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ECONOMIC GOVERNANCE IN THE EURO AREA: BALANCING RISK REDUCTION AND RISK SHARING

by Fabrizio Balassone, Sara Cecchetti, Martina Cecioni, Marika Cioffi, Wanda Cornacchia, Flavia Corneli and Gabriele Semeraro*

Abstract

The unchecked build-up of imbalances during the 2000s exposed the euro area to the risk of sudden stops. Such risk materialized in 2009-10 and its consequences were amplified by the absence of adequate institutions. Europe embarked on a thorough process of reforming its economic governance. We review the measures taken concerning sovereigns and banks since 2010 and discuss possible ways forward on both fronts. We argue that, while significant progress has been achieved, a lot of ground remains to be covered. In general, reforms have favoured risk reduction over risk sharing. As a result, in the face of exceptional circumstances, the euro area is not equipped with the fiscal tools necessary for macroeconomic stabilization; moreover, banking union lacks common financial backstops. Only further risk (and sovereignty) sharing can avoid harmful pro-cyclical excesses.

JEL Classification: E58, E62, F42, F45, G28, H63.
Keywords: economic and monetary union, banking union, fiscal union, sovereign risk, prudential regulation, sovereigns-banks nexus.

Contents

* Banca d'Italia, Directorate General for Economics, Statistics and Research.

1. Introduction[1]

The consensus narrative of the euro-area (EA) crisis identifies its proximate cause as the rapid unwinding of large intra-EA lending imbalances, which built up largely unchecked during the 2000s. The lack of institutions capable of dealing with this 'sudden stop' turned it into Europe's worst economic crisis since WWII.[2]

The sovereigns-banks nexus was one of the main amplifying factors of financial distress during the crisis. On the one hand, the difficulties encountered by banks affected the sovereigns directly, through the bailout of troubled intermediaries, and indirectly, through the impact of reduced lending on the economy. On the other hand, sovereigns' weaknesses affected banks' balance sheets, their ratings and their cost of funding while the economic recession worsened the quality of their lending portfolios.

In Greece, the dire conditions of the public finances ignited the crisis (Fig. 1) and the problems of the sovereign rapidly spread to the banking system, opening the door to second-round effects. Europe's hesitation in dealing with Greece's difficulty, up to the announcement of 'private sector involvement' in the summer of 2011, sparked contagion in countries suffering from macroeconomic imbalances of diverse natures as financial markets began to fear the break-up of the EA and quickly priced in the risk of large outstanding government debts being redenominated in the national currency (Fig. 2).[3]

The first to be hit were Ireland and Portugal. The former was suffering from a systemic banking crisis, which impaired the sovereigns' resilience in the face of financial turmoil (because of the bailout of the banking sector, Irish public debt increased by 21 percentage points in 2010), the latter from a mix of excessive private lending and weak public finances. Spain and Italy followed suit, with large losses in the banking sector and a high public debt being their respective weaknesses.[4] In some cases, most notably in Cyprus, the contagion also made its effects felt through large losses on domestic banks' holdings of crisis-hit foreign sovereign bonds.[5]

[1] The authors would like to thank Alessandra De Aldisio, Paolo Del Giovane, Eugenio Gaiotti, Marco Taboga, Silvia Vori and Stefania Zotteri for useful comments and discussions. We also thank participants to the conference "Inside public debt: ethical arguments against default" organized by University of Rome La Sapienza (May 2016) and the XXVIII Villa Mondragone International Economic Seminar "Facing EU Challenges, Relaunching Sustainable Growth" organized by University of Rome Tor Vergata (June 2016). All remaining errors are ours.

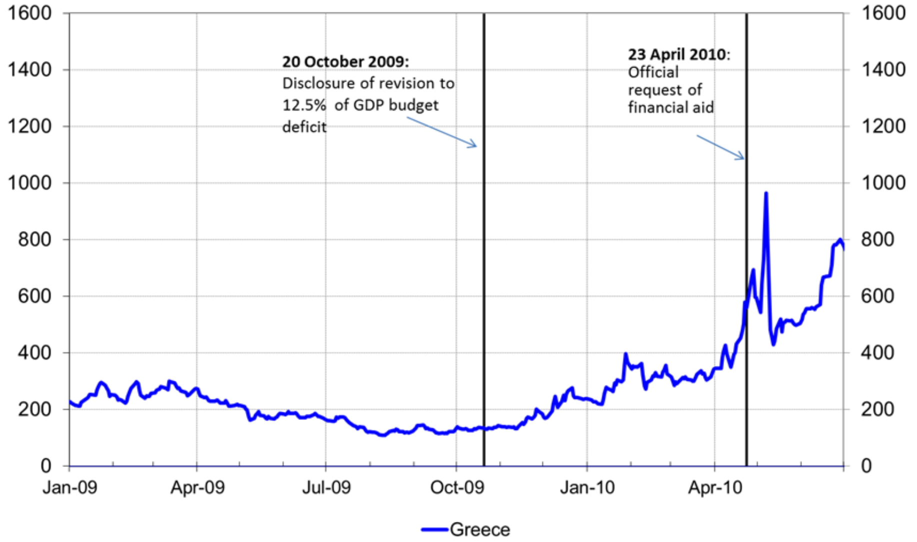
[2] Baldwin *et al.* (2015); Baldwin and Giavazzi (2016).

[3] This is consistent with the idea of 'wake-up call contagion' (Giordano *et al.*, 2013). Sovereign risk premiums rose rapidly after the agreement between German Chancellor Merkel and French President Sarkozy, at a summit in Deauville in October 2010, on having distressed sovereigns restructure their debts to private creditors. Although some challenge the causal link (e.g. Mody, 2015), others point out that '*even as late as April 2010, after the first sampling indicated the scale of the [Irish] banking losses, sovereign spreads were little more than 1%. By November of that year (just a few weeks after the Deauville statement […]) large banking outflows and spreads exceeding 5% made recourse to official assistance inevitable*' (Honohan, 2013). Di Cesare *et al.* (2012) present evidence that, for several countries, risk premiums reached levels well above what could be justified on the basis of fundamentals. Among the possible reasons for this, they focus on the perceived risk of a break-up of the EA. See also Ignazio Visco's interview with Corriere della Sera on July 8, 2012 and Visco (2012 and 2013).

[4] Spanish banks needed recapitalization amounting to €61.5 billion, €41.3 billion of which was provided by the European Stability Mechanism to the FROB (the bank recapitalization fund of the Spanish government) and then channeled to the financial institutions concerned. After declining by around 20 percentage points over 1994-2007, Italy's debt-to-GDP ratio increased sharply in 2008-09, from 102 to 112, mainly because of the recession.

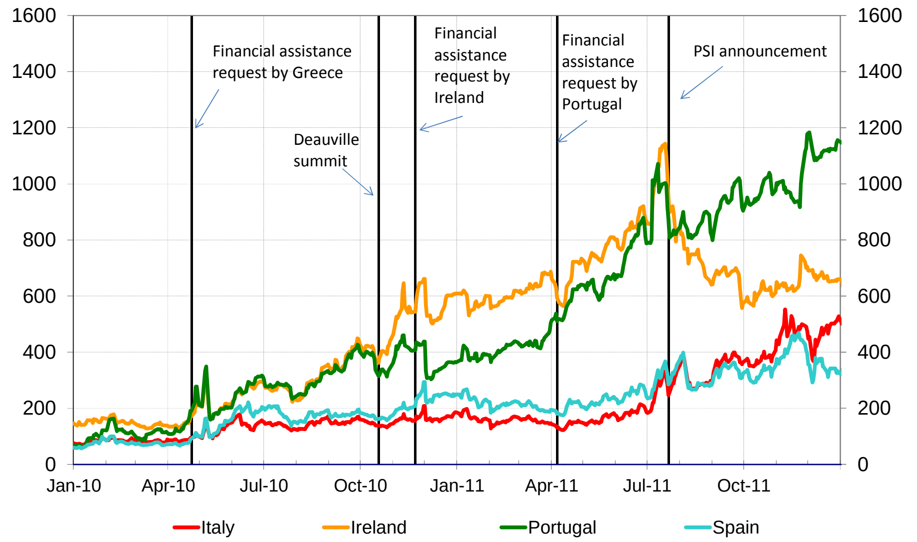
[5] Cypriot banks suffered losses in excess of €4 billion as a result of the Greek government bond restructuring (http://ec.europa.eu/economy_finance/publications/occasional_paper/2013/pdf/ocp149_en.pdf).

Figure 1 – Greece: sovereign spread (2009-2010)
(basis points; daily data)



Note: Spread between the benchmark 10-year government bond yield and the correspondent Bund yield. *Source*: Bloomberg

Figure 2 – Ireland, Portugal, Italy and Spain: sovereign spreads (2010-2011)
(basis points; daily data)



Note: Spread between the benchmark 10-year government bond yield and the correspondent Bund yield. *Source*: Bloomberg

In response to the crisis, European authorities embarked on a thorough process of reforming the economic governance of the EU and the EA. It aimed to strengthen the resilience of first sovereigns, then banks to shocks by both reducing their individual risk potential and increasing risk sharing. Although some have criticized the process for being lengthy and failing to keep pace with the quick reaction of financial markets, in six years – and in an extremely difficult economic environment – the institutional and regulatory landscape of Europe has been overhauled (Table 1).

Table 1 - The evolution of EU economic governance: a timeline

Date		Measure
2015	Oct	Introduction of the European Fiscal Board and proposal for a European Deposit Insurance Guarantee Scheme
	Aug	The third financial assistance programme for Greece is approved
	Jun	The Five Presidents' Report is published
	Jan	The Single Resolution Mechanism becomes operational*
	Jan	The Commission's releases Communication on the flexibility margins of the Stability and Growth Pact
2014	Nov	The Single Supervisory Mechanism is fully operational
	Jul	EU governments signs off on Single Resolution Mechanism
2013	Oct	Eu publishes law on euro-area bank supervision
	Mar	A financial assistance programme for Cyprus is approved
	Feb	The two pack is passed
2012	Oct	The European Stability Mechanism (ESM) becomes operational
	Jul	A financial assistance programme for Spain is approved
	Jul	President Draghi pledges "to do whatever it takes to preserve the euro"
	Jun	The first draft of the Four Presidents' Report is published
	Jun	Euro area leaders call for a single bank supervisory mechanism involving the ECB
	Mar	The second financial assistance programme for Greece is approved
	Mar	The Fiscal Compact is passed
2011	Sept	The six pack is passed
	May	A financial assistance programme for Portugal is approved
2010	Nov	The first European semester is kicked off
	Nov	A financial assistance programma for Ireland is approved
	Jun	The European Financial Stability Facility (EFSF) is created
	May	The first financial assistance programme for Greece is approved

(*) The bail-in rule comes into force a year later, in January 2016.

Significant progress was achieved, but risk reduction was favoured over risk sharing. More efforts are needed. This paper reviews the measures taken concerning sovereigns and banks (Sections 2 and 3, respectively), and discusses possible ways forward on both fronts (Sections 4 and 5). The main conclusions are summarised in Section 6. After a double recession and financial crisis, the EA has entered an environment of weak and uncertain growth, marked by deflationary pressures. Only further risk sharing can avoid harmful pro-cyclical excesses. Common financial backstops introduced (or planned for introduction) during the crisis must be strengthened, guarding against asymmetries in the way European decisions enter national laws, which sometimes risked undoing the progress achieved. A currency union cannot survive repeated shocks without adequate policy instruments: countercyclical fiscal policy is a necessity; either the EA moves swiftly towards fiscal union and a federal budget or member states must be in a position to run their own fiscal stabilization in the face of exceptional circumstances.

2. Strengthening the sovereigns

2.1 Risk reduction

To reduce the risks from sovereigns, macroeconomic surveillance was reinforced. The 'six-pack', 'two pack' and 'fiscal compact' introduced deep changes.[6] The debt rule became operational (almost twenty years after the Maastricht Treaty)[7] and an expenditure benchmark flanked the structural balance in assessing countries' fiscal positions. Independent institutions ('fiscal councils') were set up at the national level to assess compliance with the rules, and sanctions applicable in both the preventive and the corrective arms of the Stability and Growth Pact (SGP) were strengthened.[8] A common timeline was defined to synchronise key steps in the preparation of national budgets, promote peer review and multilateral coordination, and allow the assessment of national draft budget laws by the European commission (with a view to their consistency with European fiscal rules). In addition, a procedure was introduced to allow the timely detection and correction of macroeconomic imbalances in individual member states, with a focus on the potential for negative externalities for other countries.

The poor pre-crisis compliance record warranted a tightening of fiscal rules. Over 1998-2007 countries in the EA (including Greece, which joined in 2001, and excluding later members) recorded deficits in excess of 3 per cent of GDP eighteen times (Table 2). Germany trespassed the threshold four times, followed by France, Greece, Italy and Portugal with three violations each. Although weak market pressure contributed,[9] this was clearly the result of flaws in monitoring and enforcement of fiscal rules.

However, European fiscal rules (or their prevailing interpretation) lack the necessary flexibility in the face of exceptional circumstances. Buti *et al.* (1997), in an exercise of retrospective application of the SGP, consider the effect of automatic stabilizers on government budgets in cases of negative growth over 1961-1996 for the then 15 members of the Union. They conclude: '*the risk of incurring an excessive deficit is relatively high for countries involved in lengthy recessions which result in significant negative output gaps and make it extremely difficult to re-absorb the deficit within the first year of recovery. […] in 9 out of the 24 recession episodes considered, GDP declines for two or three years. In 5 of these 9 events, even starting with a balanced budget, the deficit exceeds the 3.5 per cent level in the recession period and remains above the 3*

[6] The six-pack, which came into force at the end of 2011, includes: (i) four regulations on the prevention and correction of excessive fiscal and macroeconomic imbalances (n. 1175 and n. 1177 on budgetary deficits and regulations n. 1174 and n. 1776 on macroeconomic imbalances); (ii) one regulation on the effective enforcement of budgetary surveillance (n. 1173); and (iii) one directive on national fiscal frameworks (n. 85). The two-pack, which entered into force in 2013, includes one regulation on common provisions for monitoring and assessing budgetary plans (n. 473) and one regulation on strengthening the surveillance over Member states in difficulty (n. 472). The fiscal compact is part of the Treaty on stability, coordination and governance in the EMU, which also entered into force in 2013.

[7] The Treaty and the annexed protocols require countries to avoid excessive deficit and debt and specify that national debt should not exceed 60 per cent of GDP or, if above the threshold, it should be '*sufficiently diminishing and approaching the reference value at a satisfactory pace*'. Failure to comply with this rule was intended to trigger the excessive deficit procedure, the same way as trespassing the 3 per cent of GDP threshold for deficit. However, since the words 'sufficiently' and 'satisfactory' were not given a quantitative counterpart, the debt rule plaid no role in practice.

[8] Specifically, the obligation to lodge an interest-bearing deposit has been introduced if the member state does not comply with the recommendation of the Council within the preventive arm. Such deposit is converted into a non-interest-bearing one in case of serious noncompliance or when an Excessive Deficit Procedure is opened, and finally into a fine if the country fails to take effective action to correct its excessive deficit. Also, in order to strengthen the automaticity of the enforcement a reverse majority voting system has been included.

[9] Prior to the crisis, markets neglected cross-country differences in economic fundamentals and fiscal discipline. Sovereign spreads were nil. It was a confirmation of the 1989 Delors Report warning that '*rather than leading to a gradual adaptation of borrowing costs … the constraints imposed by market forces might either be too slow and weak or too sudden and disruptive*' (Committee for the Study of Economic and Monetary Union, 1989, p. 20).

per cent level during the following year' (p. 20). They also point out that '*in case of recessions, the margins for implementing large-scale discretionary countercyclical policies are rather limited, unless budgets move into surplus. […] In the event of a severe recession during the early years of EMU, since several countries will still have deficits in the 2% to 3% of GDP range, they risk moving into excessive deficit, unless they take a pro-cyclical budgetary stance. […] Long recessions may pose serious threats even to countries with sound pre-recession budgetary positions*' (p. 30).

Table 2 – Net borrowing (+)/lending (-) in the EA: 1998-2007(1)

(EA 12; % of GDP)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Italy	2.7	1.9	1.5	2.2	2.3	2.4	3.2	4.1	4.4	1.6
Belgium	1.3	0.9	0.0	-0.2	-0.1	-0.4	0.0	-0.1	-0.4	0.3
Germany	2.1	1.1	1.0	2.8	3.6	3.8	3.7	3.3	1.6	0.2
Ireland	-2.3	-2.0	-4.5	-1.6	0.3	-0.1	-1.4	-1.0	-2.9	-0.2
Greece	2.4	1.6	0.9	1.7	1.2	4.6	6.6	4.5	2.5	3.5
Spain	1.8	1.1	0.4	0.2	0.1	-0.4	0.1	-1.1	-1.8	-2.2
France	2.9	1.8	1.3	1.5	3.2	4.1	3.6	2.9	2.5	2.7
Luxembourg	-2.1	-2.4	-5.3	-6.1	-2.5	-0.8	1.2	1.9	-0.7	-3.2
Netherlands	0.9	-0.5	-1.3	-0.1	1.1	3.2	2.1	0.3	-0.6	-0.4
Austria	2.1	2.0	1.6	-0.2	0.6	1.1	1.0	1.5	1.4	0.4
Portugal	2.3	2.0	1.7	4.1	2.8	2.8	3.0	6.0	3.9	2.6
Finland	-1.0	-2.3	-6.7	-4.9	-4.7	-2.3	-2.1	-2.6	-3.8	-5.3

Source: Banca d'Italia, Supplements to the statistical bulletin, Public finance statistics in the EU, various issues.

(1) Data as reported by Eurostat at the end of the following year (subsequent changes in the European system of national accounts are not taken into account). The number of violations (highlighted in yellow) grows to 28 if deficits are measured by today's statistical standards.

This is especially problematic in a context where institutional and economic rigidities hamper other sources of macroeconomic stabilization. In a currency union, monetary policy cannot react to the economic conditions of individual countries, nor can member states rely on exchange rate movements to cushion them against shocks. In addition, labour mobility is far from perfect and rigidities in product and service markets remain significant in the EA. Last, but not least, the EA does not possess a 'federal budget' to provide fiscal stabilization.

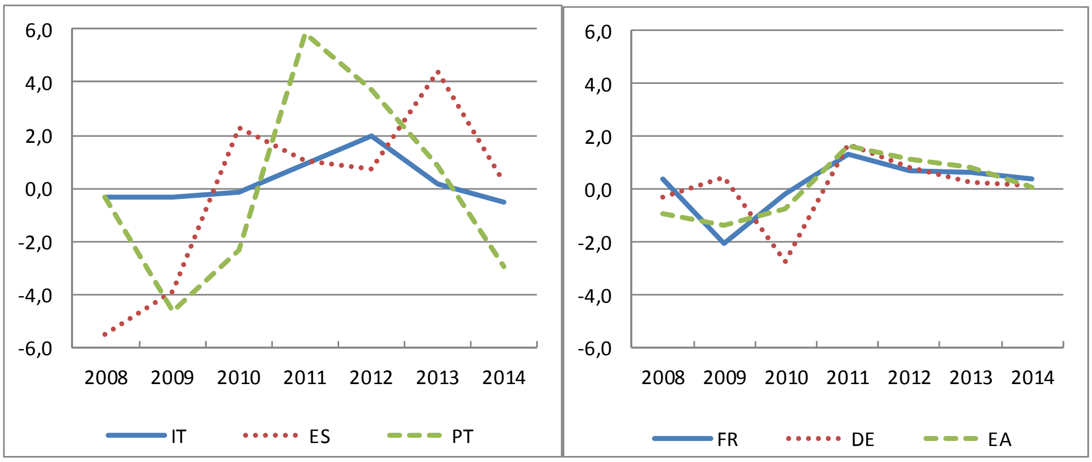
The experience with the recent crisis exemplifies the risks involved in this set up. Without a lender of last resort, shocks to the perception of fiscal sustainability can be (and were) unboundedly amplified. To reign in escalating risk premiums, most EA member states had no other choice than undertaking pro-cyclical fiscal policies to regain market confidence and avoid a financial disaster. The extent of the needed consolidation was amplified by (the excessively restrictive interpretation of) European fiscal rule, which tended to leave little space, if any, even for the operation of automatic stabilizers. This resulted in a strongly pro-cyclical fiscal stance at the height of the crisis in many member states and, absent the counterbalance of a federal budget, in the EA as a whole (Fig. 3).

Though outweighed by the benefits from the avoided financial meltdown, the macroeconomic costs of this strategy have been significant. In Italy, for instance, it is estimated that '*the measures to consolidate the public finances adopted in the second half of 2011 with the aim of preventing an uncontrolled deterioration in the conditions on the financial markets had an adverse effect on demand equivalent to 1 percentage point of annual GDP growth*' (Banca d'Italia, 2013, p. 38).

In some cases, the need for fiscal consolidation originated from insufficient fiscal prudence before the crisis, but more flexible rules could have made it less costly. A concerted European strategy could have credibly phased-in the implementation of the needed fiscal effort, and attune it to the prevailing cyclical conditions. Within a more flexible, though rules-based, fiscal framework the EA might have lead the markets rather than follow them in the effort to ease tensions and regain stability in the face of an exceptional shock. The macroeconomic costs of the adjustment would have been reduced.

Figure 3 - Fiscal stance during the crisis (2008-14)(1)

(Annual changes in cyclically adjusted primary deficit; per cent of GDP)



(1) A positive value indicates a contractionary stance.

The 2015 communication by the Commission on the flexibility within the existing rules of the SGP is a step in the right direction. The communication clarifies how cyclical conditions should be taken into account in the implementation of the SGP. It operationalizes the provisions dealing with the modulation of fiscal effort over the economic cycle under the preventive arm of the SGP (Table 3). It also stresses that the Commission will continue to assess effective action under the corrective arm of the Pact based on a measurement of structural fiscal effort, excluding budgetary developments, which are outside the control of governments. Finally, it affirms the Commission's willingness to use the provisions allowing deviations from the fiscal adjustment required under both the preventive and the corrective arm of the SGP in the face of '*a severe economic downturn in the EA or in the EU as a whole*' (p. 17).[10]

But the recognition is still missing that, lacking a federal budget, exceptional circumstances may call for exceptional measures. First, even under exceptional circumstances a fiscal expansion (i.e. a worsening of the structural balance) is not explicitly allowed, at best a neutral fiscal stance is conceded. Second, if a severe economic downturn were to push a country's nominal deficit well above the 3 per cent of GDP threshold (e.g. over 3.5 per cent), Treaty on the Functioning of EU (TFEU) provisions (art. 126) would still trigger an excessive deficit procedure (with the annexed stigma effect). Third, the interaction between the adjustment towards the medium term objective (MTO) prescribed under the preventive arm and the debt rule can give rise to conflicts whereby a fiscal stance allowed under the former would not be in line with the latter, and vice versa.

[10] European Commission (2015a). The communication also clarifies margins allowed with respect to the financing of investment and the implementation of structural reforms.

Table 3 - Matrix for annual adjustment under the preventive arm of the SGP

		Required annual fiscal adjustment*	
	Condition	Debt below 60 % and no sustainability risk	Debt above 60 % or sustainability risk
Exceptionally bad times	Real growth <0 or output gap <-4	No adjustment needed	
Very bad times	$-4 \leq$ output gap <-3	0	0.25
Bad times	$-3 \leq$ output gap < -1.5	0 if growth below potential, 0.25 if growth above potential	0.25 if growth below potential, 0.5 if growth above potential
Normal times	$-1.5 \leq$ output gap < 1.5	0.5	> 0.5
Good times	output gap $\geq$ 1.5 %	> 0.5 if growth below potential, $\geq$ 0.75 if growth above potential	$\geq$ 0.75 if growth below potential, $\geq$ 1 if growth above potential

* Improvement in the structural balance until the medium term objective (MTO) is achieved; percentage points of GDP. *Source*: European Commission, 2015a.

2.2 Risk sharing

When public finances in some EA member states started deteriorating in 2008-09, the EU lacked a common and agreed framework for dealing with sovereign debt crises. The urgency to intervene in order to help EU partners and limit financial contagion resulted in ad hoc and targeted actions with bilateral loans and loans granted directly by the EU budget (through the European Financial Stability Mechanism, EFSM) of limited amounts (€80 billion and €60 billion respectively). Meanwhile instruments for dealing with current and future sovereign debt crises were defined:

i) The European Financial Stability Facility (EFSF) was set up in 2010 as a temporary institution. Designed under paramount pressure, it was far from being optimal. The funding of its lending operations was treated as public debt of the guarantor countries, adding to the tensions affecting the public finances of some member states. Its financial capacity was limited (€255 billion at inception), insufficient to contain the risk of contagion in the area.

ii) To address these limitations, the European Stability Mechanism (ESM) was set up to gradually replace the EFSF from 2013 as a permanent firewall, thus flagging the commitment of member states to the single currency. Its implementation represented a significant improvement over its predecessor. Its lending capacity was much higher (€500 billion at inception) and its lending operations did not influence member states public finances.[11] Moreover, its legitimacy was secured by an amendment to EU treaties (article 136, TFEU) authorising EA countries to establish a stability mechanism to protect the common currency.[12]

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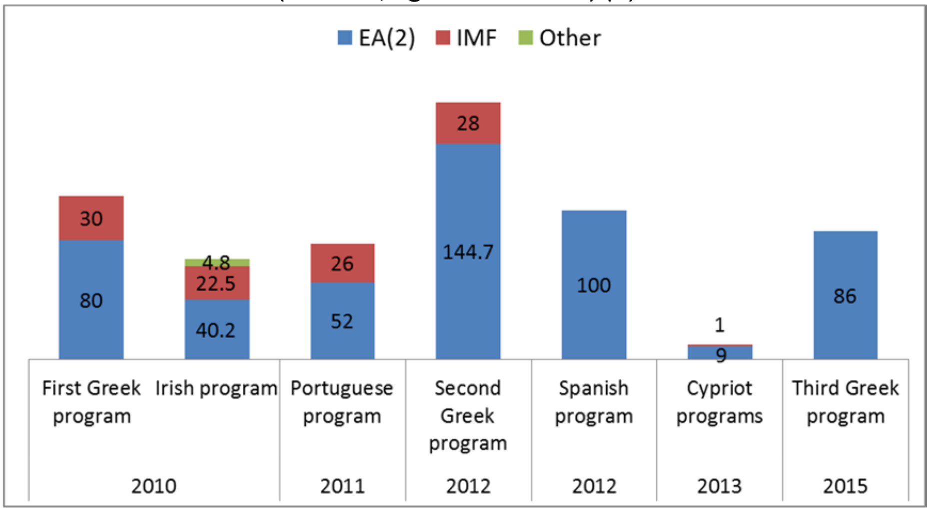
[11] Only the paid-in capital (€80 billion over a total of 700) accrued to the guarantor countries' public debt. Additional capital can be called to avoid ESM default on its obligation to its creditor and in this case it would weigh on the guarantor countries' public finance. However, the likelihood of this scenario is minimized by the prudent funding strategy by the ESM.

[12] This was necessary to avoid potential conflict with the 'no bail-out' clause in art. 125 of the TFUE ('*The Union shall not be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of any Member State, without prejudice to mutual financial*

Although the financial commitment of the member states is considerable in absolute terms, it is small relative to the size of government debt in the area. The ESM residual lending capacity currently stands at about €370 billion against a total of government debt in the area amounting to €9.5 trillion, about 90 per cent of the area's GDP. It would have been barely enough to cope with the financial assistance programs launched over 2010-12 (Fig. 4). While adequate as a first line of defence against the loss of market access for a small or mid-size EA country, it would barely cover one year of refinancing needs for a large country.

Figure 4 – Financial support to EA countries
(€ billion, agreed amounts) (1)



Notes: (1) Agreed amounts can contain resources not actually disbursed. (2) Includes bilateral loans, EFSM, EFSF, ESM. *Source*: European Commission.

Moreover, the procedure for and the number of actors involved in the approval of an assistance or precautionary ESM program may hamper its timeliness and create significant uncertainty. The complexity of the procedure also reflects the unwillingness of EA member states to delegate decisions on matters concerning financial assistance. The ESM Board of Governors is currently composed by the 19 Ministers of Finance of the EA and is chaired by the President of the Eurogroup. Decisions on financial support require unanimity. An emergency procedure is foreseen for cases in which both the European Commission and the ECB deem that there is a risk to the financial stability of the EA as a whole, but this still requires a qualified majority of 85 per cent. The European Commission and the ECB are involved first in the preliminary assessment that follows a request of assistance and then in the definition of the program's details. The ESM Treaty mandates that, whenever possible, the involvement of the IMF should also be sought. The final program agreement needs the approval of the 19 members of the Board of Directors (one for each EA member state) by a qualified majority of 80 per cent, while all subsequent reviews need approval by unanimity. The complexity of the approval process is reflected in the length of the procedure, estimated by the ESM to be about three to four weeks for loan agreements. In practice, the agreement over programs during the crisis (most of them took place before the ESM was operational) has generally taken less, with the exception of the program for Cyprus (Table 4).[13]

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guarantees for the joint execution of a specific project. A Member State shall not be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of another Member State, without prejudice to mutual financial guarantees for the joint execution of a specific project').

[13] A proposal by the EU-IMF-ECB was ready by the end of July 2012 but the Cypriot authorities requested further negotiations, mostly on measures for the financial sector. Elections held at the beginning of 2013 also delayed the agreement.

Table 4 – Time for the definition of program conditionality during the EA sovereign crisis

	Date of request for financial assistance	Date of signing the MoU	Number of days
Greece	21 April 2010 (visit of EU-IMF-ECB in Athens)	3 May 2010	13
Ireland	21 November 2010	3 December 2010	13
Portugal	8 April 2011	3 May 2011	26
Cyprus	25 June 2012	24 April 2013	303

A positive note is the ESM flexibility with respect to debt restructuring. The Treaty establishing the ESM does not make private sector involvement a mandatory companion to ESM financial assistance. An analysis of debt sustainability must be conducted before deciding on granting a loan, but there is no automatic link between the result of such analysis and debt restructuring. The preamble to the Treaty does however foresee that '*in accordance with IMF practice, in exceptional cases an adequate and proportionate form of private sector involvement shall be considered in cases where stability support is provided accompanied by conditionality in the form of a macro-economic adjustment programme*'.

Overall, the degree of risk sharing has significantly increased but remains limited. Compared to the pre-crisis situation, a lot of ground has been covered. A strict interpretation of the no bail-out clause as impeding any form of financial assistance has been overcome. Not only were financial facilities set up, but also their nature and the nature of their operations has gradually evolved. EFSF loans were backed by guarantees individually provided by member states, while the ESM has its own capital. Early loans were granted at a premium over the funding cost, while the financial terms of later ones only allow cost recovery.[14] In addition, in the context of the Greek program, the maturity of outstanding loans was significantly extended ('reprofiling', a soft form of debt relief). However, as noted above, the financial capacity of the ESM is relatively small and ESM bonds are not backed by the unlimited joint guarantees of its shareholders.[15]

The birth of the ESM made it institutionally possible for the ECB to define appropriate rules of engagement for monetary policy in the face of 'unjustified' runs on sovereign bonds. After the introduction of the ESM, the Governing Council of the ECB decided on the modalities for government bonds purchases in secondary markets (outright monetary transactions, OMT) with the purpose of safeguarding monetary policy transmission and the singleness of monetary policy. Tensions in EA sovereign markets eased significantly right after the announcement (Fig. 5), which was interpreted as a clear sign of the Governing Council resolve to address distortions related to fears of euro reversibility. The fact that the ECB did not have to buy a single bond to achieve this result suggests that the problem was one of multiple equilibria. Markets were converging to a 'bad' equilibrium in which concerns over the sustainability of public finances in some member states were pushing rates up, thus providing the conditions for defaults. The announcement of ECB's possible intervention was sufficient to guide markets towards the 'good'

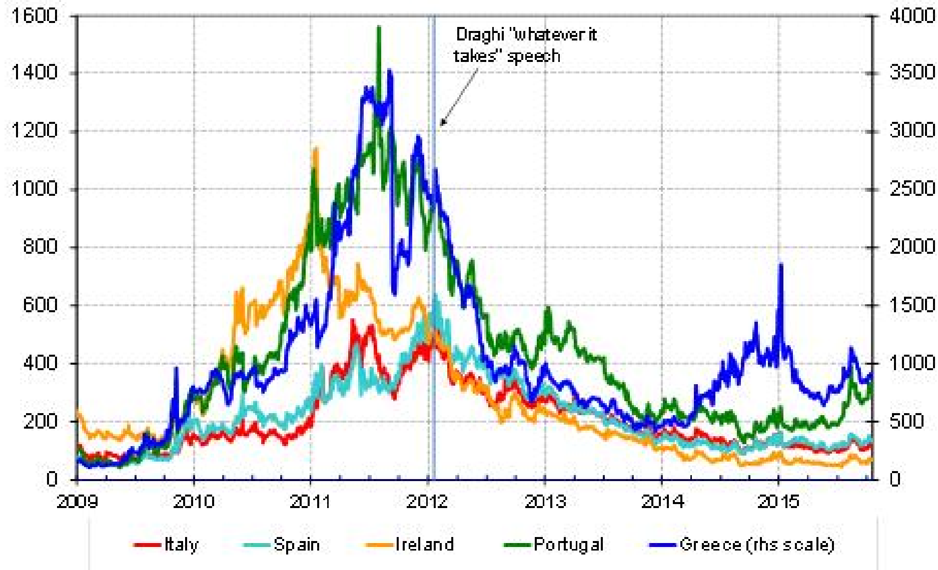
[14] The interest rate charged on the first Greek program was based on three-month Euribor plus a margin (300 basis points for three years and 400 subsequently). For Ireland, the effective cost of lending was set to 5.9 percent while for Portugal between 5 and 6 percent, depending on maturity and lender (EFSM or EFSF). In July 2011, the European Council agreed to a common 3.5 percent interest rate for the three countries under program and a longer maturity (15 years).

[15] The guarantee extended by each member state is limited to its participation in the ESM capital. This implies that, in order for the ESM bonds to retain a high rating, its lending capacity must be lower than the total capital subscription. With unlimited joint guarantees, the lending capacity of the ESM would substantially increase.

equilibrium. Altavilla *et al.* (2014) find that the OMT announcement decreased the Italian and Spanish 2-years government bond yields by 2 percentage points, leaving unchanged the bond yields of the same maturity in Germany and France.

OMT filled a gap in the economic governance of the EA. That is why their announcement was so effective. However, they remain untested and there are concerns as to whether they allow timely intervention. The activation of OMT is subject to the agreement on an ESM assistance program or an Enhanced Conditions Credit line, including the possibility of ESM primary market purchases. Both forms of assistance come with macroeconomic conditionality attached. Precautionary assistance without an adjustment program (which the ESM can also grant) or assistance for financial institutions are not sufficient for OMT, nor is the mere application for a program by the country concerned (Box 1 provides a description of the types of financial assistance the ESM can provide). We have noted above how long ESM program approval can take. Moreover, the introduction of OMT met with significant opposition in some countries. Most notably, the German Constitutional Court considered that the OMT exceed the competences given to the ECB by the Treaties and forwarded the case to the European Court of Justice (ECJ) for a legal opinion. Although the ECJ ruled in favour of OMT as a monetary policy instrument, the actual use of OMT remains likely to be accompanied by controversy, which could further delay intervention.

Figure 5 – Sovereign spreads in selected EA member states (2009-2016)
(basis points; daily data)



Note: Spread between the benchmark 10-year government bond yield and the correspondent Bund yield. *Source*: Bloomberg

The link with ESM programs and the attached macroeconomic conditionality, while useful to prevent moral hazard, can also determine unwanted outcomes. OMT can be terminated either when the monetary policy transmission mechanism and/or the singleness of monetary policy are no longer in danger, or when there is non-compliance with the conditionality established in the ESM program. These two perspectives can be in contrast. Halting OMT because of non-compliance with conditionality may result in the implosion of the market for the concerned country's debt. In its ruling on OMT the ECJ clearly distinguished between the monetary policy concern of the ECB and the economic policy concern of the ESM.[16] The ECJ judgment

[16] The ECJ in its judgment of 16 June 2015 argued that OMT are part of monetary policy, not economic policy ('*The OMT programme, in view of its objectives and the instruments provided for achieving them, falls within monetary policy and therefore within the power of ESCB*'). It further pointed out that OMT contribute to price stability, the primary objective of the ESCB and that OMT do not infringe the prohibition of monetary financing of Member States.

suggests that the role of the ECB in future program reviews should be limited. Others have also argued that the ECB should interpret its formal role in future ESM programs as narrowly as possible (e.g. Gros, 2015). Consistently, compliance with conditionality should only be sought by the ESM, not by the ECB. For this however an amendment to the ESM treaty is likely to be necessary, which would require unanimous ratification and in some countries, possibly, a referendum.

Box 1 – Instruments for ESM intervention

Five types of instruments are included in the ESM lending toolkit: 1) loans (financing assistance facility agreement, FFA); 2) precautionary credit lines (precautionary conditioned credit line, PCCL, and enhanced conditions credit line, ECCL); 3) primary market support facility (PMSF); 4) secondary market support facility (SMSF); and 5) (direct or indirect) financial institutions' recapitalization. As specified in the ESM Treaty, support to a member state is subject to strict conditionality, according to the instrument agreed.

FFAs 1) are targeted to countries facing debt rollover crises. All loans are subject to macroeconomic adjustment programs with appropriate conditionality, as detailed in the Memorandum of Understanding negotiated by the member state and the European Commission – in liaison with the ECB and, wherever possible, together with the IMF.

Precautionary facilities 2) provide credit lines as a means of prevention against crises. Access to these facilities is granted only to countries with sound economic conditions, assessed with reference to pre-set criteria. Importantly, PCCLs are not accompanied by specific macroeconomic conditionality; however, the respect of the pre-set criteria allowing access to PCCLs is to be continuously monitored also after a PCCL has been granted. The activation of ECCLs – which are available to countries with some weaknesses compared with the pre-set criteria for PCCLs – is conditional on the commitment to correct such weaknesses through appropriate measures while ensuring the continuous respect of other PCCLs pre-set criteria that were met at the time of approval of support.

PMSFs 3) allow the ESM to engage in primary market purchases of sovereign bonds. They can only be activated as a complement to loans or precautionary facilities and are subject to strict implementation rules.

A country requesting an SMSF 4) should either have already signed an adjustment program or comply with very specific eligibility criteria close to the ones applying to ECCLs and accept the attached conditionality. Moreover, a technical sub-committee has to be established in order to decide on the implementation of the SMSF and has to report monthly to the ESM Board of Directors.

Finally, assistance for financial institutions 5) can be provided in the form of loans to the requesting member state or, if this could dangerously deteriorate the creditworthiness of the sovereign, directly to the financial institution(s) under distress. Recapitalization can take place within or without an adjustment program, but always under specific conditionality on the involved institutions and possibly on the entire financial sector. The *Guideline defined in 2012 states that in the case of indirect recapitalization of financial institutions the use of ESM facilities has to comply with '*the provisions of the European Union's State-aid framework and relevant provisions of any future crisis management framework for bank recovery and resolution*'. For direct recapitalizations instead, the Guideline specifies all the preconditions that need to be satisfied for the use of ESM in order to fulfil the terms of the SRM.*

In 2012 Spanish banks have benefited from a financial assistance program granted by the EFSF/ESM to the Fund for Orderly Bank Restructuring (FROB), that has acted as an agent of the Spanish government. Conditionality was financial-sector specific and included both provisions for individual banks (including in-depth bank restructuring plans and segregation of bank's problematic assets) and horizontal conditionality (regarding the governance, regulation and supervision of the financial sector). In parallel, Spain had to comply fully with its commitments and obligations under the Excessive Deficit Procedure and the recommendations to address macroeconomic imbalances within the framework of the European semester.

3. Strengthening the banks

3.1 Risk reduction

The project of a banking union was rapidly defined and announced in June 2012. It involved both risk reduction and risk sharing. The international operating scale of major European banks required a centralised supervisory responsibility, so that fragmented information would no longer risk allowing growing imbalances to go undetected. Moreover, the definition and application of common rules for banks in the EA (and any non-euro member states that would want to join) was deemed necessary to reassure the markets of the comparability of information on banks based in different countries. At the same time, the responsibility for the management of banking crisis and for deposit insurance was to be moved at the European level to help sever the link between banks and sovereigns, including by use of a common public financial backstop.

The implementation of the banking union has so far privileged risk reduction over risk sharing. The project consisted of three complementary pillars: a Single Supervisory Mechanism (SSM), a Single Resolution Mechanism (SRM), and a European Deposit Insurance Scheme (EDIS). However, only the SSM is fully operational (since November 2014). The SRM has been defined but it lacks a common public financial backstop. Only the first two loss-absorption lines foreseen in the Bank Recovery and Resolution Directive (BRRD) are active: private sector involvement through the bail-in of creditors and a resolution fund financed by the banking industry. The EDIS remains at the stage of proposal.

The SSM was set up in record time. It comprises the ECB and national supervisory authorities, and monitors all credit institutions – with systemic banks directly supervised by the ECB. Its '*rapid implementation was possible thanks to a provision in the Treaty expressly assigning the ECB prudential supervision functions. The SSM could right from the beginning rely on a whole set of common prudential rules (single rulebook), contained in the package of regulations CRR/CRD4 which had already transposed Basel III agreements in Europe*' (Rossi, 2016). In order for the ECB to have a clear view of the situation of the banks it supervises from the outset, a comprehensive assessment of banks' financial health was also carried out. From an operational viewpoint, the launch of the SSM has certainly been successful, in light of the complexity of the project and of the very short time frame available. In addition, the establishment of the SSM has been a fundamental step in the process of restoring investors' confidence in European banks. With the SSM banks should be stronger and less exposed to shocks: common supervision should ensure effective enforcement of stronger prudential requirements for banks, requiring them to keep sufficient capital reserves and liquidity. This should make EU banks more solid, strengthen their capacity to adequately manage risks linked to their activities, and absorb losses they may incur.

The BRRD is now implemented in national legislation in almost all member states. The deadline was 31 December 2014.[17] According to ISDA BRRD Implementation Monitor,[18] as of 2 June 2016 only Poland, among EU countries, has not yet implemented the BRRD, while Slovenia has only partially implemented it.[19]

The success of the SSM will depend on its ability to perform effectively a difficult balancing act between micro- and macro-prudential considerations. Regulatory changes that tighten capital ratios are particularly challenging after a financial crisis when banks are already deleveraging. The conflict with an

[17] The BRRD entered into force on 2 July 2014. EU member states were required under Article 130 of the BRRD to adopt and publish the laws, regulations and administrative provisions necessary to comply with the BRRD by 31 December 2014 and to apply those with effect from 1 January 2015, except in relation to the bail-in provisions, which are to apply from 1 January 2016 at the latest.

[18] Available at http://www2.isda.org/isda-brrd-implementation-monitor/.

[19] Belgium, Croatia, France and Latvia have implemented most of the provisions in the BRRD; all other EU countries have fully implemented it.

accommodating expansionary monetary policy stance may help smoothing the transition toward higher capital ratios by providing accommodative financing conditions (for example, the TLTRO2, announced last March by the ECB Governing Council, guarantee to banks certainty on funding availability at exceptionally low costs, thus potentially shielding credit supply from financial market volatility). However, the monetary policy stimulus is weaker when the private sector is deleveraging as a consequence of the financial crisis and the bank transmission channel is broken.

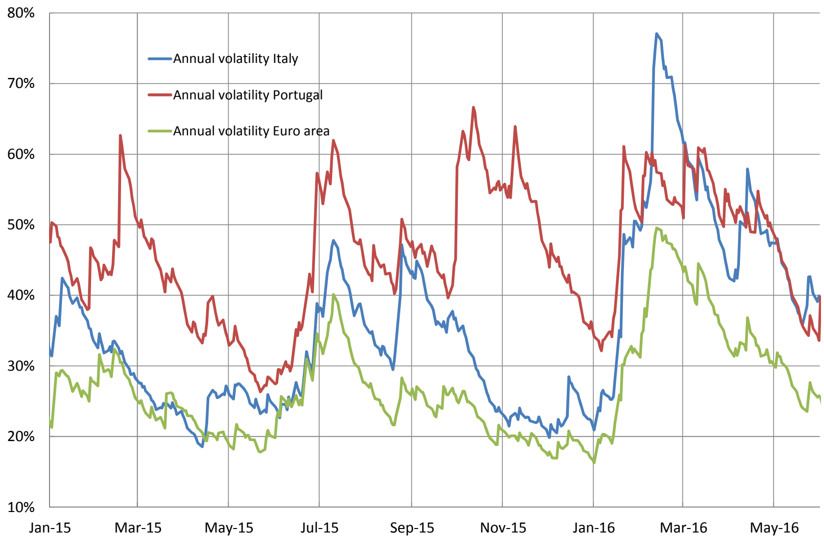
The SRM faces similar challenges. The BRRD contains some legal exemptions from the bail-in rule, aimed to balancing the different objectives of a 'resolution' procedure (i.e. protection of taxpayers, of systemic stability, depositors' protection, continuity in the supply of essential financial services). First, not all debt is subject to the bail-in (exempted categories include covered deposits, secured liabilities derivatives and inter-institution liabilities with maturities of less than seven days). Second, national resolution authorities can decide to '*exclude, or partially exclude, liabilities on a discretionary basis if they cannot be bailed-in within a reasonable time; to ensure continuity of critical functions; to avoid contagion or to avoid value destruction that would raise losses borne by other creditors*.' The careful management of these exemptions will be key. Risks to legal certainty in the EU will have to be taken into account (the same liability could be subject to two different treatments depending on whether the bank is directly supervised by the ECB, in which case the SRB will decide on the exemptions, or not).[20]

The abrupt introduction of the new standards set in the BRRD (and before that by the Commission communication on state aid) gave prominence to the need to reduce investors' moral hazard over the risks for financial stability. '*During the technical negotiations on BRRD held in 2013 the Italian authorities had formally argued in favour of applying the bail-in tool only to newly issued bonds expressly containing a contract term entrusting the authorities with the power to write-down or convert them upon the occurrence of the conditions for resolution. In addition, to allow time for investors to become aware of the new rules and for banks to provide an adequate buffer of bail-inable liabilities, it was stressed the need to defer the entry into force of the new rules to 2018. The objections raised in technical contexts, by both the Bank of Italy and the Ministry of Finance, were not taken into account. The political pressure coming from the Northern European countries prevailed*' (Rossi, 2016).

The first applications of burden sharing in Portugal and in Italy have shown limitations and risks. The concerns of Italian authorities were confirmed: the retroactive application of new rules to instruments issued prior to the introduction of both burden sharing and the bail-in and the little time given to investors to adapt theirs choices to the new rules resulted in significant litigation and political pressure to reimburse the households involved. Contagion effects from the troubles of even small intermediaries impacted the public's confidence in the resilience of the banking system. More in general, since last summer, there has been evidence of variations in the performance of individual banks' share prices mainly ascribable to fears over asset quality and transparency. As underlined in Banca d'Italia (2016a), the recent increased attention of investors to the characteristics of bank assets is likely partly due to uncertainty among operators as to the direction bank regulation is taking in the EA and to the as yet incomplete banking union. The resulting uncertainty in the banking sector is confirmed by the high levels of volatility reached by the aggregate banking indices (Fig. 6).

[20] See Visco (2016a) for a detailed discussion.

Figure 6 - Annual volatility of the stock banking sector
(daily data)



Source: Thomson Reuters Datastream and authors calculations.

3.2 Risk sharing

On the side of risk sharing, as already noted, the banking union largely remains unfinished business. The size of the SRF seems very low compared with the magnitude of State aids and guarantees during the peak of the global financial crisis and with the size of large European banks. Moreover, it is building up slowly, with full funding expected to be achieved only by 2024. The creation of common public financial backstops to the SRF has been postponed to an indefinite future. Finally, the common deposit insurance scheme is still at the stage of proposals.

The SRF has a target size of at least 1 per cent of covered deposits of banks in the Banking Union. It has become operational since January 2016 and its funding will build up gradually with the contributions by banks by means of annual deposits. The Single Resolution Board determines the size of contributions year by year (upon consultation of the ECB or the national competent authority and in strict cooperation with national resolution authorities).[21] De Groen and Gros (2015a) estimate that, even if SRF contribution is estimated at only about a quarter of the total losses incurred by banks during the recent financial crises, it should be capable of dealing with major crises, even of similar proportions as the last one.[22] Even if some limited bridge funding might be needed in case of an early crisis, De Groen and Gros (2015b) argue that this could be mobilized on short notice.

However, under a systemic crisis, the losses expected to be absorbed by the private sector may well exceed its resilience: in this case the SRF would need a public financial backstop. The absence of such a backstop has often been taken to mean that the Single Resolution Fund is useless (Schoenmaker, 2014). Member states have agreed that the banking union requires access to an effective common fiscal backstop to be used as a last resort. '*Such a backstop would imply a temporary mutualisation of possible fiscal risk related to bank resolutions across the banking union. However, use of the backstop would be fiscally neutral in the medium term, as any public funds used would be reimbursed over time by the banks (via ex-post contributions from the banking sector)*' (European Commission, 2015b). Moreover, the design of a temporary public backstop would be needed '*for cases where the application of the bail-in might exacerbate, rather than alleviate, the risks of systemic instability. It would be fully consistent with the*

[21] See Banca d'Italia (2016b).

[22] This reflects the provisions allowing its intervention only after a bail-in of 8% (of liabilities) has taken place and limiting its funding to 5% (of liabilities including own funds).

provisions of the Key Attributes of Effective Resolution Regimes of the Financial Stability Board, that are the global standards for the resolution of large financial intermediaries' crises' (Rossi, 2016). A proposal to use the ESM as a financial backstop for crisis management has been put on hold.

Equally important, a Single Deposit Insurance Scheme is missing. Deposit insurance is currently implemented at the national level based on the 1994 Directive on Deposit Guarantee Schemes (DGS) as amended in 2010 with the aim to harmonize the coverage and funding arrangements of national DGS and clarify responsibilities. The amended Directive aims to guarantee that deposits up to a limit of € 100,000 in any European bank will be reimbursed to depositors in the event of bank failure, without any haircut. Its requirements should be fully phased in by 2024. Today, almost all European countries have an explicit deposit insurance (the only two exceptions are Israel and San Marino).[23] The system is structured such that it can absorb isolated bank failures, not a systemic banking crisis.

The EU Commission has recently proposed an EA wide deposit insurance scheme (EDIS) for bank deposits, supplementing national DGS. The rationale of the proposal is to increase the resilience of the Banking Union against future financial crises by reducing the vulnerability of national deposit guarantee schemes to large local shocks and further reducing the link between banks and their home sovereign. The EDIS is intended to establish a mutual system of private deposit insurance based on a Deposit Insurance Fund (DIF), to which the already existing national funds would gradually transfer the resources collected by the participating banks. The scheme would guarantee the same protection in all countries participating in the SSM. EDIS would be built on the existing system and developed over time: it would fully insure national DGS as of 2024.[24]

Negotiations are proceeding slowly and there are heated discussions about the design of the single deposit guarantee scheme. Notwithstanding the scheme does not envisage any public backstop, and has a very long transition, a climate of mistrust still prevails along national borders: '*The proposal has faced firm opposition from some countries …. They call for the harmonization of major national regulations – bankruptcy laws, collateral framework, tax rules, company law and consumer protection – before mutual guarantee schemes are even discussed; and, above all, they call for the preliminary introduction of prudential requirements for banks' sovereign exposure*' (Rossi, 2016). Among the opponents, the German Council of Economic Experts (2015) takes a critical view of a common European deposit insurance scheme warning of the risks involved in a premature introduction. In particular they point to the need to first sever the financial sovereign-bank nexus with the aid of regulatory reforms as necessary preconditions to prevent the danger of risks in one member state being transferred to the others. A similar position has been taken recently by the EU Dutch Presidency and by the President of the Bundesbank.[25]

4. Further reforms of the fiscal governance

In the medium- to long-run fiscal stabilization should become a 'federal function'. This is consistent with the theory of fiscal federalism, which emphasises the trade leakages impairing the effectiveness of 'local' stabilization policies (Musgrave and Musgrave, 1984), as well as with prevailing international practice. No federation works with a share of 'local' to total expenditure as high as the EU's (98 per cent).

In monetary unions, a centralized fiscal policy is indispensable. Monetary policy cannot react to the economic conditions of individual countries, nor can member states rely on exchange rate movements to cushion them against shocks. As early as 1969, Kenen argued that a 'central' fiscal policy would limit the

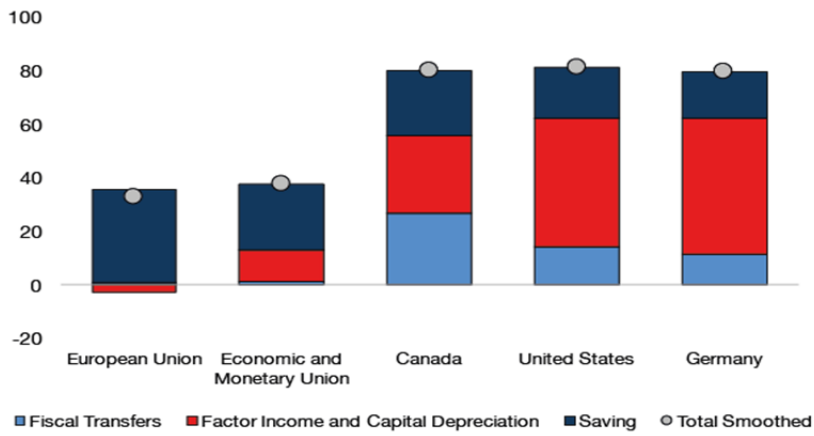
[23] See Demirgüç-Kunt *et al.* (2014) for details.

[24] See European Commission (2015c) and European Commission (2015d) for the details of the proposal.

[25] See: (a) *Strengthening the banking union and the regulatory treatment of banks' sovereign exposures*, Presidency note, Informal ECOFIN, April 22, 2016; (b) *Solidità e solidarietà nell'Unione monetaria*, speech at the German Embassy in Rome, April 26, 2016 (http://www.bundesbank.de/Redaktion/EN/Reden/2016/it_2016_04_26_weidmann.html).

'local' adjustments in price and wages necessary to cater for an idiosyncratic shock. A 'federal budget' would be particularly desirable in the EA as its member states display less cross-country labour mobility compared to the US and other established federations (Obstfeld and Peri, 1999), have less integrated financial markets and appear relatively more likely to be hit by asymmetric shocks (Bayoumi and Eichengreen, 1992). In federations like Canada, Germany, and the US, around 80% of income shocks to sub-national components are smoothed, either via private credit and capital markets — smoothing about 50-70% of shocks — or public transfers from the centre to sub-national components — between 10-30% (Bluedorn *et al.,* 2013).[26] By contrast, income shocks to Eurozone countries are only about 40% smoothed, with fiscal risk sharing found to be nearly zero (Fig. 7).

Figure 7 - **Risk sharing in different federations**
(*per cent of regional income shocks smoothed*)



Source: Allard and Bluedorn (2016)

The necessity to complement a monetary union with a fiscal union has been knowingly side-stepped by European policy makers for a long time. A report on the fiscal union (the MacDougall Report) was published already in 1977 on behalf of the European Commission, and a mention concerning the economic desirability of a common budget is present even in the 1970 Werner Report. Later on, the technical papers accompanying the 1989 Delors Report and especially European Commission (1993a, b) discussed the topic in depth. On 3 May 1998, when Europe was completing the last steps before the adoption of the single currency Padoa Schioppa wrote a column for Corriere della Sera highlighting its incompleteness. The debate on a fiscal union for the EA re-started during the crisis, as countries were struggling to cushion against the recession.

There is no shortage of technical alternatives to create a fiscal capacity for the EA. A 'rainy-day fund' model with common resources allocated inter-temporally and across member participants according to the economic cycle is discussed, among others, in European Commission (2012), Allard *et al.* (2013) and Caudal *et al.* (2013). Proposals for a euro-wide unemployment insurance have also been put forward (e.g., Lellouch and Sode, 2014; Brandolini *et al.*, 2014; Bénassy-Quéré *et al.*, 2016). Balassone *et al.* (2014) discuss the possibility of an EA pension scheme.

However, the idea has met with strong opposition and is mainly seen as a long-term project.[27] Critics of the rainy day fund have pointed out the difficulty of identifying the cyclical position of member states in

[26] See also Asdrubali *et al.* (1996), Melitz and Zumer (2002), and Obstfeld and Peri (1998).

[27] All official reform proposals put forward since 2012 – though with differences in emphasis – share the conclusion that a fiscal union for the euro area is a medium- to long-run project (Balassone *et al.*, 2014).

real time. Proposals for a common unemployment insurance scheme have met resistance because of the difficulty in discriminating between cyclical and long-term unemployment, opening the way to permanent net transfers to regions characterized by higher structural weaknesses. The establishment of a common pension system would be a challenging endeavour, in view of the variety of pension arrangements now existing in EA countries. More generally, critics fear that such a common fiscal capacity could foster opportunistic behaviour and weaken the incentives to promote possibly painful growth-enhancing reforms.

Against this background, a second best solution is to allow fiscal stabilization at the national level in the face of exceptional circumstances. The 'ratification' of such 'exceptional circumstances' cannot be based on numerical criteria. Complete contracts cannot be written and chances are that exceptionality may take different and new shapes over time. After all, even though today deflation is a concrete risk, it was not considered explicitly in any of the provisions of the SGP. A comprehensive evaluation will have to rely on discretion, on the possibility to complement hard evidence with qualitative case-by-case analysis.

To make sure that discretion is properly used, appropriate checks and balances will be necessary. One possibility would be to entrust the national fiscal councils introduced by the Fiscal Compact with this responsibility (Pisani-Ferry, 2016), possibly with the backing of the recently-created European Fiscal Board (EFB).[28] Both are independent technical bodies, the national councils with a better knowledge of local conditions, the European board with a safety distance from national politics. Another possibility would be to entrust the EA Finance Minister advocated by Villeroy de Galhau and Weidmann (2016) with the authority to declare the existence of 'exceptional circumstances', again with the backing of national fiscal councils and the EFB. Comparing these two options, the former can be seen as providing more shelter from political bargaining, while the latter has advantages in terms of both democratic legitimacy and political responsibility.

The identification of exceptional times, although not constrained by numerical thresholds, should be inspired to transparent criteria. The decision should be based on a large information set encompassing, inter alia, the monetary policy stance, financial and macroeconomic risks as identified by the European Systemic Risk Board (ESRB) and by the macroeconomic imbalances procedure, the country-specific fiscal space (measured with a view also to the long-term, e.g. with reference to the Commission's sustainability indicator S2).

In practice, in 'exceptional circumstances' a 'budget of flexibility' would be made available to member states. This would be additional to the flexibility margins already attached to specific clauses in current rules (investment, structural reforms). It would be an exceptional and temporary budget, made available by the Commission or by the EA Finance Minister (with the backing of national fiscal councils and the EFB) when, for example, the fiscal stance is deemed to be unduly restrictive once the overall macroeconomic and fiscal conditions are taken into account. In order to mitigate moral hazard, access to this budget could be made conditional on countries' track record with sound fiscal policy.

Implementing this reform would be easier if it were accompanied by some increase in risk sharing. The change in 'rhetoric' and the backing of European institutions may help reduce the potential for negative market reactions to fiscal expansions in distressed member states. However, an explicit financial backing would be much more effective. As stated in the 5-Presidents' report (Juncker, 2015), '*the world's second largest economy cannot be managed through rule-based cooperation alone. […] it will need a shift from a system of rules and guidelines to a system of further sovereignty sharing within common institutions*'. This could be achieved, for instance, through a mechanism of gradual debt mutualisation (German council of

[28] The EFB was introduced by a Commission's decision in November 2015. It will be composed by five renowned international experts in macroeconomics and budgetary policy-making, nominated by the Commission in consultation with several key stakeholders such as the ECB, the Eurogroup and the national fiscal councils. It is bestowed with the responsibility to evaluate the consistent implementation of the EU fiscal framework, with a particular focus on the horizontal consistency of the implementation of budgetary surveillance and on cases of particularly serious non-compliance with the rules. It will also advise on the appropriate overall fiscal stance for the EA.

economic experts, 2011)[29] by strengthening the financial capacity of the ESM and streamlining its governance, or by providing a leaner set of rules for the OMT.[30] Unfortunately there doesn't seem to be much appetite for further risk sharing at present.

To be a credible insurer against liquidity crises, the ESM should be able to provide financing in sufficient quantity. The extension of unlimited joint guarantees to ESM operations by its shareholders could increase the lending capacity of the mechanism substantially. Currently such guarantees are explicitly ruled out by the ESM Treaty, consistent with the no bail-out clause in art. 125 of the TFEU and with national legislation in some member states.[31] The availability of an autonomous revenue flow would be an alternative which would require no less institutional reform.[32] As it stands, the ESM lending capacity could be increased only through new capital subscriptions by member states – which would impact their national debts –, or by an increase in the ratio of lending capacity to subscribed capital (currently at about 71 per cent) – which would impact on ESM rating and cost of funding.[33]

Besides its quantity, the timeliness and predictability of financing are key to the effectiveness of ESM operations. A revision and simplification of ESM governance could go a long way in this respect. The involvement of the Board of Governors in the operation of ESM could be reduced and most 'routine' decisions left to the Board of Directors (possibly, with a much smaller membership), whose decision could as a rule be taken by qualified majority (set at a lower level than the current 80 per cent). Moreover, the number of actors involved in the decisions could be reduced.[34] Finally, a new very short term liquidity

[29] The German council proposed the creation of a European Redemption Fund to swap national debt in excess of 60 percent of GDP into common liabilities issued by the Fund and backed by limited joint guarantees pledged by all member states, subject to a pre-defined plan for debt reduction under the form of an amortization scheme covering 20-25 years. The proposal, later dismissed by the German Council crashed against opposition to the build-up of joint guarantees, sharing this fate with earlier proposals for the introduction of Eurobonds. Parello and Visco (2012), building on an earlier suggestion by Visco, revamped the proposal by envisaging the possibility for the Fund to invest the surplus liquidity generated by the difference between the flow of amortization installments paid by the Member states and the interest bill due by the Fund to the market each year, arising from the very long-term issuance policy of the Fund. Similar proposal have been put forward by Pâris and Wyplosz (2014) and by Corsetti *et al.* (2015). They also find antecedents in the general debate on Eurobonds (see, for instance, Delpla and Von Weizsacker, 2010, and Boonstra, 2011).

[30] OMT could be allowed to start without waiting for the definition of a fully-fledged macroeconomic adjustment program (e.g. using precautionary conditioned credit lines), or simply upon the request for assistance to the ESM by a member state. Additionally, macroeconomic conditionality could be taken out of the picture once the OMT has started (see Section 2). On this account, however, high controversy is likely to impede reforms. The current set up for OMT decided in 2012 struck is obviously the result of a compromise balancing the concerns over financial stability with those over moral hazard and it is unlikely that positions have changed much thereafter. Moreover, some members of the Governing Council are expressing doubts about the current asset purchase programme (APP) of the ECB (e.g., Weidmann, 2016). Although the OMT differs from the APP in its scope and characteristics, these criticisms can make very difficult accepting changes that would simplify the activation of OMT. It should also be noted that the German Constitutional court considers itself entitled to reject the decisions or opinions of the ECJ and this does not exclude the reopening of the case concerning the legitimacy of OMT.

[31] ESM Treaty Chapter 3, Art. 8 reads: '*The liability of each ESM Member shall be limited, in all circumstances, to its portion of the authorized capital stock at its issue price. No ESM Member shall be liable, by reason of its membership, for obligations of the ESM.*' In 2011 the German Constitutional Court, ruling on financial aid to Greece and the EFSF, clarified that the Parliament cannot '*enter in permanent mechanism under international public law which results in an assumption of liability for other state voluntary decisions, especially if they have an impact that is difficult to evaluate*'.

[32] For instance, Corsetti *et al.* (2015) propose bringing forward the future (50-year-long) income stream of specific revenue sources and capitalize them into a Stability Fund which would then allow the Fund to buy a large share of the public debt of the participating countries. To this purpose, the Fund would issue 'stability bonds', collateralized by the expected stream of revenues.

[33] At present ESM bonds have a triple-A rating from Fitch and an Aa1 rating from Moody's.

[34] Balassone and Committeri (2015), for instance, argue for the separation of ESM and IMF activities.

facility could be introduced for use in emergency situation, allowing the ESM to provide liquidity without the need to set a fully-fledged adjustment program.

Resistance to increasing the financing power of the ESM, especially under lower conditionality, is however strong. Several proposals, both institutional and academic, actually go in the opposite direction, suggesting the introduction of sovereign insolvency procedures associated with ESM assistance – which would reduce the need for additional financial resources – in order to partially deal with moral hazard concerns (Box 2). The German Council of experts (2015) has suggested the introduction of a formalised insolvency mechanism to make the no bail-out clause credible (Andritzky *et al.*, 2016a, provides more details). Such a procedure would require a maturity extension of government bonds as part of future adjustment programs if public debt is not deemed sustainable. In the event of severe public debt overhang or a material breach of fiscal rules, an ESM adjustment program should only be approved after a debt haircut is imposed on private creditors. This line of reasoning was recently echoed in a recent open letter by the president of the Bundesbank and the governor of the Banque de France, underlying the necessity to investigate '*how ESM rescue programmes could better involve private investors and how a sovereign debt restructuring process could be designed which does not put financial stability in the euro area as a whole at risk*' (Villeroy de Galhau and Weidman, 2016).

Box 2 – Insolvency procedures for sovereigns

The literature on the design of insolvency procedures for sovereigns dates back to the 1980s (for a review, see Rogoff and Zettelmeyer, 2002). After the debt crises of the 1990s, a proposal was developed at the IMF for the introduction of a Sovereign Debt Restructuring mechanism (SDRM) entrusting an international body with the task of administering the resolution of sovereign debt (Krueger, 2002). The proposal was explicitly based on Chapter 9 of the US Bankruptcy Code, a provision designed for municipalities, not for States.

US municipalities retain the responsibility of repayment of their debt, without any commitment of the state or federal budget. The purpose of chapter 9 is to provide a financially-distressed municipality protection from its creditors while it develops and negotiates a plan for adjusting its debts (typically resulting in maturity extensions, haircuts on principal or interest, refinancing by means of new loans), so that basic governmental functions are preserved.

The debt adjustment plan is filed by the debtor within a time range fixed by the court. Unlike private bankruptcy (Chapter 11), creditors are not allowed to file alternative plans. Initiated by the debtor and managed by a Bankruptcy Court, chapter 9 procedure includes an 'automatic stay' to stop all collection actions against the debtor. Total liquidation is excluded. At the same time Chapter 9 provides protection to creditors by preventing dissipation of available resources via payments to non-priority counterparties. The procedure also includes, as a condition to confirmation, that the plan be accepted by each class of creditors impaired under the plan.

However, the SDRM proposal 'failed to command the majority needed to amend the Fund's Articles of Agreement due to the members' reluctance to surrender the degree of sovereignty required to establish such a framework' (IMF, 2013). After the demise of the SDRM, work in this field principally redirected towards the promotion of collective action clauses (CACs) in sovereign bonds issued in key international financial markets.[35] *This was complemented by the adoption of voluntary codes of conduct by some sovereign issuers and international investors.*

[35] In this respect, it is worth noting that since 2013 EA member states are obliged to incorporate a two-limb aggregation clause in their bond contracts. This has been an important improvement in order to discourage opportunistic and destabilizing hold-outs actions (Bardozzetti and Dottori, 2014). Alike CACs and automatic maturity extension, an additional insurance mechanism has been proposed in the literature, based on the indexation of bond payments to variations in domestic GDP (Borensztein and Mauro, 2004, Blanchard *et al.*, 2016). One drawback with the issuance of those instruments by EA member states is the insurance mechanism is only effective if most of the debt is held abroad; however, the foreign held share of EA sovereign debt does not exceed 50%. Concern has also

Almost a decade later, the Greek crisis reopened the debate and shifted attention to the context of the EMU. Bruegel proposed the creation of a European Crisis Resolution Mechanism (ECRSM), closely linked to the SDRM (Gianviti et al., 2010). The proposal foresaw the involvement of a number of institutions: an economic body to assess debt sustainability and oversee the economic adjustment of the debtor country (e.g., the ECB or the European Commission), a legal body to resolve disputes (e.g., the European Court of Justice), and a financial body to provide financial assistance and interim financing (the EFSF/ESM). Most subsequent proposals also foresee a crucial role for the ESM, often combined with an improvement in CACs, complementing the procedure. In fact, the insolvency mechanism can be seen as a way to establish a statutory framework to overcome collective action problems and facilitate an orderly (and foreseeable) debt restructuring.

A novel element in such proposals is the presence of automatic triggers for the insolvency procedure. The Bundesbank first proposed a compulsory trigger clause to be added to the issuance terms which would automatically extend maturity by three years in the event of assistance granted by the ESM (Weber et al., 2011). The Committee on International Economic Policy and Reform built on this framework by adding thresholds and elaborated legal details of a highly formalized procedure to be implemented through an ESM Treaty change (CIEPR, 2013). Fuest et al. (2016) and Andritszky et al. (2016b) enrich their proposals with provisions for a gradual transition to the new regime.

However, these proposals risk worsening the very problem the ESM was set up to address. First, the introduction of automatic triggers may end up facilitating the ignition of crises rather than help preventing them. Runs on sovereign bonds may start as soon as debt levels come in the vicinity of thresholds and/or as soon as talks of ESM support begin. Second, triggers may also negatively affect the sustainability of countries' fiscal positions both by further reducing the fiscal space available for stabilization policies (Bofinger, 2016) and by raising their borrowing costs. Third, by increasing the stigma associated with ESM assistance, an automatic link between ESM financing and maturity extension may delay intervention, thus increasing the costs of restructuring. Fourth, and conversely, by creating a relatively easy and less uncertain exit option a SDRM might incentivize more irresponsible fiscal policy early on. The current setting, in which debt restructuring is possible but is painful because of uncertainties and the accompanying adjustment program imposed by European institutions, '*might in fact strike the right balance between market discipline and fiscal responsibility*' (Bénassy-Quéré *et al.*, 2016).

There are further good reasons not to modify the ESM Treaty by introducing more specific terms concerning debt restructuring. First of all, it is not that easy to discriminate between solvency and liquidity crises, and any assessment on the solvency of a sovereign debt requires a significant degree of judgement when considering the several elements involved (deficit and debt dynamics, the maturity profile of liabilities, growth prospects, macroeconomic and demographic risks, etc.). It is for this reason perhaps that the recent reform of IMF lending policy (Box 3), while reducing the degree of allowed discretion compared with previous arrangements, does not entail a degree of automatism comparable to proposals put forward in the European context. Second, and more importantly, the ESM must preserve the stability of the EA as a whole, and systemic issues cannot be simply disregarded when deciding on financial support to member states and whether their debt should be restructured with private sector involvement, which, as clearly pointed by Bini Smaghi (2011), can entail very high and unpredictable costs.[36]

Finally, there is no agreement on the optimal timing and features of debt restructuring. A consensus appears to be emerging on the correlation between debt crisis and growth slowdown (Borensztein and Panizza, 2009, Furceri and Zdzienicka, 2012, Reinhart and Reinhart, 2015), but the IMF 'too little, too late'

been raised that, given the increasing synchronization of EA business cycles, insurance effectiveness would require sovereign bonds to be held by non EA investors (De Grauwe and Ji, 2016).

[36] Balassone and Committeri (2015) also discuss the merits of the controversial 'systemic clause' abolished by the new IMF lending policy (Box 3).

claim is not univocally proved yet. For instance, Asonuma (2012), with data as well as a theoretical contribution, highlights a possible trade-off between haircut dimension and subsequent credit conditions, as lower recovery rates for creditors are associated with higher bond spreads in the post-default period. Moreover, causality issues remain to be solved, and the doubt remains if recession is a good time for implementing a restructuring: final restructurings (conventionally, the ones not followed by another debt crisis within four years) usually happen when a country is already recovering from past decline (Reinhart and Trebesch, 2016; Benjamin and Wright, 2009). The evidence is also mixed on the relative merits of debt reprofiling and deeper debt restructuring. For instance, Rehinart and Trebesch (2016) and Schröder (2014) show that the economic landscape and the probability of serial restructurings are worse for reductions in net present value given by maturity extensions and/or interest rate reductions (i.e. reprofiling) than for a debt write-off.

Box 3 – The IMF new lending framework

The IMF has recently modified its lending framework with two important changes in its exceptional access criteria. First, the 'systemic clause' was abolished (this clause allowed the IMF to provide assistance to Greece without the need for debt restructuring even if the Greek debt was considered sustainable but not with high probability). Second, when debt is considered sustainable but not with high probability and the country has lost market access, the IMF is now allowed to require a reprofiling of the sovereign debt, which does not need to restore sustainability with high probability, but is sufficient to improve the debt profile and safeguard Fund's resources.

The reform was motivated by the risks that the systemic exemption clause could have increased moral hazard behaviour of countries as well as private creditors. In addition, it could have exacerbated the risk that IMF resources be exposed to few very large adjustment programs. The possibility of conducting a reprofiling should be less costly than a fully-fledged restructuring and therefore more acceptable for creditors. Moreover, a reprofiling does not decrease the exposure of private creditors to the country under program, and this would provide safeguards to official creditors (with preferred creditor status, like the IMF) in case a need materializes for a more extensive debt restructuring.

*The modified lending framework recognizes that there could be circumstances in which cross-border spillover risks from debt restructuring are so severe that any form of restructuring should be avoided. The new lending framework does not preclude IMF interventions in those circumstances, even when there is uncertainty on the debt sustainability and without any form of debt restructuring; however, it requires that financing should be provided from '*sources other than the Fund*' (i.e. other official creditors), in order to improve the debt profile.*

Finally, IMF lending must be accompanied by a complex debt sustainability analysis that considers not only the debt level but also its structure and dynamics over the medium-term and under different policy paths and different global economic environment. It is recognized that debt sustainability analysis should not be interpreted in a mechanic way, and any assessment on the high probability of debt sustainability always contains a consistent degree of judgement.

5. Completing the banking union and beyond

Severing the link between banks and sovereigns requires the completion of the banking union with the risk sharing elements foreseen by the original project and still lacking implementation. Member states have to agree on a common backstop (that is a common financing facility) backing the Single Resolution Fund in case of sudden need, exceeding the available means of the fund. In the short term, while the Single Resolution Fund is progressively built up (until 2024) through contributions from the banking sector, member states also need to provide appropriate bridge financing (for example, through a credit line with the European Stability Mechanism, ESM). Concerning deposits, the approval of the Commission proposal discussed in Section 3 needs to be complemented by a public backstop for the privately financed deposit insurance fund, which could be needed to support its role in crisis financing.

The crisis management framework should incorporate a macro-prudential approach. This would reassure financial markets that, in case of crisis, resolution tools that might endanger financial stability will not apply. The new European framework on banking crisis has the overarching purpose to ensure that banks can fail without adverse consequences on financial stability. However, it does not provide for any effective tool to safeguard financial stability when the application of resolution tools – such as the bail-in – may exacerbate rather than alleviate systemic risk.

The European debate is instead increasingly focussing on calls for a revision of the prudential treatment of banks' sovereign exposures, which is argued to be necessary to strengthen the stability of the banking sector and address the sovereign-bank nexus.[37] The Dutch Presidency note for the ECOFIN of April 2016 lists five possible policy options identified by the EFC High Level Working Group,[38] ranging from retaining the current treatment to addressing both credit and concentration risk. A common point in the debate is the necessity of a gradual implementation of any possible revision, to avoid dangerous repercussions on financial markets. However, even if the implementation takes place in the medium-to-long term, possible issues related to frontloading by banks in terms of sell-off of sovereign bonds should be taken into account.

Such reforms could have disruptive consequences for EA economies, risking to be more harmful than helpful. Based on Lanotte *et al.* (2016), Box 4 provides estimates on the likely consequences on government bond's yields of the revision of the prudential treatment of banks' sovereign exposures as proposed by the German Council of Economic Experts (Andritsky *et al*., 2016b). The reform could have significant consequences on the government bond markets of Italy, Spain and, to a lower extent, Germany. As pointed out by Lanotte *et al.* (2016), estimates such as those in Box 4 must be interpreted as a lower bound. First, they are derived from a comparative static exercise, while transitional dynamics in the current circumstances might be highly non-linear. Second, they are based on a partial equilibrium analysis, excluding changes in the riskiness of government bonds following portfolio adjustments induced by the reform. Third, they exclude repercussions on regulation applicable to other intermediaries (for instance, the insurance sector, which also holds significant amounts of government bonds). Fourth, they exclude possible changes in banks' portfolio composition following the reform, while a more realistic assumption would be that banks rebalance their portfolio toward less risky assets in order to save capital costs. Fifth, there could be significant macroeconomic implications if banks decide to deleverage in order to address at

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[37] According to Nouy (2012), '*there is a need to have a better understanding of the sovereign risk and assess the need for regulatory reform in that regard, in particular to consider regulatory charges differentiated according to the respective credit quality of sovereigns*'. For Weidmann (2013), '*a reassessment of the regulatory treatment of sovereign exposures of financial institutions is crucial*'. Gros (2013) suggests that risk weights on sovereign debt should not be at zero, and '*should be based on 'objective' criteria, rather than ratings*', he points out that more important than risk weighting for sovereign exposure is diversification, which is to be addressed by applying large exposure rules. The Five Presidents' Report (Juncker, 2015) also refers to the possibility of introducing limits on banks' exposures to individual sovereigns as a means to ensure sovereign risk diversification. European Commission (2015c) announced that it '*will come forward with the necessary proposals on the prudential treatment of sovereigns, drawing on quantitative analysis under preparation in the Economic and Financial Committee and the Basel Committee and paying particular attention to financial stability aspects*'. Constancio (2015) expressed its disagreement with the idea of introducing caps on sovereign exposure, but sounded more confident about revisions of risk weights, provided they do not create undue turbulence in markets where sovereign debt is used. Visco (2016b) examines in detail pros and cons of a revision of the prudential treatment of sovereign exposures and concludes against it: '*the mere recognition that there is no truly risk-free asset does not per se warrant a change in the regulatory treatment of sovereign exposures. […] At the current stage, a broad agreement has been reached on the pros and cons of different reform options, not on their overall balance. My personal view is that the potential benefits of a reform are uncertain, while the potential costs could be sizeable.*'

[38] The EFC HLWG on the prudential revision of sovereign exposures was set up in 2015 to study different dimensions of sovereign exposures and look at the implications of various regulatory changes.

least part of the capital shortfall arising from the revision of sovereign risk weights (any significant deleveraging could cause further credit tightening, reduce economic growth, and eventually also have an impact on fiscal balances).

Sovereign exposures generally receive a more favourable treatment than those towards private companies. In the Basel II framework, '*at national discretion, a lower risk-weight may be applied to banks' exposures to their sovereign (or central bank) of incorporation denominated in domestic currency and funded in that currency*' (Paragraph 54). In most advanced countries, banks' exposures to domestic sovereigns in domestic currency receive a zero risk weight (to our knowledge, this is the case in Australia, Canada, Hong Kong, Japan, Singapore and the US). Any possible changes of the regulatory treatment of the sovereign exposures should be discussed in an international context, namely within a reassessment of the Basel framework, so to ensure a level playing field.

There are good reasons for this preferential treatment. Markets need a safe asset that serves as a store of value, as a means to meet regulatory requirements, and as a pricing benchmark. '*To be sure, risk-free must be understood as a behavioural concept. […] there is no such thing as a risk-free asset, strictly speaking. However, we used to live in a world where sovereign risk was so low that investors could behave as if that debt was risk-free. The situation was a bit like air travel: we all know that the risks are not zero when we get on a plane but they are low enough for most of us behave as if they were truly minimal*' (Caruana, 2013, p. xxvi). Governments have a comparative advantage in providing safe assets (even the large production of safe assets before 2008 by private vehicles relied implicitly on the perceived government backstop). In general, their credit, liquidity and market risks are lower than in the private sector. The probability of a default of an AAA-rated sovereign issuer is much lower than the one of AAA-rated corporations. According to Moody's (2008), between 1983 and 2007 issuer-weighted cumulative default rates for sovereigns have been on average lower than those for their corporate counterparts, except for BBB-rated issuers at three-years or longer horizons.

Box 4 – Effects of a reform of the prudential treatment of banks' sovereign exposures

The German Council of Economic Experts recently proposed a revision of the prudential treatment of banks' sovereign exposures, in terms of both risk weights and concentration limits (Andritzky et al., 2016b). We follow Lanotte et al. (2016) to assess the impact of such proposal on sovereign bond markets in Italy, France, Germany and Spain in a stylised partial equilibrium framework.

In this framework demand elasticities are equal to the share of government bonds held by EA banks. They are estimated using data on banks' sovereign exposures collected by EBA (2015). We also consider a 'pessimistic scenario' in which the elasticity is equal to 100%.

The risk weights proposed by the German Council are equal to 0.5 for Italian and Spanish government bonds and 0 for French and German ones (so the sovereign markets of these two countries would not be impacted by the reform). Our exercise shows that the reform would have a stronger impact for Spain than for Italy (Table 1). Compared to Italy, Spain has a higher elasticity of banks' demand for its sovereign bonds (which in the model amounts to a larger exposure of banks relative to the total outstanding Spanish bonds). In the pessimistic scenario the impact is driven only by the risk weight as the elasticity is assumed to be equal across countries.

Table 1 – Estimated impact on 10-year government bond yields of a revision of risk weights

(basis points)

	Risk weight	*Scenario*	
		Optimistic	Pessimistic
Italy	0.5	**12**	**46**
Spain	0.5	**25**	**46**

Note: the estimated elasticities used to compute the optimistic scenario are 0.22 and 0.42 for Italy and Spain, respectively.

Andritzky et al. (2016b) also propose to apply a cap to the ratio of banks' exposure towards individual sovereigns to their Tier 1 capital. The cap would be based on each sovereign's rating (they suggest 75 per cent for Italy and Spain and 100 per cent for Germany and France). This is different from the current regulation for corporate exposures, which are capped at 25 per cent independent of the rating. With a 100 per cent concentration limit, banking groups in Italy, Germany and Spain would have more than €100 billion of excess domestic sovereign debt (Table 2).

Table 2– Domestic sovereign debt exposure in excess of concentration limits

Concentration limit	*75%*		*100%*	
	billions of €	% of nominal GDP	billions of €	% of nominal GDP
Italy	152	9	118	7
Germany	187	6	135	5
France	46	2	0	0
Spain	151	14	102	10

We use the same conceptual framework as above to analyse the effect of such caps on sovereign bond returns. When the concentration limit is binding, banks need to sell their excess exposures. The impact on government bond yields will depend on the elasticity of demand for these bonds rescaled by a factor that takes into account the fact that bonds shed by banks will be bought by a reduced investor base. We again follow Lanotte et al. (2016) and use the demand elasticity estimated by Grande, Masciantonio and Tiseno (2014). We consider two scenarios also in this case. In an optimistic scenario, the demand by other sectors remains unaffected and the scaling factor is equal to the reciprocal of the share of government bonds not held by domestic banks. In a more pessimistic scenario, in which insurance companies do not buy bonds shed by banks and households' demand does not react to changes in yield in the short- and medium-run, the scaling factor is equal across countries.

Among the countries for which the concentration limits would be binding, we find that the impact would be strongest on Spanish bonds (58 and 50 basis points in the optimistic and pessimistic scenarios, respectively). It would be lowest in Germany, as the higher elasticity and the high home bias in German banks' portfolios would be more than compensated by the higher concentration limit (Table 3).

Table 3– Estimated impact on 10-year government bond yields of a revision of concentration limits

(basis points)

Concentration limit	*75%*		*100%*	
	optimistic	pessimistic	optimistic	pessimistic
Italy	24	38		
Germany			18	19
France			0	0
Spain	50	58		

Note: The rescaled elasticities used to compute the impact in the optimistic scenario are 0.026, 0.039, 0.024and 0.034 for Italy, Germany, France and Spain respectively. The elasticity used in the pessimistic scenario, common to all countries is 0.04.

A reform of the prudential treatment of sovereign exposure should only be considered if it provides incentives to remedy the current shortage of safe assets, not if it risks worsening it. In the EA, there are only two ways to remedy the shortage of safe assets. First, there is risk reduction: member states should ensure sound fiscal positions to make their sovereign paper safer. Second, there is risk sharing through a fiscal union and debt mutualization with eurobonds. We have already discussed the progress made in risk reduction and the difficulty of making further advances in risk sharing.

Solutions could be envisaged to provide incentives to diversification, resulting in a 'synthetic' alternative to Eurobonds. As suggested by Corsetti *et al.* (2015), exposures to individual EA sovereigns may indeed be assigned a non-zero risk weight and be subject to concentration limits, if both provisions do not apply when a bank holds paper issued by all EA sovereign in a balanced portfolio (say, in proportion to countries' GDP). For this to work, the same concentration limit and non-zero risk weight should apply to all sovereigns, thus recognizing that excessive demand for a single sovereign can pose risks to financial stability regardless of its riskiness (as was the case with the sharp increase in demand of German bonds during the crisis). Although the proposal may present some conceptual appeal, to assess its viability a more in-depth investigation of its technical features and potential repercussion would be needed. Among several open issues, the following could be mentioned: how to define the diversified portfolio of sovereign bonds; how to account for sovereign bonds in currencies other than the euro; how to deal with non-investment grade securities.

6. Conclusions

The unchecked build-up of imbalances during the 2000s exposed the EA to the risk of sudden stops. Such risk materialised in 2009-10 and its consequences were amplified by the absence of adequate institutions. Europe embarked on a thorough process of reforming the economic governance of the EU and the EA. Significant progress was achieved, but a lot of ground remains to be covered.

The poor pre-crisis compliance record warranted a tightening of fiscal rules, but rules should be more flexible in the face of exceptional circumstances, especially in a context where institutional and economic rigidities hamper other sources of macroeconomic stabilization.

The degree of sovereign risk sharing has increased, but remains limited. A strict interpretation of the no bail-out clause has been overcome, but the financial capacity of the ESM is relatively small and is not backed by the unlimited joint guarantee of its shareholders. The ECB's outright monetary transactions remain untested and there are concerns as to whether they can be timely deployed. The link with ESM conditionality, while useful to limit moral hazard, may hamper their effectiveness.

The implementation of banking union has so far favoured risk reduction over risk sharing. The single resolution fund is small, privately financed and building up very slowly. The Commission proposal for an EA deposit insurance scheme has the same features and is being put on hold. The success of the SRM will depend on its ability to perform a difficult balancing act between micro- and macro-prudential considerations. The first applications of burden sharing in Portugal and in Italy have already shown their limitations and risks.

The EA needs fiscal tools for macroeconomic stabilization, but fiscal union had met with strong opposition. The only viable second-best option is to allow fiscal stabilization at the national level in the face of exceptional circumstances. To make sure that discretion is properly used, appropriate checks and balances will be necessary. This reform should be accompanied by some increase in risk sharing, by enhancing the lending capacity of the ESM and ensuring it is able to provide timely and predictable financing.

Several proposals, both institutional and academic, actually move in the opposite direction by suggesting the introduction of automatic sovereign insolvency procedures associated with ESM assistance in order to partially deal with moral hazard concerns. They risk worsening the very problem the ESM was set up to address.

Severing the link between banks and sovereigns requires that banking union be completed, incorporating the risk-sharing elements envisaged in the original project but still not implemented. A reform of the prudential treatment of banks' sovereign exposures could have a disruptive impact on EA economies, risking to do more harm than good, unless used to remedy the shortage of safe assets by providing a synthetic alternative to Eurobonds.

Europe is at a crossroads, pressured by exceptional economic and geopolitical circumstances. Either it finds the strength to return to its roots and embraces a second (and deeper) round of reforms based on enhanced risk sharing, or it risks running into pro-cyclical excesses that may finally tear it apart. It cannot afford to abandon national stabilization instruments (fiscal and financial) without replacing them with similar tools at the supranational level.

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