

A BASIC UNEMPLOYMENT INSURANCE SCHEME FOR THE EURO AREA¹

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Introduction

The Eurozone debt crisis has led to an intensive debate over reforms of the fiscal institutions, which would lead to greater economic stability and better incentives. It is a widely discussed particularity of the European Monetary Union (EMU) that monetary policy is centralized, while fiscal policy is carried out at a national level (Bordo, Jonung and Markiewicz 2013).⁶ Critics of the current setup argue, among other things, that national automatic stabilizers provided insufficient cushioning of economic shocks during the crisis. According to this view a key issue was that some EMU member states lost access to private capital markets or were not far off losing it, so that their ability to let national stabilizers play their part was limited. From this perspective, common fiscal stabilization mechanisms would help to make EMU more resilient to asymmetric macroeconomic shocks (Bertola 2013, IMF 2013). The main concerns in this debate relate to the issues of permanent transfer flows within the currency union and moral hazard. In particular, national governments might neglect structural reforms or fiscal consolidation.

What are the options for the design of a fiscal risk sharing mechanism in the euro area? In the so-called Four Presidents' Report published in 2012, the former President of the European Council, Herman van Rompuy, made the following suggestion: "An EMU

fiscal capacity with a limited asymmetric shock absorption function could take the form of an insurance-type system between euro area countries. [...] The specific design of such a function could follow two broad approaches. The first would be a macroeconomic approach, where contributions and disbursements would be based on fluctuations in cyclical revenue and expenditure items [...]. The second could be based on a microeconomic approach, and be more directly linked to a specific public function sensitive to the economic cycle, such as unemployment insurance." (Van Rompuy 2012). The European Commission, and more recently Jean-Claude Juncker in the Five Presidents' report, built upon this initiative with their own blueprints for the EMU (European Commission 2012, Juncker et al. 2015).

In recent years, various studies have been published that analyze and discuss different aspects of a European fiscal union and different reform proposals along the lines of the Four Presidents' report. For the 'macroeconomic approach', existing proposals include a cyclical shock absorber based on output gaps (Enderlein, Guttenberg and Spiess 2013) and a stabilization fund for the euro area (Furceri and Zdzienicka 2015). For the 'microeconomic approach', the debate has focused on the idea of a common EMU-wide unemployment insurance system (henceforth EMU-UI) as proposed among others by Deinzer (2004), Dullien (2014) and Andor (2014).

Our paper (Dolls et al. 2015b) is the first to provide a comprehensive and systematic analysis of a wide range of design options for an EMU-UI system based on household micro data.⁷ Our counterfactual experiment covers the period since the launch of the euro in 1999 until 2013. The analysis includes 18 member states (EA 18) and simulates a sample of repeated cross-sections for each member state combining micro data from the EU Statistics on Income and Living Conditions (EU-SILC) and the EU Labor Force Survey (EU-LFS). We focus on the redistributive and stabilizing effects of a basic EMU-UI scheme that partly replaces national



¹ This article is a short version of Dolls et al. (2015b).

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⁶ In the following we equivalently use "EA", "EMU" and "Eurozone" to refer to the 18 member states of the European Currency Union that had introduced the euro by 2014.

⁷ Bargain et al. (2013) simulate different variants of a fiscal union with a joint tax-benefit system. In the present paper, we focus on one element: an EMU-UI system. See Fuest and Peichl (2012) for a discussion of different elements of a fiscal union, as well as Dolls et al. (2015a) for a new blueprint for a fiscal union combining fiscal insurance (through EMU-UI) with an orderly procedure to restructure the debt of an insolvent euro member.

UI systems. The basic EMU-UI system is designed such that it has a broad coverage of the short-term unemployed, while the long-term unemployed are not eligible. Unemployment benefits from the EMU-UI scheme can be topped up by national UI systems. We quantify the coverage and stabilization gaps. These are defined as the differences in coverage and stabilization between i) the benchmark scenario of national UI alone and ii) a reform scenario where EMU-UI and national UI coexist as explained further below. Coverage and stabilization gaps are calculated at the aggregate household level, as well as for different socio-demographic groups within each country. Automatic fiscal stabilization effects are broken down into household income and government budget stabilization. In addition, we explore the effects of experience rating and compare the basic EMU-UI scheme to a variant with 'contingent', i.e., trigger-based benefit payments that provide income insurance only if the labor market situation deteriorates significantly in a given member state. Moreover, we run several sensitivity checks regarding the coverage and generosity levels of the scheme. We also discuss various concerns and the potential adverse effects of an EMU-UI system, and particularly the view that such a system would give rise to moral hazard and that it might even lead to a 'transfer union', a result that would conflict with the political promises made by at least some national governments to their electorates when the euro was introduced. Importantly, the aim of our paper is not to serve as a policy proposal. It should rather be seen as a conceptual experiment, providing general insights into the economic implications of various design options for a basic EMU-UI. In the following we discuss the general design options for an EMU-UI scheme, discuss their advantages and disadvantages, and present results for a basic variant.⁸

Possible characteristics of an EMU-UI system

A common unemployment insurance system for the euro area could be designed in various ways. Three key options have been discussed in the literature on this subject and in the policy debate to date. A first option would be a common EMU-UI system that provides a basic level of insurance by partly replacing national unemployment insurance systems. Benefits from the euro area system could be topped up by additional payments from national unemployment insurance systems. Hence, there would be room for diversity across member states

⁸ In Dolls et al. (2015b), we present further variants and additional results.

so that existing differences with regard to replacement rates and benefit duration could be preserved. The EMU-UI system would be financed by social insurance contributions with a contribution rate that could be uniform across Eurozone member states, or country-specific and time-variant to restrict cross-country transfers. An important feature of such a scheme is that it would provide income insurance for the unemployed (under certain eligibility conditions) irrespective of the size of the unemployment shock in a given member state. As an alternative, a common scheme could provide income stabilization only in the event of large (unemployment) shocks. Such contingent unemployment benefits would be triggered if the level and/or change in overall unemployment were to reach a pre-determined threshold in a given period. National unemployment insurance systems would still be in place in normal times. As a third option, the euro area unemployment insurance scheme could complement national systems by providing additional transfers, which would either top up national benefits or kick in if national benefits were to expire. The payout rules of this scheme could also be trigger-based. Such a system would be comparable to the US unemployment insurance system where regular state benefits can be complemented by two types of benefits extension programs that are at least partly provided by the federal government, the Extended Benefit program (EB) and emergency benefits (Nicholson, Needels and Hock 2014).⁹

Concerns over introducing an EMU-UI system

In principle a fiscal insurance mechanism should not lead to redistribution ex ante. A major concern with an EMU-UI system is that it might do exactly that: it may result in permanent transfers between euro area member states, an outcome that would meet strong resistance in those countries that would be the net contributors. How do the three variants for an EMU-UI system differ with regard to the risk of permanent redistribution? A basic EMU-UI scheme would not be designed to generate permanent redistribution because such a scheme is based on changes in employment status, rather than on unemployment levels. Differences in unemployment rates alone do not (necessarily) lead to permanent redistribution because benefits would be targeted at cyclical (short-term) unemployment and would expire after

⁹ Please note that in the US regular state benefits are paid for a period which usually lasts no longer than six months. The large extensions of unemployment insurance provided by the US federal government in the 2009–12 period increased the benefit duration to 99 weeks in many US states. Unemployment benefits in the EMU are usually granted for much longer periods of time than regular state benefits in the US.

a certain time span. It may nevertheless happen that (net) transfers are unevenly distributed across member states if flows into unemployment diverge permanently or if there are permanent differences in the level of short-term unemployment. This risk could be reduced by claw-back mechanisms based on experience rating; or if transfers were to be trigger-based as under the contingent benefit scheme. Clearly, redistributive effects of the former (latter) scheme would depend on the exact claw-back mechanism (choice of the trigger). The risk of permanent transfers would be high with an EMU-UI scheme that provides extended benefits after national unemployment benefits expire, because such a scheme would be likely to cover not only cyclical, but also structural unemployment. Moreover, it could incentivize governments to cut national unemployment insurance benefits as the EMU-UI system would step in.

A further concern related to moral hazard is that a common EMU-UI system could undermine incentives for national governments to address structural weaknesses in the labor market. One argument against this claim is that national governments would still bear the cost of long-term unemployment under a basic, contingent or non-contingent EMU-UI system. This argument is much weaker, however, with an extended benefit program, which would also be likely to cover structural unemployment. Moreover, incentives to pursue active labor market policies such as short-time work could be adversely affected by an EMU-UI system given that the cost of short-term unemployment would be borne by the common pool.

Additional concerns relate to other moral hazard issues including administrative manipulation and adverse incentive effects at the individual level with regard to job search and labor supply. National administrations would have incentives to use their discretion to increase the number of benefit recipients. Incentives to manipulate would depend on the characteristics of the system, e.g. the required employment period or a waiting period for EMU-UI benefits. The longer both periods are, the more costly would administrative manipulation be, but longer periods would also reduce desired insurance effects. Distortions at the individual level depend on the overall benefit level (EMU plus national benefits) and duration relative to the status quo. The effect of a common EMU-UI system on labor migration in response to labor market shocks is ambiguous. The portability of unemployment benefit claims might increase the willingness of individuals to migrate and to search for a job in a member state with better labor market conditions.

But the benefits could also reduce incentives for active job search if the EMU-UI is more generous than national unemployment insurance systems.

Data and methodology

There are different possible methodological approaches for analyzing the economic effects of an EMU-UI system. While previous research has mainly used aggregate macro level data, we rely on representative household micro data for the EA18 using EUROMOD, a static tax-benefit calculator for the European Union countries. EUROMOD is mainly based on cross-sectional micro data from the EU Statistics on Income and Living Conditions (EU-SILC) released by Eurostat, which we combine with micro data from the EU Labor Force Survey (EU-LFS).¹⁰ The key advantage of our approach in the present context is that we exploit both detailed income distribution information contained in EUROMOD, as well as information on changing labor market patterns over time from the LFS. We are thus able to account for heterogeneity in various characteristics of the populations in different countries, which macro data approaches cannot capture.

In our simulation experiment, we introduce an unemployment insurance scheme for the EA18 member states and ask what would have happened if such a scheme had been introduced at the launch of the euro in 1999. As there are neither panel data nor repeated cross-sectional data available containing both income distributions and labor market conditions for all EA member states over this period, we construct a series of reweighted cross-sections for the period of analysis, which exactly replicates changes in labor market conditions (unemployment rate, share of short- and long-term unemployed, size and composition of the labor force) and average earnings over time. Our baseline input data is from EU-SILC 2008, the most recent data available with the version of EUROMOD used, including the EA18 member states. For each country, these data are first reweighted to reflect labor market conditions as observed in 1999, and then subsequently reweighted for each year of the analysis.

From the LFS, we impute changes in (un)employment rates, size of the labor force, shares of short- and long-

¹⁰ Sutherland and Figari (2013) provide more detailed information on EUROMOD, the underlying input data and validation. The EU-LFS, conducted by the national statistical institutes across Europe and processed by Eurostat, is a representative household survey covering the years from 1983 onwards. It is the most important source for labor market statistics in the EU.

term unemployment, and coverage rates of national UI systems for 18 gender-age-education strata (male/female, three age groups, three education levels) on an annual basis. We simulate (un)employment changes over time for each of the 18 socio-demographic subgroups so that our series of reweighted cross-sections precisely matches these dimensions both at the subgroup and aggregate level. Earnings growth is imputed from the AMECO-database in order to account for changes in the tax base of the EMU-UI and national UI systems. These imputations ensure that our reweighted micro data are consistent with aggregate statistics in each year of our simulation period. The analysis at the subgroup level allows us to examine individual heterogeneity within each member state, showing which groups in the population would benefit/lose from the introduction of an EMU-UI system. In addition, we construct a national UI calculator that incorporates all important policy rules of national UI systems over the period 2000–13 and simulate national unemployment benefits in addition to EMU-UI benefits in the case of dual insurance and in the benchmark scenario.

Our analysis is based on the following simplifying assumptions. Firstly, we do not take into account general equilibrium effects of an EMU-UI system, i.e., our analysis remains in a partial equilibrium context. This implies that we abstract both from the potential moral hazard of national governments and administrations, which could have adverse labor market effects, as well as from the potential growth-enhancing effects of an EMU-UI scheme. Accounting for these macroeconomic feedback effects would require linking our micro data to a macro-econometric simulation model. Secondly, we do not simulate individual behavioral responses, e.g. potential migration responses, changes in hours worked or different patterns of entries and exits to the labor force, which could follow the introduction of an EMU-UI. In the light of these assumptions, our results should be interpreted as 'first-round' effects of an EMU-UI system. A further assumption relates to the interaction between EMU-UI and national UI systems, given that a basic EMU-UI system analyzed in this paper would partly replace national UI systems. We assume that national UI systems would top up the EMU-UI scheme if national UI systems are

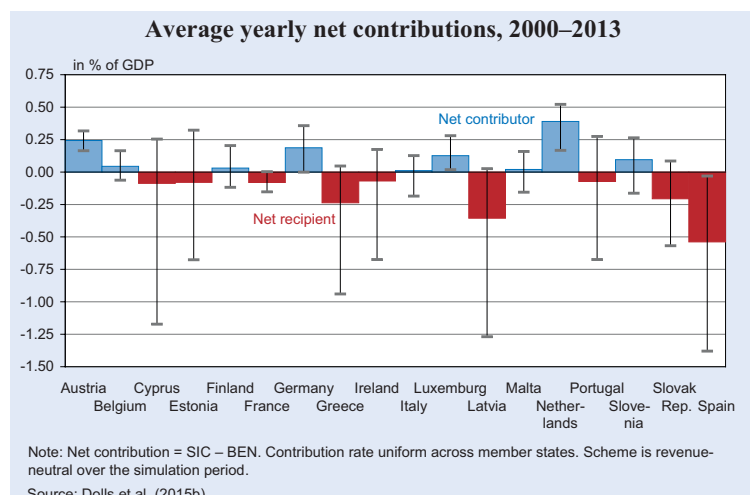
more generous in their coverage or replacement rate, so that no unemployed person would be worse off after the introduction of an EMU-UI system. Finally, we run our simulations as if the EA18 had existed from 1999 onwards, as it would complicate the interpretation of our results if we included new member states only after their adoption of the euro.

Results and discussion

Our main results are as follows. We find that a basic EMU-UI scheme with a replacement rate of 50 percent, a maximum duration of benefit receipt of 12 months and a broad coverage of all new unemployed with previous employment income could be implemented with a relatively small annual budget. Over the period 2000–13, average benefits would have amounted to roughly 47 billion euro per year, financed by a uniform contribution rate across member states of 1.56 percent on employment income. The scheme is not designed to give rise to permanent redistribution across countries because only short-term (rather than structural) unemployment is insured. Nevertheless our simulations reveal that a small number of member states would have been net contributors or net recipients in each year of our simulation period. Figure 1 shows that Austria, Germany and the Netherlands would have been the largest net contributors with average yearly net contributions of 0.19–0.39 percent of GDP. Latvia and Spain are the largest net recipients (average yearly net benefits of 0.36 and 0.54 percent of GDP).

We show that a basic EMU-UI scheme can provide insurance by stabilizing household incomes and govern-

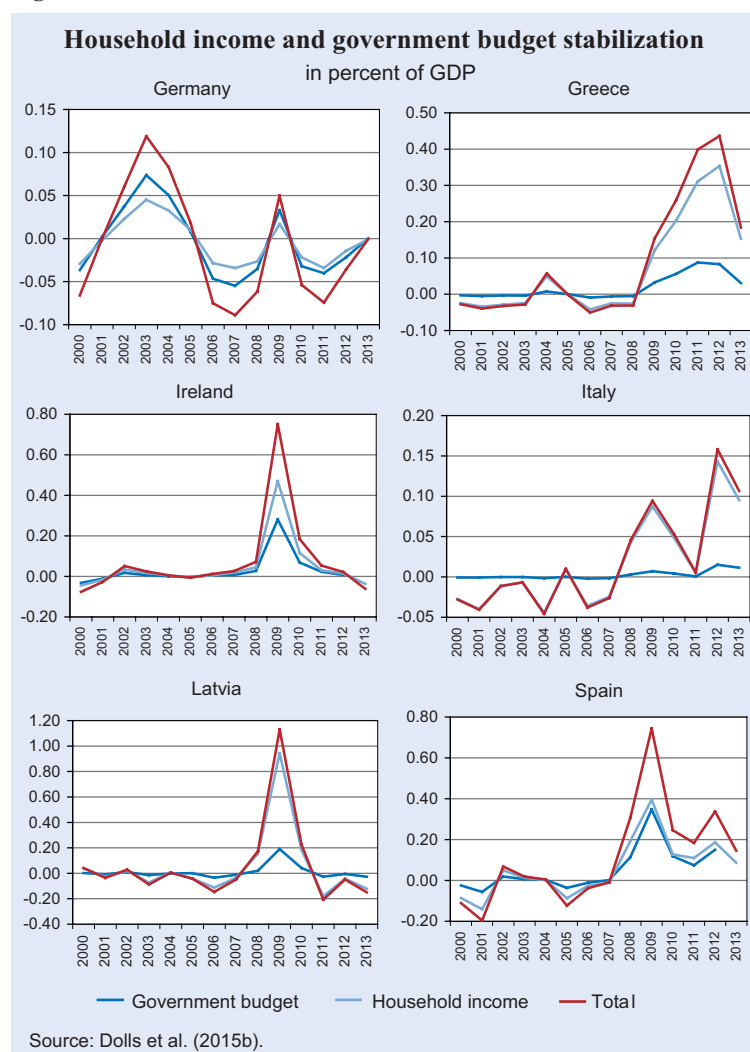
Figure 1



ment budgets. Household incomes are stabilized if unemployment benefits under dual insurance (the combination of national UI and EMU-UI) are more generous or if coverage rates are higher than in the status quo. Government budgets are stabilized in the event of unemployment shocks due to the fact that national UI benefits increase less in case of dual insurance relative to the benchmark. We compare automatic stabilization effects under dual insurance and the status quo. Figure 2 shows the stabilization effects of the simulated EMU-UI scheme for a selection of member states. Stabilization effects are measured as the change in net benefits following entries into or exits from unemployment relative to GDP in a given year. Figure 2 reveals that the largest stabilization gains would have been achieved in the recent crisis period with cushioning effects of up to 1.1 percent of GDP in Latvia. Germany belongs to those countries that would have been stabilized mainly in the early 2000s and very little afterwards due to improving labor market conditions in the following years.

Turning next to within-country heterogeneity, we find the largest coverage and stabilization gains for the young and, perhaps surprisingly, also for the high-skilled unemployed. The reason for the former is that the young often do not meet the eligibility conditions of national UI, while they are covered by the simulated EMU-UI. The result for the high-skilled is due to a higher proportion of short-term relative to long-term unemployed (who are not eligible to EMU-UI) among them. Finally, we consider a contingent version of the basic scheme, which is activated if the unemployment rate in a given member state is one percentage point higher than in one of the previous three years. Under this system no member state would have been in a permanent net contributing/receiving position. With 22 billion EUR per year, the overall budget and thus the amount of cross-country redistribution would have been less than half as large as under the non-contingent scheme in the baseline.

Figure 2



One should note that the simulations assume revenue-neutrality over the entire time span considered (2000–2013), but not in each period. This raises the issue of whether the EMU-UI would be allowed to issue debt. In our calculations the EMU-UI would have produced a surplus in its early phase, so that reserves would have been available to finance higher benefits in the crisis. But there is, of course, a concern that political pressures would build up to let the EMU-UI accumulate more and more debt until it needs to be ‘bailed out’ by the member states. Clearly, while a balanced budget in each period would limit the ability of the system to act as a fiscal stabilizer, an effective debt limitation would be needed. One possible approach would be to start by deliberately accumulating reserves, which would provide a buffer in the next recession.

We should emphasize that our analysis has a number of limitations, which should be taken into account in the

interpretation of the results. Most importantly, it is not the objective of our paper to establish whether or not the introduction of an EMU-UI scheme is desirable in terms of overall welfare. Our analysis is descriptive and simply focuses on the financial flows implied by a basic unemployment insurance scheme and the ability of these flows to act as an automatic stabilizer. In addition, we take economic behavior as given. If EMU-UI had the desired stabilizing effects, the financial flows in the system would differ from those calculated here; the redistributive effects would probably be smaller. However, if the moral hazard effects dominated, the financial flows from contributors to recipients could also be larger. Adding behavioral effects to the analysis would be a promising area for future research.

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