



A European transfer union

August 2, 2011

How large, how powerful, how expensive?



Is Europe on the way to a transfer union? In public debate, the current rescue measures for distressed member states in the European Monetary Union (EMU) are seen as the forerunners of a transfer union between the euro countries. A transfer union is characterised by permanent, direct and horizontal transfers.

Transfers between states should therefore not be categorically ruled out – provided that they are efficiently designed and are granted to the right place. As politically-intended transfers, their success should be measured against their own objectives. They must also be operationally efficient – i.e. conferred for a limited period, for a defined purpose and subject to conditions.

Transfers between states already take place through the EU budget. The net positions of the member states of the EU lead to substantial effective cash flows during the financial year – in 2009, more than EUR 866 million just between Germany and Greece.

Potential transfers result from the euro countries' liabilities under the rescue package (up to EUR 580 bn) and from the European Central Bank's involvement in the crisis (up to EUR 408 bn). However, these are not annually recurring cash flows but rather are potential one-off payments that only have to be made (pro rata) in the event of insolvency of an EMU country. Perpetuation of such transfers cannot be ruled out, however.

The EMU is still a long way from systematic transfers. The payments that could arise from potential transfers in the event of a state bankruptcy are very large. Nevertheless, they are less than the possible burdens that could arise were there to be long-term, direct and horizontal financial equalisation of the euro countries.

Under the rescue mechanism, potential transfers between EMU member states could increase, as macroeconomic tensions in the euro area take a long period, at best, to decrease. The stability of the system must be preserved in the medium term.

In the future, this trend could further fuel political tensions in Europe. The more critical the situation in which a country finds itself, the greater the potential threat of transfers being perpetuated, using the argument for systemic stability. On the other hand, countries making the largest proportion of payments could insist on playing a decisive role in the political agenda.

The decisive factors for the future of the euro area are not just the technical details and the volume of transfers but also the political tensions that result from them. They could be the real critical risk factor for the stability of European policy.

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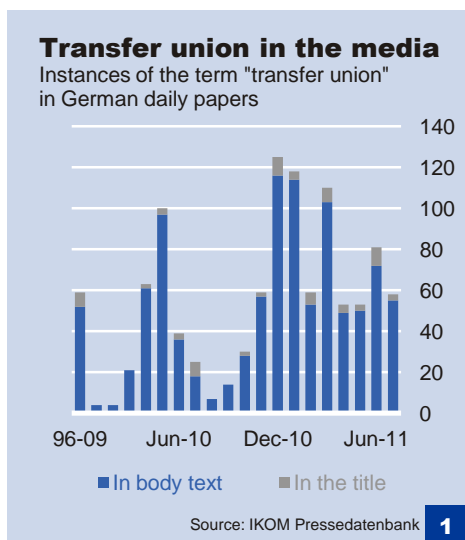
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Implicit transfers – a definition

The single market and currency union involve more than just actual and potential transfers: economic and monetary integration also gives rise to implicit transfers, for example in the form of positive and negative externalities that, for years, have resulted from the European single market but also, potentially, through the euro crisis.

Firstly these are the positive externalities of the European single market, which arise from the four freedoms – for example from economies of scale or falling transaction costs. An example of negative externalities is the losses of tax receipts that the member states could suffer if resident investors were to register tax write-downs on securities issued by another state, or if banks were hit because of negative exogenous shocks.

Externalities also arise within the EMU: a common financial policy leads to a uniform level of interest rates that is unable to satisfy the requirements of all the national economies.

A typical example of an implicit transfer is, for instance, the convergence of interest rates between the countries in the euro area during the first ten years of its existence. Countries that formerly had high interest levels were able to benefit from lower rates while, for Germany, real interest rates were too high.

As a description and analysis of the cause-effect relationships of implicit transfers is outside the scope of this study, we will mention implicit transfers only in passing. In the rest of the study, we will quantify exclusively actual, potential and systematic transfers.

A controversial expression keeps cropping up in discussions on European economic policy: **The European transfer union**. This term is often used simplistically and without clear definition. So far, there has also been no quantification of the extent of potential transfers. Nevertheless, the current rescue measures for distressed member states of the European Monetary Union (EMU) are being viewed as the forerunners of a transfer union between the countries in the European Union (EU) and the EMU. This EU Monitor takes the current discussions as an opportunity to quantify and assess current and potential future cash flows between the member states of the EU and EMU.

Section 1 defines the term “transfer union” and demonstrates possibilities for the assessment of transfers between states. Against this backdrop, Section 2 quantifies and assesses current transfer payments within the EU budget. Sections 3 and 4 estimate and assess potential transfer payments in the framework of the euro rescue package and the involvement of the European Central Bank (ECB). Section 5 compares these amounts with the payments that would arise in the event of a systematic financial equalisation between the euro countries. Section 6 concludes this study.

1. Background

The term “transfer union”, is often used in differing, usually normative connotations. At the centre of criticism is the fear of long-term, direct and horizontal transfers between European countries, primarily between the EMU countries. This connotation of “transfer union” will be used as a benchmark definition in the remainder of this examination.

The discussion therefore does not concern the existing, vertical **financial equalisation of all 27 EU member states** through the EU budget although, considering net contributions, this also has a horizontal effect. Rather, the possible expansion of the rescue package for the countries in the euro area, resolved last year and further developed this year, will be reviewed. For instance, loans and guarantees given by euro countries in the framework of the rescue mechanism could become permanent transfers in the event of the recipient countries getting into financial difficulties. As a rule, lack of capability, or, in relation to possible transfers, lack of political will for consolidation (*moral hazard*) displayed by some of the countries in the euro area are cited as reasons.

In order to be more selective, in the remainder of this examination we will distinguish three different types of inter-state transfers in EU and EMU.

- **Actual transfers** comprise all current cash flows between the member states of the EU and EMU. They are important annual flow figures, which have an effect on the public finances of the EU member states.
- From a current perspective, **potential transfers** can be defined as all prospective cash flows between member states that could arise from the agreements to rescue the euro area made since May 2010 – including the involvement of the ECB in providing liquidity and market management. If loans are not repaid and/or guarantees are called on – for example as part of debt re-scheduling or voluntary debt cancellation by creditors, a one-off transfer results. However, there is a risk that one-off transfers will lead to further payments, which in the end could become systematic transfers.



Transfers between states and a proposal for classification under regulatory policy

How can transfers between states be classified in relation to their planned objectives? An expedient approach is based on Musgrave (1973), which allocates economic policy measures to three fields of activity – resource allocation, income distribution and macroeconomic stabilisation.

Allocation represents the creation of good general conditions for free competition to take place. This normally arises from supply-side policies but also, when policies create efficient conditions - for instance a competitive framework or the provision of public (social and merit) goods. A typical area for allocation policy is the EU regional policy – although this also includes distributive elements.

Redistribution relates to the field of policy that redistributes the accrued welfare in an economy in order to compensate those disadvantaged by allocation. In the EU, this task is primarily administered by the Common Agricultural Policy – although, as a result of various reforms, this increasingly includes elements of allocation.

Stabilisation, the third task for economic policy, is to stabilise the economic cycle. In the EU it is the recent crisis mechanisms that aim at stabilisation and from which potential transfers could arise. In this respect we will see that there are definitely interactions between stabilisation policy and redistribution.

These three fields of activity will be referred to time and again in the course of the investigation.

- **Systematic transfers** can be actual or potential transfers, provided that they are permanently embodied in the framework of a financial equalisation scheme between euro countries.

Transfers between states already take place in the EU. These are politically desirable and have legal standing. For instance, Article 3 III of the EU Treaty refers, inter alia, to “*economic, social and territorial cohesion and solidarity between the member states*” as one of the aims of the Union. Measures that are financed must correspond with the aims of the Union and have been agreed¹ by the member states in the framework of the European Treaties and secondary legislation².

The economic rationale for the current actual transfers through the EU budget derives from the history of the Union and the demands of the European Single Market. It includes allocation policy and distributive policy goals. (see text box on the regulatory classification)

- The enormous economic **growth in the post-war period** primarily benefited cities and industrial centres – a reason to create balancing mechanisms, in the form of agricultural and regional transfers, to support disadvantaged rural areas and the peripheral and border regions. These transfers were motivated by redistributive policy.
- In particular, the successive **enlargements of the EU to the south and east** led to the political desire for economic convergence between regions and member states. Investments – primarily in infrastructure projects – are aimed at stimulating growth dynamics in countries and regions with below-average economic performance. These transfers were motivated by allocation policy.

The provision of **European public goods** (e.g. the European Single Market, with its four market freedoms) also results in positive externalities – for example in the form of economies of scale or falling transaction costs - that, through new growth dynamics, in the end also level out differences in income and prosperity.³ These can be described as implicit or indirect transfers (see text box) that, however, will not be dealt with in more detail in this paper.

From an economic point of view, transfers between states should therefore not imperatively be ruled out – provided that they are efficiently arranged and are made to the correct place. The remainder of this study will therefore assess the transfers mentioned in terms of their actual success and operational efficiency.

- The actual success of the transfers can be measured against the fulfilment of the goals set by the policy giving rise to the transfer.

¹ In contrast to the financing of measures via the budget, member states are not allowed to assume liability for the liabilities of other member states (see: *No Bailout Clause*, Art. 125 TFEU). In order to make this regulation compatible with a long-term crisis mechanism, a paragraph will be added to Art. 136 TFEU later this year, allowing mutual assumption of liabilities within the scope of the *European Stability Mechanism* ESM from mid-2013, provided that there is strict conditionality.

² European secondary legislation derives from the primary legislation in the European treaties. It comprises directives, regulations, decisions and recommendations.

³ Specifically: Economies of scale for firms; welfare benefits in markets for products and factors, growth in total factor productivity and the marginal productivity of capital increase and provide stronger capital accumulation. The board of experts (2005) assume that a cumulative 8% of trade creation would occur through the EMU alone. Badinger (2005) ascribes an annual growth effect of 0.5% to European integration between 1950 and 2000.

EU net positions

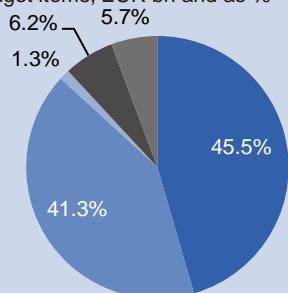
EUR m, 2009 – Operating balance

BE	-1,663.9
BG	624.2
CZ	1,702.5
DK	-969.5
DE	-6,357.5
EE	573.0
IE	-47.5
GR	3,121.0
ES	1,181.7
FR	-5,872.7
IT	-5,058.5
CY	-2.3
LV	501.5
LT	1,493.3
LU	-100.2
HU	2,719.4
MT	8.6
NL	117.7
AT	-402.1
PL	6,337.1
PT	2,150.7
RO	1,692.5
SI	241.9
SK	542.1
FI	-544.2
SE	-85.6
UK	-1,903.3

Source: European Commission **2**

EU budget 2011

Budget items, EUR bn and as %



- Sustainable growth: EUR 64.5 bn
- Natural resources: EUR 58.7 bn
- Union citizenship, freedom, security and justice: EUR 1.8 bn
- EU as a global player: EUR 8.8 bn
- Miscellaneous, a: EUR 8.2 bn

Source: European Commission **3**

— Operational efficiency is achieved if transfers between states serve the correct purpose and are undertaken with low transaction costs and steadily increasing efficiency of allocation. It is complied with if, in particular, transfers between states are time-limited, earmarked (i.e. for a specific purpose) and conditional – i.e. granted against an obligation for something in return.

The actual and potential transfers that are described and assessed in the remainder of this paper cover a wide spectrum of formats and objectives. Not all the defined efficiency criteria are therefore necessarily applicable to the same extent. However, they aid in assessing the individual transfers in terms of their efficiency.

2. Current transfers in the EU through the EU budget

In the first stage of the analysis, we investigate the extent of current actual transfers through the EU budget. There are no direct horizontal transfers between the member states of the European Union. However, vertical transfers made through the EU budget have a horizontal effect. This can be shown by deliberately taking a net transfer point of view, without making normative conclusions.

There are different ways to calculate the net position.⁴ In the following we refer to the European Commission's method of operative budget balances.⁵ A simplified but objective method for representing transfers between states is to divide the amounts paid by the net contributors by the percentage of all recipients that are net recipients. Table 4 shows the transfers calculated this way, in absolute figures. Net contributors⁶ are shown on the vertical axis, net recipients on the horizontal axis. As an example, in 2009, the net positions of Germany and Greece resulted in an effective horizontal transfer effect, through the EU budget, of EUR 866 m.

It's not just the amount of the allocations that is relevant but also their structure, from which flows their application in the national environment. Chart 5 shows that transfers by each member state differ not only in amount but also in composition.

For example, the member states in Eastern Europe tend to receive large appropriations of funds from the competitiveness and cohesion budget items, whereas the majority of transfers to France, Spain and Greece – measured in terms of gross national income (GNI)⁷ – are paid to the agricultural sector. This has consequences for the long-term growth potential of the recipient countries. This is because regional policy funds are aimed primarily at cohesion through supply-side – and therefore usually growth-oriented – measures, while on balance agricultural policy funds are still aimed at cushioning structural change. They do not promote growth.

⁴ See Heinen, N. (2011). EU net contributor or net recipient: Just a matter of your standpoint? Deutsche Bank Research. Talking Point. Frankfurt am Main.

⁵ This calculation method ignores administration expenses and traditional equity capital. For each country, the balance is calculated from the expenditure and the adjusted national contribution – the latter corresponds to the percentage of the national contributions paid by a country, applied to the sum of the total expenditure.

⁶ Germany's position as a net contributor has varied considerably, depending on economic variations and political negotiations – since 2000 between EUR 5.9 bn and EUR 11.5 bn p.a. This has effects on the direct transfers that we have derived through the net positions.

⁷ While the GDP measures the value added according to a *domestic market concept* (all the output produced in the country), gross national income refers to a *citizen concept*, which measures the output of all the economic entities that belong to a country.



EU budget 2009: Net transfers from net contributors to net recipients, absolute terms

Net contributions from EU net contributors, proportionally according to the EU budget allocation key to net recipient countries (EUR m)

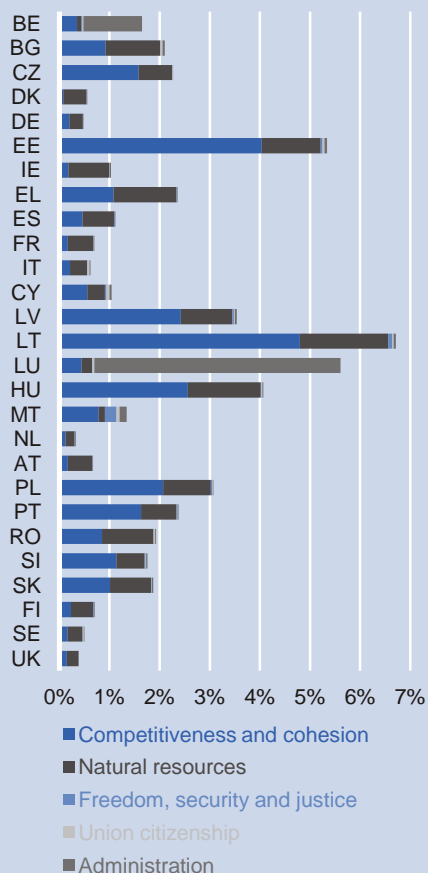
	BG	CZ	EE	GR	ES	LV	LT	HU	MT	NL	PL	PT	RO	SI	SK	SK	SUM
BE	45.3	123.6	41.6	226.6	85.8	36.4	108.4	197.4	0.6	8.5	460.0	156.1	122.9	17.6	39.4	34.9	1,705.0
DK	26.4	72.0	24.2	132.0	50.0	21.2	63.2	115.0	0.4	5.0	268.0	91.0	71.6	10.2	22.9	20.3	993.5
DE	173.1	472.2	158.9	865.6	327.8	139.1	414.2	754.2	2.4	32.6	1,757.6	596.5	469.4	67.1	150.4	133.4	6,514.6
FR	159.9	436.2	146.8	799.6	302.8	128.5	382.6	696.7	2.2	30.2	1,623.6	551.0	433.6	62.0	138.9	123.2	6,017.8
IE	1.3	3.5	1.2	6.5	2.4	1.0	3.1	5.6	0.0	0.2	13.1	4.5	3.5	0.5	1.1	1.0	48.7
IT	137.8	375.7	126.5	688.8	260.8	110.7	329.6	600.1	1.9	26.0	1,398.5	474.6	373.5	53.4	119.6	106.1	5,183.5
CY	0.1	0.2	0.1	0.3	0.1	0.1	0.1	0.3	0.0	0.0	0.6	0.2	0.2	0.0	0.1	0.0	2.4
LU	2.7	7.4	2.5	13.6	5.2	2.2	6.5	11.9	0.0	0.5	27.7	9.4	7.4	1.1	2.4	2.1	102.7
AT	10.9	29.9	10.1	54.7	20.7	8.8	26.2	47.7	0.2	2.1	111.2	37.7	29.7	4.2	9.5	8.4	412.0
FI	14.8	40.4	13.6	74.1	28.1	11.9	35.5	64.6	0.2	2.8	150.5	51.1	40.2	5.7	12.9	11.4	557.6
UK	51.8	141.4	47.6	259.2	98.1	41.6	124.0	225.8	0.7	9.8	526.2	178.6	140.5	20.1	45.0	39.9	1,950.3

Sources: European Commission, DB Research

4

Differing country focus

EU funds as % of GNI



Source: European Commission excluding pre-accession and balancing payments

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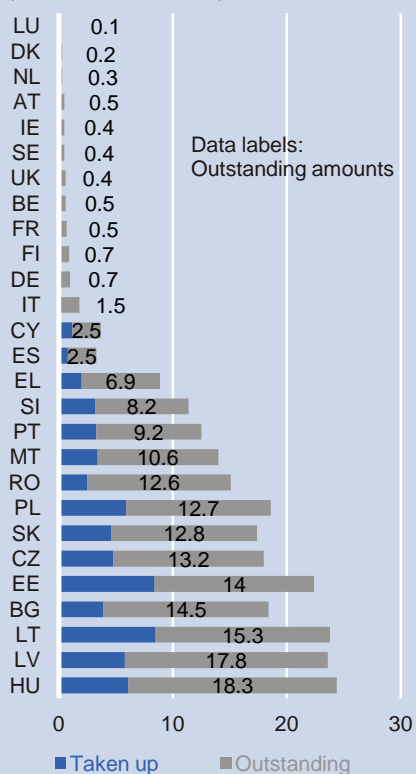
Appropriations from the **competitiveness and cohesion** budget item have three objectives: the first of which is economic convergence of the least developed regions and member states. The European Regional Development Fund (ERDF) and the European Social Fund (ESF) support regions where the gross national income (GNI) per head is less than 75% of the EU average, with co-financing of between 75 and 85% of project costs. The cohesion fund supports member states having a GNI per head below 90% of the EU average with co-financing of up to 85%. Another objective is regional competitiveness and employment. The ERDF and ESF support those regions to which the convergence objective does not apply with up to 50% of public expenditure – in peripheral regions with up to 85%. The third objective is the European Territorial Cooperation. Cross-border cooperation and the integration of regions and firms are co-financed by the ERDF at up to 75% of total costs. The idea at the centre of these allocation-policy-determined objectives is that economic integration alone is not sufficient to reduce disparities. Convergence between member states and regions should therefore be achieved by creating appropriate general conditions.

Co-financing relaxes the strained relationship between the aim of conditionality, which attempts to direct the processes and results of national economic policy, and the principle of subsidiarity, a key principle of European integration. Projects are promoted exclusively at national level. To be supported, projects must comply with the *Community strategic guidelines for cohesion, growth and employment*. An advantage of such support is that it provides for consistency in national policies, because projects are financed in the long term and independently of election cycles.

However, the principle of co-financing also presents the Union with particular challenges: not all the funds are actually taken up by the member states. Even in the current financing period (2007-2013), a large proportion of the funds earmarked for recipients of the structure and cohesion fund is yet to be taken up. Marzinotto (2011), for example, calculates that, in Greece, the *Reste à Liquider* – i.e. the difference between allocated funds and those actually taken up – is around 7% of GDP. His corresponding figure for Portugal is

Low rates of absorption

Funds from the Structural and Cohesion Fund taken up and outstanding (2007-2013%, % GDP)



Source: Marzinotto (2011) **6**

9.3% and for Central and Eastern Europe more than 15%.⁸ Chart 6 shows the low absorption rate by country. Under this financial framework, Hungary alone still has outstanding funds equivalent to 18.3% of its GDP.

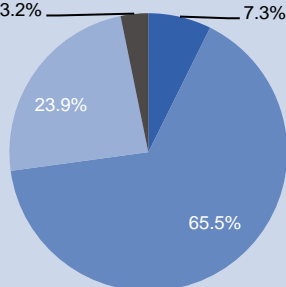
A common criticism is that the terms for granting regional and structural aid have not been adapted to the economic downturn resulting from the economic crisis – fiscal consolidation by the member states has limited the possibilities for co-financing. Although, in the framework of the European economic package, the European Commission laid down that the project finance instalments for 2009 and 2010 can be paid out even without co-financing, this will do nothing to address the basic problem of low rates of take-up. Other critics⁹ deplore the tendency for fraud in the EU budget: In only the last two financial frameworks, from 2000 to 2006 and 2007 to 2013, the Commission withheld EUR 8.4 bn on suspicion of fraud – EUR 2.5 bn from Spain alone.

The **Natural Resources budget item**, which includes spending on the Common Agricultural Policy (CAP) and aid for the fishing industry, has clear redistributive aims – not only between taxpayers and agriculture but also between member states, as a result of the differing importance of their agricultural sectors. As the Common Agricultural Policy accounts for more than 98% of this budget item, we have concentrated on it in the following.

In June 2003, the EU agriculture ministers agreed the Luxembourg Conclusions, which reformed the CAP to take account of the eastward enlargement of the European Union. The latest reform consists of decoupling direct payments from output (so-called product premiums) in favour of single farm payments, for instance for arable land. Support to farmers is subject to strict conditionality (*Cross Compliance*) – for example in the area of environmental protection and safety of food and animal fodder. Inadequate compliance with these standards leads to direct payments being reduced or withheld. At the same time, the extent of the market support measures – e.g. for cereals, sugar and beef – has fallen in the last few years. Chart 7 shows that the vast majority of budget expenditure on the CAP went on direct support and the development of agricultural areas. Only about 7% was spent on market support measures.

EU strong on direct aid

CAP expenditure (2010) EUR m



- Market support: EUR 4,399.8 m
- Direct aid: EUR 39,273.0 m
- Agricultural development: EUR 14,358.1 m

Source: European Commission **7**

The **other expenditure items** in the EU budget – i.e. administrative expenses of the EU institutions (6%), the **EU as a global player** (6%) and **freedom, security and justice** (1%) have no distributive policy objectives. Their objectives are the creation of an effective framework – and they therefore have allocation policy goals.

Transfers through the EU budget are politically desirable. Their success must therefore be measured by the extent to which the objectives of individual policy areas are fulfilled. Economic integration under the European Union has growth-promoting effects on its member states – as shown by the obvious growth effects of the single market and its four market freedoms, and also by the welfare effects from European public goods (e.g. the coordination of

⁸ Marzinotto (2011) puts forward two reasons why this is so: in 2007, the so-called N+2 rule, which provided that countries would forfeit their claims to funds if such allocated funds were not taken up within two years, was relaxed. This reduced the pressure to take up funds in some countries. In addition, some member states have difficulty in supplying the necessary equity resources in order to be able to take up the funds under the co-financing regulations. The reasons for this are: limited fiscal room to manoeuvre; and a lack of administrative competence.

⁹ E.g. Financial Times, 1 December 2010.

EU budget: Income and Expenditure

The EU budget is fed by five sources of income. VAT resources account for about 11% of receipts. As a rule, the member states pay over 0.3 percentage points of the VAT rate – limited by caps and rebates for specific countries. Resources in the form of a proportion of Gross National Income (GNI) are handed over by the member states at annually variable rates. They comprise about 75% of the revenue. Traditional resources are customs duties – for example levies on agricultural products, sugar levies – which account for about 12% of income. The member states hand over 75% of this income to the Union, being allowed to keep a quarter as an allowance for expenses. The smallest proportion, just under 1%, is miscellaneous income, for example interest received and fines. In addition are amounts carried forward from the previous year.

The expenses structure of the EU budget is divided into five items. The Sustainable Growth item (45%) finances the structure and cohesion funds. The Natural Resources item (41%) primarily includes expenses on agriculture and fisheries and aid for development of rural areas. “Other Expenditure” includes, primarily, the administrative expenses of the EU institutions. The items “EU as a global player” (6%) and “Union Citizenship, freedom, security and justice” (1%) cover payments for pre-accession aid; Neighbourhood Policy; development aid; the common security and defence policy; and police and judicial co-operation.

The CAP pursues distribution policy objectives

economic policy, standardisation).¹⁰ The coordination of economic policy in the crisis (coordination of economic stimulus packages, the speedy decision to save the euro) also prevented more serious distortions of the capital markets and limited the negative effects on the real economy. A look at the aggregated EU budget allocations shows, however, that consistency of objectives is not always evident. The individual objectives of sectoral policies are very often self-contradictory, as are allocation policy objectives and distributive policy aims. These inconsistencies between objectives are not surprising: they have to be renegotiated every year in a continuing political process between the Commission, the Parliament and the member states. Although, from a politico-economic point of view, the advantages of European integration are undisputed, the results of the appraisal of regional and cohesion policies and agricultural policy turn out to be mixed.

In fact, the stimulation through **regional and cohesion policies** has had positive effects. The Commission (2010b) points out that, in the period 2000-2006, the GDP of the former Objective 1 Regions of the EU 15 increased by about 10%. The net contributor countries were also able to profit from this development, through increased exports. However, taking into account the already high rate of growth in that period, as well as the amounts involved, this figure is hardly surprising. Specifically, investments in infrastructure works and qualification schemes could be assessed as successful – particularly as the marginal benefits of such measures in relation to the whole economy cannot be negative. The Commission (2010b) also noted that only 34% of the funds would have produced results that could be positively assessed.¹¹ On regional policy, Becker et al (2005) found that, although there are growth effects from EU transfers under regional policy, in 36% of all recipient regions the payments exceeded the optimal (i.e. efficiency maximising) amount and that, in 18% of the regions, a decrease in the transfers would not have resulted in any reduction in growth. The verdict is therefore that the allocations are not goal-oriented and give rise to only very limited advances in convergence. Particularly in view of the fact that the cohesion fund was supposed to make adaptations possible in the run-up to the European currency union, this opinion is disappointing.

In contrast to the more allocation policy-oriented objectives of the regional and cohesion policy, redistribution is an explicit objective of the CAP. However, given the latest reforms, it can be seen that the strongly redistributive elements of the CAP are tending to have ever-decreasing market distortion effects and are increasingly exhibiting allocation policy objectives. However, this cannot obscure the fact that the CAP, the second-largest item in the budget, still involves transfers that, as instruments of redistribution policy, have no growth-promoting effects.

The operational efficiency of the EU budget still has scope for improvement as a mechanism for indirect horizontal transfers between the member states. It is limited, for example, by the lack of time limits for the transfers. Although the seven-yearly financial

¹⁰ See, for example, Badinger (2005), who assesses the growth effects of European integration between 1950 and 2000 at more than 26%. Crepo Cuaresma et al. (2008) show that the previous length of EU membership has as decisive an effect on the positive growth effects as those that result from EU membership. This is particularly true for poorer countries.

¹¹ Evaluation is a matter for the member states. It is evident that the South European countries demonstrate a lower rate of reporting back than the EU average.

The euro summit on 21 July: The euro safety net reloaded

After the culmination of the euro debt crisis the heads of state and government of the EMU agreed on 21 July on a comprehensive package to develop further EMU anti-crisis measures.

- **Greece** gets a second bailout package worth EUR 109 bn. In addition, the private sector has committed to participate in the Greek programme with a net contribution of up to EUR 106 bn (2011-2019). The loans within the new programme will be extended to a minimum of 15 years and up to 30 years with a grace period of 10 years. Interest rates (at approx. 3.5%) will be slightly above the EFSF refinancing costs. The new conditions will apply to the existing Greek loan facility as well. Moreover, Structural and Cohesion Funds for Greece (EUR 20 bn) will be targeted at improving competitiveness and growth. The European Commission has set up a special Task Force for this purpose.
- **The ECB** agreed to accept a downgrade of Greek government bonds to Selective Default in the context of debt restructuring. This U-turn became possible because there will be guarantees by the EFSF or the euro area governments for Greek government bonds pledged by banks to the ECB for the relevant period.
- **The scope of the EFSF** is substantially enlarged. It will finance the recapitalisation of all eurozone financial institutions via loans to governments. It will be allowed to intervene in the secondary market on the basis of an ECB analysis and a unanimous decision by the EFSF members. Implicitly and importantly, these elements also constitute a line of defence to fight incipient crises in other member states, such as Italy and Spain, at an early stage. The maturity of EFSF loans will be extended from 7.5 years to at least 15 years and the interest rate lowered from around currently 4.5 %, in the case of Greece, Portugal and Ireland, to around 3.5% (lending rates equivalent to those of the balance of payments facility) without undercutting EFSF funding costs. While lowering the interest rates almost to the level of EFSF refinancing costs makes sense with regard to improving the respective country's debt sustainability, it weakens the disciplining force of markets on a country's fiscal behaviour. This moral hazard risk is also inherent in the new precautionary credit line that is available for all eurozone members apparently without conditionality. It will provide financing in the context of precautionary programmes to countries in the euro area, including those that are not under EU/IMF bailout programmes.

perspectives allow a regular realignment of major budget items, so far agricultural policy measures in particular are not time-limited. Earmarking does take place – for example through the cohesion policy guidelines and the strict allocation of funds to the individual instruments of agricultural policy. Conditionality is also increasingly making its way into the EU budget – for example in the area of regional and cohesion policy by linking payments from the Cohesion Fund to compliance with the objectives of the Stability and Growth Pact, or through the *Cross Compliance* provisions in the framework of the CAP.

3. Potential transfers in the EMU through the rescue mechanisms

In addition to the existing transfers between member states through the EU budget, the economic crisis has revealed a new dimension of transfers between states. In Section 1 we defined these as potential transfers. The worsening of the euro crisis in spring 2010 made necessary several rescue mechanisms, aimed at providing temporary liquidity to euro countries in fiscal difficulties. Depending on the rescue mechanism, these use loans from the member states and the IMF, together with guarantees from the member states and the Commission that, through a special-purpose entity, finances additional loans to countries in difficulties.

Potential transfers can arise from several sources:

- They already exist in the form of bilateral cash flows, originating in loans between states. This applies, for example, to the bilateral loans for Greece. These will become actual transfers if the loans are not repaid.
- Another type of potential transfers arises from loan guarantees and guarantees that are given by euro member countries as part of the EU rescue systems. In this case, however, cash flows only arise if these guarantees are called on.

These possible transfers will be discussed in this section. In the following we differentiate between

- the rescue package for Greece (2 May 2010).
- the euro rescue package – comprising the Commission's European Financial Stabilisation Mechanism (EFSM) facility, the European Financial Stability Facility (EFSF) and funding from the IMF (9 May 2010).
- Prospectively: the successor rescue package ESM, the outline agreement for which is currently being negotiated.

After the culmination of the euro debt crisis the heads of state and government of the EMU agreed on 21 July on a comprehensive package to develop further EMU anti-crisis measures. The EFSF framework agreement will be realigned according to the conclusions of the summit until the end of this year (see text box). As the ratification process is still at its very beginning, this chapter expresses the current situation of the EFSF framework agreement and the Greek rescue package.

3.1 Potential costs of the rescue of Greece

On 2 May, the Commission, the EMU heads of state and heads of government and the IMF reached a decision on the rescue package for Greece. It consists of lines of credit amounting to EUR 110 bn – EUR 30 bn of which was provided by the IMF as a loan. The EMU member states made a further EUR 80 bn available to the



ECB capital key

	% of ECB capital	% of guarantees excl. GR
BE	3.48%	3.58%
DE	27.13%	27.92%
IE	1.59%	1.64%
ES	11.90%	12.24%
FR	20.38%	20.97%
IT	17.91%	18.42%
CY	0.20%	0.20%
LU	0.25%	0.26%
MT	0.09%	0.09%
NL	5.71%	5.88%
AT	2.78%	2.86%
PT	2.51%	2.58%
SI	0.47%	0.48%
SK	0.99%	1.02%
FI	1.80%	1.85%
GR	2.82%	0.00%

Sources: ECB, DB Research **8**

Profile of the aid to Ireland

The total support allocated in the package for Ireland (December 2010) is EUR 85 bn.

- Ireland is responsible for EUR 17.5 bn of this through its national pension funds;
- The IMF is responsible for EUR 22.5 bn;
- The EFSM is responsible for EUR 22.5 bn.
- The effective rate of interest on the securities issued is 2.5%;
- The EFSF is responsible for EUR 17.7 m. As the bonds that finance the loans are over-collateralised, the volume of bonds required to be issued amounts to EUR 26.5 bn. The EFSF bonds have a term of 7.5 years – the effective interest rate for refinancing through the EFSF is 2.89%. Ireland has to pay an interest rate of 5.9% on its aid.

In the scope of the aid to Ireland, further potential transfers arise from non-euro countries that are member states of the European Union. The United Kingdom is contributing EUR 3.8 bn, Sweden EUR 0.6 bn and Denmark EUR 0.4 bn in lines of credit, because these three countries in particular benefit from the stabilisation of Ireland due to the close involvement of their financial markets.

So far EUR 11.4 bn has been transferred from the EFSM, EUR 3.6 bn from the EFSF (corresponds to guarantees of EUR 5 bn) and EUR 7.2 bn from the IMF.

commission, which then passed on these loans in tranches to Greece. Their volume was calculated according to each EMU country's share of ECB capital, as shown in Table 8.

Our extensive overview on page 12 shows the payments to Greece already made and those that are planned, as well as the proportion payable by each country. It is apparent that the national shares of each tranche differ. Participation by the member states in proportion to the ECB formula therefore only relates to the final result, not to the individual cash flows during the process.

After the fifth tranche in July this year, a total of EUR 47.1 bn has now been poured into Greece under the EU/IMF programme. While the IMF is a preferential creditor, the euro countries' aid to Greece will be provided on institutional investment conditions. This could have implications in the event of a debt rescheduling, which will be discussed later. The fifth tranche of the rescue package is currently being negotiated.

3.2 Euro rescue package

The Greek budget crisis in spring 2010 posed a fundamental threat to the government bond markets, prompting the Eurozone heads of state and heads of government to agree a second rescue mechanism, on 9 May, geared to the provision of temporary liquidity for Euro countries. This "euro rescue package" comprises three elements: The European Financial Stabilisation Mechanism EFSM, under the aegis of the Commission; the European Financial Stability Facility EFSF, financed by the member states; and additional IMF aid. Potential transfers can also result from this.

3.2.1 European Financial Stabilisation Mechanism EFSM

One component of the euro rescue package is the EFSM – this is a credit facility by the Commission, with a volume of EUR 60 bn, that is guaranteed through the EU budget. For this purpose, the EU Commission takes up funds from the capital market, for which the member states are liable as joint guarantors, pro rata with their payments into the annual EU budget. A similar procedure has already been adopted in the case of the so-called "balance of payments aid" to non-euro countries such as Latvia, Hungary and Romania. The overview on page 12 shows that EUR 17.9 bn of the lines of credit has already been called on as part of the rescue package for Ireland and Portugal, and EUR 30.6 bn is earmarked for disbursement.

The EFSM gives loans to countries in need of help at interest rates close to market levels (see text box regarding the programmes for individual countries). On repayment of the loans, the interest payments produce returns that – after deducting financing costs – are also integrated in the general balance sheet. The example of Greece, however, shows that loan interest rates and repayment periods can also be adjusted if, for instance, a country fulfils economic policy targets under the structural adjustment programme.¹² Any gains on interest will be entered in the EU budget. The summary also shows that non-euro countries can also become involved in the rescue, through their EU budget liability.

¹² In the case of Greece, the term of the emergency loan was extended to 7.5 years and a reduction of 100 basis points in the interest rate was in prospect. See: Conclusions of the heads of state and heads of governments of the member states of the euro currency area on 11 March 2011. For Ireland it was different: Although Ireland demanded a reduction at the beginning of the year, this was not followed up by the community of countries in the euro area due to dissension on the adjustment of corporation tax.

Profile of the aid to Portugal

The total support allocated in the package for Portugal (May 2011) is EUR 78 bn. The EFSM, EFSF and IMF are each responsible for EUR 26 bn. So far EUR 6.5 bn has been transferred from the EFSM, EUR 5.9 bn from the EFSF (corresponds to guarantees of EUR 8 bn) and EUR 6.1 bn from the IMF. To finance it, the EFSF has issued, inter alia, a 10-year bond with a volume of EUR 5 bn (interest rate 3.49%) and a 5-year bond for EUR 3 bn (interest rate 2.825%). The financing costs for Portugal have not yet been agreed.

Stepping-Out Guarantors pull out of their share of liability for EFSF guarantees

Outlook: The ESM from 2013

On 11 July, the eurozone's financial ministers agreed on the prospective European Stability Mechanism (ESM) and signed the ESM treaty. Ratification should take place in the coming months. The ESM will then take the place of the EFSF and EFSM as a crisis mechanism. However, it requires an amendment to the TFEU, which currently still prohibits long-term cooperation of euro countries that includes mutual liability.

The ESM will have a total volume of EUR 700 bn, comprised of EUR 620 bn of guarantees and callable capital and a cash deposit of EUR 80 bn. This should provide it with an effective power of intervention of EUR 500 bn. The apportionment formula for the guarantees differs slightly from the current EFSF formula.

Loans from the ESM to distressed countries will have seniority over bonds. A possible debt rescheduling would therefore have less serious consequences than under the current rescue systems, under which advances are made on a quota basis. On the other hand, the IMF has higher seniority than the ESM.

3.2.2 European Financial Stability Facility EFSF

The EFSF is a special-purpose entity under Luxembourg law, the founding of which is based on an international treaty. It is provided with guarantees by the EMU member states. If – after an aid programme has been launched – a euro country applies for aid, the EFSF takes up funds from the capital markets and transfers them to the country in need of help, in the form of tranches of credit. A safety margin allows funds to be taken up on triple-A terms, although it reduces the EFSF's effective power of intervention to around EUR 255 bn.

The summary on page 12 quantifies the proportion of the guarantee to the EFSF for each country – and the extent of each country's liability for the aid programmes already in existence for Ireland and Portugal. It can be seen that each country's relative share increases as more countries apply for aid. This is because, as soon as a country applies for aid, it becomes a so-called "stepping-out guarantor" and ceases to be liable for its own aid programme or for other, future programmes. This means, for example, that although Portugal is still a guarantor of the Irish aid programme, it would not be for any new programmes that might arise. Although Greece is formally a partner to the treaty, it is no longer liable: it was the first "stepping-out guarantor". Within the framework of the guarantee, the guarantees to be called on from the participating countries can therefore increase – by exactly the amount of the safety margin, which separates the effective power of intervention from the actual amount guaranteed.

As with the EFSM, interest is charged on the loans – at specific interest rates for each country that can also be adjusted on fulfilment of economic policy targets. For example, the current interest rate for Ireland is 5.9%.

3.2.3 IMF involvement

In addition to the EFSM and the EFSF, the IMF is also involved in the rescue packages – each of them with a one third share. This provides additional lines of credit of up to EUR 250 bn.¹³ As shown in the summary on page 12, EU member states outside the euro area are, of course, also liable for the loans that are granted – as, pro rata, are all other IMF member countries. However, the IMF is a privileged creditor.

The current rescue package is the basis for its successor mechanism – the European Stability Mechanism ESM. The text box gives details of the ESM.

¹³ Support by the IMF proportionately relates to loans effectively paid out by the EFSM and EFSF. The prospective IMF lines of credit are reduced to around EUR 157.5 bn as a result of the current ratings-controlled limitation of the EFSF's power of intervention to EUR 255 bn. This corresponds to 50% of the effective power of intervention of the EFSF and EFSM. However, as the EFSF powers of intervention should be increased to a full EUR 440 bn during this year under the EFSF reform, for the time being we have retained the assumption of an additional EUR 250 bn from the IMF.



3.3 Assessment

The analysis of potential transfers between the euro countries described above shows a diverse picture. The rescue packages have certainly had a stabilising effect on the euro area and its peripheral countries: they have also boosted optimism by investors and consumers. Larger distortions of the bond markets, with potential negative setback effects for the financial systems and real economy of the euro area, have been prevented; although, in this case, it would be hard to make a counterfactual argument.

It is debatable whether there has been consistency of objectives where loans were intended to stabilise the real economy and the financial system, as well as to improve national economic and fiscal policies through conditionality. There are grounds for concern that, in the event of badly-implemented conditionality in economic policy, *Moral Hazard* could lead to a dilution of the economic policy aims of the reform programme – and that well-intentioned stabilisation plans could, in the end, counteract the policy of economic reform.

At first sight, **operational efficiency** is satisfied: notwithstanding the considerable risk of default on repayment, cash flows between the member states – at the moment – take place exclusively in the form of loans. Within the framework of the existing aid programme these are time-limited – as a rule until mid-2013. The loans are not a “free lunch” for the recipient countries, as they are firmly earmarked (liquidity assistance). Loans are granted subject to strict conditions and therefore with a high degree of conditionality. Under the rescue programme, funds are not paid out until economic policy conditions, in the framework of the structural adjustment programme, are complied with. However, current developments in Greece show that conditionality is being more and more broadly interpreted.

However, this consistently positive image cannot withstand a second look. For example, the poor budgetary conditions in some of the countries being aided by the support measures give rise to real doubts as to whether the loans granted will actually be repaid and, therefore, whether the aid really is for a limited period. The prospect of a long-term crisis mechanism further increases these misgivings, rather than dissipating them. At the moment, there is no clear prospect of exit. In view of the fact that the politicians state that “there is no alternative” to the support measures for the euro countries, the effectiveness of the conditionality is also called into question: the absence of an alternative is incompatible with conditionality.

4. Potential transfers in the euro system

The third element of transfer comprises contingent liabilities arising from the supporting measures for the euro area rescue package, set up by the ECB in May 2010. The focus of our observations is on three items:

- Traditional ECB **liquidity operations**, which have sharply increased during the crisis;
- ECB interventions in the government bond markets, in the scope of its **Securities Markets Programme**;
- The provision of additional liquidity through so-called **Emergency Liquidity Assistance**.



Actual and potential transfers in the framework of the European rescue programme

Potential loans, loans and guarantees arranged by institution and target country of the aid programme - varying distribution depending on the aid package (EUR m): As of July 28, 2011

	Total	BE	DE	IE	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI	GR	EE*	Non-EMU	ROW**
Potential loans from member states	80.00	2.86	22.34	1.31	9.79	16.78	14.74	0.16	4.70	0.07	4.70	2.29	2.06	0.38	0.82	1.48	0.00	0.00	0.00	0.00
Tranche 1: May 2010	14.50	0.00	4.43	0.00	1.94	3.33	2.92	0.03	0.04	0.01	0.93	0.46	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tranche 2: September 2010	6.50	0.76	1.50	0.35	0.66	1.12	0.99	0.01	0.01	0.01	0.32	0.15	0.14	0.10	0.00	0.39	0.00	0.00	0.00	0.00
Tranche 3: January 2011	6.50	0.24	1.86	0.00	0.82	1.40	1.23	0.01	0.02	0.01	0.39	0.19	0.17	0.03	0.00	0.12	0.00	0.00	0.00	0.00
Tranche 4: March 2011	10.90	0.39	3.04	0.18	1.33	2.29	2.01	0.02	0.03	0.01	0.64	0.31	0.28	0.05	0.11	0.20	0.00	0.00	0.00	0.00
Tranche 5: July 2011****	8.70	0.31	2.43	0.14	1.06	1.82	1.60	0.02	0.02	0.01	0.51	0.25	0.22	0.04	0.09	0.16	0.00	0.00	0.00	0.00
So far paid out	47.10	1.70	13.26	0.67	5.81	9.96	8.75	0.10	0.12	0.04	2.79	1.36	1.23	0.23	0.20	0.88	0.00	0.00	0.00	0.00
Outstanding	32.90	1.17	9.08	0.64	3.98	6.82	5.99	0.06	0.09	0.03	1.91	0.93	0.84	0.15	0.62	0.60	0.00	0.00	0.00	0.00
IMF loans	30.00	0.58	1.84	0.16	0.51	1.36	1.00	0.02	0.04	0.01	0.65	0.27	0.13	0.04	0.05	0.16	0.14	0.01	2.62	20.42
Tranche 1: May 2010	5.50	0.11	0.34	0.03	0.09	0.25	0.18	0.00	0.01	0.00	0.12	0.05	0.02	0.01	0.01	0.03	0.03	0.00	0.48	3.74
Tranche 2: September 2010	2.50	0.05	0.15	0.01	0.04	0.11	0.08	0.00	0.00	0.00	0.05	0.02	0.01	0.00	0.00	0.01	0.01	0.00	0.22	1.70
Tranche 3: December 2010	2.50	0.05	0.15	0.01	0.04	0.11	0.08	0.00	0.00	0.00	0.05	0.02	0.01	0.00	0.00	0.01	0.01	0.00	0.22	1.70
Tranche 4: March 2011	4.10	0.08	0.25	0.02	0.07	0.19	0.14	0.00	0.00	0.00	0.09	0.04	0.02	0.00	0.01	0.02	0.02	0.00	0.36	2.79
Tranche 5: July 2011	3.30	0.06	0.20	0.02	0.06	0.15	0.11	0.00	0.00	0.00	0.07	0.03	0.01	0.00	0.01	0.02	0.02	0.00	0.29	2.25
So far paid out	17.90	0.35	1.10	0.09	0.30	0.81	0.59	0.01	0.02	0.01	0.39	0.16	0.08	0.02	0.03	0.09	0.08	0.01	1.56	12.18
Outstanding	12.10	0.23	0.74	0.06	0.21	0.55	0.40	0.01	0.01	0.00	0.26	0.11	0.05	0.01	0.02	0.06	0.06	0.00	1.06	8.23
ESFM: Potential loans	60.00	2.04	11.16	0.84	6.48	12.00	8.82	0.12	0.18	0.06	1.02	1.38	1.80	0.24	0.42	1.08	1.44	0.06	11.76	0.00
Of which: Programme for Ireland: Earmarked	22.50	0.77	4.19	0.32	2.43	4.50	3.31	0.05	0.07	0.02	0.38	0.52	0.68	0.09	0.16	0.41	0.54	0.02	4.41	0.00
So far paid out	11.40	0.39	2.12	0.16	1.23	2.28	1.68	0.02	0.03	0.01	0.19	0.26	0.34	0.05	0.08	0.21	0.27	0.01	2.23	0.00
Of which: Programme for Portugal: Earmarked	26.00	0.88	4.84	0.36	2.81	5.20	3.82	0.05	0.08	0.03	0.44	0.60	0.78	0.10	0.18	0.47	0.62	0.03	5.10	0.00
So far paid out	6.50	0.22	1.21	0.09	0.70	1.30	0.96	0.01	0.02	0.01	0.11	0.15	0.20	0.03	0.05	0.12	0.16	0.01	1.27	0.00
Of which: Outstanding	11.50	0.39	2.14	0.16	1.24	2.30	1.69	0.02	0.03	0.01	0.20	0.26	0.35	0.05	0.08	0.21	0.28	0.01	2.25	0.00
ESFS: Guarantees****	440.00	15.74	122.85	7.21	53.87	92.25	81.07	0.89	1.13	0.41	25.87	12.60	11.36	2.13	4.50	8.13	0.00	0.00	0.00	0.00
ESFS: Potential loans	255.00	9.27	72.38	0.00	31.74	54.36	47.76	0.52	0.67	0.24	15.24	7.42	6.69	1.26	2.65	4.79	0.00	0.00	0.00	0.00
ESFS: Guarantees for Ireland	26.50	0.96	7.52	0.00	3.30	5.65	4.96	0.05	0.07	0.03	1.58	0.77	0.70	0.13	0.28	0.50	0.00	0.00	0.00	0.00
ESFS: Potential loans for Ireland	17.70	0.64	5.02	0.00	2.20	3.77	3.32	0.04	0.05	0.02	1.06	0.52	0.46	0.09	0.18	0.33	0.00	0.00	0.00	0.00
ESFS: Ireland: Guarantees used up	5.00	0.18	1.42	0.00	0.62	1.07	0.94	0.01	0.00	0.00	0.30	0.15	0.13	0.02	0.05	0.09	0.00	0.00	0.00	0.00
ESFS: Ireland: Loans already paid out	3.60	0.13	1.02	0.00	0.45	0.77	0.67	0.01	0.01	0.00	0.22	0.10	0.09	0.02	0.04	0.07	0.00	0.00	0.00	0.00
ESFS: Ireland: Guarantees outstanding	21.50	0.78	6.10	0.00	2.68	4.58	4.03	0.04	0.06	0.02	1.29	0.63	0.56	0.11	0.22	0.40	0.00	0.00	0.00	0.00
ESFS: Ireland: Loans outstanding	14.10	0.51	4.00	0.00	1.76	3.01	2.64	0.03	0.04	0.01	0.84	0.41	0.37	0.07	0.15	0.27	0.00	0.00	0.00	0.00
ESFS: Guarantees for Portugal	38.88	1.45	11.33	0.00	4.97	8.51	7.48	0.08	0.10	0.04	2.39	1.16	1.00	0.20	0.41	0.75	0.00	0.00	0.00	0.00
ESFS: Potential loans for Portugal	26.00	0.97	7.58	0.00	3.32	5.69	5.00	0.05	0.07	0.03	1.60	0.78	0.00	0.13	0.28	0.50	0.00	0.00	0.00	0.00
ESFS: Portugal: Guarantees used up	8.00	0.30	2.33	0.00	1.02	1.75	1.54	0.02	0.02	0.01	0.49	0.24	0.00	0.04	0.09	0.15	0.00	0.00	0.00	0.00
ESFS: Portugal: Loans already paid out	5.90	0.22	1.72	0.00	0.75	1.29	1.13	0.01	0.02	0.01	0.36	0.18	0.00	0.03	0.06	0.11	0.00	0.00	0.00	0.00
ESFS: Portugal: Guarantees outstanding	30.88	1.15	9.00	0.00	3.95	6.76	5.94	0.07	0.08	0.03	1.90	0.92	0.00	0.16	0.33	0.60	0.00	0.00	0.00	0.00
ESFS: Portugal: Loans outstanding	20.10	0.75	5.86	0.00	2.57	4.40	3.87	0.04	0.05	0.02	1.23	0.60	0.00	0.10	0.21	0.39	0.00	0.00	0.00	0.00
ESFS: Guarantees not yet taken up	374.62	13.99	109.20	0.00	47.88	82.01	72.06	0.79	1.01	0.36	23.00	11.20	0.00	1.90	4.00	7.23	0.00	0.00	0.00	0.00
IMF: Potential loans	250.00	4.85	15.35	1.33	4.25	11.33	8.30	0.18	0.30	0.10	5.45	2.23	1.08	0.30	0.45	1.33	1.15	0.08	21.85	170.13
IMF: Potential loans for Ireland	22.50	0.44	1.38	0.12	0.38	1.02	0.75	0.02	0.03	0.01	0.49	0.20	0.10	0.03	0.04	0.12	0.10	0.01	1.97	15.31
Of which: Loans already paid out	7.20	0.14	0.44	0.04	0.12	0.33	0.24	0.01	0.01	0.00	0.16	0.06	0.03	0.01	0.01	0.04	0.03	0.00	0.63	4.90
IMF: Ireland: Loans outstanding	15.30	0.30	0.94	0.08	0.26	0.69	0.51	0.01	0.02	0.01	0.33	0.14	0.07	0.02	0.03	0.08	0.07	0.00	1.34	10.41
IMF: Potential loans for Portugal	26.00	0.50	1.60	0.14	0.44	1.18	0.86	0.02	0.03	0.01	0.57	0.23	0.11	0.03	0.05	0.14	0.12	0.01	2.27	17.69
Of which: Loans already paid out	6.10	0.12	0.37	0.03	0.10	0.28	0.20	0.00	0.01	0.00	0.13	0.05	0.03	0.01	0.01	0.03	0.03	0.00	0.53	4.15
IMF: Portugal: Loans outstanding	19.90	0.39	1.22	0.11	0.34	0.90	0.66	0.01	0.02	0.01	0.43	0.18	0.09	0.02	0.04	0.11	0.09	0.01	1.74	13.54
IMF: Not yet earmarked	250.00	4.85	15.35	1.33	4.25	11.33	8.30	0.18	0.30	0.10	5.45	2.23	1.08	0.30	0.45	1.33	1.15	0.08	21.85	170.13
ESM	620.00	21.56	168.31	9.87	73.80	126.39	111.07	1.22	1.55	0.45	35.45	17.25	15.56	2.65	5.11	11.14	17.47	1.15	0.00	0.00
(prospective)	80.00	2.78	21.72	1.27	9.52	16.31	14.33	0.16	0.20	0.06	4.75	2.23	2.01	0.34	0.66	1.44	2.25	0.15	0.00	0.00
Guarantees	80.00	2.78	21.72	1.27	9.52	16.31	14.33	0.16	0.20	0.06	4.75	2.23	2.01	0.34	0.66	1.44	2.25	0.15	0.00	0.00
Cash deposit	80.00	2.78	21.72	1.27	9.52	16.31	14.33	0.16	0.20	0.06	4.75	2.23	2.01	0.34	0.66	1.44	2.25	0.15	0.00	0.00

*Estonia will not assume liability until the reform of the EFSF framework agreement. **ROW - Rest of World. ***Bilateral loans from Denmark (EUR 0.4 bn), Sweden (EUR 0.6 bn) and the UK (EUR 3.8 bn). ****Already adjusted in the proportion of guarantee for Greece. *****The individual shares of each EMU country for the fifth tranche have not been published yet. We take indicative orientations according to the ECB capital key.

Sources: European Commission; EFSF; IMF; DB Research



Accepting government bonds as collateral heavily increases ECB exposure

Collaterals and Ratings

In order to take advantage of central bank liquidity, commercial banks in the euro area deposit collaterals with the ECB, normally in the form of government bonds, corporate bonds and securitisations.

Although, before the crisis, there were minimum requirements for the rating of securities of this type (at least A-), in the course of the crisis the requirements were relaxed to BBB. This means, for example, that Greek government bonds can still be deposited with the ECB as collateral for central bank liquidity – they are “central-bank eligible” – and from this perspective are still attractive for private creditors.

After the reduction in the rating requirements, Greek government bonds are still on deposit. The ECB has raised the prospect that, in coming years, government securities with poor ratings will only be accepted as collateral in return for a special payment.

The status of the euro countries as joint guarantors deserves special attention in relation to potential transfers through the euro system. For example, if a country drops out due to insolvency, each other country's share of liability proportionally increases.

4.1 Provision of liquidity in the framework of the ECB financial policy

In the course of its open-market operations, the ECB provides liquidity to the commercial banks in the euro area. Since the start of the crisis, the commercial banks have also made increasing use of the marginal lending facility, in order to acquire liquidity from outside the – sometimes poorly functioning – interbank market. Chart 10 shows the enormous expansion of the marginal lending facility since the start of the crisis in the fourth quarter of 2009.

In order to be able to take advantage of the (favourable) central bank liquidity, made available to the commercial banks through full allocation, commercial banks in the euro area have deposited collaterals in the form of government bonds, corporate bonds and securitisations.

Contingent liabilities for the ECB – and therefore for the liable member states of the euro area – can ensue through two channels:

1. Should one of the EMU countries decide to reschedule its debts, the ECB would have to make write-downs by value corrections, to take account of the reduced value of the securities in the portfolio. These would then be applied by the national central banks of the other euro countries, in line with the ECB's capital key.
2. If a commercial bank in the euro area were to become insolvent and if the government bonds deposited as collateral were quoted below par, the national central banks must also cover any possible losses.¹⁴

Inevitably, the reduced central bank profits would then place a burden on the budgets of the euro countries as well – even if, by using undisclosed reserves of the respective national central banks, 100% of the central banks' losses were not passed on to the budgets. In its books, the ECB holds a total of EUR 249 bn in the government bonds of countries that have been under more intense observation by the markets, in view of possible debt rescheduling, in the last few months.

4.2 Securities Market Programme (SMP)

On 9 May 2010, the ECB board resolved to buy up government bonds on the secondary markets. Since then, government bonds worth over EUR 77 bn have been bought up under the Securities Market Programme – much of them in May and June last year. The ECB will hold these bonds to the end of their terms. The initially-associated increase in the money supply was then neutralised by short-term tender. The ECB has not stated the exact composition of its bond portfolio. The figures shown for each country in Table 9 are therefore estimates, based on the varying purchase volumes in particular weeks that were critical for individual countries.

Provided that the government bonds remain in the ECB portfolio without hitches, no transfers between the member states arise.

¹⁴ This will not apply if the banking sector of the rescheduling country undergoes recapitalisation by the state. This would control the ECB's losses on liquidity transactions and reduce the losses to only the involvement within the scope of the *Securities Market Programmes* (see 4.2).

Contingent liabilities in the scope of the euro system's unconventional financial policy measures

EUR bn; as at: February 2011

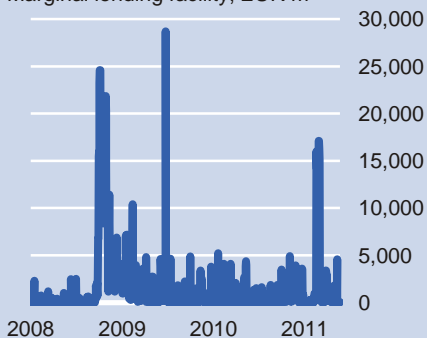
	Total	BE	DE	IE	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI	GR	EE
SMP total	74	2.565	20	1.17	8.78	15.04	13.2	0.14	0.18	0.07	4.22	2.05	1.851	0.35	0.73	1.33	2.08	0.19
Of which GR	47	1.629	12.7	0.75	5.58	9.55	8.39	0.09	0.12	0.04	2.68	1.30	1.176	0.22	0.47	0.84	1.32	0.12
Of which IE	15	0.52	4.06	0.24	1.78	3.05	2.68	0.03	0.04	0.01	0.85	0.42	0.375	0.07	0.15	0.27	0.42	0.04
Of which PT	12	0.416	3.25	0.19	1.42	2.44	2.14	0.02	0.03	0.01	0.68	0.33	0.30	0.06	0.12	0.22	0.34	0.03
Open market total	249	8.632	67.4	3.95	29.6	50.6	44.5	0.49	0.62	0.22	14.2	6.91	6.229	1.17	2.47	4.46	6.99	0.64
Of which GR	91	3.155	24.6	1.44	10.8	18.5	16.3	0.18	0.23	0.08	5.19	2.53	2.276	0.43	0.90	1.63	2.56	0.23
Of which IE	117	4.056	31.7	1.86	13.9	23.8	20.9	0.23	0.29	0.11	6.67	3.25	2.927	0.55	1.16	2.10	3.29	0.30
Of which PT	41	1.421	11.10	0.65	4.87	8.33	7.32	0.08	0.1	0.04	2.34	1.14	1.026	0.19	0.41	0.73	1.15	0.10
ELA total	85	2.947	23.00	1.35	10.09	17.28	15.18	0.17	0.21	0.08	4.84	2.36	2.126	0.4	0.84	1.52	2.39	0.22
Of which GR	15	0.52	4.06	0.24	1.78	3.05	2.68	0.03	0.04	0.01	0.85	0.42	0.375	0.07	0.15	0.27	0.42	0.04
Of which IE	70	2.427	18.9	1.11	8.31	14.23	12.50	0.14	0.17	0.06	3.99	1.94	1.751	0.33	0.69	1.25	1.97	0.18
Of which PT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	408	14.14	110	6.48	48.42	82.92	72.87	0.80	1.02	0.37	23.26	11.32	10.21	1.92	4.04	7.31	11.46	1.04

Sources: ECB, estimates of SMP proportions by country and ELA: DB Research

9

Volatile exposure

Marginal lending facility, EUR m



Source: ECB 10

Things are different, however, if a country whose bonds are held in the ECB portfolio should implement a debt restructuring. In this case the ECB would presumably need to be recapitalised – in proportion to the capital key of its shareholders, the euro countries. The potential effects of this for the individual euro member countries are also shown in Table 9. In this connection it must, however, be pointed out that, under the SMP, the ECB has purchased the government bonds below par. Losses resulting from a capital reduction, which would be applied to the par value, might therefore turn out to be proportionately lower.

4.3 Emergency Liquidity Assistance

Independently of the usual provision of liquidity and the SMP, the central banks of Greece and Ireland are also resorting to the provisions of the *Emergency Liquidity Assistance (ELA)*. In this case the national central banks provide additional liquidity for distressed banks – usually against the deposit of securities.

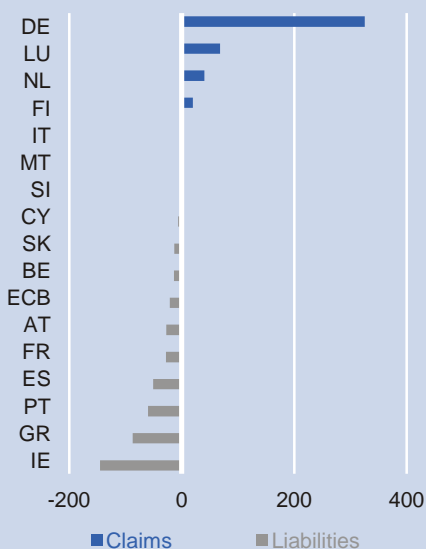
Although the national central bank has the sole authority to make decisions concerning ELA and also carries the business risk, the ECB assumes the role of lender of last resort and the responsibility for these new liabilities. However, as the national central banks in the euro system are liable for each other as joint guarantors, a risk of potential liability is transferred to the other central banks. In the event of a bad debt this could lead to transfers between states, which therefore need to be quantified. The table shows that EUR 70 bn has been paid out to the Irish banks within the scope of the ELA. EUR 15 bn was paid to the Greek banks.

4.4 Assessment

Evidently, in line with their planned stabilising role, the liquidity measures, SMP and ELA have prevented larger distortions of the bond and interbank markets. This has reduced the danger of another financial crisis, with its associated risk to the real economy. There is consistency of objectives between the individual provisions – the objectives of the liquidity measures, SMP and ELA complement one another. This is in the nature of things: consistency

Euro system: Target2 balances

EUR bn, as at end of 2010



Source: ECB 11



Target2 balances as a fourth contingent liability?

Currently, the relationships between the Target2 balances held by the central banks in the euro area are under discussion, as a fourth source of potential transfers.

Target2 is an individual interbank payment system for large amounts, which is active for cross-border payments within the euro area, provided that these are handled by the central banks. For instance, if an Italian importer's bank processes a payment transaction for a product from the Netherlands through Target2, the effect is that the Dutch central bank has a claim against the Italian central bank – i.e. the Target2 balance of the Dutch central bank increases while the Target2 balance of the Italian central bank is reduced. The ECB is the central counterparty.

During the crisis, the Target2 balances between the EMU member states sharply expanded. This was because, before the crisis, as a rule cross-border payments were also processed between commercial banks. The loss of confidence in the interbank market led to payments increasingly being processed through the Target2 System. The asymmetrical Target2 balances therefore resulted from trade imbalances in the EMU.

Another reason for the expansion of the difference in balances could be considered to be the current refinancing transactions, in the scope of which the commercial banks in peripheral countries increasingly place their confidence in the ECB, while banks in countries with positive Target2 balances undertake refinancing on the interbank market.

Chart 11 shows that the Target2 balances in the euro area are heavily imbalanced. For example, at the end of 2010 Germany had a credit balance of EUR 326 bn against other countries - and therefore against the Euro system. We also discern a liability position at the ECB. The Bundesbank (2011) states that this arose through the SMP and the ECB covered bond programme, together with seigniorage liabilities against the national central banks and the euro system.

It is a matter for debate, whether or not the Target2 balances are contingent liabilities. It is, however, certain that the national central banks in the euro area are responsible, as joint guarantors, for the liabilities of their partners. Target2 balances would therefore possibly give rise to transfers if a country should leave the EMU. Target2 balances therefore only reflect the distribution of liquidity in the euro system. They do not present any special risks, provided that the euro system continues to exist.

of objectives is easier to achieve in a strictly hierarchical, politically independent system like the euro system, than in fields dominated by co-determination. A point of criticism, however, is that the information, guidance and selection functions for market prices were restricted by the increased liquidity. However, a trade-off between the planned objectives: firstly stabilisation of the financial system and thereby the real economy; and secondly price transparency, can end up in favour of the first objective, provided that the measures are temporary and that there is price stability.

The objective of **operational efficiency** is broadly satisfied. The ECB acts from its independent position and grants support as it sees fit – and, for the purposes of price stability, also for a limited period. Although it's debatable whether, in the event of continuing macroeconomic pressure, transfers can consistently be time-limited, there is a clearer prospect of exit than in comparable fiscal rescue packages. Earmarking of the allocations also occurs, as the funds for liquidity support are allocated as part of a tightly demarcated programme and are applied within the closed context of the euro system. The closed financial policy system is also a reason why the conditionality aspect, as a prerequisite for operational efficiency, can be omitted in this case. Conditionality results from the tight corset of the fixed European financial policy rules.

5. On the way to a financial equalisation between the euro countries?

The last three sections have shown that actual and potential transfers within the EU and EMU are far from negligible. Taking Germany as an example, it can be seen that, in addition to the actual annual transfers through the EU budget (2009: EUR 6.37 bn), there are further potential one-off payments: EUR 144 bn, through the rescue package and another EUR 100 bn from liability as a joint guarantor under the euro system. It is important to note, in this connection, that the EU budget transfers are annually-recurring cash flows, while call-in of guarantees already granted and/or non-payment of loans, e.g. to Greece, has a one-off effect on the overall figure.

In the light of these figures, the question often posed in public discussions is whether these potential transfers could, in the end, even achieve the dimensions of a European financial equalisation. A meaningful answer to this question can only be given by clarifying the possible financial extent of a European financial equalisation.

The methodology of our calculations is based on the model used by Konrad and Zschäpitz (2011). For simplicity, these assume that a European financial equalisation – analogous to the German *Länderfinanzausgleich* (fiscal equalisation scheme of the German Länder) – could be applied by an alignment of the European tax revenue per person. As the tax burden differs, due to differing tax rates and bases of assessment, between the member states of the EU, we have chosen public revenue per head – i.e. total revenues of all local and regional authorities, including the revenue of social insurance providers – as a benchmark. Accordingly, in the following we calculate, as a reference value, the annual transfers that would be necessary to align the state revenues per person of the euro countries – adjusted for purchasing power and public sector share – to the average of the euro area. Like Konrad and Zschäpitz (2011) we have used the 2007 budget year as a basis, so that our calculation is not distorted by the short-term changes in public revenues during the course of the crisis.

Simulation: Levelling of the public revenues of the EMU-17

Results of the simulated adjustments (right-hand four columns) EUR m

	National income 2007, Euro per head	100% adjustment	80% adjustment	50% adjustment	30% adjustment
BE	15,165.60	-12,901.1	-10,320.9	-6,450.5	-3,870.3
DE	12,955.80	-12,139.5	-9,711.6	-6,069.7	-3,641.8
EE	4,354.90	6,550.0	5,240.0	3,275.0	1,965.0
IE	15,967.90	-1,599.1	-1,279.3	-799.6	-479.7
GR	8,105.40	13,257.7	10,606.2	6,628.9	3,977.3
ES	9,645.00	68,371.4	54,697.1	34,185.7	20,511.4
FR	14,749.20	-82,901.4	-66,321.1	-41,450.7	-24,870.4
IT	12,075.70	28,910.1	23,128.1	14,455.1	8,673.0
CY	9,079.00	2,015.5	1,612.4	1,007.8	604.7
LU	31,130.20	-776.5	-621.2	-388.2	-232.9
MT	5,380.20	1,352.4	1,081.9	676.2	405.7
NL	15,861.00	-13,141.8	-10,513.4	-6,570.9	-3,942.5
AT	15,714.80	-7,606.3	-6,085.0	-3,803.1	-2,281.9
PT	6,567.80	25,979.9	20,784.0	12,990.0	7,794.0
SI	7,263.70	5,817.4	4,653.9	2,908.7	1,745.2
SK	3,307.90	21,915.3	17,532.2	10,957.6	6,574.6
FI	17,814.80	-6,654.1	-5,323.3	-3,327.1	-1,996.2
Total transfer volume:		137,719.7	110,175.8	68,859.9	41,315.9

Sources: Eurostat, DB Research

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For a full equalisation on an annual basis, countries with above-average public revenues would balance the public revenues of those that are below average – this is an illusory target, taking into account that transfers of such volume would constitute more than 30% of the GDP of Estonia. For full equalisation, each year EUR 137 bn would need to be transferred within the euro area.

In this case, Germany would receive annual payments of more than EUR 12 bn. France would have to pay the most, by a large margin, due to its high public revenue per person. Table 12 shows that lower equalisation targets, for example aimed at closing the gap by 80% or 50%, would still involve large annual transfers.

The direct and potential transfers envisaged in sections 2 to 4 of course are nowhere near this scale. These considerations show that, despite actual and potential transfers, the EU and EMU are still a long way from the transfer volumes needed for full fiscal integration, such as the so far unquantified horror scenarios of a transfer union would have the public believe.

6. Outlook and Summary

Payments arising from potential transfers are smaller than a financial equalisation scheme

This study is a review and assessment of actual and potential cash flows in the EU and EMU. The payments that could arise from potential transfers in the event of a state bankruptcy – depending on the type of debt restructuring planned – are extremely large. Nevertheless, they are smaller than the possible transfer payments that could arise in the course of a financial equalisation of the euro countries on the basis of systematic – i.e. long-term, direct and horizontal – financial transfers. The EU and the euro area are still a long way from being a transfer union according to this definition.

Nevertheless, the extent to which economic policy preferences, economic necessity and legal restrictions will dominate future transfers between the EU and the EMU is still a matter for debate.



Eurobonds: Phoney debate or just a dream?

Whenever financial transfers between the countries in the euro area come up for political debate, so-called Eurobonds are usually a hot topic. In this respect several different models are under discussion. Their common feature is that the euro countries borrow money from the capital markets with joint liability – in other words as a joint liability entity in normal economic circumstances.

Supporters put forward the following arguments:

- 1.) Higher liquidity: The large market volume of joint bonds could reduce liquidity premiums. Smaller EMU member states suffer from high market liquidity spreads, as in smaller countries the market capacity (depth of the market) is low. Bonds could only be traded with large bid-ask spreads.
- 2.) The euro as a reserve currency: A very liquid European bond market could make the euro more attractive as a reserve currency. Even larger transactions would not have an effect on pricing.
- 3.) Aggregated lower interest burden: Joint bonds could boost overall demand for European government securities, which in turn would lead to a reduction in the interest burden.
- 4.) Lower risk of a country becoming insolvent. Mutual guarantee could reduce the risk of a state bankruptcy and prevent larger distortions of the financial markets.

Critics of joint Bonds normally raise two arguments against them:

- 1.) Moral hazard: reciprocal liability by the euro countries would take the pressure off the markets of problem countries, as these were only forced to consolidate in the last few months. The market pressure for consolidation for the euro countries would initially decline.
- 2.) Poorer rating, higher interest rates: If the guarantees of the euro countries were measured by their proportion of ECB equity capital and if the national ratings were weighted by this figure, the joint EMU bond would be given a rating of AA+. Countries that had better ratings before would therefore incur additional costs through higher interest rates. For Germany alone, each percentage point increase in interest rates results in additional costs of EUR 17 bn p.a.

The debate over the joint bonds flares up at irregular intervals and could therefore continue to feature in European economic policy discussions for years. For instance, during deliberations on the legislative package for economic control, the European Parliament instructed the Commission to carry out an investigation of the way in which a (partial) communitisation of the financing aspects of the countries in the euro area, through bonds with joint liability, might be implemented.

Current economic policy preferences indicate that the size of the EU budget will increase only gradually. However, there is a good chance that the market-oriented elements in the EU budget will take on a more powerful role – and thus that the positive externalities emanating from EU budget appropriations will also be strengthened. There is a lot to be said for future EU budget plans, which are oriented more to allocation policy and less to pursuing redistribution policy objectives. Distributive-policy-oriented support for rural areas could be further reduced.

The current economic policy preferences are oriented towards a clear exit strategy from the aid programmes. It is a matter for consideration, however, whether economic necessities will not give rise to a reorientation in the near future. Three arguments seem to suggest that transfers between the member states of the EU could increase and be perpetuated in the framework of the rescue mechanism.

- **Macroeconomic stresses** in the euro area will decline in the long term at best – provided that the planned economic policy coordination measures take effect. There is a long way to go before any possible reduction in macroeconomic stresses, as some of the peripheral countries probably could not manage without support.
- **Mutual dependencies between the euro countries** are too large – in the view of continuing stresses – to allow the prospect of a reduction in existing potential transfers. This is particularly true in view of the fact that, from 2013, the ESM will be established as a permanent crisis mechanism and – so far – no European economic policy institution has ever been dissolved without having a successor.
- **The more critical the position of the recipient country, the stronger its threat potential** to require further transfers, so that the systemic stability of the community is not put at risk.

A European financial equalisation, with permanent, direct and horizontal transfers, is nonetheless not on the agenda. Legal restrictions are the main reason for this, even after amendment of Art. 136 of the TFEU (Treaty on the Functioning of the European Union). This states that transfers within the EMU may only be made through a crisis mechanism that provides for conditionality. There are also legal restrictions in the national constitutions – and as a result of actions pending in the German Federal Constitutional Court. This also suggests that a European financial equalisation, with permanent, direct and horizontal allocations, is not on the long-term agenda.

In the future, changing economic policy preferences, economic necessities and legal restrictions could further fuel the **political tensions** in the euro area.

- Potentially, countries making the largest proportions of payments could insist, on playing a continuing, decisive role in shaping the political agenda and thereby changing the balance of power in Europe.
- However, there is a threat of tensions not just between states but also at national level. This is demonstrated by the latest Finnish and Dutch reactions to the aid packages for Portugal and Greece, which indicate the potential for major domestic policy conflicts when providing loan assistance for distressed countries.

Shifting of risk from the technical to the politico-constitutional level

In order to defuse this political dynamite, politicians must therefore take care to strengthen the role of the national legislatures in the decision-making process and to further strengthen the elements of conditionality in the aid programmes. This results not just from considerations of direct involvement (and the assumption of political liability) by the representatives of the electorate. At least in Germany, the planned, heavier involvement of the legislature also results from legal considerations. For example, pending constitutional challenges to the German participation in the rescue packages are also based, inter alia, on the lack of legitimacy of the aid, as the legislature was not involved in the decision to the necessary extent.

The real risk factor is not just the volume of the financial transfers but also the associated economic, legal and, in particular, political challenges that could make the current potential transfers critical for the stability of European policy. European economic policy will therefore long be fraught by controversial discussions about the demands, amounts and objectives of transfers between states.

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Literature

- Badinger, H. (2005). Growth Effects of Economic Integration: Evidence from the EU Member States. *Weltwirtschaftliches Archiv*. Vol. 141. Issue 1. pp. 50-78.
- Becker, S, P. Egger and M. v. Ehrlich (2005). Too much of a good thing? On the growth effects of the EU's regional policy. CEPR Discussion Papers, 8043. Centre for Economic Policy Research. London.
- European Commission (2010a). Finanzbericht 2009. European Commission, Brussels.
- European Commission (2010b). Fünfter Bericht über den wirtschaftlichen, sozialen und territorialen Zusammenhalt. European Commission, Brussels.
- Feld, L. P. (2006). Nettozahler Deutschland? Eine ehrliche Kosten-Nutzen-Rechnung. In W. Wessels and U. Diedrichs (Hrsg.). *Die neue Europäische Union: im vitalen Interesse Deutschlands? Studie zu Kosten und Nutzen der Europäischen Union für die Bundesrepublik Deutschland*. Europäische Bewegung Deutschland und Europa Union Deutschland. pp. 93-113. Berlin.
- Feld, L. P. and J. Schnellenbach (2007). Das Finanzierungssystem der EU und die Nettozahlerdebatte, *Wirtschaftsdienst* 2/87 (2007). pp. 114-120.
- Heinen, N. (2011). EU net contributor or net recipient: Just a matter of your standpoint? Deutsche Bank Research. Talking Point. Frankfurt am Main.
- Konrad, K. and H. Zschäpitz (2011). The future of the eurozone. ifo Forum. München.
- Marzinotto, B. (2011). A European fund for economic revival in crisis countries. Bruegel Policy Contribution. Brussels.
- Musgrave, R. A. (1973). *Public Finance in Theory and Practice*. MacGraw-Hill, New York et al. 1973.
- Osterloh, C. (2011). Can Regional Transfers Buy Public Support? Evidence from EU Structural Policy ZEW Discussion Paper No. 11-011. ZEW Mannheim.
- Without author (2011). Monatsbericht März. Deutsche Bundesbank. Frankfurt am Main.
- Without author (2005). Jahresgutachten 2005/2006. Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Lage in Deutschland. Wiesbaden.

The political economics of the euro Reports on European integration, No. 82	July 1, 2011
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Printed by: HST Offsetdruck Schadt & Tetzlaff GbR, Dieburg

ISSN Print: 1612-0272 / ISSN Internet and e-mail: 1612-0280