

Statement to the Federal Constitutional Court, with a particular focus on the OMT programme and the matter of TARGET2 balances

A Introduction

The monetary framework of the European Monetary Union is governed by the Maastricht Treaty and the associated legal acts. Its guiding principle is a stability-oriented monetary policy that is geared to maintaining price stability and implemented by central banks but prohibits the monetary financing of governments. This model mirrors the experiences of those central banks which were independent prior to the advent of monetary union and focused on ensuring monetary stability by acting to safeguard price stability. The monetary union is subject to a narrow and clearly defined mandate within the Eurosystem owing to its special composition as a commonwealth of countries which have awarded overall responsibility for monetary policy to a supranational level but which to a great extent still decide national fiscal and economic policy on their own account. Within this framework, the fact that neither the union nor the member states are liable for the debt of another member state, as well as the ban on monetary financing of governments and the independent role played by the markets in assessing the soundness of individual states in the union which arises from individual fiscal responsibility, all serve to protect single monetary policy, say from the effects of unsound public finances in individual euro-area member states. In this regard, market influence is exercised via the respective risk premiums which prevail when governments seek capital market funding.

The financial and economic crisis which has been going on since 2007, together with the sovereign debt crises affecting several euro-area member states since 2009, have seen a substantial expansion in the range of monetary policy instruments being used and a major extension of the balance sheets of the Eurosystem central banks. With these measures, the Eurosystem has made an important contribution towards containing the crisis. The Deutsche Bundesbank gave its support to a large number of the measures taken. However, it considers some individual decisions to be very problematic, and has voiced its criticisms publicly.

In light of the various arguments and views recently presented in proceedings before the Federal Constitutional Court, the Deutsche Bundesbank would like to submit the following statement, with a particular focus on government bond purchases by the Eurosystem, TARGET2 balances and the resulting risk of losses for the Federal budget.

B OMT programme

Following a brief description of the Outright Monetary Transactions (OMT) programme as it was adopted, the text below discusses the monetary policy rationale behind the programme, paying particular attention to an impairment of the transmission mechanism. It then takes an in-depth look at the OMT instrument, analysing its significance in relation to the monetary financing of governments.

I Decisions taken thus far regarding OMTs

On 6 September 2012, the Governing Council of the European Central Bank terminated its Securities Markets Programme (SMP). This programme was initiated in May 2010 and the Eurosystem's holdings of sovereign bonds purchased via the programme at that point amounted to just under €210 billion.¹ Upon being terminated, the SMP programme was immediately replaced by the OMT programme.

As with its predecessor, the OMT programme was designed to safeguard an orderly transmission and the singleness of monetary policy. Unlike the SMP, however, the amount of purchases is not explicitly limited and individual transactions are expressly tied to certain conditions. Commitment to a full EFSF/ESM macroeconomic adjustment programme or to a precautionary programme (Enhanced Conditions Credit Line), which include the possibility of EFSF/ESM primary market purchases, are stipulated as necessary – but not necessarily sufficient – conditions for countries to participate in the OMT programme. The ECB Governing Council nevertheless reserves the right to impose additional conditions. As a rule, OMT purchases are to be discontinued if an affected country breaches the requirements attached to a programme;² purchases are not permitted during an ongoing programme review, either.³ Moreover, any such purchases may only be made if the country in question has broad access to the capital market.

Other details include the desired involvement of the IMF in structuring and overseeing the adjustment programme as well as the possibility of the existing programme countries (Greece, Portugal and Ireland) also making purchases if they have regained access to the bond market. Furthermore, as with the SMP before it, the liquidity provided by way of the OMTs is to be fully absorbed, regardless of whether and for how long the current policy of full allotment of monetary policy refinancing operations prevails. Unlike the SMP, the OMTs are to focus on the shorter end of the maturity spectrum, to be understood as maturities of between one and three years. As it is not desirable for recipient countries to shift into shorter maturities in response to purchases of any of their issues, these countries' issuance behaviour is to be monitored closely. The Eurosystem does not want to claim preferred creditor status with regard to the government bonds purchased as part of the OMTs. The

¹ As the purchase prices differed from the par value of the bonds – they were usually lower – the specified purchase volume, ie the amount of liquidity provided by the purchases, does not correspond to the par value of the purchased bonds.

² However, in such a case it cannot be ruled out that the Eurosystem will implement other measures with respect to the country so as to counter the risk of measures being reversed, even if conditionality is not complied with.

³ In his opening statement at the press conference on 4 October 2012, ECB President Draghi commented: "OMTs would not take place while a given programme is under review and would resume after the review period once programme compliance has been assured."

general public is to be informed weekly about the total holdings and the market value of the OMT portfolio; on top of this, the average maturity and a country breakdown will be provided once a month. The start, continuation and suspension of government bond purchases are at the sole discretion of the ECB Governing Council and shall be decided in a manner consistent with the monetary policy mandate.

II Monetary policy reasoning for the OMT programme with reference to the transmission mechanism

The ECB argues that the OMT programme is required to safeguard the transmission of monetary policy on the grounds⁴ that the current situation is characterised by risk premiums on government bond yields which are attributable in particular, in the view of the ECB, to unfounded fears on the part of investors with regard to the reversibility of the euro.⁵ Because government bond markets are important at several points in the transmission mechanism, it is argued, these risk premiums are undermining the proper functioning of the transmission of monetary policy. Therefore, the effectiveness of monetary policy measures is constrained, particularly in those euro-area countries in which there are (unjustified) risk premiums on government bonds. As a result of the tensions in the sovereign bond markets, the argument continues, the ability of banks to provide credit is seriously hampered, with adverse consequences for the real economy. Accordingly, the aim of OMTs is to achieve a better alignment of financing conditions in the real economy with the ECB policy rates. Thus, in the following we first discuss how the monetary transmission mechanism works and the necessity of correction if it is impaired, as well as the role of conditionality in OMTs.

1 How the transmission mechanism works

The monetary transmission mechanism is a process by means of which monetary policy decisions act upon the economy in general and the price level in particular.⁶ Monetary policy decisions are transmitted through various channels which come into play at different stages of the transmission process. There is generally a time lag in the impact of monetary policy decisions on prices, and the effect varies depending on the economic situation. In general, a precise (point-by-point) quantification of the effects of monetary policy measures is not possible because of uncertainties about the data used (eg revisions, under-recording), the models applied (omission of important transmission channels) and the parameters used (eg in the event of structural changes in an economy). Statements can be made only about probability, typically in the form of confidence bands. The only thing which is certain is that, in the execution of monetary policy, central banks are usually confronted with long and variable time lags which cannot be precisely predicted; as a rule of thumb, a time lag of one to two

⁴ See, for example, the Editorial in the ECB Monthly Bulletin of September 2012.

⁵ It is argued in part that the stability of the euro as a whole is regarded as being in danger even though there is only one country in which its reversibility is becoming increasingly probable. At the press conference after the ECB Governing Council meeting at the beginning of August, ECB President Mario Draghi emphasised the irreversibility of the euro in every member state and explicitly stated that there would be no return to the drachma and the lira. The aim of the government bond purchases is to counter self-reinforcing dynamics resulting from "irrational" market assessments. It is argued that there are multiple equilibria, and that monetary policy is able, through OMT, to prevent the very disadvantageous potential scenarios.

⁶ ECB (2011), The monetary policy of the ECB, p 58.

years is assumed before monetary policy stimuli have their full effect on the economy. Consideration also has to be given to the fact that, in general, structural relationships in an economy are subject to ongoing change. With regard to monetary policy transmission specifically, this means that transmission cannot be assumed to be unchanging over time, but will evolve as a result, for example, of increasing globalisation, structural reforms or changes in behaviour. Whether and how these changes occur cannot be tested empirically until some time after they arise, when sufficient data become available.

Transmission is usually initiated by a change in the central bank's main tool, its policy rates.⁷ Based on its monopoly in creating central bank money, the central bank sets the interest rates on its monetary policy operations, and thus also the refinancing costs of commercial banks.⁸ Through its control over refinancing costs, the central bank exerts significant influence on money market rates. Money market rates in turn affect other interest rates – to differing degrees – for example, banks' interest rates for short-term lending and deposits ("interest rate channel"). Studies show that the euro-area economies are influenced by monetary policy chiefly through this interest rate channel.⁹

Medium to long-term interest rates (for example, yields on government bonds or long-term lending rates) are impacted only indirectly by changes in money market rates, because the expectations of market participants play a decisive role in determining medium to long-term market interest rates. For instance, medium to long-term market interest rates are driven to a significant extent by the expectations of market participants with regard to long-term economic growth and inflation trends, and thus by the long-term outlook for an economy (or for a currency area). Accordingly, medium to long-term market interest rates reflect expectations with regard to future policy rates and thus with regard to the expected course of monetary policy. As a result, changes in the key policy rates are only passed through to medium to long-term market interest rates when they lead to a change in market expectations with regard to long-term trends in prices and economic performance.

Through the interest rate channel outlined above, interest rate changes have an influence, in a variety of ways, on the saving, consumption and investment decisions of households and enterprises. The ensuing demand effects have a temporary influence on economic activity and, through this, on prices. Furthermore, because of their impact on financing conditions, monetary policy decisions also bear upon financial variables such as asset prices ("asset price channel") and exchange rates ("exchange rate channel"). Finally, shifts in policy rates

⁷ Expositions of the monetary transmission mechanism usually assume only implicitly that the prices of goods are not fully flexible, although this assumption is a key prerequisite for the explanation of how a change in nominal interest rates can be used to produce effects in the real economy. For the following explanations, it is not necessary to describe the individual transmission channels in detail. Extensive information may be found in the following: A Worms, (2004), Monetary policy transmission and the financial system in Germany, in: J-P Krahenen and R Schmidt (eds), *The German Financial System*, Oxford University Press; or, J Boivin, M Kiley and F Mishkin (2011), How has the monetary transmission mechanism changed over time?, in: B Friedman and M Woodford (eds), *Handbook of Monetary Economics*, North-Holland.

⁸ The commercial banks request central bank money to cover their cash needs, to repay interbank loans and to meet their obligations with regard to minimum reserve deposits.

⁹ See, for example, B Hofmann and A Worms (2008), *Financial Structure and Monetary Transmission in the EMU*, in: X Freixas, P Hartmann and C Mayer (eds), *Handbook of European Financial Markets and Institutions*, Oxford.

may also have an influence on the supply of credit (“bank lending channel”)¹⁰ and on corporate balance sheets (“balance sheet channel”).¹¹

However, important constituents of the monetary transmission mechanism and of its transmission channels remain imperfectly understood despite a series of recent empirical studies. In particular, there is only limited knowledge of how institutional changes and financial innovations since the beginning of monetary union in 1999 have altered the dynamics between different economic variables in the euro area (which in turn are likely to have affected the transmission of monetary policy). All in all, there is incomplete knowledge of how the transmission of monetary policy has developed over time – this applies in particular when the current end of the data is reached, as a great deal of data are required to analyse such changes, whilst there is obviously little data available.¹² Since the outbreak of the financial crisis, this knowledge gap has widened rather than narrowed.

Let us summarise in somewhat concise form. First, time lags which are difficult to quantify precisely remain a feature of the transmission of monetary policy stimuli to the price level. Second, it is primarily via the interest rate channel that monetary policy generally affects the economy as a whole. Tightening the monetary reins leads temporarily to a fall in output, which, as explained above, will peak about one to two years after the relevant interest rate increase. This finding is based mainly on studies using pre-crisis data. Price reductions tend to come about more slowly; prices are stickier than output in their reaction to changes in monetary policy. Third, interest rate moves affect the economy through corporate cash flows and the supply of bank lending, underlining the importance of the lending channel in monetary policy.

2 Existence of a prevailing impairment to the monetary transmission mechanism

Just as the transmission of monetary policy stimuli to the real economy involves a wide variety of mechanisms and reactions on the part of economic agents, so impairments to the monetary transmission mechanism may in general arise at different points. An impairment to the transmission process can be described as an effect of monetary policy stimuli which would not normally be expected, which may be brought about in particular by market failure (eg because of the asymmetrical distribution of information) or irrational behaviour. Thus, the only requirement for an impairment to exist is that any given monetary policy stimulus does not give rise to an effect which is “normal” or “usually to be expected” in terms of its plus or minus sign, time line or potency. Or, to put it in more technical terms: an impairment may exist if current estimates on monetary policy transmission fall outside those confidence bands which are “usually” obtained in econometric estimates. An obvious reason for an

¹⁰ As well as the traditional bank lending channel, where the focus is on the volume of credit supply – higher policy rates cause the funds available to banks for lending to shrink or become more expensive – more recent literature also discusses what is called the “risk-taking channel”, which comes into play when the incentive for banks to take on risks in lending is influenced by monetary policy decisions.

¹¹ The corporate balance sheet channel is based on the burden which an interest rate increase places on the assets side of corporate balance sheets, for example because the relative value of certain claims is thereby reduced. A lower net worth then impacts negatively on the enterprise’s creditworthiness as a borrower and thus constrains lending.

impairment may be that one or more of the above-mentioned transmission channels may be functioning to only a limited extent or not at all, for example if price formation on certain markets is no longer following the empirical patterns which have hitherto been usual. For instance, under certain circumstances in a crisis situation, the assessment of risk by participants in the financial markets may become divorced from the usual determinants.

However, it is impossible to establish whether a currently observed deviation constitutes a temporary impairment or a long-term shift in monetary transmission based on fundamentals. This is because, in defining an impairment to the transmission of monetary policy, the problem arises that the relevant estimates on monetary transmission may be outside the econometric confidence band estimates because the underlying economic conditions have themselves changed, rendering invalid the constancy assumed to characterise the relevant transmission interrelationships. In this case, there is no impairment. Additional difficulty is brought to the task of demonstrating an impairment (or change) to the monetary transmission mechanism by the fact that, as is generally agreed, such an impairment can only be judged with certainty with the benefit of a retrospective view. Demonstrating an impairment to monetary transmission at the time of its occurrence is generally not attempted simply because information on the current performance of the economy becomes available only with a time lag, while a certain body of data needs to be available to establish the existence of any “impairment”. Thus, an empirical analysis of the monetary transmission mechanism in real time is not feasible.

3 Indications of an impairment to the monetary transmission mechanism

Therefore, it is only possible at best to infer indications for or against an impairment to the transmission of monetary policy. However, because there is no way of demonstrating with certainty that the transmission mechanism is impaired at the time the decision is made on whether to undertake OMT purchases, and because OMT purchases may entail risks to price stability, the robustness of these indications needs to meet particularly high standards.

Risk premiums on government bonds as an indication of an impairment

Differing trends in yields on Eurosystem member government bonds vis-à-vis the pre-crisis period may potentially be an indication of an impairment in monetary transmission. With the outbreak of the sovereign debt crisis, the yields on government bonds issued by peripheral countries diverged significantly from yields on German government bonds, for instance.

However, recently observed movements in the market for government bonds cannot be cited with certainty as evidence of an impairment in monetary policy transmission because it cannot be established whether any “disturbance” in government bond yields is due to fundamental causes or whether excessive or irrational behaviour or other forms of inefficiency are at work. To establish this, one would need to demonstrate both that the market valuation of the government bonds of individual member states was incorrect and that this incorrect valuation was being reflected in financing conditions for the private sector. While it is true that observable fundamental data, such as debt or deficit ratios for government or the economy as a whole, can be cited to identify such an incorrect valuation,

this procedure alone can produce very different results depending on the models applied. In addition, in the context of the sovereign debt crisis, reform and consolidation measures already implemented would need to be factored into a forward-looking analysis, thus further raising to a considerable extent the level of uncertainty in evaluation and of subjectivity. Market valuation is also decisively influenced by the extent to which further implementation of reforms, adherence to conditionalities and, ultimately, the servicing of private-sector and government debt securities are deemed to be assured. Therefore, focusing on the risk premiums on selected government bonds is insufficient. If it is not possible to quantify individual risk components with certainty and to assign and interpret these components clearly, ie to break down the risk premiums analytically, in the end assumptions can be manipulated to justify any interpretation and concomitant policy recommendation. Against this backdrop, it seems that any attempt to answer the question as to whether and in what parts government bond yields reflect a risk premium not backed up by the fundamentals will ultimately be arbitrary and inadequate; a recommendation for monetary policy action developed on this basis is therefore questionable.

High financing costs for the real economy as an indication of an impairment

Another indication for an impairment in monetary policy transmission may be derived from national differences in interest rates on lending to non-financial corporations and households. There is no doubt that the financing environment for credit institutions deteriorated with the outbreak of the sovereign debt crisis, as faltering creditworthiness for individual countries entails a range of potentially disadvantageous effects for those countries' banking systems.¹³

That applies all the more in view of the fact that failure to adhere to reform requirements is supposed to result in OMT purchases being halted. In such a scenario, a country's solvency would be seriously jeopardised and risk premiums reflecting uncertainty about the potential for such a scenario may therefore be entirely rational. It is clear that such uncertainty about government solvency would flow over into the private sector, as a potential sovereign default would be likely to be hugely detrimental to the financial outlook and thus to creditworthiness in parts of the private sector. Thus, higher financing costs for the private sector may reflect higher fiscal risks at national level. To reduce financing costs, it would then be necessary to curtail the risks (for example through balance sheet adjustments or cost reductions). However, this cannot be achieved with the tools of monetary policy, and if monetary policy did artificially reduce financing costs, there would be a risk of new distortions being created as a result. Thus, this would not be a development to be combated by means of monetary policy, but rather the direct result of national fiscal policy in the hands of national policymakers.

This means that differing market interest rates within the euro area are not incompatible with a single monetary policy. In principle, different economic fundamentals should lead to a

¹³ First, the value of any secondary reserves in the banking sector in the form of liquid securities (in particular government bonds) fell as a consequence of the rise in risk premiums on the securities in question. This made it more difficult to obtain funding for loans through secondary reserves. Second, higher risk premiums reduced the value of the securities for collateral purposes. Third, a sovereign downgrade typically led to a lower rating for the banks in that country. Fourth, higher risk premiums meant that implicit or explicit government guarantees for the banks were diminished in value (Panetta et al, 2011, p 1)

varying equilibrium level of market interest rates from country to country in the euro area.¹⁴ It is thus very doubtful whether a uniform market interest rate in the monetary union is an economic position worth seeking; such doubts are justified for as long as the individual countries differ in their fundamentals. Against this backdrop, the diagnosis of any impairment to the transmission mechanism should be based less on the absolute level of market interest rates than on the change in the general level of interest rates in response to changes in the policy rate, ie on the transmission of interest rates. It is therefore a question of whether financing conditions in the real economy are moving in step with policy rates in the Eurosystem,¹⁵ such that, via the resulting influence on economic activity, price stability can be safeguarded.

Just as interest rate differentials *per se* cannot be cited as an indication of an impairment to the transmission mechanism, so uniformity in the level and response of private-sector financing costs does not necessarily point to a well-functioning transmission mechanism. From today's perspective, few are likely to disagree that the risk premiums on government bonds in the peripheral countries compared to the yields on German government bonds were much too low before the onset of the sovereign debt crisis in 2010 – whether because of an incorrect valuation of risk or because the prohibition on liability agreed in the EU treaties was not regarded as credible. In view of differing fundamentals (economic structure, economic situation, expectations with regard to future economic and political development, occurrence of shocks, etc), heterogeneous transmission (despite a single policy rate) could be something to be expected and even economically appropriate. A (forced or artificial) single interest rate or a (forced) uniformity in interest rate transmission may prevent precisely the adjustments which are required.

Ultimately, however, the connection between refinancing conditions in the financial sector and the provision of credit to the real economy also needs to be looked at in a more nuanced manner. Even if banks' financing conditions are dependent on the level of government bond yields, an analysis needs to take on board not just how close the connection actually is (and whether it is the same in every country) but also the significance of any widening in risk premiums for the provision of lending and thus for aggregate demand for credit and for prices: nothing can be inferred here from the level of government bond yields alone. In addition, the significance of government bond yields for monetary transmission may have to be qualified, as the banking sector has been less dependent on the money or capital markets for its funding, at least at the short end, since the move to full allotment.

4 The necessity of using monetary policy to correct an impairment

Even if one were to disregard the problems involved in specifically evaluating an impairment in the monetary policy transmission process and accept an impairment of this nature, the question arises whether and why such a development needs to be corrected – and whether

¹⁴ It can be shown, for instance, in a neoclassical growth model (or, more precisely, through the Euler equation), that there is a close relationship between the long-term equilibrium growth path of an economy and the (natural) real interest rate in that economy.

¹⁵ See ECB Monthly Bulletin, September 2012, pp 7-8.

and why this should be done by way of monetary policy. Ultimately, as long as economic and fiscal policies remain matters of national responsibility, economic developments in the various countries potentially entail different risks. These differences also justify the different risk premiums seen in private lending relationships. Seen in this light, the monetary policy (interest rate) stimulus directed at the euro area as a whole can be obscured by country-specific developments without this constituting irrationality or necessitating monetary policy action. The singleness of monetary policy within the Eurosystem therefore runs counter to measures and decisions that are designed merely to rectify national impairments.

These considerations are particularly relevant with regard to the point raised in the context of the OMT programme, that is, any reversibility of the currency of individual member states would give rise to additional interest rate premiums, and this would be unacceptable from a monetary policy viewpoint. However, given the continued existence of sovereign nation-states, the current composition of European monetary union cannot be guaranteed, at least not by the central bank. Hypothetically, this would only be conceivable if the central bank were to grant each country unconditional and unlimited funding in order to prevent an exit. This does not fall under the remit of monetary policy, however. And even if monetary policy support were provided, the majority of a country's general public could push for a country to exit the European monetary union and their elected representatives could democratically agree on an exit because they are not able or willing to create the economic framework required for continued membership of the European monetary union. Any judgement on the probability of such political developments, and on the associated appropriateness of the prices of public and private debt instruments, must inevitably be a highly subjective matter.

Just like the question as to whether the monetary policy transmission mechanism is impaired is an intuitive one, so, too, is subjectivity at the very heart of a government bond purchase programme whose fundamentally unlimited purchases are supposed to be based on such considerations. And if individual countries' continued membership of the European monetary union cannot be deemed to be beyond all doubt, the emergence of reversibility premiums does not, in and of itself, constitute any grounds justifying unlimited monetary policy interventions aimed at eliminating such premiums. Decisions on the composition of the euro area or whether and how this composition is guaranteed are matters for other bodies, notably governments and parliaments. The corresponding risks need to be evaluated by these bodies and shouldered via support measures, if necessary.

5 Conditionality of OMTs

It has also been argued that particularly the conditionality attached to the programme and compliance with this principle were of special importance for the permissibility of the programme. That is to say that, if conditionality were complied with and the assistance programme were implemented, there would obviously be no justification for any redenomination or insolvency premiums. First, a sustainability assessment would need to produce a positive outcome, and second, the expected successful implementation of the programme would make the prospect of a country "coming off the rails" appear irrational. At the heart of this line of argument is the assumption that the programmes that come into being as part of a comprehensive political compromise and on the basis of a given pool of

information are, essentially, realistic and therefore need to be convincing to rational investors. However, the case of Greece demonstrates that a programme cannot rule out insolvency. The question whether the assumptions made as part of the programme, which, with hindsight, were definitely over-optimistic, could have been avoided will remain unanswered here. In any case, given past experience, it is quite a stretch to argue that monetary policymakers could assume compliance with conditionality in all instances, and thus guarantee that the country in question will remain solvent on a lasting basis and that risk premiums will decline on grounds justified by the fundamentals.

A country's solvency and low funding costs could only be safeguarded with certainty if there were an option to provide that country with what was, ultimately, unlimited and unconditional monetary financing; this is incompatible with the Eurosystem's mandate, however.¹⁶ Added to this, owing to the announced conditionality, OMTs would have to be discontinued if the programme's requirements were no longer being complied with. The Eurosystem would then clearly be in something of a quandary, inevitably raising the following question. Why, particularly in a situation in which sovereigns (can) no longer fulfil austerity programmes and matters could potentially come to a head, is it that monetary policymakers stop intervening and monetary transmission is no longer said to be impaired?

6 Interim assessment

Even if the effect of monetary policy stimuli varies throughout the euro area, it is doubtful whether these differences represent an impairment that needs to be rectified by monetary policymakers. The assumption that the monetary transmission process is significantly impaired will in any case contain highly subjective elements. The secondary market purchases can indisputably facilitate a temporary decline in risk premiums. Yet it is doubtful whether these purchases are conducive to a lastingly stability-oriented development of European monetary union. The large-scale assumption of risks by the Eurosystem in connection with OMTs is making it increasingly difficult to reverse these measures *inter alia*, while the burden on fiscal policy to fulfil its duties is being eased. Any evaluation of the appropriateness of a country-specific risk premium, the assumption of risk in connection with assistance measures (on the primary or secondary markets) and in connection with any misjudgements over a country's economic and political prospects are matters for fiscal policymakers. Another reason for this is that fiscal policymakers ultimately decide on the specific programme details and also on the structure and future development of European integration as a whole, and it is fiscal policymakers who are directly subject to parliamentary oversight. If monetary policy is called upon to perform this task, it may become subject to fiscal policy dominance, thereby potentially jeopardising the stability objective.

III Government bond purchases by the Eurosystem

1 Categorisation of government bond purchases

¹⁶ See ECJ ruling 199/2012 dated 27 November 2012, paragraph 135 f.

Irrespective of the question of whether the transmission process is impaired and of whether this impairment is to be, or can be, remedied by monetary policymakers, the question arises, with regard to the Eurosystem, as to whether government bond purchases in the form of OMTs are an instrument which the Eurosystem is permitted to use.

Generally speaking, government bond purchases by central banks on the open market are not uncommon nowadays. However, the government bond purchases currently being carried out by the Bank of England (“BoE”) and by the Federal Reserve System (“Fed”), for instance, are fundamentally different from the bond purchases that the Eurosystem intends to carry out in the form of OMTs. These transactions do not aim to preserve the solvency of sovereigns; rather, they are open market transactions that are designed to influence the risk-free rate of interest, not the solvency risk premium of individual member states of a monetary union. The Fed, BoE and the Bank of Japan (“BoJ”), for instance, purchase bonds issued by their own central governments which are of a high credit quality. By contrast, the Eurosystem is looking to reduce the high risk premiums of individual poorly rated member states within a monetary union by purchasing their sovereign bonds. Consideration should also be given to the fact that the countries listed above are federally or centrally organised nations where the central government level holds the central bank’s capital and bears any profits or losses, which means that the purchases do not cause a redistribution of risks among the taxpayers of various independent member states.

What is more, the debate on the Eurosystem’s government bond purchases should be more nuanced to reflect the fact that, unlike the mandates of the central banks mentioned above, it is European primary law that sets the requirements in this regard. The ban on sovereign bond purchases on the primary market is a material element of the prohibition of monetary financing and a necessary factor in preserving the independence of the ECB and the national central banks within the Eurosystem.

The understanding that government debt instruments can be purchased on the secondary market by the ECB and the Eurosystem under their monetary policy mandate is derived from the prohibition of primary market purchases. Accordingly, it is assumed that the purchase of government bonds on the secondary market is essentially covered by the provisions set out in Article 18 of the Statute of the European System of Central Banks and of the European Central Bank (ESCB Statute) regarding the monetary policy operations of the Eurosystem. This is predicated on these secondary market purchases being within the scope of the monetary policy tasks entrusted to the Eurosystem and not being used to circumvent the ban on primary market purchases. However, against the backdrop of a possible circumvention of the ban on monetary financing, the ECB is prohibited from carrying out any such purchases of government bonds on the secondary market that are designed to fund government budgets independently of the capital markets.¹⁷

The terms “monetary policy” and “monetary policy measure” are not specified to a sufficient degree, however. Thus, this generally means that any measures taken by a central bank can be regarded as monetary policy, notably including large-scale government bond purchases

¹⁷ See Federal Constitutional Court ruling (case number 2 BvR 1390/12) dated 12 September 2012, paragraph number 278.

(eg the Fed's quantitative easing) or even large-scale monetary financing designed to preserve a sovereign's solvency. However, it does not follow that this type of monetary policy is necessarily sensible and conducive to price stability or any secondary objectives, nor does it mean that monetary policy measures of this nature are covered by a central bank's mandate. If a central bank had the legitimacy to take any measures which could be deemed, with a certain degree of plausibility, to serve monetary policy and price stability objectives, and which it could carry out itself, the normative boundaries of monetary policy would already be ineffective *ex ante* and thus superfluous. However, this would seriously call into question the legitimacy of independent monetary policy. After all, a key cornerstone of this legitimacy is the fact that monetary policymakers are bound to operate within a clearly defined institutional framework, and that they comply with this framework especially in times of crisis or when under outside pressure. This is also likely to have been the thinking conveyed to the general public when the European monetary union was established.

If secondary market purchases are carried out on a large scale, they might also have the effect of helping to fund governments. In this case, the purchases would entail considerable stability risks, however. This idea is based on the experience – one that can be explained in economic terms and is proven by historical data – that governments are generally oriented more to the short term and that this is one of the reasons why they are biased towards borrowing. If it is not restricted, this bias can lead to an undesirable persistent increase in debt levels which can ultimately pose a threat to a country's solvency.

However, such a development also jeopardises monetary policy that is geared to safeguarding price stability. It is true that monetary policy can generally help to preserve the solvency of a country running up excessive public debt in its own currency by ultimately providing monetary financing to cover the government's funding needs. However, the more monetary policymakers deploy their toolkit to keep a country solvent, the less scope they have to simultaneously pursue their *de facto* objective – that of safeguarding price stability. Measures such as raising policy rates make it more difficult, and more expensive, to satisfy the country's funding needs. Thus, the further monetary financing progresses, the more it can dominate over the objective of keeping prices stable.

Monetary policy comes under significant pressure to preserve a country's solvency, regardless of future inflation risks, if a situation emerges in which government spending threatens to go out of control. It goes without saying that a sovereign default event poses severe risks for financial stability and the development of the economy as a whole (and the monetary transmission mechanism no longer works like it does in periods of normality). At the same time, the political support for fiscal policy measures on a scale needed to preserve a country's solvency can then often only be gained with a great deal of difficulty, meaning that ever more is expected of the central bank, the only body seen as being capable of action. In a worst-case scenario, monetary policymakers are left to choose between abandoning price stability and accepting the risks resulting from a sovereign default. In the first case, sovereign default can be averted if the government debt is denominated in the country's own currency and can be funded by the central bank (this will not work if the sovereign debt is denominated in a foreign currency). But even if a sovereign default is still clearly some way off, a central bank pursuing a stability-oriented policy will find it difficult to

safeguard price stability if that country's fiscal policy is unsound. If economic agents believe that there is a certain probability that the situation will escalate and thus exert additional pressure on monetary policymakers, there might come a time when inflation expectations rise swiftly and strongly, thereby significantly confounding the central bank's efforts to safeguard price stability.

There are no acute signs of this happening at present; the longer-term inflation expectations derived from surveys or extracted from financial market data remain anchored, even though surveys indicate that uncertainty over future inflation rates has increased. In the European monetary union, which is designed to be a stability union, inflation expectations need not have already become de-anchored to be regarded as evidence of monetary financing. A government that can make use of the central bank, if need be, to fund its expenditure policy will usually have a greater tendency to take up debt financing first. There was certainly a degree of awareness of this incentive problem when the monetary union was established and this shaped the structure of the European Economic and Monetary Union. Fiscal rules were supposed to curb the threat of public finances getting out of hand from the outset; the complementary Stability and Growth Pact (SGP) was set up to give these rules more bite. A no bail-out rule was also agreed upon in order to encourage investors in general to carefully gauge the risk involved in government bonds as well, the idea being that a country with less sound public finances would incur interest rate premiums which in turn would have a disciplinary effect on fiscal policy. A ban on monetary financing was also enshrined in the EU Treaty in order to underline the primacy of price stability. As it were, fiscal policy was shown *ex ante* that monetary financing was not an option and that monetary policy would not step in to help even in the face of severe political and economic pressure. The idea was to create an inherent interest for fiscal policymakers to prevent the fiscal situation from escalating in the first place. They were to be given no scope for fobbing responsibility off on monetary policy.

In retrospect, these precautions have not produced the desired effect. Too little regard was paid to the fiscal rules ahead of the crisis, and the SGP was increasingly eroded until it was ultimately no longer capable of fulfilling its stabilising function. Furthermore, severe unsound developments were also seen in other parts of numerous economies while debt levels rose very strongly at times, including in the private sector.

In the European monetary union, the aim was to shield all the member states from a situation in which the existence of monetary financing and the use of monetary policy tools to preserve the solvency of individual member states meant that the objective of achieving price stability throughout the euro area did not have primacy (and sovereign solvency risks were redistributed among taxpayers). Just a single precedent that impairs the fundamental framework and undercuts the fundamental ban on monetary financing is all it takes to severely damage the desired dominance of monetary policy; such a precedent could then tempt other countries to rely on monetary financing as well. In a situation like this, the monetary policy objective of safeguarding price stability would gradually give way to fiscal interests. The single monetary policy would be increasingly at the mercy of measures aimed at preserving solvency, and its credibility would be at risk. Once monetary policy has started on this slippery slope, it is both difficult and very expensive to change direction. Even if monetary policy were later to adhere to a strict policy of price stability and (contrary to

expectations) accept a sovereign default, its earlier misjudgement would become visible in the form of significant losses and a potential burden on euro-area taxpayers via the central bank's balance sheet, thereby damaging its credibility and acceptance.¹⁸

To prevent this kind of gradual and nearly irreversible momentum from gaining traction, it would be crucial to make clear, early on, that monetary policy will not be misused for these purposes and that the central bank will strictly interpret the prohibition of monetary financing. However, in a fiscal crisis, this might collide with the claim that the monetary transmission mechanism is impaired and that action is needed to avert a potential financial market crisis, these points being given repeated emphasis. Monetary policy would then give the impression that it could indeed be co-opted for fiscal policy purposes as a means of compensating for insufficient fiscal policy action; events in Greece (see box below) serve as a warning in this regard. In this context, indicating that unlimited government bond purchases are an option sends out a signal that is just as worrying as the point often raised in public debate that timely and appropriate fiscal policy measures were *de facto* ruled out, meaning that only monetary policy was capable of action. The conclusion derived from this apparent lack of alternatives is that monetary policymakers have to act, irrespective of any legal, economic and institutional barriers. Monetary policy action in a situation like this can strengthen perceptions among governments that fobbing off the pressure to act on monetary policymakers is a worthwhile strategy from a national perspective because the associated political costs can be reduced or offloaded altogether. The lack of alternatives to central bank action thus becomes a self-fulfilling prophecy.

Liquidity provision to Greece

The Eurosystem's provision of liquidity to cover the financing requirements in Greece is particularly problematic and illustrates the assumption of fiscal tasks by monetary policy. Greek liquidity needs were financed via the Eurosystem despite doubts regarding the solvency of the state and the banks. While the risks arising from the Eurosystem's provision of liquidity tended to be transferred to the Bank of Greece, the latter is hardly likely to actually be in a position to independently assume any large-scale losses. The Eurosystem has exposed itself to considerable risks of loss should Greece and its banking system default completely and, in particular, should Greece exit monetary union, which, given the political tensions which emerged during the implementation of the adjustment programme, could at no point have been considered unlikely.

The fact that barely solvent banks were ultimately allowed to be financed by means of ELA without the provision of adequate collateral, and that the banks concerned also used the liquid funds they received to finance the Greek government, is a particularly serious issue. The resulting problem of monetary policy being co-opted by fiscal policy was made particularly clear by the action taken in connection with Greece's impending default in August 2012.

- The implementation of the Greek assistance programme was a long way off target, as was also subsequently confirmed by the decision to adopt a new programme.

¹⁸ See Section D.

- European fiscal policymakers delayed payment of the agreed assistance funds because conditions had not been met.
- However, Greece had substantial financing requirements (in particular, refinancing maturing debt securities).
- Greece had evidently decided not to meet its financing needs by means of fiscal measures (eg by freezing expenditure).
- Instead, Greece issued additional T-Bills. However, this was not based on it, in principle, still having regular access to the market. Rather, the vast majority of these T-Bills were probably purchased by Greek banks. Yet the banks did not have the corresponding liquidity reserves available, but instead made extensive use of the liquidity assistance provided by the central bank (ELA).
- The Greek banks were only able to acquire the T-Bills because the Eurosystem had significantly expanded the volume of T-Bills accepted as collateral for procuring liquidity on an *ad hoc* basis. The Greek banks were thus able to purchase additional Greek T-Bills and then immediately obtain funding from the Greek central bank.

Monetary policy therefore made it possible for a country to be financed though the provision of liquidity, even though the conditionality of a fiscal assistance programme was not met and fiscal policymakers had halted the payment of further funds. The banks, as quasi-intermediaries, were not sufficiently solvent to be able to independently bear the risk resulting from a possible Greek sovereign default.

These experiences also back up fears that the approach to conditionality under the OMT programme will not stop extensive purchases even in dubious cases and will thus not prevent a redistribution of risk through the Eurosystem's balance sheet.

The considerations outlined above concerning the monetary financing of governments certainly leave scope for interpretation with regard to purchases of government bonds on the secondary market. We are critical of government bond purchases for the following reasons.

- As already mentioned, the sovereign bond purchases of other central banks differ from those of the Eurosystem in that the latter specifically purchases bonds with a poorer credit rating, which means that the balance sheet risks are significantly higher. Furthermore, the countries listed above are federally or centrally organised nations where the central government level holds the central bank's capital and bears any profits or losses, which means that the purchases do not cause a redistribution of risks among the taxpayers of various independent member states.
- If the Eurosystem more or less caps the yields (or spreads) on a country's sovereign bonds by means of secondary market purchases, this will also have an impact on the primary market – and thus on new sovereign bond issuances – because financial market participants can be certain that they can sell a newly issued bond to the Eurosystem at any time for a minimum price. A country's financing conditions are

consequently decoupled in part from price formation on the financial market, as they are predetermined by the Eurosystem's intervention.

- This problem escalates if a large share of a country's current debt issuance is promptly purchased by the Eurosystem and it is guaranteed that there will be no substantial time lags following issuance. If there is a perceptible time lag, then the circumvention of financial market funding would be weakened to the extent that the purchasers would still bear a holder risk over a noticeable period of time and could not assume that they would be able to quickly pass on the purchased bonds to the Eurosystem. Conversely, the closer in time the purchases are to the primary market issuance and the greater the volume of bonds purchased by the Eurosystem, the smaller the residual risk borne by the original purchasers of the primary market issuance. *In extremis*, their role would be limited to passing on the newly issued bonds to the Eurosystem with a short time lag; that country's access to the capital market would then be shielded for the most part from market forces.¹⁹
- The problem of bypassing the financial market also becomes particularly evident if state-owned banks, or banks under the control of the state, or even the ESM/EFSF, initially act as primary market purchasers and the bonds are then passed on to the Eurosystem after a short period of time. The situation would be even more disturbing from our perspective if the banks, in turn, were reliant on extensively tapping the central bank for funding.²⁰
- Furthermore, the purchases can impinge on central banks' independence, which constitutes a key prerequisite for them to successfully fulfil their main objective of safeguarding price stability. This is firstly the case due to the terms of the intended secondary market purchases of government bonds. A necessary condition for such purchases is the conclusion of a full EFSF/ESM macroeconomic adjustment programme or a precautionary EFSF/ESM programme, including the possibility of EFSF/ESM primary market purchases. Secondly, as the concrete terms and justification of the secondary market purchases amount to at least the declaration of an unconditional guarantee of the continued existence of the euro area in its current composition, this ultimately means that a country can also be financed independently of the financial market in order to ensure that it stays in monetary union. This means that the governments concerned will have a particular ability to blackmail the Eurosystem, thereby threatening the independence of monetary policy.
- The justification given for the Securities Markets Programme (SMP), which was set up in 2010 and recently terminated, was that it was limited in terms of both scope and volume. This is not intended to be the case for the new programme for purchasing

¹⁹ See Herrmann, *EuZW (Europäische Zeitschrift für Wirtschaftsrecht)* 2012, p 805, 811.

²⁰ Although the funding of public sector banks by the Eurosystem is in line with the EU Treaty, such action can no longer be deemed justifiable if public sector or state-controlled banks are used in order to circumvent the ban on primary market purchases. If virtually no private lenders are at risk of any losses occurring during the "intermediate phase" (but rather ultimately only the state itself as the owner), it seems reasonable to interpret this – as in the case of the ESM's intermediary role – as circumventing the ban on monetary financing of governments.

government bonds on the secondary market (Outright Monetary Transactions, OMT) which has now been adopted. Thus, particularly in connection with the above-mentioned guarantee, over time, the debt of a beneficiary country could largely end up on the Eurosystem's balance sheet. The central bank could therefore be by far the largest creditor of a state. This harbours the risk that the Eurosystem would no longer be free to make monetary policy decisions, as the default of a member state would badly damage the credibility of the Eurosystem.

C TARGET2 problem

I Why are TARGET2 balances of relevance?

The TARGET2 balances that have arisen at some Eurosystem national central banks since the onset of the financial crisis have sparked broad public debate. The discussion has mainly focused on the causes of these balances and the risks associated with them. This statement will present the TARGET2 system and point out the potential risks. This section of the statement departs from the fact that the Deutsche Bundesbank is an integral part of the Eurosystem, which comprises the European Central Bank and the national central banks of the countries that use the euro. The Deutsche Bundesbank assumes that this system will continue to exist and that Germany will remain a member of monetary union. Its considered opinions on risk are based on these assumptions.

II What is TARGET2?

When the third stage of European monetary union was initiated, the national central banks of the Eurosystem did not merge to form one central bank, but they transferred their monetary policy decision-making powers to the Eurosystem. When the euro was introduced as book money in 1999, the Deutsche Bundesbank's monetary policy decision-making powers were thus transferred to the Eurosystem. The ECB Governing Council is responsible for formulating monetary policy. Changes to the monetary policy framework can only be made by the ECB Governing Council. However, in accordance with the principle of decentralisation, the national central banks are still responsible for implementing monetary policy (Article 12.1 of the Statute of the European System of Central Banks and of the European Central Bank; hereinafter ESCB Statute). Within this institutional setting, there is a need to ensure that the financial settlement of monetary policy operations is conducted in an efficient and reliable manner. An essential prerequisite for this was a secure and rapid payment system via which central bank money can be supplied without restrictions within the single currency area and also reabsorbed. The TARGET payment system, which enables central bank liquidity to be transferred without restrictions within the single currency area, was set up for this purpose. Banks are primarily provided with central bank money through refinancing operations, but also *inter alia* by national central banks acquiring securities portfolios and conducting operations on their own responsibility.

TARGET went live on 4 January 1999 and was initially an alliance system. The national RTGS systems²¹ were connected to one another via an interlinking component. In 2007, the alliance system was replaced by a shared technical infrastructure (TARGET2). The underlying decisions of the ECB Governing Council and the corresponding framework formed by the guidelines of the ECB Governing Council are based on Article 22 of the ESCB Statute. These guidelines²² were issued by the ECB Governing Council in accordance with Article 12.1 of the ESCB Statute and are binding for all national central banks in the Eurosystem. Therefore, all Eurosystem central banks are legally obliged to participate in TARGET.

TARGET2 processes an average of around 350,000 payments with a value of just under €2½ trillion each working day.²³ This figure is broadly equivalent to the size of Germany's GDP.^{24,25} These payment transactions can take a wide variety of forms, such as payment for a goods delivery, the purchase or sale of a security, the granting or repayment of a loan that has become due and the depositing of funds at a bank, among many others. TARGET2 not only settles cross-border payments. In the German component, in 2011, for example, around seven-tenths of the payments settled were national payments and only about three-tenths were cross-border payments. Alongside TARGET2, there are other payment systems in Europe, some of which have high turnover (for example, EURO1). At the end of a working day, the remaining balances from these private payment systems are also settled using TARGET2 because these payments are processed²⁶ securely in central bank money. Consequently, the results from these other systems also enter the TARGET2 system.

III How do TARGET2 balances arise?

The decentralised implementation of the single monetary policy in the euro area means that central bank money can, in principle, be created in various countries and can move across borders to other countries. If the credit institutions of a member state receive more central bank money on balance, the national central bank in question records a net positive TARGET2 balance, as is currently the case with the Bundesbank. But if the credit institutions of a member state receive less central bank money on balance, as is currently the case with the Bank of Greece, for example, the central bank records a negative TARGET2 balance. Within the TARGET2 system, this represents a claim not on another national central bank, but rather on the European Central Bank (ECB), since the legal relationships between the central banks are organised such that genuine settlement occurs, with the ECB acting as a clearing house that settles transactions among national central banks. The individual relationships between the national central banks, and the balances that occur as a result of daily business between them, are thus legally nullified, and only the respective relationships

²¹ Real time gross settlement systems.

²² Guidelines ECB/2007/2 and ECB/2011/NP17.

²³ Figures according to the ECB: <http://www.ecb.int/paym/t2/html/index.en.html>.

²⁴ TARGET2 has 976 direct participants, 3,465 indirect participants and 13,083 correspondent banks, <http://www.ecb.int/paym/t2/html/index.en.html>.

²⁵ TARGET2's share in euro-denominated large-value payment transactions stands at 91% in terms of amount and 59% in terms of volume; <http://www.ecb.int/paym/t2/html/index.en.html>.

²⁶ <http://www.ecb.europa.eu/pub/fsr/html/index.en.html>

with the ECB count. However, bilateral relationships between Germany and the peripheral countries in any case account for only a small share of the balances that occur. Instead, complex multilateral transactions are behind the TARGET2 balances. In legal terms, there is an ongoing settlement process, whereby daily occurring balances are carried forward. As long as the system continues to exist, these balances are updated on a daily basis. Legally speaking, the balances are claims of or against the ECB, which are not intended to be met regularly outside the context of the circulation of central bank money. As the system's continued existence is assumed, its regulatory framework also does not provide for any termination rights, through which a repayment of these claims could be brought about. From a legal perspective, the relationships between the ECB and the national central banks should, in our opinion, not be viewed as lending in the sense of a loan contract, particularly as it is also the case that no lending conditions have been negotiated.

As the national central banks involved hold current accounts for the credit institutions participating in TARGET2, cross-border liquidity flows can, as in the case of the Deutsche Bundesbank, result in the national central banks having liabilities vis-à-vis the national banking systems and claims on the ECB (TARGET balances) if the credit institutions hold balances at the national central banks. Conversely, as in the case of the Bank of Greece, for example, the national central bank can have liabilities vis-à-vis the ECB and claims on its national credit institutions, as a result of refinancing, for instance.

TARGET2 itself does not supply any liquidity and does not grant any loans. Instead, the TARGET2 balance reflects the decentralised implementation of the monetary policy decisions taken by the ECB Governing Council and the situation on the money markets. Consequently, in principle, the TARGET2 balance does not permit restrictions on such cash flows. Under normal circumstances, the respective balances keep being offset by the capital flows between the national banking systems, as the need for capital in one banking system is offset by lending from a banking system with surpluses. Thus between 1999 and the outbreak of the financial crisis in 2007, no TARGET2 balances indicated any fundamental problems.²⁷

IV Have TARGET2 balances increased since the onset of the financial crisis?

The situation changed fundamentally with the onset of the financial crisis. Commencing in 2007, sizeable positive²⁸ and negative TARGET2 balances have accumulated within the Eurosystem. Since then, the redistribution of liquidity among credit institutions via the money market has ceased to operate normally owing to mutual mistrust among banks. At the same time, wholesale funding on the financial markets became more difficult and more expensive

²⁷ For developments of other claims of the Deutsche Bundesbank on the Eurosystem including TARGET balances, see http://www.bundesbank.de/Redaktion/DE/Downloads/Statistiken/Aussenwirtschaft/Auslandspositionen_Bundesbank/S201ATB39697A.pdf?__blob=publicationFile. Between 1999 and 2007, the TARGET balances fluctuated between -31 billion and +71 billion, but at times stood in the range of only a few billion.

²⁸ For The Deutsche Bundesbank's external position, see http://www.bundesbank.de/Redaktion/DE/Downloads/Statistiken/Aussenwirtschaft/Auslandspositionen_Bundesbank/S201ATB39697A.pdf?__blob=publicationFile

for the banks. Some institutions have effectively been cut off from the market and so are reliant on liquidity assistance from central banks, in particular since this mistrust took hold of entire markets in the wake of the sovereign debt crisis.

Ultimately, the current development in TARGET2 surpluses and deficits results from disequilibria in the balance of payments of several euro-area countries, with both current account deficits and private-sector capital exports potentially playing a role. This is reflected in the liquidity outflows from these countries, which are ultimately financed by the Eurosystem. Currently, Spain and Italy, as well as the programme countries of Greece, Ireland and Portugal, have the highest TARGET2 liabilities to the ECB. Alongside Germany (€715 billion on 30 November 2012), the Netherlands, Luxembourg and Finland all have accrued large claims on the ECB. These TARGET2 balances increased strongly in the course of 2011, particularly in the second half of the year as the financial and sovereign debt crisis escalated. After expanding significantly in the first half of 2012, with balances increasing by more than €200 billion, they averaged slightly above the €1,000²⁹ billion mark since June. During this period, Bundesbank TARGET2 claims levelled off at around €740 billion. However, this overall stabilisation was, at times, accompanied by considerable daily fluctuations. In the course of the financial and sovereign debt crisis, there have been several phases when TARGET2 balances temporarily stopped growing or even decreased, for example in 2009 and during the first half of 2011.³⁰

V Implications

1 For the surplus countries

Banking systems that receive inflows of central bank money through TARGET2 have a lesser need to seek funding from their national central bank; partly because home markets are considered safe havens in the sovereign debt crisis. Institutions in Germany have therefore steadily reduced the volume of their funding from the Bundesbank and now actually have a large credit balance on their Bundesbank accounts. Consequently, they are parking surplus inflows of central bank money in the Eurosystem's deposit facility or are investing them in Eurosystem liquidity-absorbing operations. This has the effect of extending the Bundesbank's balance sheet. A sale of assets, for example of reserve assets, is not necessary to compensate for the influx of central bank money, because this is offset by the

²⁹ Sum of all TARGET2 claims or all TARGET2 liabilities

³⁰ See Deutsche Bundesbank, Monthly Report, November 2012, p 49.

TARGET2 claim on the ECB on the asset side of the Bundesbank's balance sheet, a significant part of Germany's external assets.³¹

2 For the deficit countries

Conversely, credit institutions in deficit countries were affected by the above-mentioned liquidity outflows. However, in contrast to the pre-crisis situation, they have not borrowed any more funds from credit institutions in surplus countries because these institutions were not prepared to lend, or at least not at favourable interest rates. As a result, banking sectors in deficit countries turned to their respective national central bank for funding, which provided liquidity at the applicable central bank interest rate.

a) Full allotment and an extended collateral framework in the Eurosystem

Since the onset of the crisis, demand for central bank funding has increased sharply and the Eurosystem has massively extended its provision of liquidity. A substantial amount of liquidity was released through the full allotment procedure. The collateral framework, which forms the basis for Eurosystem lending to credit institutions – Article 18.1 of the Statute of the ESCB only permits lending against adequate collateral – has been relaxed several times in order to facilitate the provision of additional liquidity and thus cover requirements in deficit countries. These Eurosystem crisis measures were intended as short-term solutions to ensure the proper functioning of the financial system under more difficult conditions. Without the additional liquidity, extremely short-run adjustment processes would have ensued. It emerged that not only individual credit institutions were affected but rather that rising payment outflows from the entire banking sector were offset. On the one hand, this allowed for the necessary adjustment measures in peripheral countries to be spread over time. On the other, however, more and more risks were taken on as the solvency and collateral requirements of counterparties were lowered. This has blurred the line between ensuring liquidity and preserving solvency and has greatly extended the tasks of monetary policy.

b) Emergency Liquidity Assistance

The situation was exacerbated by ailing credit institutions also drawing on Emergency Liquidity Assistance (ELA) from NCBs in addition to their regular source of funding from

³¹ H. Schlesinger, The Balance of Payments Tells Us the Truth, CESifo Forum, Special Issue January 2012, pp 9-10.

central banks. This is a conventional instrument used by central banks which, under Article 14.4 of the Statute of the ESCB, shall not be regarded as being part of the functions of the ESCB, each NCB therefore issues it independently and at its own risk. Such provision of ELA must also be collateralised. However, the requirements listed under the collateral framework of the Eurosystem do not apply here as the provision of this liquidity falls within the remit of each individual NCB. Consequently, lending is more flexible. To prevent a conflict with EU State-aid rules, ELA is only permitted to meet the temporary liquidity needs of illiquid but not insolvent credit institutions. The provision of ELA by NCBs does not completely sidestep the control of the ECB Governing Council. Pursuant to Article 14.4 of the Statute of the ESCB, if the Governing Council finds, by a majority of two-thirds of votes cast, that the provision of ELA is inconsistent with the objectives and tasks of the ESCB, it may veto any further provision of ELA by the NCB in question. However, the reality is that large amounts of ELA are currently being granted over longer periods of time. For example, the banking sector in Greece is receiving extensive ELA from the Bank of Greece.

3 Potential for reversing this development

The expansion of surpluses and deficits in the Eurosystem can be limited if individual credit institutions curtail their borrowing from central banks. The Bundesbank has drawn attention to this time and again. To do this, the Governing Council must decide by way of a majority vote to limit the Eurosystem's collateral framework more strictly. At the same time, the credit institutions in question would have to be either recapitalised or, where necessary, resolved if they are not in a capacity to continue operating without receiving special central bank funding. Fiscal policymakers should make the ultimate decision when it comes to assuming risk by providing funding to banks that are in danger of defaulting. The ongoing to and fro of TARGET2 balances since May 2012 does not mean that the situation has necessarily improved. Nevertheless, this development highlights the fact that the additional external funding requirements of peripheral countries, in particular, are no longer primarily being covered by national central banks. Above all, countries receiving financial aid from the assistance programmes have not recorded any noticeable increases in their (negative) TARGET2 balances for some time now.³²

There are currently no provisions for directly restricting or collateralising TARGET2 balances; such measures can be introduced as an amendment to the TARGET Guideline only if the Governing Council agrees to them by a majority vote. These measures should not under any circumstances lead to a segmentation of the money market or restrict in any way the free movement of capital.

³² Deutsche Bundesbank, Monthly Report, November 2012, p 49.

The US Federal Reserve (Fed), is also not immune to the accumulation of surpluses and deficits in its payment system, Fedwire. These are booked in the Interdistrict Settlement Account (ISA). Surpluses and deficits in ISA are generally only partially balanced. This is carried out each April by the Fed, which, depending on the average change in balances in the previous twelve months, redistributes securities holdings in the System Open Market Account (SOMA). In the event of a surplus, the Fed increases its holdings of securities and, in turn, reduces its ISA claims.³³ This type of measure cannot just be applied to the TARGET2 system because, in contrast to the Fed's policy, which is based on purchases of securities ("Outright Transactions"), Eurosystem monetary policy is primarily based on lending, which is collateralised by securities and carried out domestically by national central banks. NCBs cannot transfer these securities amongst one another as they are tied to each lending relationship. Furthermore, such security purchases in the US focus primarily on US government bonds, or at least on high-quality marketable securities. The redistribution of interest-bearing instruments in SOMA essentially has no impact on the US federal government, because after a dividend of 6% on the paid-in capital is paid to the Federal Reserve districts, the profits of all these districts are handed over to the US Department of the Treasury (around 98% of distributed profits in 2011).³⁴

VI What is the significance of TARGET2 balances?

TARGET2 balances are a useful instrument for assessing the health of banking sectors in different countries. They reflect balance of payments imbalances (from the movement of services and capital), which were compensated for by comparatively low-cost central bank funding. Whenever the banks of a given country are net recipients of central bank money, the NCB in question records a positive TARGET2 balance, as is the case with the Bundesbank. If, on the other hand, there is a net outflow of money from the banking sector, the NCB will record a negative balance – as is the case with the Bank of Greece.

VII Risks from TARGET2 balances

1 The Eurosystem's continued existence

If the Eurosystem remains as it is, there will be no immediate risks from TARGET2 payments, but rather from the liquidity provision measures described above. The tensions in

³³ Krämer, J, *Wirtschaftswoche* of 18 February 2012, p 38; see also Board of Governors of the Federal Reserve System (2012), *Financial Accounting Manual for Federal Reserve Banks*, Section 40.40 SOMA Participation, Revision Set 52, July 2012.

³⁴ In 2011, district banks received \$1.6 billion in statutory dividends and the Federal government received \$76.9 billion in payments. (<http://www.federalreserve.gov/newsevents/press/other/20120110a.htm>).

the financial markets should abate once confidence in the euro-area banking sector as a whole and in individual banks has been restored and those banks that are currently experiencing major liquidity problems have been restructured or disappear from the market. The recapitalisation of solvent banks and the resolution of non-viable institutions are key prerequisites for this. In addition, countries that have forfeited the confidence of the capital markets need to remedy their structural deficits and boost their competitiveness with the aim of improving their public finances and their current account situation and hence of being able to attract private capital once again. As soon as these steps are taken, the movement of capital between national markets in the euro area will balance out, which, in turn, should correct the balance of payments imbalances.

2 Risks which would arise if a member state were to exit monetary union

One hypothetical case being debated publicly, in which parts of the negative TARGET2 balances might be transformed into actual balance sheet risks, could occur if a member state were to exit monetary union. The Treaty on the functioning of the European Union (TFEU) does not contain any provisions governing the exit of a member state. However, if a member state were to exit, even though it is also not covered by the framework of TARGET2, this would lead to the withdrawal of the central bank of the country in question from the TARGET2 system in its current form. In such an event, the ECB's TARGET2 claims on the NCB of the exiting member state would then fall due. Possible netting against reclaims from paid-in capital and transferred foreign reserve assets is negligible given the sums in question. If the exiting NCB cannot repay its liabilities, it would be necessary to devise a solution for settling the outstanding difference. Although the NCB's liabilities vis-à-vis the ECB are essentially counterbalanced by claims on national credit institutions, which are also secured under monetary policy refinancing, the ECB, as a creditor in the TARGET2 system, does not have direct access to this collateral; under this decentralised policy framework, collateral is deposited with the NCBs as contractual partners. Furthermore, in such a scenario, a recovery event does not necessarily occur, because the national credit institution may not be in arrears on its payment obligations to its central bank. Also, the value of collateral in euro terms may be relatively limited.

Ultimately, if such a scenario were to arise, the amount of losses would essentially depend on the extent to which the exiting central bank would actually be able and willing to pay off its debt. In accounting terms, the ECB would have to write off the residual claim if it were conclusively deemed unrecoverable. It would incur a loss on its balance sheet for the write-off or at an earlier point in time when a corresponding provision is made in respect of an

impending write off. In this respect, the ECB will primarily have the risk. Irrespective of the distribution of the payment flows over time, the ensuing losses for the Eurosystem will, from an economic standpoint, ultimately have to be shouldered by taxpayers in the remaining member states.

In terms of risk, there is only one scenario in which the level of Bundesbank TARGET2 claims would be relevant: namely, if Germany were to leave the monetary union or if the monetary union were to collapse. In this instance, the recoverability of the claims would depend on the willingness to negotiate a solution at European level. As was mentioned at the outset, the Bundesbank believes that the Eurosystem will continue to exist and that Germany will remain a member of the monetary union. The Bundesbank's considered opinions on risk are based on these assumptions.

D Risks to the Federal budget

I General monetary policy risks

In order to participate in Eurosystem refinancing operations, a counterparty has to be both solvent **and** able to post adequate collateral. In traditional central bank practice, this provides a double safeguard in that losses can only arise if the counterparty defaults and the collateral provided by that counterparty concurrently proves insufficient upon realisation. Losses should not normally occur if sufficient collateral within the meaning of Article 18.1 of the ESCB Statute is posted. Refinancing therefore usually results in a profit for the Eurosystem. Based on the principle of decentralisation and the fact that collateral is generally standardised, refinancing can be carried out anywhere in the Eurosystem. If the national central banks were able to retain these profits, competition within the Eurosystem for these refinancing operations could potentially emerge. To prevent this from happening, pursuant to Article 32 of the ESCB Statute, profits from the refinancing operations are distributed among the national central banks in accordance with the capital key.³⁵

However, parallel to this distribution of profit, pursuant to the decision of the ECB Governing Council the national central banks generally bear any losses arising from refinancing operations according to their share in the ECB's capital. This is because the national central banks cannot influence the choice of collateral, since this is established by the ECB Governing Council for the Eurosystem as a whole. Furthermore, there are non-monetary policy refinancing operations for which risk-sharing is ruled out. These include, for example, the provision of Emergency Liquidity Assistance (ELA) by a national central bank, for which the bank generally selects collateral under its own responsibility.

³⁵ This is also why TARGET2 balances pay interest at the refinancing rate, ie the same rate that applies directly to refinancing. Income is thus transferred to the national central bank which received the central bank money created according to its share in the ECB's capital.

In the context of the crisis, the ECB has perceptibly lowered collateral standards for monetary policy refinancing operations, which has enabled the extensive provision of liquidity through full allotment procedures³⁶ and the supply of long-term liquidity to credit institutions. As a consequence, risk arises from operations which create central bank liquidity because the broadening of the collateral framework as described means that higher risks of default were accepted along with these types of collateral. Despite larger haircuts, it may no longer be possible to ensure that losses can be fully absorbed.

The ECB Governing Council's decisions on loss distribution continue to apply, which means the financial risks arising from the extended monetary policy refinancing operations must, as a rule, be borne by the national central banks according to their capital share, regardless of the national central bank at which the losses occur.

An additional point is the establishment of securities portfolios held for monetary policy purposes. These are built up at the central banks of the Eurosystem in the same proportion as the banknote allocation key,³⁷ which means that the ECB assumes 8% itself and distributes the remaining holdings among the Eurosystem's national central banks according to their share in the ECB's capital key. Should assets of this kind, such as holdings of Greek government bonds, default, the risks that arise are also distributed according to the capital key. This also is reflected in the Bundesbank's higher risk provisioning, which leads to the transfer of a smaller profit to the Federal Government.

II Eurosystem losses in balance sheet terms

If a central bank of the Eurosystem's profit and loss account reports a loss, it is treated as follows:

1 Loss by the ECB

In the event that a loss is incurred by the ECB itself, it must be offset against the general reserve fund and the provisions of the ECB pursuant to Article 33.2 of the ESCB Statute. If these funds do not cover the loss, as shareholders on the ECB Governing Council, the national central banks may decide by a capital majority (pursuant to Article 10.3 of the Statute of the ESCB) that the monetary income to be distributed to them is to remain with the ECB to offset the ECB's remaining losses. The ESCB Statute does not provide for any additional loss transfers to the national central banks. Any participation in the ECB's loss would have the effect of reducing the national central banks' profits.

The national central banks are not obliged to offset an existing loss. Although the national central banks are obliged to pay in an amount that corresponds to their subscribed share of the ECB's capital if the ECB's nominal capital is increased, the amount paid for the purpose

³⁶ ECB press release, 15 October 2008.

³⁷ Annex 1 of the decision of the European Central Bank of 13 December 2010 on the issue of euro banknotes, OJ, 9 Feb 2011, L35/26, specifies the banknote allocation key as of 1 January 2011, which is used pursuant to Article 4 (1) of the decision to distribute the total value of the euro banknotes issued among the members of the Eurosystem.

of a capital increase cannot be used directly to cover the loss. A loss can therefore only be reduced directly if additional provisions can be formed from the profits.

In the event that any losses incurred by the ECB cannot be repaid using this method, the ECB must bring the loss forward in its annual accounts until the loss is covered by future ECB profits or future monetary income from the Eurosystem's central banks as agreed by the ECB Governing Council.

2 Loss by a national central bank of the Eurosystem

Should losses arising from monetary policy operations be incurred by a national central bank of the Eurosystem, the ECB Governing Council may decide to indemnify the national central banks against these losses. Pursuant to Article 32.4 of the ESCB Statute, these amounts can be offset against the national central banks' monetary income.

If an individual national central bank incurs a loss as a result of the Eurosystem's internal loss distribution mechanism or for other reasons, it may draw on its current income and own provisions and, if the profit and loss account shows a loss, on its reserves. As at 31 December 2011, the Deutsche Bundesbank's risk provisions totalled €7.709 billion. The Bundesbank's reserves amount to €2.5 billion, the upper limit established in section 27 (1) of the Bundesbank Act.

If losses incurred by a national central bank of the Eurosystem cannot be fully repaid using these methods, the national central bank must bring forward the loss in its annual accounts until the loss is covered by future profits.

The shareholders of the national central banks – the government, in Germany, as in most member states of the Eurosystem – are not directly liable for any losses incurred by the central banks. However, additional transfers could become necessary if a large loss were to be carried forward over several years. However, according to the Convergence Reports of the ECB, the member state would be assumed to become liable if the amount and the sustainability of the losses raised doubts as to the ability of the national central bank to perform its tasks. In its Convergence Report, the ECB states the following:

“For all the reasons mentioned above, financial independence also implies that an NCB should always be sufficiently capitalised. In particular, any situation should be avoided whereby for a prolonged period of time an NCB's net equity is below the level of its statutory capital or is even negative, including where losses beyond the level of capital and the reserves are carried over. Any such situation may negatively impact on the NCB's ability to perform its ESCB-related tasks but also its national tasks. Moreover, such a situation may affect the credibility of the Eurosystem's monetary policy. Therefore, the event of an NCB's net equity becoming less than its statutory capital or even negative would require that the respective Member State provides the NCB with an appropriate amount of capital at least up to the level of the statutory capital within a reasonable period of time so as to comply with the principle of financial independence.”³⁸

³⁸ ECB Convergence Report, May 2012, pp 28-29.

Should losses from the abovementioned monetary policy operations exceed the Deutsche Bundesbank's risk provisions, this could lead to losses which the Bundesbank has to report. In this case, the Federal Government, as a shareholder, would have to decide whether to offset the Bundesbank's losses in order to balance the Bundesbank's accounts. Depending on the volume of the losses, this could mean considerable obligations for the Federal budget but could be seen as essential to maintaining a stability union. The Bundestag would then have to approve the necessary funds.

III An economic analysis of the effects of Eurosystem losses on the Federal budget

A central bank can always create money, and could ultimately relieve the burden on its government's budget at any time by injecting funds, regardless of its own profits or losses. However, first, the Eurosystem is not permitted to finance governments. Second, the euro area is designed to be a stability union, which means that monetary policy is not shaped by the government's funding needs, but by stability policy requirements.

The member states' government budgets are ultimately financially linked to the Eurosystem. A national central bank's profits are transferred to its member state, while in the event of a loss, the treasury forgoes any transfers in the particular year and potentially also in the following years, and may even have to fund a recapitalisation if the losses are excessive. Losses (from government bond purchases, for example) are therefore reflected in the Federal budget via the Bundesbank. For this reason, it cannot be assumed that that taxpayer will not ultimately bear any losses, regardless of whether they are incurred by the Bundesbank or by the ECB. There may be delays with regard to the time of payment if, for example, earnings are retained, a loss is carried forward or a loss is (initially) only recorded on the ECB's balance sheet. However, in the context of a stability-oriented monetary policy, the time at which any losses (from government bond purchases, for example) are reflected in the cash position makes no difference to the Federal budget from an economic view. Prompt recapitalisation by the Federal Government would be needed if large losses were to undermine the credibility of the central bank's primary objective of price stability. In effect, losses from government bond purchases by the Eurosystem would therefore impair the long-term sustainability of public finances just as much as losses from the EFSF or the ESM and would constrain the Federal Government's financial latitude accordingly. In this respect, they do not differ substantially from EFSF or ESM secondary market purchases which do, however, require approval by parliaments and, potentially, judicial review.

It is occasionally argued that the losses for the Federal budget would be even higher if the Eurosystem did not intervene through secondary market purchases for stability purposes, thus preventing the crisis from further intensifying. However, it would at least be in keeping with the guiding principles of European economic and monetary union if the volume and nature of the assistance to be granted to member states in need of support could be decided within the framework of the ESM/EFSF. The decision would then be the responsibility of national governments and parliaments so as not to further blur the boundary between fiscal policy and monetary policy and to allow monetary policymakers the flexibility to achieve their primary objective of safeguarding price stability. This would also allow the decisions about

the individual support measures for certain countries to be consistently integrated into the current debate about the basic focus and further development of the euro area. Decisions on how to shape the extensive assumption of liability, appropriate control mechanisms or even powers to intervene in national budget sovereignty, through a fiscal union, for example, should essentially be made jointly. There is a risk that potentially substantial bond purchases by the Eurosystem, which cannot be ruled out due to the announcement of fundamentally unlimited purchases, may disrupt the sequencing of these measures. This would mean the Eurosystem purchasing government bonds upfront and proceeding to communitise risks without the potentially desirable introduction of more comprehensive powers of intervention. This increases the risk of the imbalance between liability and control becoming greater.