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A faint, grayscale topographical map of Europe serves as the background for the central text. The map shows the outlines of the continents and major mountain ranges.

RESPONSIBILITY OF STATES AND CENTRAL BANKS IN THE EURO CRISIS

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RESPONSIBILITY OF STATES AND CENTRAL BANKS IN THE EURO CRISIS

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HANS-WERNER SINN¹

1. Regulatory reasons for the crisis

The reason for the crisis in the GIPSIC countries (Greece, Italy, Portugal, Spain, Ireland, Cyprus) lies in the exorbitant inflation rates experienced by these countries since the introduction of the euro.² This inflation has robbed them of their competitiveness, since a corrective currency devaluation is not possible within a monetary union. The inflation was fuelled by exceptionally high borrowing by the private and public sectors in these countries. The loans created an economic bubble that burst in 2007/2008 when the US sub-prime crisis affected European banks.

The credit bubble stemmed from the fact that investors did not charge appropriate risk premia. These investors were primarily French banks, which largely

borrowed money from Germany and the Benelux, but also German and British banks, as well as investors from all over the world.³

Before the announcement of the euro's introduction, the state and private sectors in Southern Europe had to pay far higher interest rates than their counterparts in the North. Investors required risk premia because the countries often shirked repayment of their debts through inflation and devaluation. Risk premia disappeared within just two years of the final announcement of the euro launch at the EU Summit held in Madrid in December 1995.⁴

Investors no longer demanded risk premia because, disregarding the stipulations of the Maastricht Treaty, they considered the Eurosystem as protection from state bankruptcy and the private bankruptcies that would follow. If investors had taken article 125 of the Treaty on the Functioning of the European Union (TFEU) seriously, which states that creditors cannot count on the help of other states in the case of a bankruptcy, then they would have been more cautious and the inflationary credit bubble would never have arisen.

The fact that the EU glossed over the Maastricht Treaty by repeatedly assuring investors that investments in Southern Europe were safe, desirable and wise also contributed to investors' recklessness. This is clearly illustrated by the fact that the EU supplemented the Basel proposal on banking regulation with the rule that banks do not need to set aside any equity capital for loans to EU states (as well as to Liechtenstein, Norway and Iceland), regardless of the individual countries' solvency risk and even if they use their own risk models.⁵ Government bonds were given



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² From the EU Summit in Madrid in 1995, at which the irrevocable decision was taken to introduce the euro, until the year of the Lehman crisis, these countries became around 30 percent more expensive thanks to inflation and, to a smaller extent, to an initial appreciation relative to the rest of the Eurozone as measured by the GDP deflator. This is shown by Ifo Institute calculations based on Eurostat data on the GDP deflator (cf. Eurostat, *Economy and Finance*, National Accounts) taking into account bilateral flows in the trade of goods (cf. UNCTAD, *Statistics*, International Trade).

³ See Bank for International Settlements (BIS), *Consolidated Banking Statistics*, <http://www.bis.org/statistics/consstats.htm>.

⁴ Cf. Figure 4 below.

⁵ This aspect is frequently ascribed to the Basel Agreement itself, but that is not completely true. Although the Basel Agreement does allow risk weights for government bonds to be zero depending on a country's rating or its classification by an export credit insurance agency, this only applies in cases where a bank adheres to the standard approach to risk assessment. The standard approach includes the option of giving zero risk-weights to claims against European sovereigns. However, if banks use the option of applying their own risk model (IRB approach), endogenous risk weights for government bonds, also taking the country's ratings into consideration, should result. This was modified by an EU-internal agreement to change national sol-

a risk-weighting of zero in the calculation of risk-weighted assets, of which a certain percentage had to be held in the form of equity (Tier-1 capital).

The assumption that states could not go bankrupt contradicts the no-bail-out clause of the Maastricht Treaty (article 125 TFEU), which only makes sense under the assumption that such a bankruptcy is possible. Moreover, a tension exists between the preference for state financing through financial institutions and article 124 TFEU, which, in principle, precludes any such privileged access, even if it allows for exceptions based on 'prudential considerations'.

The supervisory regime also favours loans to banks in other countries rather than loans to firms, since the former only require setting aside a minimal amount of capital. When granting loans, no consideration was given to banks' different levels of creditworthiness, a fact that contributed crucially to the disappearance of interest rate spreads in the eurozone.⁶

The solvency regulation of insurers suffered from a similar defect. It did not require any direct equity backing for government bonds or differentiation according to creditworthiness.⁷

Continued FN 5:

veny regulations. According to these regulations (e.g. German solvency regulation of 14 December 2006) banks are allowed to give government bonds from the euro area a risk weight of zero for an unlimited duration of time by way of derogation from the Basel Agreement and as an exception to the IRB approach even if they use their own risk models. See § 26 No. 2 b in relation to § 70 No. 1 c SolvV and/or § 80 No. 1 in relation to § 89 No. 1 d of Directive 2006/48/EC. See also H.-W. Sinn, *Casino Capitalism: How the Financial Crisis Came About and What Needs to be Done Now*, Oxford University Press, Oxford 2010, Chapter 7.

⁶ The risk weighting for loans to EU banks (as well as those of Liechtenstein, Norway and Iceland) was 0.2, while it mostly amounted to around 0.5 for well-managed firms in the real economy, but was scaled according to creditworthiness.

⁷ The amount of equity capital to be kept available only had to match a certain share of the premium volume. See Council of the European Communities, "First Council Directive 73/239/EEC of 24 July 1973 on the Coordination of Laws, Regulations and Administrative Provisions Relating to the Taking-up and Pursuit of the Business of Direct Insurance (Other than Life Insurance)," *Official Journal* L 228, 16 August 1973, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31973L0239:EN:HTML>, and Council of the European Communities, "Council Directive 92/49/EEC of 18 June 1992 on the Coordination of Laws, Regulations and Administrative Provisions Relating to the Taking-up and Pursuit of the Business of Direct Insurance (Other than Life Insurance) as well as the Corrigendum to Directives 73/239/EEC and 88/357/EEC (third non-life insurance Directive)," *Official Journal* L 228, 11 August 1992, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31992L0049:EN:HTML>, as well as the European Parliament and the Council of the European Union, "Directive 2002/83/EG of the European Parliament and of the Council of 5 November 2002 on Life Insurance," *Official Journal* L 345, 19 December 2002, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002L0083:EN:HTML>. With the new Solvency-II-System more differentiated equity capital requirements are formulated for investments by insurers, but there are still no equity requirements for loans to EU states (as well as to Liechtenstein, Norway and Iceland). See EIOPA, *Report on the Fifth Quantitative Impact Study (QIS5) for Solvency II*, 2011, https://eiopa.europa.eu/fileadmin/tx_dam/files/publications/reports/QIS5_Report_Final.pdf.

The regulatory deficits meant that banks and insurance companies in the North gorged on government bonds from Southern Europe, all for the sake of earning a few dozen more basis points in interest income, and granted Southern European banks a lot of cheap interbank loans that were passed on to private clients and governments, triggering an inflationary investment boom.

The governments' refusal to adhere to the debt ceilings agreed upon also contributed to the development of credit bubbles, inasmuch as the bubbles originated in the public sector. This applies both to the 60 percent debt-GDP ceiling of the Maastricht Treaty and for the deficit criteria agreed in the subsequent Stability and Growth Pact. However, the governments' role was by no means as important as suggested in the public debate over this issue, for it cannot explain the credit bubbles that developed in Spain and Ireland, which were the result of private borrowing instead.

The institutionally induced abandonment of interest rate spreads effectively acted as a subsidy for capital flows from the North to the South and West of the eurozone. This shifted economic vigour in the euro area from Northern to Southern Europe and Ireland.

During this period Germany became the world's second-largest capital exporter after China, and plunged into a recession.⁸ For a long time Germany had the lowest net investment rate and the lowest growth rate of all European countries.⁹ Unemployment increased to a frightening degree in the years up to 2005, obliging Germany to undertake painful reforms (Agenda 2010).¹⁰ Most of Germany's savings were invested abroad, after capital had paved its way *via* a corresponding current account surplus.¹¹

Subsidizing this capital flow did not prove beneficial for Europe as a whole either, since for one thing part of the capital borrowed in the South was only channeled towards consumption, squandering the opportunity to build up a productive capital stock, and for another, projects were implemented in the South that were less profitable than others in the North that could no longer be carried out due to the exodus of invest-

⁸ See International Monetary Fund, *World Economic Outlook Database*, <http://www.imf.org/external/pubs/ft/weo/2013/01/weodata/index.aspx>.

⁹ See H.-W. Sinn, *Die Target-Falle, Gefahren für unser Geld und unsere Kinder*, Carl Hanser Verlag, Munich 2012, Chapter 2, p. 57 and/or p. 52, Figure 2.1.

¹⁰ See H.-W. Sinn, *Die Target-Falle*, op. cit., Chapter 2, pp. 59ff.

¹¹ See German Federal Statistical Office, *Fachserie 18, Volkswirtschaftliche Gesamtrechnungen*, Series 1.5, 2012, Table 1.5.

ment capital. Indeed, many risky construction projects were undertaken that, in retrospect, turned out to be extremely speculative misinvestments. In Spain entire city boroughs were built although there was no demand for them. Their ruins now bearing witness to the errors of European policy. This has all contributed to weak growth in the eurozone since the introduction of the euro. The eurozone has become one of the slowest growing economic regions in the world, in stark contrast to the Lisbon agenda aspirations to make the Union “the most competitive and dynamic knowledge-based economy in the world...”.¹²

2. Refinancing credit and Target balances

In 2007 the atmosphere changed and investors became increasingly reluctant to continue to finance the Southern countries, which by that time had become accustomed to the credit inflow and were running high import levels fuelled by credit-financed wage increases. The crisis erupted in September and October 2008, when the collapse of the investment bank Lehman Brothers led to massive disruptions in the worldwide interbank market.

The GIPSIC countries avoided paying the higher, risk-commensurate interest rates that investors demanded on new loans by raising credit from their local central banks instead, with the ECB's approval. The cheap loans no longer available from France and the Northern countries of the eurozone were replaced by money from the electronic printing presses of the central banks in question. These central banks created new money and lent it to the banks. The banks, in turn, lent the money to the private sector or the government, as they had done previously with money borrowed on the international capital market. Despite dwindling private credit, the printing-press money helped these countries to continue to pay the wages of construction workers and public employees, which financed the flow of imports. In addition, commercial banks used the printing-press money to repay external loans taken out previously on the interbank market, which their creditors no longer wished to roll over, or only at higher interest rates. In other words, the money newly created by the central banks of the GIPSIC countries was used to finance national current account deficits, taking over the role previously performed by the private capital market, as well as capital flight,

mostly in terms of repatriating capital to investors' home markets.¹³

2.1 Target balances

The additional credit generated by the electronic printing presses of the distressed countries is reflected in their Target balances, for these balances measure the net payment orders to other countries made by distressed countries, which in economic parlance are called balance-of-payment deficits. Since payment orders abroad reduce a country's monetary base, they go hand-in-hand with the creation of new money in the country making the payment orders, which compensates for the outflows.¹⁴ Without the fresh supply of money from the electronic printing press, the local monetary base would have shrunk quickly, leading to sharp interest rate increases, which, however, would have attracted fresh private capital from abroad.

The payment orders from the country creating additional refinancing credit forced the central bank addressed to honour such orders on behalf of the other and to create the corresponding amount of liquidity. This, in turn, reduced its possibility to offer refinancing credit to its own domestic economy. Thus base money created by refinancing credit was shifted from one country to another. From an economics point of view, the central bank addressed thus provided credit to the ordering central bank.

This was not credit granted on the basis of special credit contracts, but merely as the result of the treaties that underpin the ECB system. In German balance-of-payment statistics, this credit features in the item ‘Portfolio investment assets and other investment of the Bundesbank’¹⁵ and is rightly entered as an inter-governmental credit, which is made by one country to another. Materially, the international shift of central bank credit underlying the payment orders also represents a transfer of purchasing power, as with any other credit. Ultimately, the fact that an interest rate equal to the main refinancing rate is added to the Target bal-

¹² European Parliament, *Lisbon European Council 23 and 24 March 2000*, Presidency Conclusions, http://www.europarl.europa.eu/summits/lis1_en.htm.

¹³ See H.-W. Sinn and T. Wollmershäuser, “Target Loans, Current Account Balances and Capital Flows: The ECB's Rescue Facility,” *International Tax and Public Finance* 19, 2012, pp. 468–508, <http://www.cesifo-group.de/DocDL/sinn-itax-2012-target.pdf>.

¹⁴ See H.-W. Sinn and T. Wollmershäuser, op. cit., p. 474, as well as P. Cour-Thimann (of the ECB), “Target Balances and the Crisis in the Euro Area,” *CESifo Forum*, Special Issue, April 2013, <http://www.cesifo-group.de/DocDL/Forum-Sonderheft-Apr-2013.pdf>, esp. p. 8 and pp. 14–16.

¹⁵ See Deutsche Bundesbank, *Zahlungsbilanzstatistik*, Table I.9.f.

ances every year further underlines the credit nature of such balances.

Historically, the loans that the central banks granted to each other within monetary systems were always repaid with gold. Under the Bretton Woods System, the French and British central banks repaid the credit provided by the Bundesbank, by virtue of accepting their currencies and carrying out payment orders in Deutsche mark to German recipients, with gold.¹⁶ Almost all of the Bundesbank's gold reserves can be attributed to the repayment of credit, similar in nature to Target credit, between the European members of the Bretton Woods System. Until 1975, the US district central banks used to settle balances in payment orders (as measured in the Interdistrict Settlement Accounts), which are the exact equivalent of the Target balances, with gold or gold-backed securities.¹⁷ Today they are settled annually with interest-bearing, marketable assets, shares in the so-called SOMA portfolio resulting from money creation *via* open-market operations.¹⁸ In the eurozone, in contrast, Target credit slumbers on the balance sheets of the central banks as an interest-bearing book claim that can never be called due. It has assumed the character of an unlimited overdraft credit which, according to the rules of the ECB system, is available to the member national central banks.

This raises the question, which the author cannot answer, of how this overdraft credit is compatible with article 123 of the TFEU, which prohibits "overdraft facilities or any other type of credit facility with the the European Central Bank ... in favour of ... public authorities". Even if one does not wish to consider the national central banks as public entities, it must be kept in mind that behind the Target balances are many bank loans to national governments that were used to pay public employees and for other public expenditures, and enabled the recipients of payments to realise the international payment orders that are measured by Target balances. This topic is examined in greater detail in Section 2.4.

The honouring of payment orders by the central banks of the addressee country, and especially by the

Bundesbank, means that the money created for this purpose did not result from refinancing credit for its domestic commercial banks, as is usually the case, but from providing credit to the ECB system, and thus from credit for the central banks of other countries.

The new money flows to the accounts of a country's commercial banks, but as it is not needed to provide the domestic economy with liquidity, the banks use it to repay outstanding refinancing credit that they previously received from their own central bank. All of the refinancing credit issued in the non-GIPSIC countries became redempt in this manner as early as summer 2011. Moreover, once their refinancing credit had been repaid, many commercial banks parked the inflowing liquidity in their time deposits by the national central banks. Both processes led to a corresponding destruction of central bank money.

Money creation for other national central banks *via* payment orders only took place in Germany, the Netherlands, Luxembourg and Finland, for these were the only countries to acquire significant Target claims. The French commercial banks, which had granted the greatest number of loans to the periphery countries, did receive a large number of loan repayments, but subsequently used this money to repay loans that they themselves had taken out from other countries. This is why the Banque de France did not tend to acquire Target claims; its temporary Target balances were swiftly settled off. The Bundesbank, by contrast, was the main financier of the balance-of-payment deficits of the Southern countries, since in terms of volume, German firms and banks were the main recipients of net payment orders in the euro area.

The accumulation of Target balances did not stoke up inflation, because, on balance, no new money was created either in the South or the North. The money newly created in the South *via* central bank refinancing operations disappeared *via* payment orders abroad, and the money created in the North by the central banks carrying out the payment orders was mopped up through the repayment of refinancing credit and building of deposits with the central banks. However, there is an indirect risk of inflation insofar as the credit relations that arose between the countries as a result may induce the majority of the debtor countries to advocate one day a policy of inflation in the ECB Council in order to reduce their debt burden. The increasingly loud calls on the part of Southern countries

¹⁶ The repayment of loans linked to the balance-of-payments deficits could be made at official parity with dollars or gold. Since the market price of dollars was below parity, the debtor countries preferred to pay with gold. See M. J. M. Neumann, "Geldwertstabilität: Bedrohung und Bewährung," in: Deutsche Bundesbank, ed., *50 Jahre Deutsche Mark – Notenbank und Währung in Deutschland seit 1948*, Beck, Munich 1998.

¹⁷ See H.-W. Sinn, *Die Target-Falle*, op. cit., Chapter 12, p. 369.

¹⁸ Ibid., p. 363, and EEAG, *The EEAG Report on the European Economy*, CESifo, Munich 2013, Chapter 4, p. 104.

for more strongly expansive monetary and fiscal policy can be interpreted in this light.

The Target liabilities of the GIPSIC central banks peaked in August 2012 at exactly 1000 billion euros, Spain accounting for 434 billion euros, Italy for 287 billion euros, Greece for 107 billion euros, Ireland for 91 billion euros, Portugal for 71 billion euros, and Cyprus for 10 billion euros. For Cyprus, these debts amounted to 57 percent of its GDP for 2012, while for Greece and Ireland the debts represented 55 percent of GDP each, for Portugal 43 percent of GDP, for Spain 41 percent, and for Italy 18 percent of GDP.

Conversely, at that point the central banks of Germany, the Netherlands, Luxembourg and Finland had collectively accumulated 1060 billion euros in Target claims, of which Germany accounted for 751 billion euros, or 28 percent of its GDP for 2012. In all countries the Target balances show significant differences, and in most countries they even account for the lion's share of their net external asset position. Germany's net external asset position, i.e. the external wealth accumulated by Germany over the course of its history, totalled 970 billion euros at the end of June 2012. 75 percent were merely Target claims held by the Bundesbank.

The monetary base (M0) in the GIPSIC countries in August 2012 totalled 367 billion euros,¹⁹ while the total monetary base of the Eurosystem amounted to 1,751 billion euros. Fully 78 percent ($= (1,000 \text{ billion euros} + 367 \text{ billion euros}) / 1,751 \text{ billion euros}$) of the central bank money available in the eurozone at the time had been created in the GIPSIC countries by asset purchases and refinancing credit, although these countries collectively account for only 33 percent of the eurozone's GDP. Inversely, 72 percent of the monetary base of the remaining euro countries was created, on balance, on account of international payment orders, instead of asset purchases and refinancing credit. The commercial banks of these countries repaid all of their refinancing credit and deposited the remaining excess liquidity at their national central banks, essentially becoming creditors to their central banks.

The volume of the GIPSIC countries' Target liabilities (status: end of March 2013) has now fallen to 734 billion euros, and the monetary base of the Eurosystem

is now 1,363 billion euros. The share of the Eurosystem's monetary base that was generated by open-market transactions or refinancing credit in GIPSIC countries is still 79 percent.

Today the GIPSIC countries have created three times (3.2 times) as much money through such operations as they require to meet their own liquidity needs. They used the surplus cash to pay off foreign loans, and to purchase goods and assets.

Still, some central banks of the non-GIPSIC countries are in debt to the private commercial banks in their jurisdictions. The reason is that they no longer create money *via* refinancing credit, but have had to accept deposits by commercial banks instead. In Germany the level of credit granted by the Bundesbank to commercial banks has become so negative that it has even overcompensated for the amount of money created *via* purchases of assets such as gold, currencies or government bonds. The amount of central bank money created in Germany (M0) totalled 536 billion euros at the end of March,²⁰ which was around 54 billion euros below the level of Target claims. All of the money put into circulation in Germany therefore arose on balance as credit granted by the Bundesbank to other central banks in the Eurosystem.

2.2 Target balances and fiscal rescue credit

The decrease in Target balances since August 2012 is due, on the one hand, to the fact that fresh private money flows were set in motion to purchase newly issued Southern European government bonds thanks to the insurance coverage provided by the OMT programme. This is discussed in greater detail in Section 3.3. On the other hand, a total of 37 billion euros in fiscal bail-out credit flowed indirectly from Germany into the crisis-afflicted countries between August 2012 and May 2013, which reduced the Target balances one-to-one because of the payment orders involved.

This effect alone – in other words the mere shift from ECB lending to intergovernmental lending – is responsible for 23 percent of the decrease in German Target balances.²¹ Overall, Germany's exposure through official bail-out funds totalled around 108 bil-

¹⁹ Monetary base in the sense of the sum of deposit facility, a credit institute's credit balance in current accounts (including minimum reserve) as well as the 'statutory' amount of bank notes minus the claims arising from the under-proportionate issue of bank notes (intra-Eurosystem claims).

²⁰ Including the quantity of bank notes that exceeded statutory values, which led to the Bundesbank's corresponding exposure to the ECB system (intra-Eurosystem liabilities).

²¹ Calculations by the Ifo Institute, see Ifo Exposure Level, <http://www.cesifo-group.de/ifoHome/policy/Haftungspegel.html>.

lion euros between May 2010 and May 2013.²² If these funds had not been supplied, Germany's Target claims, given the same volume of other financial transactions between Germany and abroad, would not total 589 billion euros, but 697 billion euros.

The decrease in Greece's Target balances can be almost entirely accounted for by intergovernmental bail-out funds. From August 2012 to March 2013 (latest data on Target balances), international bail-out funds for Greece totaled 42.3 billion euros, while Greece's Target balance fell by 36.5 billion euros. A little more than the total decrease in Target credit can therefore be attributed to the bail-out funds, which simply means that some of the bail-out funds financed a further capital flight to other countries.

Portugal received 5.9 billion euros in rescue money during this period, accounting for 66 percent of its reduction in Target liabilities (8.9 billion euros). Ireland's Target liabilities fell by 31.3 billion euros, and in this case bail-out payments only accounted for 3.8 billion euros, or 12 percent, of the sum. Spain received 41.3 billion euros from the ESM bail-out package. This sum corresponded to 28 percent of the 150 billion euros that the country was able to reduce its Target liabilities between August 2012 and May 2013.

2.3 The lowering of collateral standards for refinancing credit

As explained above, the flow of money into other countries before summer 2012 as measured by the Target balances was replaced by new refinancing credit. This refinancing credit was made possible by the introduction of the full-allotment policy and a steady lowering of the eligibility standards for the collateral that commercial banks had to hand over to their respective central banks to secure the refinancing credit. Until October the collateral required an A- rating at the very least, which meant a high creditworthiness. The ECB Council subsequently lowered the minimum rating to Triple B-, the level just above Non-Investment Grade (junk status). This lowering of quality significantly expanded the volume of collateral that GIPSIC banks could pledge, enabling them in the subsequent years to draw a growing amount of refinancing credit via their central bank's money-printing press.

²² See footnote 57; the amount of 108 billion euros is the difference between the values stated there for the entire sum (447 billion euros) and for the bail-out funds via the ECB system included in it (339 billion euros).

Moreover, the ECB Council also approved 250 billion euros worth of ELA loans (Emergency Liquidity Assistance). At the end of April 2013, 107 billion euros of these funds were still available.²³ ELA consists of refinancing credit to commercial banks, for which a bank's sovereign assumes liability and its national central bank decides over collateralisation. A central bank can grant ELA at its own discretion, unless two-thirds of the ECB Council objects. The maximum stock of ELA reached 70 billion euros for Ireland (February 2011), 124 billion euros for Greece (May 2012) and 11 billion euros for Cyprus (April 2013).²⁴ In terms of the issuance of potential net payment orders to other countries, which under the Target system foreign central banks are obliged to honour, ELA is not different to normal refinancing credit. However, ELA can be used to delay the bankruptcy of banks and, thus, make it possible for politically privileged groups of investors to bring their assets to safety, as shown by the Cyprus crisis.²⁵

Furthermore, the bundling of credit claims enabled banks to create non-traded Asset-Backed Securities (ABS), which were accepted by the national central banks as collateral despite the lack of a market price for them. It can be assumed that many of these ABSs

²³ See European Central Bank, *Monthly Bulletin*, May 2013, see p. 17*. The total amount of ELA is not explicitly stated on the ECB's balance sheet, but the item "Other claims on euro area credit institutions denominated in euro" offers an approximate value.

²⁴ Central Bank of Ireland, *Financial Statement of the Central Bank of Ireland*, Position "Other assets", <http://www.centralbank.ie/policies/stats/cmab/Pages/Money%20and%20Banking.aspx>, Central Bank of Greece, *Monthly Balance Sheet*, April 2013, Position "Other claims on euro area credit institutions denominated in euro", http://www.bankofgreece.gr/Pages/en/Publications/FinStatements.aspx?Filter_By=9, and Central Bank of Cyprus, *Monthly Balance Sheets*, April 2013, Position "Other claims on euro area credit institutions denominated in euro", http://www.centralbank.gov.cy/nqcontent.cfm?a_id=10458&s_id=10936&listing=all. At the time of writing (end of April 2013) the stock of ELA credit is 21 billion euros in Greece, 2 billion euros in Ireland and 11 billion euros in Cyprus. In Ireland's case the reduction in ELA is due to the bankruptcy of the bad bank that was created from the the Anglo-Irish Bank and was subsequently taken over by the state. The bad bank was the main recipient of ELA credit. As it went bankrupt, the ELA credit claims of the Central Bank of Ireland were swapped for long-term government bonds bearing extremely low interest. See Central Bank of Ireland, *Central Bank Statement*, 7 February 2013, <http://www.centralbank.ie/press-area/press-releases/Pages/CentralBankStatement.aspx>. This was described and criticized by the ECB's former chief economist, Jürgen Stark, as forbidden state financing. See J. Stark, "Irlands verbotener 'Deal' mit der Notenbank," *Die Welt*, 14 March 2013, <http://www.welt.de/finanzen/article113645427/Irlands-verbotener-Deal-mit-der-Notenbank.html>.

²⁵ During the period following the Greek haircut in March 2012 up to the bank insolvencies in Cyprus in March 2013, Cyprus provided its effectively insolvent Laiki Bank with 9 billion euros in ELA credit, thus enabling it to repay the deposits of key domestic and foreign customers, leading to corresponding international payment orders, which were measured by the country's Target balances. The community of states subsequently granted Cyprus 10 billion euros in bail-out funds, which should bring Cyprus' Target balances back down, if the money isn't used to repay more foreign investors. See also H.-J. Döbel, *Bewertung des Bankenrestrukturierungsprogramms in Zypern und seiner Auswirkungen auf Konzepte und Institutionen der Bankenunion*. Brief expert report commissioned by the SPD parliamentary group, Finpolconsult, Berlin, 17 April 2013.

did not satisfy the requirements of secure collateral and were widely used to conceal toxic credit claims, as was the case in the United States when ABS were introduced.

In a letter sent in February 2012, Bundesbank President Jens Weidmann warned ECB President Mario Draghi of the deterioration in the collateral pledged for refinancing credit granted by national central banks and the Bundesbank's accumulation of Target claims as a result.²⁶

2.4 Indirect state financing *via* refinancing credit to commercial banks

Much of the collateral used by commercial banks to secure refinancing credit from their central banks consisted of government bonds issued by their own governments, since the banks largely used the newly printed credit money to purchase these government bonds. It is a fact that when the volume of refinancing credit soared between 2008 and 2011, the government debt owed to the country's own commercial banks increased from 12 billion to 50 billion euros in Ireland, from 208 billion to 408 billion in Spain, from 643 billion to 864 billion in Italy and from 14 billion to 49 billion in Portugal.²⁷ This has contributed either directly or indirectly to the accumulation of Target balances: directly if the bonds were purchased abroad; indirectly if domestic sellers used the funds freed up to invest abroad.

No official figures have been published for Greece, but it has been reported that around 77 percent of the collateral provided to the Greek central bank consisted of government bonds or private securities guaranteed by the state.²⁸

This is consistent with the information that Greek banks held government bonds almost exclusively of their own country in 2010 (around 98 percent), and practically no government bonds of other European

countries. Domestic government bonds as a share of the total portfolio of government bonds from euro countries was also over 90 percent in Spain, and over 80 percent in Italy and Portugal.²⁹

The exposure of banks to their own government increased again considerably when the ECB began to implement its Longer Term Refinancing Operation (LTRO) programme, worth a trillion euros at the beginning of December 2011. The programme consisted of three-year refinancing credit offered to banks at variable interest rates matching the main refinancing rate (0.75 percent at the time, 0.5 percent today). This prompted Spanish banks to increase their stocks of domestic government bonds by 26 percent, or 45 billion euros, from the beginning of the programme to the end of January 2012, while Italian banks increased their stocks of Italian government bonds by 31 percent, or 63 billion euros, by the end of February. A large share of these purchases led to an inflow of bonds from abroad, and this in turn to net payment orders abroad, which were measured by the Target balances.

In any case, the government bond purchases enabled by the refinancing credit granted by central banks created scope for new issues of government bonds, and thus also served to finance several European states with money freshly created by their central banks. State financing with the printing press largely replaced financing by the capital markets since the outbreak of the crisis in 2007/2008. However, this mechanism started to falter when the rating agencies posted negative credit outlooks for Greece, Portugal and Ireland, which soon led to actual downgrades to the 'Non-Investment Grade' category (Greece in April 2010, followed by Portugal and Ireland in July 2011).³⁰ That created a problem because the government bonds purchased with freshly created money no longer qualified as secure collateral for refinancing credit.

The ECB Council quickly reacted by waiving the need for a minimum rating and continued to accept the government bonds as collateral, despite the junk status that they

²⁶ See S. Ruhkamp, "Die Bundesbank fordert von der EZB bessere Sicherheiten," *Frankfurter Allgemeine Zeitung*, 1 March 2012, No. 52, p. 9; as well as "Bundesbank geht im Target-Streit in die Offensive," *Frankfurter Allgemeine Zeitung*, 13 March 2012, No. 62, p. 9. The article states: "In a letter seen by the FAZ, Weidmann explicitly refers to the rising Target claims. He suggests a collateralization of the ECB's claims *vis-à-vis* the financially weak central banks of the Eurosystem, which have reached a value of over 800 billion euros." (Author's translation of the German original text)

²⁷ See Eurostat, *Economy and Finance*, State, Public Deficit and Debt, Structure of Public Debt.

²⁸ 39 points out of these 77 percent were attributed to government bonds and 38 points to private papers secured by the government. See N. Panigirtzoglou, G. Koo, S. Mac Gorain and M. Lehmann, "Flows & Liquidity. Who are the Losers from Greek Debt Restructuring?," J.P. Morgan, *Global Asset Allocation*, 6 May 2011.

²⁹ See S. Merler and J. Pisani-Ferry, "Hazardous Tango: Sovereign-bank Interdependence and Financial Stability in the Euro Area," Banque de France, *Financial Stability Review*, April 2012, e.g. Fig. 5a, as well as: "Banken aus Euro-Krisenländern greifen bei heimischen Staatsanleihen massiv zu", *Handelsblatt*, 18 April 2012, <http://www.handelsblatt.com/economy-business-und-finance-banken-aus-euro-krisenlaendern-greifen-bei-heimischen-staatsanleihen-massiv-zu/6525254.html>.

³⁰ On 27 April 2010 the ratings agency S&P lowered its rating for Greece to BB+, Moody's downgraded Portugal on 5 July 2011 to Ba2 and Ireland to Ba1 on 11 July 2011.

were given by the ratings agencies.³¹ This initially secured the indirect state financing *via* the printing press and averted the immediate collapse of Greece and Portugal.

Moreover, the decline in the market value of the collateral led to a decrease in the banks' lending volume, because the ECB updates the collateral every day to its market value, which, minus a safety margin deduction, serves as the basis for the granting of refinancing credit.

This collateral rule forced the Greek central bank to reduce its refinancing credit in proportion to falling market values, which made it more difficult for Greek banks to continue purchasing government bonds with this credit, and the Greek state started to look like it was teetering on the verge of bankruptcy in April 2010. The danger peaked on 28 April, when Greek interest rates for short-term bonds shot up to 38 percent over the course of the day.

3. ECB government bond purchases and official bail-out programmes

3.1 From indirect to direct state financing: the SMP

When yields on Greek government bonds exploded at the end of April 2010 and the market values plummeted, the ECB felt obliged to ask its member central banks to make support purchases in order to preserve the role of the government bonds as collateral for the refinancing credit granted to Greek banks, which was, in turn, the source of funds for the purchase of government bonds. Ignoring opposition from the Bundesbank and the ECB's chief economist at the time, Jürgen Stark, the ECB Council approved the so-called Securities Markets Programme (SMP) at the beginning of May 2010.³²

³¹ See European Central Bank, *ECB Announces Change in Eligibility of Debt Instruments Issued or Guaranteed by the Greek Government*, press release, 3 May 2010, <http://www.ecb.europa.eu/press/pr/date/2010/html/pr100503.en.html>, and same author, *ECB Announces the Suspension of the Rating Threshold for Debt Instruments of the Irish Government*, press release, 31 March 2011, http://www.ecb.europa.eu/press/pr/date/2011/html/pr110331_2.en.html, and/or the same author, *ECB Announces Change in Eligibility of Debt Instruments Issued or Guaranteed by the Portuguese Government*, press release, 7 July 2011, http://www.ecb.europa.eu/press/pr/date/2011/html/pr110707_1.en.html.

³² The decision to purchase government bonds was announced on 10 May 2010, see European Central Bank, *ECB Decides on Measures to Address Severe Tensions in Financial Markets*, press release, 10 May 2010, <http://www.ecb.europa.eu/press/pr/date/2010/html/pr100510.en.html>. On 11 May 2010 the President of the German Bundesbank highlighted the risks involved in such a decision and expressed his opposition to it. See A. Weber, "Kaufprogramm birgt erhebliche Risiken," Interview with J. Schaaf, *Börsen-Zeitung*, 11 May 2010, http://www.bundesbank.de/Redaktion/DE/Kurzmeldungen/Fokusthemen/Archiv/2010_05_11_interview_mit_herrn_prof_dr_axel_a_weber_in_der_boersen-zeitung.html. The ECB's chief economist, Jürgen Stark, explained at an event held by the Hanns-Seidel-Stiftung in Munich on 22 February 2013 that Bundesbank President Weber and himself had decided to resign at the time, which they both did in open protest at the ECB's policy, but not until the following year.

Under the SMP, Eurosystem central banks bought government bonds from Greece, Italy, Portugal, Spain and Ireland up until the beginning of March 2012. The book value of these government bonds peaked at 219 billion euros in February/March 2012. The ECB has provided more precise information about the structure of its stocks on only one occasion. According to this statement, Italian bonds accounted for 47 percent, Spanish 21 percent, Greek 15 percent, Portuguese 10 percent, and Irish bonds 7 percent at the end of 2012.³³ In the case of Greece this represents 17 percent of Greek GDP, while the figure for Portugal is 14 percent. The Bundesbank participated in the bond purchases under the SMP at 27 percent, or 59 billion euros in the peak.

The central banks of the distressed countries themselves also bought the bonds issued by their governments. If these purchases are excluded from the calculations, the book value of the credit granted in this way by central banks of the non-GIPSIC eurozone countries to the GIPSIC countries peaked at 139 billion euros. It still stood at 124 billion euros on 31 May 2013. It can be assumed that, on balance, government bonds worth this sum flowed from the crisis-afflicted countries into the other eurozone countries, which resulted in corresponding payment orders to the distressed countries that reduced the Target balances. These purchases can therefore be regarded as credit in addition to the public credit already granted, which is measured by the Target balances themselves.

The purchase of government bonds eased the financial situation of the crisis-afflicted states in two ways:

- Firstly, it facilitated the continuation of *indirect* state financing *via* refinancing credit, which was granted to banks in return for collateral. (This in itself led to an increase in the Target deficits of the crisis countries, because the fresh liquidity was used to make international payment orders.)
- Secondly, the purchase created scope for new government bonds, which the crisis-afflicted countries were able to place on the market without having to offer higher yields. In that respect it also constituted *indirect* state financing. (Since this in itself led to government bonds migrating abroad, it resulted in payment orders from abroad to the crisis countries and curbed the rise in Target balances.)

³³ See European Central Bank, *Details on Securities Holdings Acquired Under the Securities Markets Programme*, press release, 21 February 2013, http://www.ecb.europa.eu/press/pr/date/2013/html/pr130221_1.en.html.

Despite the Maastricht Treaty's Article 123 prohibition of state financing by central banks, the majority of the ECB Council defend the view that state financing *via* government bond purchases in the secondary market is allowed.³⁴ In fact, however, it is merely *not prohibited*, while primary market purchases are definitively prohibited.

The reason for the lack of a ban possibly lies in the fact that nobody wanted to exclude the French central bank's repo transactions based on government bonds. The Banque de France used to buy and sell government bonds at a high frequency in order to prevent the daily fluctuations of their rates; but the bank did not accumulate stocks of government bonds over longer periods of time. In this case, however, there is a buildup of stocks of purchased bonds that enables governments to issue fresh bonds for replacement to the banks, rendering the difference between primary or secondary market moot. In all events such purchases represent a financing of the state *via* money creation, which is precisely what the Treaty signatories wanted to prevent.

From an economics point of view, it is not self-evident that the difference between direct and indirect state financing can be equated with the difference between primary and secondary market purchases, as the ECB argues. In the end, there are three ways for central banks to finance states:

- Commercial banks are granted refinancing loans by their central banks and use this credit to purchase government bonds, pledging these bonds as collateral with their central banks.
- Central banks purchase government bonds from banks that have either bought these bonds from the government themselves or *via* a third party.
- Central banks purchase government bonds themselves from the states.

³⁴ See European Central Bank, "Decision of the European Central Bank of 14 May 2010 Establishing a Securities Market Programme, ECB/2010/5," *Official Journal* 124/8, http://www.ecb.europa.eu/ecb/legal/pdf/l_12420100520en00080009.pdf. Article 1 of the programme states that: "Under the terms of this Decision, Eurosystem central banks may purchase the following: (a) on the secondary market, eligible marketable debt instruments issued by the central governments or public entities of the Member States whose currency is the euro; and (b) on the primary and secondary markets, eligible marketable debt instruments issued by private entities incorporated in the euro area." See also Introductory Statement to the Press Conference (with Q&A) by Mario Draghi, President of the ECB, and Vítor Constâncio, Vice-President of the ECB, 6 September 2012, <http://www.ecb.int/press/pressconf/2012/html/is120906.en.html>, as well as European Central Bank, *Monthly Bulletin*, October 2012, especially box 1: Compliance of outright monetary transactions with the prohibition on monetary financing, p. 7.

There is practically no difference between paths 2 and 3, because a government can sell its bonds at any time to a central bank *via* a friendly, or even a state-owned commercial bank, the latter being treated as a private bank according to Article 123(2) of the TFEU. The banks sometimes had to wait only three days after the issue of government bonds before they could sell them to their own central bank.³⁵ The ECB says that it applies a holding period 'numbered in days' for its intervention after the issue of bonds.³⁶ In practice, however, by and large bonds were purchased that had been on the market for longer than this period.

Yet it is not really a question of the amount of time involved. The fact that banks have the long-term expectation that the Eurosystem central banks are prepared to buy government bonds should the threat of a price slump arise is enough to ease government financing at favourable conditions. It is not the point in time at which a government bond is bought that is decisive, but the explicit or implicit promise that it will be purchased before it matures if the situation gets tight. Every purchase of government bonds by the ECB that leads to the accumulation of bond stocks and serves to support bond prices is, in this sense, a signal that, from an investor's point of view, reduces the risk associated with government bond purchases and lowers the yields on new issues. In this respect, both of these paths must be classified, from an economic perspective, as direct government financing.

By contrast, the first path, whereby banks themselves must bear the risk of a state bankruptcy and must therefore exercise a certain control function, can well be classified as indirect financing. According to this classification, the SMP would contradict the spirit of article 123 of the Maastricht Treaty by making the credit facilities of central banks available to the state.

³⁵ Information Request of 21 November 2012 by the German Constitutional Court regarding the details of the Eurosystem's Securities Markets Programme (SMP), response from the German Bundesbank dated 3 December 2012, question 3. The latter states that: "Purchases of government bonds in the framework of the SMP took place exclusively on the secondary market. New issues were not purchased under the SMP for a period totalling five working days around the issue date – i.e. two days before the issue, on the day of issue itself and two days after the new issue. The same applies to the bonds with the next shortest and next longest remaining maturity issued by the same government. On expiry of this deadline – or in individual cases three days after the new issue – bonds can be purchased under the SMP." (Author's translation of the German original text)

³⁶ See F. Schorkopf, *Stellungnahme der Europäischen Zentralbank*, constitutional complaints 2 BvR 1390/12, 2 BvR 1439/12 and 2 BvR 1827/12, Organstreitverfahren (proceedings related to a dispute between supreme federal bodies) 2 BvE 6/12, 16 January 2013, p. 32.

3.2 The intergovernmental rescue funds: EFSF, ESM & Co.

In view of the legal uncertainty surrounding the SMP, the Bundesbank's reservations and the pushiness of the ECB president, it is understandable that the Community took measures to unburden the ECB as early as May 2010. These measures consisted of an intergovernmental bail-out credit for Greece and the establishment of the European Financial Stability Facility (EFSF), a fund based in Luxembourg, which is to issue bonds itself backed by guarantees from the euro states, in order to lend the proceeds to distressed countries that comply with certain conditions.

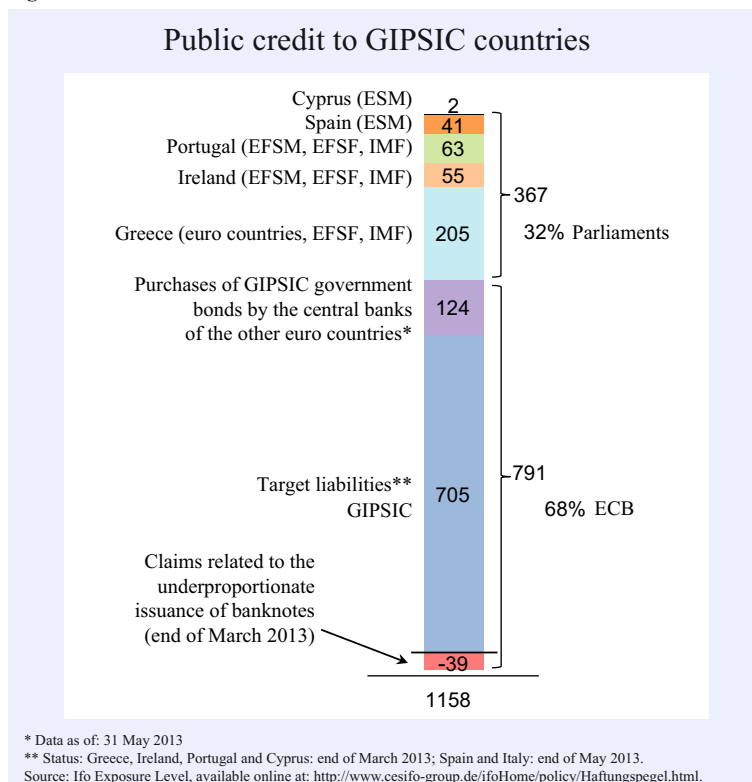
Initially, the EFSF's lending power was limited to 440 billion euros and its existence was restricted to a period of three years. However, in the spring/summer of 2012, it was duplicated and turned into a permanent facility under the name of European Stability Mechanism (ESM), with a maximum lending volume of 500 billion euros. Surprisingly, both bail-out systems have been active parallelly since the introduction of the ESM. The ESM is managed by a board of governors, on which, unlike the ECB Council, voting rights are distributed according to the exposure of the countries concerned.

A total of 53 billion euros in intergovernmental credit and 127 billion euros in EFSF funds have flowed into Greece to date. Greece, Ireland, Portugal, Spain and Cyprus have collectively received a total of 202 billion euros from the EFSF and ESM programmes. They were also granted 68 billion euros in IMF funds and 44 billion euros from the European Financial Stability Mechanism (EFSM), a bail-out fund linked to the EU. In total, they received 367 billion euros, or 23 percent of their joint GDP in 2012.

Figure 1 offers an overview of the total amount of public funding that has flowed into the six crisis countries, which is regularly updated in the Ifo Exposure Level.³⁷ It includes, in addition to the items mentioned in the paragraph above, government bond purchases by the central banks of other countries, as well as Target credit as known at the time of writing. Claims held by the crisis countries due to an underproportionate issuance of bank notes, which are accounted for on central banks' balance sheets in a way similar to Target claims and play a similar role economically, are deducted from these amounts.

It can be seen that the lion's share of the credit granted to the crisis countries consisted of ECB credit and only a small share, just 32 percent, was monitored by the parliaments of the eurozone countries.

Figure 1



The largest recipient in absolute figures was Spain. It received 41 billion euros *via* the bail-out programme and 270 billion euros, on balance, *via* the ECB system, totalling 30 percent of its GDP. The largest recipient in relative terms was Greece, which received a sum that equalled 162 percent of its GDP. It received 205 billion euros *via* the bail-out programmes and an estimated 109 billion euros from the ECB system. Greece has already been pledged an additional 41 billion euros.

If these pledged funds are included in the figures, Greece has been awarded 185 percent of its 2012 GDP in public bail-out funds. By

³⁷ A detailed explanation of the calculations can be found under <http://www.cesifo-group.de/ifoHome/policy/Haftungspegel.html>.

way of a comparison, the external debt relief for Germany after the Second World War, including assistance from the Marshall Plan over a number of years, amounted to 22 percent of Germany's 1952 GDP, according to figures stated in the London Agreement on German External Debt.³⁸

The French finance minister at the time, Christine Lagarde, acknowledged that the assistance pledged in the eurozone contradicted the No-Bail-out Clause of the Maastricht Treaty (Article 125 TFEU), but argued that it was necessary to cope with the emergency situation in which the EU found itself.³⁹

3.3 Monetary policy or fiscal policy: ESM, SMP and OMT

Despite its limited lending volume the ESM has, according to politician's understanding of the term 'lending volume', possibilities to borrow on the markets in order to buy government bonds, since the purchases of government bonds are not classified as lending, although from an economic point of view that is what they are. A special secondary market programme for the purchase of government bonds was created within the ESM, the so-called Secondary Market Support Facility (SMSF). This programme has not been activated to date, but remains available should intervention prove necessary.

The official statement published by the ESM on its plans to buy government bonds reads:⁴⁰

"The Secondary Market Support Facility (SMSF) ... aims to support the good functioning of the government debt markets of ESM Members in exceptional circumstances where the lack of market liquidity threatens financial stability, with a risk of pushing sovereign interest rates towards unsustainable levels and creating refinancing problems for the banking system of the ESM Member concerned. ..."

The ESM obviously intends to do exactly the same as the ECB did with its SMP. This raises the question of whether

these programmes are to be classified as monetary policy or fiscal policy, and confirms the suspicion that at least one of these institutions, either the ECB or the ESM, is acting *ultra vires*, i.e. overstepping its mandate.

Although the ESM's SMSF programme is not formally limited, an indirect limitation of government bond purchases is present insofar as the liability of participant countries is limited to 700 billion euros. Buyers of ESM bonds will be prepared to finance more than this amount – optimists even reckon with the possibility of multiple leverage – if they receive significantly higher yields to cover the progressively rising risks.

After the danger that Germany would face joint and several liability for the activities of the ESM was removed by a modification demanded by Germany's Constitutional Court, Germany's exposure was limited, in the absence of further decisions by the ESM's Board of Governors, to 190 billion euros.⁴¹

A central political argument for the EFSF and the ESM was the concern expressed by the former president of the German Bundesbank (Axel Weber) and the former ECB chief economist (Jürgen Stark) regarding the legality of the ECB's purchase of government bonds, which subsequently led to the resignation of both officials. Their protest certainly influenced German politics. Leading politicians in Germany understood that the ECB had intervened at a time of emergency, when parliaments were not ready to take action, but subsequently decided that they would prefer to exercise control over government bond purchases. One of the main arguments used to convince the Bundestag of the necessity of a public bail-out package was that the ECB should be allowed to return to its monetary policy responsibilities. In the words of Volker Kauder, chairman of the CDU/CSU parliamentary group in the Bundestag:⁴²

"I would like to explicitly say on behalf of our coalition: once we have established, in the course of setting up the EFSF, that bonds can be purchased on the secondary market under certain conditions, then we no longer wish the ECB to buy such bonds in the future. That must be and remain the task of the bail-out fund."

³⁸ See C. Buchheim, "Das Londoner Schuldenabkommen," in: L. Herbst, ed., *Westdeutschland 1945 – 1955. Unterwerfung, Kontrolle, Integration*, Oldenbourg, Munich 1986, pp. 219–229.

³⁹ See B. Carney and A. Jolis, "Toward a United States of Europe," *The Wall Street Journal*, 17 December 2010, <http://online.wsj.com/article/SB10001424052748704034804576025681087342502.html>. This article cites Christine Lagarde as follows: "We violated all the rules because we wanted to close ranks and really rescue the eurozone."

⁴⁰ European Stability Mechanism, *Guideline on the Secondary Market Support Facility*, Article 1, <http://www.esm.europa.eu/pdf/ESM%20Guideline%20on%20the%20secondary%20market%20support%20facility.pdf>.

⁴¹ See German Federal Ministry for Finance, *Bundesregierung macht den Weg frei für den dauerhaften Stabilitätsmechanismus ESM*, press release, 26 September 2012, <http://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2012/09/2012-09-25-PM57.html>.

⁴² "Plenarprotokoll der 135. Sitzung von Mittwoch, dem 26. Oktober 2011", Deutscher Bundestag, *Endgültige Plenarprotokolle*, Plenary protocol 17/135, <http://dip21.bundestag.de/dip21/btp/17/17135.pdf>. (Author's translation of the German original text)

Even the ECB itself highlighted the link between its own SMP and the Community's EFSF/ESM programme. In the words of former ECB President Trichet:⁴³

"Of course, what we expect is that the EFSF, which will have the capacity to intervene in the secondary markets, will be effective and efficient in its interventions. That would permit us not to have to intervene to help restore more appropriate monetary policy transmission."

With the arguments cited above it was also possible to convince the Bundestag parties to agree to the ESM. Nobody wanted the ECB to purchase government bonds since this was deemed legally questionable, the official bail-out fund being therefore organised as a replacement. In reality, the ECB stopped purchasing government bonds during the parliamentary debates, which were increasingly frequent towards the end of 2011, and thus led members of parliament to expect that it would refrain from conducting such legally problematic purchases in the future.

However, the Bundestag had hardly ratified the ESM Accompanying Act on 29 June 2012 when the ECB announced on 6 September 2012 (shortly before the German Constitutional Court's rejection of the appeal against the ESM treaty on 12 September 2012) that it would support the ESM from that point on in its bail-out measures for distressed countries, and would, if necessary, support *unlimited* purchases of government bonds.⁴⁴

"Within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough."

These were the words of ECB President Mario Draghi.⁴⁵ Once conditions for ESM support had been negotiated and the country in question had started to implement the agreed reform programme, the ECB would purchase as many government bonds as necessary to support the prices of these bonds and thus to upwardly limit the interest rates at which states can borrow. The ECB called its new strategy Outright Monetary Transactions (OMT).

⁴³ Transcript of the questions asked and the answers given by Jean-Claude Trichet, President of the ECB, and Vítor Constâncio, Vice-President of the ECB, 4 August 2011, <http://www.ecb.int/press/press-conf/2011/html/is110804.en.html#qa>.

⁴⁴ See European Central Bank, *Technical Features of Outright Monetary Transactions*, press release, 6 September 2012, http://www.ecb.europa.eu/press/pr/date/2012/html/pr120906_1.en.html. President Draghi had used similar words before, but now he used them in the context of the OMT programme.

⁴⁵ Speech by Mario Draghi, President of the European Central Bank at the Global Investment Conference in London, 26 July 2012, <http://www.ecb.europa.eu/press/key/date/2012/html/sp120726.en.html>.

With OMT, the ECB effectively waived the exposure limit of 190 billion euros on the ESM's government bond purchases, which had been strengthened by the preliminary decision of Germany's Constitutional Court of 12 September 2012. It practically told government bond buyers that they did not need to fear a state bankruptcy because the ECB would buy an unlimited volume of bonds from them to avoid the possibility of any insolvency and would accept the write-off losses on its books, whereby it would in effect foist these losses on taxpayers and recipients of state welfare benefits. The ECB did state the conditions for its purchases, in particular that the bonds to be bought must not have a maturity of more than three years and that the country in question must previously agree to the ESM bail-out fund's conditions and should not have completely lost access to the capital markets. However, these conditions do not change the fact that the markets viewed the ECB's announcement as an implicit mutualisation of the debts owed by the crisis countries. The President of the Swiss Central Bank, Philipp Hildebrand, wrote in the *Financial Times*:⁴⁶

"The ECB's outright monetary transactions are a game-changer. OMT's soothing power stems from the fact that market participants in effect see them as a commitment to the mutualisation of liabilities across the eurozone: countries standing together behind the debts of the vulnerable."

As mentioned, either the ECB's purchase programmes (SMP and OMT) or the essentially identical purchase programme run by the ESM (SMSF) are *ultra-vires* activities for the respective institutions, for they can be seen as either monetary policy or fiscal policy. The ECB is either practicing fiscal policy, which is beyond its remit, or the ESM is practicing monetary policy, which is beyond its remit. The acceptance of exposure risk through guarantees is clearly part of fiscal policy, which should be subject to democratic control. In this sense, the ESM is not overstepping its competences. The ECB, however, cannot escape the accusation that it has exceeded its mandate.

4. The risks and costs of ECB policy

The opinion is often voiced that no liability risks can be associated with the ECB's operations because there

⁴⁶ P. Hildebrand, "France's Economy Needs to Become More German," *Financial Times online*, 2 May 2013, <http://blogs.ft.com/the-a-list/2013/05/02/frances-economy-needs-to-be-become-more-german/?#axzz2VLGgwKY0>.

is no obligation for member central banks of the Eurosystem to recapitalize the ECB or for states to recapitalize their national central banks, and that losses therefore cannot affect public sector budgets. The ECB can carry on its operations with negative equity for an unlimited period without the states being affected. Thus the losses from government bond defaults are only imaginary and have no real significance.

This view does not withstand scrutiny from an economic point of view, since the ECB's depreciation losses represent interest losses on the assets that are to be written-off, as well as on the replacement assets that could have been acquired inflation-free at the former's maturity. The present value of interest losses always equals the value of the write-off losses themselves, if calculated correctly. This applies regardless of how and whether the losses are reported in the accounting system. Somebody has to bear these losses. Based on the current state of affairs the loss-bearers are the taxpayers, who stand behind the sovereigns that own the national central banks of the ECB system.

The interest income that Eurosystem member central banks earn from the open-market and refinancing operations, the so-called seignorage, are pooled by these central banks and then redistributed according to their capital shares, which correspond to country size.⁴⁷ It does not matter where the interest income was generated. So if bonds purchased by the ECB system default, Germany will in principle bear 27 percent of the losses.

4.1 Potential exposure *via* the OMT programme

This reasoning also applies to the potential depreciation losses on government bonds that Eurosystem central banks have acquired in the course of SMP and OMT operations; they are also expressed in corresponding losses in interest income. To ensure that purchases of these government bonds are inflation-neutral, the ECB sterilises the resulting increase in the money supply. It generally does so by granting a lower volume of refinancing loans. At least it has expressed its intention to do so.⁴⁸ The purchase of government bonds therefore essentially (apart from interest differentials) offers no net interest income and the write-off of these bonds therefore represents an irretrievable

loss of interest income. Should such bonds default due to a state insolvency, the ECB cannot acquire any new bonds to create fresh interest income, as this would increase the money supply, which would have an inflationary effect and would lead to losses for money holders. The interest income from the ECB's purchases of government bonds which then have to be written off is therefore irreparably lost. The interest income on replacement loans or bonds, which the ECB could have given out or bought at bond maturity without inflating the stock of outstanding money balances, is also lost. The Eurosystem therefore permanently loses interest income, the so-called seignorage, whose present value amounts to the value of the defaulted government bonds. This loss is borne by all states that would otherwise have participated in the distribution of interest income by their respective central banks, and thus the states' taxpayers or welfare recipients. The present value of the consumption foregone by them and their children equals the size of the write-off loss on such government bonds.

From this point of view there are no economically relevant differences between a write-off loss that affects the ESM and forces the states of the Eurosystem to make an additional contribution to cover the losses, and a write-off loss that affects the ECB. The loss is always fully borne by the Treasuries or the Ministries of Finance of member states and therefore by taxpayers and all those whose income comes from the public sector budget. From an economic point of view, the questions of whether the states are obliged to make subsequent payments to recapitalise their central banks and of whether central banks with negative equity should be allowed to continue to operate or not, are irrelevant to the assessment of these losses.

The losses sustained by the ECB are limited to the present value of all of the interest income generated by it (including other capital income) provided that the governments do not inject fresh equity capital. Under static conditions, this present value equals the sum of the monetary base (M0) and the equity capital of the ECB system. The monetary base is the stock of central bank money as existent in the form of bank notes and demand deposits held by commercial banks with the central bank, for it was created through the purchase of lucrative assets and the provision of interest-bearing refinancing credit to commercial banks. As mentioned above, this monetary base currently (end of March 2013) has a value of 1,363 billion euros. Together with the equity capital of the Eurosystem, which is worth

⁴⁷ A country's capital share corresponds to the average value of its pro rata to population and GDP share.

⁴⁸ See European Central Bank, *Technical Features of Outright Monetary Transactions*, op. cit. This states that: "The liquidity created through Outright Monetary Transactions will be fully sterilized".

496 billion euros, the total liability limit of the Eurosystem, based on a static calculation, is 1,858 billion euros. The upper limit for a potential German liability from the ECB's actual and announced purchases of government bonds is 27 percent of the monetary base, thus 369 billion euros, plus the 137 billion euros equity capital of the Bundesbank, amounting to 506 billion euros in toto. The 190 billion euro liability limit from the ESM is not included in this sum.

The exposure limit is even higher in a dynamic calculation if one assumes that the economy of the euro area will grow continuously, meaning that the central banks can lend a rising amount of money without accelerating inflation. The present value of interest income from lending self-created money is then higher than the current monetary base and Germany's potential liability is correspondingly higher.⁴⁹ Remarkably, based on such considerations, the chief economist of Citibank argued that the ECB can absorb losses of up to 3.4 trillion euros, without, however, mentioning that the member states would be fully liable for these losses.⁵⁰ In that case, Germany's maximum exposure limit for the OMT would climb to 922 billion euros (27 percent of the 2.9 billion euros monetary base plus 137 billion euros of Bundesbank equity). There is however a significant degree of uncertainty in any such dynamic calculation due to weak growth in the eurozone.

The upper exposure limit is also higher if the member states of the Eurosystem offset equity losses by way of capital increases, since the fresh equity capital will also be subject to the risk of further write-offs.

The ECB asserts that its OMT programme is limited to bonds with 'a residual term to maturity of between one and three years'⁵¹ and it shows a table according to which the stocks of such bonds for Spain, Italy, Ireland and Portugal are worth only 524 billion euros, so that the liability (contrary to the declaration of the ECB president) would indeed be limited. This statement is baffling for various reasons and can only be interpreted as a defensive assertion aimed at playing down the situation.

Firstly, an initial inspection of the table presented reveals that it only features bonds with a total maturity

of up to three years, which does not correspond with the statement cited above that the bonds with a 'residual term to maturity of between one and three years' will be targeted by the OMT. If longer-maturity bonds with residual terms to maturity of between one and three years were to be added to this sum, the figures would presumably be much higher.

Secondly, almost every government bond issued (with the exception of short-term treasury bills) will eventually come into the range of a residual term to maturity of between one and three years. This means that almost all of the government bonds of the countries in question are protected by the OMT. As of 7 December 2012, the government bonds of Ireland, Italy, Portugal and Spain may have had a value of roughly 2 trillion euros.⁵² This sum minus the bonds with a residual maturity of less than a year would give the exposure for the community, if the present value of seignorage and the stock of equity capital were not to constitute the limit.

Thirdly, the number of countries that may receive funds from the programme is not specified. Another large candidate could be France, since vast swathes of the French economy are no longer competitive, and given its role as the major creditor of today's crisis-afflicted countries, the French banking system is far more vulnerable than any of its Eurosystem counterparts. If French government bonds are also included in this sum, the exposure may already have soared to around 3.5 trillion euros. This roughly equals the maximum liability limit resulting from a dynamic seignorage calculation as cited above (3.4 trillion euros), if no fresh equity is injected.

Fourthly, when new government bonds are issued it is of no relevance to the interest-lowering effect of the OMT whether their maturity is less than three years, whether or not the ECB's buy-back promise already applies to these bonds now. To soothe buyers and ensure that new issues have a lowering effect on interest rates, the repurchase guarantee only needs to be limited to the time shortly before or at maturity, for the market price of an asset is always derived recursively, back from what the last owner is able to collect when s/he sells or returns the asset. After all, an investor buys an asset only if s/he is confident that a successor

⁴⁹ If M is the monetary base, i the (constant) nominal interest rate and r the (constant) nominal annual growth rate of the economy, then the present value of interest income from the Eurosystem's lending out its monetary base is $M \cdot i / (i - r)$.

⁵⁰ See W. Buiter and E. Rahbari, "Looking into the Deep Pockets of the ECB," Citi Economics, *Global Economics View*, 27 February 2012.

⁵¹ See F. Schorkopf, *Stellungnahme der Europäischen Zentralbank*, op. cit., esp. p. 34.

⁵² F. Schorkopf, *Stellungnahme der Europäischen Zentralbank*, op. cit., p. 34, reports 2.2 trillion euros for all residual maturities for Ireland, Italy, Portugal and Spain. Please note that these figures only relate to securitised sovereign debt (verbrieft Staatschulden) and not all sovereign debt is securitised. Unfortunately, the stock of bonds with a residual term to maturity of less than a year was not reported.

can be found who shares this opinion. Thus, government bonds only have a value if they are expected to eventually be repaid, because only under such conditions would the last investor in the chain buy them. That, however, is precisely what the OMT promises, for before a country goes bankrupt and is cut off from the market it will request assistance from the ESM bail-out fund, meaning that the ECB can buy the bonds before they reach maturity. The ECB would then bear the write-offs that must be made if a country goes bankrupt, or would more probably pressure the community of states to avert the crisis-afflicted country's bankruptcy through open transfers to it.

The limitation of exposure that the ECB claims exists will only apply if the ECB were to say, for example, that it is only prepared to buy bonds with a residual term to maturity of over a certain period (more than three years). This kind of rule would render the promise worthless for the crisis-afflicted countries and would not reduce the yields on their bonds, because it implies that the last owner of the bond does not enjoy any protection. The last owner will only ascribe a low value to the bond and the fact that the next-to-last owner knows this means that s/he will only be prepared to pay a low price for it. Such support is obviously not going to improve bond prices or lower bond yields.

4.2 Risks related to refinancing credits

Exposure risks similar to those resulting from the purchase of government bonds are also created for Germany by normal refinancing operations, as well as the Target debts of the GIPSIC countries, which, as explained, measure the above-normal level of refinancing operations.

If banks in the eurozone go bankrupt and the collateral that they have received in the form of securities or state guarantees becomes worthless, a liability risk in the form of lost interest receipts also arises for the ECB when banks default on the refinancing credit they had received. This liability risk does not increase the upper exposure limit mentioned above associated with Germany's capital share in the ECB, because this liability risk is limited to the Eurosystem's loss of interest income. However, it does increase the scope and probability of Germany's exposure to losses. If the collateral includes government bonds, Germany also faces a liability risk from the indirect financing of crisis-afflicted

countries *via* the ECB's refinancing credit, especially from the volume of such credit exceeding the amount required to meet the country's liquidity needs that is used to finance foreign bills. As mentioned, this excess credit as reflected in the Target balances was only available thanks to a lowering of collateral standards.

4.3 Target losses in the case of exit and bankruptcy, should the euro continue to exist

The preceding statements on the loss of interest receipts from refinancing credit only apply to cases of bank and state bankruptcies within an existing Eurosystem. The circumstances are different in the case of an exit from this system, which terminates the legal relationship between the Eurosystem and the commercial banks of the exiting country.

If each country had only created enough money for its own circulation, there would have been no cross-border flows of interest income from refinancing operations and, in this respect, an exit together with a bankruptcy could not entail any losses for those countries remaining within the Eurosystem. Losses arising from the bankruptcy of any commercial bank would then be sustained by the exiting country itself and would no longer impact the other countries.

However, the central banks of the GIPSIC countries have, as shown, created over three times the money circulating in their respective countries to grant interest-bearing refinancing credit to the commercial banks for international payment orders. That is why interest income is flowing on balance from the GIPSIC central banks to their counterparts in the other euro countries, the present value of which is measured by the Target debts. Should all or only one of these countries exit the Eurosystem and fail to honour its Target debt, the corresponding net interest income that its central bank(s) should have been obliged to pay out to the others would no longer be flowing. This would result in a permanent interest loss for the countries remaining in the Eurosystem, whose present value equals the Target debt of the exiting country. This interest loss would be shared among the countries remaining in the Eurosystem according to their capital share in the ECB, i.e. in proportion to their size.

In concrete terms, since the GIPSIC countries have already accumulated Target debts of around 705 billion euros (end of May and/or end of March), the rest of

the euro countries must, in the case of an exit and bankruptcy of the GIPSIC countries, reckon with the loss of interest income worth 705 billion euros. Germany would have to bear around 43 percent or 302 billion euros of such losses in line with its share in the ECB's capital as divided among the remaining euro countries.

A modification of this calculation is appropriate insofar as the GIPSIC countries would also lose their share of equity capital in the ECB in this case, or 11 billion euros (37 percent of 31 billion euros), as well as their claims against the ECB system due to their slightly under-proportional issues of bank notes, which, as shown in Figure 1, amounts to 39 billion euros. In this light, the losses of the remaining euro countries would total 656 billion euros (= 705 billion euros – 11 billion euros – 39 billion euros). The German share of this loss would not amount to 302 billion euros in this case, but to 281 billion euros.

In principle, there is no upper limit to the present value of the interest losses from Target debt in the form of the Eurosystem's money supply, for the Target balances are theoretically unlimited. It is completely conceivable that part of the euro area may produce more central bank money than exists in the Eurosystem by granting credit, in order to purchase goods abroad and pay off debts with it, while the excess liquidity created by payment orders from abroad may be destroyed in another part of the Eurosystem where commercial banks deposit this liquidity with their central banks, which basically means that they lend it to them. As mentioned above, this kind of net lending by commercial banks to their central banks is already occurring on balance in the non-GIPSIC countries. The Bundesbank in particular has become a debtor of the German commercial banking sector. Theoretically there are no limits that could prevent the perverse process of net lending by private German banks to the Bundesbank from reaching a level where it even overcompensates for the money created by asset purchases, or in other words a level at which Target claims exceed the money circulating domestically, and in fact this situation has prevailed in Germany since July 2012.

Moreover, in the case of a bankruptcy, the other states would presumably have to also reckon with the loss of the claims related to government bonds that their central banks were obliged to acquire in the framework of the SMP. These claims total, as mentioned above, 124 billion euros. They are to be added to Germany's

share in the losses of Target claims, i.e. to the 281 billion euros mentioned above. In this scenario Germany would have to reckon with losing a total of 334 billion euros if the European Monetary Union were to continue to exist in its present form, while the GIPSIC countries were to exit and go bankrupt.

4.4 Target losses in the case of a euro break-up or a German exit

The losses would be slightly greater if the Eurosystem were to fall apart. In this case Germany would hold claims against a system that no longer existed and would have to wrangle with the Netherlands, Luxembourg and Finland over the equity capital remaining in the ECB, which, as already mentioned, would only be 31 billion euros.

According to the current figures, Germany has Target claims of 589 billion euros. That is the present value of the interest income flows from the other central banks of the eurozone to the Bundesbank, to which the Bundesbank has a claim according to the distribution rules, because it did not lend the money that it created to German banks, but made it available to them *via* payment orders carried out on behalf of other central banks. Conversely, other central banks have a claim on the Bundesbank's interest income, because the Bundesbank granted refinancing credit that led to an overproportionate issue of bank notes, which, according to the assumption underlying the reporting of money creation in the Eurosystem's central banks' balance sheets, might be circulating somewhere else in the euro area. The liability arising for the Bundesbank, represented by the present value of the interest income payable to others, totals 204 billion euros (end of March 2013). In net terms this means that the Bundesbank has a claim to interest income from the rest of the Eurosystem with a present value of 385 billion euros.

If the euro breaks up, this interest income will no longer flow to the Bundesbank, but will remain at the central banks, which are collecting them thanks to their higher lending to national commercial banks. In all events, there are no explicit legal grounds for corresponding German claims. A thousand reasons will be found why the Target balances do not represent credit claims and they will be declared irrelevant balances that lose all validity in the event of a euro break-up. In this scenario, Germany has to reconcile itself to the losses of its claims arising from money creation on behalf of other

central banks (Target) minus its liabilities related to its overproportionate issue of bank notes (204 billion euros), which currently total 385 billion euros.

4.5 Shift in growth forces due to free insurance coverage

Beyond the calculation of potential capital losses, the shift in growth forces in the euro area is an important implication of ECB policy and the bail-out funds. As outlined at the beginning of this report, the crisis arose from the fact that the path southwards was made particularly attractive to savings capital from the North *via* special regulatory rules, which partly overrode market forces. This false investment policy led to the inflationary credit bubble, which robbed the Southern countries of their competitiveness and ultimately led to exorbitant capital destruction.

When the capital markets recognized their mistake and wanted to correct it, the ECB opposed this by underbidding the credit offering of the capital markets for the Southern European countries and Ireland with fresh money from the electronic printing press. The combination of maturity, collateral quality and interest rates offered by the ECB could not be matched by the private banks of the North in view of the risks present.

Thanks to its government bond buying and its announcement of unlimited purchases if necessary, the ECB subsequently offered free credit insurance for government bonds, effectively escorting Northern savings southwards, although they no longer really wanted to flow in that direction.

With both measures the ECB effectively detached the financing of the governments and private sectors of Southern Europe to a large extent from the capital market, which it justified with the alleged dysfunctioning of the markets.⁵³ While the markets demand a wide spread of interest rates in line with the risks at stake, the ECB maintains that the transmission of monetary policy calls for less inequality between interest rates than caused by the markets. With its interventions it is making capital investment in Southern Europe attractive once again to German and other investors. However, since capital can only be invested once, this policy automatically means that it prevents the capital from being put to other uses, for example in Germany.

⁵³ See European Central Bank, *ECB Decides on Measures to Address Severe Tensions in Financial Markets*, op. cit.

The investment security artificially created in Southern Europe will have a particularly negative impact on the German domestic economy, for its boom during the last three years can be explained by the fact that domestic investors preferred to invest in their safe home haven. The construction boom has constituted a central pillar of the German economy over the past 3 years. It has reduced unemployment and has benefited broad swathes of the population. These strata of the population will become the victims of the public protection of capital exports to Southern Europe, for the forces that drive this boom will be weakened.

The already visible result of the calmer market, soothed by the Community's and the ECB's promise of protection, is that the governments of Southern and Western Europe are prepared to take on higher debt levels again. Thanks to the low interest-rates offered by the ECB, the ESM and the markets backed by the OMT, the willingness to conform with the debt ceilings agreed in the Fiscal Compact just last year has evaporated again. France, Spain, the Netherlands, Portugal, Slovenia and Poland have asked the EU Commission for a temporary suspension of the debt ceiling, which they were granted and which accordingly means a higher level of government debt. This fresh government debt will also help to siphon investment funds away from other parts of Europe.

However, the artificial interest-rate subsidy, and the indebtedness that it entails, delay the reforms needed to improve competitiveness rather than facilitating them. It slows the required real depreciation in terms of reducing relative goods prices. This will lead to a sclerotic consolidation of the euro crisis with high structural unemployment, which will hamper any return to sound economic relations and pave the way towards the need for a steady flow of further bail-out funds that will eventually result in a transfer union. This will only create further areas resembling the Italian Mezzogiorno, geared towards receiving permanent assistance, never restoring competitiveness and subject to a chronic sickness of the Dutch Disease type.⁵⁴

⁵⁴ A Dutch disease is referred to as a loss of competitiveness by way of becoming too expensive, which is a result from having access to funds for imports *via* channels other than the sale of goods. In the Netherlands the disease broke out in the 1970s, after gas was found there and sold abroad. The revenue from the sale of gas enabled wage increases, which exceeded increases in industry productivity and therefore deprived the Dutch manufacturing sector of its competitiveness. The same phenomenon can be engendered by a private or public inflow of credit or public transfers from other regions. See E. Dichtl and O. Issing, ed., *Vahlen's Großes Wirtschaftslexikon*. Vol. 1, 2nd edition, Vahlen, Munich 1993, esp. p. 480, or A. Sitz, "Dutch Disease: Ökonomische Konsequenzen eines Energiebooms," *Jahrbuch für Sozialwissenschaft* 37, 1986, pp. 218–245.

Moreover, the free insurance against government insolvency, which the ECB declared with its OMT programme, not only directed savings capital from the North to the South of the euro area, but also attracted savings capital from across the world to Europe. This is now preventing the depreciation of the euro that is urgently needed to improve the competitiveness of the Southern countries.

4.6 The path dependency of policy

By surging ahead with assistance for the GIPSIC countries, especially by paving the way for a dramatic extension of refinancing credit as shown by the Target balances, the ECB has taken the matter into its own hands and left the Community almost no alternative but to accept the subsequent bail-out programmes. By May 2010, when the governments approved the first bail-out packages, the ECB had granted additional refinancing credit worth over 150 billion euros, which led to corresponding Target balances.⁵⁵ As mentioned, the ECB did so *via* the full-allotment policy together with a lowering of the quality of collateral required for refinancing credit from Single A– to Triple B– as well as by tolerating the Emergency Liquidity Assistance (ELA) credit granted by the Central Bank of Ireland.

Hence, the ECB had already significantly extended its exposure in spring 2010 and taken on risks by financing the banks and, indirectly, the states of the crisis countries. Politicians were therefore no longer free to act at the time when the decision was taken over the bail-out funds of the community and the question arose whether the ECB's government bond buying should be tolerated. However, the decisions made by the ECB Council left almost no other alternative. In that sense the German Chancellor, Angela Merkel, was right to argue that there was no alternative for policy makers than to agree to fiscal bail-out programmes.

If the ECB had not approved the bail-out funds, many banks in Greece, Ireland and Portugal would almost certainly have gone bankrupt, and in view of the low quality of the collateral offered for refinancing credit, this would have resulted in heavy losses for the ECB and thus for the countries of the eurozone.

A similar situation applies to the other measures subsequently taken by the ECB. By further lowering the

quality of the collateral it demanded by waiving a minimum rating for the government bonds of Greece, Portugal and Ireland and extending the terms of refinancing credit, which represented an undercutting of the interbank market in terms of lending conditions and further bloated Target balances, the ECB intertwined itself even more closely with the fate of the banks and governments of the crisis-afflicted countries. The same applies to state financing *via* the SMP purchasing programme and the announcement of such purchases *via* the OMT.

The ECB's loss risk *via* the OMT programme may seem less overt because the ECB has not yet purchased any bonds in the context of this programme. However, the ECB will not renege on its promise of protection, which resembles a credit default swap (CDS) insurance for buyers of Southern European government bonds in an emergency situation. Viewed in this light this programme also represents a significant extension of liability and risk.

This all has increased the pressure on policy to prevent the liability case scenario from materialising, or at least to make it more improbable, *via* other bail-out measures. In May 2010 the German government was therefore obliged to approve inter-governmental rescue credit to protect the ECB from losses. Moreover, in June 2012 it was obliged to approve the opening of the ESM for a recapitalization of private banks, in order to prevent the collapse of the banks and governments of Southern European states and stop the ECB from sustaining losses. As a shareholder of the ECB that would have to bear the overall losses, Germany was already involved and saw no further scope for action at the point in time at which the decision had to be taken.

A path dependency in policy has thus developed whereby the decisive course is set by the ECB Council instead of Europe's parliaments. Parliaments can almost be said to have been reduced to vicarious agents of the ECB Council, because the latter's prior decisions have limited the freedom of parliamentary decision-making.

This highlights a major problem for democracy, for the ECB was not conceived as a body to bail-out banks and governments in the euro area, but as an institution that conducts monetary policy. The ECB Council does not have the mandate to implement the comprehensive fiscal bail-out measures that it has taken, and certainly

⁵⁵ The Target debt of the GIPSIC countries amounted to 156 billion euros at that time (30 April 2010).

not to pre-determine explicit bail-out policies, which parliaments essentially only have to execute.

4.7 The creeping confiscation of savings

The free CDS insurance of the government bonds of the crisis-afflicted countries, which is linked to the ESM protective shield and ECB policy, pushes down the interest rates at which crisis-afflicted countries can borrow and thus lowers the interest income received by savers from capital exporting countries, and especially from Germany, the world's largest capital exporter. The Target balances have the same effect, for they arise due to the fact that some national central banks are offering local commercial banks refinancing credit at cheaper rates than the capital market, and are thus reducing the market rates themselves. The undercutting of the capital market with the printing press has considerably lowered the interest burden of Southern European governments and private sectors compared to the interest that the markets would have demanded. This effect has already heavily impacted German life insurance policies, with insurers no longer able to meet the guaranteed interest rates.

Long-term capital investments made by citizens as pension provisions are particularly affected by the interest rate drop due to the very strong compound interest rate effect. Whoever, for example, invests savings for 30 years to accumulate a pension with this capital and no longer receives 5 percent per year in interest, but just 2 percent per year has to accept a 58 percent cut in his/her pension.

The counter-argument is naturally that savers now receive safer income and can thus forego a risk premium in the interest rate. For one thing, their banks are investing more funds in the Bundesbank, where they are considered safer than in Southern banks. For another, they are benefitting from the ECB's buy-back guarantee for government bonds in the OMT programme.

However, it is effectively the savers as taxpayers themselves who provide the guarantee, because they must bear the losses of the ECB and the ESM. And they are not only helping themselves, but savers from outside the eurozone who do not participate in the bail-out initiatives as taxpayers. Seen in this light, the interest advantages of the Southern countries when borrowing in the North are matched by the corresponding inter-

est disadvantages of the Northern countries, while the security of the latter is unchanged or diminished.

This particularly applies to German savers whose financial institutes do not invest the capital entrusted to them directly in Southern Europe, but in many cases did so *via* France or the Benelux countries and also made investments worldwide. According to information from the Bank for International Settlements, at the time of the Lehman crisis (Q3 2008) German banks had an exposure of 590 billion euros in loans to the public and private sectors of the GIPSIC countries, while France had one of 604 billion euros.⁵⁶ The German loans represented 6.5 percent of the bank debts of the GIPSIC countries including the deposits of local households and firms and 24 percent of loans by banks from all other countries of the world to the public and private sectors of the GIPSIC countries. However the exposure of Germany to the sum of all bail-out funds (IMF, EU, ECB, ESM, EFSF, EFSM and the first bail-out package for Greece) for the GIPSIC countries is 39 percent.⁵⁷ The argument sometimes put forward that Germany's savers were the big

⁵⁶ See Bank for International Settlements (BIS), *Consolidated Banking Statistics*, <http://www.bis.org/statistics/consstats.htm>; the figures stated (in US dollars) were calculated in euros using the exchange rate of 30 September 2008.

⁵⁷ Germany's share of the ECB's bail-out measures for the GIPSIC countries as a whole (the countries in the bail-out programmes and Italy) totals 43 percent, which corresponds to Germany's share in the ECB's equity capital without the GIPSIC countries. Of the 791 billion euros in ECB credit, which is mentioned in Figure 1, 339 billion euros came from the Bundesbank. Germany's contribution to the international fiscal bail-out packages for individual crisis states must be added to this figure.

Concerning the payments from non-GIPSIC countries to GIPSIC countries, Germany paid over 15 billion euros to Greece in the framework of the first bail-out package. Germany contributed 43 percent, or 54 billion euros, to the second Greece package stemming from the EFSF (127 billion euros paid out to date). Its contribution to the IMF's assistance to Greece of around 25 billion euros to date amounts to a good 6 percent or 2 billion euros. This means that Germany has provided Greece with a total of 71 billion euros in bail-out funds excluding its participation in the ECB's bail-out funding.

To date, the EFSM, EFSF and IMF have paid out around 22 billion euros, 13 billion euros and 20 billion euros to Ireland, respectively. Germany accounts for around 4 billion euros of EFSM funds (around 20 percent, like Germany's share in EU income), a good 5 billion of the EFSF funds (43 percent) and a good 1 billion euros of IMF funds (6 percent). In total, Ireland therefore received around 11 billion euros from Germany in addition to ECB assistance.

Portugal received 22 billion euros from the EFSM, 19 billion euros from the EFSF and 22 billion euros from the IMF. Germany contributed to these sums according to the quotas mentioned above which in absolute terms amounted to a good 4 billion euros, 8 billion euros and 1 billion euros. The German contribution to this country *via* the official bail-out funds totaled 14 billion euros.

Spain received 41 billion euros from the ESM, while Cyprus was paid 2 billion euros. Although there is no specific exposure for concrete individual measures with the ESM and there is no automatic increase in the percentage rates due to so called "stepping out guarantors" as with the EFSF, in purely arithmetical terms Germany contributes 27 percent according to the ESM key, which is a good 11 billion euros for Spain and around ½ billion euros for Cyprus. Germany contributed around 5 million euros to the IMF's payments to date to Cyprus (around 0.1 billion). In total Germany has granted credit to the crisis-afflicted countries, including bail-out assistance via the ECB, of around 447 billion euros (339 + 71 + 11 + 14 + 11 + 0.5). This is 38.6 percent of the total funds paid out of 1,158 billion euros.

winners of the bail-out initiatives, because they were also bailed out by other still healthy euro countries is therefore questionable. If Germany's savers stand to benefit, this is only to the degree that they are able to pass on the costs of the bail-out to other German taxpayers. Germany's citizens collectively are certainly not the winners.

Figure 2 shows how valuable this free insurance cover offered by government bodies is. This figure shows the development of CDS insurance premia for the government bonds of the GIPSIC countries since 2005. The premia measure the annual interest rate of the aval at which creditors can insure themselves against a default on the part of their debtors. It is clear that the CDS insurance premia for all countries increased very sharply at the outbreak of the crisis, but that with the exception of Greece, which had obviously been given up for lost, these premia have fallen again since autumn 2011. This trend was undoubtedly underpinned by market expectations that the EFSF would be converted into the ESM's permanent bail-out mechanism, and the subsequent announcement of the OMT programme, for both significantly increased the security

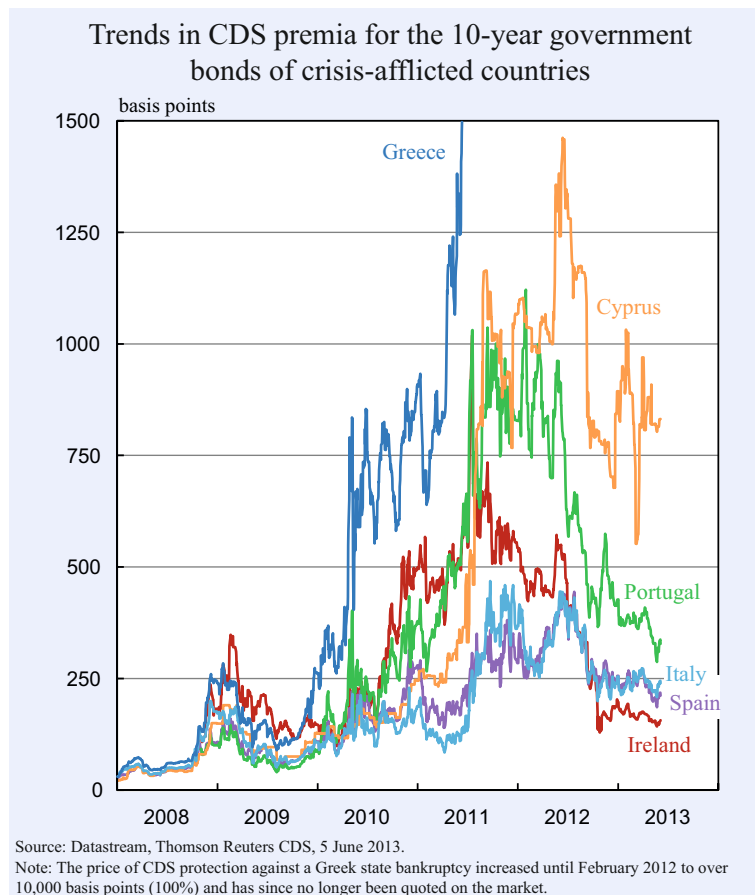
of government bonds. In the fourth quarter of 2011 the CDS premia for the insurance of the government bonds of the five remaining crisis-afflicted countries was at 4.1 percent, if government debt levels are used as weights. In the first quarter of 2013 the premia, on the other hand, were at just 2.5 percent. In terms of the available aggregate government debt of these countries at the time (end of 2012), this premia reduction corresponds to an economic advantage of around 53 billion euros per year.⁵⁸ Germany's share of this amount totals around 23 billion euros.⁵⁹ These are rough estimates or reference points for the annual economic values of the protection systems offered.

The German government could also underwrite the risk that it is running *via* the OMT programme and the ESM at any time by selling CDS protection for worldwide risks worth the same amount itself. Then it could earn the 23 billion euros by selling the insurance that it currently offers for free.

Let us now suppose that the Community could perfect its protection to the degree that all risk disappeared. A plausible value for this additional protection is given by the average value of CDS insurance premia for the five crisis countries (excepting Greece) from 2009 to 2012 that have remained despite the bail-out activities. Based on the government debts of these countries at the end of 2012, income from the provision of such additional protection would total 72 billion euros per year. If Germany had joined forces with the other non-GIPSIC countries to make such an offer, it could have received an additional insurance premium worth 31 billion euros per year.⁶⁰

It is often argued that the bail-out policy of the Community and the

Figure 2



⁵⁸ The government debt of the crisis countries excluding Greece totaled 3,285 trillion euros at the end of 2012.

⁵⁹ Germany's capital share in the ECB without the GIPSIC countries is 42.84 percent.

⁶⁰ The average CDS premium for the five crisis countries in the years 2009 to 2012 was 2.2 percent of insured government debt. The government debt of these countries at the end of 2012 amounted to 3,285 billion euros. Germany's capital share in the ECB without the GIPSIC countries amounted to 42.84 percent.

ECB helps absorb some of the increase in interest rates demanded by the market from the GIPSIC countries since the outbreak of the crisis and reduce it to a bearable and economically acceptable level. This would suggest that the interest payments made by these countries to their foreign creditors rose during the crisis, but were not as high as 'irrational' market demand.

In fact, however, the interest burden shouldered by the GIPSIC countries has fallen. It dropped by 24 percent between 2008 and 2012, although the external debt contracted by these countries, as measured by the current account deficits, increased by 219 billion euros or 13 percent and the market interest rates exploded, which was criticized on all sides and universally seen as the main problem of the crisis.⁶¹

Figure 3

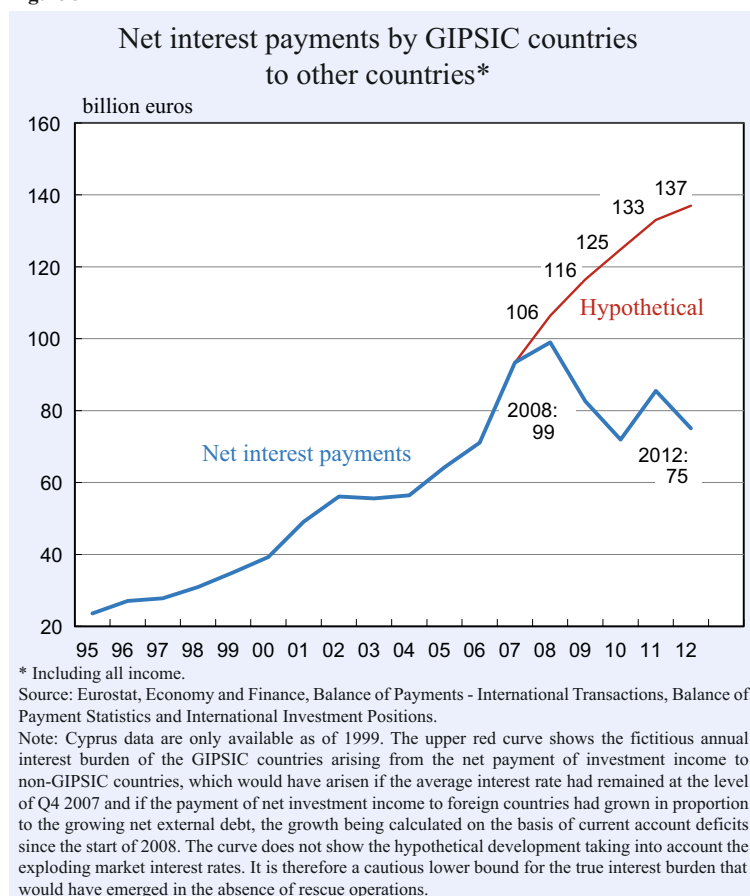


Figure 3 shows the trend in net capital income paid by the crisis-afflicted countries to other countries since 2000. It shows that the interest burden of the GIPSIC countries before the crisis rose continually due to the excessive external debt of these countries, but amazingly reached a peak as early as the year of the Lehman crisis (2008) and then, despite growing debt and rising market interest rates, fell again.

This amazing phenomenon can be attributed to the fact that the crisis-afflicted countries did not pay market interest rates on the public replacement loans that were provided by the ECB and the community of states. As already explained in Figure 1, these loans primarily took the form of fresh ECB money issued in the crisis countries by way of providing refinancing credit to commercial banks at interest rates of one percent or lower (Target credit), as well as credit in the form of government bond purchases by the national central banks of the eurozone, which lowered the interest rates on government debt. Together both of these items account for nearly 70 percent of total bail-out credit (see Figure 1).

⁶¹ The debt contracted is not exactly the same as the net external investment position of the countries, which shows the debt calculated at its market value, i.e. after devaluation effects and after the 119 billion euro hair-cut at the expense of Greek's debtors that was carried out in 2012.

5. Economic assessment of ECB policy

With the cheap refinancing credit that the central banks of the GIPSIC countries granted their commercial banks – and which led to the overflow of liquidity created by the ECB credit into other countries, as measured by the Target balances – the ECB granted the hard-pressed countries public credit. The credit partly flowed into the private sector. However, during the crisis, as shown above, it mostly flowed to governments. Banks used it to purchase government bonds, which they submitted as collateral to their central banks. This constituted indirect government financing *via* the ECB system. The credit granted in this way does not differ in its economic core from the credit that was also granted by the ESM public bail-out mechanism. Even the risk for the creditor countries is similar. If the euro survives, but the debtors go bankrupt, Germany's exposure, as explained above, corresponds to its share in the ECB's capital in both cases (should the euro break up or should Germany exit, its exposure is greater due to the unequal distribution of Target claims). Since neither the international allocation of central bank money in circulation nor the total amount of money in circulation is affected by the ECB's actions, they are to be classified as *regional*

fiscal policy, which gives endangered regions the opportunity to finance themselves at cheaper rates than those offered by the capital market. The ECB's credits represent a hidden form of fiscal equalisation between the states of the eurozone that was not intended by national parliaments or by the European Parliament when they ratified the European treaties. This fiscal equalisation is also dysfunctional, since it is not linked to objective criteria like relative wealth or differences in income.

Since they are sterilised, the government bond purchases made in the framework of the ECB's SMP also constitute purely fiscal credit with no direct influence on the regional distribution of the money supply. This credit is granted in this way by the Community *via* the ECB to certain states just as it grants these states such credit *via* the ESM bail-out fund.

The government bond purchases announced in the framework of the OMT programme resemble the CDS protection for government bonds that can be bought on the market, but they come for free. Without the protection of this programme governments would have to pay considerably higher risk premia included in their interest rates on the capital market.

The OMT programme is identical to the SMSF programme within the ESM bail-out fund, which performs exactly the same protective function and would provide assistance under the same conditions in the case of an emergency. Taxpayers bear liability in the same way in both cases. The provision of protection is a fiscal responsibility that should really be left to the markets, or alternatively perhaps to the democratically controlled ESM, but should not be left to the ECB Council to decide.

It is sometimes said that the OMT does not cost the Community anything. In the end, the markets calmed down although the ECB did not spend a cent. This viewpoint is not tenable from an economic point of view, for the insurance protection has an economic value even if the insured loss does not materialise.

The CDS market, on which the government creditors can insure themselves, exists and works. It has a worldwide insurance volume of 20 trillion euros and is undoubtedly in a position to cover the government debts of the GIPSIC countries, which amount to 3.285 trillion euros.⁶²

⁶² See ISDA, International Swaps and Derivative Association, *ISDA Market Survey*, Notional Amounts Outstanding, Semiannual Data, All Surveyed Contracts, 1987-present, <http://www2.isda.org/functional-areas/research/surveys/market-surveys/>.

The fiscal credit and insurance operations transfer public capital or escort private capital with public protection to the crisis-afflicted countries. They lead to exposure risks for taxpayers and shift purchasing power, economic activity and not least, scope for wage increases from the North to the South of the euro area. These effects are presumably not strong enough to cancel out the self-correction of the capital market, which triggered a construction boom in Germany; but they nevertheless represent a force that is curbing Germany's growth. This force is slowing down the requisite correction of current account deficits because Germany tends to have lower wage increases and can afford to import less, while the pressure on Southern countries to have current account surpluses in order to repay their external debts is reduced. The ECB's bail-out operations do not differ from other regional fiscal policy measures in this respect.

There are no similar forms of regional fiscal policy within the US monetary system, although this system has comparable structures with its 12 largely autonomous district banks and the Federal Reserve Board. In the United States money is mainly supplied *via* an open-market policy, and particularly by the purchase of federal government bonds (mostly by the New York Fed). There, endangered states cannot expect help from the printing press. California and Illinois, which are both currently facing major problems, cannot presume that their freshly issued government bonds will end up at the Fed at some point, and must therefore reckon with the fact that their creditors will demand rising interest rates if they issue too many of these bonds. This dramatically curbs their urge to take on debt. The printing press is not available to solve their financial problems.

This caution in the financing of individual states is mainly due to the fact that the districts of the Fed do not comply with the state borders and the management of the District Feds, which are private institutions, lies in the hands of technocrats, who are influenced by banks rather than politics. Both of these factors constrain the influence of local politics and preclude any conversion of local central banks into regional fiscal policy institutions, as has been the case in Europe.

This caution, however, does not apply at the federal state level. Indeed, the federal level of government is also financed by the printing press *via* the Federal Reserve's government bond purchases, which is one

of the reasons for excessive federal debt in the United States.

In addition to monetary policy *via* open-market transactions, local money creation *via* refinancing credit also exists in the United States for local banks (discount windows and other forms of refinancing credits). However, abuse by undercutting the capital markets with the electronic printing press does not pay, because the Target-like balances (called ISA balances in the United States) resulting from excessive local money creation, must be settled once a year (in April) by the handing over of ownership rights to the assets acquired. While the eurozone has a system that enables individual central banks to provide additional regional credit and to chalk up corresponding debts on the slate of the ECB system, the limitation of open-market operations on federal securities prevents such debts in general, and if they nevertheless arise out of refinancing operations, the creditor central banks in the United States demand the regular conversion of the resulting accounting debt (ISA balances) into marketable assets, i.e. the securitisation of this debt. The securitisation of accounting debt at market conditions not only eliminates the interest rate advantage of credit from the local printing press, but also creates a fundamentally different incentive situation than in the eurozone.

Securitisation also offers the far greater advantage that creditor central banks receive claims that would still, in principle, retain their value even if the dollar were to be abolished. If securitisation were to be introduced in Europe, the Bundesbank would not need to fear the demise of the euro, and Germany would be faced with a fundamentally different negotiation situation when approving expensive bail-out initiatives. The disastrous path-dependency of politics, whereby there is no alternative to the next bail-out step when each new crisis strikes, would be reduced. Moreover, the ECB would no longer be able to prejudice the actions of parliaments or force their hand *via* free access to the printing press.

The Bank of England's policy also bears little resemblance to that of the ECB. Nobody knows how Target balances have developed there, because the relevant data are not published and perhaps not even collected. For this reason it cannot be ruled out that credit transactions of a fiscal nature are carried out there to benefit certain regions. However, the Bank of England strictly ensures that it makes impartial decisions in the

area of monetary policy. As soon as there is any suspicion of fiscal implications, the Treasury is involved and democratic support for the decision is requested. This was strongly emphasised by the President of the Bank of England in his farewell speech.⁶³

The ECB Council, taking all decisions in the eurozone but lacking democratic legitimacy, is the underlying reason why a painstaking review of the question of whether the ECB has exceeded its mandate is required. In the ECB Council the central bank governors of each member country, whether big or small, has one vote. Moreover, the members of the ECB Board also each have one vote. This structure is underpinned by the notion that this should be a purely technocratic body that only implements monetary policy, and which should give rise to little contention and certainly no national conflicts of interest. However, if this council is to take decisions that have fiscal implications and to intervene in the allocation of purchasing power and capital within the euro area, then it requires a democratic structure that follows the principle of equal voting power for all citizens of the euro area, or distributes voting rights according to exposure and financing shares like other international organisations such as the IMF and the ESM.

6. Policy measures against interest rate spreads: the ECB's justifications

The ECB has not recognisably made the attempt to specifically justify or legitimise its *indirect* purchase of ailing government bonds *via* refinancing operations collateralised with government bonds, which increased to a huge extent during the crisis. The successive lowering of collateral standards in the refinancing business was repeatedly, and without any consideration of the risks at stake, only justified with the argument that it was necessary to ensure the availability of collateral and liquidity.⁶⁴ The letter by Bundesbank President Jens Weidmann, in which he criticises this practice and

⁶³ See M. King, "Threats to Central Banks and their Independence," presentation at the conference *Challenges to Central Banks in the 21st Century*, 25 March 2013, London School of Economics.

⁶⁴ See European Central Bank, *Measures to Further Expand the Collateral Framework and Enhance the Provision of Liquidity*, press release, 15 October 2008, http://www.ecb.europa.eu/press/pr/date/2012/html/pr120906_1.en.html, and same author, *ECB Announces Measures to Support Bank Lending and Money Market Activity*, press release, 8 December 2011, http://www.ecb.europa.eu/press/pr/date/2011/html/pr111208_1.en.html, and same author, *ECB Takes Further Measures to Increase Collateral Availability for Counterparties*, press release, 22 June 2012, <http://www.ecb.europa.eu/press/pr/date/2012/html/pr120622.en.html>. However, a substantial, semi-official statement can be found under P. Cour-Thimann, *Target Balances and the Crisis in the Euro Area*, op. cit.

calls for an improvement in the quality of the collateral provided was not answered in any way recognisable to the public. Nor did the ECB react when the rating agency Moody's announced its potential downgrading of Germany thanks to the heavily swollen Target balances resulting from the generous refinancing policy.⁶⁵

Instead, the ECB's public communications focused on the purchase of government bonds on the secondary market in the framework of its OMT programme.⁶⁶ It justified the secondary market purchases with (in its opinion) dysfunctional transmission of monetary policy measures. During the crisis the interest rates for government bonds had spread too far. It was allegedly the task of the OMT to reduce this additional interest rate spread *via* market interventions and thus to improve the transmission of monetary policy.

6.1 The economic importance of interest rate spreads

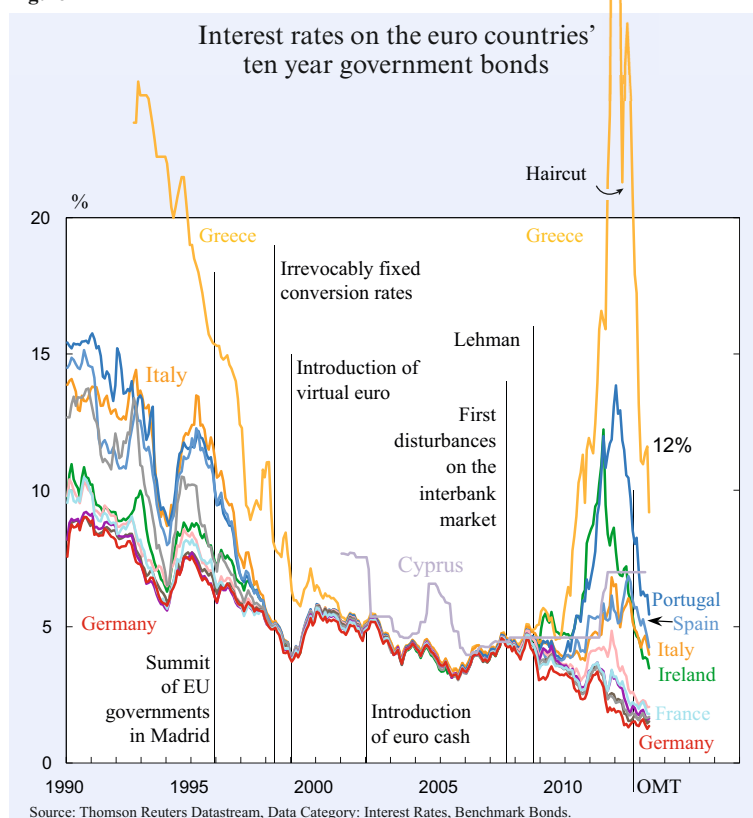
Before taking a stand on the ECB's justifications individually, it is necessary to clarify the fundamental importance of interest rate spreads in the market economy. These spreads are necessary to adequately reflect the different investment risks in the interest rate and make the effective interest rates in the sense of a mathematical interest rate expectation equal. The interest rate agreed upon in the credit contract is, in fact, only the maximum interest rate that is paid

under favourable circumstances. In reality, however, sometimes less or even nothing is paid. All too often debtors go bankrupt, or to prevent a bankruptcy there are interest rebates, haircuts or debt reschedulings that prolong the duration of repayment and mostly mean temporary interest income losses for the creditors. In the post-war period (1950 to 2010), for instance, there were no fewer than 186 reschedulings of government bonds in 95 countries.⁶⁷ Depending on the creditworthiness of the debtors, the probabilities of interest rate reducing events are seen as different and therefore more or less strong differences between the nominal interest rates as specified in the credit contract and the effective interest rates that emerge on average from all conceivable scenarios result. So the nominal interest rates have to be different to make the effective interest rates equal.

When the euro was announced at the Madrid Summit of 1995, today's crisis-afflicted countries all had to accept high risk premia in comparison to Germany, because these countries

⁶⁷ See M. G. Papaioannou and C. Trebesch, "Sovereign Debt Restructurings 1950-2010 – Literature Survey, Data, and Stylized Facts," *IMF Working Paper* No. 203, 2011. An overview of state bankruptcies over the centuries is offered by Streissler. See E. Streissler, *Honi soit qui mal y pense?*, Österreichische Akademie der Wissenschaften, Vienna August 2011.

Figure 4



⁶⁵ See Moody's, *Moody's Changes the Outlook to Negative on Germany, Netherlands, Luxembourg and Affirms Finland's Aaa Stable Rating*, 23 July 2012, London, http://www.moodys.com/research/Moodys-changes-the-outlook-to-negative-on-Germany-Netherlands-Luxembourg--PR_251214?lang=de&cy=ger. In the words of the agency: "The second and interrelated driver of the change in outlook to negative is the increase in contingent liabilities ... The contingent liabilities stem from bilateral loans, the EFSF, the European Central Bank (ECB) via the holdings in the Securities Market Programme (SMP) and the Target 2 balances, and – once established – the European Stability Mechanism (ESM)."

⁶⁶ See European Central Bank, *Monthly Bulletin*, September 2012, p. 7 which states: "OMTs aim at safeguarding the transmission mechanism in all euro area countries and the singleness of the monetary policy. OMTs will enable the Eurosystem to address severe distortions in government bond markets which originate, in particular, from unfounded fears on the part of investors of the reversibility of the euro, as reflected, inter alia, in widening differences in the pricing of short-term sovereign debt up to July 2012. ... In such an environment, OMTs will provide a fully effective backstop to avoid destructive scenarios with potentially severe challenges for price stability in the euro area."

regularly wiped out part of the agreed repayments and the interest due *via* inflation and the subsequent depreciation of their currencies. This was anticipated by investors in the form of corresponding risk premia. As a result, Italy, Ireland, Spain and Portugal had to pay an average of 3.7 percentage points more in interest for ten-year government bonds than Germany in the five years from 1991 to 1995. After the Summit, in less than the two years before the exchange rates were irrevocably fixed in May 1998, there was almost perfect interest rate convergence. The interest rate differences shrank to some tenths of a percentage point, where they remained until the Lehman crisis. Figure 4 illustrates the events.

In this phase the market players falsely assumed that the debtor countries would be in a position to service their debts, or counted on bail-out initiatives by the Community should the debtors prove unable to do so. However, during the financial crisis the interest rates spread out again in a manner similar to that seen in the early 1990s, although not as widely as before the Madrid Summit. In 2009 to 2012 the interest rates of the four countries cited were 3.3 percentage points above that of Germany on average. Had investors feared losses due to inflation and currency depreciation before 1995, during this period they feared state bankruptcy, haircuts and write-off losses after potential exits from the eurozone.

With its article 125 TFEU the Maastricht Treaty is also built on the basic assumption that individual countries within the Eurosystem may not be in a position to service their debts, for otherwise there would be no need to rule out liability on the part of other countries. The interest rates in the Eurosystem therefore should have spread out according to the creditworthiness of public and private borrowers. The fact that this did not take place to a sufficient degree because the regulation of banks and insurers circumvented article 125 of the Treaty was already outlined in Section 1. That lack of interest spreads is the reason for the inflationary credit bubbles in Southern European countries that robbed these states of their competitiveness.

In a market economy there is fundamentally no justification for public bodies to make adjustment of what the right interest rate should be, for there are a large number of imponderables involved in the calculation that cannot be objectified. According to the principle of contractual freedom it is the asset holder who must decide whether the nominal interest rate agreed upon

and further credit conditions like, for example, the collateral provided, are appropriate. Nobody can force asset holders to loan their wealth under conditions that they are unhappy with.

In fact, alongside the freedom to choose a job, freedom to invest is one of the main drivers of the market economy. It is mainly responsible for the allocative efficiency of this type of economy as well as for the growth and prosperity that it can create. Kenneth Arrow and Gérard Debreu were awarded the Nobel Prize in Economics for their formal proof of this by no means trivial statement in the form of their main theorems of welfare economics.

Interventions in the process of free price formation are therefore fundamentally damaging to the efficiency of the economy. This is particularly true for government guarantees, which lower the probability and the extent of debtors' defaults and thus encourage creditors to accept lower nominal interest rates. Such guarantees constitute fiscal interest subsidies that are fundamentally out of place in a market economy and distort the efficient allocation of capital to rivaling uses.

According to articles 119 and 120 of the Maastricht Treaty, the European Central Bank is obliged to obey the principles of the market economy. Article 119(2) of the Treaty explicitly states that the single currency can only be implemented to support general economic policy "in accordance with the principles of an open-market economy with free competition". In this light, measures to reduce interest rate spreads require detailed and solid proof of market failures, as well as further proof that these failures cannot be addressed in another way.

6.2 Discussion of the ECB's arguments

In the following, the justifications presented by the ECB's counsel, Frank Schorkopf, are discussed one by one.⁶⁸ As Schorkopf reports, the ECB believes that the growing interest rate spread represents a disruption to the monetary policy transmission mechanism to the detriment of the Southern countries.⁶⁹ This can primarily be deduced from three observations. These observations are quoted verbatim below and explained:⁷⁰

⁶⁸ See F. Schorkopf, *Stellungnahme der Europäischen Zentralbank*, op.cit.

⁶⁹ See F. Schorkopf, op. cit., p. 23 as well as European Central Bank, *Monthly Bulletin*, September 2012, op. cit., Figure E, p. 10.

⁷⁰ F. Schorkopf, op. cit., p. 21.

1. *“The interest rates on government bonds have a determining influence on the level of interest rates for the issue of bonds by financial and non-financial companies (price channel)”*.⁷¹

This statement means that the disturbance of market activity lies in the fact that a state's credit risks posited by the markets lead to rising interest rates and thereby impact the companies in that country, which therefore have to pay higher interest rates than similarly well-run companies in other countries.

2. *“The sharp increase in long-term interest rates due to disruptions in the bond markets results in a fall in asset prices, leading to considerable portfolio losses in the financial and non-financial sector. For banks, this constrains their ability to lend money to business (balance sheet channel)”*.

With this statement the ECB's counsel is referring to the fact that rising interest rates in the Southern countries lead to market value losses in private and government bonds, which were previously issued at lower interest rates, until their effective interest rate is levelled up with the newly issued bonds. Insofar as the market losses also affect securities held by banks, the latter's equity capital is destroyed, forcing them to restrict their lending if no fresh equity capital is available in order to satisfy regulatory minimum equity requirements.

3. *“The use of government bonds as collateral for refinancing operations would be limited in cases of extremely low liquidity in the markets for government bonds, which would also constrain lending by banks (liquidity channel)”*.

This refers to the situation that banks, as explained above, only receive refinancing credit from their national central banks if they can provide sufficient collateral in return. If a reduction in the credit rating of certain governments leads to an increase in interest rates and a decrease in the market value of the outstanding, longer-term government bonds, the banks' ability to receive refinancing credit, i.e. freshly created money, from their national central banks to purchase these government bonds or for other purposes is reduced.

The observations cited here are correct. However, they by no means represent economic justifications for intervention in the process of market price formation, because instead of disturbances in the market process, they reflect its efficiency.

⁷¹ Author's translation.

Ad 1:

It is certainly true that the interest rates to be paid by a country's companies increase in line with those of its governments bonds. However, that is not a market failure, but a sensible market reaction. The interest rates for states rise if the latter have accumulated excessive levels of debt and investors fear that there may be haircuts, or even a bankruptcy. The increase in interest rates is the right signal to states and the social groups behind them to reduce lending and take the painful route of tax increases.

Countries that have not collected enough taxes for a longer period of time and have tolerated black market business, have made their citizens rich, in many cases richer than German citizens.⁷² Interest rate increases force these countries to collect more taxes from their citizens and companies. This reduces private wealth and the equity capital of these companies, and thus increases the risk of private bankruptcy. The growing risk of bankruptcy is reflected in the rising interest rates paid by companies. Companies are thus practically in the same boat as their national governments.

However, this situation has nothing to do with a disruption of monetary policy, but is merely a result of the fact that public debts are national debts, which are not (yet) mutualised in Europe. If all companies and citizens of the eurozone were to be responsible for repaying the debts of a specific state, the deplored transmission of the interest rate increase from the state to companies would be equally distributed across all companies in the eurozone. With the current legislation and treaties, however, the eurozone's companies and citizens are not responsible for repaying other state's debts! It is wholly and solely the task of national citizens and companies to provide their government with appropriate tax revenues. One cannot predetermine the mutualisation of public debt in the euro area by simply referring to alleged disruptions in the transmission of monetary policy.

Ad 2:

It is true that a loss of equity capital through a drop in the value of banks' assets forces banks to reduce their lending if they do not receive any inflows of fresh eq-

⁷² See European Central Bank, “The Eurosystem Household Finance and Consumption Survey, Results from the First Wave,” *Statistics Paper Series* No. 2, April 2013, <http://www.ecb.int/pub/pdf/other/ecbsp2en.pdf?ed88f05c45cf37a55f75fa41ae533b2b>.

uity. The various regulatory minimum equity capital regulations force them to ‘deleverage’ in such cases.

However, it is really not the ECB’s task to protect banks from losses by buying bonds that they must then hold in order to prevent a subsequent credit crunch.

The recapitalization of banks is primarily the task of the markets. It is to be assumed that the banks are in a position to issue new shares if they sell these shares cheaply enough. That reduces the claims of the bank’s longstanding owners and deprives them of a share of their wealth, but it is the role of equity capital to bear the losses of bad economic decisions. They are merely the counterpart of earlier profits.

Should it prove impossible to find private capital because the write-off losses on the investments exceed the value of the equity capital, banks can draw on the hybrid capital earmarked for this purpose. This is generally achieved by transforming the claims of subordinate creditors into equity capital. If that is not sufficient the claims of other lenders can be successively drawn upon. That is the normal procedure for recapitalising banks as practised with regard to the bank insolvencies in Cyprus, and it is set to become the standard procedure in the EU.⁷³

If a state does not like this way of recapitalizing its domestic banks, perhaps fearing that it could damage confidence in the country as a financial services provider, it is free to participate in the recapitalization itself at any time and to become an owner of the banks. This fiscal solution is also available.

It is not, however, the task of the ECB to help in such a case, because the loss risk for government bonds, as explained above, is transferred to the taxpayers of other countries, without Europe’s parliaments ever having been involved in the decisions underlying such a transfer. And even if they were implicitly involved by granting the ECB a general authorisation in the framework of the Maastricht Treaty, which is a legal question that the author cannot gauge, they certainly did not do so in the knowledge of the massive asset

risks that have now become clear. Germany’s citizens were definitely not aware of these exposure risks, especially since they have been repeatedly denied by politicians.

On 23 April 1998 in his keynote address to the German Bundestag on the euro, Helmut Kohl said the sentence cited below twice to assure his listeners that Germany had not accepted any liability risk by signing the Maastricht Treaty:⁷⁴

“According to the Treaty rules, the euro community shall not be liable for the commitments of its member states and there will be no additional financial transfers”.

Ad 3:

It is undoubtedly true that an interest rate spread at the expense of the government bonds of Southern European countries represents a reduction in their market values and thus reduces the possibility of using these bonds as collateral for refinancing credit. In this sense the indirect financing of governments by the ECB, which occurred through the loaning of large amounts of newly created money and which shot up during the euro crisis (see Section 2.4), is reduced. This can be described as a limitation of the transmission of monetary policy.

However, it should not blind us to the fact that it was the excessive lending by Southern Europe’s banks, which created the inflationary credit bubble that led to the loss of competitiveness and to massive capital destruction (see Section 1). It is not convincing to interpret the reduced lending enforced by the self-correction of the capital markets as a disruption of the monetary policy transmission mechanism, as this reduction actually represents a sensible market reaction.

The ECB’s policy of preserving the value of the government bonds in order to facilitate bank lending contradicts the key message of article 123 of the Treaty that the ECB cannot offer states lending facilities. This policy primarily supports the creation of refinancing credit for the purpose of buying government bonds and pledging them as collateral. The more suitable a bond is as collateral for refinancing credit, the

⁷³ Compare this with the statement by the EU Competition Commissioner: M. Barnier, *Meeting the Challenge of Europe’s Long-term Financing Needs: A Pre-requisite for Jobs and Growth*, speech at Eurofi High Level Seminar, Dublin, 11 April 2013, http://europa.eu/rapid/press-release_SPEECH-13-308_en.htm?locale=en. M. Barnier, “Ich will die kleinen Sparer schützen,” *Handelsblatt*, No. 62, 28 March 2013, pp.30/31, as well as M. Barnier, “Sparer sollen bei Bankenpleite haften,” *Frankfurter Allgemeine Zeitung online*, 13 April 2013, <http://www.faz.net/aktuell/wirtschaft/wirtschaftspolitik/eu-kommissar-barnier-sparer-sollen-bei-bankenpleite-haften-12147592.html>.

⁷⁴ H. Kohl, *Speech at the German Bundestag during the Debate on the Resolution of the German Federal Government Regarding the Definition of the Participants in the Third Stage of the European Economic and Monetary Union*, 23 April 1998, Berlin, http://helmut-kohl.kas.de/index.php?menu_sel=17&menu_sel2=&menu_sel3=&menu_sel4=&msg=1764. (Author’s translation of the German original text).

greater is the incentive for the bank to buy this bond with refinancing credit. The indirect government financing by central banks with freshly created money described in Section 3 was based on securing the refinancing credit with government bonds that were purchased with this credit itself. The Southern European states particularly selected this financing path after the credit that they were granted by the capital market became too expensive. If this form of monetary transmission were to be disrupted, it would benefit Europe's financial stability and comply with the guidelines set out for the ECB in the Maastricht Treaty. The aim of these guidelines is to prevent states from using the printing press at critical times, not to facilitate it.

Moreover, the monetary policy transmission to the firms of Southern Europe is not at all being obstructed since the collateral accepted is not limited to government bonds. The ECB accepts a whole potpourri of private securities as collateral. These include both marketable and non-marketable assets, and especially uncovered bank bonds, asset-backed securities, corporate bonds, commercial papers and deposit certificates.⁷⁵ The only condition stipulated is that these bonds can be traded on a regulated market, or on an unregulated market accepted by the ECB, and have a minimum rating of Triple B– (investment grade).⁷⁶ Depending on the collateral in question, the ECB also attributes safety margins according to its internal lists. In this respect, there is absolutely no fundamental difference between private and public debt securities. It is merely a question of creditworthiness and market values. It is precisely a market-value based orientation that ensures that the ECB does not grant credit for inferior use where repayment is uncertain. If government bonds are not accepted as collateral, that can only be good for private sector lending, since it obliges the banks to purchase corporate bonds and submit them as collateral to their central banks in order to participate in the refinancing business. So, in terms of the impact of monetary policy transmission in the real economy, the situation is diametrically opposed to the ECB's counsel claims. If the value of government bonds falls, money creation for governments is disrupted, but money creation for the private sector is boosted.

Additionally, the thesis of the disruption of the monetary policy mechanism was justified by the ECB's

⁷⁵ For a complete list of all collateral accepted by central banks see European Central Bank, *Payments and Markets, Collateral*, <http://www.ecb.int/paym/coll/html/index.en.html>.

⁷⁶ A presentation of the ECB criteria that bonds must satisfy in order to be acceptable to central banks is available at European Central Bank, *Payments and Markets, Collateral, List of Eligible Marketable Assets*, <http://www.ecb.int/paym/coll/assets/html/index.en.html>.

counsel with a reference to the break-up of the monetary union:⁷⁷

“Such a disruption is particularly present if the European Central Bank cannot reach the real economy of the euro area as a whole with its monetary policy impulses because market players in the government bond market primarily fear a break-up of the European Monetary Union, leading to high risk premia being factored into the price of certain government bonds”.

With this statement the ECB is taking up an argument that was brought into the debate by the research department of Italy's central bank.⁷⁸ It concedes that certain interest rate spreads have to be accepted, but that spreads arising due to the threat of a break-up of the eurozone represent market failures, because this danger does not exist in reality.⁷⁹

This position is not tenable because the danger naturally existed and continues to exist that certain countries will not be able to remain within the monetary union, as well as the danger that inner tensions will tear the entire Eurosystem apart. This can no longer be seriously disputed today. In view of mass unemployment among young people that can barely be controlled in Southern Europe, there is quite clearly the risk of a collapse. Many observers believe that it is only a matter of time before southern austerity fatigue and northern rescue fatigue clash, bringing more radical political parties to power in Europe, which see their salvation in the dissolution of the European Monetary Union.

However, the risk of a break-up of the eurozone alone can neither explain the interest spreads nor what the ECB calls the disturbance in the transmission of monetary policy. General uncertainty, if fully symmetrical and not generated by the mistrust of certain states, would affect all countries equally and would increase all of their interest rates compared to the rest of the world. However, it would not give rise to intra-euro interest rate spreads if investors expect that every country were to reintroduce its own currency and there was no systematic appreciation or depreciation. In this

⁷⁷ F. Schorkopf, *Stellungnahme der Europäischen Zentralbank*, op.cit., p. 20. (Author's translation of the German original text)

⁷⁸ See A. Di Cesare, G. Grande, M. Manna and M. Taboga, “Stime recenti dei premi per il rischio sovrano di alcuni paesi dell'area dell'euro” (Recent estimates of sovereign risk premia for euro-area countries), *Banca d'Italia Occasional Paper* 128, September 2012, in circulation as of June 2012, http://www.bancaditalia.it/publicazioni/econo/quest_ecofin_2/qef128.

⁷⁹ The ECB President spoke of “unfounded fears” regarding the collapse of the Eurosystem. See Introductory Statement to the Press Conference (with Q&A) by Mario Draghi, President of the ECB, and Vitor Constâncio, Vice-President of the ECB, op. cit.

sense the term ‘redenomination risk’ chosen by the ECB seems slightly fuzzy.

The connection between exit scenarios and interest rate spreads does naturally exist, but only due to asymmetries in the euro area, which will become apparent when one of the countries exits.

On the one hand, the lack of competitiveness on the part of individual countries will lead to depreciation, as some countries have become too expensive due to the inflationary credit bubble brought by the euro. For Spain, Greece and Portugal the depreciation required is expected to be around 30 percent.⁸⁰ Since the debts will presumably be redenominated in national currencies according to the *lex monetae*, creditors of these countries will have to reckon with depreciation losses in such a case. The danger of these depreciation losses is paid for in advance *via* interest rate premia.

On the other hand, a collapse would reduce the likelihood of further debt being accumulated or guaranteed by the ECB, or of the ESM being mutualised or of the introduction of Eurobonds. The danger of being left with government bonds because a country goes bankrupt and is no longer supported by others induces creditors to demand higher interest rates.

However, these aspects do not represent a distortion of monetary policy transmission and do not legitimize an intervention on the part of the ECB. The threat of depreciation results from excessive prior inflation and the lack of caution on the part of countries when borrowing. Investors, who anticipate this threat with a certain degree of probability, act rationally if they demand interest rate premia, and it is also efficient that the countries affected will limit their borrowing in order to reduce their exposure to these interest rate premia. The problem lies in national responsibility and is not a matter for the Community.

Moreover, the owners of government bonds can only assume that these bonds will be repaid at maturity *via* the debt mutualisation programmes of the Community or the ECB if the euro survives. The continued existence of the euro therefore remains the implicit prom-

ise of protection (as interpreted by the markets) that it always was, and that created the inflationary credit bubble which robbed the competitiveness of the Southern European countries.

Above all, it is correct that the over-indebted countries only have a chance to introduce the long-awaited Eurobonds to successively convert old state debts into mutualised debts at the formers’ maturity if they remain within the Monetary Union. Over-indebted countries will only be able to press for Eurobonds if the European Monetary Union is declared sacrosanct, and only then will the buyers of government bonds have the safety that induces them to accept low interest rates.

However, all that is really no good argument for the OMT, as it means justifying the OMT with the goal of strengthening those forces that are working towards a mutualisation of debts in Europe in violation of article 125 of the Maastricht Treaty. Debt mutualisation is announced with the OMT only so that it can be enforced subsequently.

The ECB is exceeding its mandate with the OMT. The decision over whether to mutualise debts or not and which countries should belong to the monetary union should only be taken by democratically-elected representatives of the Community of states and not by a board of experts, whose task is to implement monetary policy and keep prices stable. It doesn’t help matters if such fundamental decisions are semantically qualified as monetary policy so that the ECB is authorised to take them.

The ECB has repeatedly emphasized that it does not wish to remove the entire interest rate spread, but merely the part that is creating a redenomination risk, by which it means the depreciation risk.⁸¹ It measures this risk by the difference between the interest rate spread and the CDS premia that have to be paid as insurance against a state bankruptcy, because the CDS insurance normally does not cover the depreciation risk, at least not in the case of a general break-up of the euro, as it would have to cover all government debt in the eurozone in that case. However, as explained, this risk only arises from the lack of competitiveness and is therefore the responsibility of each individual state. The problem of irrational markets that would justify a mutualisation of risk does not arise in this context.

⁸⁰ See H. Pill, K. Daly, D. Schumacher, A. Benito, L. Holboell Nielsen, N. Valla, A. Demongeot and A. Paul, Goldman Sachs Global Economics, “Achieving Fiscal and External Balance (Part 1): The Price Adjustment Required for External Sustainability,” *European Economics Analyst*, Issue No. 12/01, 15 March 2012; H. Pill, K. Daly, D. Schumacher, A. Benito, L. Holboell Nielsen, N. Valla, A. Demongeot and S. Graves, Goldman Sachs Global Economics, “External Rebalancing: Progress, but a Sizeable Challenge Remains,” *European Economics Analyst*, Issue No. 13/03, 17 January 2013.

⁸¹ See F. Schorkopf, *Stellungnahme der Europäischen Zentralbank*, op.cit., p. 31.

Moreover, the OMT programme only superficially helps the countries concerned. In truth, like all bail-out programmes that create low interest rates for the crisis-afflicted countries, it lames incentives to find a solution to the problem autonomously. This can be shown by comparing Ireland with the other crisis-afflicted countries. Ireland is the only distressed economy to date that has achieved a convincing change for the better. It is the only country in which unemployment has fallen and, as Figure 4 shows, the Irish interest rates broke away from the general trend early on. While the ECB argues that interest rates spread further in summer 2011 due to the redenomination risk,⁸² Irish interest rates fell during this period and are now below the level of Italian rates. This was not primarily because Ireland received funds from the EFSF bail-out fund. Other countries also received such funds. It was far more due to the efforts made by the country itself. Ireland is the only crisis-afflicted country that has achieved a correction of its relative goods prices by accepting an uncompromising austerity policy with double digit wage decreases as of 2006. The Irish price index for gross domestic product fell by 15 percent versus that of its euro area trade partners between 2006 and 2012.⁸³ No other country then in the eurozone reduced its prices to a comparable degree during the crisis. This radical regime restored Ireland's competitiveness and led to such a significant improvement in its current account balance that investors regained confidence and accepted lower interest rates on further loans to Ireland.

Looking back, Ireland's main advantage was that its credit bubble burst as early as 2006, two years earlier than in other countries, which did not run into trouble until after Lehman's bankruptcy. At that time Ireland was not yet granted any easier access to the refinancing credit of the ECB system. Target balances for Ireland were practically zero until October 2010. The country had to help itself and did so through austerity programmes that led to uncompromising reductions in its wages and prices.

All other crisis-afflicted countries, on the other hand, were plunged into crisis after the Lehman bankruptcy and saw the opportunity to solve their problems *via* recourse to the local printing presses because they managed to gain a majority in favour of the dramatic

easing of the collateral policy for refinancing credit (described in Section 2.3) in the ECB Council. This bail-out *via* the printing press made the Irish path of austerity, or a self-bailout *via* austerity, expendable and implied that the other countries were not able to regain competitiveness during a crisis that has lasted almost six years. The OMT follows this logic.

The Irish example very clearly illustrates the dangers of the OMT programme. It relieves the countries of the necessity of improving their own competitiveness and leads to a sclerotic solidification of their economic problems, which obliges other countries to tolerate a growing amount of public rescue credit and to subsequently waive its repayment, which inevitably leads to a transfer union.

If the ECB does not want to be seen as the agent of the national interests of countries that did not wish to ask their population to follow the same course as Ireland, it should abandon its argument that there is a supposed disturbance in the monetary policy transmission mechanism. Instead of flowery language, the path towards a European Union should be built on a stable currency, trust and truthfulness. This alone will guarantee the long-term reputation of the European Central Bank.

7. Summary of key points

Thesis 1:

The problems experienced by Southern European countries arose through excessive private and public debt, which mainly accumulated due to regulatory flaws. In contradiction of the no-bail-out clause of article 125 of the Maastricht Treaty, which supposes the possibility of a state bankruptcy, the EU shaped banking regulation – at a working level and below the Basel Agreement – so that banks could finance an excessive credit flow into Southern European countries. This created an inflationary credit bubble that robbed Southern European countries of their competitiveness and created mass unemployment that can barely be controlled.

Thesis 2:

When the American sub-prime crisis spilled over to Europe and the banks of France and Northern Europe were no longer prepared to continue to finance the Southern countries at low interest rates, the Southern banks took out a growing amount of replacement credit from their national central banks, generated *via* money creation, in order to repay their

⁸² See M. Draghi, *The Euro, Monetary Policy and Reforms*, Speech on receiving an honorary degree in political science, LUISS Guido Carli University, Rome, 6 May 2013, <http://www.ecb.europa.eu/press/key/date/2013/html/sp130506.en.html>.

⁸³ See H.-W. Sinn, "Austerity, Growth and Inflation. Remarks on the eurozone's Unresolved Competitiveness Problem," *CESifo Working Paper* No. 4086, January 2013, p. 7f, http://www.cesifo-group.de/DocDL/cesifo1_wp4086.pdf.

foreign bills. With the money from the electronic printing press they paid their import invoices and repaid loans to foreign banks that had become too expensive. This led to the rise of so-called Target balances, which grew to a peak of 1,000 billion euros for the six crisis-afflicted countries in summer 2012.

The refinancing credit was made possible by the ECB Council's decisions to steadily lower the quality of the collateral needed by commercial banks to draw on refinancing credit based on money creation and to tolerate the ELA credit that national central banks are able to grant independently. This enabled the central banks of Southern Europe to undercut the interbank market with the electronic printing press.

Thesis 3:

The credit generated *via* money creation initially flowed into the private sector, but a great deal also flowed into the public sector after which it financed payment orders to other countries. The banks purchased large amounts of their own country's government bonds, which they subsequently submitted to their central banks as collateral against credit based on money creation. This indirect financing of governments by the ECB reached alarming levels in the crisis. Accordingly, 77 percent of the collateral submitted by Greek commercial banks to their central bank were Greek government bonds or securities guaranteed by the Greek government. Greek banks practically only held government bonds issued by their own country. Spanish and Italian banks also focused their investments, buying over 80 percent of their government bonds in their respective home countries.

Thesis 4:

The Northern banks, and especially the Bundesbank, had to execute the payment orders from other central banks and therefore had to provide money that they could otherwise have created *via* refinancing credit.

About 80 percent of the central bank money supply of the euro area was created in the six crisis-afflicted countries through refinancing operations or asset purchases, although these countries only account for 33 percent of the eurozone's GDP. In Germany, on the other hand, there is no longer any money that was, on balance, created *via* refinancing operations or asset purchases. All of the money circulating in Germany came into existence by way of the Bundesbank's carrying out payment orders on behalf of

other central banks. This made the Bundesbank, with its Target claims, the main creditor of the ECB system.

This process constituted grounds for the ratings agency Moody's to express doubts over the creditworthiness of the Federal Republic of Germany.

Thesis 5:

The kind of regional fiscal policy being pursued by the ECB in Europe has no counterpart in the United States. There the Fed generally creates money *via* its open-market purchases of federal government bonds that are not biased to the benefit of specific regions and are absolutely not biased in favour of certain federal states. The government bonds of states threatened by bankruptcy like California or Illinois are not purchased by the Fed.

Regional money creation is also possible in the United States to a limited extent *via* the discount window. This creates Target-like credit relations between the district central banks. However, American Target credit has to be securitized once a year *via* the ceding of ownership shares in the open-market portfolio by the respective district central banks. All of this ensures that credit generated *via* the printing press cannot undercut local market conditions.

Thesis 6:

The excessive money creation in Southern Europe, which was mostly collateralised with government bonds, became a problem when the value of government bonds eroded during the crisis and the government bonds of Greece, Portugal and Ireland were given a junk status by the rating agencies, as that robbed the Southern European commercial banks of their collateral. The ECB reacted by abolishing the minimum quality requirements for these government bonds when used as collateral and by beginning to make supportive bond purchases in the framework of its SMP in May 2010. These purchases kept the prices high and interest rates low. This enabled the states to directly sell the same amounts of new bonds as the ECB had bought without having to offer higher interest rates on them.

Moreover, the ECB's support purchases safeguarded the business models of some banks, which consisted of buying government bonds with refinancing credit and using these government bonds as collateral for such credit.

Thesis 7:

In view of the possible conflicts with article 123 of the Maastricht Treaty, which prohibits government financing by central banks, politicians showed their willingness to approve several bail-out packages to disburden the ECB.

Via the various parliamentary controlled bail-out packages including EU and IMF funding, the crisis-afflicted countries have been granted 367 billion euros in public credit to date. However, that only represents 32 percent of the total overall credit granted by the Community to the crisis-afflicted countries including Italy, which currently total 1,158 billion euros. 68 percent of this credit was granted by the ECB, with 124 billion euros in the form of government bond purchases through other central banks in the Eurosystem and 705 billion in the form of Target credit, net of claims of the Southern countries arising from their disproportionately lower issue of bank notes. These scales constitute a democracy problem.

Thesis 8:

The ESM bail-out fund features the Secondary Market Support Facility (SMSF). This facility enables the Community, under the control of parliaments, to purchase the government bonds of distressed economies on the open market. However, from the market's point of view, the ESM is too small because its liability is limited to 700 billion euros, of which Germany is liable for 190 billion euros.

It was presumably for this reason that the ECB founded the OMT programme, which constitutes the focal point of today's hearing. This programme is practically identical to the SMSF programme of the bail-out fund, but it features no exposure limit. This characteristic calmed down the capital markets.

Both programmes, the ECB's OMT and the ESM's SMSF, are potential programmes that have an impact thanks to the free insurance cover that they offer. Moreover, they are applied under almost identical conditions, namely those of the ESM.

They offer a service identical to that which can be purchased by government bond owners in the form of CDS insurance at any time on the private market, only that this service is provided free-of-charge.

They offer German savings capital a protected passage South, although it really no longer wishes to flow

in this direction. This capital flow is dampening the German construction boom and economic activity, while having a stimulating effect in the South. Moreover, it is slowing down the structural adjustment of current account balances in the euro area, which already by definition are akin to capital flows.

The identity and parallel nature of both programmes creates an *ultra-vires* problem for the ESM or the ECB. At least one of both organizations is overstepping its mandate. The programmes either constitutes monetary policy, in which case the ESM is overstepping its mandate since it is not allowed to make monetary policy; or it constitutes fiscal policy, in which case the ECB is going beyond its remit.

The insurance cover provided *via* the OMT and/or SMSF is certainly of a fiscal nature. In this sense the *ultra-vires* accusation can only be brought against the ECB.

Thesis 9:

The liability resulting from the OMT programme is completely borne by the taxpayers. Germany is liable for a good 27 percent of the programme. It is of no importance whether the states of the Eurosystem are obliged to recapitalise the ECB or not, which would, if necessary, mean that the central banks will continue to work with negative equity. In all events the finance ministers lose an eternal stream of interest on the bonds to be written off, whose present value is as great as the depreciation losses.

If there is no recapitalisation, the maximum exposure of the Eurosystem is determined by the Eurosystem's stream of interest income from lending out the money it created and its initial stock of equity in the amount of 496 billion euros. Based on static calculations the present value of the interest flow from lending the self-created stock of money balances is equal to the amount of central bank money, or 1,363 billion euros. If the Eurosystem's equity stock is added to this sum, the total rises to 1,858 billion euros. Germany stands to lose up to 506 billion euros. This amount is to be added to the maximum exposure of 190 billion euros from the ESM.

Calculated on a dynamic basis that takes into account the growth of the money supply, the loss is around 3.4 trillion euros, which means 920 billion euros for Germany.

The maximum potential losses are obviously higher if the equity capital that has been lost is replaced by the

countries involved to take account of their institutional liability. In this case the new equity capital can also naturally be lost.

The ECB's counsel maintains that the exposure *via* the OMT programme is limited to 524 billion euros because this programme is restricted to bonds with a remaining term of up to three years. This statement is false. Since all bonds have a remaining term of less than four years at some point, the entire collateralised government debt of the crisis-afflicted countries will be guaranteed, provided that the bonds have a remaining term of at least a year. That could amount to around 2 trillion euros for the crisis-afflicted countries.

Thesis 10:

There are also potential losses from the additional refinancing credit that is reflected in the Target balances. If the crisis-afflicted countries exit and go bankrupt, the legal relationship of the ECB system with the banks of these countries is terminated. The Target claim of the ECB system can then be written off, because this claim is the present value of the interest income, which is to be paid by the banks of the crisis-afflicted countries to the system's other central banks. In view of the claims of the crisis-afflicted countries resulting from an under-proportional amount of currency, Germany would then have to reckon with losses totalling 281 billion euros.

If the euro were to break up, Germany should expect to lose its Target claims against the ECB system. After deducting German liabilities due to over-proportional bank note issues, the losses in the form of irrecoverable interest claims against other euro countries could then amount to up to 385 billion euros.

Thesis 11:

Notwithstanding the potential losses in the case of a catastrophe, there will be losses for creditor countries like Germany in any case through interest rate cuts, which arise because the ECB offers investors free insurance cover and undercuts the inter-bank markets in favour of the banks of Southern Europe with cheap credit from the electronic printing press.

It is significant that the crisis-afflicted countries were in a position during the crisis to significantly reduce the net interest that they paid on their net external debt, although the market interest rates and the debt

accumulated externally increased. This illustrates that the bail-out measures of the ECB and the Community not only had curbing effects on interest rates, but also overcompensated for interest rate increases in the markets.

Thesis 12:

Interest rate spreads according to the creditworthiness of the debtors are indispensable for the functioning of the capital markets in order to guarantee the efficient allocation of capital. Politicians' attempts to reduce these spreads are essentially damaging to economic growth and if such attempts are to be useful, they require a very careful justification on the basis of external effects and other market failures.

The ECB defends its attempts in this respect by citing supposed disturbances of monetary policy, but its arguments in this respect are not convincing.

Thesis 13:

The ECB complains that the high interest rates paid by governments have an impact on corporate rates, but does not take into account that companies are in the same boat as the governments in whose country they are based because they are liable as taxpayers. As long as government debts in the euro area are not mutualised they cannot be released from this liability. In this light the transmission of interest spreads from the government to the corporate sector is an efficient market reaction, and not a market failure. It is not up to the ECB to prejudice the functioning of a common European state by mutualising responsibility for state debts.

Thesis 14:

The ECB complains that market value losses in government bonds rob banks of their equity capital and force them to deleverage. However, the ECB is not responsible for the recapitalisation of the banks *via* the OMT programme. Instead, the banks' creditors are to be called on through debt equity swaps or, if a state fears a loss of confidence, this state itself, but not the other states that stand behind the ECB, would have to bear the potential losses.

Thesis 15:

The ECB ultimately complains that market value losses on government bonds restrict the possibility of using these bonds as collateral for refinancing credit. That is no market failure either, but a sensible development to encourage banks to buy corporate securities instead of government bonds and to use them as

collateral, which raises the prices of these securities and reduces their interest rates. This argument therefore does not hold.

Thesis 16:

The ECB emphasizes that it wishes to fight that share of the interest spreads generated by so-called redenomination risk, i.e. the risk of a country's exit from the currency union or the break-up of the currency area.

However, the potential break-up of the monetary union as such is not the reason for the interest rate spreads, but the danger that a country depreciates relative to other countries after its exit because it can only regain its competitiveness in this manner, or the fear of investors that the country loses its means to apply pressure for the implementation of debt mutualisation.

Neither of these arguments is a legitimate justification for the OMT programme.

Thesis 17:

In brief, the interest rate spreads do not constitute market dysfunction, but rational market reactions to the now almost unsolvable debt problems of a few euro countries. Anyone who is displeased by the distributional policy implications of these market reactions should opt for common fiscal bail-out measures, rather than for covered measures subject to no democratic control on the part of the ECB; an institution which, if allowed to continue to act as it has done to date, will become the hegemon of the eurozone.

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