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Reconciling Insurance with Market Discipline: A Blueprint for a European Fiscal Union

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Abstract:

This contribution develops a blueprint for a European fiscal union. The proposal addresses the shortcomings of most other reform designs which do not offer a solution for insolvent or non-cooperative euro countries. We suggest a design which combines fiscal insurance with an orderly procedure to restructure the debt of an insolvent euro member. We show that fiscal insurance and a sovereign insolvency procedure are no contradiction but, on the contrary, mutually enforcing: An effective fiscal insurance helps to limit the stability risks involved in the implementation of an insolvency regime for sovereigns. And vice versa, a well-defined insolvency procedure reduces the danger that a fiscal capacity motivated as an insurance against transitory asymmetric shocks degenerates into a permanent transfer system. Moreover, we show that both elements are a helpful complement for the functioning of the European banking union and the new European fiscal governance.

JEL Classification: H87, H12

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1. Introduction

More than five years after the outbreak of the euro area debt crisis the institutional setup of EMU is in a state of flux. Despite various important and innovative reforms (banking union, fiscal and macroeconomic surveillance and coordination) the institutions of the Eurozone are far from providing a solid framework for the common currency. Several developments indicate the need for a more comprehensive redesign of euro area institutions: The responsibility for crisis containment has been shifted towards the ECB to a hardly acceptable degree. It is effectively the central bank which, through its Target2 system and a whole battery of new programmes[1] has stabilized the situation and acts as a lender of last resort for governments and banks. This heavy involvement of the ECB raises serious questions of democratic legitimacy or possible conflicts with the Maastricht principles of central bank independence and the prohibition of monetary financing of governments. In addition, the conflict between the euro area and Greece demonstrates that there is a vulnerable element in the rescue strategy applied so far: This strategy rests on conditionality and the link between assistance and reforms. The obvious weakness of conditionality is the lack of a strategy in case a crisis country refuses to respect the rules of the game.

The academic debate is equally sceptical whether the institutional reforms realized or initiated up to now really suffice. The bottom line of that literature (surveyed below) is that reforms are still incomplete with at least two important lines of criticism: The first relates to the need for stabilization and argues that so far fiscal tools are missing which could help to insure euro members against idiosyncratic shocks and to prevent the resulting self-enforcing dynamics of crises. And it would be exactly this failure to provide fiscal insurance which forces the central bank to step in. The second criticism concerns the limited credibility of the no-bailout provisions. New and refined fiscal rules can hardly be a substitute for effective market discipline. The existing ambiguity about bailouts creates uncertainty and undermines incentives to pursue sound fiscal and economic policies.

Both lines of criticism are often presented as a trade-off where Europe would have to decide between either a solidary system which provides insurance at the cost of weaker incentives or a 'fend for yourself' system which stresses individual responsibility and market discipline but is poor in stabilization.

In our contribution, we propose an institutional reform package which intends to reconcile the need for stabilization with market-based fiscal discipline. The package addresses the shortcoming of most other blueprints in the literature which do not offer a solution for insolvent or non-cooperative euro countries. Thus, the innovation of our proposal is that we combine fiscal insurance with an orderly procedure to restructure the debt of an insolvent euro member. We

[1] These programmes comprise the Securities Markets Programme (SMP), the Outright Monetary Transaction (OMT) programme, and, recently, its asset purchasing programme comprising government bonds.

show that fiscal insurance and a sovereign insolvency procedure are no contradiction but, on the contrary, mutually beneficial: An effective fiscal insurance helps to limit the stability risks involved in the implementation of an insolvency regime for sovereigns. And vice versa, a well-defined insolvency procedure reduces the danger that a fiscal capacity motivated as an insurance against transitory asymmetric shocks degenerates into a permanent transfer system.

Therefore our blueprint also addresses the major politico-economic obstacle to complete EMU (e.g. along the lines of the recent Five Presidents' Report: Juncker, 2015b). This major obstacle is the fear of an unpredictable transfer burden for countries with relatively stable budgets. Here, an insolvency procedure can pave the way for more ambitious fiscal insurance projects since it opens up an exit-option for a country with a solvency problem – no matter whether this originates from a long-run economic downturn or ongoing policy failure.

In the following, we shortly survey existing blueprints for a "fiscal union" in order to identify the missing elements, which we address in this paper (section 2). We proceed and analyse how the new setup of a banking union (section 3) and the reforms in economic and fiscal governance (section 4) have changed the situation and which shortcomings remain. Subsequently, we develop our two key pillars, a European unemployment insurance on the one hand and an insolvency procedure for sovereigns on the other hand (section 5 and 6). Finally (section 7) we discuss how these building blocks would interact and how they should be integrated to construct a viable fiscal union.

2. Existing blueprints

The recent crisis led to a new debate about a fiscal union for the Eurozone.[2] Several proposals on how to reform the institutions in the Eurozone to move closer to a fiscal union have been

[2] Several older studies discussed the implications of EMU for fiscal policy integration (see De Grauwe, 2009, for an overview). An important early discussion of the key issues can be found in the MacDougall Report (1977), which had the broad objective to analyse the role of public finances for European monetary integration. Eichengreen (1990) compares Europe to the US, emphasizing that the federal income tax in the US provides significant insurance against asymmetric macroeconomic shocks. Many economists warned that the Euro area is too heterogeneous and that the EMU would be fragile and vulnerable to economic shocks unless complemented by more fiscal integration (see Sachs and Sala-i-Martín, 1992; Buiter et al., 1993; Mélitz and Vori, 1993; Bayoumi and Masson, 1995; Masson, 1996; Eichengreen and Wyplosz, 1998; Engwerda et al., 2002; Uhlig, 2003). One exception is Fatás (1998) who argues that the cross-regional insurance potential of a European fiscal union would be limited, based on GDP data prior to the introduction of the EMU. His main objection to other empirical studies is that they fail to distinguish properly between intertemporal transfers (essentially self-insurance through debt financing), on the one hand, and true interregional insurance, on the other hand. Moreover, several authors have proposed an increase in the European budget in order to establish a horizontal fiscal equalization mechanism (Italiener and Vanheukelen, 1993; Hammond and von Hagen, 1998; Dullien and Schwarzer, 2005; Marzinotto et al., 2011). Schuknecht et al. (2011) emphasise the importance of fiscal discipline, proposing an independent fiscal council for the Euro area with the aim of improving governance and compliance.

made (see Iara, 2015 for an extensive survey of the various proposals) which we summarize in this section.[3] We focus on five dimensions: fiscal rules and governance, insurance and stabilization in case of asymmetric shocks, banking union and regulation, and Euro bonds (see Fuest and Peichl, 2012, for a survey of the different elements of a fiscal union).[4]

The European Commission (2012) offered a "blueprint for a deep and genuine economic and monetary union" consisting of several steps for the short, medium and long-term. The short-term agenda (up to 18 months) included the implementation of the new European economic and fiscal governance framework laid down in the six-pack and two-pack legislations, the adoption of proposals on joint banking supervision and resolution and the design of a financial instrument to foster economic reform in the Member States. In the medium term (up to five years), the aim was to deepen economic and budgetary policy integration, including the creation of a fiscal capacity for the euro area, a debt redemption fund, and the common issuance of short-term sovereign debt (eurobills). In the long term (beyond five years), the aim was the completion of the bank supervision and resolution scheme and the building of a common deposit guarantee insurance scheme, as well as the implementation of a euro area fiscal capacity for stabilization against asymmetric shocks. The fiscal integration process would also lead to the common issuance of public debt with longer maturities.

Bordo et al. (2013) analyse the history of successful fiscal federalism and suggest three key elements for a successful economic and monetary union relevant for the Eurozone. First, regional fiscal units can have revenue and expenditure independence, but only within a system of no-bailouts by the centre. Second, a union-wide bond market with a common bond as a response to an economically disastrous event is necessary. Third, the central government needs a large fiscal capacity and a system for (larger) transfers and equalization payments.

The Tommaso Padoa-Schioppa Group (Enderlein et al., 2012) presented their "road map towards fiscal union in Europe" in June 2012. The elements include (i) a cyclical insurance fund to provide automatic stabilization without long-term redistribution, (ii) expanding the redistributive side of the EU budget by means of increasing the EU's own resources, (iii) a common regulatory, supervisory, and deposit insurance framework for banking, and (iv) a European Debt Agency to issue jointly guaranteed debt.

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[3] Note that we do not include studies that analyse the economic consequences of some proposals in our survey, such as, e.g., Bargain et al. (2013) and Dolls et al. (2013, 2014).

[4] Fuest and Peichl (2012) discuss five possible elements of a fiscal union: (1) fiscal rules, policy coordination and supervision, (2) a crisis resolution mechanism, (3) a joint guarantee for government debt, (4) fiscal equalization and other mechanisms for transfers between countries, and (5) a larger EU budget and European taxes. The authors also discuss how these elements can be combined, and, more importantly, suggest an alternative to a fiscal union based on decentralized responsibility and financial sector stability.

In December 2012, the Four Presidents' Report "towards a genuine economic and monetary union" (van Rompuy, 2012) was presented. The key element was the creation of a "well-defined and limited" fiscal capacity to provide insurance at the central level against shocks, once that a common regulatory and supervisory financial framework and stronger coordination of structural reforms have been established (foreseen to happen after 2014). The adoption of a fiscal capacity should be complemented by increasing degrees of joint budgetary decision-making and policy coordination notably concerning taxation and employment.

Belke (2013) presented two principal but competing ways to stabilize the Eurozone: Either a centralized control over fiscal policy (including centralized control over some economic policy areas) and joint liability for government debt or national decisions over public debt which requires a banking union.

Cottarelli (2013) suggests three pillars for a fiscal union. First, stronger constraints relating to member state deficits and debt, second a larger central budget and third harmonization of non-fiscal policies (e.g. banking union). The IMF (2013) discussed what the banking union should look like.[5]

Rodrigues (2013) discusses how to redesign the existing instruments for a sustainable EMU. Her suggestions include an EU budget to provide structural convergence, a complementary Eurozone budget to provide macro-economic stabilization and the ESM issuing Eurobonds

Allard et al. (2013, 2015) suggest "minimal elements for a fiscal union in the euro area" to make a future crisis less severe: (i) a better oversight of national fiscal policies and enforcement of fiscal rules, (ii) some system of temporary transfers or joint provision of common public goods or services to increase fiscal risk sharing (subject to strong oversight and enforcement of fiscal discipline), (iii) a credible pan-euro area fiscal backstop for the banking sector and (iv) common borrowing to finance greater risk sharing and a stronger backstop and the provision of a common safe asset.

Corsetti et al. (2014) propose "New Institutions and New Policies for a Workable Eurozone". Their proposal composes first regulatory changes that discourage and limit the exposure of banks to sovereign debt, complemented by the creation of a European Bond recognized as safe by the ECB, second a sovereign debt restructuring regime and third a one-time debt stock operation to rapidly reduce sovereign debt.

In February 2015, in the next Four Presidents' report, Jean Claude Juncker in close cooperation with Donald Tusk, Jeroen Dijsselblom and Mario Draghi suggested "next steps on better economic governance in the Euro Area" including concrete mechanisms for stronger econom-

[5] The authors suggested three key elements. First, a single supervisory mechanism supervising all banks, second a single resolution authority that can close and restructure banks and intervene well ahead of insolvency and third, a common resolution/insurance fund to add credibility, facilitate limited industry funding and having access to common backstops for systemic situations.

ic policy coordination, convergence and solidarity: (i) more effective commitments to growth-enhancing structural reforms in the euro area, (ii) improvement of the functioning of the single market (i.e., enhancing labour mobility, capital market integration and further initiatives regarding digital economy and energy), and (iii) development of a long-term perspective of how the framework of the EMU should develop (Juncker, 2015a).

Table 1: Overview of proposals

	Fiscal rules / governance	Insurance / stabilization	Insolvency procedure	Banking union/ regulation	Euro bonds
European Commission (2012)	X	X		X	X
Tommaso Padoa-Schioppa Group 2012		X		X	X
Van Rompuy 2012	X	X		X	
Belke 2013	X1	X1		X2	X1
Bordo et al. 2013		X		(x)	X
Cottarelli 2013	X	X		X	
IMF (Goyal et al.) 2013				X	
Delors 2013					
IMF (Allard et al.) 2013, 2015	X	X	(x)*	X	X
CEPR (Corsetti et al.) 2014	X			X	X
Fuest et al. (2015)			X		
Juncker (2015b)	X	X		X	

Notes: *: Allard et al. (2013) mention the potential involvement of private creditors albeit without making a concrete proposal.

The Five Presidents' report of June 2015, "Completing Europe's Economic and Monetary Union" (Juncker, 2015b), suggests four steps in 3 stages (until 2025): (i) structural reforms to achieve and maintain responsible fiscal policies and enhance democratic accountability, (ii)

completing the Banking Union and accelerating the Capital Markets Union, (iii) a Fiscal Union delivering both fiscal sustainability and fiscal stabilization, and (iv) a Political Union that provides the foundation for all of the above through genuine democratic accountability, legitimacy and institutional strengthening.

The recent Five Presidents Report is silent on the question of an insolvency procedure for sovereigns. Such a proposal was suggested by Fuest et al. (forthcoming). Their "Viable Insolvency Procedure for Sovereigns" (VIPS) consists of two components: a permanent insolvency procedure for the "long-run" and a "bridge" which defines the transition towards the full activation of that procedure (see Section 6 for details on VIPS).

To sum up, as can be seen from Table 1, the different proposals lack an integrated view. They focus on a single or some elements of deeper fiscal integration of the Eurozone. Only the proposal by Allard et al. (2013, 2015) touches upon all dimensions. However, an extensive discussion of the interaction of the various elements is still missing. We will provide this in this paper.

3. European banking union and financial sector regulation

One of the key lessons of the financial crisis and the Eurozone debt crisis is that there are important links between banks and the financial stability of governments. Before the introduction of the Euro national governments were responsible for the stability of their banking system. Since there were national central banks which could act as a lender of last resort to both banks and governments the vulnerability of governments and banks to financial crises was limited, at least as long as they operated in the domestic currency. In a regime of national currencies it was consistent to consider domestic government bonds as (nominally) secure assets, assuming that highly indebted governments would always be bailed out by their central bank.

After the introduction of the Euro the situation changed fundamentally but the institutional framework of the financial sector was not adjusted accordingly. Due to the no bailout clause and the prohibition of monetary financing of governments national governments and banks lost their lender of last resort. Therefore national government bonds could no longer be considered as nominally secure assets. This increased the vulnerability of both governments and banks to financial stress considerably. But financial sector regulation continued to allow banks to hold government bonds without equity and national governments retained the responsibility of stabilising the banking sector in the event of a crisis. As a result the financial weakness of banks and governments during the debt crisis in the Eurozone was mutually reinforcing ('death loop of banks and governments') and proved to be a major destabilising factor.

The failure to adjust financial sector regulation to the new currency regime also undermined the credibility of the no bailout clause. Because banks were allowed to hold large quantities of

government bonds with very little equity it was evident that applying the no bailout clause in the event of a fiscal crisis would be very costly. The restructuring of government debt would destabilise the banking sector and threaten financial stability. Therefore rational investors expected that governments with excessive levels of debt would be bailed out with a high probability, despite the no-bailout rule. This explains the surprisingly high degree of interest rate convergence in the early years of the Eurozone. It also explains why governments with a poor record of fiscal governance were able to borrow large amounts of money.

As a consequence of the crisis the Eurozone governments introduced banking union. Banking supervision was shifted to the European level (Single Supervisory Mechanism), a European institution for bank restructuring was set up (Single Restructuring Mechanism) and a fund for the recapitalisation of banks was created (Single Restructuring Fund). Under certain conditions the ESM can provide additional funds for bank recapitalisation, and the banks themselves are required to hold more 'bail-inable' capital than before the crisis. In addition the banks themselves are required to hold more 'bail-inable capital' than before the crisis.

These are important steps towards a more solid banking sector and they reduce the mutual financial dependence of banks and their national governments in the Eurozone. Fiscal governance in the Eurozone depends on the interaction between public finances and the financial sector. Most importantly, the no bailout clause will only be credible if it is possible to restructure the debt of an insolvent country without risking a banking crisis. Therefore the ability of banks to absorb losses needs to increase and the exposure of banks to government debt, in particular to the debt of the countries where the banks reside, must be reduced. The fact that banking regulation still classifies government bonds of Eurozone member states as riskless assets, so that banks need no or almost no equity for positions in government bonds, is a key important shortcoming of the financial sector reforms that have been carried out so far.

To summarize, further reforms of the banking sector are of key importance not just for the sake of financial sector stability but also for the development of fiscal institutions in the Eurozone. Firstly, capital regulations for banks need to be reformed further, increasing the equity banks are required to hold. Secondly, the privilege of zero risk weights for government bonds must go. This is a key condition for the credibility of public debt restructuring institutions, which are, in turn, a central element of Eurozone fiscal governance.

4. Fiscal rules/governance

The Maastricht model for budgetary prudence rested on two pillars: market discipline and fiscal rules. Market discipline was supposed to be underpinned by the no bailout clause (Art. 125 TFEU), the prohibition on monetary budget financing (Art. 123 TFEU) and the ban of government privileges in loan access (Art. 124 TFEU). Fiscal rules were designed to have a double function, as an entry condition to EMU through the convergence criteria (Art. 140

TFEU) and as a permanent rule for EMU members through the excessive deficit procedure reinforced by the Stability and Growth Pact (SGP). Over the recent years, the euro area debt crisis has demonstrated the weaknesses of this initial two-pillar-framework. Moreover, the emergency measures and the permanent reforms have led to considerable changes compared to the initial setup. With respect to the first pillar, market discipline, all three Maastricht foundations are by now substantially impaired.

First, the no bailout clause had always suffered from a credibility problem as indicated by the almost complete absence of risk premia in the euro government bond market in the first decade of the euro. Since 2010, the crisis events and decisions have proven investors right who did not believe the no bailout clause. Since the 2010 crisis, countries have gained access to loans guaranteed by other euro member countries (EFSF, ESM), the European Union (EFSM) or the IMF, via institutions created ad hoc. Initially, emergency loan facilities were intended to be available only for a transitory phase. But they have become a permanent institution through the ESM. With the amendment of the TFEU (Art. 136 (3) TFEU) the ESM now has a lasting grounding in primary EU law. And obviously, access to loan facilities has not been confined to countries with a mere transitory liquidity problem. At least in the case of Greece, massive support has been given to a country with unsustainable public finances.

Second, the heavy involvement of the ECB in government bond markets has undermined the credibility of the ban on monetary financing. The Securities Markets Programme (SMP) activated in 2010 and the Outright Monetary Transactions (OMT) Programme established in 2012 both imply that the ECB can selectively buy government bonds of highly indebted countries in the secondary markets. Though the Public Sector Purchase Programme (PSPP) started in March 2015 as part of the ECB's quantitative easing is non-selective it has nevertheless massively increased the ECB's role as a buyer on the euro area government bond market. Legally, it is disputed whether the heavy ECB involvement in the bond market through all these programmes is consistent with Art. 123 TFEU. Yet, one economic implication is unambiguous: Bond market investors today base their investment calculus on the fact that the ECB is (conditionally) willing to buy these bonds in the secondary market.

Third, the prohibition of a privileged loan access for governments has lost credibility, too, since all the new loan facilities imply substantive privileges for market access. Furthermore, the reforms on banking regulation since the financial crisis have spared the extant zero weighting for euro area government bonds in banking capital requirements.

All this weakening of market discipline has been accompanied by attempts to make the second pillar of budgetary discipline, fiscal rules, more effective (for a concise summary on all reforms see European Commission, 2014). Two comprehensive legislative packages (the "six pack" and the "two pack") have strengthened both the surveillance and enforcement dimension of the SGP. On surveillance, the stock of debt criterion has become more influential. For countries with debt levels in excess of 60 per cent of GDP a numerical benchmark has been

defined for the necessary annual reduction in the debt ratio – one twentieth of the gap to the reference value. The preventive arm of the SGP now also includes a benchmark for the acceptable increase of government expenditure. On enforcement, financial sanctions are to be decided earlier in the process and with a reversed majority – i.e. a sanction proposed by the Commission can only be averted through a qualified Council majority. These new rules are also grounded in the so called "European Semester" which details the coordination of national budgets with feedback loops from Brussels over the year. Finally, the Treaty on Stability, Coordination and Governance in the EMU ("Fiscal Compact") commits the 25 signatory states to introduce deficit ceilings in binding national laws. As a consequence, national enforcement (e.g. through national constitutional courts) will supplement the enforcement pressure from supranational law.

Summing up, there has been a far-reaching re-design of the Maastricht approach to fiscal prudence over the years of the crisis. While the Maastricht approach had given equal weights to both pillars, fiscal rules and market discipline, the reformed design is less balanced: a substantial weakening of market disciplining elements has occurred. This has been accompanied with attempts to have offsetting tightening of rules.

In our view, there are clear limits to this compensatory strategy. Empirically the available evidence supports the view that fiscal rules contribute to a more sustainable fiscal performance (for a meta-analysis on the constraining impact of fiscal rules see Heinemann, Moessinger and Yeter, 2015). However, the understanding that strict rules could make up for the absence of market discipline is mistaken. This compensation view is flawed because a failure of market discipline also damages the credibility of rules no matter how strict they may be formulated. Financial sanctions for a violation of rules, for example, can only be an effective deterrent if a country cannot pass on these costs to its partners in a subsequent bailout. Conditionality of liquidity assistance, a typical element of any rule-based approach, can only be credible if there is a credible alternative to a bailout once a country becomes insolvent. Hence, fiscal rules and market discipline are no substitutes but highly complementary elements of a framework favouring fiscal prudence. Fiscal rules without market discipline are unlikely to be effective. Both historical and recent anecdotal evidence support this view: Historically, the experience in federal countries in Europe, North- and South-America suggests that close fiscal surveillance in combination with credible no-bailout clauses has guaranteed the viability of monetary unions (Bordo et al., 2013). Anecdotal evidence comes from the recent Greek experience: All new European provisions which have been implemented since 2010 could not prevent the Tsipras government, elected in January 2015, simply to disobey new rules and roll back numerous reforms. It is obvious that this behaviour has been largely motivated by the expectation that, in the end, European partners will be forced to continue with their open or hidden bailout of Greek debt.

5. Insurance

The EMU is an atypical monetary union because monetary policy is decided at the central (Eurozone) level while fiscal policy is carried out at the sub-central (member state) level (Bordo et al., 2013). If the union is hit by an asymmetric shock, in the absence of exchange rate adjustments the affected member states have to rely on national automatic stabilizers or countercyclical fiscal policy measures. A missing element which is typically available in a fully-fledged monetary and fiscal union is a fiscal capacity serving as an automatic stabilizer at the central level. Several arguments for a common insurance mechanism for the EMU have been put forward, for example the view that private risk sharing does not provide the Pareto efficient level of risk-sharing due to positive externalities (Farhi and Werning, 2014) and that contagion and self-fulfilling crises could be better contained with at least some fiscal integration (Allard et al., 2015). The Four Presidents' report (van Rompuy, 2012) also emphasized the necessity to improve the economic resilience of the EMU, but at the same time outlined important criteria for any Eurozone-wide fiscal risk sharing mechanism. In particular, it should not lead to permanent transfers across countries or moral hazard and disincentive effects at the level of individuals, the administration and economic policy (Persson and Tabellini, 1996).

There is a growing literature about possible designs of a fiscal capacity which can be broadly categorized into a macroeconomic and a microeconomic approach. The former approach would establish a fiscal equalization or insurance mechanism with transfers between countries. Recent proposals comprise fiscal insurance mechanisms based on relative output gap differences (Enderlein et al., 2013), stabilization funds (Furceri and Zdzienicka, 2013), or contingent reinsurance mechanisms (Gros, 2014). The latter approach would directly stabilize household incomes in the event of negative income and unemployment shocks through a (partly) integrated tax and transfer system (Bargain et al., 2013; Feyrer and Sacerdote, 2013; Dolls et al., 2014). A common European unemployment insurance system has been the most prominent proposal in this case (Andor, 2014; Dullien, 2014).

Some of these proposals clearly do not fulfil the criteria stated above as they would lead to permanent transfers across countries or would have adverse incentive effects (Bargain et al., 2013). Other proposals based on the output-gap as an indicator for the cyclical position have specific problems such as the challenge to identify shocks in real-time.

Our proposal for a common insurance mechanism is to introduce an EMU-wide unemployment insurance system designed such that it pays special attention to the concerns outlined above, but fulfils its role as an automatic stabilizer in the event of asymmetric shocks. The key elements of our proposal are that national unemployment insurance systems must fulfil minimum standards and that benefits from the EMU-UI scheme are contingent, co-financed by national unemployment insurance systems and directed only to the short-term unemployed. Such a scheme would lead to improved stabilization of household incomes and government

budgets and would make the fiscal policy framework in the EMU – together with an insolvency procedure for sovereigns presented in the next section – more sustainable. In the following, we will outline the details of our proposal.

Previous research has shown that the stabilization capacity of national unemployment insurance systems is very heterogeneous in Europe (Dolls et al., 2012). While unemployment insurance systems in Western or Northern European countries absorb significant fractions of unemployment shocks (25-60 percent), those in Southern and Eastern European member states provide very little insurance on average (less than 10 percent in Estonia, Greece, Italy and Slovenia). Given these enormous differences and the low level of insurance in some member states, minimum standards for national unemployment insurance systems, in particular with regard to the coverage of job losers, would lower the vulnerability of the unemployed with insufficient replacement incomes. The European Commission should monitor whether member states comply with the agreed minimum standards. Importantly, our proposal does not imply a full harmonization of national unemployment insurance systems which could still be more generous than the rules determined by the minimum standard.

In terms of contingency, two triggers need to be met before transfers from the EMU-UI system are activated. First, as member states shall be insured against asymmetric shocks, the unemployment shock in a given member state must be larger than the overall change in unemployment in the euro area (trigger 1). Second, given that member states should be able to deal with small shocks whereas large shocks can jeopardize social cohesion and overstrain public finances, transfers from the EMU-UI scheme should be triggered if the surge in unemployment exceeds a certain, pre-determined threshold (trigger 2). In that respect, our proposal is similar to the federal-state Extended Benefit program in the US which provides additional weeks of unemployment benefits in states whose unemployment rate has reached certain thresholds.[6] Clearly, the exact triggers would need to be negotiated between member states. Here, we only illustrate how the two triggers could be specified and simulate how often EMU-UI benefits would have been triggered over the period of 2000-13. If the triggers prescribed that the percentage increase in the unemployment rate has to be above the Eurozone-average (trigger 1) and larger than 10 percent (trigger 2), each member state would have triggered on at least once. Cyprus (9 years), Portugal and Netherlands (both 8 years) are the member states with the longest periods of benefit receipt from the EMU-UI system. If trigger 2 would instead stipulate that the unemployment rate must rise by 2 percentage points, i.e. a larger percentage increase in low relative to high unemployment countries, Cyprus, Spain

[6] Regular state unemployment benefits are usually paid for a maximum period of 26 weeks. According to current US legislation, they can be extended through the Extended Benefit Program by 13 (20) weeks if the unemployment rate in a given state is above 6.5 (8) percent and exceeds that of the previous two years by 10 percent (see e.g. Farber and Valletta, forthcoming). Note that further extensions can be implemented through other federal programs.

(both 5 years) as well as Greece and Portugal (both 4 years) would have been triggered for the longest periods, whereas Austria, Belgium, Germany, Finland and France would not have received transfers from the EMU-UI system. In terms of financing, in order to balance the EMU-UI budget on a yearly basis, those member states that are not triggered on would need to finance the transfers from their government budgets.

Our proposal resembles the Extended Benefit program in another dimension. Historically, states and the federal government have shared the costs of Extended Benefits equally.[7] In a similar vein, transfers from the EMU-UI system would need to be co-financed by member states. Precisely, if transfers from the EMU-UI system were triggered in a member state, the EMU-UI system would pay part of the benefits according to the minimum standards monitored by the European Commission. That is, the EMU-UI system would pay 50 percent of the benefits to the short-term unemployed with an unemployment spell not longer than 12 months. A waiting period of 2 months after job loss would exclude seasonal unemployment (like in tourism) from coverage by the EMU-UI system. The rationale for EMU-UI to be based on co-financing and focussing on short-term unemployment including a waiting period is that these elements should minimize the risk of permanent transfers, moral hazard and administrative manipulation.

How large would the budget of such an EMU-UI system be? Simulations of Dolls et al. (2014) for a non-contingent scheme with a replacement rate of 50 percent of previous gross earnings and benefits paid for up to 12 months suggest that a significant scheme could be achieved with a relatively small overall budget. Over the period of 2000-13, it would have amounted to 49 billion euros per year at the Eurozone level with average yearly net contributions in a range between -0.52 percent (Spain) to 0.41 percent of GDP (Netherlands).

6. Insolvency procedure

The possible establishment of a sovereign insolvency procedure for the euro area is sometimes debated as a minor technical or a mere crisis management issue. We think this reflects a fundamental underestimation of the issue's importance. The decision for or against such a procedure is nothing less but a far-reaching decision on Europe's fiscal constitution. The credible perspective of a possible sovereign debt restructuring opens a way to shift the burden of a sovereign insolvency to private creditors. If a sovereign insolvency is no option the burden must fall on taxpayers in other euro area countries be it through an open or hidden fiscal or monetary bailout. Accordingly, without an insolvency perspective any sovereign insolvency requires the flow of public transfers from other members of the euro area.

[7] In the Great Recession, the American Recovery and Reinvestment Act (ARRA) allowed the federal government to pay for all Extended Benefits in order to make the program more appealing to states (Nicholson et al., 2014).

One may support or reject the idea of a fiscal constitution with substantial transfers between euro member countries. However, in a democracy the consensus is usually that the establishment of a transfer system should be the result of democratic and transparent constitutional decisions. The problem with transfers as an unintentional side-effect of an absent insolvency option is that it lacks democratic legitimacy and transparency. The problem is virulent already under the status quo where the ECB has become the lender of last resort for euro area crisis countries. Since with Greece at least one of these countries is in a state of insolvency, the ECB's support implicitly has a transfer character but the consent from voters or their representatives in parliaments has never been given.

Since the outbreak of the euro area debt crisis, the literature on reforming the institutions of the euro area has repeatedly brought forward the idea of insolvency procedures. This European literature had the IMF proposal for a Sovereign Debt Restructuring Mechanism (SDRM) as starting point (Krueger, 2002). This proposal defines necessary elements of a procedure which would also have to be taken up in the European context like the need of majority creditor decision making, payment moratoria during negotiations or the need to have one moderating organization like the IMF which also could provide fresh money during negotiations.

Gros and Mayer (2010) proposed to establish a European Monetary Fund which would both provide insurance against liquidity crises and manage the restructuring of insolvent euro members. The design proposed by Gianviti et al. (2010) is more explicit about the organization of the restructuring procedure and suggests a new chamber at the European Court of Justice as an independent moderator of negotiations. The blueprint developed by the Committee on International Economic Policy and Reform (2013) makes the ESM the responsible institution and elaborates carefully the legal precautions against holdout investors. Such holdouts like specialized "vulture funds" have been successful in past ad hoc restructurings e.g. in Argentina or Greece in litigating for full repayment and thus also threaten the effectiveness of a well-defined statutory insolvency procedure.

While this literature is developed in several dimensions, it has not paid sufficient attention to the crucial problem of transition. Although an orderly insolvency procedure has substantial merits and is likely to be technically feasible, its introduction in a fragile economic, fiscal and financial environment is a tricky issue. Even if the emerging European banking union and new liquidity facilities like the ESM and the ECB's program have made bond markets more resilient against self-fulfilling panic attacks there remain substantial system risks: National banking systems are still heavily exposed to their governments because of the continuing regulative privileges of public debtors like zero weights in bank capital requirements. Furthermore, euro area countries like Spain or Italy have public debt levels which by far exceed the loan capacity of the ESM. Moreover, debt consolidation in the euro area so far has hardly even started. The establishment of an insolvency procedure in this environment could feed expectations that a restructuring of larger euro countries is imminent and then kick-off new

waves of panic-driven bond sell-offs with cross-country contagion. Hence, a profound dilemma characterizes the transition problem (pointed out by Mody, 2013): The best timing for establishing an insolvency procedure is a period with high growth, low unemployment, healthy banks and public finances. However, the need for such a procedure tends to be acknowledged only in times of fiscal turmoil.

As a way of dealing with this dilemma, Fuest et al. (forthcoming) have suggested their "Viable Insolvency Procedure for Sovereigns" (VIPS). VIPS consists of two components: a permanent insolvency procedure for the "long-run" and a "bridge" which defines the transition towards the full activation of that procedure.

The VIPS bridge is constructed through lagged implementation: The insolvency procedure is to be codified today in the ESM Treaty but its activation is postponed through a trigger clause. According to this clause, the insolvency procedure becomes fully effective once the euro area average debt-GDP-ratio falls below a critical level of e.g. 80 per cent. As a fall back trigger, a fixed date is added (e.g. the year 2030) as the latest date for the full activation. Clearly, the debt level related trigger is preferable since it would activate the insolvency regime in a fiscally friendly environment of falling debt levels. The fall back trigger is necessary, though, since it safeguards the credibility of the transition against intentional or unintended consolidation failure. The definition of the automatic activation in the ESM Treaty addresses the time inconsistency problem of lagged implementation as far as possible. ESM Treaty changes require an unanimous decision which is a high protection against later political interventions to stop the automatism. Lagged implementation has a double motivation: On the one hand it addresses the economic problem of the transition dilemma described. On the other hand it also serves the politico-economic function of overcoming reform resistance related to the self-interest of today's political decision makers (Buchanan, 1994). For governments, the constraints of an insolvency perspective might not be attractive. Hence, acceptance is more likely if the incumbents do not decide on new constraints for themselves but on those for their successors.

The VIPS bridge also includes elements of immediate action which both prepare the ground for the functionality of the procedure later on and signal the credibility of the transition today. Among those immediate elements are the following: First, with immediate effect all new euro area bond issues must contain modified collective action clauses (CAC) based on aggregate majorities for creditor decision making instead of issue by issue decision making as it is the case today. Second, a phasing-out of regulatory privileges for euro area sovereign borrowing must be started instantaneously e.g. through a slow but steady introduction of bank capital requirements for euro area government bonds. And third, euro area countries must become subject to maturity regulation in their debt management which forces them to increase substantially the average maturity of their debt instruments and which precludes a critical cluster-

ing of maturities in certain future years. These provisions will limit the risks of future ESM liquidity assistance and also make the system more resilient against bond market runs.

VIPS' long-run insolvency procedure assigns the ESM a key role. Contrary to the status quo, VIPS strictly limits ESM liquidity assistance to a maximum duration of three years ("ESM shelter period"). This shelter period has the function of an insolvency test: If a country merely suffers from transitory liquidity problems this shelter together with intense reforms and consolidation should be sufficient to boost borrower reputation and reopen market access. If three years of shelter fail to provide market access this is an indication of insolvency and, consequently, triggers the insolvency procedure. For the debt negotiations standard rules of insolvency procedures apply such as an immediate payment moratorium and equal treatment of all creditors. Throughout the negotiation period the ESM provides emergency liquidity for keeping the government operational. These additional ESM loans are senior and excluded from any final debt restructuring. One single quantitative rule for the extent of restructuring applies under the VIPS procedure: Any settlement agreed upon with creditor majority (and an ESM veto right) must not lead to a haircut which lowers the debt-to-GDP level below the Maastricht value of 60 per cent. This rule provides an expectation anchor and gives investors a clear indication of the maximum loss to be expected in case of default. Furthermore it is consistent with the rules of the reformed SGP with its strengthened role of the 60 per cent debt criterion.

Thus, the VIPS model offers a path towards an institutional setup in the euro area setup where investors lending money to governments actually take a risk. Moreover, countries which are approaching sovereign insolvency can no longer force open or hidden transfers.

7. Interaction and integration

We have argued so far that a comprehensive fiscal union for the euro area should have two central pillars which are an insurance system and a sovereign insolvency procedure and have spelled out in some detail how both components could be constructed. In the following we explore further how these two elements interact and how they should be integrated. In addition, we argue that insurance and insolvency procedure would complement the banking union and the modernized fiscal governance in a highly beneficial way.

Insurance and VIPS

One insight from the acute phase of the euro area debt crisis in the years 2010-2012 is that a monetary union without insurance is prone to "multiple equilibria". Vicious circles can evolve with initial shocks escalating into a downward spiral of increasing bond yields, deteriorating public finances, banking sector instability and recession with cross-country contagion. A monetary union is particularly fragile in this respect since the monetary policy has ceased to be national. While the issue of multiple equilibria has mostly been discussed with respect to

financial markets (De Grauwe and Ji, 2013), similar dynamics can occur in the real economy if bad news induce firms to halt investment and hiring, tilting fragile economies into recession.

The introduction of an insolvency mechanism like VIPS may increase the risk of market turbulences both when it is phased in and after its introduction. Stabilisation mechanisms like the ESM would counteract this risk. Therefore stabilisation mechanisms like the ESM and VIPS are complementary. But institutions providing stabilisation for the real economy would provide additional stability. An unemployment insurance which provides protection against transitory asymmetric shocks is a contribution to larger macroeconomic stability in the euro area. It would increase the resilience against the destructive dynamics described above. Therefore the existence of an unemployment insurance of the type described would improve the chance that a model like VIPS could be phased in without market turbulences. In this sense, a European insurance scheme can contribute to the credibility of the VIPS bridge. It would also increase the chances that an insolvency mechanism will be politically acceptable. With insurance in place, governments (and market participants) would know that countries no longer solely depend on their own financing capacities to counterbalance a transitory shock. This should make it more acceptable for national policy makers to accept harder budget constraints as a consequence of a VIPS activation.

Insurance not only simplifies the transition towards VIPS but also helps that the procedure, once activated, could function smoothly. The insurance scheme would lower the demand for ESM protection insofar this need originates from transitory country-specific shocks. Consequently, ESM shelter would tend to be a less frequently used option after the introduction of a European unemployment insurance.

Equally, there is also the reversed logic that VIPS will smooth the introduction of a European unemployment scheme. The unemployment insurance developed above is designed with the understanding that it offers insurance but no permanent transfers. However, any such claim will raise suspicion on the side of rich and fiscally sound countries. As argued above, the track record on the reliability of any such institutional promises like “no bailout” or “no monetary financing” has been poor over recent years. This bad experience currently feeds the distrust that any new fiscal capacity designed for insurance will turn into just another system of hidden transfers within the euro area – at the latest with the next acute fiscal crisis. The existence of a viable insolvency procedure for insolvent euro countries will fundamentally change the stage. With such a procedure in existence there is a credible alternative for insolvent countries in place which explicitly excludes public transfers. Hence, once VIPS with its transition phase is enshrined in the ESM Treaty, a European unemployment insurance against transitory labour market shocks should be a more acceptable project for all euro area countries independent of their particular fiscal situation.

This natural fit of insurance and insolvency procedure can be further supported by a credible integration of both institutions. The following three clarifications are reasonable for full integration:

First, euro countries which do not sign the new ESM Treaty including the insolvency procedure must also be excluded from participation in the European unemployment insurance. This clarification limits the time-inconsistency problem associated with the VIPS bridge: Countries that leave the ESM Treaty during the transition in order to avoid an insolvency procedure and its consequences would also lose insurance protection. This sets strong incentives to stick to the ESM Treaty also with VIPS' full activation.

Second, countries that violate fiscal rules of either the reformed SGP or Fiscal Compact or that do not obey the guidance obtained in the context of the European Semester should lose insurance coverage. This rule follows the logic that any crisis assistance needs to be conditional and that solidarity must be confined to countries accepting the full set of rules.

And third, payments from the European unemployment insurance should be paid out irrespective of whether a country is under the ESM shelter or in insolvency negotiations according to the VIPS scheme. Insurance payments, in order to realize their full stabilizing potential, must be predictable and reliable particularly in times of fiscal stress. Only with that certainty of support the insurance system can contribute to stabilising expectations and immunization against vicious circles.[8]

Insurance, VIPS and fiscal governance

Above we have argued that fiscal rules and market discipline are no substitutes but complementary elements which together set the right incentives for fiscal prudence.

The limited strategic effectiveness of fiscal rules without the perspective of a sovereign insolvency can be demonstrated by looking at the credibility of available sanctions in this case.

So far, given the constitutional stage of the European Union today, direct coercion e.g. through binding directives on national taxation or expenditures is no available option. Any budgetary guidance from European institutions for national budgets needs to be supported by parliamentary majorities in the member country before it can have an actual impact. The case is different with fines based on the rules of the SGP. These fines are indeed legally binding and have to be paid. However, a pecuniary fine only aggravates a persistent insolvency problem. Without the option of a debt restructuring, fines for an insolvent country just increase the need for later open or hidden transfers from partners or European institutions including the ECB.

[8] However, it remains true that investors face the uncertainty that a country might in future lose insurance coverage because it violates the rules of the euro area.

With an insolvency procedure in place, pecuniary sanctions have a different impact. If a sovereign insolvency is addressed through an orderly debt restructuring investors will be highly sensitive to any budgetary deterioration. Consequentially, signs of fiscal laxity in a euro member country will be punished through increasing risk premia on this country's government bonds. With VIPS in place this will hold in particular for countries where debt levels exceed 60 per cent since the distance to 60 per cent is the maximum loss in case of default.

With a viable insolvency procedure, rule-based fines and market discipline are mutually reinforcing. The non-compliant country can no longer implicitly shift the burden of fines to its euro partners. On the contrary, the fine immediately increases the pressure on the non-compliant country through rising bond yields. This link is effective through two distinct channels: First, fines are signals that a country violates fiscal rules and acts imprudently and, second, fines are an additional financial burden by themselves which increase debt sustainability problems. Due to the signalling channel, even small symbolic fines should have a measurable impact on risk premia.

Insurance, VIPS and banking union

There is a strong complementarity between the insolvency regime VIPS and the project of a banking union. A sovereign debt restructuring mechanism will not be credible if a haircut on public debt destabilises the banking system and gives rise to a financial crisis with harsh consequences for the real economy. The fact that the European banking union partly severs the links between sovereigns and their national banking systems and increases the stability and the loss absorption capacity of the banking system is of key importance for the credibility of the restructuring regime.

At the same time the VIPS concept supports the viability of the European banking union. It is a major concern that the banking union may allow highly indebted member states to shift the cost of excessive public debt to other countries, via the banking system. One way of doing so would be to have governments being bailed out by their own banks, which would then, if they get into difficulties, pass on the losses to the rest of the Eurozone, via the bank restructuring fund (the Single Restructuring Fund). The availability of a clear procedure for dealing with sovereign debt crises will ease pressures on banks to buy bonds of highly indebted governments.

Along similar lines a fiscal shock absorber will complement banking union. As the impact of asymmetric shocks on the economy will be cushioned somewhat, banks operating in the country which is hit by the shocks will be less affected because bank loans will perform better.

8. Conclusion

In recent years, important institutional reforms such as banking union and fiscal and macroeconomic surveillance and coordination have been implemented. Our blueprint rests on the insight that some of these reforms are still incomplete and that two key elements are missing in the current institutional framework of the Eurozone: an insolvency procedure for sovereigns and a fiscal insurance mechanism against asymmetric shocks.

In the banking sector, capital regulations are needed that increase equity requirements, abolish the privilege of zero risk weights for government bonds and require banks to diversify risks when they hold government bonds. This is of crucial importance to make the no bailout clause of the Maastricht treaty credible, since in the absence of these reforms it is likely that a debt restructuring of an insolvent member state still requires fiscal transfers to avoid a banking crisis.

An orderly procedure to restructure the debt of an insolvent member state and a fiscal insurance mechanism are the two central pillars of our proposal. Recent experience has shown that transfers without democratic legitimacy and transparency seriously undermine the support for further integration in Europe. An insolvency procedure for sovereigns is indispensable to protect taxpayers in other euro area countries in the event of debt restructuring. At the same time, a fiscal insurance mechanism in the form of a common unemployment insurance system would strengthen the economic resilience of EMU in case of large and asymmetric shocks. We have argued that, if the rules of both institutions are respected, there is no trade-off between stabilization and market discipline. To the contrary, our proposed insurance mechanism and sovereign insolvency procedure mutually reinforce each other. A stabilization mechanism such as a common unemployment insurance system would simplify the transition towards the new regime with an orderly sovereign insolvency procedure because it would support member states in times of economic distress. At the same time, the sovereign insolvency procedure would increase the acceptability of an automatic fiscal stabilizer at the central level as it would ensure that such a mechanism cannot easily be transformed into a system of permanent transfers.

References

Allard, Céline, Petya Koeva Brooks, John C. Bluedorn, Fabian Bornhorst, Katharina Christopherson, Franziska Ohnsorge and Tigran Poghosyan (2013): Toward a Fiscal Union for the Euro Area, IMF Staff Discussion Note, SDN/13/09.

Allard, Céline, John Bluedorn, Fabian Bornhorst and Davide Furceri (2015): Lessons from the crisis: Minimal elements for a fiscal union in the euro area, published in Designing a European Fiscal Union, edited by Carlo Cottarelli and Martine Guerguil.

Andor, László (2014): Basic European Unemployment Insurance – The best way forward in strengthening the EMU's resilience and Europe's recovery, Intereconomics 49 (4) Forum: 184-189.

Bargain, Olivier, Mathias Dolls, Clemens Fuest, Dirk Neumann, Andreas Peichl, Nico Pestel and Sebastian Siegloch (2013): Fiscal Union in Europe? Redistributive and Stabilizing Effects of a European Tax Benefit System and Fiscal Equalization Mechanism, Economic Policy, July 2013: 375-422.

Bayoumi, Tamim, and Paul R. Masson (1995): Fiscal flows in the United States and Canada: lessons for monetary union in Europe, European Economic Review 39 (2): 253–274.

Belke, Ansgar (2013): Towards a Genuine Economic and Monetary Union – Comments on a Roadmap, ROME Discussion Paper Series, No. 2013-04.

Bordo, Michael D., Agnieszka Markiewicz and Lars Jonung (2013): A Fiscal Union for the Euro: Some Lessons from History, CESifo Economic Studies 59 (3): 449-488.

Buchanan, James M. (1994): Lagged Implementation as an Element in Constitutional Strategy, European Journal of Political Economy 10 (1): 11-26.

Buiter, Willem, Giancarlo Corsetti and Nouriel Roubini (1993): Excessive deficits: Sense and Nonsense in the Treaty of Maastricht, Economic Policy 8 (16): 57-100.

Committee on International Economic Policy and Reform (2013): Revisiting Sovereign Bankruptcy, (Lead Authors: Lee C. Buchheit, Anna Gelpern, Mitu Gulati, Ugo Panizza, Beatrice Weder di Mauro, Jeromin Zettelmeyer), Brookings, October 2013.

Corsetti, Giancarlo, Lars P. Feld, Luis Garicano , Philip R. Lane Lucrezia Reichlin , Helene Rey Dimitri Vayanos and Beatrice Weder di Mauro (2014): The Time is Short and the Need Great: New Institutions and New Policies for a Workable, CEPR- Monitoring the Eurozone, November 2014.

Cottarelli, Carlo (2013): European Fiscal Union: A Vision for the Long Run, Swiss Journal of Economics and Statistics 2013, vol. 149, issue II:167-174.

De Grauwe, Paul (2009): The Economics of Monetary Union, 8th ed., Oxford University Press, New York.

De Grauwe, Paul and Y. Ji (2013): Self-fulfilling crises in the Eurozone: An empirical test, Journal of International Money and Finance 34: 15-36.

Dolls, Mathias, Clemens Fuest and Andreas Peichl (2012): Automatic Stabilizers and Economic Crisis: US vs. Europe, Journal of Public Economics 96 (3): 279-294.

Dolls, Mathias, Clemens Fuest, Dirk Neumann and Andreas Peichl (2013): Fiscal Integration in the Eurozone: Economic Effects of Two Key Scenarios, ZEW Discussion Paper No. 13-106, Mannheim.

Dolls, Mathias, Clemens Fuest, Dirk Neumann and Andreas Peichl (2014): An Unemployment Insurance Scheme for the Euro Area? A Comparison of Different Alternatives using Micro Data, ZEW DP. No. 14-084.

Dullien, Sebastian (2014): A European Unemployment Benefit Scheme. How to provide for more Stability in the Euro Zone, Gütersloh: Bertelsmann-Stiftung.

Dullien, Sebastian and Daniela Schwarzer (2005): The Eurozone under serious pressure - regional economic cycles in the Monetary Union need to be stabilised, SWP Comments 2005/C 22.

Eichengreen, Barry (1990): One money for Europe? Lessons from the US currency union, Economic Policy 5 (10): 117-187.

Eichengreen, Barry and Charles Wyplosz (1998): The Stability Pact: more than a minor nuisance?, Economic Policy 26: 65-113.

Enderlein, Henrik, Peter Bofinger, Laurence Boone, Paul de Grauwe, Jean-Claude Piris, Jean Pisani-Ferry, Maria João Rodrigues, André Sapir and António Vitorino (2012): Completing the Euro: A road map towards fiscal union in Europe, Report of the “Tommaso Padoa-Schioppa Group”, Notre Europe, Studies and Reports 92.

Enderlein, Hendrik, Lucas Guttenberg and Jann Spiess (2013): Blueprint for a cyclical shock insurance in the euro area, Project EU & Differentiated Integration.

Engwerda, Jacob, Bas van Arle and Joseph Plasmans (2002): Cooperative and non-cooperative fiscal stabilisation policies in the EMU, Journal of Economic Dynamics and Control 26 (3): 451–481.

European Commission (2014): The EU’s economic governance explained, Memo/13/979, Brussels, 28 May 2014.

Farber, Henry and Robert Valletta (forthcoming): Do extended unemployment benefits lengthen unemployment spells? Evidence from recent cycles in the U.S. labor market, Journal of Human Resources.

Farhi, Emmanuel and Iván Werning (2014): Fiscal Unions, Working Paper, June 2014.

Fatás, Antonio (1998): Does EMU need a fiscal federation?, Economic Policy 13 (26): 163-203.

Feyrer, James and Bruce Sacerdote (2013): How much would US style fiscal integration buffer European unemployment and income shocks, American Economic Review: Papers & Proceedings 103(3): 125-128.

Fuest, Clemens, Friedrich Heinemann and Christoph Schröder (forthcoming): A Viable Insolvency Procedure for Sovereigns in the Euro Area, Journal of Common Market Studies.

Fuest, Clemens and Andreas Peichl (2012): European fiscal union: What is it? Does it work? And are there really 'no alternatives'? CESifo Forum 13 (1): 03-09.

Furceri, Davide and Aleksandra Zdzienicka (2013): The Euro Area Crisis: Need for a Supranational Fiscal Risk Sharing Mechanism?, IMF Working Paper WP13/198.

Gianviti, Francois, Anne O. Krueger, Jean Pisani-Ferry, André Sapir and Jürgen von Hagen (2010): A European Mechanism for Sovereign Debt Restructuring: A Proposal, Bruegel Blueprint Series, Volume X.

Goyal, Rishi, Petya Koeva Brooks, Mahmood Pradhan, Thierry Tressel, Giovanni Dell'Ariccia, Ross Leckow, Ceyla Pazarbasioglu (2013): A Banking Union for the Euro Area, IMF Staff Discussion Note, SDN/13/01.

Gros, Daniel (2014): A fiscal shock absorber for the Eurozone? Insurance with deductible, Intereconomics 49 (4) Forum: 199-203.

Gros, Daniel and Thomas Mayer (2010): How to deal with sovereign default in Europe: Create the European Monetary Fund now!, CEPS Policy Brief, 202, Centre for European Policy Stud-ies (CEPS).

Hammond, George and Jürgen von Hagen (1998): Regional insurance against asymmetric shocks: An Empirical Study for the European Community, The Manchester School 66 (3): 331-353.

Heinemann, Friedrich, Marc-Daniel Moessinger and Mustafa Yeter (2015): Do Fiscal Rules Constrain Fiscal Policy? A Meta-Regression-Analysis, mimeo, Mannheim.

Hellwig, Martin (2014): Yes Virginia, there is a European banking union!: But it may not make your wishes come true, Preprints of the Max Planck Institute for Research on Collective Goods, No. 2014/12.

Iara, Anna (2015): Revenue for EMU: A contribution to the debate on Fiscal Union, European Commission Taxation Paper: N.54.

Italiener Alexander and Marc Vanheukelen (1993): 'Proposals for community stabilization mechanisms: some historical applications', European Economy: Reports and Studies, 5: 493-510.

Juncker, Jean-Claude (2015a): Preparing for next steps on better economic governance in the Euro Area, Informal European Council Analytical Note, February 2015, in close cooperation with Donald Tusk, Jeroen Dijsselblom and Mario Draghi.

Juncker, Jean-Claude (2015b): Completing Europe's Economic and Monetary Union, Five Presidents' Report, June 2015, in close cooperation with Donald Tusk, Jeroen Dijsselblom, Mario Draghi and Martin Schulz.

Krueger, Anne O. (2002): A New Approach to Sovereign Debt Restructuring, International Monetary Fund (IMF), Washington, DC, April.

MacDougall, Donald et al. (1977): Report of the study group on the role of public finances in European integration, Commission of the European Communities, Volume 1: General Report, Brussels.

Marzinotto, Benedicta, André Sapir and Guntram B. Wolff (2011): What kind of fiscal union?, Bruegel Policy Briefs (6).

Masson, Paul R. (1996): Fiscal dimensions of EMU, The Economic Journal 106 (437): 996-1004.

Mélitz, Jacques and Sylvia Vori (1993): National insurance against unevenly distributed shocks in a European Monetary Union, Recherches Économiques de Louvain (59): 1-2.

Mody, Ashoka (2013): Sovereign Debt and its Restructuring Framework in the Euro Area, Bruegel Working Paper, 2013/05.

Nicholson, Walter, Karen Needels and Heinrich Hock (2014): Unemployment Compensation During the Great Recession: Theory and Evidence, National Tax Journal 67 (1): 187-218.

Persson, Torsten and Guido Tabellini (1996): Federal fiscal constitutions: Risk sharing and moral hazard, Econometrica 64: 623-646.

Rodrigues, Maria João (2013): For a genuine economic and monetary union: lessons from the international experience, Notre Europe - Jaques Delors Institute Policy Paper 88, March 2013.

Sachs, Jeffrey and Xavier Sala-i-Martín (1992): Fiscal federalism and optimum currency areas: evidence from Europe and the United States, in M. Canzoneri, V. Grilli and P. Masson (eds.), Establishing a Central Bank: Issues in Europe and Lessons from The US, Cambridge University Press, Cambridge.

Schuknecht, Ludger, Philippe Moutot, Philipp Rother and Jürgen Stark (2011): The stability and growth pact: crisis and reform, Occasional Paper Series No. 129, European Central Bank 09/2011.

Uhlig, Harald (2003): One money, but many fiscal policies in Europe: what are the conse-quences, in M. Buti (ed.), Monetary and Fiscal Policy in EMU: Interaction and Coordination, Cambridge University Press, Cambridge, 29-64.

Van Rompuy, Herman (2012): Towards a genuine Economic and Monetary Union, Report to the European Council Meeting, December 13-14, 2012, in close collaboration with J.M. Barroso, J.-C. Juncker and M. Draghi.

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