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Which lender of last resort for the eurosystem?

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Working Paper

Otto Steiger

Which Lender of Last Resort for the Eurosystem?

B 23
2004

Which Lender of Last Resort for the Eurosystem?

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September 2004

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Abstract

Which Lender of Last Resort for the Eurosystem?

The paper want to demonstrate how to organise central banking in a monetary union of independent nations, with emphasis on the role of the central bank as lender of last resort. Section I presents the first proposal for a decentralised central banking system in a monetary union by the Swedish economist Erik Lindahl in 1930, as well as that in 1989 for the Eurosystem, the centrepiece of European Monetary Union (EMU), by Carlo Ciampi, then President of the *Banca d'Italia*. Both proposals emphasised the necessity of a strong and powerful central monetary authority. Section II demonstrates that EMU lacks a central monetary institution, because the European Central Bank (ECB) is neither a bank of issue nor can it act as a lender of last resort. Section III discusses how to overcome this fundamental deficiency of the Eurosystem, arguing that the missing central fiscal authority in EMU is as much an Achilles heel as the "narrow" ECB.

JEL Classification: E 58, E 63

Which Lender of Last Resort for the Eurosystem?[*]

Otto Steiger[**]

September 2004

"Fundamentally, there can be no such thing as an independent central bank. For the central bank to perform well, it needs to be backed by and backed up by an effective fiscal authority. In this relationship, the central bank is, inevitably, the junior partner" (Willem H. Buiter 2004, 1).

I How to organise central banking in a monetary union?

In his book on monetary theory and policy of 1930, *Penningpolitikens medel* (The means to monetary policy),[1] the Swedish economist Erik Lindahl (1891-1960), founder of the famous Stockholm School of Savings and Investment, discussed the necessary conditions of how to organise a single currency for a monetary union of independent nations (Lindahl 1930, chapter V, § 4, 170-179). His analysis built on what happened to the two great monetary unions before the First World War, the Latin Monetary Union (LMU, 1865-1927) and the

[*] Updated version of a paper originally presented at a Conference in Honour of Hajo Riese, *Monetary Policy in a World with Endogenous Money and Global Capital*, Freie Universität Berlin, 23-25 March 2001. The contribution draws on and further develops the views in Heinsohn and Steiger 2000, 2002, and 2004, and Steiger 2002 and 2004.

The updated version was presented at a Conference in Honour of Basil Moore; see Steiger 2004. The revised sections I, III and IV of Steiger 2004 are presented in this contribution, while a new and expanded version of section II of Steiger 2004 will be presented as Steiger 2005.

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[1] Abbreviated translation as "The Rate of Interest and the Price Level", in: Lindahl 1939, 139-268. Unfortunately, the translation omitted the famous § 4 of the original in which Lindahl had outlined his decentralised central banking system. The section was entitled "Monetary policy in different countries with a single paper or gold currency standard".

Scandinavian Monetary Union (SMU, 1873-1924).[2] Both unions were based on the classical gold standard (1870-1914), and their collapse was induced by the break-down of the standard during World War One. As first pointed out by Knut Wicksell (1851-1925), Sweden's most famous economist, the final dissolution of SMU, consisting of Denmark, Norway and Sweden, was caused by the missing of "a true *central bank* for all three countries" (Wicksell 1917, 78; and see 1923, 177 f.)[3] – an institution which also LMU had failed to establish (Cristina Nardi Spiller, 2003, 50 f.)[4].

In his discussion of such a single central bank, Lindahl as the first economist in history developed a *decentralised central banking system* for a monetary union. This system should consist of (i) the national central banks (NCBs) of the union's member countries and (ii) a "central bank of the [national] central banks" or "main central bank" for all countries. Both types of central banks should be tied together into a single central banking system based on the following rules: while the NCBs had the right to issue notes "as means of payment for domestic use only", the main central bank had the right to issue notes "as means of payment for liquid transactions between the countries". The latter banknotes Lindahl called "international notes" (1930, 170).

Why two types of banknotes, domestic and international, and not only one? Lindahl's answer was twofold. First of all, he wanted to implement a single monetary policy through a control of the NCBs by the main central bank allowing the latter to determine the refinancing of the former in the same way as the NCBs determined the refinancing of their domestic commercial banks. In Lindahl's proposal, the NCBs "would be forced to sell and buy international notes at *par*, wherefore they should hold such notes as cash and whose amount they could regulate by increasing or decreasing their credit at the main central bank" (Lindahl 1930, 170).

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[2] See the detailed discussion by Michael Bordo and Lars Jonung 2000, 23-30.

[3] I owe this references to Lars Jonung, European Commission, Brussels.

[4] Although Nardi Spiller does not mention the missing single central bank for LMU explicitly, her explanation is the same as that of Wicksell: In LMU, "the greatest problem was *the absence of* co-ordination of national economic[monetary] policy, with the establishment of *suitable organisations* to achieve this. This deficiency led to disparity in interest rates, and differences in price levels …. In this complex scenario, economic systems were afforded no protection from potential fluctuation or virtual disequilibrium, and so were rather *vulnerable*" (Nardi Spiller 2003, 50; my emphases).

However, there was another reason for Lindahl's two types of notes in his central banking system. Lindahl knew that in a monetary union of different nations, business cycles and, thereby, price levels often diverge. Therefore, the main central bank should be able to differentiate the rate of interest according to such divergences. A higher (lower) rate of interest for the NCB of a boom (stagnation) country would lead to a curbing (stimulation) of its credit to that NCB and, by a corresponding curbing and stimulation of the NCBs credits to their domestic banks, smooth business cycles and price levels in the monetary union.[5]

Lindahl was convinced that the possibility of a higher rate of interest in one country would not "disturb capital markets in other countries". However, he thought that "such a differentiation of credit would perhaps fail because of *political* considerations" (Lindahl 1930, 171; my emphasis).

Political considerations as an obstacle to the functioning of a monetary union, Lindahl recognised also in his discussion of the fact that monetary stability could not be guaranteed by the monetary authority alone but, in addition, by the fiscal authority, especially through the balance of its budget.[6] Therefore, he warned that his comparison, of the relation between the main central bank and the national central banks on the one side with the relation between a national central bank and its domestic banks on the other, suffered from a decisive weakness. "A central bank for several nations is not supported by a central governmental power but has to base its action on agreements between the nations. Therefore, it is difficult to conceive of a co-operation between the governments of different nations and the main central bank as intimate as between central bank and government within a nation" (Lindahl 1930, 171). The most recent political squabbles in Euroland confirm most clearly that Lindahl was right: *e.g.* (i) between the European ministers of finance (ECOFIN) and the European Commission culminating in the latter's decision to file ECOFIN at the European Court of Justice on 13

[5] The problem of the huge differences in *real* rates of interest in EMU was first discussed by Dieter Spethmann (2003, 521-530). Spethmann and Steiger (2004) analyse whether and how monetary policy in Euroland is able to smooth the differences; see also Augusto Graziani (2004).

[6] Lindahl was the first economist in history who recognized that a public deficit adds to aggregate investment and a surplus to aggregate savings; see Steiger 1987, 196.

January 2004 – a case that has been decided in favour of the Commission on 13 July 2004 –[7], and (ii) between ECOFIN and the Council of Governors of the Eurosystem – the centrepiece of EMU consisting of the European Central Bank (ECB) and twelve NCBs – on how to interpret the rules of the Maastricht Stability and Growth Pact for the euro's stability. As will be shown in section III below, for the survival of EMU it is not sufficient to have a powerful central bank for the euro area: also a strong, central European Treasury is necessary.

The mine-infested learning field for properly running a decentralized central banking system was provided, however, not by a monetary union of independent nations but a *national* federation: mankind's first such institution, the United States' Federal Reserve System (*Fed*), which was in action between the Federal Reserve Act of 1913 to the Banking Act of 1935. It was definitely a system without a central monetary authority. The seven members of the Board of Governors in Washington were restricted to tasks of coordination of the System's twelve regional Reserve Banks with no influence whatsoever on monetary policy. The System proved to be unsuitable to fight the severe banking crisis in the wake of the Great Depression, with ca two thirds of the US banks running into bankruptcy between 1929 and 1933.[8]

Only with the Banking Act of 1935 were the lessons of all that went wrong with the first Federal Reserve System finally drawn. The quagmire preceding this profound reform was admirably described by Milton Friedman and Anna Jacobson Schwartz in their famous study of 1963 (391): "There was nothing that could be called a System policy. The System was demoralized. Each Bank was operating on its own. All participated in the general atmosphere of panic that was spreading in the financial community and the community at large. The

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[7] However, the new Commission established after the elections to the European Parliament in June and taking up its activities on 1 November 2004, has already indicated to interpret the deficit rule of the stability pact less strictly, *i.e.* more in accordance with the ideas of ECOFIN.

[8] In the early years discount lending was the primary tool of monetary policy in the *Fed*, with individual Banks having considerable discretion to set discount rates. It was not until the early 1920s that the potential of open market operations was discovered. Therefore, in the spring of 1922 the Committee of Governors on Centralized Execution of Purchases and Sales by Federal Reserve Banks was established to coordinate – without interference by the Board – the actions of the System. This Committee was reconstituted as the Open Market Investment Committee (OMIC) in 1923. It consisted of representatives of the Boston, New York, Philadelphia, Cleveland and Chicago Reserve Banks, under the chairmanship of the New York Bank. The OMIC was dissolved in 1930 and reconstituted as the Open Market Policy Conference composed of the Presidents of only the twelve Reserve Banks. As a reaction to the severe banking crisis in the wake of the crash of 1929 at Wall Street, the Banking Act of 1933 established the Federal Open Market Committee (FOMC) consisting of representatives of the twelve Reserve Banks and the Board of Governors. Even then, however, the Governors did not get a vote in open market policy.

leadership which an independent central banking system was supposed to give the market and the ability to withstand the pressures of politics and of profit alike and act counter to the market as a whole, these – the justification for establishing a quasi-governmental institution with broad powers – were conspicuous by their absence".

The Banking Act of 1935 brought a powerful centralization characterising the second Federal Reserve System: "Only after authority was definitely centralized in the hands of the Board of Governors and the Federal Open Market Committee did the new institution finally come to operate smoothly" (Eichengreen 1992, 14). The Act altered the FOMC's composition to give the Board not only a vote, but also a permanent majority in open market policy. It reduced the representation of the Reserve Banks to five members, with the President of the New York Bank as the only permanent member. Furthermore, the Act assigned a very powerful role to the New York Bank – with 40 percent of all assets the biggest Bank in the System. While the other eleven Banks were still allowed to issue Federal Reserve notes and even to set discount rates, New York alone was empowered to execute open market operations and assigned the responsibility of the System's lender of last resort.

The new Federal Reserve System worked so well that it became a model for history's third and fourth decentralised central banking system, the Bank Deutscher Länder System (BdL) of West Germany, which started with the introduction of the deutschmark in 1948, and its follower in 1958, the Deutsche Bundesbank System. Both systems consisted of a strong central bank located in Frankfurt am Main and the eleven West German states' central banks, the Landeszentralbanken (LZBs). The eleven LZB-Presidents, together with the six Executive Directors of the BdL respectively the Bundesbank, formed the Council of Governors, the Zentralbankrat. Yet, the Directors clearly ruled the roost because they could make decisions without waiting for the Council's consent. More importantly, the BdL and the Bundesbank had the monopoly to issue banknotes. Therefore, they alone executed open market operations and relegated the LZBs to mere branch offices. Because the German central bankers had learned the American way so well, the deutschmark became for Europe what the dollar had achieved in the world.

When European politicians began to plan a monetary union they entrusted, at the European Council meeting at Hannover on 27 and 28 June 1988, a Committee chaired by Jacques Delors, then President of the European Commission, "the task of studying and

proposing concrete stages leading towards economic and monetary union". The resulting report was distributed to experts who delivered their comments between September 1988 and April 1989, after which both report and experts' papers were collected in a publication known as the "Delors Report" (Delors Report, 1989). The proposal for an institutional framework managing this union, EMU, was christened in the report as *European System of Central Banks* (ESCB). The Maastricht Treaty of 7 February 1992 still used that name. At the start of EMU, on 1 January 1999, it was changed to *Eurosystem*.[9] The central banking system outlined was brief and vague: (i) "This new System […] could consist of a central institution (with its own balance sheet) and the national central banks" (§ 32, 25). (ii) "The ESCB Council would determine the broad lines of monetary policy and the Board [of the central institution] would be responsible for its day-to-day execution" (§ 33, 27).

The all decisive relation between the new central monetary institution and the NCBs was left to three experts in papers attached to the Delors Report. Of them only Carlo A. Ciampi (1989), President of the Banca d'Italia and now President of Italy, discussed both elements of the Eurosystem.[10]

Ciampi's proposal of how to organize central banking in EMU took into account the breakdown of Europe's earlier monetary unions – especially LMU and SMU – as well as the quagmire of the old Federal Reserve System. They had failed because they lacked a central monetary institution. Therefore, Ciampi developed a model of central banking which was very similar to Lindahl's proposal of 1930, the most important difference being that the main central bank alone would be allowed to issue banknotes. Ciampi's system consisted of three levels: "the central monetary institution, national central banks and commercial banks". In this hierarchy, the central monetary institution would be placed at the top and "act as the central bank of the national central banks" (Ciampi 1989, § 10, 227), while the latter would maintain their present relationships with domestic commercial banks. If Ciampi's proposal had been followed, it would have meant the first establishment of a two-stage central banking

[9] From this time onward, the term ESCB relates to the ECB and *all* fifteen NCBs of the European Union (EU), *i.e.* it includes also the NCBs of Denmark, Sweden and the United Kingdom which are not members of EMU. As of 1 May 2004, due to the EU enlargement by 10 new member States, the ESCB will also include the NCBs of the Chech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia.

[10] The other two were Niels Thygesen, a Danish economist, and Jacques de Larosière, the later President of the International Monetary Fund (IMF).

system in history.

The System implied three fundamental components: (i) the central institution would have an autonomous balance sheet allowing it to take operational decisions; (ii) it would have the monopoly of issuing ECUs, today called *euro*; (iii) it would control the NCBs' demand for ECUs in credit operations with the latter. *"To bring the creation of ECUs ... under strict control, the central monetary institution should be given the power to grant member central banks discretional credit in ECUs, in the same way as a central bank refinances commercial banks through open market or rediscount operations"* (Ciampi 1989, § 15, 228; my emphasis). This meant that the NCBs could not create ECUs but would have been forced to obtain them by delivering good securities to the central institution and depositing there "*compulsory* and *free reserves*" (1989, § 16, 228). Unlike Lindahl, Ciampi neither discussed the necessity to differentiate credit nor the need for a strong, central fiscal authority in EMU.

In Ciampi's ingenious plan, the NCBs would indeed have suffered a severe "loss of monetary autonomy" (1989, § 30, 232). The prospective European currency, however, would have thrived. Yet, nothing of this proposed structure of the Eurosystem made it into the Maastricht Treaty or the Statute of the ESCB and the ECB. These documents paved the way for the NCBs' domestic monopoly to issue notes alongside with the ECB in the Eurosystem. As will be shown in section II below, the supposedly central bank in Frankfurt am Main, however, has nothing whatsoever in common with a central monetary institution.

However, such an institution is the very rational for a system of central banking, whether centralised or decentralised: to act as a *lender of last resort* for illiquid commercial banks to forestall a severe financial crisis. And if a central monetary authority is lacking in EMU, how to overcome this problem? And what about the missing central fiscal authority in EMU in this context? Unfortunately, neither Lindahl nor Ciampi addressed at all the role of the central monetary institution as lender of last resort in a monetary union. These questions will be postponed to section III below.

II Does there exist a central monetary institution in the European Monetary Union?[11]

From the four decentralised central banking systems discussed in section I above – the first and second Federal Reserve System, the BdL and the Bundesbank System – it is the Federal Reserve System of 1913, for good reason demolished in 1935, with which the Eurosystem has the strongest resemblance. However, there is one difference between the old *Fed* and the Eurosystem that has helped to confuse the experts. The Washington based institution consists – before and after 1935 – only of the Board of Governors while the Executive Board at the Frankfurt entity also entails a bank with its own balance sheet – the European Central Bank.
A quick glance at the ECB's first balance sheets for 1999 and 2000 (ECB 2001a, see *table 1* below) immediately reveals, however, that this bank in *no* way whatsoever is a *bank of issue*. What is the decisive difference between a mere commercial bank without the right to issue notes and a bank of issue? The former has to refinance at the bank of issue. Therefore, the latter's asset side is dominated by an item called "lending to credit institutions related to monetary policy operations", and its liability side by the items "banknotes in circulation" and "liabilities to financial sector" (minimum and free reserves of commercial banks), the latter two forming what is called central bank money.[12] The ECB's balance sheet as at 31 December 2000 does neither have "lending to credit institutions related to monetary policy operations", nor central bank money. Thus, the ECB is clearly *not* a bank of issue, *i.e.* it is excluded from the main refinancing operations of the Eurosystem. To have a balance sheet of its own, which the ECB indeed has, is not sufficient to meet the requirements of a bank of issue. Notwithstanding its exclusion from major refinancing operations, the ECB, in its official document *The Monetary Policy of the ECB*, stubbornly misleads the public. "The ECB is the monopoly supplier of central bank money and, by virtue of this monopoly, the ECB can set

[11] In my discussions with Hajo Riese, he always was perplexed about my view that the ECB is not a central bank. After reading this section, he hopefully will be convinced.

[12] In the Eurosystem, the uniformity of central bank money that neither notes of nor deposits at the central bank ("liabilities to financial sector") carry interest is destroyed. Other than in the Federal Reserve System and the former Bundesbank System but in accordance with the practice of several European central banks before EMU, *e.g.* that of the Banca d'Italia, minimum and free reserves at the NCBs bear interest.

Table 1: Balance Sheet of the ECB as at 31 December 2000 (€ million)

Assets	2000	*1999*	**Liabilities**	2000	*1999*
Gold and gold receivables	7,041	*6,957*	Liabilities in euro	4,789	*1,382*
Foreign currency	41,300	*44,518*	Liabilities in foreign currency	4,803	*4,709*
Other claims	4,654	*6,540*	Intra-Eurosystem liabilities (equivalent to the transfer of foreign reserves)	39,468	*41,190*
Intra-Eurosystem claims	13,080	*0*	Other liabilities	1,680	*1,540*
Other assets	1,264	*1,468*	Provisions	2,637	*22*
Loss for the year	0	*247*	Revaluation accounts	7,973	*6,860*
			Capital and reserves	3,999	*4,027*
			Profit for the year	1,990	*0*
Total assets	67,339	*59,730*	***Total liabilities***	67,339	*59,730*

Source: ECB, *Annual Report 2000*, Frankfurt am Main: European Central Bank, 2001, 172-173.
(Due to rounding, totals may not add up).

the refinancing conditions to credit institutions in the euro area" (2004b, 30).

Is the ECB, then, "a central bank of the national central banks" as proposed by Ciampi? To qualify as a "main central bank" (Lindahl) it has to have on the asset side an item called "lending to national central banks" and on the liability side one called "liablities to national central banks". Again, both these items are missing from the ECB's balance sheet. The ECB, therefore, has no means to control the lending of euronotes brought into circulation by the NCBs. With respect to repurchase transactions, which provide the bulk of money to the financial sector and are executed regularly each week with a maturity of one week, the ECB states unequivocally in its document *The Implementation of Monetary Policy in the Euro Area* (2004a, 18, my emphases): "*they are executed* in a decentralized manner *by the national central banks*". Longer-term refinancing operations, too, are exclusively left to the NCBs. These transactions, aimed at providing additional refinancing to the financial sector, are executed regularly each month and have a maturity of three months.

What banking operations, then, can the ECB perform at all after it is excluded from main and longer term operations as well as from "structural reverse operations" aimed at adjusting the structural position of the Eurosystem *vis-à-vis* the financial sector? The ECB may be called into action in four operations necessary to deal with unexpected changes in the level of liquidity in the markets: (i) *fine-tuning reverse operations* to smooth the effects on interest rates caused by sudden liquidity fluctuations; (ii) *outright transactions* for structural and fine-tuning purposes; (iii) *foreign exchange swaps* consisting of simultaneous spot and forward transactions of the euro against foreign currency and used for fine-tuning purposes; (iv) *collection of fixed term deposits* in order to absorb liquidity. Even these four operations shall normally be executed by the NCBs. However, "the Governing Council of the ECB will decide whether, *under exceptional circumstances*", these operations "*may* be executed by the ECB" (2004a, 18-22, my emphases). Though these cases handled by the ECB are truly exceptional ones, the Board still cannot take action on its own but has to wait for the Council's decision making. Until now, the ECB has not been involved in these four operations. Otherwise it would have shown respective positions in its balance sheet. Therefore, no euronotes have been created by the ECB.[13]

In the history of central banking, the ECB is the first central bank without banknotes on its liability side. This embarrassing innovation did really hurt the Governing Council of the

[13] There is, however, one case in which it may appear as if the Board can act independently: the *issuance of ECB debt certificates* to absorb liquidity from the market. Even these certificates, however, "are tendered and settled in a decentralized manner by the national central banks" (2004a, 21). As its balance sheets until today reveal, such issuance by the ECB has so far not taken place.

A case of genuine ECB independence is related to the handling of standing facilities in the Eurosystem, the *marginal lending facility* (to obtain overnight liquidity) and the *deposit facility* (to make overnight deposits). Although these facilities too are executed by the NCBs, the ECB may set the interest rate for them or even suspend them at any time (2004a, 24 f.). Marginal lending, in any case, plays a very limited role. It seldom exceeds a level of € 400 million, which represents about two per thousand of the Eurosystem's total refinancing.

Another exceptional operation, by which the ECB may create euronotes, is not discussed in the ECB's *Implementation of Monetary Policy in the Euro Area* (2004a). The ECB could create banknotes in the case of intervening in the foreign currency market by buying and, thereby, increasing its main asset "foreign currency" (€ 41.3 billion in 2000). Yet, this item is not owned by the ECB. It is administered by the NCBs which allow the ECB – however, again only after a decision by the Council – to operate with a modest fraction of all their foreign currency (€ 275 billion in 2000). Therefore, the ECB's main item on the liability side are "Intra-Eurosystem liabilities equivalent to the transfer of foreign reserves" (€ 39.5 billion in 2000).

Until today, the ECB has not created any euronote. It did not buy foreign currency but was forced to sell it in several interventions in the autumn of 2000 to slow the bewildering fall of the Euro. Consequently, the ECB's holdings of foreign currency shrunk by nearly 10 percent. The decrease in this item would have been even bigger if the value of the remaining stock, mainly consisting of dollar, would not have been increased by the corresponding rise of this currency.

Eurosystem – especially in the wake of the introduction of euro banknotes as from 1 January 2002. Therefore, on 6 December 2001, the Council came up with a no less surprising remedy. Not only the NCBs but also the ECB "shall issue banknotes" (ECB 2001b, 1) without, however, changing anything in substance. What does that mean?

The Council simply stated: "The ECB will be *allocated* a share of 8% of the total value of the euro banknotes in circulation from the start of 2002, while 92% of the euro banknotes will be issued by the 12 NCBs". At the same time, however, the Council confirmed that – as practiced until 31 December 2001 – the twelve NCBs exclusively will continue to "put into and withdraw from circulation ... *all* euro banknotes, *including those issued by the ECB"* (ECB 2001b, 1; my emphases).[14]

The statement is intentionally awkward and yet very clear. Awkward because it conveys the impression of genuine note issuing at both the NCBs and the ECB. Clear because it is careful to use two different terms – (i) "put into circulation" for the NCBs but "issue" for the ECB. Yet, the ECB does not itself "issue" eight percent of the euro banknotes, rather eight percent of all notes issued by the twelve NCBs are statistically allotted to the ECB's balance sheet. Therefore, the ECB from the start of 2002 has not become a bank of issue in its own right. Whereas before 2002 the ECB was a central bank only by name, overnight it has become a central bank by balance sheet. Even this additional qualification cannot conceal , however, that the ECB at the best is a torso of a central bank – not to speak of a central bank by mere window dressing.

In the first published new balance sheet as at 31 December 2002 (see *table 2* below) – blown up from € 68 to 90 billion in just one year – the ECB, for the first time in its history, presents itself as a bank of issue. On the liability side one finds an item not seen before – "banknotes in circulation" and at a value of € approximately 29 billion. What is the corresponding item on the asset side? Lending to credit institutions and/or NCBs related to

[14] Why did the Council allot just *eight* percent of the total value of the euro banknotes to the ECB's balance sheet? According to Jürgen Stark, Vice President of the Bundesbank, it was determined by a simple rule of thumb, not as could be assumed according to the ECB's share of the total assets of the Eurosystem – € 67 billion out of € 835 billion or 8.02 percent at 31 December 2000. The total value issued by the twelve NBCs was divided through thirteen because the ECB is number 13 in the Eurosystem. The resulting 7.69 percent was rounded-up to eight percent (Heinsohn and Steiger 2002, 27). Thus, what will appear as notes issued by the ECB under the item "banknotes in circulation" in its new balance sheets from 1 January 2002 onward is indeed a misleading label.

Table 2: Balance Sheet of the ECB as at 31 December 2002 (€ million)

Assets	2002	*2001*	**Liabilities**	2002	*2001*
Gold and gold receivables	8,058	*7,666*	*Banknotes in circulation*	**28,681**	***O***
			Liabilities in euro	1,264	*1,293*
Foreign currency	37,316	*41,235*	Liabilities in foreign currency	5,192	*5,858*
Other claims	3,231	*4,028*	Intra-Eurosystem liabilities (equivalent to the transfer of foreign reserves)	40,497	*40,497*
Intra-Eurosystem claims *(a) related to the allocation of euro banknotes within the Eurosystem*	**28,681**	***O***	Other liabilities	1,493	*1,853*
(b) others	5,468	*9,697*			
Other assets	7,512	*5,535*	Provisions	2,645	2,803
			Revaluation accounts	4,405	9,*429*
			Capital and reserves	4,870	*4,506*
			Profit for the year	1,220	1,822
Total assets	90,268	*68,061*	***Total liabilities***	90,268	*68,061*

Source: ECB, *Annual Report 2002*, Frankfurt am Main: European Central Bank, 2003, 198-199; my emphases.
(Due to rounding, totals may not add up).

monetary policy operations? Not at all! Instead, one finds a particular innovative category: "*Intra-Eurosystem claims related to the allocation of euro banknotes within the Eurosystem"* (my emphasis) at € 29 billion. How is this never-heard-of item explained to the public? "This item consists of the claims of the ECB *vis-à-vis* the euro area NCBs relating to the allocation of euro banknotes within the Eurosystem" (ECB 2003, 205).

The last remnants of respectability reflected in the 6 December 2001 decision – letting the NBCs "put into circulation" whereas the ECB "issues" – is gone for good. Hidden in a statement in the ECB balance sheet's "accounting policies", the Bank casually informs: "The ECB *and* the 12 euro area NCBs have *issued* euro banknotes as from 1 January 2002" (ECB 2003, 203; my emphases). This already goes a long way in fooling the trustful reader of the

Annual Report 2002. Yet, the costume of the impostor of a bank of issue still needs some mending. This comes in another statement in the "accounting policies": "The ECB's share of the total euro banknote issue is *backed by claims on the NCBs*" (ECB 2003, 203 f.; my emphasis). Suddenly the ECB looks like an incarnation of Lindahl's "main central bank" or Ciampi's "central bank of the national central banks", *i.e.* that the ECB grants credit to the NCBs. A mere statistical allotment of the ECB's twelve mothers to their helpless daughter is turned into the rare case of a dowry given by the daughter to the parents.

Somehow it was sensed that a misleading name – *Central* Bank – and a threadbare balance-sheet costume of a bank of issue were not sufficient to pull the wool over the eyes of Euroland's citizenry. The name of the Governing Council, the determination of the rate of interest and the volume of central bank money as well as the design of the euro banknotes – everything cried out to be assigned to the ECB to make it look like the central monetary institution of the Eurosystem.

To secure at least a rudimentary central banking activity for the ECB one could, indeed, have thought of giving it the power to determine the single monetary policy in the Eurosystem. After all, the individual NCBs have lost their autonomy in setting the rate of interest for refinancing. Who does set the rate of interest in the Eurosystem and who determines the amount of liquidity to be allotted in the tenders to be executed by the NCBs?

This is done by the Council of Governors of the Eurosytem which, however, is not the "Council of the *ECB*" as its official name suggests. The Executive Board of the ECB does not form a council of its own but is a minority group in the Council. As Board it functions only as an intermediary, a vicarious agent, between the 18 member Council, in which the six directors of the Board sit together with the twelve NCB Presidents, and the NCBs which implements the Council's policy. Other than the Board of the Federal Reserve System or the Directorate of the former Bundesbank, the ECB's Executive Board cannot take any independent decision.[15] In every respect it is controlled by the Council, which until now has merely

[15] In contradiction to most euro experts (Heinsohn and Steiger 2000, 83-85, and 2002, 13 f.), it has been clearly understood by Paul de Grauwe that the use of the label ECB as a synonym for the Eurosystem is misleading: "The Governing Council is the main decision-making body of the Eurosystem. […] The ECB is only a part of this system, and cannot take decisions of its own about monetary policy in Euroland." It is "the NCBs [who] carry out these decisions in their own national monetary markets" (2003, 164 f.). On the other side, de Grauwe holds the view that one should not exaggerate this problem of decentralisation and, therefore, continues to use the label ECB as a synonym for the Governing Council. Unfortunately, he neither mentions that the ECB

assigned the ECB some 1,200 employees out of over 60,000 in the Eurosystem.

In its official documents on the monetary policy of the Eurosystem (ECB 2004a and 2004b), the ECB is ambiguous on who exactly determines what. In both documents (2004a , 27-37; 2004b, 79-84) it gives the conflicting impression that it is the ECB as well as the Council of Governors who specify in advance the interest rate and the amount of liquidity to be allotted in tenders to be executed by the NCBs. A closer look at the Eurosystem's tender procedures clearly reveals, however, that it is the Council who rules the roost – leaving to the ECB the role of vicarious agent. "The interest rate is *specified* in advance by the Governing Council", which also "*indicates* in advance the volume to be allotted in forthcoming tenders" (ECB 2004b, 80 and 82; our emphases).[16] As the Council only meets once a month for monetary policy decisions, whereas the tenders are executed every week, the ECB has, of course, a margin in deciding the total amount of central bank money to be allotted. Notwithstanding this margin, it is *not* true that "the ECB decides on the amount of liquidity provided" (ECB 2004b, 80). At the best, the ECB can only modify by degree what the Council has determined in advance.

The NCBs do not only have the majority in the Council, but also in the committees

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is not a bank of issue nor discusses – see below, section III – the problem of the missing lender of last resort in the Eurosystem.

Also Emmanuel Apel (2003, 4) recognises that the Governing Council "is the highest decision making body of the Eurosystem." However, in his discussion who is responsible for monetary policy operations, he sometimes uses the confusing label "ECB/Eurosystem" (2003, 42). This misleads him to assign the decision on the amount of liquidity to be allotted in tenders to "the ECB Executive Board" and only the decision on the repo rate to "the ECB Governing Council" (2003, 85 and 89). However, as shown above, *both* decisions are assigned to the Council, although the Council only "indicates" once in a month how much central bank money should be supplied, leaving to the ECB Board some room for the volume in the weekly executed tenders.

On the other side, Apel (2003, 42, 50, 143 and 183), is aware of the problem of the missing central lender of last resort in the Eurosystem. However, his statement that "the current situation in the eurozone does not explicitly allow the ECB to provide liquidity support to individual banks" (2003, 183), ignores the more fundamental problem that to do so the ECB has to be re-established, first of all, as a bank of issue (see above).

[16] A definite decision on how the amount of liquidity will be allocated to the NCBs was made by the council first on 6 December 2001: "As from 1 January 2002, ... each NCB will show in its balance sheet a share of the euro banknotes issued corresponding to its paid-up share in the ECB's capital" (ECB 2001b, 1).

As shown by Gianfranco Vento (2004, 89), during the first months of single monetary policy, German banks obtained more than 60 % of the total amount of liquidity allotted by the Eurosystem's main refinancing operations (MROs), while the Italian banks got only 18.3 %. The fact that their share fell to as low as 4 % in the first months of 2003 reveals, however, that that the council's decision has not been transformed into action. Vento (2004, 89 and 91) explains the wider recourse of the German banks to the MROs with the narrow German interbank market dominated by the four largest commercial banks. Out of 307 bidders for euro central bank money during 2000, 200 were from Germany and only 18 from Italy.

which prepare its decisions. Their experts are indispensable because they collect the necessary information from the national markets which the Council and the ECB's directors have to rely on. Yet, this highly decentralized nature of the decision making process and its results in the monetary aggregates of the Eurosystem's 13 central banks cannot be seen by the public. Most importantly, both the ECB and the NCBs are explicitly forbidden to publish up-to-date statements of the balance sheets of the individual central banks. All they are permitted to let the public see is the weekly statement of the consolidated balance sheet of the Eurosystem. Only in their annual reports are the ECB and the NCBs allowed to publish their own balance sheets as at 31 December.[17]

The lack of centralisation in the Eurosystem is mirrored by the absence of a European supervision and regulation authority for the financial markets. The responsibilities are left entirely to the national authorities which do not even act under a common set of rules. Moreover, the exclusive right to authorize the issue of banknotes within the Eurosystem does not lie with the ECB but, again, with the Governing Council (Article 16 of the Statute of the ESCB and the ECB).[18]

There is some reflection of the alarming lack of power of the ECB which the Maastricht Treaty reveals in its Article 73f – unchanged as Article 59 in the Amsterdam Treaty. This Article states that in the case of a currency crisis the Council of the European Community (ECOFIN, *i.e.* the ministers of finance of the fifteen member states of the EU) can suspend capital flight out of the euro, a decision concerning which the ECB is only consulted.

Notwithstanding all the missing qualities of a central monetary institution, the Frankfurt entity at least succeeded in impressing the European public with the design of the euro banknotes circulating from the start of 2002. All these notes appear as if they were issued by the ECB. They only carry its initials in all the different languages of the EU – "BCE ECB EZB EKT EKP" – and the (illegible) signature of the ECB's President *alone*. (Like bonds,

[17] However, as has been pointed out to me by Juha Tarkka, Head of the Research Department of Suomen Pankki, the Central Bank of Finland, Suomen Pankki does not bother about this rule but publishes monthly statements of its balance sheet.

[18] It has to be mentioned, however, that the Maastricht Treaty in its Article 105a states that "the ECB shall have the exclusive right to authorize the issue of banknotes" – unchanged as Article 106 of the Amsterdam Treaty of 17 June 1997.

banknotes should carry the signature of *two* governors of their bank of issue!). Only the euro*coins* are marked with national symbols indicating that they are issued by the national governments. Any hint to the effect that it is the NCBs which issue the euronotes is omitted. This blunt decision to conceal the ECB's impotency regarding the issue of banknotes was taken by the Governing Council on 11 September 1998. The desperate attempts of the Bundesbank to make the Eurosystem follow the Federal Reserve System, in which every dollarnote can be traced back to its bank of issue, were deliberately stalled by the Council. The Bundesbank had made the proposal to name the bank of issue above the serial numbers in the upper half of the twelve star circle of the EU printed on the reverse of the notes: "With one exception the banknotes are […] identical: each note has a section indicating the bank of issue" (Deutsche Bank, 1998, 10; Deutsche Bundesbank, 1997, 21). Both sources expose the exclusion of the public from the discussion whether there should be national logos on the euronotes.

What possible reason did the Council have for violating the fundamental rule for every debt title – of which the banknote is one variety – to clearly indicate its issuer? The Italian economic historian Luca Einaudi (1999, 15) has tried to reconstruct the decision behind closed doors. The national layouts of the eurocoins were seen "fully adequate to satisfy reasonable requests of national identity within a common framework". An analogous extension of national symbols on euronotes, however, "would create the risk of a re-nationalisation of the currency". Because the Council knew perfectly well that the euro was issued by the NCBs, it very well understood that any crisis in one nation would lead to a problem – a fact well known from the period of private banks issuing notes of the same denomination. Their notes were not always exchanged at *par* but, due to the reputation of the bank, with a discount or an agio. "If a member country of EMU were faced with a political or economic crisis a form of discrimination against the euro banknotes of that country could appear, reintroducing a sort of discount and therefore an exchange rate fluctuation, which would cancel the benefits of the single currency". The mere symbols of nationality were feared as unnecessary concession to national sovereignty, aimed only to support "those wishing to prevent any real union from being formed", thereby weakening the chances of success of EMU.

Einaudi's judgement was later confirmed by Hans Tietmeyer, as President of the

Bundesbank a member of the Governing Council of the Eurosystem in September 1998: "National symbols on coins posed relatively few problems. National symbols on euronotes of some countries, I felt, would have *endangered* their *acceptance* in the others" (Tietmeyer 2001, 9; my emphases).

All these hideous efforts to make the ECB look like the powerful center of the Eurosystem are, however, doomed to fail. Since every expert will be able to identify the bank of issue by the serial numbers printed on the notes, the public at large will feel cheated and lose precisely the confidence the wise Council tried to embellish.[19]

Worries about a crisis-induced re-nationalization of the euro that led to the omission of the banks of issue on the euro banknotes are not only justified for political reasons but even more so for violations of the principles of central banking when it comes to collateral demands for the issue of euronotes. Despite the ECB's declaration in its document on *The Implementation of Monetary Policy in the Euro Area* (2004a, 39) that the Eurosystem's credit operations should be "based on adequate collateral", the details clearly reveal that the ECB's standards fall alarmingly below the demands of the former Bundesbank. The report does not define only one type of assets against which euronotes can be issued. Instead, it divides them in two groups, "tier one" assets and "tier two" assets.

While the first group covers marketable debt titles that are used all over the euro area and controlled by the ECB,[20] the second one refers to marketable *and non marketable* titles

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[19] The different national central banks were put in alphabetical order according to their nations' name in official language and then provided with the letters of the inverted alphabet which was put before the banknotes' serial numbers on the reverse, *e.g.* Belgium – *België / Belgique* – as alphabetical first nation got the last letter, **Z**, and Finland – *Suomi* – as alphabetical last nation the 12th letter from the end, **L**. The only exception from this rule was made later for an EU nation which in 1998 was not considered at all because at that time nobody thought it would meet the Maastricht criteria: Greece – *Ellas* – which as alphabetical third nation got the second letter from the end, **Y**. In 1998, this letter had been reserved for Denmark – *Danmark* – as alphabetical second nation but who will not join EMU in the near future, as will be the case for Sweden – *Sverige* – and Great Britain & Northern Ireland – *United Kingdom* – who got the letters **K** and **J** respectively. Letters like **Q** and **W**, which do not exist in some languages, or **B**, **I** and **O**, which can be confused with numbers, were deleted.

A complete list of the Euro notes according to the different nations' banks of issue runs as follows: **Z** = *België / Belgique*, **Y** = *Ellas*, **X** = *Deutschland*, **V** = *España*, **U** = *France*, **T** = *Ireland / Eire*, **S** = *Italia*, **R** = *Luxembourg / Luxemburg*, **P** = *Nederland*, **N** = *Österreich*, **M** = *Portugal*, **L** = *Suomi / Finland*.

There does not yet exist a letter for the ECB, of course, because until now it has not issued any euro banknote.

[20] Taking effect from the first quarter of 2004, the marketable tier one debt instruments have been classified in four categories of decreasing liquidity which are subject to specific *"valuation haircuts"* according to their residual maturity (percentages referring to 0-1 years and over 10 years): (i) assets with high liquidity (central government and central bank securities = 0.5-8.5 %), (ii) assets with limited liquidity (local and regional

used in certain EMU countries only and deemed financially sound exclusively by their NCBs. Of the tier two assets, it is the category of "non marketable debt instruments" issued by the *public* sector which gives reason for concern, because these titles with restricted liquidity imply a privilege for State owned banks which are closely connected with public authorities and, therefore, a circumvention of the Maastricht Treaty's sound prohibition to favour such entities by allowing them credit facilities with their NCBs.[21] It goes without saying that such close links violate sound principles of central banking: a central bank must not accept as underlying assets debt instruments issued by its counterparties, or by any other entity with which the counterparties have close links (ECB 2004a, 41; and see Heinsohn and Steiger 2004, section I, and Steiger 2004). Therefore, the Bundesbank has excluded these titles, not only of German but also of other public authorities in EMU. After all, they comprise the amount of € 57.7 billion in the Eurosystem (ECB 2001a, 188), most of them accumulated before the start of EMU and which can be used on a cross-border basis to obtain fresh money at any NCB.

The ECB is not in the dark about the risks of non marketable "tier two" assets, and of the significant losses they could imply for the Eurosystem. But it hopes that the risks can be controlled by " *'valuation haircuts'* ", *i.e.* "deducting a certain percentage from the market value of the underlying asset. […] In addition, national central banks may apply *limits* to their acceptance of tier two assets, may require *additional guarantees* and may at any time decide

government securities, jumbo *Pfandbrief*-style instruments, supranational and agencies securities = 1-12 %), (iii) assets with restricted liquidity (traditional *Pfandbrief*-style instruments, credit institution and corporate securities = 1.5-15 %), and (iv) assets with restricted liquidity and special features (asset backed securities = 2-18 %); see ECB 2004

[21] While the European Monetary Institute (EMI), the forerunner of the ECB, in its report on *The Single Monetary Policy in Stage Three* (1997, 23) still insisted on a complete disclosure of high risk collateral of public institutions, the ECB – hidden in a footnote (2004a, 42, fn. 18, my emphasis) – has left it to the NCBs whether to inform the public: "For non marketable tier two assets and debt instruments with restricted liquidity and special features, national central banks may decide *not to disclose information* on individual issues, issuers/debtors or guarantors in the publication of their national tier two lists."

We are no longer surprised that with respect to "tier two" assets – by the way also with respect to "tier one" assets – public banks are privileged: "this provision does *not apply to close links between the counterparty and the public authorities* of EEA [European Economic Area, *i.e.* EMU members plus Norway, Iceland and Liechtenstein] countries (including the case where the public authority is a guarantor of the issuer)" (2000, 43, fn. 30; my emphasis; and see 41, fn. 16).

to *remove* individual assets from their tier two lists" (ECB 2004a, 46 and 50).[22] Yet, valuation haircuts for tier two assets are at the disposal of the Eurosystem which, in contrast to the ECB, has not been vested with legal personality. They are not at the disposal of the ECB which, because of its tiny personnel, in any case could not perform such a vital function. Thus, in the end it is each NCB which controls itself.[23]

The most bizarre violation of the principles of central banking in the design of the Eurosystem, however, is the simple omission of the very rationale of a central bank, its responsibility as lender of last resort. Both in the treaties of Maastricht and Amsterdam as well as the Statute of the ESCB and the ECB it is not even mentioned. In the different documents of EMI and ECB on the single monetary policy in the Euro area, it is not discussed either. Already in 1992, Folkerts-Landau and Garber criticised that the "Statute mandates the maintenance of price stability as the explicit primary objective of the ECB", while "the maintenance of a stable financial and payments system … is not an explicit objective". Correspondingly, the Statute "defines *a 'narrow' ECB – a central bank shirking basic banking functions such as lender-of-last-resort to financial markets and the payment systems*" (Landau-Folkerts and Garbert 1992, 86 and 103; my emphasis). Six years later, at the dawn of the start of EMU, the International Monetary Fund (IMF) repeated this criticism. "The lender-of-last-resort responsibility has not been assigned to any institution in EMU; consequently, there is no central provider or coordinator of emergency liquidity in the event of a crisis" (Adams, *et al.,* 1998, 106).

Most recently, the IMF emphasised that, unlike the prime objective of price stability in the Eurosystem, the Federal Reserve System in recent decades "was *first* the ensurer of financial stability and *then* the manager of monetary stability". However, "the ECB has no

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[22] Taking effect from the first quarter of 2004, also tier two debt instruments have been classified in four categories of decreasing liquidity which are subject to specific *"valuation haircuts"* according to their residual maturity (percentages in categories (i) and (ii) referring to 0-1 years and over 10 years, and in (iv) up to 6 months – trade bills – respectively between 6 months and 2 years – bank loans): (i) marketable assets with limited liquidity (assets with a small secondary market = 2-18 %), (ii) marketable assets with restricted liquidity and special features (some marketability only = 4-25 %), (iii) marketable assets with high liquidity but also high risk (equities = 22 %), and (iv) non-marketable assets with little or no liquidity (trade bills = 4 %, bank loans = 12-22 %, mortgage-backed promissory notes = 22 %); see ECB 2004a, 48-50).

[23] In his most recent discussion of the use of collateral in Eurosystem monetary operations, Gianfranco Vento (2003, 86-90) misses the role of the NCBs in controlling the eligibility of tier two assets. Like so many other euro experts, also Vento adheres to the false view that "main refinancing operations are conducted by the ECB" (2004, 73).

responsibility for ensuring financial stability"– and no other institution in EMU either. "The ECB has a mandate for ensuring smooth function of the target payment system within Europe. […] This mandate is not insignificant, but it does not encompass financial markets stability as such. To summarize, there exists a sharp contrast between a broad central bank in the United States and a narrow central bank in EMU" (Garry Schinasi 2003, 7 and 13 f.).

In the Eurosystem, there does not exist an equivalent to the Federal Reserve Bank of New York. The ECB's means to procure a solution to a banking crisis at the EMU level are negligible in comparison with that of the New York Bank. On the other side, the decentralized organization of the Eurosystem leaves neither NCBs nor national governments clearly responsible for supervision of pan-European banks or for ensuring EMU-wide financial market stability. "As European banking groups emerge, the question of whether national central banks could adequately assess the risk of contagion and whether the home country central bank of each bank could be easily identified will become increasingly relevant. In addition, decentralized lender-of-last-resort policies may create an uneven playing field and introduce different levels of moral hazard across EMU" (Adams, *et al.,* 1998, 110).

III How to solve the problem of the missing central lender of last resort in the Eurosystem?

The missing lender of last resort-responsibility has been most extensively discussed by several authors in Charles Goodhart's (2000a) famous collection of essays, *Which Lender of Last Resort for Europe?*. Tommaso Padoa-Schioppa, Italy's executive member of the Board of the ECB, expresses his confidence that the existing institutional framework of the Eurosystem is effective enough to manage financial crises. Most of the contributors, however – Michel Aglietta, Alessandro Prati and Garry J. Schinasi, Franco Bruni and Christian de Boissieu, Rosa Maria Lastra as well as Lorenzo Bini Smaghi –, regard the national (NCB) level for lender-of-last-resort responsibility as a sub-optimal solution. They strongly demand a more centralized arrangement in which a *single* institution – either a European one or the ECB itself – takes on a leading and coordinating role in the management of crises. On the other side, Dirk Schoenmaker (2000) and Goodhart himself (2000b) have no trust in centralization

as such because – as will be shown below – there exists no central fiscal authority in EMU, which in any severe case has to form the final line of defense in euro area-wide lender of last resort-operations. Therefore, it would be best to leave the responsibility at the national level.

However, as emphasized earlier by Folkerts-Landau and Garber, lender of last resort-operations in EMU cannot be undertaken by the NCBs because of unfavourable monetary effects. "It will be more difficult for national central banks to resist calls to come to the assistance of a local banking than for a multi-national ECB. Thus, even if the monetary effects of a liquidity operation by a national central bank could be undone by the ECB, it is nevertheless advisable to control banking operations from the centre. Nor could the ECB rely on its ability to avoid a systemic crisis by financing a group of European banks to form a 'lifeboat' to assist a bank or a group of banks in need of liquidity. The diversity of banks across member countries and the lack of cohesion among these banks rules out such operations" (Folkerts-Landau and Garber 1992, 101). What the authors do not understand, however, is that to act as a lender of last resort the ECB has to be re-established as a true bank of issue, a function which – as we have seen in section II above – it does not dispose of. Furthermore, for such operations the ECB's small own capital of only € 4.87 billion (as at 31 December 2002) has to be increased considerably.

Most interestingly, the Bundesbank has recognized the missing lender of last resort in the Eurosystem, thereby contradicting the earlier view by Hans Tietmeyer, then member of its Directorate and from 1993 its President. In 1991, Tietmeyer had emphasized that "if too many tasks were to be assigned to the European Central Bank this could complicate the conduct of monetary policy. The ESCB [the Eurosystem] should be free, therefore, from responsibilities other than those for monetary policy. In particular, banking supervision […] should be left with national authorities, if only *to prevent the ESCB from being forced into a 'lender of last resort' function that would not be compatible with its task of safeguarding the currency"* (as quoted by Folkerts-Landau and Garber, 1992, 108; my emphasis).

Tietmeyer's support for a narrow ECB is in line with what the architects of the Eurosystem have called "constructive ambiguity" for the commercial banks. "The underlying principle of the EU framework for crisis management with systematic implications in the banking sector is that every crisis has unique features and has to be managed in the light of the particular circumstances […]. These institutional principles are similar to the ones existing

in Germany, whereby the Bundesbank does not have either the *explicit* responsibility for the stability of the German banking system, or the power to act as a lender of last resort. This reflects the German view with respect to 'moral hazard', whereby the very existence of a safety net may encourage imprudent behaviour on the part of credit institutions and their clients" (Apel 2003, 183; my emphasis).

However, no "explicit" mandate for the Bundesbank to act as a lender of last resort does not mean that there exists no institution in Germany responsible for managing a liquidity crisis.[24] In 1974, in the wake of the bankruptcy of the Herstatt Bank, the Bundesbank established the Liquidity Consortium Bank, popular the *Likobank*, with a capital of DEM 2.7 billion of which the Bundesbank provided 30 percent, whereas its counterparties of (today) 136 private banks contributed the remaining 70 percent. The Likobank, therefore, is an institutionalized alternative to the common lender of last resort-practices of central banks, Instead of *ad hoc* convocations of commercial banks to forestall a liquidity crisis, like that of the Federal Reserve Bank of New York (FRBN), the lender of last resort in the *Fed*, in the case of the hedge fund Long-Term Capital Management (LTCM)[25], the *Likobank* is a lender of last resort with shared responsibilities of a central bank and its counterparties. In the German banking system, the Bank deals with liquidity problems of solvent banks due to one insolvent bank, reducing the systemic risk created by this bank through ensuring timely settlements of inter-bank payments, not unlike a central bank with an explicit mandate to act as a lender of last resort. Therefore, the characterization of the *Likobank* as the German "lender of *next-to*-lender of last resort" (Apel 2003, 50; my emphasis) misses the point.

In 2000, the Bundesbank did not question Tietmeyer's support for a narrow ECB. Under its President from 1999 until 2004, Ernst Welteke, the Bank instead proposed to transform the *Likobank* to an EMU-wide institution. This should be achieved by increasing the Bundesbank's share in the capital of the *Likobank* from DEM 810 million to € 5 billion, with the German member banks expanding their share from DEM 1.89 billion to € 10 billion.

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[24] This view is held, *e.g.* by Folkert-Landau and Grabert (1992, 99) who, unaware of the existence of the *Likobank* (see below) maintain that "the German Bundesbank lacks a mandate to act as lender-of-last-resort."

[25] In the case of LTMC whose insolvency threatened to trigger a world-wide financial crisis in Septemper 1998, *e.g*. the FRBN did not help the hedge fund with fresh money but swiftly called fifteen domestic and foreign banks to put up 3.5 billion dollar as credit to LTCM.

This would not only have increased the capital of the *Likobank* to a level more than three times above that of the ECB, but also meant a centralisation of the Eurosystem in analogy with the transformation of the Federal Reserve System by the Banking Act of 1935, bringing the Bundesbank a big step closer to the role of the New York Bank within the *Fed*. This was a sound plan indeed. Yet, it did not materialise, because the private German member banks of the *Likobank* were not ready to increase the volume of their capital, thereby risking to bail out non-domestic European competitors (Heinsohn and Steiger, 2000, 105).

As long as there exists no lender of last resort in Euroland, however, it will face the problems rampant in the pre-1935 *Fed*. There, in 1933, the Federal Reserve Bank of New York had to "curtail its lender-of-last-resort activities" (Eichengreen 1992, 32), because nobody could force the Federal Reserve Bank of Chicago to support its New York sister which was committed to help its member banks and Wall Street bleeding money on an unprecedented scale. Chicago had plenty of the then most needed excess gold reserves but feared that in case of losses there would, again, be no central authority to reimburse it. Such a scenario could repeat itself in Euroland if, *e.g.,* the Banque de France was approached by the Bundesbank for a bailout of its German counterparties which at present suffer heavy losses. There would be no authority which could either put pressure on Paris or any other NCB or protect them from weakening their positions.

A politically wiser proposal by Heinsohn and Steiger (2000, 106) to bring about a lender of last resort in the Eurosystem by taking into account national sensitivities, especially in France, would be to dissolve the Frankfurt ECB altogether and move its Executive Board as a new "Board of Governors of the Eurosystem" to the French European capital Strasbourg. In this scenario, the Bundesbank, with 30.24 percent of the Eurosystem's assets (2002) its strongest central bank, would execute open market operations decided upon on foreign – French – territory. This proposal would, of course, transform the Eurosystem into a European Federal Reserve System indistinguishable from its US counterpart.

Barry Eichengreen's more radical proposal "of reducing existing European central banks to mere branch offices of the ECB or of eliminating them entirely" (1992, 14), making the ECB the sole central bank in the Eurosystem, definitely stood for sound art of central banking à la Lindahl and Ciampi . However, it was not a politically wise proposal as it simply modeled the Eurosystem after the Bundesbank system. This institution, as everybody knows,

was opposed by many European nations. Especially France suffered from the loss of monetary authority to a single central bank in Europe, the Bundesbank. Therefore, France spearheaded the design of the decentralized Eurosystem as we know it.

Both the Bundesbank and the Eichengreen proposals – as well as that of Heinsohn and Steiger – do not take into account that, as Lindahl had first pointed out, a central monetary authority in monetary union of independent nations could only function properly with a no less central and powerful ministry of finance. This is even more the case, because the lender of last resort-responsibility of the central monetary authority has to be backed by the central fiscal authority – a condition *sine qua non* for understanding central banking which Lindahl missed. Why? Because, like so many central banking theorists of our times, he did not recognise that not only commercial banks but also the central bank can run into bankruptcy (Steiger 2002, 60-66; and see 2005). Because the central bank is not an institution which can create money "out of nothing", it has to follow the principles of banking like any commercial bank when making a loan: loans are risky and can result in a loss, *i.e.* endanger the bank's *own capital*. And this also holds true for the central bank when engaging in lender of last resort-operations. "While a central bank can extend emergency loans for unlimited amounts, *its capacity to absorb losses is limited* (up to the size of its capital). The deep pockets do therefore not lie with the central bank as sometimes is suggested, but with the government" (Schoenmaker 2000, 222; my emphasis). Or, as emphasised by Goodhart (1999, 234), "what stands behind the liabilities of the CB [central bank] is *not* the capital of the CB but the strength and taxing power of the State."

Therefore, to solve the problem of its missing lender of last resort, the Eurosystem does not only need a more powerful ECB or European Bundesbank but also a strong European Treasury, *e.g.* something like the relation between the Federal Reserve Bank of New York and the US Treasury. After all, Brussels only disposes of two percent of the European GDP. It goes without saying that the intimacy between the Federal Reserve Bank of New York and the Secretary of the Treasury in Washington, cannot be matched in Euroland. Therefore, the missing central fiscal authority in EMU is as much an Achilles heel for its survival after always possible severe financial crises as the missing central monetary authority in the Eurosystem.

With the establishment of a powerful European Treasury, however, EMU would no

longer be a union of independent nations but a federal state like the United States or Germany. In Germany, politicians had promised such a federation as the aim of EMU to convince its overwhelmingly non-euro-friendly citizens to accept the common currency as a necessary step for European unification, while politicians in most of the other member countries always rejected such an idea. Even the recently postponed proposal for a European Constituency, formulated by the European Convention and chaired by former French President Valéry Giscard d'Estaing, although aiming to give Brussels more political power, still prefers a union of independent nations. Therefore, it goes without saying that EMU is doomed to fail in the case of a severe European liquidity crisis.

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