

The missing pieces of the euro architecture

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Executive summary

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THIS POLICY CONTRIBUTION describes the institutional flaws of the single currency revealed by the euro crisis and the institutional reforms that were put in place during and in the aftermath the crisis, and evaluates the remaining fragilities of the architecture of the European monetary union.

IN ORDER TO ACHIEVE A MORE RESILIENT MONETARY UNION in Europe, we propose: 1) to form a 'financing union' through the completion of the banking union and the promotion of an ambitious capital markets union to provide private risk sharing between the countries of the monetary union; and 2) to improve the defective macroeconomic policy framework to avoid a repeat of the mistakes of recent years.

THE LATTER INVOLVES: reforming the European Stability Mechanism / Outright Monetary Transactions framework to clarify its functions and improve its governance system, reforming the European fiscal rules to make them more effective to achieve the two desirable objectives of sustainability and stabilisation, and creating a small-scale euro-area stabilisation tool to provide public risk sharing in case of significant shocks that members of the monetary union cannot deal with alone and to help manage the euro-area aggregate fiscal stance. A promising option to carry out these tasks would be to establish a European Unemployment Insurance Scheme.

TO ENSURE THE DEMOCRATIC LEGITIMACY of this overhauled euro-area governance framework, a European Fiscal Governing Council composed of six executive board members – including a euro-area finance minister – and of the finance ministers of the euro-area countries, would oversee the whole system and exercise the necessary discretion, while being accountable to the European Parliament in euro-area format.

1 Introduction

Europe offers a unique example of economic and political integration of sovereign nations. This integration movement took a significant step forward at the beginning of the 1990s with the decision to share sovereignty over the issuance of a common currency and the conduct of monetary policy. The economic consequences of forming a monetary union are substantial¹, so Europe's institutional architecture had to adapt significantly and its economic governance had to be radically overhauled.

Good economic governance is defined by a set of institutions and economic policies (fiscal, monetary, financial) that: 1) prevent the build-up of imbalances at macroeconomic, financial and fiscal levels, and 2) minimise the cost and disruption caused by crises to the greatest extent possible.

The single currency's economic governance framework, as set out in the Maastricht Treaty, was the result of diverse – and sometimes antagonistic – views and tough negotiations between the countries that founded the monetary union. Maastricht specified the main objective as ensuring prosperity through the promotion of price stability and balanced growth, while leaving some leeway at the national level in terms of fiscal choices (trying at the same time to avoid moral hazard and foster fiscal discipline as much as possible) and in terms of banking regulation and supervision. However, the global financial crisis that started in the United States in 2007 and worsened in 2008 affected Europe very quickly and resulted in a first recession in 2009-10. The crisis then morphed into a European crisis that revealed the defects of the original euro architecture and resulted in a second recession in 2012². The Maastricht economic governance framework was plagued with institutional flaws that during the first years of the monetary union were hidden behind unsustainable booms in the union's periphery. The booms were mistaken at the time for a convergence in living standards. In reality, significant imbalances with housing bubbles and unsustainable current account surpluses and deficits were built up, leading in the end to economic divergence between the countries of the monetary union.

The euro area lacked the tools to prevent these imbalances from occurring (eg strict and uniform banking supervision) and instruments to manage and solve the crisis once these imbalances started unravelling. In the absence of an exchange rate stabiliser or autonomous monetary policy at the country level, other powerful adjustment mechanisms could have helped countries to absorb asymmetric shocks: labour mobility³, capital integration or a federal budget. The euro area lacked these three elements and thus entered the global financial crisis as an incomplete monetary union that was far from being an optimal currency area.

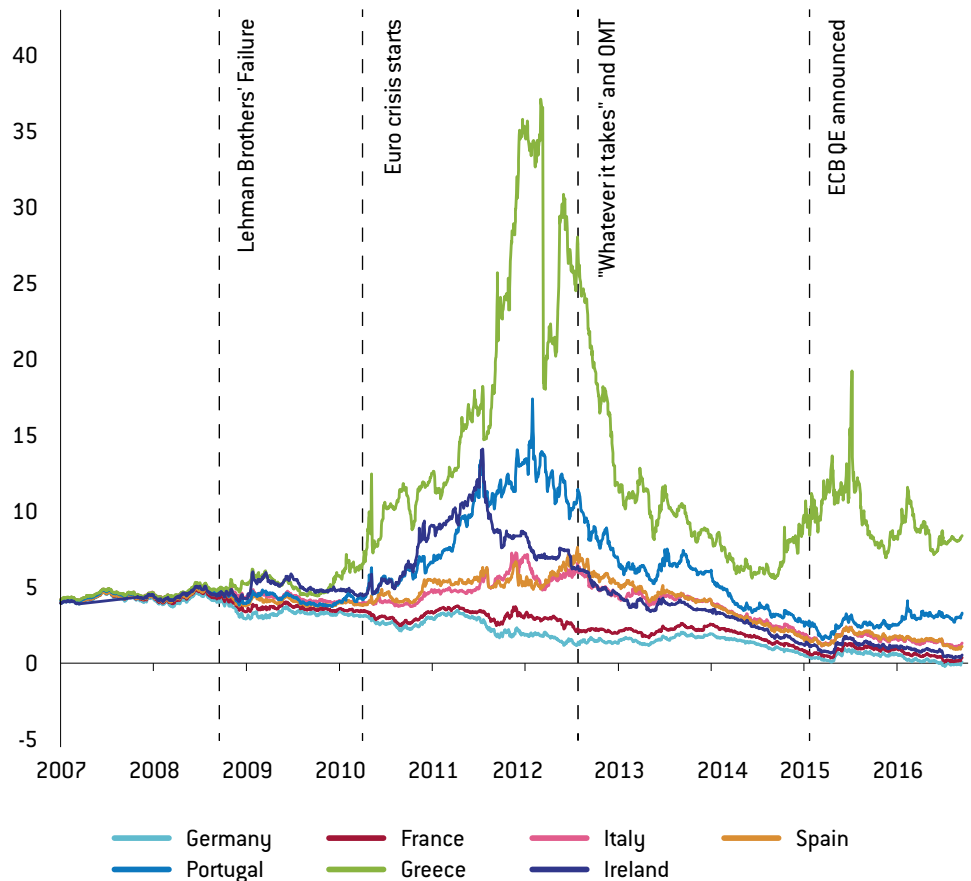
In addition, the members of the monetary union entered the crisis without a central bank willing to play the role of lender of last resort in the sovereign debt market. At a time when deficits and debt-to-GDP ratios were rising quickly because of massive bank bailouts, lower tax revenues because of the recession and bursting bubbles, and higher social expenditures because of huge increases in unemployment, sovereign debts were left vulnerable to self-fulfilling crises. As a consequence, the most-affected countries lost market access or had to pay high interest rates (Figure 1) and thus were not able to use national fiscal policy as a macro-economic stabilisation tool as much as necessary, as had been envisaged in the Maastricht

The members of the monetary union entered the crisis without a central bank willing to play the role of lender of last resort in the sovereign debt market.

- 1 Looking at the benefits and costs of forming a monetary union is beyond the scope of this paper but interested readers can look at the Optimal Currency Area (OCA) literature developed in the 1960s, notably by Mundell (1961), McKinnon (1963) and Kenen (1969), and the more recent literature assessing the impact of the euro on trade or FDI between countries of the monetary union (for instance Santos Silva and Tenreyro, 2010).
- 2 See Claeys (2017) for a more extensive account of the euro crisis.
- 3 Even though it has increased since the 1990s (and ever more during the crisis), labour mobility between EU countries is still relatively low compared to the US. In 2006, in the US, between 2 percent and 2.5 percent of the population moved from one state to another, while only 0.1 percent to 0.2 percent of EU15 residents moved to another EU15 country (Bonin *et al*, 2008).

governance framework, leaving monetary policy as the only available tool. However, because there was no consensus on what the European Central Bank was allowed to do in such an unforeseen crisis (as a lender of last resort for sovereigns, and also in terms of unconventional policies), monetary policy in the euro area was often behind the curve or even going in the wrong direction (as in 2011). Even since the ECB has started playing its role fully – after 2012 with its outright monetary transactions (OMT) programme and after 2015 with its quantitative easing (QE) programme – macroeconomic policies have remained suboptimal because the euro-area aggregate policy mix relies too much on monetary policy while it is constrained by the zero lower bound.

Figure 1: European sovereign yields, 2007-16 (%)



Source: Bruegel based on Bloomberg.

In 2012, three major institutional developments marked a turning point in the unfolding of the crisis.

Several crisis management tools that were previously missing were introduced to put an end to the crisis in the euro area's government debt markets. In 2012, three major institutional developments marked a turning point in the unfolding of the crisis: the establishment of the European Stability Mechanism (ESM), the ECB's announcement of its OMT programme and the decision to create a European banking union. In addition, surveillance tools were set up to prevent the build-up of imbalances in the future. The combination of these institutional innovations finally brought to a halt the crisis that almost ended the euro experiment.

Since 2013, the euro area has been slowly recovering, taking 10 years to return to its GDP level of 2007. In the wake of this lost decade, growth is picking up and becoming more broad-based, and unemployment is falling. It is a good time to reflect on the future of the European institutions and to build a more permanent setup than that put in place in the heat of the crisis.

This paper thus assesses the institutional reforms that were put in place during and after the crisis and evaluates the remaining fragilities of the Economic and Monetary Union (EMU)

architecture in order to make proposals for a coherent economic governance framework to make Europe's monetary union more resilient. As we will see, there are still key pieces missing to prevent crises and absorb shocks in the euro area. First, the link between sovereigns and banks is not yet totally severed, as the banking union is not yet complete. Second, risk sharing is still minimal: there is not much private risk sharing through capital markets, through the banking union or public risk sharing through fiscal policies. And finally, macroeconomic stabilisation remains too limited, especially at the zero lower bound, as the current framework is too reliant on unconventional monetary policies from the ECB and not enough on fiscal policy. We argue that these key issues can be resolved by forming a 'financial union' consisting of a completed banking union and a capital markets union (section 2) and by improving the macroeconomic policy framework (section 3).

2 Forming a 'financial union'

2.1 Completing the banking union

To be stable and resilient, the monetary union needs a well-functioning and safe banking sector. In addition, the link between banks and sovereigns must be broken. Fears over the situation of the European banking sector and potential implications for sovereigns (and vice versa) played a major role during the crisis, in particular from 2010 to 2012. Weak banks weigh on sovereign interest rates if markets believe that the government will have to rescue ailing banks, which in turn will increase the default probability of the sovereign. In return, a weak sovereign threatens the solvency of its domestic banks if the banks hold large amounts of domestic sovereign debt, or if they benefit from an implicit state guarantee that the government might not be able to honour if the state of its public finances does not allow it. The combination of the two leads to a negative feedback loop dubbed the 'sovereign-bank doom loop' during the euro crisis (Gerlach *et al.*, 2010).

In order to definitively short-circuit this 'doom loop', European leaders decided in June 2012 to create a banking union, which would rest on two pillars.

The first is the centralisation of bank supervision under the ECB through the Single Supervisory Mechanism (SSM)⁴. The main idea is to provide uniform and strengthened banking oversight in order to make bank failures less likely, on the basis that national authorities tend to be more complacent with domestic banks than with supranational banks because of 'banking nationalism' (Véron, 2015). Banking regulation would also be applied more strictly in order to address more quickly banks' capital shortfalls, to force banks to deal with non-performing loans (NPLs) or even to close zombie banks that could hamper the economic recovery. Transferring bank oversight from national authorities to the ECB was a first step to break the link between banks and sovereigns, but some countries also considered it a prerequisite for any further steps that might involve financial risk-sharing. By reducing drastically the possibility for governments to exert financial repression on their banking sectors, the setup of a central European supervisor might change the incentives of banks and push them to diversify their holdings of government bonds (which should also allow them to exert market discipline), thereby reducing the channels through which a sovereign debt crisis can morph into a banking crisis.

The second pillar of banking union is bank resolution. The aim of the Single Resolution Mechanism (SRM) is to have consistent resolution across European countries in order to

⁴ Since 4 November 2014, the ECB is the single licensing authority for all banks in the euro area, directly supervises 129 significant banks (broadly speaking the largest and most-relevant, based on criteria set by the SSM Regulation) and oversees the supervision by national supervisors of more than 3000 less significant institutions.

The banking union is still far from being complete. Two critical pieces are still missing.

reduce cross-country coordination failures, make bank resolutions more effective and better enforce the common rules⁵ than in a purely national framework. The overarching goal is to make creditor participation in bank resolution ('bail-in') the rule, leaving public sector support ('bail-out') to extraordinary occasions, thereby reducing the sovereign-bank link and the cost of potential banking crises for taxpayers. Furthermore, such a policy, if it is consistent and rigorously implemented, might also change banks' behaviour by limiting unwarranted risk-taking and bail-out expectations, thereby reducing the risk of failures in the first place. In that sense, the banking union's objective was to help put an end to the euro crisis, but also to offer a solution to prevent future banking crises in Europe. In addition, given that public support cannot always be totally excluded either for a bank recapitalisation or to top-up national deposit guarantee funds, it is essential to set up common funds – a Single Resolution Fund (SRF) and a European deposit insurance scheme (EDIS) – to spread the costs across the banking union area, in order to avoid a revival of the bank-sovereign vicious circle at the national level.

Where do we stand at the end of 2017? The establishment of a banking union has already made progress on these two fronts. A 'single rulebook' for the financial sector has been created. The bail-in rule is in place and has already shown on several occasions that it is a workable option to solve non-trivial banking problems. As far as common supervision is concerned, even if all problems in the European banking sector have not yet been solved and the reduction in NPLs is still slow in some countries, early assessments – such as Schoenmaker and Véron (2016) – suggest that the Single Supervisory Mechanism has generally improved the quality of bank oversight in Europe. Supervision appears to be independent from governments, uniform across the banking-union area, tougher and more intrusive than it was before, while being relatively fair (at least for significant banks directly supervised by the SSM).

However, the banking union is still far from being complete. Two critical pieces are still missing. The first is the European deposit insurance scheme (EDIS) that has not, at time of writing, been set up⁶. In general, a deposit guarantee provides trust in bank deposits if it is considered credible by depositors, thereby reducing bank funding costs and the probability of bank runs, and thus enhancing financial stability (Diamond and Dybvig, 1983). As summarised by Wolff (2016), there are three main reasons why the deposit insurance system should be pooled at the European level. The first is size: the more banks covered, the better an insurance scheme works. Second, centralised supervision is inconsistent with a decentralised deposit guarantee system. Without an EDIS, national deposit insurance schemes, and ultimately national taxpayers, could have to foot the bill for problems that could potentially result from inappropriate European supervision, therefore providing misaligned incentives for adequate supervision. Third, decoupling banks from sovereigns, the main objective of banking union, requires a single European deposit insurance scheme, as otherwise confidence in the banks (and their financing costs) would depend on the solvency of the government of their country of origin, and vice-versa given that national budgets would remain the only back-stop for national deposit insurance schemes. The continuation of national deposit insurance would therefore perpetuate the highly destabilising bank-sovereign vicious circle in the euro area, whereas a European deposit insurance scheme would increase financial stability and improve crisis management.

The second missing piece to complete the banking union relates to the Single Resolution Mechanism (SRM), a system that is less robust than the other parts of the banking union and in particular than the SSM. First, compared to the centralised SSM, the SRM's complex decision-making process could lead to protracted and politicised processes, which would be detrimental to the quality of the decisions taken (Véron, 2015). A simpler and more central-

5 The process is now governed by the EU Bank Recovery and Resolution Directive (BRRD).

6 The European Commission made a proposal in November 2015, but negotiations between EU countries are not making progress at the time of writing.

In a systemic crisis involving significant banking institutions, financing needs could exceed the pre-financed limited resources of the SRF.

ised resolution process – more similar to that at the US Federal Deposit Insurance Corporation (FDIC) – might therefore be more effective. Second, even though their probability can be reduced by strict regulation and supervision, systemic banking crises cannot be completely ruled out. In these cases, the need for public sector support cannot be fully excluded, even if strong bail-in rules are in place. If the domestic government finances the support, banking woes could spread to the sovereign, thus reviving the ‘doom loop’. In contrast, if a common fund steps in, the costs would be shared and the risk of banking troubles spreading to domestic public finances would be reduced. For this reason, a Single Resolution Fund (SRF), pre-funded gradually by bank levies to reach €55 billion by 2024, was created alongside the SRM to achieve adequate risk sharing in the banking union area. However, in a systemic crisis involving significant banking institutions, financing needs could exceed the pre-financed limited resources of the SRF. It is thus crucial for the credibility of the scheme that the common fund can benefit from a fiscal backstop based on centralised resources and not on national resources. In other jurisdictions, such as the United States, deposit insurance funds typically have access to a credit line from the government (Gros and Schoenmaker, 2014). Therefore, European finance ministers committed at the end of 2013 to provide a common fiscal backstop to the SRF in future extreme situations⁷. However, the practical features of this backstop remain ambiguous and have not been formalised since then. This should be a priority. One possibility would be to use the ESM as a common fiscal backstop for the SRF, and also for EDIS once it is set up, by offering them a credit line (as the US Treasury does for the FDIC), as advocated by, among others, Schoenmaker and Wolff (2015). In addition, the conditions under which the ESM can participate directly in the recapitalisation of a bank – which could provide in theory another very powerful avenue to deal with problematic banks without impacting the sovereign – are so restrictive (limited amount, participation in an ESM adjustment programme, higher bail-in level) that this option can hardly be used in practice. The option to use the ESM in that way should be simplified and also extended to precautionary recapitalisations, as recommended by Véron (2017).

The issue of the legitimacy and accountability of the common fiscal backstop should also be addressed. The institution in charge of the backstop should have the legal and political authority to authorise the use of the funds. The lack of a truly accountable executive power at European level is a problem of the single currency. It could be sensible to create an institution that could represent both the interests of the member states and of the Union as a whole (similarly to what is done in the ECB Governing Council). The decision to use the fiscal backstop would then be the responsibility of this institution (see section 3.4 for more discussion of this).

Finally, other essential elements should also be pursued to improve the functioning of the banking union. The harmonisation of bank insolvency legislation in EU countries (through an EU directive) and tighter state-aid rules at the European level would help reduce bailout expectations. The domestic home bias in sovereign bond holdings (as well as other assets for that matter) is still very much a reality, and centralised supervision by itself might not be sufficient to put an end to it, so regulatory incentives such as exposure limits might be necessary for the diversification of portfolios to happen⁸. Diversification of the assets of European banks could also take place through cross-border bank mergers and acquisitions, which should be encouraged as they would help cushion asymmetric shocks and avoid financial fragmentation.

⁷ See the ‘Statement of Eurogroup and ECOFIN Ministers on the SRM Backstop’ of 18 December 2013, available at <http://www.consilium.europa.eu/press/press-releases/2013/12/pdf/Statement-of-Eurogroup-and-ECOFIN-Ministers-on-the-SRM-backstop/>. This commitment was reaffirmed at the ECOFIN meeting of 17 June 2016. See http://www.consilium.europa.eu/en/meetings/ecofin/2016/06/st10324_en16_pdf/.

⁸ To be politically acceptable as well as incentive-compatible, EDIS and sovereign exposure limits should be implemented jointly to be sure that financial repression cannot take place at the national level and that EDIS is not seen as an indirect form of European guarantee for national government debts held by banks.

Risk sharing through the capital market channel is therefore even more important for euro-area countries than for the United States, where greater risk sharing is linked to the existence of federal budgetary transfers, but above all to a capital market channel that operates much better than in Europe

2.2 Sharing risks through an ambitious Capital Markets Union

One of the major features of the European financial system is its limited integration. The financial crisis underlined that financial integration between European countries was mainly through short-term interbank markets and wholesale debt markets. This is detrimental in terms of financial stability because these flows can turn around very quickly. When this risk materialised during the crisis, it caused a rapid fragmentation of the European financial space. The availability and financing conditions of firms in different countries diverged, until they no longer reflected the fundamentals of the companies themselves, but mainly their location.

Capital markets in European countries are also heavily fragmented, contributing to their weak development because they are less deep and liquid than if they had reached a critical scale. Furthermore, they do not fully benefit from economies of scale and network effects that would be generated at the European level. Transaction costs related to this fragmentation are exorbitant compared to the US: cross-border securities transactions within the EU are ten times more expensive than within the US (Mersch, 2014).

For savers and investors, the European financial system is characterised by a very strong domestic bias. The only market that was fairly integrated before the crisis, the European interbank market, virtually vanished during the crisis. Holdings of foreign bonds are low (Schoenmaker and Soeter, 2014) and more than 60 percent of shares held come from domestic markets (Véron and Wolff, 2016). A geographical diversification of portfolios would be better for savers because it would allow them to smooth their consumption over time by limiting the volatility of their portfolios. Diversification is also essential for firms because high-risk investments cannot find financing if they are not offset by very low-risk investments in investor portfolios (Obstfeld, 1994).

As far as economic governance is concerned, the major consequence of this fragmentation is low risk sharing between European countries. Capital markets are one of the essential channels for households and firms to smooth the impact of macroeconomic shocks on their consumption or investment. Countries have three main channels to smooth consumption when they are affected by a recession (Asdrubali *et al*, 1996): the capital markets channel, the credit channel and the fiscal channel for countries that are part of a federation. The capital markets channel makes it possible to smooth shocks thanks to income (interest and dividends) from cross-border (*ex-ante*) investments that are less correlated with domestic production than domestic investments. The credit channel makes it possible to smooth consumption by borrowing *ex-post* (or saving in case of a positive shock) funds when the shock materialises. Finally, the fiscal channel makes it possible to cushion the impact of asymmetric shocks through taxation and transfers between countries in a federation.

The absorption of asymmetric shocks in the euro area is made difficult by the very low level of federal fiscal transfers, the absence of autonomous monetary policy and the impossibility of adjusting exchange rates. Risk sharing through the capital market channel is therefore even more important for euro-area countries than for the United States, where greater risk sharing is linked to the existence of federal budgetary transfers, but above all to a capital market channel that operates much better than in Europe⁹.

Integration of European capital markets therefore appears necessary to ensure that these markets reach a critical size that would improve their efficiency and to share risk between European countries, which would allow them to better absorb asymmetric shocks. This can be achieved through the development of cross-border non-bank (and in particular equity) financing, while taking care not to increase the financial instability risk. The EU Capital Markets Union should deliver these outcomes, but it will not be easy. Some features of the European financial system have regulatory origins or are linked to tax incentives that can be

9 Estimates by Furceri and Zdzienicka (2013), Van Beers *et al* (2014) and more recently by the European Commission (2016), using the method of Asdrubali *et al* (1996), show that a large proportion of asymmetric shocks are not smoothed in Europe (between 50 percent and 75 percent), compared with less than 20 percent in the US.

changed, but the current structure of the European financial system is also the result of historical, political, institutional and legal factors and the preferences of European citizens, which will be complex to alter. The US model, which some would like to copy because it seems more balanced between banks and markets, is also the fruit of US institutional and economic history, and it would be ill-advised to try to reproduce it exactly. The Capital Markets Union, while necessary to provide the lacking private risk sharing in the euro area, will be a long-term project because it will surely take several decades to generate a new coherent economic and financial ecosystem¹⁰.

3 Improving the macroeconomic policy framework

Despite significant institutional innovations during the crisis, the fiscal/monetary component of the economic governance of the euro area remains highly imperfect for two main reasons: 1) the OMT/ESM setup is an essential piece of the euro architecture but important questions remain about the coherence of the setup and its governance; 2) the current macroeconomic policy setup is not able to provide enough stabilisation in case of big shocks, neither at the country nor at the euro-area level.

3.1 The ESM/OMT perfectible framework

The OMT programme is an essential tool of the euro-area architecture to avoid self-fulfilling sovereign debt crises. In addition to the ‘sovereign bank doom loop’, another potential driver of the increase in government yields is related to the existence of multiple equilibria in sovereign debt markets. When sovereign debt is sufficiently high, the equilibrium price of a country’s debt may not be unique: markets might coordinate expectations either on a good or on a bad equilibrium in which a default is more likely than in the good one¹¹. When markets coordinate expectations on the equilibrium with a more probable default, they logically ask for a high interest rate on government bonds. The increase in the cost of servicing debt, in turn, creates the conditions for the government to default, validating *ex post* the markets’ expectations. However, the self-fulfilling bad equilibrium can disappear if the country has a central bank ready to play fully the role of lender of last resort (LoLR) on the sovereign bond market to avoid such self-fulfilling crises. Indeed, the central bank is the only institution that can bring back markets from the bad to the good equilibrium, thanks to its potentially unlimited resources.

In the euro area, there are good reasons to think that the panic in the sovereign bond market between 2010 and 2012 was, at least partly, driven by the existence of multiple equilibria (rendered possible first by the debt increase caused by the rescue of the banking sector). Although the ECB accepted as soon as 2008 to play the role of LoLR for illiquid banks, it refused at first to do the same for euro-area governments on the sovereign debt market. The ECB interpreted its financial stability mandate in a narrow way because there was no political consensus on what it was allowed to do during a type of crisis that was not envisaged by those who had written the Maastricht Treaty. And when the ECB first attempted to intervene, with the launch of the Securities Market Programme (SMP), its limited size and the impression that the ECB was doing it reluctantly did not convince the market that the central bank was ready

¹⁰ More details and recommendations on specific reforms to increase private risk-sharing, develop certain markets and give economic agents access to the best possible sources of financing can be found in Véron and Wolff (2016) and Claes (2017).

¹¹ As shown by Calvo (1988), De Grauwe (2012) and Corsetti and Dedola (2016).

If the ECB was playing this LoLR role in all cases in which yields increase significantly, this would put an end to market discipline and could lead to a moral hazard problem

to do whatever it takes to destroy the bad equilibrium. On the contrary, the ECB's hesitation up to 2012 made possible the development of a liquidity crisis in the sovereign debt market¹².

The first decisive step to solve this problem was the decision in 2012 to replace bilateral loans and the European Financial Stability Fund (EFSF) – both set up in 2010 to provide financing assistance to Greece, Ireland, Portugal and later to Spain, but mainly considered as temporary patches – with the European Stability Mechanism, which would borrow from the markets at a low rate and to lend to solvent European countries that had lost access to markets, provided that the countries accepted to undergo macroeconomic adjustment programmes.

The second and even more essential policy innovation of 2012 was the ECB's decision to act decisively in a sovereign bond market that it considered dysfunctional and that altered the transmission of its monetary policies in some countries. Up to summer 2012, the yields of a number of euro-area governments were rising well above levels in line with their fundamentals. After ECB President Draghi said in a speech on 26 July 2012 that the ECB was ready to do “whatever it takes” to maintain the integrity of the monetary union, the ECB announced the creation of a new monetary policy instrument, the so-called Outright Monetary Transactions (OMT) programme. The announcement of possible ECB intervention (potentially unlimited) in the sovereign debt market was sufficient to guide markets towards the good equilibrium. The fact that the ECB did not have to buy a single bond to achieve this suggests that the crisis on the euro-area sovereign debt markets that took place from 2010 to 2012 was, at least partly, one of multiple equilibria due to the absence of a lender of last resort. The ECB thus agreed in mid-2012 to play this role for euro-area sovereigns in order to restore the monetary policy transmission channel.

However, the potential problem in playing the role of lender of last resort in general and for the OMT programme in particular, is that it is difficult to distinguish liquidity from solvency issues, especially for governments. If the ECB was playing this LoLR role in all cases in which yields increase significantly, without being sure that they are related to a self-fulfilling issue and not linked to fundamentals, this would put an end to market discipline and could lead to a moral hazard problem.

A strong presumption *ex ante* that debt is sustainable is therefore necessary, but also sufficient, to justify ECB purchases through the OMT programme. To solve that problem, the ECB decided that the implementation of an OMT programme would be conditional on the participation of the country in question in an ESM programme. This implies that the European Commission, in liaison with the ECB, would have to assess first whether the public debt of the country requesting help is sustainable, before the ESM programme can be approved. More importantly, given that the ESM board – composed of the finance ministers of the member states – needs to approve the programme, this means that help is only granted if other countries agree. This means that there must be not only a technical debt sustainability assessment but also a political agreement that debt is considered sustainable (Wolff, 2014). The ESM thus plays a fundamental role in the current setup. Its importance is not primarily because of its capacity to lend to countries¹³ but because it provides the political validation of the sustainability of the debt. At first sight, it might look contradictory that one of the most important tools of an independent central bank can only be activated after a vote of finance ministers, but if the ECB does not want to enter into the realm of political decisions, ‘delegating’ the sustainability decision to the ESM might be the lesser evil, given the blurry distinction between monetary policy and fiscal policy in that case.

12 As ECB President Mario Draghi summarised in his Jackson Hole speech of 2014: “Since 2010 the euro area has suffered from fiscal policy being less available and effective, especially compared with other large advanced economies. This is not so much a consequence of high initial debt ratios – public debt is in aggregate not higher in the euro area than in the US or Japan. It reflects the fact that the central bank in those countries could act and has acted as a backstop for government funding. This is an important reason why markets spared their fiscal authorities the loss of confidence that constrained many euro area governments’ market access.”

13 The current ESM’s lending capacity is €500 billion, but this might never be enough to counter a self-fulfilling crisis on the sovereign debt market, which is why the *ex-ante* unlimited nature of the OMT is essential.

The role of the ESM must be clarified and its governance model should be reformed.

However, this does not mean the status quo is desirable. The role of the ESM must be clarified and its governance model should be reformed.

First, the ESM's functions should be differentiated depending on whether countries face liquidity or solvency crises. Concerning 'pure' liquidity crises in which the ESM is essentially used as a political validation device for the ECB's OMT programme, there is no need to couple this decision with an adjustment programme. Linking a monetary policy measure to the implementation of economic reforms is highly problematic because a country might have to accept a loss of sovereignty and be forced to implement policies to access an OMT programme solely because of a problem of multiple equilibria for which it might bear little responsibility. This would put the ECB in the business of prescribing (micro-)economic policies, for which it has no remit. In principle, today, to be eligible for the OMT, countries could apply to one of the 'lighter' precautionary credit lines of the ESM (either to a Precautionary Conditioned Credit Line or to an Enhanced Conditions Credit Line) instead of a full adjustment programme, but both instruments are still conditional on the signature of a Memorandum of Understanding (MoU) and on the strict implementation of some policies. Moreover, the criteria for accessing these credit lines are overly restrictive given that both types of programmes require "*market access on reasonable terms*", which might already not be the case in a liquidity crisis. Of course, in practice, the criteria could be interpreted loosely and conditionality could be very light, but for the sake of clarity it would be better to create a new ESM track reserved for pure liquidity crises to 'authorise' OMT programmes by the ECB. In the absence of this ESM 'liquidity' track, countries facing a self-fulfilling crisis and in need of an OMT programme might be reluctant to apply to the ESM for fear of losing economic sovereignty. This clarification would increase further the credibility of this important instrument and would reduce the likelihood of it ever being used.

In contrast to today's situation, full ESM adjustment programmes should be used when the sustainability analysis concludes that a country is clearly insolvent. In that case, under the conditions that the country undertakes the necessary economic/fiscal adjustments and reaches an agreement with its private creditors on how to restore a path towards fiscal sustainability (which should involve debt restructuring), the ESM would provide a loan to help the country smooth the shock of losing market access. The precautionary credit lines of the ESM¹⁴ should be used for countries deemed 'at risk of insolvency' in the future. This type of programme could be activated at an earlier stage and with lighter conditionality (and not necessarily a debt restructuring) to avoid full-blown crises and last-minute decisions.

To summarise, there should be three distinct ESM tracks: 1) pure liquidity crises, in which the ESM would just 'authorise' OMT programmes without any conditions attached; 2) 'at risk of insolvency' situations, in which the ESM would offer a precautionary credit line under relatively light conditions, which would also make the country eligible for OMT once there is no doubt remaining on the sustainability of the country's new debt trajectory (this track will be particularly useful in the frequent cases in which liquidity and solvency issues are difficult to disentangle); and 3) clear solvency crises, in which the ESM would provide funding conditional on a macroeconomic/fiscal/financial adjustment programme and on the restructuring of the sovereign debt held by private institutions (this clear conditionality on debt restructuring would have the additional benefit of enhancing market discipline *ex ante*).

In terms of its governance model, the current unanimity rule at the ESM for the authorisation of assistance programmes¹⁵, combined with the fact that some board members (ie finance ministers) cannot support a programme without the prior approval of their national

¹⁴ There are two types of precautionary credit line available at the ESM: Precautionary Conditioned Credit Line (PCCL) and Enhanced Conditions Credit Line (ECCL).

¹⁵ Article 5 (6) (f) of the ESM Treaty. See https://www.esm.europa.eu/sites/default/files/20150203_-_esm_treaty_-_en.pdf.

parliaments, slows down and sometimes endangers the whole process¹⁶. For the good functioning of the ESM, and by extension the OMT, it is necessary to abolish the unanimity rule that hampers decision-making and to replace it with a form of majority rule. In essence, the ESM is not that different from the European Investment Bank (EIB) from an institutional perspective: member states have provided a significant but limited amount of capital and guarantees (in the form of callable capital) to two ‘funds’ that can leverage themselves on the market in order to provide loans respectively to the public and private sectors. So, why should their decision-making models be dramatically different? At the EIB, the decisions of the Board of Governors are taken on the basis of a system of double majority: a favourable vote of the majority of Board members and of the majority of the subscribed capital. National parliaments are consulted when there is an EIB capital increase, but not on each and every EIB investment project¹⁷. A similar governance and majority system could be adopted by the ESM¹⁸. In addition, the decision-making body could include representatives of the Union to take into account the general European interest¹⁹ and avoid negotiation dynamics purely based on national interests²⁰. A more transparent governance model for the ESM might help in the finding of compromises and thus contribute to better design of the programmes, preventing a repeat of the ill-designed Greek programme that was characterised by low national ownership and perceived by many Greek citizens as representing a significant loss of economic sovereignty.

3.2 Insufficient macroeconomic stabilisation and the limits of monetary policy

The second problem of current fiscal/monetary governance is that it does not provide enough stabilisation and relies too much on the ECB and on its unconventional monetary policies. We can legitimately fear that if the macro policy framework does not evolve this might continue to be the case for the foreseeable future and could be an issue when the next recession hits. Indeed, as explained in more detail in Claeys (2016), a lower neutral interest rate (i.e. the equilibrium rate between demand for and supply of funds compatible with full employment and price stability) implies that episodes in which monetary policy is constrained by the zero lower bound are likely to be more frequent and longer, yet the results of Holston, Laubach and Williams (2016) for the euro area suggest a collapse in the equilibrium real rate after 2008 and point towards a negative value for the last few years. For instance, if the neutral real rate is around zero, even if inflation is around the 2 percent target, steady-state policy rates would be around 2 percent, which would not give enough leeway to cut rates in the next recession.

16 In July 2015, after the Eurogroup accepted in principle to provide financial assistance to Greece through the ESM, the EU had to hurry organise a three-month bridge loan using another EU institution, the European Financial Stabilisation Mechanism (EFSM), to avoid an imminent default by Greece on some of its debt to the ECB while the details of the ESM financial assistance programme were negotiated and approved by national parliaments. In some countries, such as the Netherlands, the finance minister even convened a special parliamentary session to ask for permission to approve the Greek programme, because it was taking place during the parliamentary holiday

17 It is true that the size of the equity owned by member states is higher at the ESM than at the EIB, with a subscribed capital of €705bn vs €243bn for the EIB, but, like the EIB, the liability of each ESM member is limited to its portion of the capital stock (Article 8 (5) of the ESM Treaty confirmed by the joint interpretative declaration of the ESM Members of 27 September 2012: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/132615.pdf). This liability limit is important because it is considered an essential element by the German Constitutional Court to be compatible with Germany’s Basic Law. See <https://www.bundesverfassungsgericht.de/SharedDocs/Pressemitteilungen/EN/2014/bvg14-023.html>.

18 In fact, a qualified majority vote can already be used in the emergency procedure of the ESM (Article 4 (4) of the ESM Treaty). If the European Commission and ECB both conclude that “*failure to urgently adopt a decision to grant or implement financial assistance (...) threaten the economic and financial sustainability of the euro area*” a programme can be adopted with 85 percent of the votes cast, which in practice gives a veto right to Germany, France and Italy.

19 There is currently no formal role for the European Parliament or the Commission, unlike at European Council meetings in which the Commission plays a leading role in the discussions. This change would also represent a good occasion to reintegrate the ESM into the EU law framework.

20 In that case, the majority system of the EIB would have to be adapted to include voting rights for EU representatives.

The reluctance to use unconventional policies could lead to permanent suboptimal monetary policymaking in the euro area.

For comparison, in the US the average reduction of the Fed policy rate during the last nine recessions was equal to about 5.5 percentage points. This implies that the ECB would need to rely more heavily on unconventional policies, the effects of which are less certain and more difficult to calibrate given their relative novelty. Moreover, the ECB's use of unconventional policies has been controversial, which delayed their implementation in the euro area. The ECB's quantitative easing programme started six years after the beginning of asset purchases by the US Federal Reserve and the Bank of England. The reluctance to use this type of policy could lead to permanent suboptimal monetary policymaking in the euro area, should this set of policies become the ECB's main instrument because of a fall in the neutral rate.

A first possibility, if the neutral rate remains low for a prolonged period, would be for the ECB to reassess its monetary policy framework and its inflation target, which is not set in stone and is defined by the ECB itself. The (below but close to) 2 percent target might have been suitable for the first years of the ECB and may have helped anchor inflation expectations at a low and stable level at a time when the neutral rate was around 2 percent, but it might not be a well-suited inflation target for a low neutral rate era. The ECB should determine if it would be wise to raise its inflation target (for instance to 4 percent) so that the market can clear at a lower real rate. Of course, this would be a very serious decision involving some risks. It has been argued that a change to the inflation target could lead the central bank to lose credibility, dis-anchoring fragile expectations. We do not think this would be the case, but the main benefit of the 2 percent inflation target is that, at this level of inflation, many economic agents behave as if there were no inflation at all. A higher level could change that and revive indexation of contracts and thus second-round effects when there is a shock to headline inflation (for instance from energy prices).

The other possibility is to give a more active role to fiscal policy in tackling recessions and slow recoveries and in supporting monetary policy to stabilise the economy. During recessions, governments should take advantage of low rates to finance a surge in public infrastructure and R&D. With negative real rates, a higher multiplier at the zero lower bound and a positive impact of public investment on future potential growth, a fiscal push could even result in a decrease in the debt-to-GDP ratio in the long run (De Long and Summers, 2012). That is why it is time to design better fiscal policies in the euro area that would support the economy during recessions and recoveries, first by reforming the fiscal rules and then by enhancing the automatic stabiliser properties of fiscal policy at the European level.

3.3 Reforming the European fiscal rules

Even though the role of fiscal indiscipline in the outbreak of the crisis should not be exaggerated, given the other factors that contribute to explain the significant rise in sovereign yields, it also played a role in the euro-area sovereign debt crisis, at least in Greece. Despite the fiscal surveillance put in place since Maastricht, Greece misreported considerably its deficit and debt figures for the period 2005 to 2008 until a newly elected government revealed the cheating in October 2009. The revelations about the state of the Greek public finances was clearly one of the main triggers of the European sovereign crisis as this led some investors to dump all their bonds from the countries then designated by the acronym 'PIIGS' (for Portugal, Ireland, Italy, Greece and Spain) to avoid taking any risk in the European periphery, even though the fiscal positions of these countries differed substantially. European policymakers subsequently decided to reinforce fiscal surveillance to reassure investors about the solvency of European governments. This was done through a series of EU directives and regulations and a new intergovernmental Treaty, known as the 2-pack, 6-pack and Fiscal Compact. The fiscal rules based on structural deficit targets and medium-term budgetary objectives were reinforced, sanctions were made more automatic, independent national fiscal councils were put in place to monitor the rules in order to increase both peer pressure and ownership at the domestic level, and policy coordination was enhanced through the introduction of the European Semester²¹.

²¹ Claey's *et al* (2016) provides details of the successive changes in the European fiscal framework since the creation of the euro.

The current European fiscal framework remains, in practice if not in theory, highly ineffective and has contributed to the anaemic economic recovery in Europe.

However, the current European fiscal framework remains, in practice if not in theory, highly ineffective and has contributed to the anaemic economic recovery in Europe, raising questions about why EU budget rules failed to deliver economic stabilisation and public debt sustainability (Claeys *et al*, 2016).

In theory, the current rules should promote these two objectives. In addition to the 3 percent total deficit limit, another key indicator used under the current rules is the structural fiscal deficit, ie the government deficit, corrected for effects of the business cycle and one-off expenditures. In terms of counter-cyclical stabilisation, resorting to cyclically-adjusted targets makes sense in theory, and the current structural deficit rule combined with the 3 percent deficit rule should allow automatic stabilisers to operate fully in reasonably deep recessions. In addition, in deeper recessions, countries can decide to provide more cyclical stabilisation than what is allowed by the 3 percent deficit rule during one year, by entering an excessive deficit procedure (EDP). They can also ask for deadline extensions in order to comply fully with the rules (which allow them to slow down fiscal consolidation). In terms of sustainability, if the rules are fully adhered to and in the absence of shocks, the public debt ratio should decline to low levels. For instance, with a nominal GDP growth of 3 percent, a structural deficit of -1.0 percent of GDP would ensure that the public debt-to-GDP ratio converges to 34 percent. Given the existence of negative shocks and the potential exemptions from the rules, the debt ratio would be higher but could be low enough to provide enough room for manoeuvre in the case of a recession.

In practice, the fiscal rules do not fulfil these two objectives. The structural budget deficit is hard to measure in real time. Estimates are based on uncertain assessments of the business cycle (ie the output gap) and its impact on government revenues and expenditures. Estimated changes in the structural balance are typically revised by more than half a percent of GDP after one year, more than the yearly adjustment that the rules require. It seems inconceivable that recommendations for fiscal policies should be based on such an unreliable indicator, especially because during crises, measurement problems worsen at the moment when clear indicators are most needed.

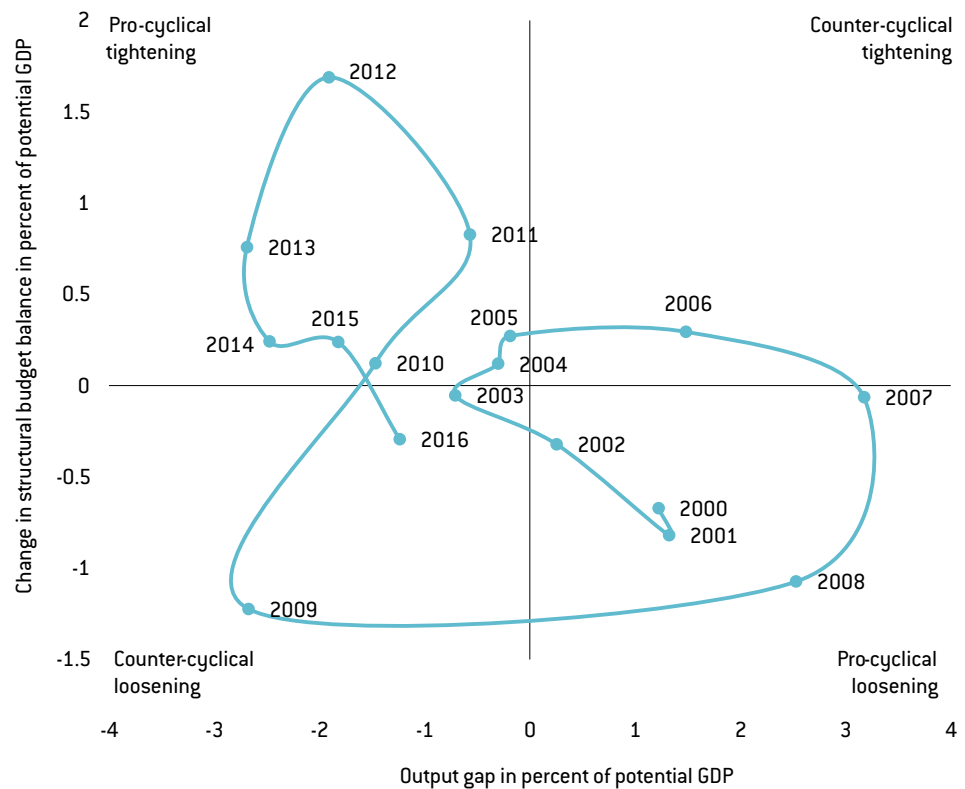
A further problem is that the European Commission's growth and inflation forecasts are a major source of errors, even though the fiscal rules are based on these forecasts. It would be appropriate to have a fiscal rule that does not depend on these forecasts. Another important issue is that even though countries can provide additional stimulus for one year by entering an EDP, when a recession lingers for several years, current fiscal rules allow deceleration of fiscal consolidation at best, instead of suggesting a necessary repeated stimulus. Because of these issues, policy recommendations were largely mistaken already before the crisis and eventually worsened the economic situation in Europe during the crisis, as most euro area countries started to consolidate their public finances as soon as 2010, instead of waiting for the best time to do it.

There are other reasons for the recent poor management of fiscal policy in Europe (eg the self-fulfilling loss of market access by some countries or Germany's preference for quicker fiscal consolidation than that recommended by the Commission) and fiscal rules might not be the only or even the main culprit, but they nevertheless contributed to these mistakes by providing misguided recommendations to member states.

Figure 2 indicates that, since establishment of the monetary union, fiscal policy was only really countercyclical in 2009 and has been mostly pro-cyclical the rest of the time. Therefore, before the crisis and in 2010-15, the fiscal framework ensured neither the sustainability of public finances nor macroeconomic stabilisation. During the boom years (2001-07), Spain and Ireland had on average large budget surpluses but clearly suffered from a political economy spending bias with expenditure growth of about 10 percent per year. However, the current rules would not have constrained these countries because of the real-time measurement error leading to an overestimation of their structural balance. As a result, and as shown by Martin and Philippon (2017), we now realise that in countries like Spain and Ireland, fiscal policies were not countercyclical and should have been much more conservative during the

boom, and did not build enough margin of manoeuvre to be able to use fiscal stabilisation in the downturn.

Figure 2: Euro-area aggregate fiscal stance



Source: Bruegel based on WEO October 2016, IMF.

In these circumstances, preserving the fiscal framework as it is today would be harmful. The Stability and Growth Pact and the Fiscal Compact need to be revised: the 3 percent deficit and the badly measured structural deficit should not be used as operational targets for fiscal policy. Instead, the fiscal framework should focus on a rule limiting the growth of public expenditure, excluding unemployment insurance expenditure and one-off expenditures. According to this rule (explained in detail in Claey's *et al*, 2016), the annual growth of public expenditure should not exceed the sum of the country's potential real GDP growth plus the central bank's inflation target (2 percent per year). In bad times, this would reduce the incentive of governments to cut expenditures. Even if tax revenues fall and spending on unemployment increases, governments would still be allowed to support growth through deficits. In good times, this would dampen excessive booms, such as those in Ireland and Spain before the crisis, because governments would not be allowed to spend the extra tax revenues generated by bubbles. This limitation of expenditure would also take account of the level of public debt. Countries with high debt would have lower spending growth than those with low debt, in order to ensure long-term fiscal sustainability²².

This rule would be simpler and easier to monitor than the current rules. It would not rely on an unpredictable indicator, and, more importantly, it would more conducive to the two desirable objectives of sustainability and stabilisation. This is essential because ultimately, countries will not observe the rules because they fear sanctions, but because they agree that

²² A debt correction mechanism could for instance take the following form: the maximum expenditure growth ceiling would be reduced by 0.02 times the difference between the debt level in the previous year and the 60 percent of GDP debt criterion.

the rule represents the best guidance for their fiscal policies to be both sustainable and supportive of growth.

3.4 A new accountable executive institution: the European Fiscal Governing Council

Another key issue in the current European fiscal framework is the multiplicity and opacity of the flexibility clauses. This leads to endless negotiations between EU member states and the Commission and between member states themselves. Leaders of countries that do not respect fully the rules consider them to be inappropriate and try to disregard them. Leaders of countries that comply with the rules fear that the rules are not imposed on their partners with enough force and that the credibility of the system might be in danger. In practice, the use of these flexibility clauses has given discretionary power to the European Commission. In bad times, this means dogmatic application of rules plagued by measurement and estimation errors is avoided, but there is a risk that in good times, member states will try to use the flexibility of the system to bypass the rules when they should be applied strictly to reduce the debt and build some room for manoeuvre. We propose abandoning flexibility clauses and, since no rule can anticipate all contingencies, replacing them with an institution that would exercise discretion and decide when countries can deviate from the rules, using whatever methods they deem appropriate (the estimation of output gaps and structural fiscal balances being only one of the methods).

We propose that this task would be carried out by an institution composed of an executive board of six members representing the general interests of the monetary union (appointed by the EU Council and approved by the European Parliament in a euro-area setup) and the finance ministers of the countries of the euro area²³. Given the similarity with the ECB Governing Council, this new institution could take the name of European Fiscal Governing Council (EFGC). An advantage of involving finance ministers (as well as making the new council more politically acceptable to member states) would be that this decision-making body would be the same as the one governing the reformed ESM, which would streamline the governance system of the euro area and give some pre-eminence to the new institution. The executive board would be headed by a euro-area finance minister who would take over the current responsibilities of the Commissioner for Economic and Financial Affairs, the President of the Eurogroup²⁴ and the Chairperson of the Board of Governors of the ESM (see Figure 3)²⁵.

To ensure the democratic legitimacy of the EFGC, the members of its executive board (including the euro-area finance minister) should be accountable directly to European citizens. An accountable board should be obliged to inform citizens and their representatives about its decisions and should be able to justify them. This could take the form of regular press conferences and hearings at the European Parliament (in a euro-area format), accompanied by the publication of reports justifying decisions. The European Parliament should be involved in the nomination of the members of the executive board²⁶, exercise some oversight over the board and should be able to impose sanctions on the body in case it fails to meet its obligations.

23 This setup would share some characteristics with the one proposed in Sapir and Wolff (2016)

24 This would also have the additional advantage of separating the roles of Eurogroup president and national finance minister which could lead to conflict of interest between the euro area's best interests and the national interests of the minister's country.

25 In addition to representing the interests of the whole monetary union when decisions are taken, the EFGC executive board should be responsible for preparing the EFGC meetings, implementing its decisions and managing the day-to-day business of the EFGC, of the ESM and the European Unemployment Insurance Scheme and of the corresponding euro-area fiscal/borrowing capacity.

26 Given the importance of the EFGC's decisions, the required qualifications and appointment procedures of its executive board members should be as strict as those for ECB Executive Board members.

3.5 The need for a euro-area stabilisation tool

Even if the ESM/OMT framework and fiscal rules are fixed, other critical problems remain. First, even if fiscal rules are fully adhered to and ensure sustainability and stabilisation at the national level, in a monetary union it is important to take into account the fiscal stance at the area-wide aggregate level. Purely national fiscal policies and fiscal rules that do not consider the positive or negative spillovers onto partners might lead to a suboptimal aggregate fiscal stance in the absence of proper fiscal policy coordination, and to a suboptimal macroeconomic policy mix in the absence of coordination between monetary policy and aggregate fiscal policy²⁷. This issue is even more acute when monetary policy is constrained by the zero lower bound, and by political and institutional considerations. For instance, as noted by the recently created European Fiscal Advisory Board (2017), if all countries follow literally the current fiscal rules in 2018, this would result in a contractionary increase in the aggregate structural budget balance, while an expansionary stance would still be appropriate given the remaining slack in the euro-area economy²⁸. On the contrary, if countries with fiscal space used it, the euro-area aggregate fiscal stance could be slightly expansionary, which means that cross-country coordination of fiscal policy could solve the problem.

However, fiscal policy coordination has never really succeeded in the euro area (except for the fiscal stimulus of 2009). Since the Stability and Growth Pact is asymmetric and targets only countries with excessive deficits, it is illusory to think that it will ever be possible to make surplus countries spend more if it is not directly in their interest. Moreover, coordination might not even be the most cost-efficient tool to increase aggregate stabilisation in the euro area, given that recent research has shown that fiscal multipliers depend on the cyclical situation and are higher in an economy in which there is more slack (Auerback and Gorodnichenko, 2013). In that case, it might be better to increase spending not in countries with fiscal space but in countries in which there are spare capacities, especially if they cannot do it on their own because this would lead them to breach the rules.

This is why it is essential to build a fiscal stabilisation tool at the euro-area level that would contribute to deliver the right fiscal stance at the aggregate level and to achieve the right policy mix without overburdening the ECB. The stabilisation tool should be of sufficient magnitude to generate the necessary fiscal impulse to close the gap between what is generated by the sum of (constrained) national fiscal policies and the desirable aggregate fiscal stance. To be politically acceptable by all parties this instrument should not have any allocative or (permanent) redistribution function and should focus solely on its stabilisation function (Wolff, 2017). Furthermore, it should not give any incentive for member states to reduce fiscal discipline at the national level or to neglect structural issues. Actually, a side benefit resulting from the introduction of a stabilisation instrument at the Eurozone level would be that, once such a tool is in place, the improved fiscal rules could also be enforced more strictly – discretionary exemptions from the rules decided by the institution in charge will become less relevant – because the potential tightening effect of implementing the rules in a strict way at the national level could be compensated for using the common fiscal tool, and rules could focus even more on the sustainability of national public finances.

In addition, this tool should also be able to provide cross-country risk sharing against large asymmetric shocks that single countries cannot easily deal with on their own because it would lead to a significant increase in public debt that could later cast doubts on their solvency and threaten their capacity to access markets. Although private risk sharing should be pursued through the completion of the banking union and the establishment of a genuine Capital Markets Union, this might not be sufficient. Fiscal risk sharing and private risk sharing are complements rather than substitutes (Fhari and Werning, 2017). In practice, a minimum degree of public risk sharing might be considered necessary by markets to sustain

The stabilisation tool should also be able to provide cross-country risk sharing against large asymmetric shocks that single countries cannot easily deal with on their own.

27 Inflationary (or deflationary) fiscal policy in one euro-area country could impact the average euro-area inflation rate targeted by the European Central Bank and trigger a monetary tightening (respectively easing) for everyone.

28 At the beginning of 2017 underemployment was about 18 percent of the euro-area labour force (ECB, 2017)

risk sharing within private markets. Banking union is a good example showing that some fiscal risk sharing (through EDIS and a fiscal backstop for bank resolution) is necessary to generate private risk sharing. The potential to generate private risk sharing through the CMU is high in principle, but this is still largely a work-in-progress project with uncertain prospects and practical challenges before it starts paying off in the long run. Besides, the desirable asset diversification might never take place if the institutional framework is not improved and the possibility of an exit by one of the countries is not definitely ruled out (and this possibility will never be totally ruled out if there are crises of the magnitude of those that took place in 2010-15 in the euro area).

In fact, in addition to the previously mentioned drivers of the sovereign debt crisis, some euro-area sovereigns also incurred a redenomination risk premium as some market participants started to think at some point that the euro was reversible and that countries would go back to national currencies and repay their debt in a depreciating currency. Again, the euro area's institutional and political architecture was not considered strong enough to appear irreversible, which led to discussions about a potential euro exit for various countries. This redenomination risk was mainly prevalent during the euro crisis, but it also reappeared during the chaotic negotiations in Greece in the summer of 2015 and in a milder version before the French presidential election of 2017. The fact that this redenomination fear reappears from time to time during economic or political crises suggests that the euro governance framework is imperfect and that markets start believing that countries could have an incentive to exit the monetary union. The recent occurrences of increasing redenomination risk show that is still the case. Of course, redenomination risk is above all a political risk and there will always be Eurosceptic parties advocating for an exit from the monetary union, so the redenomination risk might never be nil, but their influence in the public debate would be diminished in a well-functioning and prosperous monetary union. That is why it is essential to strengthen the euro architecture and increase the resilience of the monetary union and of its constituent countries in such a way that staying in the euro becomes clearly desirable in all situations, including after large asymmetric shocks.

Finally, a euro-area stabilisation tool would also benefit from having a borrowing capacity to increase its stabilisation properties through inter-temporal smoothing. In addition, having a European institution able to issue highly rated bonds (i.e. safe assets) would allow all EMU countries – and not only the core – to benefit marginally from the lower interest rates resulting from the flight to quality/safety that takes place during crises (which amplifies the divergence between core and periphery countries)²⁹. The bonds issued by the stabilisation fund would be considered safe because they could be used as collateral at the ECB with a minimal haircut, and would be bought by the ECB as part of a QE programme as a supranational asset issued in euros.

²⁹ The architecture proposed in this paper should in the long run make all euro-area sovereign bonds safer and thus limit drastically the intra-EMU flight for safety observed during the euro crisis. In such a framework, sovereign bonds would not be subject to liquidity crises thanks to OMT, they would be (almost totally) immune to the sovereign bank-doom loop thanks to the banking union and sovereign exposure limits, and public finances would more sustainable thanks to better fiscal rules and the risk-sharing provided by the euro-area stabilisation mechanism. Of course, the risk of default would still exist (this is the case for all assets including those considered perfectly safe today, such as US Treasury bonds) but the probability of default would be much lower than it was at the time of the Maastricht governance framework. If all sovereign bonds from the euro area were able to regain safe-asset status, it would make the provision of European safe assets through Eurobonds, blue bonds/red bonds (Delpa and von Weizsäcker, 2010) or ESBies (Brunnermeier *et al*, 2016) much less necessary.

A promising option for the stabilisation mechanism at the euro-area level would be to put in place a European Catastrophic Unemployment Insurance Scheme (ECUIS).

3.6 One option for a stabilisation tool: a European Catastrophic Unemployment Insurance Scheme

A promising option for the stabilisation mechanism at the euro-area level would be to put in place a European Catastrophic Unemployment Insurance Scheme (ECUIS), which would be activated in exceptional circumstances when a euro-area member state suffers a rapid and significant increase in short-term unemployment. When activated, the scheme would provide benefits to the newly unemployed in euro-area countries facing a significant shock. It would be financed through borrowing and reimbursed *ex post* with revenues from a single contribution rate on all wages in the euro area, regardless of the previous use of the scheme and the current economic situation of participating countries.

This particular type of stabilisation mechanism would fulfil all previously mentioned requirements by contributing marginally to an appropriate aggregate fiscal stance and providing cross-country and inter-temporal risk sharing for large asymmetric shocks, while respecting current political constraints. The mechanism would be calibrated so the fund's budget would be balanced over the cycle and there are no permanent transfers between countries and no incentive to reduce fiscal discipline at national level or to neglect structural problems (as the scheme will only be triggered by a quick rise in unemployment and not by a high level of unemployment³⁰). The ECUIS option also has a clear advantage over most other possible stabilisation mechanism tools proposed in the literature: because it would rely on the change in the unemployment rate, its activation and payments would be automatic³¹ and based on an observable, fairly well measured and standardised variable, unlike mechanisms relying on the output gap. An additional obvious advantage of the ECUIS is that it would also benefit the unemployed, who are generally at the bottom of the income distribution and have a higher propensity to consume.

Claeys *et al* (2014) explored variants of such a scheme, playing with the different parameters of a potential ECUIS (trigger, replacement rate, coverage rate, contributions, etc). Table 1 shows an updated simulation of a variant of the scheme in which it is activated when unemployment rises in one year by more than 0.5 percentage points above its previous five-year average. This version of the scheme sets a single contribution rate for all euro-area countries and would finance unemployment benefits with a generous replacement rate of 80 percent of the wage previously received while employed.

One the main advantages of such a scheme is that, as long as member states benefitting from the scheme do not compensate by reducing their deficits, the scheme would make the aggregate euro-area fiscal policy more countercyclical. However, even if recipient countries decide to reduce their deficits, the scheme would help them absorb significant shocks better because lower deficits would result in a lower increase in their debt-to-GDP ratios (which would help them retain market access and thus reduce the number of instances in which the ESM would be used). The example of Spain during the crisis is revealing in that regard. Faced with an unprecedented increase in unemployment since the bursting of the housing bubble, Spain would have received on average almost 2 percent of its GDP per year from the ECUIS from 2008 to 2013, which would have been extremely helpful at a time when deficits reached 10 percent, and when Spain embarked in a fiscal consolidation of a magnitude of 2 percent of GDP per year.

30 Unlike a permanent ECUIS, the scheme would not reward deficient labour markets, so harmonisation of labour institutions would not be absolutely necessary. However, some convergence of (currently very different) labour markets might be desirable, also to limit the differences in wage developments across the monetary union, which would facilitate the conduct of monetary policy by the ECB.

31 The automaticity of the instrument is essential because, as shown for instance by Cimadomo (2012), fiscal policy can be counter-cyclical in its intentions while pro-cyclical in its results because of forecasting and estimation errors and delays in its implementation.

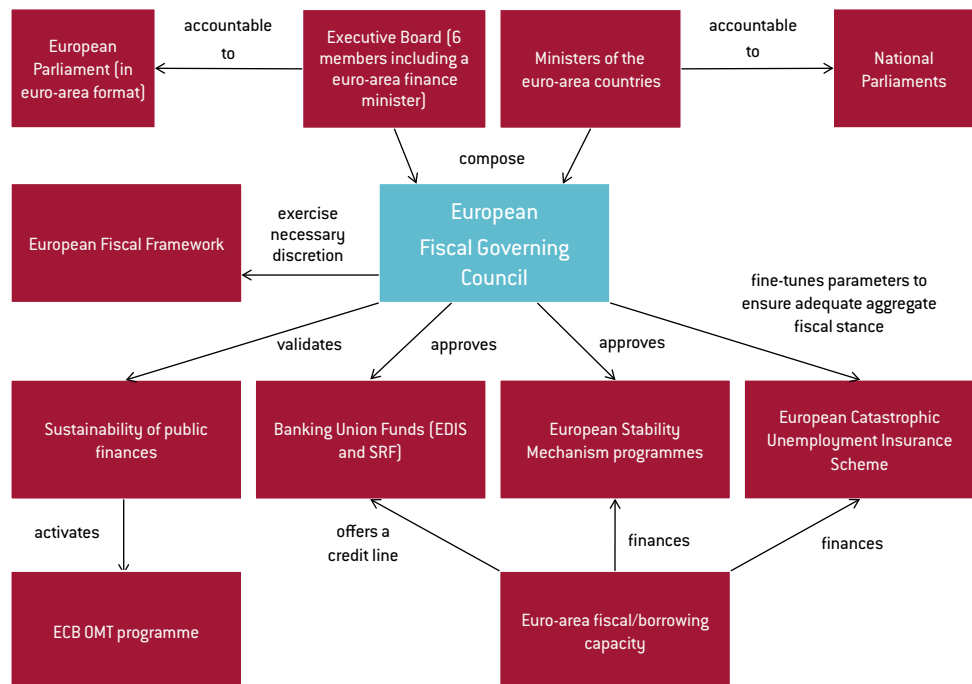
Table 1: ECUIS, net payments/contributions (in % of GDP) to participating countries, and annual and cumulative cash positions of the scheme for the euro area

% of GDP	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Austria	0.00%	0.00%	0.00%	0.00%	0.47%	0.47%	-0.11%	-0.11%	-0.11%	-0.11%	-0.22%	-0.31%	-0.37%	0.10%	-0.63%	-0.51%
Belgium	0.00%	0.00%	0.00%	0.61%	0.49%	-0.07%	-0.12%	-0.12%	-0.13%	-0.12%	-0.24%	-0.34%	-0.42%	-0.57%	-0.68%	-0.54%
Cyprus	0.00%	0.00%	0.00%	0.00%	-0.04%	0.42%	-0.10%	-0.10%	-0.10%	0.53%	0.49%	0.62%	0.90%	1.02%	0.75%	0.75%
Estonia	0.00%	0.00%	0.00%	0.00%	-0.04%	-0.05%	-0.10%	-0.11%	-0.13%	1.53%	1.30%	-0.31%	-0.38%	-0.54%	-0.67%	-0.55%
Finland	0.00%	0.00%	0.00%	0.00%	-0.05%	-0.07%	-0.12%	-0.11%	-0.12%	0.94%	0.73%	-0.32%	-0.40%	-0.55%	-0.67%	0.66%
France	0.00%	0.00%	0.00%	0.00%	-0.06%	-0.08%	-0.13%	-0.13%	-0.13%	0.74%	0.57%	-0.34%	0.48%	0.39%	-0.68%	-0.54%
Germany	0.00%	0.00%	0.00%	0.67%	-0.06%	0.66%	-0.12%	-0.12%	-0.12%	-0.11%	-0.24%	-0.32%	-0.39%	-0.54%	-0.67%	-0.54%
Greece	0.00%	0.00%	0.00%	0.00%	-0.04%	-0.05%	-0.08%	-0.08%	-0.08%	0.72%	0.84%	1.14%	1.30%	1.01%	-0.38%	-0.30%
Ireland	0.00%	0.00%	0.00%	0.00%	-0.05%	-0.07%	-0.11%	-0.11%	0.60%	1.24%	0.85%	0.60%	-0.31%	-0.43%	-0.51%	-0.39%
Italy	0.00%	0.00%	0.00%	0.00%	-0.04%	-0.06%	-0.09%	-0.10%	-0.10%	0.47%	0.37%	-0.26%	0.38%	0.32%	-0.52%	-0.41%
Latvia	0.00%	0.00%	0.79%	0.00%	-0.04%	-0.05%	-0.10%	-0.12%	-0.14%	2.10%	1.51%	-0.29%	-0.35%	-0.49%	-0.63%	-0.51%
Lithuania	0.81%	0.00%	0.00%	0.00%	-0.04%	-0.05%	-0.10%	-0.10%	-0.11%	1.44%	1.31%	0.78%	-0.32%	-0.44%	-0.54%	-0.42%
Luxembourg	0.00%	0.00%	0.00%	0.13%	0.16%	0.12%	-0.07%	-0.07%	-0.07%	0.15%	-0.15%	-0.21%	-0.26%	-0.11%	-0.18%	-0.04%
Netherlands	0.00%	0.00%	0.00%	0.33%	0.36%	-0.07%	-0.12%	-0.12%	-0.12%	-0.11%	0.23%	-0.31%	0.19%	0.20%	0.07%	-0.49%
Portugal	0.00%	0.00%	0.39%	0.58%	0.45%	0.51%	0.45%	0.52%	-0.12%	0.74%	0.61%	0.75%	0.94%	0.70%	-0.55%	-0.44%
Slovakia	0.68%	0.00%	0.00%	0.00%	-0.03%	-0.05%	-0.08%	-0.09%	-0.09%	0.73%	0.59%	-0.25%	-0.30%	-0.41%	-0.50%	-0.40%
Slovenia	0.00%	0.00%	0.00%	0.00%	-0.06%	0.44%	-0.12%	-0.12%	-0.12%	0.59%	0.48%	0.47%	0.43%	0.37%	-0.64%	-0.50%
Spain	0.00%	0.00%	0.00%	0.00%	-0.05%	-0.07%	-0.12%	-0.12%	1.35%	2.26%	1.98%	1.92%	2.14%	1.94%	-0.58%	-0.46%
Annual cash position (%GDP)	-0.01%	0.00%	-0.01%	-0.23%	-0.02%	-0.16%	0.10%	0.10%	-0.07%	-0.54%	-0.42%	-0.01%	-0.30%	-0.19%	0.57%	0.47%
Accumulated cash position (%GDP)	-0.01%	0.00%	-0.01%	-0.25%	-0.26%	-0.41%	-0.30%	-0.18%	-0.25%	-0.80%	-1.21%	-1.19%	-1.50%	-1.70%	-1.12%	-0.63%
Annual cash position (€bn)	-0.43	0.06	-0.71	-20.68	-1.78	-14.37	9.87	10.09	-6.37	-50.82	-39.80	-0.80	-28.69	-18.62	55.04	45.85
Accumulated cash position (€bn)	-0.43	-0.37	-1.08	-21.76	-23.54	-37.91	-28.04	-17.96	-24.33	-75.14	-114.94	-115.74	-144.43	-163.04	-108.00	-62.16

Source: Bruegel based on the method in Claeys *et al.* (2014). Note: Parameters used in this simulation: single contribution rate for the whole euro area; replacement rate of previous wage: 80 percent; trigger of the scheme: increase in unemployment of 0.5 ppt in one year above 5-year average. The table displays net payments as a percentage of GDP that would have been received by the countries from an EUI scheme since 2000. Positive numbers, in green, represent net payments to the countries, whereas negative numbers, in red, represent net contributions to the EUI scheme. The last 4 rows of the table indicate annual and cumulative cash positions of the scheme for each year (in % of GDP and in € billions). Positive numbers, in green, represent positive cash positions of the scheme that could be saved for the future, whereas negative numbers, in red, represent negative cash positions that would have to be financed by borrowing in capital markets.

It is also important to note that Spain would not have been an isolated case and many other countries would have benefitted from the ECUIS since 2000 and would have been net recipients when they experienced slumps: Austria in 2004-05, Belgium in 2003-04, Cyprus since 2009, Greece from 2009 to 2013, Germany in 2003 and 2005³² and the Netherlands in 2003-05. The ECUIS in that particular form would therefore fulfil fairly well the main goals assigned to a euro-area stabilisation tool: provide stabilisation against asymmetric shocks and cross-border risk sharing without creating transfers between countries that are too persistent or too large³³. As a result of the relatively frequent use of the scheme by euro-area countries, the ECUIS would have accumulated, at its maximum, a moderate debt equivalent to 1.7 percent of euro-area GDP at the end of 2013, because of the borrowing (the equivalent on average of 0.3 percent of euro-area GDP per year) necessary to finance the scheme during the crisis. In order to avoid a lasting debtor position, the ECUIS contribution rate would be set every year at the level that would have balanced the fund over the past five years. As Table 1 shows, setting contributions this way would allow the fund to return to surpluses fairly quickly but would also reduce its counter-cyclicality. Given the low frequency of such crises (and the slow recoveries that tend to follow them), the return towards balance could be lengthened by increasing the number of years for calculating contributions from five to seven, or even 10 years.

Figure 3: Proposed overhauled euro-area economic governance framework



Source: Bruegel. Notes: See section 3.4 for details. EDIS=European Deposit Insurance Scheme, ECUIS=European Catastrophic Unemployment Insurance Scheme, ESM=European Stability Mechanism, OMT=Outright Monetary Transactions, SRF=Single Resolution Fund.

32 The case of Germany is a good example of an additional benefit of having such an instrument in place: in 2003-05 Germany could borrow as much as desired for stabilisation purpose and was never at risk of losing market access in that occasion. However, it did so at the expense of the fiscal rules in force at the time, thus undermining their credibility. Better fiscal rules are certainly necessary, but having an ECUIS in place at that time would have allowed Germany to provide additional fiscal stabilisation without breaching the rules. Fiscal rules could thus be enforced more strictly with such a tool in place.

33 From 2000 to 2015, if such a scheme had been in place, the largest annual net contributions would have come from Belgium and France in 2014 and would have 'only' represented 0.68 percent of their respective GDPs (ie a smaller amount than their net contributions to the EU budget, which are always going in the same direction, unlike ECUIS flows, which can go both ways).

In terms of governance, the ECUIS would in principle be mostly automatic and would not need much decision making once it is up and running. Nevertheless, given that it would complement other euro-area fiscal/monetary tools, the European Fiscal Governing Council should be responsible for the scheme (see section 3.4 and Figure 3). The ECUIS's generosity, trigger point and other parameters should generally be calibrated to make sure the scheme is countercyclical in both bad times and good times, with fine-tuning in real time by the EFGC (under the control of the European Parliament in euro-area format), to ensure that the gap is closed between what is generated by the sum of national fiscal policies and the desirable euro-area aggregate fiscal stance. For simplicity and consistency, the borrowing capacities of the ESM and the ECUIS should be merged into a euro-area fiscal/borrowing capacity, which would also increase the depth and liquidity of the market for the bonds issued by the common institution. The revenue stream to reimburse the issued debt would be a mixture of contributions from wages, bank levies for resolution and deposit guarantees and ESM loan repayments.

4 Conclusions

In mid-2017, growth in the euro area is picking up after a decade of recessions and slow recoveries. However, European leaders should not be complacent and wait for the next crisis to reform the euro architecture. On the contrary, these quieter times offer a good occasion to build a more permanent and coherent setup than that which was implemented in the heat of the crisis.

Since 2012, several essential crisis management tools that were previously missing (ESM, OMT, banking union, QE, etc.) have been introduced to bring an end to the crisis that almost brought an end to the euro. In addition, surveillance tools were set up to avoid a repeat of previous mistakes and prevent the future build-up of imbalances. Thanks to these institutional and policy innovations, the basic building blocks of the architecture are now in place and the resilience of the system has increased. However, the euro-area architecture is still incomplete and its foundations remain shaky.

The minimum requirements to achieve a well-functioning and resilient monetary union in Europe are the following. First, to break the loop between banks and sovereigns, the banking union should be completed immediately with the setup of EDIS and of a fiscal backstop for the SRF, while banks should be given the incentives to diversify their sovereign portfolios. Second, an ambitious capital markets union project should be put forwards and quickly implemented to increase private risk sharing between the member states of the monetary union. And third, to avoid the policy mistakes of the recent years in the next crisis, the macroeconomic policy setup needs to be updated. The OMT/ESM framework and its governance need to be revised to be effective in case another crisis happens in the monetary union. The fiscal rules need to be fixed so that they provide the right recommendations for fiscal policy to become countercyclical at the national level both in bad and good times (in order to have some margin for manoeuvre when the next crisis hits). And given that policy coordination is illusory it is necessary for the euro area to add to its toolkit a stabilisation mechanism (such as a European Catastrophic Unemployment Insurance Scheme), in order to insure members states against significant asymmetric shocks with which they cannot deal on their own and to take into account the aggregate fiscal stance. It is important to understand that all these elements (banking union, capital markets union, and a reformed macroeconomic framework) are complements and not substitutes. They are all necessary to form a coherent framework that will be able to insure the resilience of the monetary union to large shocks.

In the long run and if there is political will, a simpler model, more similar to the US model – with federal transfers, federal stabilisation mechanisms and a no-bailout clause for

sub-federal entities – could be pursued in Europe. A no-bailout clause combined with a restructuring mechanism and a loosening or even a removal of European fiscal rules could be credibly applied and would not be too disruptive in the euro area if, and only if, two conditions are met. First, a significant share of public spending (and thus taxation) should be permanently transferred to the centre to avoid too much disruption in the provision of essential public services in case of default. Second, banks should have a diversified portfolio of sovereign assets thanks to prudential regulation so a potential sovereign restructuring does not lead to a sovereign-bank feedback loop. However, in that case, countries would have to accept that national fiscal policy could no longer be used as a countercyclical tool (as it would be impossible to default and to keep borrowing at the same time). They would also have to accept some volatility on national debt markets, and possibly some sovereign defaults as a result of self-fulfilling liquidity crises if the central bank is only responsible for the federal debt, as in the US. More importantly, countries sharing fully automatic stabilisers and a high share of public spending and taxes would have to harmonise their social institutions accordingly. In that case, fiscal policy at the euro-area level would not only have a stabilisation function, as contemplated before, but would also have some redistributive and allocative dimensions. This, in turn, would only be desirable if it takes place in a democratic process with the fiscal union becoming a full political union. This might be an option in the long run if the citizens of the EU are eager to integrate further and form a federal state. However, our view is that, from an economic perspective, this is not absolutely necessary for the short-term survival of the euro.

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