Hebous, Shafik; Weichenrieder, Alfons J.

Working Paper
Towards a fiscal union? On the acceptability of a fiscal transfer system in the eurozone

White Paper Series, No. 28

Provided in Cooperation with:
Research Center SAFE - Sustainable Architecture for Finance in Europe,
Goethe University Frankfurt

Suggested Citation: Hebous, Shafik; Weichenrieder, Alfons J. (2015) : Towards a fiscal union? On the acceptability of a fiscal transfer system in the eurozone, White Paper Series, No. 28, SAFE, Frankfurt am Main,
http://nbn-resolving.de/urn:nbn:de:hebis:30:3-390617

This Version is available at:
http://hdl.handle.net/10419/116773

Terms of use:
Documents in EconStor may be saved and copied for your personal and scholarly purposes.
You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.
If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.
Shafik Hebous and Alfons Weichenrieder

Towards a Fiscal Union?
On the Acceptability of a Fiscal Transfer System in the Eurozone

White Paper No. 28
SAFE Policy papers represent the authors’ personal opinions and do not necessarily reflect the views of the Center of Excellence SAFE or its staff.
Towards a Fiscal Union?
On the Acceptability of a Fiscal Transfer System in the Eurozone

Shafik Hebous and Alfons Weichenrieder
Goethe University Frankfurt and CESifo

July 2015

Abstract
There is a large, but yet growing debate about the need to complement the European monetary union with a stronger fiscal union. This paper reviews the potential trade-offs between effectiveness, moral hazard problems, and permanent redistribution. In particular, we contribute to the question of how member states may be willing to enter into a stronger fiscal union if the evolution of this union may imply large redistribution under incomplete contracting. We discuss clawback mechanisms that have been suggested in the literature, but conclude that clawbacks are undesirable, as they would essentially destroy the insurance value of a fiscal union. Instead, we propose that a clearly defined exit option as a guarantee against involuntary redistribution can make entry into a stronger fiscal union less risky and hence more attractive for member states.

JEL: H1, H7
Keywords: EMU, Eurozone, European unemployment insurance, fiscal transfers

Corresponding author:
Alfons J. Weichenrieder
Goethe University Frankfurt
Faculty of Economics and Business Administration
60323 Frankfurt (Main)
Germany
a.weichenrieder@em.uni-frankfurt.de

1 Hebous: Goethe University Frankfurt and CESifo (hebous@wiwi.uni-frankfurt.de). Weichenrieder: Goethe University Frankfurt, Vienna University of Economics and Business, and CESifo (a.weichenrieder@em.uni-frankfurt.de). This paper is part of the research program of the Center "Sustainable Architecture for Finance in Europe" (SAFE). Project funding (#2014-11531) is gratefully acknowledged.
1. Introduction

Since the global economic and financial crisis of 2007-2008, the Eurozone has been facing protracted economic challenges putting continuous pressures on policy making to identify underlying causes and effective policy responses.

In many respects, the design of Eurozone policies involves a dilemma between sovereignty and deeper common policies. Recently, a wide agreement has evolved in the area of banking regulation. The lack of central supervision in a currency union may have led to rather lax supervision. To address this concern, Eurozone countries decided to hand over the supervisory power from national regulators to a central agency (i.e., a “banking union”).

On the fiscal side, there is currently a vivid discussion on intensifying fiscal arrangements in the euro area towards a fiscal union. Yet, fiscal union may mean different things to different people, with concepts ranging from stronger fiscal rules, to installing automatic fiscal transfers between members, to the extreme of a centralized tax and expenditure policy.

The Eurozone has already adopted a detailed set of rules putting limits on national debt and deficit indicators to forestall negative fiscal externalities in the union and enhance fiscal discipline. However, the success of these rules is debatable due to challenges in enforcing them and ensuring commitment. EU policy makers constantly hold extensive rounds of talks to update existing rules or create new ones. The policy jargon in this area is rapidly expanding and details are very involving. We do not address the issue of fiscal rules here as many papers discuss budget rules and their effectiveness (e.g. Auerbach, 2014). While fiscal rules are already in place, a further step towards a fiscal union, and the focus of this paper, would be a system of fiscal transfers between EU member states or within the Eurozone to smooth domestic income fluctuations. The argument is based on the idea that when monetary policy is conducted at the union level, a member country abdicates a tool to

---

3 There are other proposals for further fiscal integration in the Eurozone, such as mutualizing public debt and Eurobonds, that can be labeled under the term fiscal union. These proposals are not discussed here. For a discussion, see German Council of Economic Experts (2012), and Fuest and Peichl (2013).
4 In March 2015, for example, the EU gave France another two years extension to bring its budget within the agreed deficit limits. This was the third extension for France since 2009.
5 Diagram A1 in the appendix depicts the various fiscal arrangements in the Eurozone in a compact manner to put the discussion on a fiscal transfer system into perspective.
counteract idiosyncratic asymmetric (i.e., country-specific) shocks. In principle, if national fiscal space was maintained, then a member country could use national fiscal policy for stabilization purposes. However, many argue that the euro area might be better off endorsing a built-in fiscal transfer system as an insurance mechanism against those shocks.

In fact, many federations around the world, e.g., Germany and the US, feature various fiscal institutions that can help to cushion asymmetric shocks. For example, a federal tax system, which largely depends on income and consumption tax bases, implies that boom states contribute more than lagging states to finance nationwide government expenditures. Federal unemployment systems can transfer purchasing power from low-unemployment areas to high-unemployment areas. Further, social security contributions to finance public pensions and health care systems are usually income-dependent and decline during local recessions. Additionally, a number of countries have fiscal federalism schemes that redistribute tax revenues from well-performing regions to under-performing areas.

In contrast to the above-mentioned mechanisms, the Eurozone does hardly feature such centralized systems. Social transfers and unemployment benefits are organized at the national level. The EU budget, comprising about one percent of EU GDP, is too small to provide sizeable short-run stabilization for Eurozone member countries. In addition, there appears to be no hope for a budget increase in the medium term as member states are reluctant even to centralize a policy area like defense, which is a prime candidate for centralization in any federation.

Thus, there are several recent calls for introducing a fiscal transfer system in the Eurozone that would not rely on shifting real expenditures but on reshuffling tax revenues. The previous president of the European Council, Van Rompuy, considered an integrated budgetary framework that includes a "fiscal capacity" for absorbing asymmetric shocks to be an essential building block for "a stable and prosperous EMU" (Van Rompuy, 2012). According to the IMF (2013), a common unemployment insurance could help making the euro area more resilient against future shocks and could make it easier to commit to fiscal rules than it was possible in the past. Also, László Andor, the past EU commissioner for Employment, Social Affairs and Inclusion, has strongly lobbied in favor of a European unemployment insurance (EUI) scheme.
In this paper, we lay out a number of challenges that face a fiscal transfer system in practice. There are several open issues in connection to the design and the effectiveness of a potential built-in transfer mechanism. These include moral hazard concerns, political economy considerations, and the capability of stabilizing aggregate fluctuations without a permanent redistribution of income or tax revenue. Indeed, the fear of losing tax revenue has a long-standing history in the EU and, for example, has been named to prevent progress in value added taxation.⁶

Yet, the creation of a stronger fiscal union that introduces something like an EUI may imply similar asymmetries as those created by a monetary union without a banking union: as long as important labor market policies are determined by national states, the joint redistribution mechanism may encourage laxity and provide problematic incentives at the national level.

One message of our overview is that there is a severe trade-off between the effectiveness of a fiscal scheme and moral hazard problems. A simple, yet new, proposal is to ensure that member states can opt out from the system subject to prior notification and a commitment to a minimum participation period. Despite that, the history of European fiscal rules and renegotiations shows that initial commitments are often softened and politicized; the implementation of an “exit option” can act as a credible safeguard against expropriation of member states in the face of incomplete contracts.

Often, the concerns about a common fiscal transfer system are dulcified by suggesting a clawback mechanism that foresees receipts for states with net payments in previous years. Yet, the discussion has ignored important implications of a clawback mechanism. If member states’ contributions (to any designed system) are adjusted based on previous net payments, then received transfers are nothing more than a granted loan. If the member state could obtain a loan from the capital market, the loan through the fiscal transfer system is superfluous. If prevailing conditions are such that the capital market refuses to lend that state, then the European Stability Mechanism (ESM) is the viable option. In fact, in the presence of clawback mechanisms, it is not clear, why a fiscal transfer system is preferred to member states’ own stabilization efforts.

⁶ See Keen and Smith (1996).
2. About the Need for Common Fiscal Shock Absorption

A first essential question is to which extent asymmetric macroeconomic shocks in the euro area are really a pressing problem that requires unified action. After all, the European debt crisis was triggered by an external shock that was common to all member states. Moreover, the problems that are currently creating headlines and became permanent buzzwords are of structural nature. While the motivation of the theory of optimum currency areas is based on short-run demand shocks (e.g., shocks to preferences), the failure of the banking sector, for example, may be better targeted by a banking union rather than a fiscal union and respective steps have already been taken.

In addition, it has been widely recognized that the social security systems of some ailing countries were (and still are) ill designed to cushion adverse shocks. In some member states, unemployment insurance schemes provide for mediocre amounts of assistance or very short periods of assistance. There is a large discussion about how a European scheme could resolve this, and surprisingly little discussion on how member states could improve on their own. In Greece, as an extreme case, there is a flat monthly unemployment benefit of €360 for a maximum period of 12 month and total expenditures on labor market policies in 2010 were less than one percent of GDP. At the same time, the overall Greek budgetary stance expanded drastically, from an overall government deficit of 9.9 percent of GDP in 2008 to a deficit of 15.3 percent in 2009 and still 11.1 percent in 2010. Taken together, these figures cast doubt on whether the incurred deficits did benefit the needy. Instead, it appears that more shock absorption could come from improved national systems, while much of the current debate is exclusively concentrating on the missing common shock absorbers.

Some evidence on the effectiveness of common shock absorbers is coming from federal countries. Indeed, model simulations of shocks often come up with large predictions of income smoothing, which may be intuitive given that federal budgets, including health and social security tend to make up for the larger part of public budgets. At the same time, empirical estimates of income smoothing that rely on actual data are surprisingly small. These studies seem to imply that most of the income smoothing is actually supported by

---

7 This compares to more than 2 percent in Germany and more than 3.5% in Ireland and Spain. See Claey, Darvas and Wolff (2014).
8 See AMECO database.
private capital markets and fiscal redistribution systems have a much smaller role (see Asdrubali et al., 1996; Buettner, 2002; Hepp and von Hagen, 2013, and the overview by Feld and Osterloh, 2013). Many estimates suggest that the consumption smoothing through fiscal tax-transfer systems amounts to some 15% of total smoothing only.

A possible reason for this divergence may be that fiscal transfers often simply crowd out higher deficits by regional governments. In this way, the transfers do not really come in addition. A similar problem may apply in the case of a hypothetical EU scheme. National fiscal systems are relieved and their need to run into deficits may be reduced. At the same time, the stabilizing benefit of the transfers will usually require that national deficits are nevertheless incurred just as in the absence of the fiscal transfers, while the immediate reason for these national deficits has been reduced by cross-border transfers. Hence, as far as we abstract from a different stabilizing effect of national deficits and cross-border transfers (see below), the national policy may have to revert to timely and active discretionary policies (tax cuts or expenditure increases) to preserve the same amount of national deficits.

Although some estimations ascribe a small quantitative role to fiscal transfers, these may have a larger macroeconomic impact than smoothing via capital and financial markets. If a region with a negative income shock has to borrow more to cushion the shock, then forward looking consumers may consume less as they foresee the additional future taxes. Additional government spending may crowd out some private spending by “Ricardian” consumers. Conversely, a smoothing that is financed by fiscal transfers from other, neighboring regions implies no future obligations and therefore should not have such counteracting consumer behavior (Farhi and Werning, 2012).

Hence, emphasis on Ricardian consumer behavior may leave a role for smoothing fiscal transfers even if these transfers only crowd out national deficits. It has to be emphasized, though, that this conclusion only holds true if receiving cross-border transfers comes without future obligations. Such a future obligation may be introduced by clawback mechanisms that have been suggested to avoid redistribution between countries. We will come back to this issue below.
3. Design Issues

3.1 Performance measure

Designing a fiscal transfer system entails making important choices. One important issue is the performance measure that may be used to compute cross-border transfers. A GDP-based measure is one candidate. However, GDP figures are frequently revised, and real time data can be different from final realized figures leading to continuous readjustments of transfers. The fall 2014 procedure of readjustments adopted for the EU budget and the sentiments that went along in the contributing country (the UK) give a particularly pronounced example of the difficulties. Yet, even in more business as usual type of situations, data corrections trigger revisions of national GNI-related contributions to the EU budget for up to four years following a specific budget year (European Parliament, 2014). At the same time, however, a stabilization scheme should operate relatively quickly and adequately. Additional issues can occur if the reference measure involves the concept of an output gap since estimates of "potential output" are always debatable.

Another option is to rely on unemployment statistics as proposed by Italianer and Vanheukelen (1992). Employment statistics tend to be subject to lower revision errors than GDP numbers. Admittedly, employment as a performance measure is also subject to some concerns such as institutional differences in defining unemployed persons and the duration of the benefits. The design of national unemployment schemes varies severely (Jara and Sutherland, 2014).

3.1 Macro-simulation of transfers

Independent of whether a system bases transfers on GDP or unemployment, there is an important distinction between systems that react to levels in the performance measure and those that react to changes in the performance. Andor (2014) suggests a system that relies on levels of a performance measure. The idea is to establish a basic European
unemployment benefit that pays only for the first couple of months of unemployment to substitute “for 40 per cent of the previous reference wage”.  

On the contrary, Van Rompuy (2012) contains a proposal that is based on changes in the performance measure, which is slightly more complicated. To get a feel of how a fiscal transfer system would look like in practice, we calculate the amount of transfers in the Eurozone that would have occurred according to Italianer and Vanheukelen (1992), who had spelled out a specific design very similar to Van Rompuy’s suggestion.

This system defines recipients and the received amounts ($R_{it}$) for country $i$ in year $t$, based on the deviation of the change in unemployment rate of a member country ($\Delta u_{it}$) in the respective year from the average change in unemployment of the rest of the euro area ($\Delta u_{EUT}$). For each country $i$, the average $\Delta u_{EUT}$ is computed excluding the own country. Further, the system is assumed to impose a cap on received transfers at two percent of a member’s GDP ($y_{it}$). Formally, this leads to the following definition of the transfers that a member state with below average performance may receive:

$$R_{it} = \begin{cases} 0 & \text{if } \Delta u_{it} - \Delta u_{EUT} \leq 0 \\ \alpha [\Delta u_{it} - \Delta u_{EUT}] y_{it} & \text{if } 0 < \Delta u_{it} - \Delta u_{EUT} \leq 2 \\ 2\alpha y_{it} & \text{if } \Delta u_{it} - \Delta u_{EUT} > 2 \end{cases}$$

An important parameter is $\alpha$, which decides on the size of transfers (as a fraction of GDP) that a certain underperformance in the development of unemployment will trigger. Italianer and Vanheukelen (1992) propose $\alpha = 0.01$. Accordingly, a member state whose increase in the unemployment rate exceeds the average increase by one percentage point would receive a transfer of one percent of its own GDP.

$R_{it}$ is defining the transfers to recipient country $i$ in year $t$. Analogously, for a contributing country, the contribution is denoted by $C_{it}$. Essentially, for each percentage point for which the change in the unemployment rate is better than the EU average there is a payment of $\beta$ times the GDP of that country.

---

9 Not all the institutions that are established in existing nation states are also discussed in the EU or euro area. For example, due to disparities in health standards and income levels, a European health insurance would be quite inappropriate. For reasons of insufficient democratic representation and subsidiarity, similar things apply for a European income tax (Lipatov and Weichenrieder 2015). Since the EU does not have a tax administration nor an administration for social insurance, the most realistic idea is a redistribution via national transfers that condition on national characteristics like the unemployment rate or per capita GDP.
### Table 1: Simulating the Italianer-Vanheukelen System (Balanced Budget Version)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(in percent)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Austria</strong></td>
<td>R</td>
<td>0.6</td>
<td>0.3</td>
<td>0.4</td>
<td>0.4</td>
<td>0.3</td>
<td>0.5</td>
<td>0.4</td>
<td>0.3</td>
<td>0.6</td>
<td>0.1</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Belgium</strong></td>
<td>R</td>
<td>0.3</td>
<td>0.6</td>
<td>0.2</td>
<td>0.2</td>
<td>0.5</td>
<td>0.1</td>
<td>0.3</td>
<td>0.3</td>
<td>0.1</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>0.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyprus</strong></td>
<td>R</td>
<td>0.4</td>
<td>0.9</td>
<td>0.1</td>
<td>0.3</td>
<td>0.8</td>
<td>0.0</td>
<td>0.2</td>
<td>0.4</td>
<td>1.6</td>
<td></td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Estonia</strong></td>
<td>R</td>
<td>0.5</td>
<td>2.0</td>
<td>1.0</td>
<td>0.8</td>
<td>2.0</td>
<td>1.6</td>
<td>0.3</td>
<td>2.0</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>0.9</td>
<td>0.2</td>
<td>0.1</td>
<td>0.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Finland</strong></td>
<td>R</td>
<td>0.1</td>
<td>0.4</td>
<td>0.8</td>
<td>0.5</td>
<td>0.8</td>
<td></td>
<td>0.3</td>
<td>0.04</td>
<td>0.2</td>
<td>0.3</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>France</strong></td>
<td>R</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.7</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td>R</td>
<td>0.7</td>
<td>0.6</td>
<td>0.9</td>
<td>0.6</td>
<td>1.2</td>
<td></td>
<td></td>
<td>0.5</td>
<td>0.8</td>
<td>0.9</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.1</td>
<td>1.0</td>
<td>0.8</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Greece</strong></td>
<td>R</td>
<td>0.1</td>
<td>0.6</td>
<td></td>
<td>0.3</td>
<td></td>
<td></td>
<td>2.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>0.9</td>
<td>1.6</td>
<td>1.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ireland</strong></td>
<td>R</td>
<td>0.3</td>
<td>0.3</td>
<td></td>
<td></td>
<td>0.5</td>
<td>0.4</td>
<td>0.03</td>
<td>0.8</td>
<td>1.1</td>
<td>1.7</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.7</td>
</tr>
<tr>
<td><strong>Italy</strong></td>
<td>R</td>
<td>0.6</td>
<td>1.2</td>
<td>1.0</td>
<td>0.9</td>
<td>0.7</td>
<td>0.3</td>
<td></td>
<td>0.2</td>
<td>0.7</td>
<td>0.1</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Luxembourg</strong></td>
<td>R</td>
<td>0.3</td>
<td>0.4</td>
<td>0.7</td>
<td>1.0</td>
<td></td>
<td>0.7</td>
<td>0.5</td>
<td>0.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.8</td>
<td></td>
<td></td>
<td></td>
<td>0.5</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Malta</strong></td>
<td>R</td>
<td>0.015</td>
<td>0.6</td>
<td>0.3</td>
<td>0.9</td>
<td>0.2</td>
<td>0.3</td>
<td>0.5</td>
<td></td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Netherlands</strong></td>
<td>R</td>
<td>0.0</td>
<td>0.3</td>
<td>0.7</td>
<td>0.7</td>
<td>0.3</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
<td>0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Portugal</strong></td>
<td>R</td>
<td>0.7</td>
<td>0.8</td>
<td>1.0</td>
<td>0.2</td>
<td>1.3</td>
<td>0.7</td>
<td>1.2</td>
<td>0.2</td>
<td>0.9</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Slovakia</strong></td>
<td>R</td>
<td>1.2</td>
<td></td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.6</td>
<td>1.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Slovenia</strong></td>
<td>R</td>
<td>0.1</td>
<td>0.3</td>
<td>0.1</td>
<td>0.8</td>
<td>0.3</td>
<td>0.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spain</strong></td>
<td>R</td>
<td>0.7</td>
<td></td>
<td></td>
<td>0.0</td>
<td>0.7</td>
<td></td>
<td>2.0</td>
<td>2.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** R denotes received transfers according to system Italianer and Vanheukelen (1992). C denotes implied contributions by an algorithm described in the text and more detailed so in Hebous and Weichenrieder (2015). All variables are reported in percent of GDP. $\beta$ is computed as described in the text and the appendix, and it measures a country's contribution, as percent of GDP, for each percentage point the unemployment rate is lower than the rest of the area average. In 2005, the value of $\beta$ corresponds to contributors for which the cap of 2 percent of GDP is not binding. Values in bold denote binding caps.
We introduce, however, a maximum contribution of 2 percent of GDP, which follows the suggestion by Italianer and Vanheukelen (1992).\textsuperscript{10} The definition of $C_{it}$ is such that the system is balanced without deficits. While the system can be forced to be balanced in every year, this implies that while $\alpha = 0.01$ on the receivers’ side, there is no guarantee that on the contributors’ side we get a parameter $\beta$ that has the same value. Indeed, it can be shown (see Hebous and Weichenrieder 2015) that in the presence of asymmetric countries, a system cannot both be symmetric with respect to a certain size of a per capita shock on the one hand and be balanced on the other hand.

Table 1 presents the figures implied by this system for the past when calculated based on yearly numbers of unemployment. In all calculations, an implicit simplifying assumption is that the transfers had no repercussion on unemployment or that these repercussions are small enough to be ignored.\textsuperscript{11} Of particular interest is the deepest year of the crises. The list of recipient countries in 2009 included Estonia, Ireland, and Spain; each receiving 2 percent of its GDP. Spain would have received 2 percent of its GDP for five consecutive years from 2008 to 2012 and Greece for three consecutive years from 2010 to 2012. Obviously, the system would have triggered payments to Greece when it actually would have been too late. Germany would have been a receiver from 2001 to 2005 with received transfers reaching 1.2 percent of GDP in 2005. Finland would have almost never been a receiver of transfers (apart from very small amounts in 2005 and 2006) whereas Portugal was always a receiver with the exception of one year.

Table 1 also presents the amounts ($C$) that a country has to contribute in a balanced system allowing the value of the contributors’ parameter to be determined within the model (we denote it $\beta$) and $\alpha = 0.01$. In 2005, contributions by Estonia, Slovakia, and Spain would have been capped at 2 percent of GDP. For instance, the contributions of Finland and Greece in 2005 are 0.8 and 1.4 percent of GDP respectively.\textsuperscript{12} Additionally, Table 1 points towards a potentially heterogeneous experience of countries. For instance, in the case of France,

\textsuperscript{10} Note, however, the argument by Gros (2014), who argues that it is especially the large shocks that call for insurance if the loss function is convex.

\textsuperscript{11} Unlike other simulations of stabilization schemes in the literature (e.g. Enderlein et al., 2013), we abstain from ad hoc assumptions on multiplier effects. Note that recent evidence suggests that multiplier effects may vary across countries, with extremely low values in countries with rigid labor markets (Topal, 2015).

\textsuperscript{12} These numbers are somewhat larger than those implied by an unbalanced system. Numbers resulting from an unbalanced system are not reported.
Germany, and the Netherlands, we notice that the width of fluctuations in transfers over the years is relatively narrow compared to smaller members such as Estonia and Slovakia.

In Table 1, there is a frequent departure of $\beta$ and $\alpha$ that makes sure that the system is balanced in every year. Conversely, we could conceive a system that acts symmetrically by using $\beta = 0.01$. Such a system would not be balanced in each year. Figure 1 illustrates the surpluses and deficits that such a system would have implied in the past. An interesting implication of symmetry (i.e., $\beta = 0.01$) would have been rather large surpluses in the crisis years 2009-2010 that amounted to more than 0.6% of euro area GDP. This surplus can be explained by the symmetry of the system with respect to large and small countries in connection with the fact that some larger countries, including Germany, had a relatively good labor market performance. With large countries paying in and small countries being recipients there would have been leftovers in the budget. Below, we will come back to the possible political tensions that such surpluses and possible deficits may provide.

**Figure 1: Simulated Deficits and Surpluses**

![Graph showing simulated deficits and surpluses](source: Hebous and Weichenrieder (2015).)

### 3.3 Institutional Framework

As mentioned above, the idea of a fiscal capacity that conditions transfer payments between member states based on changes in a performance measure is just one possibility. An alternative is to introduce a system that depends on levels of unemployment. For
concreteness, consider the proposal by Dullien (2014). Here the European funds would pay a transfer that is merely substituting for national unemployment benefits and thereby relieving national systems. At the same time, a duration and benefit level that is lower than that of any national system may make sure that the European system does not extend overall benefit levels, as Figure 2 illustrates. Note, however, that with the currently mediocre benefits in some member states, an EUI may first require an extension of national benefits to not interfere with the total amount of benefits.

**Figure 2: Relieving National Systems (Dullien 2014)**

Simulation of such a system is more difficult than simulating the IV system as it requires knowledge about the duration of unemployment and existing simulations have to work with strongly simplifying assumptions. Based on macro-data, it has been claimed that, as long as the benefit level is tied to the national wage rate, a common system that offers a replacement of 50 per cent of the insured wage for a duration of 12 months may imply a contribution rate of up to 1.66% percent of insured wages (Dullien, 2014). Dolls et al. (2014) have estimated a 1.57% contribution rate based on micro data simulations.

### 4. Moral Hazard

If individuals are risk averse and moral hazard effects are assumed absent, full insurance generally maximizes expected utility. In the context of macroeconomic insurance systems, this would speak for an extensive revenue sharing within the EU or indeed among all countries in the world. Yet, moral hazard effects may overcompensate the positive effects of risk sharing as the insured may alter their behavior from what is efficient. For a fully insured entity or person, a reduction in effort creates costs mainly to other entities or entities that...
take part in the insurance system. Such negative behavioral effects are typically the reason why insurance markets are absent for many risks. Compulsory insurance in such a situation may cause large welfare losses as individuals or entities are locked into a system with bad incentives. The combination of moral hazard risks with a legal system that requires unanimity to change, as it would be the case in the European case, may prove particularly hazardous if things go wrong. If side payments are politically difficult, a single country that may loose from a reform can uphold reforms much needed in the rest of the area.

In the case of a EUI that does not increase benefit levels beyond the preexisting ones, there are no additional distortions of private incentives unless national governments react. Thus, the main attention needs to be given to the moral hazard effects for governments. The literature on fiscal federalism has extensively discussed the possible effects (e.g., Persson, and Tabellini, 1996; von Hagen, 2012). This does not mean that politicians might purposely increase the number of unemployed persons in order to receive transfers, but they might be reluctant to embrace politically costly reforms. Additionally, to the extent that the system mitigates political "punishment" for bad polices, political accountability becomes opaque. This aspect is a concern even within jurisdictions that share a common legal basis, regulation, and tax systems such as the German fiscal equalization system (Länderfinanzausgleich). The concern may be even larger for unions that are more diverse.

One example of a politically painful reform is the Agenda 2010 that Germany implemented in 2003-2005. The reform cost Chancellor Schröder his office and the Social Democratic Party (SPD) lost the 2005 federal election. Table 1 shows that Germany would have received transfers in the period from 2001 to 2005 that could have possibly delayed such a necessary structural reform. An interesting number is the amount of transfers that Germany would have received according to the IV simulations in 2005. Following the reforms, unemployment in Germany went up, partly due to changes in statistical definitions, implying a hypothetical increase in the received check (1.2 percent of GDP in 2005).

Several moral hazard problems that may result from a common unemployment system seem even more tangible than a reduced effort for political reforms. In a world, in which important labor market policies are determined by national states, the joint redistribution mechanism may invite for laxity and strategic incentives at the national level.
governments may reduce their effort and cost to endow local employment offices. Yet, investments into job market matching, active policies and incentivization can be highly effective, as is visible from country experiences (see, e.g., Andersen and Svarer, 2007).

In addition to reduced incentives to hire agents for the employment office, remaining resources may be directed towards the long-term unemployment for whom European co-financing is unavailable. The European subsidies for short-term unemployed may also limit the incentives to pay short-time allowances that may not be subsidized. Long-term unemployed may be transformed into short-term unemployed by statistical tricks and public job creation companies. We may also expect a changed national perception of minimum wages as part of their cost – an increased unemployment – may be socialized across Europe. The same applies to other legal frameworks of labor markets. Strengthening union rights, much like minimum wages, may increase the wage level at the expense of higher unemployment.

A strategy to reduce moral hazard problems is to implement a system as the IV System described in Section 3. Here, an unemployment producing policy may trigger transfers, but on a temporary basis only. This advantage in terms of moral hazard cost has been emphasized in Van Rompuy (2012). However, this also comes at a cost however. In such a system, even long-lasting shocks may trigger transfers only for one period. Hence, the lower moral hazard comes at the cost of a lower insurance value, a fact that has not been spelled out in the proposal. There are therefore sound economic reasons to expect that a temporary fiscal expansion is less effective in stabilizing output than a permanent change in government expenditures (Baxter and King, 1993). Conditioning transfers on the change in a performance measure can also mean that crisis countries may soon become contributors, in spite of their bad initial conditions. This is politically and economically difficult to preserve.

5. Clawback Mechanisms

A frequent component, which has been suggested as part of fiscal transfer schemes, is a clawback mechanism. As Andor (2014) suggests, clawbacks could “neutralise net transfers ex post” by modifying future net contributions based on the history of net-transfers. A similar
proposal is put forward by Dullien (2014) to address the political concern of permanent net
transfers.13

Advocates of an EUI assert that a built-in automatic fiscal transfer system can avoid moral
hazard problems, avoid permanent redistribution of income and be effective at the same
time. Indeed, to a considerable extent, the moral hazard effects, which a European
unemployment insurance may exert for member states, could be reduced by implementing a
credible and time-consistent clawback mechanism. Such a mechanism would make sure that
over a certain time horizon, any member state of the EUI has a balanced net-receipt of
transfers. In such a case, reduced labor market efforts would hardly pay-off. A country that
drags its feet when it comes to improving labor market conditions may receive more money
from the budget today, but would have to contribute more in the future. Apart from the fact
that no interest may be charged on a member state’s receipts, there is no overall advantage
for this country of this opportunistic behavior. Essentially, a clawback mechanism transforms
the common transfer system into a system of implicit debt. While a government may prefer
this additional possibility to incur additional debt, in most instances there would be other
debt channels available and hence no fundamental change of incentives.

While a clawback mechanism may be helpful to reduce moral hazard costs, the fact that
clawbacks are producing implicit deficits is not only an advantage. It also implies that an
advantage of fiscal transfer systems, which has been discussed above, evaporates: while in
the absence of a clawback mechanism a transfer from outside a member state may have a
larger stabilizing effect than a debt finance stimulus, clawbacks destroy this comparative
advantage. With clawbacks, Ricardian consumers who observe additional transfer-funded
expenditures of their government have little reason to behave differently than in the case of
debt-financed expenditures. As the Eurozone is exactly looking for a stabilization mechanism
that improves on national debt and deficit policies, this is sobering.

6. Accountability

The design of unemployment insurance and labor market institutions is a core area of
economic policy and the respective policies can have large implications. As a rule of thumb,

13 For an empirical analysis of clawbacks see Dolls et al. (2014).
for example, extending the duration of unemployment insurance by one week can be expected to increase the length of the an average unemployment spell by more than one day (Lalife and Zweimüller, 2004, p. 65). Shaping the relevant institutions and trade-offs is therefore of prime importance and clear political accountabilities are crucial.

In a situation in which most labor market policies are decided on at the national level, the introduction of a EUI may lead to wrong perceptions by voters. Although some current proposals may not deserve the title European unemployment insurance, as the main idea is to design transfers between member states based on levels of short-term unemployment, the existence of an EUI may blur responsibility and invites national politicians to look for a European scapegoat if national labor market policies fail. As a result, a reduction of political accountability could lead to worse political outcomes (Seabright 1996). Indeed, the common currency, the euro, has already done quite a lot to blur political responsibilities in the area of economic policy. The blame game and extensive scapegoating in the ongoing debt crisis provides a pronounced lesson. The call for political accountability suggests a corner solution instead of a mix of responsibilities. Either unemployment insurance should stay in the domain of the member states or it should be centralized.

7. The Problem of Writing Binding Contracts

The Eurozone has a short but sizeable history of extensive rule bending. Several examples come to mind. One example is the infringement of the Stability and Growth Pact (SGP) by Germany and France in the first half of the 2000s and the ex post adaptation of the SGP rules. Strengthening of the rules through the “Six Pack” and the Fiscal Compact so far had no visible effect of improving the commitment value (see footnote 4).

Another, somewhat distinct, example of rule bending is the interpretation of Article 125 TFEU, which was introduced as a no-bailout clause in the Maastricht Treaty. In the financial crises, the commitment value of the Article quickly vanished. In its Pringle decision of 27 November 2012, the ECJ, which had to consider the compatibility of the ESM with the European treaties, decided to ignore the fact that Article 125 (2) speaks of a “prohibition”. This wording strongly suggests that the whole Article should be read as a commitment and this was the interpretation at least among the majority of German legal scholars (see Rohleder et al. 2011, p. 7).
The discussion of a third bailout program for Greece, to be funded from ESM sources, almost completely blocked out the question of whether this is legal. The revision of Article 136 TFEU, ratified by the last member state in 2013, spells out that the stability mechanism may be “activated if indispensable to safeguard the stability of the euro area as a whole”. While unanimity among economists is difficult, it seems awkward that the situation of July 2015, with virtually no signs of contagion on capital markets, should make additional loans to Greece “indispensable”.

Of course, the development is not completely unexpected, as constitutional courts have been identified in the literature as important drivers of centralization and threats to subsidiarity (Vaubel, 1996; 2009). The problem is not restricted to the EU, but arguably more pronounced there.

An important threat to the binding character of agreements lies in their politicization that, in turn, is owed to the intergovernmental character of EU policies. One recent example is the discussion about the UK budget contribution that occurred in November 2014. Based on an upward revision of national GNI data, the EU demanded from the UK the transfer of about €2.1 billion to the EU budget. The readjustment implied that France and Germany were to receive a rebate of €1 billion and €779 million, respectively. UK Prime Minster David Cameron attempted, in part, to hinder the repayment rejecting to "get our cheque book out" for December 1. In fact, conservative leaders even called upon ignoring the entire bill.14 At the end, the British prime minister claimed to have succeeded in halving the British bill, while this claim turned out to be unwarranted (House of Commons Treasury Committee, 2015).

While the politicization did not work out in the UK case, there are counter examples. Another example of politicization is the agreement on interest applicable to the Euro bailout programs, where the interest rates agreed in the first Greek rescue package were under constant renegotiation (see Table 2).

14 The leader of the Conservative member of the European Parliament, Syed Kamall from the UK, said that the “European Commission is penalising Britain for taking tough decisions, putting in place a long-term economic plan and for having the most successful economy in the EU, while actually rewarding France for being an economic basket case”. Conservative backbencher John Redwood found that the request from the EU "offended all our principles of natural justice and fair taxation" (See BBC at http://www.bbc.com/news/business-29751124).
### Table 2: Main Terms of First Greek Euro Area Loan Facility

<table>
<thead>
<tr>
<th>Time</th>
<th>Agreement / Revision of Main Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2010</td>
<td>300 basis points (bp) above Euribor for three years, 400 bp thereafter, maturity of five years.</td>
</tr>
<tr>
<td>June 2011</td>
<td>200 bp above Euribor, after three years 300 bp above Euribor, increase of maturity to 10 years.</td>
</tr>
<tr>
<td>February / March 2012</td>
<td>150 bp above Euribor, maturity set to 15 years.</td>
</tr>
<tr>
<td>December 2012 / February 2013</td>
<td>Euro Area Loan Facility (Amendment): 50 bp above Euribor, maturity set to 30 years.</td>
</tr>
</tbody>
</table>

All these experiences with existing rules seem to suggest that the EU and the euro group find it hard to commit to firm rules. While the rules that define the GNI-based own resource survived recent efforts to politicize and revise them, the historical UK discount and the special deals of other countries reflect more successful renegotiations. Similar renegotiations can be expected to arise in the case of a European system of fiscal transfers. Clearly, it is a delicate task for politicians to convince voters that even though a member state has high unemployment rates (and perhaps increasing unemployment figures in the last quarters) it has to transfer money to other EU countries. Relatedly, there is the issue of a small country effect. It is also not an easy task to explain to the voters of a smaller member country that they have to transfer money to a larger (perhaps with a higher GDP per capita) member, such as France or Germany.

While some flexibility may be welcome if initial expectations turn out wrong, rules should provide a minimum of credibility. Lack of credibility may lead member states to refuse entering a system that may evolve in unanticipated directions or may turn into instruments for large amounts of redistribution between member states. In any case, the implementation of a shock absorbing system needs to overcome the aversion of possible losers to be politically successful.

### 8. Implications of an Exit Option

As discussed above, a clawback mechanism, though a potential measure to overcome member states’ fear against a future net-payer position, may destroy the desired stabilization that calls for a system of fiscal transfers in the first place. Apart from clawbacks,
there are two fundamental, non-exclusive approaches that may help separating the insurance against macroeconomic shocks from permanent redistribution.

A first solution is to promise regular readjustment of contributions based on past data to avoid persistent net-payers and net-recipients. This may be termed experience rating and is well-known from private insurance markets. Unlike a clawback mechanism, experience rating would largely preserve unexpected past gains of member states, but would ideally adjust contributions to move the system to expected zero balance in the future. Hence, unlike clawbacks that try to undo previous net-receipts, experience rating would accept past imbalances and hence would not resemble an implicit debt. Another, probably more demanding approach is to predict the future medium-term performance of an economy and to base the “fair” insurance premium on these forecasts.

While the comparison with private insurance markets may be instructive, both approaches to reach a “fair” insurance premium can be expected to be open to all kinds of difficult politicized decision-making problems well known from previous EU history. Debates for example may arise as to which past shocks have been of a one-off nature and should not feed into future contributions. Given the unpredictability of this political process, richer countries may have doubts about the commitment value of promises to regularly adjust the system.

Assume a situation in which the Eurozone has already agreed on a specific scheme to cushion asymmetric shocks and exit from the scheme is disallowed. When it comes to future renegotiations of the structure of contributions, the status quo at that time will form the natural point of departure, as it is presently the case when negotiating the multiannual financial framework of the EU. Yet, if the rules that establish the adjustments of contributions are not forming a complete contract, then a country may find it difficult to push through the required changes to avoid a permanent net-payer position.

A possible instrument to give additional bargaining power to net-contributers could be to allow for an explicit exit option from a macroeconomic insurance system. While the EU treaties allow exit from the Union (Article 50 TEU), there currently are no rules on how to exit from the Eurozone. Even though membership in the euro is usually considered
irrevocable, the irrevocable agreement to a system of fiscal transfers that binds generations of future national parliaments may be considered problematic.

Allowing for an exit option can make sure that moral hazard effects that may arise from macroeconomic insurance will not outweigh its benefits. In addition, it would shift the threat point of member countries in future renegotiations and will lead to a redistributive outcome that should be restricted by the stand-alone utilities of participating countries. In this way, the concerns of member states could be met by making redistribution more difficult: facilitating exit makes entry a less grave choice to make.

Despite this advantage, of course, there must be limits to exits. Viable insurance contracts require that an insured person or entity cannot claim the indemnity without paying the agreed fee. Similarly, an insured who knows that a damage by chance did not occur must not be able to exit ex post without paying up. Finally, either entry must not be possible after a damage has occurred, or alternatively the premium has to increase adequately to reflect the certainty of the insurance pay out. Since the insured risk in the case of macroeconomic shock absorption is essentially the business cycle fluctuation, exits from such a scheme may require some 3-4 years of prior notice to minimize these problems.\(^{15}\)

Almost any insurance scheme may be fraught by moral hazard and adverse selection problems. How would an exit option affect these problems? First, consider the moral hazard case. Here, an exit option can be regarded as a safeguard against moral hazard effects that may turn the net effect of insurance negative. Conversely, adverse selection problems may be addressed by compulsory insurance (e.g. Johnson, 1977) and here a voluntary mechanism may be more problematic. However, in the case of Eurozone member countries, macroeconomic conditions are under constant scrutiny and adverse selection problems based on asymmetric information should be of minor relevance.

Compared to the possibility of asymmetric information about macroeconomic conditions, a more likely issue is that contributions, which have been agreed on in a political process, may be unacceptable. An example may illustrate. Assume the Eurozone would next year agree to

\(^{15}\) Consequently, the two year period, suggested in Article 50 (3) TEU may be too short compared to a cyclical boom.
introduce the IV system described in Section 3.1. It is quite possible that such a system would be disadvantageous for a country like Greece that may experience a prolonged period of catch-up growth. A corresponding net-payer position could, in principle, be cushioned by a limited lump-sum transfer or discount. Yet, only the exit option may give a single country enough leverage to renegotiate effectively if the lump sum payment offered by the rest of the group is considered insufficient.

9. Conclusions

If individuals are risk averse and moral hazard effects absent, extensive mechanisms to absorb asymmetric regional shocks are a no-brainer. At the same time, new political institutions may socialize the outcome of bad policies and may therefore be fraught with bad incentives. Just like organizing a monetary union without a joint and centralized supervision of banks turned out to be a bad idea, the introduction of a European unemployment insurance without a centralization of labor market policies may be highly problematic as well.

This paper has reviewed the potential trade-offs between effectiveness, moral hazard problems, and permanent redistribution. In particular, we are hoping to contribute to the question of when member states may be willing to enter into a stronger fiscal union, given that the evolution of this union may imply large redistribution under incomplete contracting. Our discussion of clawback mechanisms, which have been suggested in the literature, suggests that clawbacks are undesirable, as they would essentially destroy the insurance value of a fiscal union and would transform the fiscal transfers into implicit debt. Instead, we propose that a clearly defined exit option as a guarantee against involuntary redistribution can make entry into a stronger fiscal union less risky and hence more attractive for member states. At the same time, the exit option may serve as an insurance against possibly flawed schemes that, in the absence of the exit right, may be hard to change due to distributional concerns and a corresponding veto by some countries. To facilitate easy exit, a European system should probably be balanced; i.e., it should not be granted the right to incur debt.
References


Feld, L.P. and S. Osterloh (2013), Is a Fiscal Capacity Really Necessary to Complete EMU?

Freiburger Diskussionspapiere zur Ordnungsoekonomik 13/5.


German Council of Economic Experts (2012), Annual Report 2011/12, Chapter 3, European Redemption Pact.


