## Does the Euro Need a State?

By Thomas Mayer, Frankfurt am Main

#### **Abstract**

Does the euro need a state? Not necessarily. EMU could be built along the lines of a gold standard, where

- the supply of central bank money by the ECB is inflexible (as a result of a link to gold or a fixed "k-percent-rule" of central bank money expansion);
- sight deposits in a certain amount are guaranteed by banks' holding of central bank reserves against them in the full amount;
- all other creditors to banks bear credit risk, and banks are not allowed to lend to governments in excess of regulatory limits to single credit exposures; and
- there are legally binding insolvency procedures for banks and states.

An EMU of this type would not allow an activist monetary policy to stabilize total demand and, by establishing a hard budget constraint for governments, it would set strict limits to the room for maneuver of fiscal policy. It would be left to governments to create the necessary economic flexibility for their economies to be able to adjust to economic shocks or, if they cannot do this, leave EMU.

It would, of course, be an illusion to believe that the above sketched model for EMU would be implemented. Politics cannot be economically abstinent; it needs meddling with the economy to justify its existence, preferably for the benefit of powerful vested interest groups. Hence, politics wants the euro as state debt money, even if electorates resist a state for the euro. But state debt money without a functioning state is unstable as it opens the door for the abuse of the money printing press. Thus, politics may succeed in keeping the euro, but hardly as a stable currency in the long run.

### Zusammenfassung

## Braucht der Euro einen Staat?

Braucht der Euro einen Staat? Nicht notwendigerweise. Die EWU könnte nach dem Modell des Goldstandards gebaut werden, in dem

 das Angebot an Zentralbankgeld durch die EZB unflexibel ist (infolge einer Anbindung an Gold oder einer festen "k-Prozent Regel" für die Expansion der Zentralbankgeldmenge);

- Sichteinlagen in einem bestimmten Umfang durch die volle Deckung mit Zentralbankreserven garantiert sind;
- alle anderen Bankgläubiger Kreditrisiken ausgesetzt sind und die Banken Kredite an Staaten nur bis zur Grenze für Großkredite vergeben können;
- es rechtlich verbindliche Insolvenzverfahren für Staaten gibt.

Eine EWU dieser Art würde einen aktvistische Geldpolitik zur Stabilisierung der Nachfrage nicht erlauben und dadurch, dass sie eine harte Budgetrestriktion für Regierungen errichtet, enge Grenzen für die Fiskalpolitik setzen. Es bliebe den Regierungen überlassen, die notwendige wirtschaftliche Flexibilität zu erzeugen, damit sich die Wirtschaft an exogene Schocks anpassen kann oder, wenn ihr dies unmöglich ist, die EWU verlässt.

Es wäre natürlich eine Illusion, zu glauben, dass das oben skizzierte Modell für die EWU verwirklicht werden würde. Die Politik kann nicht ökonomisch abstinent sein, sie muss sich in die Wirtschaft einmischen, um ihre Existenz zu rechtfertigen, vorzugsweise zum Nutzen wichtiger Interessengruppen. Deshalb will die Politik den Euro als staatliches Schuldgeld kreieren, auch wenn die Wähler einen Staat für dem Euro ablehnen. Staatsgeld ohne Staat ist jedoch instabil da es die Tür zum Missbrauch der Gelddruckerpresse öffnet. Die Politik mag zwar den Bestand der Euros gewährleisten können, aber sie kann ihn nicht langfristig als stabile Währung sichern.

# I. What is Money?

Standard economic text books explain the emergence of money in history as a result of the need to facilitate barter trade. For Adam Smith, "the propensity to truck, barter, and exchange one thing for another" is an essential feature of human nature. Because of this propensity, humans can specialize on productive activities they can do best and trade the results of these activities against those of others to obtain the range of products they wish to consume:

"In a tribe of hunters and shepherds a particular person makes bows and arrows, for example, with more readiness and dexterity than any other. He frequently exchanges them for cattle or for venison with his companions; and he finds at last that he can in his manner get more cattle and venison, than if he himself went to the field to catch them. From a regard to his own interest, therefore, the making of bows and arrows grows to be his chief business, and he becomes a sort of armourer."<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Smith, Adam (1776), An Inquiry into the Nature and Causes of the Wealth of Nations, Book 1, Chapter 2, Of the Principle which gives occasion to the Division of Labour.

 $<sup>^2</sup>$  Smith, Adam (1776), ibid., also cited in Graeber, David (2012), Debt: The first 5000 years. Melville.

Of course, for the armourer to be able to exchange his bows and arrows for cattle or venison he needs a companion willing to engage in the opposite trade. But he may have difficulties finding someone with the opposite preference and hence may not be able to carry out the exchange. His problem would be much reduced, if he could split the transaction into two parts: giving bows and arrows for "something", and then receiving cattle and venison against this "something" - which would be nothing more than a means of exchange. For a means of exchange to serve its purpose, it ought to be of a known and standardized quality and not able to be produced by those who use it for the acquisition of another good. If its quality varied it would lose its character of a universal good and regain that of a specific good and hence could no longer be easily traded against any other good. And if it could be easily produced by those who use it for a purchase the seller would doubt whether it really represented the value of the other good he is intent on acquiring through the sale of his own good. From the above it is clear that some goods better serve as means of exchange than others and we can understand why mankind over time developed a preference for precious metals for this purpose. The utility from precious metals as means of exchange can be improved, when the metal is stamped by a trustworthy agent to certify its quality and quantity. It is even better, when the metal can be stored at a safe place and paper notes certifying the deposit can be used as means of exchange. To sum up, according to standard economic textbooks, economic transactions are rooted in barter trade, and money is a means to facilitate barter trade.

The conventional narrative of economists of money as a means to facilitate barter trade has been challenged by anthropologists. According to *Graeber* (2012), economic exchange did not start with barter but was initially based on credit, and he quotes fellow anthropologist Caroline Humphrey: "No example of a barter economy, pure and simple, has ever been described, let alone the emergence from it of money; all available ethnography suggests that there never has been such a thing." Graeber reviews numerous studies of primitive societies, which describe economic transactions within these societies based on "give-and-take", or credit and debt, rather than barter trade. The latter comes into play in the special case when there is no trust among the economic agents, for example when economic exchange occurs between different tribes and not members of the same tribe. Graeber claims that "give and take" was also the dominant form of economic exchange in the pre-Christian societies of Mesopo-

<sup>&</sup>lt;sup>3</sup> See *Graeber* (2012), p. 29.

tamia and Babylonia. "Money" was only used as unit of account, and not as a means of exchange. It assumed this use only much later when trust within societies was lost and replaced by power. Graeber says:

"In fact, our standard account of monetary history is precisely backwards. We did not begin with barter money, and then eventually develop credit systems. It happened precisely the other way around. What we now call virtual money came first. Coins came much later, and their use spread only unevenly, never completely replacing credit systems. Barter, in turn, appears largely a kind of accidental byproduct of the use of coinage or paper money: historically, it has mainly been what people who are used to cash transactions do when for one reason or another they have no access to currency."

Whether our present day virtual money system originates from barter money or credit money is not only of academic interest. Our understanding of the nature of money has an important influence on how we organize our monetary order. Eucken (1989) distinguishes three types of money systems: (i) commodity money; (ii) debt money; and (iii) credit money.<sup>5</sup> Type (i) money refers to the classical economic description of a good becoming money by assuming the role of a means of exchange. The second type emerges when a private entity issues a certificate against the deposit of commodity money, or when the state issues token money to pay for goods and services. 6 The third type of money is created by the banking sector as deposit through the extension of credit in a fractional reserve money system. According to Eucken, all past and present monetary orders are a combination of the described money systems. In the money orders of the more distant past, commodity and debt money played prominent roles. Over time, however, these money systems have lost importance while the role of credit money has increased. Our present monetary order is dominated by the credit money system, which is created in a publicprivate partnership. Central banks try to steer the process of credit and money creation by setting interest rates on central bank reserves with a view to influencing credit demand via the impact of central bank rates on credit market rates.

<sup>&</sup>lt;sup>4</sup> Graeber (2012), p. 40.

 $<sup>^5</sup>$  Eucken, Walter (1989). Die Grundlagen der Nationalökonomie. Berlin/Heidelberg/New York.

<sup>&</sup>lt;sup>6</sup> To ensure acceptance of token money, whose nominal value generally far exceeds its production value, the state tends to declare this money as "legal tender", meaning that a creditor has to accept it from a debtor as settlement of the debt.

Fractional reserve banking creates two risks for depositors: First, the credit extended to create deposits may not be repaid so that the deposits are destroyed. Second, demand for "outside money" (i.e., money not created by the banks themselves) may exceed banks' reserves of outside money, making a withdrawal of a part of the deposits impossible. The two risks are not independent of each other. Concerns about credit losses, whether justified or not, may induce depositors to "run" on banks, depleting their reserves and forcing closure. "Runs" can be contagious, spreading from one bank to another, eventually affecting the entire banking sectors. That is why central banks were created. Endowed with the privilege to issue bank notes as legal tender, they were able to act as "lenders of last resort" to troubled private banks.

The Austrian school of economics argues that a monetary order based on a private credit money system inevitably produces credit cycles and hence leads to economic instability. By being able to offer credit funded with self-created money instead of savings, banks can induce investment that eventually cannot be fully funded by the available pool of savings. Since the production of investment goods takes time, the excess of investment over savings is not visible as long as the production process is not completed. However, at some point in the production process the pool of available savings is exhausted and interest rates rise. As a result, investment projects cannot be completed and are abandoned with the result that economic activity contracts. As banks, which have financed the investment, begin to tumble, the temptation is great for the state to intervene and to inject more money via its central bank to avoid an economic depression.

The founding history of the Swedish Riksbank, the oldest central bank in the world, nicely illustrates the origin of central banks as creations of governments. In 1656 the King of Sweden gave a license to a business man with name of Johan Palmstruch and his partners to found the first bank of Sweden. The bank borrowed 300,000 Specie Daler (a Norwegian silver coin) against precious metals, commodities, land and other valuables as collateral. With this capital the bank extended credit to the king and built a money printing business. The bank accepted copper coins as deposits and issued paper notes against them. As the notes were soon accepted as means of payment, the bank printed more notes than it received coins as deposits, expecting only a fraction of depositors wanting to exchange their notes back into coins at any given point in time. However, when the price of copper rose, more depositors wanted to exchange

their notes back into coins than the bank could accommodate. When the bank became unable to honor its notes in 1664, the government took over and promised depositors an exchange on demand in future. However, since they lacked the means to exchange the notes against coins at once they simply declared the notes as legal tender, forcing any creditor to accept them as settlement for a debt.

History has amply demonstrated that the creation of credit money by private banks eventually leads to a state central bank as backstop, which can replace inside money with outside money when trust in the former has been lost. For this to work, the outside money issued by the central bank needs to be declared legal tender by the state. But if the central bank can issue token money as legal tender it is only a small step for the state to employ it for the funding of its expenses. Before the great financial crisis direct lending by the central bank to the state had gone out of fashion because of past abuses. Instead, central banks lent indirectly to states by funding private banks' purchases of government bonds. Since the beginning of the great financial crisis the taboo has been broken and central banks have bought government bonds directly in rising amounts.

The recent closing of ranks between governments and central banks leads to irritation among those who see money primarily as a means of transaction as encapsulated in purest form in a commodity money system. From this point of view, fractional reserve banking is the original sin that ends with state debt money (token money issued by the state to fund its activities). Hence, advocates of private money propose a return to the gold standard coupled with the abolition of fractional reserve money through a hundred percent reserve coverage of demand deposits at private banks. By contrast, those who see the nature of money rooted in its function as a measure of credit advocate the move to a money order governed by a state debt money system. When fractional reserve banking is made impossible by introducing a hundred percent reserve requirement for deposits and money is created by central bank lending to the government, the financial system will be more stable and government finances stronger as seigniorage from money creation will no longer be shared with private banks but accrue to the government alone.8

 $<sup>^7</sup>$   $Huerta\ de\ Soto,$  Jesus (2011), Geld, Bankkredit und Konjunkturzyklus, Stuttgart, Chapter 9.

<sup>&</sup>lt;sup>8</sup> Benes, Jaromir/Kumhof, Michael (2012), The Chicago Plan Revisited, IMF Working Paper 12/202.

### II. A Monetary Order for EMU

As Economic and Monetary Union was launched without a corresponding state it was initially designed along the lines of the 19th century gold standard. The central bank was to pursue price stability as its only goal, forbidden to lend to governments, and put out of their reach. Consistent with their national sovereignty in key fiscal and economic policy areas, it was left to EMU member states to achieve the fiscal discipline, financial stability and economic flexibility necessary for orderly membership in such a demanding monetary system. The common currency was commodity money in character and the common central bank akin to an intelligent gold mine. With financial markets benign and credit amply available during the first decade of EMU members could ignore the requirements of sustainable membership and allow government debt and current account deficits to soar and external competitiveness to plunge.

When the downturn of the global credit cycle arrived in the euro area and caused a sudden stop of funding for several over-indebted states and economies, stronger EMU members and the Eurosystem of Central Banks initially set out to extend bridge funding for adjustment. However, as countries struggled to reach the goals of adjustment programs in 2010–11 and the prospect of government defaults and exit of countries from EMU became real, policy makers in 2012 began to change course and to build a new model for EMU. The new model that emerged – let's call it EMU 2.0 – no longer resembled the  $19^{\rm th}$  century gold standard model of EMU 1.0. Instead, it was designed along the lines of a state debt money system.

As explained above, in a monetary order dominated by state debt money the central bank is a lender of last resort to banks and governments. With its fixed rate, full allocation refinancing operations with maturities of up to three years, the ECB has lent to banks directly against a wide range collateral so that they could remain in business, and to governments indirectly by funding banks' purchases of government bonds. And with its program of Outright Monetary Transactions, the ECB promises to lend to governments directly. As its monetary activities reach into the domain of fiscal policy, it is only consequent that it enters into closer cooperation with governments at the euro area level by tying its government bond purchases to the approval of policies by the Eurogroup, by participating in the formulation of policy conditionality and subsequent policy surveillance, and by taking over the role of single supervisor of

euro area banks. In EMU 2.0, the ECB ceases to play the role of an intelligent gold mine it was given in EMU 1.0 and instead becomes a true state central bank. Its policy goals go beyond price stability and include financial and fiscal stability, and eventually also economic growth.

### III. A Shadow State for EMU

A state central bank obviously cannot function effectively without a state. Its activities stretch beyond the narrow range of pure monetary policy well into the classical fiscal policy domain of the state. Hence, in a monetary order dominated by a state debt money system the state and the central bank together form an economic government (where for obvious reasons the state is in the lead). Thus, since the beginning of the great financial crisis central banks in both the US and the UK have supported governments in satisfying their own funding needs, propping up financial institutions and improving access of non-financial entities to credit in a way going far beyond their realm before the crisis.

The problem for the role of the ECB as state central bank is that there is no official euro area state. Given electorates' wide-spread resistance against moving key areas of national sovereignty to the European level, policy makers in the course of 2012 set out to build a shadow state for the euro. The architecture of this state is a web of pacts and inter-governmental treaties (six-pack, two-pack, fiscal compact, etc.) that limit national sovereignty in the area of fiscal and general economic policy. The European Council of heads of states and governments has evolved as the government of the euro shadow state, with the Eurogroup (of Finance Ministers) as its executive arm and the so-called Troika (composed of the EU Commission, ECB and IMF) its task force. The ECB has become a partner to the euro shadow state, as is appropriate for a state central bank. The President of the ECB participates in the meetings of the Eurogroup, where policies for the euro are approved, and ECB staff participate in missions of the Troika, which designs policies and supervises execution. The central bank provides a (conditional) financial backstop to states having difficulties in accessing credit markets, and it will assume the role of single supervisor for euro area banks. The central banks objectives have effectively been broadened to include financial stability and fiscal stability in addition to price stability. It is only a matter of time until the ECB will also have to focus on "growth" to ease social tensions and protect EMU from centrifugal political forces. Thus, the governance

structure of the euro area has become much more similar to that of single states, such as the US or the UK. Because of this, spreads between government bond yields of periphery and core countries narrowed significantly during the second half of 2012.

### IV. Eurobellion

While financial markets applauded the move towards a monetary order for EMU closer to a state debt money system, resistance by electorates of euro area countries against this began to grow. Greece, Ireland and Portugal still accepted the authority of the Eurogroup and Troika and followed their policy advice (or at least made some efforts to do so). But already the Spanish authorities were reluctant to fully sub-ordinate their policy sovereignty to the euro shadow state. They relied on euro area help for the restructuring of the savings and loans sector, but abstained from applying for ECB support in the context of the central bank's OMT program, which would have required approval of their policies by the Eurogroup.

However, a more serious challenge to the authority of the euro shadow state emanated from the Italian elections on February 24-25 this year. The result, which brought a hung parliament, sent two clear messages to policy makers in Italy and Europe: 1. a vote of no confidence in Italy's political establishment; and 2. a rejection of the euro shadow government. The first message was contained in the surge of the anti-establishment Five-Star-Movement to Italy's biggest single party, the second in the disappointing outcome for Mario Monti, the leader of the "technical government" that replaced the Berlusconi government at the end of 2011. Voters rejected Monti not only because of his austerity policies that brought increases in taxes and cuts in social benefits, but also because they regarded him as the local representative of the euro shadow government. Rebellion against the euro shadow government also played a role in the initial rejection of the Eurogroup's bail-out package by the parliament of Cyprus, although the authority of the Euro shadow government was restored eventually. In the end, it is the larger countries, notably Italy and Spain, which have the ability to emasculate the euro shadow government. The ECB will not be able to withdraw monetary support to these countries when they do not follow the policy instructions from the euro shadow government and let them drop out of the euro as this would threaten the existence of EMU. Although Spain has been in the focus of financial markets it is Italy with its volatile and unstable political situa-

tion that could de-throne the euro shadow government and call the ECB's bluff when its economy fails to recover in the course of this year.

From the point of view of euro-skeptic, anti-establishment political forces in Italy, the ECB could do more to help the country, if it intervened aggressively in the Italian bond market to substantially lower interest rates and, as a by-product of monetary easing, also brought down the exchange rate of the euro. If these forces gained hold of the government against the background of a deteriorating economy, they could threaten a referendum on Italy's EMU membership in case their demand was ignored. Scared about the financial and economic crisis an Italian exit from EMU would provoke, the euro shadow government and the ECB would probably accommodate Italian wishes, subject to only token conditionality for Italian economic and fiscal policy.

### V. Three Scenarios for EMU

In 1991, one year before the signing of the Maastricht Treaty, Otmar Issing, who later became the first chief economist of the ECB, said that no monetary union of sovereign states in history has survived without eventually being backed by political union. The present crisis of EMU would seem to support Issing's skepticism. The effort of leading politicians to quickly build a shadow state for the euro is the logical response to the crisis. But what if the shadow state is rejected by the sovereign, the electorates in the EMU member countries? It seems that this opens three paths for the future development of EMU.

First, a jump forward to a political union and a money order tilted towards a state debt money system. Significant parts of fiscal and general economic policy that are presently under national sovereignty would have to be surrendered to a democratically legitimate body at the euro area level. In return there would be more common liability for public debt and a full backing of the supra-national body by the ECB in emergencies (i.e., the ECB would issue state debt money if needed to ensure fiscal and financial stability). It would seem that this path is the most likely one, given that policy makers have already proceeded to build a shadow euro state. However, in view of the resistance of electorates against the shadow state, a move towards full political union will face very stiff headwinds. Should politicians push it through against the will of national electorates it may well result in a dysfunctional union, where different majorities in the chambers representing common and national

interests block each other, as is presently the case in the US or Italy. Hence, a political union imposed from the top against resistance from the bottom would hardly seem to represent a stable platform for EMU

Second, the return to the Maastricht principles of EMU 1.0 and a money order tilted towards a commodity money system, i.e., a quasi gold standard. This would require first the withdrawal of the ECB from its "non-standard monetary policy" measures, including the OMT program, as soon as possible and a narrow interpretation of its role as single bank supervisor (leaving the responsibility for financial stability largely in the hands of national governments). Second, the ESM could be turned into a true European Monetary Fund (EMF), giving only short-term liquidity support to countries and banks in financial distress and managing an orderly insolvency for over-indebted entities. In exceptional circumstances the EMF, and not individual countries, could receive short-term financing from the ECB to resolve a liquidity crunch. The ECB would retain price stability as its sole objective and responsibility for fiscal and financial stability as well as policies to foster economic growth would remain at the national level. Since any help by the EMF would be strictly limited in time, say three years, a country unable to return to financial or fiscal stability within this time frame would have the option to leave EMU. Third, EMU could eventually move to a quasi gold standard, where the stock of central bank money is highly inflexible (fixed by a "k-percent rule" of expansion or even tied to gold by a fixed Euro price of an ounce of gold). To end the role of the ECB as a lender of last resort to systemically important banks and governments, banks could be forced to back sight deposits in a certain amount completely with central bank money reserves, leaving all other bank creditors fully exposed to credit risk, and banks could be banned from lending to governments in excess of the usual limits of exposure to single creditors<sup>9</sup>. This would seem to offer a stable platform for EMU, akin to the gold standard that prevailed roughly from 1815 until the beginning of WWI in 1914, but also demand a high degree of economic discipline from its members.

Third, a muddling through with a continuing erosion of the authority of the euro shadow state and increasing reliance on ECB support through ELAs and the OMT program (with policy conditionality retained only in name). This path would lead to a monetary order dominated by a state debt money system without a functioning state, akin to the Ruble Zone

<sup>&</sup>lt;sup>9</sup> See *Mayer*, Thomas (2013), A Copernican Turn for Banking Union, CEPS Policy Brief No. 290, 14 May 2013.

that existed in the wake of the collapse of the Soviet Union in 1991. After the former Soviet republics had regained national sovereignty they decided to keep the ruble and the former Soviet central bank system as common currency and central bank. However, they failed to move national sovereignty to the supra-national level to create state-like structures at the Ruble Zone level so as to coordinate fiscal and general economic policies with monetary policy. The resulting lack of policy discipline at the national level resulted in a competition for central bank credit by national central banks. The Russian central bank, which was at the centre of the system, for a while tolerated central bank credit extension at the level of the republics in order to keep the Ruble Zone together. But as inflation increased, the Baltic countries with a preference for lower inflation and a stronger currency left the Ruble Zone in 1992. Weaker countries followed later and the Ruble Zone effectively ended in 1993, when Russia had a currency reform in that year. The Ruble Zone had of course much weaker political ties than EMU member countries have today, and towards its end inflation surged to very high levels, which are not in sight in the euro area. Hence, the process of disintegration would be much slower for EMU, lasting many years instead of only two. But without a functioning political structure at the euro area level and the ability of national governments to live up to the requirements of membership of a quasi gold standard, a fate like that of the Ruble Zone is the most likely future of the euro area.

#### VI. EMU Redux

Would EMU eventually disappear without any remnants like the Ruble Zone did when it followed the third of the possible scenarios described in the previous section? Because of the strong political will to stay together this seems unlikely.

As argued above, a common central bank and weak supra-national political structure is likely to lead to excessive central bank credit extension in a currency union of sovereign states. Members with a preference of low inflation and a hard currency are likely to leave first. Hence, excessive central bank credit extension to stabilize weaker systemically important EMU member states could lead to higher inflation in the stronger members, notably Germany. It is conceivable that these countries could move towards inflation indexation of financial contracts to avoid the undesired redistribution of income and wealth from creditors to debtors associated

with higher inflation. Indexed contracts could eventually be redenominated into a new, virtual currency, when inflation would threaten to become ingrained. Such a currency could exist only as book money, with cash remaining in euro. 10 Clearly, such a move would be difficult for countries that have invested a lot of political capital in EMU, such as Germany, but it would be easier for countries with little political capital in EMU, e.g., Finland. Should Germany eventually find it against its national interest to remain in EMU, a partial exit via a virtual parallel currency would perhaps be just politically acceptable – and certainly much preferable to a full exit – to other EMU member countries, notably France.

Weaker countries could find it opportune to introduce a parallel currency to the euro that allows them to monetize part of their government debt and regain international competitiveness through depreciation of this parallel currency against the euro. In fact, capital controls and restrictions to cash withdrawals introduced during the crisis in Cyprus already temporarily separated euro assets held in Cyprus from those in other EMU countries. To make this arrangement permanent without capital controls, euro assets in Cypriot banks could have been redenominated into a separate currency – call it C-euros – and be made tradable against euros. When a new, lower value of the C-euro against the euro would have been established, controls could be lifted and the C-euro could exist alongside the euro. Parallel currency schemes along this line could be useful for other countries suffering from an overvalued exchange rate and insufficient backing of euro liabilities with viable euro assets.

#### VII. Conclusions

So, does the euro need a state? Not necessarily. EMU could be built along the lines of a gold standard, where

- the supply of central bank money by the ECB is inflexible (as a result of a link to gold or a fixed "k-percent-rule" of expansion);
- sight deposits up a certain amount are guaranteed by banks' holding of central bank reserves against them in the full amount;
- all other creditors to banks bear credit risk, and banks are not allowed to lend to governments in excess of regulatory limits to single creditor exposures; and
- there are legally binding insolvency procedures for banks and states.

<sup>&</sup>lt;sup>10</sup> See Mayer, Thomas (2012), "Trapped in the EMU?", CESifo Forum 13 (4), 59-63.

An EMU of this type would not allow an activist monetary policy to stabilize total demand and, by establishing a hard budget constraint for governments, it would set strict limits to the room for maneuver for fiscal policy. It would be left to governments to create the necessary economic flexibility for their economies to be able to adjust to economic shocks or, if they cannot do this, leave EMU.

It would, of course, be an illusion to believe that the above sketched model for EMU would be implemented. Politics cannot be economically abstinent; it needs meddling with the economy to justify its existence, preferably for the benefit of powerful vested interest groups. Hence, politics wants the euro as state debt money, even if electorates resist a state for the euro. But state debt money without a functioning state is unstable as it opens to door for the abuse of the money printing press. Thus, politics may succeed in keeping the euro, but hardly as a stable currency in the long run.

### References

Benes, Jaromir/Kumhof, Michael (2012), The Chicago Plan Revisited. IMF Working Paper No. 12/2012.

Eucken, Walter (1989), Die Grundlagen der Nationalökonomie, Berlin, Heidelberg, New York.

Graeber, David (2012), Debt: The first 5000 years. Melville.

*Huerta de Soto*, Jesus (2011), Geld, Bankkredit und Konjunkturzyklus. Stuttgart *Mayer*, Thomas (2012), Trapped in EMU, CESifo Forum 13 (4).

 (2013), A Copernican Turn for Banking Union, CEPS Policy Brief No. 290, 14 May 2013.

Smith, Adam (1776), An Inquiry into the Nature and Causes of the Wealth of Nations