, which is merely dragging them ever deeper into the trap.

Private banks could be recapitalized by way of debt-equity swaps, along the lines discussed in Chapter 8. In principle, the EU proposals are on the right track by advocating a bail-in of shareholders and creditors to protect taxpayers, and by establishing a pecking order for how to allocate the losses. However, the list of exemptions is long. That, together with the cap set for the bail-in of shareholders and creditors combined at just 8% of a bank's balance sheet, and the proposal of using the resolution fund and/or the ESM as a public backstop, comes perilously close to a ruse. It is much more a recipe for a bailout rather than bail-in. To really protect taxpayers, the bail-in percentage should be much higher, and the list of exceptions much shorter.

For one thing, exempting deposits of € 100,000 each seems far too lenient, given that this is the median household wealth in the Netherlands and twice the median household wealth in Germany, for example. If there is to be such an exemption, it should be financed by the respective state and its national deposit insurance, so as to avoid the moral hazard effects that would necessarily result from international mutualization of responsibilities. Unfortunately, such restraint is not discernible in the European solutions, as the plans published at this writing anticipate a socialized solution with a gradual transition period. Moreover, some of the states that might wish to provide such a guarantee are themselves close to bankruptcy and would need community funds to do so. Thus, the exemption of deposits of this order of magnitude is hardly possible. Setting up a deposit insurance scheme in which one country guarantees another's deposits up to its own median wealth, or more, seems wholly out of proportion.

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[40] J. Zettelmeyer, C. Trebesch and M. Gulati, 'The Greek Debt Restructuring: An Autopsy', *CESifo Working Paper* No. 4333, available at: <http://www.cesifo-group.de/DocDL/cesifo-wp4333.pdf>.

[41] See European Banking Authority, EU-wide Transparency Exercise 2013 Summary Report, available at: <http://stress-test.eba.europa.eu/documents/10180/526027/20131216_EU-wide+Transparency+Summary+Report.pdf>, p. 13, and EEAG, *The EEAG Report on the European Economy: The Road Towards Cohesion*, CESifo, Munich 2014, available at: <http://www.cesifo-group.de/DocDL/EEAG-2014.pdf>, chapter 4: *Banking Union: Who Should Take Charge?*, figure 4.1, p. 93.

For another, there is no excuse for exempting covered loans from the liability hierarchy. To the extent that they are covered, such loans are protected by the respective collateral. If the collateral fails, be it a government bond, a private security or any other kind of private asset, the holders of covered bonds should bear the losses rather than ask community funds to step in, as the EU proposal envisages. Exempting covered loans from bail-ins would blow away creditors' caution when lending to zombie banks, prompting them to content themselves with low yields, as even bad collateral will probably be enough to enjoy the backup protection. Circular trading of bonds among banks to generate the necessary collateral out of nothing would also be a possibility, as it would provide the banks' creditors with common protection and would enable the banks to borrow at low interest rates. Moral hazard and the misallocation of resources are pre-programmed with this strategy.

Excluding covered loans from the bail-in exemption would, of course, hurt the ECB. After all, a rationale behind the exemption for covered bonds may have been the attempt to protect the ECB from the consequences of its overly lax collateral policy (see Chapter 5). But there is no point in protecting the ECB with the ESM or other community instruments, since it would just mean repackaging the potential write-off losses from one public budget to another, with no benefit to taxpayers. To the contrary, it would be in the interest of Europe's voters and taxpayers to avoid this ploy and show openly in the NCBs' balance sheets which risks have arisen from the problematic collateral policies adopted by the ECB Governing Council. This would put a stop to the reckless lending strategy out of local printing presses, which in effect is little more than a regional fiscal policy riddled with negative allocative implications and doubtful democratic legitimation.

Along with writing off some of the ECB's credit claims on banks, debt relief should naturally also be given for unrecoverable Target claims on indebted NCBs, as the Target debt resulted from the NCBs' excessive lending of freshly created money. The unavoidable write-off losses will have to be booked in the NCBs' balance sheets by shifting the Target claims from near-insolvent countries to the still-sound euro countries in proportion to their ECB capital keys. This relief should come together with the move to harder budget constraints in the Eurozone, in particular the move to the gold standard for future Target settlement proposed above.

Despite the need to forgive some of the debt, the countries themselves could make a significantly greater effort to redeem their debt. One possibility would be the sale of state property. Greece, for example, has state-owned property (excluding real-estate holdings) worth 85% of GDP in 2010, and additional real-estate holdings worth an

estimated 87% to 130% of Greek GDP.[42] The Greek government had promised the Troika (ECB, IMF, EU), in a memorandum of understanding dated 2 July 2011, that it would privatize state property worth € 50 billion.[43] Its efforts have been rather scanty, however. By the end of 2012 its privatization receipts were only € 1.6 billion.[44] As of this writing, the Greek Finance Ministry's privatization website is still empty. Recall in this context that Alexander Hamilton's debt mutualization of 1790 came in exchange for handing over western territories. It is not plausible to solve all of Greece's debt problems without the country itself making a contribution.

Further measures that could be considered include wealth levies or mandatory government bond purchases by property owners.[45] After all, there is substantial private wealth in the crisis-hit countries, as revealed by a survey conducted by the ECB (see Figure 2.12). Even when differences in household size are taken into account, Italians and Spaniards, for instance, are on average 14% wealthier than Germans, 40% wealthier than Finns and 42% wealthier than Dutchmen. The wealth of Italians was emphasized by then-Prime Minister Silvio Berlusconi long before the ECB published its statistics.[46] Other troubled countries score similarly. There is much to be said for taking part of this wealth to help repay some of the debt, particularly in those countries whose debt also resulted from the fact that governments substituted debt financing for tax financing because a substantial fraction of private activities were carried out on the black market. Incidentally, the relative size of the black economy is strongly correlated with the debt-to-GDP ratio.[47]

The right mixture of debt relief, privatization, and wealth levies could be jointly negotiated in a Paris Club debt conference convened to reset the Eurozone. The European debt crisis has many causes, and creditors and debtors alike share the responsibility. A way to distribute the burden fairly should thus be sought—and it is

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[42] See International Monetary Fund, *Greece: Second Review Under the Stand-By Arrangement*, December 2010, p. 52.

[43] See European Commission, *The Economic Adjustment Programme for Greece: Fourth Review*, Spring 2011, p. 94.

[44] See European Commission, *The Second Economic Adjustment Programme for Greece: Third Review*, July 2013, p. 26.

[45] A similar proposal has been made by W. F. Richter, 'Zwangsanleihen—Ein Beitrag zur Konsolidierung', *Handelsblatt*, 25 November 2011, available at: <http:// www.wiso.tu-dortmund.de/wiso/of/Medienpool/veroeffentlichungen_richter/WR_Veoeffentlichungen_Stand_Oktober_09/Zwangsanleihen.pdf>.

[46] Organisation for Economic Co-operation and Development, *Economic Outlook* No. 91, 2012, Statistical Annex, table 58; see 'Berlusconi: "Non facciamoci del male" / E sulla crisi: "Noi, i più ricchi d'Europa" ' ['We, the richest in Europe'], *La Repubblica*, 20 June 2010, available at: <http://www.repubblica.it/politica/2010/06/20/news/berlusconi-popolarita-4996320/>.

[47] A. Prinz and H. Beck, 'In the Shadow of Public Debt: Are there Relations between Public Debt and the Shadow Economy?', *Economic Analysis & Policy* 42, 2012, pp. 221–236.

important that it be found soon. Speed has at least two advantages. One is that confidence would be quickly restored and the period of uncertainty for investors that is currently paralyzing economic activity would come to an end. The other is that it would keep the cost to taxpayers in check. Currently Europe is in a phase of substituting public creditors of southern countries for private ones, as the number cited for the Greek public debt showed. The more time elapses, the larger the portion of the portfolio of GIPSIC assets owned by governmental institutions, and the larger therefore the haircut loss affecting the taxpayers and the general population, who actually bear the least responsibility for the mess, and the larger the risk that investors would like to repeat the game after the haircut. Investors must learn their lesson, and to this end, it is essential to let them bear the losses arising from their poor investment decisions. There is no ethical or economic case for having investors protected by European states—the latter have enough on their plate as it is.

A Breathing Currency Union: Between Bretton Woods and the Dollar

In addition to the debt problem, the competitiveness problem also urgently needs to be tackled. Both problems are related, but not identical. Some countries, such as Italy, have a considerable public debt problem, but since the government debt is largely held by Italians, this is not a foreign debt problem. Italy may not need more than a 10% real devaluation to attain a situation in which its foreign debt is sustainable and the economy is competitive (see Table 4.1). On the other hand, it is difficult to imagine that Greece, Portugal, and Spain would be out of the woods if their public debt problem were resolved. As discussed in Chapter 4, Greece needs to depreciate by 36% to reach the Turkish price level and Portugal needs a depreciation of 29%. In various scenarios by Goldman Sachs, Spain, Greece and Portugal would have to devalue by 20% to 30% to achieve debt sus-tainability. Manufacturing wages in Spain are more than three times, and in Greece more than twice, as high as in Poland (Figure 4.12). Portugal's wages are about 60% higher. These countries will not be able to achieve sufficient degrees of depreciation in the foreseeable future, not least because only a very moderate realignment of their relative prices has taken place during the crisis (see Figure 4.8).

The spectrum of economists who consider it impossible to try to achieve a real depreciation of the required magnitude through a wage and price squeeze ranges from Friedman to Keynes. As explained in Chapter 4, one problem is that the labour unions are trying to block this development, since a symmetrical wage and price cut cannot convincingly be orchestrated, given that millions of contracts would have to be changed simultaneously. Another problem is the potential distortion of the balance sheets of the country's borrowers and lenders that could push many borrowers into bankruptcy.

Compliance with 'austerity conditions' attached to fresh public credit, which initially brings about a political lull, should not be confused with a real depreciation, which is the only mechanism that can reinstate competitiveness. Even now the supposed austerity programmes, which are nothing more than a restriction on new net borrowing, are deemed unbearable, and yet they haven't managed to bring about any sizeable reductions in relative price levels, as Figure 4.8 shows. To be sure, if one insists on hard expenditure cuts by not giving further credit and calling due old debts, it would be possible to induce a deflation, but the social systems of the affected countries would probably break under the strain and plunge the countries into chaos. Germany's experience at the time of the Weimar Republic, when prices sank by 23% from 1929 to 1933, because the Treaty of Versailles and the Dawes Plan tied it to the gold standard, should be warning enough, as discussed in Chapter 4.

The alternative solution, contemplated by many, is inflation in the core. To some extent that is indeed necessary. However, the ECB's primary mandate of ensuring price stability rules out this possibility. In addition, it would be difficult to overcome Germany's deep-seated trauma stemming from the hyperinflation from 1914 to 1923, which led to impoverishment and radicalization of the middle class. Only a small amount of extra inflation will be possible in the core, but that will be far from sufficient to allow for the necessary realignment of relative prices in a foreseeable time.

Apart from that, the Japanese example, mentioned in Chapter 4, has shown that it may not be easy to generate inflation. When the Japanese property bubble burst in 1990, the country's banks ran into serious difficulties. In the early years they were able to hide the write-off losses, but as loans matured and were not serviced, around 1997, the truth came out. About 40% of the banks were in trouble and had to be rescued or taken over by the state. Since 1998, at least prima facie, monetary policy has been extremely loose, with short-term rates hovering most of the time between zero and 0.5%.[48] Extreme Keynesian debt policies increased the debt-to-GDP ratio from 67% of GDP in 1990 to 244% of GDP in 2013. And yet, GDP prices have fallen since 1998. The Japanese GDP deflator now stands at the same level as 1980. So even if the ECB wanted to trigger inflation, it is entirely unclear that it would ever succeed in doing so. A deflating economy has an unlimited appetite for liquidity, and it may prove impossible to get it

[48] It has been argued though that the policy was not as loose as it seemed, as the low interest rate was not accompanied by a large growth in monetary aggregates. See M. Friedman, 'Reviving Japan', *Hoover Digest* 2, 30 April 1998, available at: <http://www.hoover.org/publications/hoover-digest/article/6549>; A. H. Meltzer, 'Time for Japan to Print Money', *American Enterprise Institute Online*, 17 July 1998, available at: <http://www.aei.org/issue/foreign-and-defense-policy/regional/asia/time-for-japan-to-print-money/>; D. Laidler, 'Monetary Policy after Bubbles Burst: The Zero Lower Bound, the Liquidity Trap and the Credit Deadlock', *Canadian Public Policy* 30 (3), September 2004, pp. 333–340.

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going again by pumping even more money into it. The Japanese example proves that economists' age-old fear of deflation might be justified.[49]

So, the only options remaining are permanent transfers—or exits.[50] The perils of permanent transfers, which range from the Dutch Disease to the contagion effects upon other countries that want the same treatment, have already been mentioned in this book. The transfers make countries addicted, the wrong price vectors are cemented, and the countries never become competitive. The negative experiences with German reunification and the Italian Mezzogiorno, which despite huge, continuous transfers have not yet managed to develop competitive and self-sustaining economies, should serve as a warning.[51]

The catastrophic developments in the southern European labour markets depicted in Chapter 1 also show that such a strategy is a dead end. As was shown in Tables 8.1 and 9.2, Greece had received public credit of around € 288 billion, or 157% of 2013 GDP, by December 2013. Had Greek prices not increased faster than the Eurozone average since the Madrid Summit of 1995, that ratio would be 198% of GDP, given Greece's actual real 2013 GDP level. In relative terms, that sum is about forty times as large as the help the Marshall Plan provided to Germany after the war which, aggregated over the years, amounted to a credit equal to 5.2% of Germany's GDP for 1952.[52] In addition, Greece has benefited from an open haircut on public debt at the expense of private foreign investors of around € 65 billion, or 36% of its 2013 GDP (€ 105 billion including domestic investors). The implicit haircut represented by interest relief at the expense of other states, furthermore, benefited Greece to the tune of € 43 billion, or 24% of its 2013 GDP. A further € 32 billion in rescue credit, equivalent to 18% of Greece's 2013 GDP, has already been earmarked for the country and will be disbursed if Athens satisfies the Troika conditions. All of this has merely kept the patient alive,

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[49] See A. Hansen, *Full Recovery or Stagnation*, Norton, New York 1938. A. C. Pigou, *Employment and Equilibrium: A Theoretical Discussion*, Macmillan, London 1941. D. Patinkin, *Money, Interest, and Prices: An Integration of Monetary and Value Theory*, University of Chicago Press, Chicago 1956.

[50] Se also A. Hughes-Hallett and J. C. Martínez Oliva, 'The Importance of Trade and Capital Imbalances in the European Debt Crisis', *Peterson Institute for International Economic Working Paper* No. 13-01, January 2013.

[51] H.-W. Sinn and F. Westermann, 'Due "Mezzogiorni" ', *L'industria* 27, 2006, pp. 49– 51, and H.-W. Sinn and G. Sinn, *Jumpstart. The Economic Unification of Germany*, MIT Press: Cambridge, Mass., and London, England 1992.

[52] H. Berger and A. Ritschl, 'Die Rekonstruktion der Arbeitsteilung in Europa. Eine neue Sicht des Marshall-Plans in Deutschland 1947–1951', *Vierteljahreshefte für Zeitgeschichte* 43, 1995, pp. 473–519, table p. 479. Germany, in turn, was granted debt relief in the London Debt Agreement of 1953 of 30 billion deutschmarks (including forgiving the Marshall Plan credit), which was 22% of West German GDP for 1952. See C. Buchheim, 'Das Londoner Schuldenabkommen', in L. Herbst (ed), *Westdeutschland 1945–1955. Unterwerfung, Kontrolle, Integration*, Oldenbourg, Munich 1986, pp. 219–229.

but has obviously not been able to cure it. Greek unemployment rates in 2013 were more than twice as high as those prevailing in May 2010, when the official rescue operations for Greece began. It is time to reconsider the therapy.

The only option that offers a faster way to regain competitiveness without riots and strife is an exit followed by devaluation of the new currency. On the basis of data made available by Reinhart and Rogoff, the Ifo Institute arrived at the conclusion, after studying 71 currency crises, that the current account balance of the countries that devalued their currency improved quite markedly within one or two years of devaluation, with their GDP rallying as well.[53] By the third year, their export growth already typically lay about two percentage points above the trend.

Three case studies conducted by the Ifo Institute, addressing the Argentine devaluation of 2002, its Thai counterpart of 1997, and the Italian devaluation of 1992, show the quick economic recovery that followed devaluation. In Argentina, the economy perked up as early as two quarters after devaluation, and in Thailand the upturn came six quarters later. Even Italy, where the devaluation process covered a longer period, quickly returned to growth. Indeed, all three countries had current account surpluses one year after starting their depreciation.

No member country, however, should be pressed into exiting the monetary union. The decision must be adopted by the corresponding governments and parliaments. Conversely, it cannot be accepted that countries that do not dare an exit, or that rule it out altogether, can assume as a matter of course that they will continue to be financed by other countries. Membership in the Eurozone does not include the right to be propped up with transfers from abroad when a country loses its competitiveness. The legal conditions for membership were laid out very clearly by the Maastricht Treaty.

Letting distressed countries remain members of the Eurozone on permanent life support does not really help them. While it protects the rich, who own government bonds and other assets, against wealth losses, and helps the government to finance its expenditure, the ordinary population gains very little from this strategy. The jobless young, in particular, stand to suffer from such a policy. If young people cannot enter the labour force and learn a trade, this will have strong negative implications for their entire life. One generation of Greeks and Spaniards may be lost by the countries' desperate attempt to stay in the Eurozone.

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[53] B. Born, T. Buchen, K. Carstensen, C. Grimme, M. Kleemann, K. Wohlrabe, and T. Wollmershäuser, *Austritt Griechenlands aus der Europäischen Währungsunion: historische Erfahrungen, makroökonomische Konsequenzen und organisatorische Umsetzung*, Ifo Institute, Munich 2012; C. Reinhart, 'This Time is Different Chartbook: Country Histories on Debt, Default, and Financial Crises', *NBER Working Paper* No. 15815, 2010; and C. Reinhart and K. S. Rogoff, *This Time is Different: Eight Centuries of Financial Folly*, Princeton University Press, Princeton 2009.

In view of the catastrophic situation that the euro has brought about in some countries and which drags on despite support from the community of nations, the question arises as to how much longer the respective populations of the countries affected can bear to follow this course. How long will the populations of Spain and Greece be willing to accept the bitter reality that one in two youths not in education is unemployed—one more year, two or three? Nobody knows. Tough political decisions must be made. Ultimately, no parliament will be able to avoid having to choose between radical social reforms that include wage cuts and an exit from the Eurozone.

If a country does decide to exit, the community of nations should make every attempt to ensure that this is an orderly process. It should support the process by helping to lessen the social burdens resulting from the recapitalization of banks, using debt-equity swaps. Moreover, an emergency programme with community funds should be instituted to secure basic services and energy provision to compensate for the expected increase in import prices.

Most of all, the stigma of a permanent separation should be removed. This can be accomplished by setting up a breathing currency union that recognizes the status of an associated member possessing a return option.[54] The associated member would have the advantage that it could adjust its exchange rate quickly to restore competitiveness, without having to fight for years with the unions and other interest groups, sparing itself the attendant economic malaise and massive unemployment that could bring the entire country to the brink of collapse.

An existing arrangement, the longstanding European Exchange Rate Mechanism II, could provide the basis for such a currency 'association'. ERM II is the successor to ERM I, to which all EU currencies, with the exception of those of the new members from eastern Europe, formally belonged from 1979 to late 1998. It was replaced by ERM II on 1 January 1999, with the introduction of the euro. Conceived for EU member states that have not yet introduced the euro, ERM II at present includes Denmark and Lithuania. All countries that have adopted the euro since 2000 have done so on condition of spending a two-year period within ERM II without stress, staying within a range of ±15% with respect to a central rate against the euro. This mechanism

[54] These passages are based on H.-W. Sinn, 'Die offene Währungsunion', *Wirtschaftswoche*, No. 29, 16 July 2012, p. 39, available at: <http://www.ifo.de/de/Sinn_WiWo_2012/w/4FAADYipx>; H.-W. Sinn and F. L. Sell, 'Der neue Euro-Club', *Süddeutsche Zeitung*, No. 169, 24 July 2012, p. 19, available at: <http://www.ifo.de/de/ Sinn_Sell_SZ_2012/w/3qGgteRuJ>; and H.-W. Sinn and F. L. Sell, 'Our Opt-in Opt-out Solution for the Euro', *Financial Times*, 31 July 2012, available at: <http://www.ft.com/intl/cms/s/0/b2c75538-da35-11e1-b03b-00144feab49a.html#axzz25VFxZZXs>.
A similar proposal was made in 2010 by Martin Feldstein. See M. Feldstein, 'Let Greece Take a Eurozone "Holiday" ', *Financial Times*, 16 February 2010, available at: <http://www.ft.com/intl/cms/s/0/72214942-1b30-11df-953f-00144feab49a.html#axzz25VFxZZXs>.

could be expanded to allow it to also harbour, after a transition period, countries that left the Eurozone and plan to re-enter.

With such rules the Eurozone could become a breathing, open currency union, something between a currency union of the Bretton Woods type and a firm conglomerate like the US dollar zone. While the latter might in the end be desirable, as will be discussed in the last section of this book, the political will to form a federal state with a power centre that could enforce the rules needed to avoid the moral hazard problems associated with a common currency does not yet exist. Given this limitation, Europe needs a currency union that is more flexible than the dollar, allowing the necessary realignment of relative prices through exchange rate adjustments, and at the same time more rigid than a system of separate currencies with fixed exchange rates.

Exits from the euro would, of course, be a source of market irritation and turmoil. Every economist can spell out the contagion effects this might create. But the turmoil would be the result of the chaos created precisely by the fact that no orderly exit path has been defined; wild speculation about what might happen would trigger capital flight.

In practical terms, this is how an orderly exit could take place. The new cur-rency would have to be prepared in secret and introduced as the new legal tender over a weekend, when the banks are closed. All deposits and all contracts between domestic partners denominated in euros, including wage contracts, loans, rental contracts, pensions, and even price lists, would be converted immediately, keeping the numerical values, into the new currency.

Naturally, the new currency will quickly come under devaluation pressure. The forecasts point to a devaluation for Greece of about a half to two-thirds.[55] But the exchange rate will eventually find its equilibrium. Once stable, the country can formally join the ERM II. The exchange rate may oscillate thereafter, but only within the specified range. Since the ECB is obliged under the ERM II to help through interventions, the country will be able to fulfil this requirement. In addition, it must meet the other normal requirements for readmission to the monetary union, in particular the posting of sufficiently small deviations in yields and inflation compared to the Eurozone average, as well as meeting all indebtedness criteria.

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[55] Citi Research, Global Economic Outlook and Strategy, 25 July 2012, p. 7, available at: <https://groups.google.com/forum/#!topic/brokeragesreport/WJWC3Wprr48>; M. Voss, 'Citigroup erwartet Griechenlands Euro-Austritt zum 1. Januar 2013', Focus, 26 July 2012, available at: <http://www.focus.de/finanzen/news/staatsverschuldung/90-prozent-wahrscheinlichkeit-fuer-grexit-citigroup-erwartet-griechen-austritt-am-1-januar-2013_aid_787927.html>; and D. Eckert, 'Was passiert, wenn die Troika den Stecker zieht', Die Welt, 27 July 2012, available at: <http://www.welt.de/finanzen/article108401579/Was-passiert-wenn-die-Troika-den-Stecker-zieht.html>.

Furthermore, it would be advisable to agree to a reform agenda with the country in question that would have to be fulfilled before a re-entry is possible. Nothing will convince the country's political forces of the necessity of reform more than the hope of their making possible a return to the euro.

There will, of course, be a host of technical problems. If the planned exit is leaked ahead of time, there will be bank runs, since depositors will try to withdraw all their money in order not to be affected by the currency conversion. In such a case, the conversion must proceed immediately and, if necessary, capital controls and a limitation of withdrawals from bank accounts have to be introduced, just as they were in 2013 in Cyprus. However, capital controls would not be necessary for long, for as soon as the conversion has taken place and the currency has depreciated, there would be no point in leaving the country, as the investors' wealth loss would have already occurred and could not be avoided by leaving. On the contrary, if the currency depreciation were to overshoot initially, as many believe it would, it would be attractive to bring funds whisked abroad back home to buy cheap domestic assets. If Cyprus exited the euro today, it could remove all of its capital controls tomorrow.

Fortunately, nowadays many if not most payments can be carried out electronically. Thus, the conversion of bank accounts, which can be carried out overnight, would achieve a fair amount of the necessary task. Nevertheless, bank notes are still of great importance to everyday life in most economies, especially in southern Europe. Their conversion is the most difficult part of the exit. Basically, there are three options for such a conversion:

The first option would be for the central bank to try to collect all the euro banknotes and exchange them for the new currency. But since the euro would continue to operate in the rest of the Eurozone, this option would necessitate permanent currency management, border controls, and a great deal of bureaucracy, since everyone would try to hoard euros and bring them out of the country. These problems mean that this option is not feasible.

The second option would be that all euro banknotes in the entire Eurozone, except for those of the exiting country, could be exchanged for new banknotes over a limited period. (Technically, old bank notes could be reused by being stamped accordingly.) Currency controls would only need to be in place by the end of the exchange period.

The third option would be to allow the euro as a parallel currency in the exiting country, in a similar fashion as is currently the case in eastern Europe or Turkey.[56] This would simplify the transition problem enormously. The new currency would be the only legal tender. All prices, wages, and debt contracts would be denominated in it, and it would be used for all electronic payment orders. However, cash transactions could still be conducted in euros, applying the new exchange rate. In this way, even if it proves infeasible to print all the necessary new-currency banknotes on time, cash transactions would still be possible.

One of the advantages of this solution would be that there would be no point in hoarding euros or even trying to bring them out of the country. Thus, no border controls and no capital controls like in Cyprus would be necessary. The danger of capital flight exists only before the conversion, but since this conversion is only virtual and does not affect the banknotes, it can be carried out over a weekend.

The new domestic banknotes, once printed, would in time crowd out most of the circulating euro banknotes, which would be used for purchases outside the new-currency country. The euros thus spent in the rest of the Eurozone would, in turn, crowd out the euros created there through refinancing credit and asset purchases. The economic effects would be very similar to those observed in the northern euro countries resulting from the extra refinancing credit that leads to net payment orders and Target debt, as discussed in Chapter 6. Thus, it would be appropriate to add the banknotes remaining in circulation after a currency conversion to a country's Target debt.

Let us consider the case of a Greek exit. In December 2013, the Greek Target debt amounted to € 50.0 billion, while its monetary base was € 37.9 billion. The latter included € 25.4 billion in statutory banknotes and € 10.8 billion in over-proportionate banknote issuance, as measured by Greece's intra-Eurosystem liability. If Greece were to exit, with statutory banknotes being exchanged into drachma, assuming that the rest had already diffused to other countries, the Greek central bank would have a € 60.8 billion liability vis-à-vis the Eurozone (= € 50.0 billion + € 10.8 billion). If, on the other hand, Greece were to keep the statutory euro banknotes, which could be used for

[56] There are numerous other proposals for parallel currencies. For example, the proposal to allow payment of all invoices in both the old and the new currency: B. Lucke and M. J. M. Neumann, 'Drachme als zweite Landeswährung einführen', *Handelsblatt*, 21 May 2012, available at: <http://www.handelsblatt.com/meinung/gastbeitraege/gastbeitrag-drachme-als-zweite-landeswaehrung-einfuehren/6656530.html>; and T. Mayer, 'Der Geuro', *DB Research*, 23 May 2012, available at: <http://www.dbresearch.de/PROD/DBR_INTERNET_DE-PROD/PROD0000000000288868.pdf>. Another example is the Matheo solution, according to which all Eurozone countries have a currency parallel to the euro in which domestic debt contracts and prices are denominated. See A. ten Dam, ' "The Matheo Solution (TMS)" kann den Euro retten', *ifo Schnelldienst* 64, No. 23, 9 December 2011, pp. 22–25, available at: <http://www.cesifo-group.de/DocDL/ifosd_2011_23_2.pdf>.

purchases in the rest of the Eurozone after the printing of drachmas, the Greek central bank's liability would increase by an additional € 25.4 billion. While this sum is not peanuts, it is small relative to the Target and intra-Eurosystem liabilities it has already incurred, and even smaller relative to all the funds lent to Greece so far, including the intergovernmental, IMF and EU funds which, as summarized in Table 8.1, amount to € 288 billion. If Greece defaults on its debt, the question of whether or not it also defaults on its statutory banknote liability is obviously of secondary importance.

A major issue is its foreign debt, since it is denominated in euros, but that is not something particular to an exit and an open depreciation. As discussed in Chapter 4, in terms of foreign debt there is no difference between an internal depreciation through price and wage cuts and an external depreciation after introducing a new currency. The increase in the debt-to-GDP ratio would be the same in either case. And it bears emphasizing once again: as difficult as the debt situation might appear after such a depreciation, it is the only possible way for the debtor country to develop a structural current account surplus and to pay back at least some of its debt. The road back to repaying foreign debt is always via a depreciation and, therefore, always via an initial rise in the debt ratio.

A plausible way to handle the debt of the exiting country would be to apply the *lex monetae*, according to which the country has the right to convert its foreign debt into domestic currency. While this is more difficult for Greece today than it was before, given that the haircut of 2012 implied a restructuring of Greek debt under English law, the new EU rules to be specified for this case would probably govern these agreements.

There is some concern regarding a surge of inflation after a devaluation that could wipe out the devaluation effect almost immediately. Some economists have argued that a depreciation for that reason is no help for the exiting country.[57] This concern would be justified if the depreciation occurred in an initial situation of competitive goods prices, but such is not the case with the Eurozone's distressed countries. These countries, through the inflationary credit bubble brought about by the euro, actually became too expensive, and are now stuck in the Eurozone with downward-rigid prices that are far above the equilibrium prices. Since an open depreciation removes a locking bolt that prevents prices in euro terms from falling to their equilibrium values, a bouncing back of the drachma prices nullifying this effect is not to be feared. Open depreciation would lead to inflation only if this depreciation went too far, pushing prices below their

[57] See B. Eichengreen, 'The Euro: Love it or Leave it?', *VoxEU*, 4 May 2010, available at: <http://www.voxeu.org/article/eurozone-breakup-would-trigger-mother-all-financial-crises>; M. Jacobides, 'Greece could become "the North Korea of Europe" ', *London Business School News*, 16 May 2012, available at: <http://www.london.edu/news-andevents/news/2012/05/Greece_could_become_%E2%80%9Cthe_North_Korea_of_Europe%E2%80%9D_1432.html>.

equilibrium level. However, if there were to be some inflation of drachma prices correcting this, there still would be a depreciation in net terms, helping the exiting country's economy.

Once depreciation and the necessary reforms had been conducted, a return from the ERM II to full euro membership would be relatively easy, because the banknote-exchange problem would not occur in the same form. After all, nobody would want to hide the national currency if it could not be used anywhere else; instead, those holding national notes would head for the bank to exchange them for euros. New euros sufficient for serving domestic liquidity needs could therefore be given to the country without incurring a liability to the Eurosystem.

The possibility of conducting an open devaluation is of crucial importance to the functioning of the Eurozone. On the one hand, the Eurosystem needs firepower in order to tackle balance-of-payments problems with fresh liquidity from the printing press. On the other hand, however, it needs hard budget constraints and interest spreads commensurate with each member country's creditworthiness in order to prevent excessive public and private borrowing and the emergence of economic bubbles. Both objectives evidently cannot be mutually reconciled within the Eurozone, as presently structured.

The ECB has denied the dilemma to date by pursuing a corner solution. It has disregarded the perverse incentives to the real economy and has merely tried to calm the markets by granting the countries experiencing balance-of-payments problems credit at ever lower rates of interest and with ever lower-quality collateral using the printing press, a policy which has subsequently led to numerous other fiscal and quasi-fiscal rescue operations. The anticipation of this policy by market investors triggered excessive borrowing in both the private and the public sectors in the first place, which, in turn, led to a loss of competitiveness among a significant number of member countries, turning them into a bottomless pit for the still-solid economies in the currency union.

Pursuing such a one-dimensional policy goal has been a serious policy error, because in the presence of rival objectives, but lacking separate policy instruments, a middle way would have been more sensible. This error can only be corrected if limits are set to financial support and if the possibility of self-help is opened through a temporary exit accompanied by devaluation. For this reason, it would be useful if the Eurozone became a more open currency union with an ordered procedure for temporary exits and subsequent readmission. This is the only way for the troubled countries to restore their economies to good health, and arguably the best way for the Eurozone as a whole to overcome its balance-of-payments crisis.

In addition to the economic advantages, there would be political advantages as well. No member country would be expelled or have to feel that its chances were slipping away for good. If the exit option were portrayed as a practical policy measure, rather than the end of the world, it could be managed and implemented in such a way so as to be advantageous for almost everyone concerned, with the possible exception of some financial investors. It would strengthen both cohesion in Europe and the peaceful coexistence of its peoples.

A building that can only be entered but not exited is a trap. The euro has turned out to be such a trap for southern European countries. They were lured in by low interest rates, enjoyed some growth, and then experienced the inflationary credit bubbles that deprived them of their competitiveness; now they are having great difficulties in bringing about the necessary real depreciation. A breathing currency union would open an escape route, providing a space where the dwellers live in peace with each other.

The Path towards Unity[58]

The motto of the United States of America is *'E pluribus unum': 'Out of many, one'*. Europe's motto is *'In varietate Concordia': 'Harmony in diversity'*, which is officially translated as *'United in diversity'*. It is hard to express the differences between the US and the European model any more clearly than this. The USA is a melting pot. Uncountable ethnic groups fused into a homogeneous American composite. Immigrants arrive and leave their nationality at the border, and metamorphose into a quintessential American. Europe, on the other hand, is a mosaic of different peoples and cultures that have developed over the course of its long, turbulent history, who strive for good neighbourly relations and share common traditions that range from science to religion. People tend to stay where they grew up, speak their own language, and cling to their birth place.

These differences raise the question of whether a United States of Europe is worth striving for. Many refuse to accept this concept because they do not believe in the possibility of a unified European identity. A single political system like the USA's

[58] This text contains passages, with the authorization of the publisher, from: H.-W. Sinn, 'Die europäische Fiskalunion', *Perspektiven der Wirtschaftspolitik* 13, 2012, pp. 137–178.

presupposes a common language and a single nationality. Europe, for that reason, could not be anything but a confederation for the foreseeable future.[59]

That view may be too pessimistic, though. After all, in the heart of Europe, the Swiss Confederation proves that different languages and cultures can live alongside peacefully and prosperously in a common nation.[60] Switzerland grew from a defence union into a decentralized state with strong cantons and limited fiscal power allocated to the centre, and of course it also has a common currency. Like the US, Switzerland is based on the no-bailout principle and has little redistribution between the regions. Up to this day, a common foreign policy and a common army are the central pillars of the Confederation.

The achievement of the EU itself should not be downplayed. It has allowed Europe to overcome its horrible past and has generated a long period of peace and prosperity that few people after the war would have dared dream of. The Common Market has brought about a better division of labour, with gains from trade for everyone. Small countries in particular have profited, as the market integration helped to overcome the disadvantages of smallness and allowed them to participate in the economies of large scale formerly reserved for the bigger countries. The common political system helped to establish the rule of law everywhere and brought many practical advantages for everyone despite the cultural diversity. These advantages include the right to move freely across borders, the free movement of goods and services, legal certainty for cross-border economic activities, an infrastructure that does not end at national borders, and, last but not least, common security interests. These advantages have attained such an overwhelming importance in the lives of many Europeans that there is no reason to call European integration as such into question. Incidentally, a good deal of European identity has emerged in the EU, coupled with respect for mutual cultural achievements, that should not be overlooked.

To be sure, the subsidiarity principle enshrined in the Maastricht Treaty[61] states that the economic decisions should be left to the lowest possible level, ideally even to the individual level. Only in justifiable cases may decisions be elevated to a collective level, but even then to the lowest possible level in that category. If the individual is not to decide, then the family; if not the family, the community; if not the community, the state

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[59] J. Limbach, 'Es gibt keine europäische Identität', *Frankfurter Allgemeine Zeitung*, 26 August 2012, available at: <http://www.faz.net/aktuell/feuilleton/debatten/europas-zukunft/jutta-limbach-ueber-europas-zukunft-es-gibt-keine-europaeische-identitaet-11868798.html>; R. Herzog, 'Die dürfen nur nicken', Interview by T. Hildebrandt and H. Wefing, *Die Zeit*, 25 September 2011, available at: <http://www.zeit.de/2011/39/Interview-Herzog/seite-2>; and R. Brüderle, 'BRÜDERLE-Interview für die Rheinische Post', Interview by M. Bröcker, *Rheinische Post*, 4 July 2012, available at: <http://www.liberale.de/content/bruederle-interview-fuer-die-rheinische-post-7>.

[60] EEAG, *The EEAG Report on the European Economy: The Road Towards Cohesion*, Munich 2014, chapter 2: *Switzerland: Relic of the Past, Model for the Future?*.

[61] See EU, 'Treaty on the Functioning of the European Union (TFEU)', 9 May 2008, article 5.

or province; then the country; and at the very end, the European institutions. Only close to the grassroots is the knowledge available that is needed for a proper solution, and only when the decisions are made at that level is the individual right to freedom guaranteed.

However, there are many justifiable exceptions that call for collective action. Along with the provision of infrastructure, defence, and basic economic freedom, there is the regulation of economic activities—after all, there is not much reason to hope that the competition among regulatory systems will select the best. More likely, the laxest will prevail.

The field of banking regulation is the most topical example. It was addressed in Chapter 8 in the section on banking union. If the rules and restrictions that banks must abide by are set at a national level, but banking risks are partially pooled by sharing the profits and losses from refinancing credit and asset purchases in the Eurosystem, the national regulatory bodies and the NCBs will always have an incentive to establish loose standards and provide generous credit, thus inducing excessive risk-taking, because the potential benefits accrue at home, while some of the potential losses fall on other jurisdictions. Regulatory competition degenerates into a competition in laxity. There are many similar examples from the fields of norms, taxation or income redistribution policies that have been examined in the fiscal federalism literature.[62] Therefore, many fundamental considerations speak for a deepening of the European integration process all the way to the establishment of a European confederation like Switzerland.

The perils of such a path always lie in the fact that collective decision bodies not only provide collective services that are useful for everyone, but can also abuse their power to redistribute resources between the participating countries. Democratic decision-making bodies are not immune. On the contrary, they make it possible for minorities to be exploited by the majority. In order to tackle this problem, special rules are needed to protect the minorities, such as a requirement for qualified majority or unanimity in decision-making. The fiscal decisions of the ECB Council discussed in this book represent a particularly dramatic example of this problem, because they are adopted by simple majority—and in the case of ELA credit fewer—by a body that is not democratically structured. This has led to a massive redistribution among the countries of Europe and from non-involved taxpayers in the still-stable economies to creditors around the world.

Redistribution can be understood as providing a collective benefit to all countries if it takes the form of protective insurance. After all, at its core every type of insurance is a

[62] See H.-W. Sinn, *The New Systems Competition*, Yrjö Jahnsson Lectures, Basil Blackwell, Oxford 2003.

redistribution system that transfers the resources of those who have been lucky so far to those suffering damages. But for this interpretation to hold, it is mandatory that the corresponding decision be adopted behind the veil of ignorance, i.e. *before* catastrophe strikes and *before* it is known who was lucky and who wasn't.

This is definitely not the case with the current redistribution decisions in the Eurozone, since they are being adopted after the damages have become apparent. In addition, such an insurance scheme was explicitly ruled out from the outset, in the Maastricht Treaty negotiations, by the no-bailout clause (article 125 of the TFEU).[63]

The Eurozone's course towards joint liability—which follows on from the ECB's prior decisions to extend generous refinancing credit to banks by dramatically reducing collateral standards and by deciding to buy government bonds through its SMP and OMT programmes—does not lead to the establishment of a federal state in the real sense of the word, i.e. to a union of equals who by their own will, decide to come together and provide mutual assistance. Instead it leads, if anywhere at all, to a unitary state that will come into being through a disregard of the wishes of the population and through the actions forced upon them by a technocratic body that acts wholly independently and that pre-determines parliaments' subsequent decisions.

This path cannot lead to the establishment of a United States of Europe because a large proportion of Europe's people do not agree to it. Both in the northwest and the east the largest countries do not want this, and it can be safely assumed that they will never voluntarily agree to the joint-liability union now in the making. In Denmark, the enthusiasm for joining has cooled just as much as it has in Poland, while in the Czech Republic and Sweden the dismissive attitude towards the Eurosystem has become even stronger. The assertion that the Eurosystem can lead to the establishment of the United States of Europe is unconvincing. The road towards a joint-liability union is more likely to lead to deep divisions in Europe.

That is the problem with the mutualization initiatives of the European institutions during this crisis. Insurance is demanded without having previously entered into an insurance contract, because, in denial of the Maastricht Treaty, it is assumed that the Eurosystem implicitly represents such a contract. In order to justify the sweeping collectivization measures that are currently being called for, a unitary political state would have had to have been established, one whose cohesive power goes even beyond

[63] See EU, 'Treaty on the Functioning of the European Union (TFEU)', 9 May 2008, article 125.

that of the United States or Switzerland, since these countries rule out the mutualization of state debts.[64]

Whoever cites Hamilton, and calls for Europe's still-solid economies to assume the debts of the crisis-hit countries, must perforce establish a European federal state with the full consent of its citizens first. At the very least, those footing the bill today must be able to assume that their children and grandchildren will be able to count on similar protection from the other member countries in a hundred years, when they themselves may be in need of support. Only a unitary state can credibly justify and guarantee such long-term commitments, ensuring that today's net recipients of help will not renege on granting their reciprocal support in future, when the need arises. The constitution of this state is the insurance contract.[65]

A federal state needs a common legal system, a common army to protect it from external threats, and a central power that ensures that the rules and obligations of the insurance contract are met. It needs a common government, a parliament built on the one-man-one-vote principle, and a second chamber representing the individual states. Fiscal equalization and interpersonal transfer systems can only be established once these conditions have been satisfied, because only then can they be perceived as mutual insurance. The greater the redistribution tasks, the higher the system's centrifugal forces and the stronger the central power needed to hold everything together. Learning from US and Swiss experience, debt mutualization should never be part of such a system.

There is absolutely no willingness to create such a federal state in Europe today. The common legal system and army, which are the first and foremost perquisites of such a state, will not be forthcoming as long as Europe is not threatened by external enemies who force it to unite. The French state would not agree to communitarizing its Force de Frappe. For the foreseeable future, the EU will remain an alliance of states devoid of a strong central power.

The EU has remained stable without a central power to date because no significant redistribution between the states has taken place. The entire EU budget amounts to just

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[64] Compared to other integrated economic areas, the Eurozone was designed as a confederation with little collective risk sharing and almost no delegation of sovereignty. Through the rescue measures it moved in the direction of collective risk sharing without increasing the delegation of sovereignty, leaving the path of stable degrees of integration because of the missing implementation of strong fiscal contracts and rules, as described in H. Berger, 'Die Logik der Währungsunion', in K. Konrad, R. Schön, M. Thum, and A. Weichenrieder (eds), *Die Zukunft der Wohlfahrtsgesellschaft—Festschrift für Hans-Werner Sinn*, Campus, Frankfurt 2013, pp. 57–76.

[65] An early proposal for such a constitution was made by A. Spinelli and E. Rossi, *The Ventotene Manifesto. For a Free and United Europe*, Milan 1943. For a more recent, explicit and restrictive draft of such a constitution, based on the EU's current decision-making structures, see European Constitutional Group, *A Proposal for a Revised Constitutional Treaty*, April 2006, available at: <http://www.freiheit.org/files/600/A_Proposal_for_a_Revised_Constitutional_Treaty_10.04.06.pdf>.

1% of GDP, which was perceived as advantageous all round, making everyone happy to go along with it. This seems to have been forgotten by many of those who advocate a transfer union without first founding a national state.

Those who advocate redistribution through the introduction of a fiscal union should be warned by the fate of the Soviet Union. The Soviet Union needed force to ensure cohesion despite the redistribution, but, as history has shown, this force contained the seeds of its own destruction. The Soviet Union was no fair mutual insurance system, whereby each state could bank on enjoying transfers from other states at some point.[66]

The USA and Switzerland, and not the Soviet Union, should be regarded as models for Europe. The USA has spent over 200 years developing its present system, Switzerland over 500. After their difficult initial years, they have evolved into fair, functional systems that largely respect fundamental freedoms, dispense with a debt union, and therefore function without an excessively strict central authority.

Whoever wishes to develop the Eurozone into a transfer and debt union that is even in a position to prevent state insolvencies should know that this will require much more central power than is available in the USA or Switzerland. Under such a system there would not be much room for freedom and the free will of the federal states. In the USA and Switzerland, the central governments cannot effectively limit the budgets of individual states or cantons. Instead, the regional bodies are left to settle up with their creditors alone if they have overcommitted themselves, and are ultimately left to declare insolvency. As paradoxical as this may sound, the risk of insolvency in fact is the stabilizing principle that holds everything together, because it invokes sufficient debt discipline to avoid insolvency in the first place, or to keep the debt small enough to make it manageable should an insolvency nevertheless occur. If regional entities borrow too much, investors will ask for higher interest rates, putting a brake on further borrowing and avoiding the kind of inflationary credit bubble that wrecked the southern European and Irish economies. Without such a self-correcting mechanism to prevent excessive capital flows, the currency union will never be able to stabilize itself. Political agreements among independent states will not be able to exert a similar kind of discipline as markets are able to enforce. It is utopian to believe that opportunistic, abusive behaviour in a debt union can be avoided by establishing a mere fiscal union.

Those wishing to start the formation of a European central state with a transfer and debt union that is only limited by a fiscal compact are playing a dangerous game. This path conjures up the threat of major conflicts and brings peril, which is anything but a contribution to peaceful co-existence. It turns friendly neighbour nations into debtors

[66] See also F. Heisbourg, 'EU arbeitet hart daran zu verschwinden', Interview, *Der Standard*, 17 April 2012.

and creditors. The conflict between debtors and creditors, which heretofore has always been solved in Europe at the private level using legal means, would be elevated to the level of states. This path does not lead to the wished-for United States of Europe, but to chaos, and brings enduring discredit to the European ideal. It would jeopardize the cooperation and integration achieved so far in Europe. The better Europeans are not the romantics, but those who seek realistic solutions that accord with the free will of the people, the laws of economics, and the free decisions of parliaments, without the latter being predetermined by technocratic bodies overstretching their mandate, and solutions that can be applied without a forced redistribution of wealth.

During its first few decades, the USA committed a number of dangerous errors that Europe would do well to avoid. Anybody who wants a United States of Europe should seek to replicate the economic principles of the United States of America as they are today, and not to repeat the errors of the past. Europeans should waste no time in setting off along this path.