

JUST ROUND THE CORNER? PROS, CONS, AND IMPLEMENTATION ISSUES OF A FISCAL UNION FOR THE EURO AREA¹

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Abstract

The experience of other successful monetary unions and economic theory suggest that the euro area would benefit from the establishment of a supranational fiscal capacity (a fiscal union), to buffer country-specific shocks. The reforms prompted by the crisis (e.g., the European Stability Mechanism and the banking union) are introducing – though to a limited extent – elements of cross-country risk sharing. In particular, the banking union will help smoothing out some of the most relevant asymmetric shocks that can affect the euro area, i.e., the financial crises. Nevertheless, further elements of risk sharing are probably needed. Proposals to create a sort of rainy-day fund for the euro area present major practical difficulties – associated, inter alia, to the uncertainty characterising the identification of shocks in real time. A more appropriate solution, consistent with how risk sharing operates in existing federations – though not without implementation issues – may be centralizing specific public functions. We argue that, among these, consideration should also be given to the creation of a euro-wide, notional-defined contribution pension scheme.

1 Introduction

The sovereign debt crisis taught European policy-makers five main lessons: first, European fiscal rules were backed by weak enforcement mechanisms; second, those rules were in any case insufficient, since they did not consider other macroeconomic imbalances (as it became apparent, private liabilities could quickly turn into public debt); third, the European framework lacked crisis-resolution instruments to deal with sovereign crises (of both the liquidity and solvency type) in an orderly way; fourth, the potential implications of the link between sovereigns and banks in a monetary union had been underestimated; and, fifth, the costs of debt deleveraging and macroeconomic adjustment are exacerbated in a monetary union, if there is no fiscal federal authority and national ones are constrained by insufficient fiscal space.

Some of these lessons were predictable on the basis of well-established economic principles (e.g., Krugman, 2013) and some thorny issues, such as the necessity to complement a monetary union with a fiscal union, were knowingly side-stepped by European policy makers (e.g., Mody, 2013).³ In the end, the crisis prompted serious efforts to address the above-mentioned

¹ The opinions expressed in this paper are the authors' and do not necessarily reflect those of Bank of Italy.

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³ Indeed, a report on the fiscal union (the *MacDougall Report*) was published already in 1977 on behalf of the European Commission. Later on, the technical papers accompanying the 1989 *Delors Report* and especially European Commission (1993a, b) discussed the topic in depth. A mention of the economic desirability of a Community budget is present already in the *Werner Report* (1970). Tommaso Padoa Schioppa, deeply involved in the process leading to the introduction of the euro, was among the first to acknowledge the incompleteness of the European project and the inherent risks generated by politics lagging behind economics in the process of integration. On May 3, 1998, when Europe was completing the last steps before the adoption of the single currency, he wrote in a column for *Corriere della Sera*: "The Union has full competence for microeconomic policy (the opening up of borders, the rules on products and services, the safeguarding of competition), but its capability for macroeconomic policy is, with the exception of the monetary field, embryonic and unbalanced: it can avoid harm (excessive deficits) but it cannot do good (a proper fiscal policy). [...] It is thus right not only to applaud yesterday's step but also to underline its unfinished nature, the risks and the rashness".

shortcomings. Fiscal rules have been strengthened – through the Six-pack, the Two-pack and the Fiscal Compact – and mechanisms for crisis management have been introduced: the European Financial Stabilization Facility (EFSF) first, and the European Stability Mechanism (ESM) later. The Six-pack has also provided a new surveillance tool to monitor and correct imbalances other than the fiscal ones, *i.e.* the macroeconomic imbalances procedure (MIP). In addition, the creation of a banking union was devised as a means to sever the link between banks and sovereigns.

Much work is still needed to refine the new tools introduced by these tightly sequenced reforms. The management of sovereign insolvency crises remains somewhat unstructured compared to the detailed procedures defined for dealing with liquidity crises through the ESM. The banking union project needs completing, even though important steps have been taken (preparatory work for the single supervisory mechanism to be up and running in November 2014 is proceeding rapidly and on schedule; an agreement for the constitution of the single resolution mechanism has recently been reached among the Council, the Commission and the European Parliament; and a directive has been approved that harmonizes all the relevant features of national deposit insurance schemes). The effectiveness of the MIP remains to be tested.

Most importantly, little progress has been made in the way of defining stabilization mechanisms which can supplement national budgets.

The need to remedy the asymmetry of a single monetary policy and multiple national budgets was recognized in reports released in 2012 by the European Commission and by the President of the European Council.⁴ Both reports envisaged the creation of a fiscal capacity for the economic and monetary union (EMU) to support member states in the absorption of shocks and the possibility of financing the implementation of selected reforms in individual member states through pooled resources under contractual agreements between the institutions of the Union and the country concerned. However, discussion of a subsequent proposal by the European Commission in March 2013 to implement such contractual agreements lead to no constructive result.⁵ Since then, the official debate on a fiscal union for EMU has been at a stand-still.

Against this background, this paper reviews the economic rationale for a fiscal union in EMU (Section 2) and the lessons learned from other successful federal countries (Section 3). It then summarizes the “official” proposals put forward in the debate (Section 4), examines existing risk-sharing mechanisms in the euro area (Section 5) and discusses the possible ways to implement a fiscal union in Europe (Section 6). Section 7 concludes.

While we are aware that in the short and medium term some form of shared fiscal responsibility may be useful to facilitate economic convergence and even the success of governance reforms already enacted,⁶ the focus of the paper is on long-run institutional design.

2 The economics (and politics) of fiscal union

Economists have discussed the costs and benefits of membership of a monetary union since the three seminal papers by Mundell (1961), Mc Kinnon (1963) and Kenen (1969). The main intuition behind the so-called theory of optimum currency areas (OCA) is that, once the exchange

⁴ The EC *Blueprint for a Deep and Genuine Economic and Monetary Union* was published in November 2012. The report *Towards a Genuine Economic and Monetary Union* was presented in June 2012 and updated the following December by the President of the European Council, working closely with the Presidents of the European Commission, the Eurogroup and the ECB.

⁵ *Towards a Deep and Genuine Economic and Monetary Union: The Introduction of a Convergence and Competitiveness Instrument*, Communication from the Commission to the European Parliament and the Council COM(2013) 165 final.

⁶ This was the case of the single resolution mechanism, a keystone in the architecture of the banking union, for which a mutualisation of resources has been agreed.

rate is irrevocably fixed, nation-specific shocks to aggregate demand induce current account imbalances that – to the extent that domestic prices are sticky – translate into lengthy and painful internal deflation which cannot be addressed by the area-wide monetary policy. This implies that the expected net benefits of a monetary union are higher:

- a) if each member economy produces a quite similar and well-diversified mix of products (so that sizable asymmetric demand shocks are rare),
- b) if domestic wages are flexible and cross-country labour mobility is high (so that asymmetric demand shocks do not translate into prolonged deflation and unemployment),
- c) if member economies are open to international trade, and
- d) if labour market institutions are similar (so that symmetric supply shocks do not have different impacts in different countries).⁷

Kenen (1969) was the first to point out that a shared fiscal policy could reduce the costs of being a member of a monetary union.⁸ He argued that the operation of area-wide automatic fiscal stabilizers would allow to re-establish equilibrium while limiting the necessary reduction (increase) in domestic prices and wages in a countries affected by an adverse (positive) asymmetric demand shock. This mechanism would be particularly desirable in the euro area as its member states display less cross-country labour mobility compared to the US and other established federations (Obstfeld and Peri, 1999) and may be relatively more likely to be hit by asymmetric shocks (Bayoumi and Eichengreen, 1992).

Kenen's (1969) argument is subject to three main economic objections:

- 1) *Member states' fiscal policies could be, in principle sufficient to absorb the effects of cyclical fluctuations.* In a context like the euro area, in which member states run sizable budgets, there is obviously a strong case to leave most of the stabilization function to the automatic stabilizers inbuilt in these budgets. Indeed, it seems fair to acknowledge that the EU budgetary framework grants enough fiscal room for manoeuvre to countries which enter a "normal" downturn with deficits near to their medium-term objectives and debts close to 60 per cent of GDP. However, economies in a monetary union are more integrated than stand-alone countries. This magnifies spillovers and reduces the effectiveness of national fiscal reactions. As remarked by Oates (1972), "Small local economies are in general highly open economies (...). This implies that the leakages from a marginal dollar of private spending are likely to be quite large. As a result, in a simple Keynesian system, the expenditure multiplier is likely to be quite small".⁹ Coordination of national fiscal policies could be an alternative way to internalize cross-country spillovers, but it is subject to the delays and the difficulties inherent in international negotiations.
- 2) *Financial markets could provide insurance against national income fluctuations analogous to that provided by a fiscal union.* Indeed, well-developed financial markets could be used by citizens of a country hit by an adverse economic to smooth consumption *ex post*, borrowing from citizens of countries which have not been hit by the shock. More importantly, financial markets provide *ex ante* income insurance: holding foreign assets, citizens of each member country can build a portfolio whose returns are inversely correlated with economic conditions in

⁷ For a survey of the OCA literature, see Mongelli (2005) and Dellas and Tavlas (2009).

⁸ Of course, the importance of area-wide automatic stabilizers would be greatest in the case of adverse shocks, given that prices and wages are more likely to be rigid downward than upward.

⁹ This concern induced Oates (1972) and others to advocate the centralization of the "stabilization function" of the public sector; it has become a cornerstone of the theory of fiscal federalism (see, e.g., Musgrave and Musgrave, 1973) and it was echoed in the European Commission's MacDougall report (1977). Oates (1972) also advocated the centralization of the "distributive function", as he feared that interstate mobility would make income redistribution at the sub-central level impossible. The size of fiscal policy spillovers in the euro area has been assessed in several papers (Cwik and Wieland, 2011, Beetsma *et al.*, 2006, Auerbach and Gorodnichenko, 2013).

their own country. The extent to which it is possible to insure against country-specific shocks using financial markets is an empirical matter: it appears that this risk-sharing channel is more developed in the US than in Europe (Sorensen and Yosha, 1998), where there is still a pronounced national segmentation. Moreover, this channel for risk-sharing might not be easily accessible to low-income households. Finally, Fahri and Wening (2013) have recently argued that, even with perfect financial markets, economic agents tend to under-insure, because they neglect the aggregate-demand externalities inherent in their choices.¹⁰

- 3) *The introduction of the single currency itself may increase the synchronization of business cycles across member states and the degree of flexibility and competitiveness of the internal market, thanks to the elimination of the exchange rate risk and the reduction of transaction costs* (Frankel and Rose, 1998). The architects of the EMU relied on this virtuous cycle: the single currency would have fostered the single market, and the enhanced trade integration would have led to more correlated business cycles, therefore reducing the costs of the currency union.

Besides economic concerns, there are at least two political-economy objections to complementing a monetary union with a fiscal union. The first, and more obvious, is the moral hazard issue intrinsic to any form of insurance (Persson and Tabellini, 1996a and 1996b). For example, if countries could count on supranational instruments to reduce the cost of unemployment, they would have less incentives to pursue policies which might reduce unemployment risk to start with, especially if such policies entailed significant political costs. The second objection highlights the existing cultural differences between the citizens of the member countries. Indeed, it has been shown theoretically (Algan *et al.*, 2011) and empirically (Camussi *et al.*, 2013) that social insurance schemes require a sufficient amount of trust among members. Currently, this common trust seems to be lacking in the European context (for example, Guiso *et al.*, 2013, report survey evidence that the majority of Germans were consistently against financial aid to Greece, and at the same time most Greeks have an unfavourable view of Germany). On the other hand, proponents of a European fiscal union could respond that belonging to the same welfare system may also foster a sense of trust among the European people. The relationship might go both ways. As Delors himself puts it in one of the papers accompanying his 1989 *Report*: "...federal budgetary mechanisms (...) are both the product and the source of the sense of national solidarity which all the relevant economic and monetary unions have" (Delors, 1989).

3 The size of federal automatic stabilizers in successful fiscal unions

While economic theory identifies the main trade-offs involved in the decision to complement a monetary union with a supranational fiscal capacity, and therefore it is helpful to frame the discussion about a possible fiscal union for the euro area, theory alone cannot say whether such a fiscal union is desirable, let alone determine its optimal scope and size. In this section we try to cast more light on these questions, considering the amount of fiscal risk-sharing prevailing in established federations.

Starting from Asdrubali *et al.* (1996), the literature on risk-sharing in federal countries has focused on three main channels. First, each state can smooth country-specific income shocks if it holds an internationally well-diversified portfolio of assets (in other words, Gross National Product should be less volatile than GDP), or, second, if it benefits from transfers from other states or from higher levels of government. Thirdly, for a given shock to GNP net of international transfers,

¹⁰ Basically, by making their income less volatile, each economic agent contributes to make aggregate-demand less volatile as well, which entails benefits for other agents as well.

disposable income and consumption might be smoothed out by reducing private and/or state savings.

What is mainly relevant for our discussion is the fraction of risk-sharing obtained through the federal budget – currently close to zero for the euro area. Concerning the US, there is a consensus that 10-15 per cent of individual states income variability is offset by the federal fiscal system (von Hagen, 1992; Asdrubali *et al.*, 1996; Melitz and Zumer, 1999 and 2002). Similar results are found for Canada (Melitz and Zumer, 1999 and 2002; Obstfeld and Peri, 1998) and other federal countries.

The findings suggest that the absence of a “federal” budget puts euro area countries at a disadvantage compared to US states when faced with asymmetric adverse shocks.

However, it should be pointed out that most of the risk-sharing among, for example, the US states, is achieved through other channels, in particular through a cross-holdings of assets: as a significant amount of the portfolio of households and firms of (say) Georgia is invested in stocks and bonds of firms in (say) Montana, an asymmetric shock to Georgia’s GDP translates less than one-to-one into a shock to Georgia’s GNP. Indeed, the income of people in Georgia partly depends on dividends and capital gains earned elsewhere in the country. On the contrary, European investors display a much more pronounced “home bias” – a problem which has been exacerbated by the recent crisis.

Overall, this implies that pursuing a more complete financial market integration of the euro area could be important also to provide a risk-sharing mechanism, which can compensate, at least in part, for the lack of fiscal stabilizers at the area level.

4 A fiscal union for the euro area: the official debate

The official debate on a fiscal union for EMU started in mid-2012, when the European Council invited its President “to develop, in close collaboration with the President of the Commission, the President of the Eurogroup and the President of the ECB, a specific and time-bound road map for the achievement of a genuine Economic and Monetary Union”. Official proposals put forward since have converged – though with differences in emphasis – on the following:

- 1) a fiscal capacity is necessary for the EMU to increase its ability to absorb asymmetric shocks;
- 2) practical considerations suggest that a microeconomic approach, supported, for instance, by unemployment benefits, is preferable over a macroeconomic one, grounded on rule-based transfers from a common pool of resources accrued to a “rainy-day fund”;
- 3) the related increase in solidarity should be accompanied by adequate safeguards against moral hazard (for the most part already introduced with the reform of European governance, though some further strengthening of surveillance and coordination mechanisms may be needed);
- 4) a fiscal union for the euro area is a medium- to long-run project, not something to be implemented to help countries out of the current crisis.

Manifest controversy concerns the possibility to accompany such risk-sharing arrangement by some form of redistribution through permanent transfers. Equally controversial is the possible extension of the common fiscal capacity to cover common shocks and to finance euro-wide investment projects. In its 2012 *Blueprint*, the European Commission acknowledges that “EMU is facing a fundamental challenge, in particular as regards the euro area, and needs to be strengthened to ensure economic and social welfare for the future”. The Commission argues that “a comprehensive vision for a deep and genuine EMU conducive to a strong and stable architecture in the financial, fiscal, economic and political domains, underpinning stability and prosperity is

necessary”; and concludes that “such an EMU should also be underpinned by an autonomous and sufficient fiscal capacity that allows the policy choices resulting from the coordination process to be effectively supported” (p. 9).

The *Blueprint* proposes a phased approach to strengthening the EMU and developing its fiscal capacity. The first step (in the short term, within the next 6-18 months) would be “the establishment of a financial instrument within the EU budget to support re-balancing, adjustment and thereby growth of the economies of the EMU” (p. 12). The Commission argues that this is needed because addressing the consequences of excessive public and private debt accumulation “is proving a long and difficult task, involving constraints in the credit supply, stretching public finances, and weak growth in the private sector as firms and households clean their balance sheets” (p. 14).

In the medium term (18 months to 5 years), a proper fiscal capacity for the EMU should be established to support the implementation of the policy choices resulting from deeper policy coordination, in particular in the field of taxation and employment. Finally, in the long term (beyond 5 years), “based on the progressive pooling of sovereignty and thus responsibility as well as solidarity competencies to the European level, the establishment of an autonomous euro area budget providing for a fiscal capacity for the EMU to support Member States in the absorption of shocks should become possible” (p. 12).

As when EMU was designed (see footnote 3), for reasons of political feasibility, the *Blueprint* sets the creation of a federal budget as a long-term objective. In the immediacy, relief for distressed member states would be sought by means of contractual arrangements, whereby financial support is provided to individual countries for the implementation of selected reforms (those deemed relevant also by European institutions) and in exchange for precise obligations concerning both their scope and timeline, so as to limit moral hazard.

A similar approach is taken in the December 2012 Report by the President of the European Council. Setting up “a mechanism for stronger coordination, convergence and enforcement of structural policies based on arrangements of a contractual nature between member states and EU institutions [backed by] temporary, targeted and flexible financial support” (p. 4) is recommended in the short term, before end-2014 or in “Stage 2”, according to the terminology adopted in the *Report*. “[E]stablishing a well-defined and limited fiscal capacity to improve the absorption of country specific economic shocks, through an insurance system set up at the central level” (p. 5) is seen as a goal for the longer term.

In the same document, the rationale for introducing fiscal risk-sharing is clearly spelled out: “In a common currency area, the burden of adjusting to country-specific economic shocks falls on labour and capital mobility, price and cost flexibility, and fiscal policy. In order to protect against negative fiscal externalities, it is important that fiscal risks are shared where economic adjustment mechanisms to country-specific shocks are less than perfect. This is clearly the case in the euro area, where labour mobility is comparatively low, capital flows are susceptible to sudden swings that can undermine financial stability, and structural rigidities can delay or impede price adjustments and the reallocation of resources. In such cases, countries can easily find themselves pushed into bad equilibria with negative implications for the euro area as a whole” (p. 10).

At the same time, concerns over moral hazard are voiced more explicitly compared to the Commission’s *Blueprint*: fiscal risk-sharing “needs to be complemented with a mechanism to induce stronger economic convergence, based on structural policies aiming at improving the adjustment capacity of national economies and avoiding the risk of moral hazard inherent to any insurance system. Hence, in addition to fulfilling their intrinsic purpose, successfully implementing reforms specified in a contractual arrangement could also serve as a criterion for participating in the asymmetric shock absorption function” (p.10).

The *Report* also sets out to describe the two broad approaches that could be followed in designing the shock absorption arrangements. “The first would be a macroeconomic approach, where contributions and disbursements would be based on fluctuations in cyclical revenue and expenditure items, or on measures of economic activity. 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. In this case, the level of contributions/benefits from/to the fiscal capacity would depend directly on labour market developments. In this scenario, the fiscal capacity would then work as a complement or partial substitute to national unemployment insurance systems. Transfers could, for example, be limited to cyclical unemployment by covering only short term unemployment” (p. 11).

The *Report* is adamant in denying any redistributive role for the common fiscal capacity: “...elements of fiscal risk-sharing related to the absorption of country-specific shocks should be structured in such a way that they do not lead to unidirectional and permanent transfers between countries, nor should they be conceived as income equalisation tools. Over time, each euro area country, as it moves along its economic cycle, would in turn be a net recipient and a net contributor of the scheme” (p. 12).

A recent IMF Staff Discussion Note (Allard *et al.*, 2013) argues along similar lines. Four elements are identified as essential for a successful fiscal union: first, better oversight and stronger incentives for sound national fiscal policies; second, and subject to the above, some system of temporary transfers or joint provision of common public goods or services to increase fiscal risk-sharing; third, credible pan-euro area backstops for the banking sector to help break the sovereign-banking link; fourth, some form of common borrowing (backed by common revenue) to provide a safe asset and reduce the potential for large portfolio shifts between sovereigns.

Fiscal risk-sharing is thus firmly set in the context of the wider reform process undertaken in the euro area, featuring as an additional building block for the reform of economic governance and the banking union. Diverging from the Report of the President of the Council and more aligned with the Commission’s *Blueprint*, the IMF *Staff Note* puts significant weight on the issue of common borrowing.¹¹

The options for fiscal risk-sharing considered include a “rainy-day fund” which, financed by contributions paid by all member states, would pay out transfers to countries experiencing negative shocks as well as shifting a minimum level of provision of unemployment benefits at the euro-area level. The two are examples, respectively, of the macroeconomic and microeconomic approach to fiscal risk sharing identified in the *Report* of the President of the Council. Much as in the Commission’s *Blueprint*, due to political constraints, the adoption of a fully-fledged common budget for the EMU is seen as a long-term possibility only.

Different from the *Report* of the President of the Council and from the Commission’s *Blueprint*, the IMF *Staff Note* also discusses practical challenges in implementing fiscal risk-sharing in either forms. For the macroeconomic scheme, the main obstacle “would be to correctly detect the events warranting the activation of the insurance scheme, and hence transfer payments. While technical methods exist to identify negative growth shocks, they are not free of errors and complex to implement in real time, making it hard to disentangle temporary from permanent shocks, and exogenous shocks from policy shocks. The parameters of intervention could also be

¹¹ The Note underscores how dealing with the existing debt overhang involves a delicate act of balancing to avoid both triggering debt-deflation dynamics and reducing the incentives to restore competitiveness by “selling insurance after the fact”. As a possible compromise, the *Note* suggests the possibility “to transform part of the sovereign debt where it is excessive to common debt – in the sense that euro area entities would hold the debt – against a commitment from participating countries to repay that debt over time, and conditional on fiscal medium-term plans and structural reforms” (p. 27), and refers to the Debt Redemption Fund proposal put forward by the German Council of Economic Experts (Doluca *et al.*, 2012) as an option. A similar reference can be found in the Commission’s *Blueprint*, not in the *Report* of the President of the Council.

hard to communicate to the public, raising challenging issues of transparency and accountability” (p. 20). For the microeconomic scheme, the main difficulty is identified in the need to distinguish between short and long term unemployment: “given the wide variation in long-term unemployment levels across the euro area [...] providing insurance against long term unemployment from the center would immediately give rise to permanent transfers from low-unemployment level regions to high-unemployment regions. This would be akin to redistribution, and not risk sharing, and could provide disincentives to reform labor markets in recipient countries” (p. 20).

Much as the Report by the President of the Council also the IMF Staff Note makes an effort to exclude a redistributive role for the common fiscal capacity. It provides arguments and evidence to the effect that, if risk-sharing is properly implemented, financial costs would not systematically fall on those countries with a stronger tradition of fiscal prudence: “ex ante risk-sharing only means that, at any point in time, countries experiencing better cyclical conditions support those at the other end of the spectrum; it does not mean the same country is always on the giving or receiving end. Our analysis shows that, with a risk-sharing mechanism in place over a sufficiently long period, all current euro area members would have benefited from transfers at some point in time” (p. 5).

Moral hazard is again a major concern: “as with any insurance scheme – that is, without any conditionality – “free-riding” would remain a risk, especially if the scheme ends up delivering more permanent transfers than warranted: countries could be less inclined to build fiscal buffers at the national level or implement difficult adjustment measures, knowing that ultimately, the rainy-day fund would provide support” (p. 20).

The IMF *Staff Note* stresses that the proposed fiscal risk-sharing is an instrument for future crises, it does not address the existing debt overhang. It underscores that in the current situation, relying entirely on country-adjustment could trigger debt-deflation dynamics, dragging the entire region into a period of prolonged stagnation. But it stops short of making explicit proposals for the short term, except for stressing the importance of setting up a sound common fiscal backstop for the upcoming banking union.

A recent paper by French Treasury Staff (Caudal *et al.*, 2013) argues that the crisis has “brought home the need for a currency area to have a permanent stabilisation mechanism capable, in particular, of dealing with asymmetric shocks” and that “this mechanism could take the form of a common budget for the euro area, with significant resources” (p. 1). The paper is openly critical of the solutions based on a rainy-day fund, pointing out their practical problems. Compared to the proposals discussed above, the paper takes a slightly different view about the timeline for implementing this common budget. It recognizes that it should be a medium-term project and that it calls for further steps in the direction of political integration, but it does not push it forward into an indefinite future by blaming political constraints.

The French paper does not limit the function of the common budget to the absorption of asymmetric macroeconomic shocks. On the one hand, “the function of a public backstop at European level within the framework of the banking union could also depend ultimately on the euro area budget. This would have the advantage of being especially credible as a backstop, since its capacity is not limited in advance” (p. 6). On the other hand, “giving the euro area budget discretionary powers to intervene on top of the automatic stabilisers would considerably reinforce its capacity to stabilise the economy in the event of severe shocks. Giving the budget a capacity to provide fiscal stimulus in the event of a simultaneous contraction of activity in all euro area member states would complete the action of monetary policy, thus instituting a more comprehensive policy mix in the euro area. This would be especially useful when the contraction is so great that monetary policy comes up against its interest rate constraint. [...] Moreover, over and

beyond its fiscal stimulus function, one could envisage authorising a limited structural deficit, for example in order to finance investments” (p. 8).

The paper acknowledges the difficulty of designing the counter-cyclical stabilising function of a euro-area central budget in such a way that no permanent redistribution is involved. “The assumption of a neutral budget on average for each member state is a very bold one. It would no doubt be hard to design a budget resulting in only temporary transfers for all member states as a whole, unless one were to opt for a mechanism with complex rules” (p. 11).

More importantly, the paper provides a justification for such permanent transfers to occur. It remarks that “given the highly heterogeneous structure of the individual member states’ economies, and the existence of potential agglomeration effects within currency areas leading to the concentration of activity at the area’s core at the expense of peripheral states, some regions could experience greater and more recurring difficulties than others. It could therefore be justifiable, in economic terms, for these peripheral regions to benefit from the common budget more frequently. In practice, the extent of these transfers will depend on the nature and procedures for the execution of central budget expenditures; these could be calibrated in such a way as to increase or minimise them” (p. 11).

This is not to say that the issue of moral hazard is overlooked in the analysis. The possibility of durable transfers goes hand in hand with the need for strengthened mutual surveillance and stronger governance in order to avoid encouraging free-riding. The paper points out that economic and fiscal governance in the euro area has already been significantly strengthened, but concedes that “the creation of a euro area budget, reflecting greater solidarity between member states, could ultimately justify a further strengthening of European economic governance, subject to the democratic legitimacy of the arrangement” (p. 11).

The position of the French paper echoes the resolution adopted by the European Parliament on November 20, 2012 on the *Interim Report* by the President of the European Council. Indeed, the Parliament “is of the opinion that a ‘genuine EMU’ cannot be limited to a system of rules but requires an increased budgetary capacity based on specific own-resources (including a financial transaction tax) which should, in the framework of the Union budget, support growth and social cohesion addressing imbalances, structural divergences and financial emergencies which are directly connected to the monetary union, without undermining its traditional functions to finance common policies”.¹²

5 Prodromes of a fiscal union for the euro area

Before discussing proposals for a fully-fledged fiscal union, it must be acknowledged that the ESM and the banking union, once fully established, provide for a non-negligible degree of shock absorption at the supranational level, therefore complementing the stabilizing role of national fiscal policies.

5.1 The ESM

The ESM is a permanent mechanism providing financial support to countries in (potential) distress. It was created in 2011, following in the steps of the European Financial Stability Facility (EFSF), a temporary mechanism with the same function which was set up a year before.

Three elements make the ESM a starting block of a common fiscal capacity: 1) the possibility for the ESM to provide stability support also on a precautionary basis; 2) the possibility

¹² Resolution P7_TA(2012)0430, 20.11.2012, Par. 11.

to raise funds by issuing financial instruments (or by entering into other financial obligations) mutually guaranteed by member states, even if only up to the capital committed by each of them, 3) the (not yet operational) possibility to directly recapitalize banks.

At the same time, there are limits to the analogy between the ESM and a fiscal union: 1) ESM financial assistance is not automatic: it is provided to requesting countries subject to strict conditions and to a preliminary debt sustainability analysis; for countries whose debt is deemed unsustainable, a debt-restructuring plan would have to be negotiated with private creditors; these features can strongly reduce moral hazard but also limit the extent of possible stabilization; 2) the lending capacity of the ESM is strictly constrained by the amount of its capital (paid-in and callable) that was agreed upon when it was set-up ; 3) if ESM assistance is not provided on a precautionary basis, it risks being systematically late, providing support when the social and economic costs of a crisis have already turned substantial.

5.2 *The banking union*

The crisis made patent to what extent a country's public finances and stability of the financial sector are interrelated. Losses incurred by the banking sector (for example, as a result of a financial bubble bursting) can be a drag on public finances to the extent that governments, frightened by the systemic consequences of banks' distress, bail-out financial institutions. Symmetrically, an increased in (perceived) sovereign risk can generate tensions for banks, weakening their balance sheets and compromising their access to private funding, to the extent that banks display a bias toward holding bonds of their own sovereign.

The ongoing implementation of a banking union marks an important progress in the architecture of the EMU. This change chiefly aims at: (a) breaking the link between sovereigns and banks and curbing the probability of future systemic banking crisis, and (b) avoiding the fragmentation of financial markets along national borders, also by providing clear and comparable information on the state of European banks' health, thus limiting the risk of abrupt reversal of capital market flows (see Beck, 2012; Goyal *et al.*, 2013; Visco, 2013; and Draghi, 2014).

As argued by Rey (2013), a well-designed banking union will help in smoothing out some of the most relevant asymmetric shocks that can affect the euro area, given also the relevance of its banking sector relative to other areas (e.g. the USA).

The banking union has three key components: a single supervisory mechanism (SSM), a single bank resolution mechanism (SRM) and harmonized deposit insurance schemes. Priority has been given to the construction of the first component, the SSM, comprising the ECB and the national supervisory authorities. Its launch is scheduled in November 2014. Preparatory work is proceeding on schedule, and a comprehensive assessment of the soundness of the banks that will fall under the direct supervision of the SSM is currently under way.

An agreement on the SRM was reached by the European Council in December 2013 and amended and finalized with the European Parliament and the Commission in March 2014. Moreover, the recent *Bank Recovery and Resolution Directive* harmonizes heterogeneous national practices, rules and tools for bank crisis management. It lays down a number of preventive measures, including the bail-in of bank creditors which must take place before any access to public funds is granted. Concerning the third component of the banking union, a directive has been approved that standardizes all relevant features of national deposit guarantee schemes.

A well-functioning supranational resolution mechanism requires a common, stable and sizable pool of resources for several reasons.¹³ First, the costs of bank failures at the supranational level cannot be charged to national governments. Second, the resolution of failing banks will be more effective and smoother for the central supervisory and resolution authorities if resources are available at the central level, without the need to negotiate operations with national governments. Third, independence and credibility of the single supervisor and the single resolution authority are reinforced by the establishment of a common fiscal backstop, as this reduces the possibility of regulatory capture by national governments and steadies expectations about the adequacy of available resources in times of systemic stress.

According to the recent agreement, a Single Resolution Fund will be established to which all banks in the participating member states would contribute. The Fund has a target level of €55 billion and will be able to borrow from the markets. Its resources will have to reach at least 1 per cent of covered deposits over an 8-year period. During the transition, the Fund will comprise national compartments corresponding to each participating member state. The resources accumulated in those compartments would progressively be mutualised within 8 years, starting with 40 per cent of these resources in the first year.¹⁴

The agreement reached includes a commitment to allow the Fund to borrow from the market. The loans should be repaid by future contributions from the banking sector itself. In principle, there is no limit to the ability of the SRF to borrow. However, during a financial crisis such ability could prove insufficient, as markets may not be willing to lend.¹⁵

If the exclusion of a common fiscal backstop to the SRF is eventually confirmed in the final legislation, then the agreement would represent a step back compared to the explicit reference in the December 2013 agreement to a common fiscal backstop. The latter, given the limited resources of the SRF, would have been instrumental to address the concerns expressed by Draghi (2014) that “if markets cannot ascertain *ex ante* how resolution will be financed, and in what quantities, they may find themselves having to price-in a residual risk of national government involvement, thus perpetuating the bank-sovereign nexus”.

6 Implementing a fiscal union for the euro area

Regardless of the elements of a fiscal union that are already present, even if not explicit, in the ESM and in the banking union, the inherent limitations of these institutions as risk-sharing tools, in particular in addressing real shocks at an early stage, may call for an additional shock absorber at the euro area level.

In designing this additional element, two options are available (Allard *et al.*, 2013). In the first, very theoretical option, insurance against country-specific income shocks would be provided, on the basis of an *ex ante* formula, by transfers from the euro area budget to the government suffering from the shocks. In the alternative case, insurance would be provided implicitly by the cyclical characteristics of the euro area budget. For example, as revenues are counter-cyclical, while expenditures are a-cyclical or counter-cyclical (as in the case of unemployment benefits) this

¹³ Indeed, all the existing federations, at least during the current crisis, have kept the responsibility of resolution and deposit insurance at federal level with substantial support from the public finances (cf. Allard *et al.*, 2013).

¹⁴ The Fund would be owned and administrated by a Single Resolution Board which will include permanent members as well as the Commission, the Council, the ECB and the national resolution authorities. Based on a notification by the ECB concerning the presence of a failing bank, the Board will assess whether there is a systemic threat and any private sector solution; otherwise it will adopt a resolution scheme including the relevant resolution tools and any use of the Fund.

¹⁵ This argument has been clearly made by the commentary “Resolution most foul” to the SRM agreement published by Eurointelligence on March 21st, 2014 (<http://www.eurointelligence.com>).

implies that the country hit by the shock would be a net beneficiary, drawing from the common pool of resources an amount larger than its contribution to it. This second mechanism is the standard stabilization tool in existing federations, generally complemented by discretionary transfers.

6.1 *Rainy-day funds and temporary cross-country transfers*

Rainy-day funds would reallocate resources inter-temporally but also across participants in different positions along the economic cycle. The idea is quite simple: member states at the top of the cycle would contribute to the fund whereas transfers would be granted to those at the bottom.¹⁶ Permanent transfers from one region to the other would be avoided: in the long-term there should be neither net recipients nor net contributors.

One of the main problems of such a mechanism consists in the identification of a country's position in the economic cycle and consequently in the measure of the net contributions each member state will have to pay in a given period. Reference is often made to estimates of the output gap, which however have proved to be quite fragile in real time. Caudal *et al.* (2013) clearly show this point by highlighting the differences between real-time estimates and *ex post* evaluations of the output gap, which do not only concern the magnitude of the estimated gaps but also their sign. In these conditions, one could find out *ex post* that those who were net recipients based on real-time estimates should have been net contributors instead.

The allocation of net contributions could also be based on differences between the actual unemployment rate and a measure of structural unemployment (Artus *et al.*, 2013). In this case, net contributions would be computed as a percentage¹⁷ of the aggregate payroll multiplied by the gap between actual and structural unemployment rates. It must be noted that the problem of the cyclical position of an economy is in this case simply shifted from estimating the output gap to determining the structural unemployment.¹⁸ Moreover, the support would reach the country with a substantial delay, summing the lags with which employment reacts to the shock to those with which this reaction is recorded by official statistics and the rainy-day funds allocated.

In order for the stabilisation fund to properly function in case of negative symmetric shocks as well, its size and possibly its ability to borrow would be crucial. Concerning the size, a recent estimate by the IMF indicates in 1.5 to 2.5 per cent of GNP the annual contributions required by each euro area member state so as to achieve a level of overall income stabilization comparable to the one commonly observed in existing federations. Sufficiently large contributions would allow the accumulation of resources in good times, providing for proper intertemporal smoothing also in case of large common shocks. As for the ability to borrow, a stable and guaranteed flow of revenues (for instance, a dedicated tax stream) would provide a means to ensure a high rating and a low cost of funding.

The presence of any common stabilization fund carries with it a moral hazard problem, given the difficulties in identifying idiosyncratic shocks and the consequent possible delivering of permanent transfers. Imposing an *ex post* conditionality would, however, contrast the very nature of a stabilization fund, thus the free-riding problem should be addressed, as much as possible, *ex ante*. Strengthening fiscal rules and improving coordination in the policy making process are then

¹⁶ A recent proposal, which highlights the advantages of providing for a deductible in the design of the scheme, is in Gros (2014).

¹⁷ Such percentage should be set as a fraction of the current average replacement rate provided by unemployment insurance schemes in member states.

¹⁸ For a discussion of the debate on the concept, measurement, underlying determinants and policy relevance of the structural rate of unemployment, see Richardson *et al.* (2000). It may also be noted that national differences (affecting inter alia the extent of discouragement effects) may hamper the use of the actual unemployment rate as a cyclical indicator.

important tools. Conditioning the access to the implementation of agreed structural reforms (along the lines suggested in the Report of the President of the Council and discussed in Section 4) could also be considered.

6.2 Unemployment benefits

Unemployment insurance has been another widely debated solution for organizing temporary transfers among countries hit by idiosyncratic shocks. Both the funding of unemployment benefits and their use in the short term are indeed highly correlated with the economic cycle. The development of a common unemployment scheme would thus, at least in part, overcome the problem of identifying the position along the economic cycle, which is one of the drawbacks of rainy-day funds. Moreover, risk sharing would directly concern individuals (with transfers provided to those hit by exogenous shocks and contributions paid in proportion to salaries), rather than being managed at the aggregate (country) level.

In this case too, however, the risk of a time lag between the economic crisis and the fiscal response is present. Indeed, unemployment tends to react with some delay to economic downturns, depending also on labour market characteristics (e.g., employment labour protection legislation, wage bargaining arrangements, the relative weights of temporary and permanent contracts, etc.; see IMF, 2010). In addition, this mechanism would smooth out the impact of a negative shock only for those who have access to unemployment benefits, leaving the remaining part of the population out in the cold.

A centralized unemployment scheme, in terms of funding and benefit provisions as well as a harmonized legal framework, is a feature common to some, but not all federations. Interestingly, in the US unemployment schemes are basically decentralized at the state level, even though the federal government usually supplements the system with discretionary transfers during severe downturns.¹⁹

The realization of a European unemployment scheme would require the harmonization of labour market legislation at least partially across the euro area, leading to a stronger integration of the single market. This would be a good thing in itself, but is not an easy task, given the highly heterogeneous level of employment protection (Table 1).²⁰

The common scheme could be set up at the level of the least generous system for short-term unemployment currently present in the euro area (Table 2),²¹ leaving it to member states whether to provide any integrations. Taking the least generous system as a minimum reference point could facilitate a political agreement on the characteristics of the common mechanism.

Alternatively, federal resources could kick in only in particular circumstances and add to state programmes: for instance, additional benefits could be provided (or the time-span over which benefits are granted extended) only where unemployment exceeds a given threshold. Once the parameters are set, the insurance would operate automatically, with less room for political bargaining among participating countries.

In both the alternatives just discussed, it seems likely that the amount of resources channelled to a country by the common unemployment benefit system would not be large, even in

¹⁹ See Allard *et al.*, 2013.

²⁰ For a comparison between labour market conditions across euro area countries, see Wolff (2012).

²¹ According to OECD data, net replacement rates in euro area countries for the initial phase of unemployment (that is a proxy for short-term unemployment) varied between 20 and more than 90 per cent in 2011.

the case of a sizeable asymmetric shock. This limit is compounded by the consideration that such schemes always exclude workers entering the labour market for the first time.

It seems difficult to design a system that fully excludes redistribution between countries. Treatment of long-term unemployment, which is likely to be more dependent on structural weaknesses and thus endogenous to national policy choices, should be left at national level. Otherwise, the common system would provide permanent net transfers to those regions characterized by higher structural unemployment, with the risk of discouraging reforms.²²

Table 1

OECD indicators on Employment Protection Legislation 2013¹

Country	Protection of Permanent Workers Against Individual and Collective Dismissals	Protection of Permanent Workers Against (Individual) Dismissal	Specific Requirements for Collective Dismissal	Regulation on Temporary Forms of Employment
Austria	2.44	2.12	3.25	2.17
Belgium	2.95	2.08	5.13	2.42
Estonia	2.07	1.74	2.88	3.04
Finland	2.17	2.38	1.63	1.88
France	2.82	2.60	3.38	3.75
Germany	2.98	2.72	3.63	1.75
Greece	2.41	2.07	3.25	2.92
Ireland	2.07	1.50	3.50	1.21
Italy	2.79	2.41	3.75	2.71
Luxembourg	2.74	2.28	3.88	3.83
Netherlands	2.94	2.84	3.19	1.17
Portugal	2.69	3.01	1.88	2.33
Slovakia	2.26	1.81	3.38	2.42
Slovenia	2.67	2.39	3.38	2.50
Spain	2.28	1.95	3.13	3.17
Latvia	2.91	2.57	3.75	1.79

(1) Data refer to 1 January 2013. Scale from 0 (least restrictions) to 6 (most restrictions).

Source: *OECD Employment Protection Database*, 2013 Update.

²² This could be in part overcome by conditioning participation in the common (short-term) unemployment benefit scheme to the implementation of a European employment contract containing those elements deemed necessary for a more functional labour market (Artus *et al.*, 2013).

Table 2

Net Replacement Rates for Single Earner, 2011: Initial Phase of Unemployment¹
(available euro-area countries)

Country	Not Qualify for Cash Housing or Social Assistance “Top Ups” ²						Qualify for Cash Housing or Social Assistance “Top Ups” ³					
	67% of AW		100% of AW		150% of AW		67% of AW		100% of AW		150% of AW	
	No child.	2 child.	No child.	2 child.	No child.	2 child.	No child.	2 child.	No child.	2 child.	No child.	2 child.
Austria	55	71	55	68	45	54	55	83	55	68	45	54
Belgium	85	85	63	67	47	52	85	85	63	67	47	52
Estonia	55	63	54	60	53	58	55	63	54	60	53	58
Finland	57	73	53	66	46	57	64	85	54	74	46	60
France	69	67	66	67	69	68	69	67	66	67	69	68
Germany	59	72	59	70	57	65	59	79	59	70	57	65
Greece	49	55	35	39	24	28	49	55	35	39	24	28
Ireland	50	64	36	63	28	52	73	65	53	64	41	53
Italy	68	76	55	68	40	53	70	75	57	69	42	54
Luxembourg	83	89	85	92	77	80	83	90	85	92	77	80
Netherlands	76	71	75	71	58	57	76	76	75	77	58	57
Portugal	75	77	75	77	75	77	75	77	75	77	75	77
Slovakia	62	72	65	93	67	87	62	72	65	93	67	87
Slovenia	85	85	76	86	54	65	85	91	76	88	54	68
Spain	79	77	58	73	40	51	79	77	58	73	40	51
Latvia	86	76	87	80	78	74	86	76	87	80	78	74
Malta	39	63	28	48	20	34	51	66	39	53	28	38

(1) Initial phase of unemployment but following any waiting period. Any income taxes payable on unemployment benefits are determined in relation to annualised benefit values (*i.e.*, monthly values multiplied by 12) even if the maximum benefit duration is shorter than 12 months. Where receipt of social assistance or other minimum-income benefits is subject to activity tests (such as active job-search or being “available” for work), these requirements are assumed to be met. Children are aged four and six and neither childcare benefits nor childcare costs are considered.

(2) After tax and including unemployment benefits and family benefits. No social assistance “top-ups” or cash housing benefits are assumed to be available in either the in-work or out-of-work situation.

(3) After tax and including unemployment and family benefits. Social assistance and other means-tested benefits are assumed to be available, subject to relevant income conditions. Housing costs are assumed equal to 20 per cent of AW.

Source: OECD, *Tax-Benefit Models* (last revised 06/12/2013); www.oecd.org/els/social/workincentives

6.3 A contribution to the debate: a centralized NDC pension scheme for the euro area

Even though federations tend to have a single unified, centrally-funded public pension system (IMF, 2013), to our knowledge the centralization of (part of) the pension system has not been proposed, either in the official or in the academic debate on the fiscal union for the euro area during the crisis. This is all the more surprising in view of the fact that an authoritative proposal for a coordinated pension system in Europe had been put forth before the crisis (Holzmann, 2006).²³ This neglect may be related to the lengthy transition associated with any changes to such systems.²⁴ However, since there is a wide consensus that the fiscal union is a long-term project, this should not warrant the outright exclusion of pensions from the toolkit.

²³ Marin (2006) notes that Holzmann’s is “not the first, but probably the most encompassing treatment so far of the proposition to design NDC-type institutions to promote the emergence of an all-European pension system” (p. 274). It may be noted that the Holzmann’s proposal envisages a European coordinated system of NDCs, while here we discuss a centralized euro-area scheme.

²⁴ And, indeed, centralization may imply significant changes in national rules across EMU countries.

A common pension system would strengthen the euro-area ability to achieve macroeconomic stabilization in case of symmetric shocks. Stabilization achieved through a unified pension system would not be negligible. If the size of the system were limited to that of the countries where the first-pillar public scheme provides only a basic support (being heavily complemented by occupational schemes or mandatory private pensions), the revenue and expenditure involved would be of the order of 5 per cent of GDP. Allowing an exception for these (few) countries, the size of the centralized scheme would amount to 7 per cent of GDP (Table 3).²⁵

Most of the stabilizing power of public budgets comes from their size, as revenue are cyclical while expenditure are largely insensitive to the cycle. Centralizing the pension system would imply shifting to the euro-area level between 1/8 (if the first alternative mentioned above is adopted) and 1/6 of national budgets and a corresponding quota of the associated automatic stabilizers. This is still small compared to other federations (the share ranges between 34 and 61 per cent in the sample surveyed in IMF, 2013).

A standard analysis to gauge the stabilizing capacity of the public sector follows two steps and refers to a balanced shock to all private components of GDP. In the first step, the automatic reactions of revenue and cyclical expenditure (in general, unemployment benefits) to such shock is computed (in the reference scenario all budgetary components remain constant). In the second step, short-term fiscal multipliers are applied to these cyclical reactions. In our case, assuming an elasticity of 1 with respect to GDP for social contributions and a fiscal multiplier of 1/3²⁶, the stabilizing effect of the reformed euro-area budget would be of the order of 2 per cent of the shock, against an estimate of around 17 per cent, on average,²⁷ for national budgets in the euro area.

Besides enhancing fiscal risk sharing, a unified, centrally-funded public pension system for the euro area would have a number of advantages.

First, it would eliminate an obstacle to labour mobility across countries in the area, thereby increasing the system's efficiency and its ability to cope with shocks. The comparatively low labour mobility is probably the most important factor hampering adjustment to shocks within the euro area. According to Holzman (2006), "one important mechanism to support a common currency and adjustments after shocks is a pension system that does not lock persons into sectors and countries, but instead supports full labour mobility across professions and states – a requirement that is far from reality in the European Union. In many European countries, different pension rules for public and private sector workers impede mobility between the sectors. Mobility between states exists notionally for public schemes (less in reality), but full portability for corporate and voluntary funded systems is still under construction. As a result, the European Union does not have a coordinated – and even less a harmonized – pension system, which characterizes other economically integrated areas under a common currency (such as Australia, Brazil, Canada, Switzerland, and the United States). These federations or confederations exhibit many differences at state or provincial levels (including income taxes or short-term social benefits), but they have one thing in common – a public retirement income scheme across states." (p. 240).

Second, centralizing the pension system would imply large economies of scale in terms of management of financial flows and of data storage and processing, while the size of the staff in the new pension institution would be limited compared to other functions: European citizens would

²⁵ These values can be seen as upper bounds, as they include also elements of social assistance, which are extraneous to a NDC scheme.

²⁶ This estimate, in line with that used by Caudal *et al.* (2013), is also consistent with estimates for revenue items in Jerome *et al.* (2004) for the euro area countries and with an overall fiscal multiplier close to 0,5 – as found by IMF (2010) using a sample of advanced economies from 1980 till 2009 - taking into account that most empirical evidence indicates that short term expenditure multipliers are higher than revenue ones.

²⁷ Caudal *et al.* (2013) obtain this estimate by assuming revenue multipliers equal to 1/3 and expenditure multipliers equal to 1.

still largely interact with their national institutions. Notwithstanding this, the reform may lead to significant improvements, in some countries, in terms of transparency and communication to the public by setting minimum/uniform standards.

Third, the establishment of a common pension system may also reduce uncertainty concerning fiscal sustainability in specific countries and the capacity of the respective national institution to fulfil pension commitments.²⁸

Fourth, this reform could also reduce mistrust across European citizens concerning fiscal behaviour in other countries, thereby lessening opposition to solidarity mechanisms among member states (on this point, see also the remarks by Jacques Delors reported at the end of Section 2). Indeed, at the height of the crisis, a number of articles pointed out that a main concern in Germany was the too generous pension system in Greece.²⁹

Fifth, contrary to unemployment insurance, it would be relatively easy to design the system so that no redistribution between States is involved, using an actuarially fair Notional Defined Contribution (NDC) System.³⁰ Actually, a properly design NDC system guarantees that no redistribution takes place not only across countries, but also across and within generations. Indeed, for each cohort in each country the internal rate of return of the system would depend on the growth of the wage bill recorded during its own working years in the country, and on its own life expectancy. This rate of return would be the same for every individual in the cohort.

Finally, a NDC system presents a number of additional advantages with respect to alternative arrangements. It guarantees financial stability *vis-à-vis* economic and demographic shocks. As it is actuarially fair, it minimizes distortions in the labour market (*i.e.*, it reduces the incentive to early retirement). As an NDC pension scheme can be implemented by crediting workers' contributions in personal accounts resembling standard banking accounts, it is also easy to understand and contributes to broadening pension literacy.

While entailing the many potential benefits described above, the establishment of a common pension system is a challenging endeavour, in view of the variety of pension arrangements now existing in euro area countries. It will also require a number of crucial decisions concerning the design of the system and its implementation, in particular with respect to its phasing in.³¹ Here we only discuss some aspects, to open the debate on the best features of the new system.

As already mentioned, it may indeed be reasonable to design such reform so that it would produce its effects very gradually, considering also that workers close to retirement are unable to adjust to sudden changes to the pension rules. A possible solution is to apply the new system to contributions paid after a certain date, for example that of the approval of the reform. As happened

²⁸ According to a survey, only 22 per cent of young Italians expected, in 2007, to receive any public pensions at the time of their retirement (*Repubblica*, April 26, 2007):

http://www.repubblica.it/2007/04/sezioni/scuola_e_universita/servizi/giovani-pensioni/giovani-pensioni/giovani-pensioni.html

²⁹ The article "Greece's Generous Pensions. What Makes Germans So Very Cross About Greece?", *Economist* web site, Feb 23, 2010, made exactly this point: "IT IS the pensions, stupid. That, I am coming to conclude, is the cause of the real venom being expressed towards Greece in places like Germany. It is not just that German politicians and newspaper commentators are really cross about the idea of bailing out the profligate Greek government. It is striking how often their annoyance is expressed in angry comparisons of the Greek and German retirement pension rules." See also *Der Spiegel*, May 18, 2011:

<http://www.spiegel.de/international/europe/german-chancellor-on-the-offensive-merkel-blasts-greece-over-retirement-age-vacation-a-763294.html>

³⁰ Differences in growth between countries could be taken into account by allowing for rates of return to be linked to the national origin of contributions. An analysis of notional defined contribution (NDC) pension schemes can be found in Palmer (2006).

³¹ It would be probably appropriate to establish a group of experts, with the mandate to present a proposal to the Eurogroup. In discussing how a pan-European pension system would come about, Holzman (2006) conjectures, in its concluding remarks, that such scheme "at some moment in the future [will be] espoused by a charismatic European politician as reform champion. Perhaps this will happen after the first main asymmetric shock hits Euroland".

in Italy following the 1995 reform introducing a NDC system, two systems to compute benefits would coexist for several decades: the old one, with reference to contributions paid until the selected date, and the new one, with reference to the contributions paid afterwards.

It may also be reasonable that the new euro area pension institution be given responsibility only over the new system. For a long period, social contributions paid would largely exceed benefits; during this period, it may be reasonable that national budgets would continue to record contributions paid in, transferring to the new institution only the amount sufficient to match the payments due.³²

Table 5

Public Expenditures on Old-age and Survivors' Benefits

Country	Public Expenditure on Cash Benefits for Old-age and Survivors									Total inc. Non-cash (percent of GDP)
	Level (percent of GDP)					Change	Level (percent of total government spending)		Level in Net Terms (percent of GDP)	
	1990	1995	2000	2005	2009 ¹		1990	2009 ¹		
Austria	11.4	12.3	12.2	12.4	13.5	18.3%	22.1	25.5	11.8	14.0
Belgium	9.1	9.3	8.9	9.0	10.0	10.2%	17.4	18.7	8.9	10.2
Czech Republic	5.8	6.1	7.2	7.0	8.3	42.9%		18.5	8.3	8.6
Denmark	5.1	6.2	5.3	5.4	6.1	19.3%	9.2	10.5	4.5	8.2
Estonia			6.0	5.3	7.9			17.6	7.8	8.1
Finland	7.3	8.8	7.6	8.4	9.9	36.3%	15.1	17.7	8.3	11.1
France	10.6	12.0	11.8	12.4	13.7	29.2%	21.4	24.2	12.8	14.1
Germany	9.7	10.5	11.1	11.4	11.3	15.7%		23.4	10.9	11.3
Greece	9.9	9.7	10.8	11.8	13.0	31.2%		24.2	13.0	13.2
Hungary			7.6	8.5	9.9			19.4	9.9	10.5
Ireland	4.9	4.3	3.1	3.4	5.1	5.2%	11.5	10.5	4.8	5.6
Italy	10.1	11.3	13.5	13.9	15.4	53.3%	19.1	29.8	13.5	15.6
Luxembourg	8.2	8.8	7.5	7.2	7.7	-6.1%	21.6	17.8	6.9	7.7
Netherlands	6.7	5.8	5.0	5.0	5.1	-23.9%	12.2	9.9	4.7	6.1
Norway	5.6	5.5	4.8	4.8	5.4	-5.2%		11.5	4.4	7.4
Poland	5.1	9.4	10.5	11.4	11.8	129.1%		26.4	10.8	11.8
Portugal	4.9	7.2	7.9	10.3	12.3	151.9%		24.8	11.6	12.5
Slovak Republic		6.3	6.3	6.2	7.0			16.9	7.0	7.4
Slovenia			10.5	9.9	10.9			22.1	10.9	11.0
Spain	7.9	9.0	8.6	8.1	9.3	17.3%		20.1	9.0	9.9
Sweden	7.7	8.2	7.2	7.6	8.2	6.8%		15.0	6.2	10.8
United Kingdom	4.8	5.4	5.3	5.6	6.2	28.1%	11.6	12.1	5.9	6.8
OECD	6.1	6.7	6.9	7.0	7.8	27.0%		16.6	7.3	8.3

Note: See Adema, W. and M. Ladaique (2009), "How Expensive is the Welfare State? Gross and Net Indicators in the OECD Social Expenditure Database (SOCX)", OECD Social, Employment and Migration Working Paper, No. 92, OECD Publishing, Paris, <http://dx.doi.org/10.1787/220615515052> for more details on the data, sources and methodology.

Source: OECD Social Expenditures Database (SOCX) ; OECD Main Economic Indicators Database.

³² Moreover, national budgets may permanently include the flows pertaining to the country specific component of the pension scheme.

7 Final remarks

The EU has been called by some commentators a “half-built house” (Begsten, 2012; Spolaore, 2013) and the problems of being in mid-stream are constantly stressed both by those who advocate more integration and by sceptics who think that integration has gone too far.

The architects of the monetary union were fully aware of its unfinished nature. The need to complement the single currency with a federal budget was stressed already in the ‘70s, during the early discussion of the project. The fiscal union never came because the political conditions were not there. Too much sovereignty was to be forgiven, for too deep were the changes needed to fundamental laws and institutions in individual countries.

Nowadays, official reports once again explicitly talk of a fiscal and political union as the cornerstone of a “deep and genuine economic and monetary union”. Yet it is a long-term endeavour. It is not just the depth and technical complexity of the reform, it is once again a matter of political conditions.

In existing federations, the central government is usually in charge of providing public goods such as defence, foreign affairs, the judiciary, and part of police activity. Economic theory and actual practice also support assigning distribution and stabilization functions to the federal government.

For the euro area, this would be technically a titanic effort. It would require the harmonization (or, better, the integral redrafting) of most existing laws at the national level. It’s not just about the rules of the game for cooperation among states, it is really about the daily lives of European citizens: employment protection, pensions, the social safety net, the rule of law, even education and perhaps health. Politically, it would be a quantum leap, requiring both a powerful and determined leadership and a widespread electoral support. Most of all, the move to a fiscal and political union would require a deep sense of trust among (the people of) individual nations.

But trust is the currency which was worst hit by the crisis. It shows in the ground gained by euro-sceptics in national political arenas as well as in the constant reference to moral hazard in the debate on the reform of European economic governance. Cross-country solidarity is unlikely to be achieved unless it is pursued through a transparent, broad and democratic debate, possibly strengthening the role of the European Parliament (Trichet, 2013; Habermas, 2013).

Difficulties in designing a fully-fledged fiscal union are compounded by legacy issues: the need to address in the short and medium term large public and private debts as well as structural weaknesses in some economic systems raises additional problems which we do not address in this paper.

A less ambitious approach is probably the only possible response to this state of affairs. We agree with Draghi (2012) that “those who claim that only a full federation would be sustainable set the bar too high”, and that instead one should focus on the “minimum requirements to complete the economic and monetary union”. But this recognition should not lead to a strategy of “setting up incomplete and inefficient arrangements, relying of the overoptimistic expectation that such inefficiencies can always be address at a later stage” (Spolaore, 2013).

We think that a rainy-day fund would be one of such inefficient and incomplete arrangements. A euro-wide unemployment benefit can be a step in the right direction provided that the inevitable degree of cross-country redistribution that it will bring about is clearly acknowledged and accepted. The technical challenges associated with it – mostly related to the diversity in employment protection legislation and unemployment benefits regulation and financing across member states – should not be underestimated.

In this paper we suggest a further, but very circumscribed and arguably efficiency-enhancing step in the direction of “more union”: a euro-wide first-pillar pension system based on notional defined contributions. This would entail no cross-country permanent redistribution while building up a buffer for automatic stabilization in the face of asymmetric shocks. It would also favour labour mobility.

We acknowledge that the design of the system (and of its lengthy phase-in) presents significant challenges. Nevertheless, the current juncture could offer a window of opportunity for bold reforms, as US history suggests. In that country, the Great Depression spurred the most significant shift in the fiscal balance of power between the Federal government and the individual states. It has been computed (Wallis, 1984; Wallis and Inman, 2003) that at the beginning of the ‘30s about 70 per cent of government expenditures in the US pertained to the sub-federal level, while in 1940 this share dropped to slightly above 50 per cent, with overall government spending remaining almost unchanged.

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