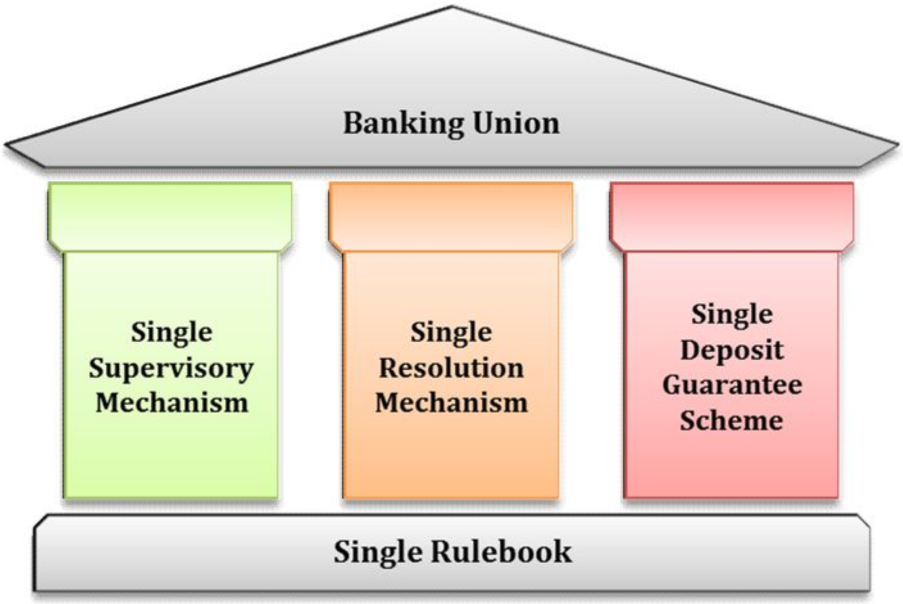
Testing the resilience of Banking Union

Cost of Non-Europe Report



STUDY

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European Added Value Unit

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Testing the resilience of Banking Union: Cost of Non-Europe Report

This study has been drawn up by the **European Added Value Unit** of the Directorate for Impact Assessment and European Added Value, within the European Parliament's Directorate-General for Parliamentary Research Services, with a view to improving understanding of the operation of Banking Union and its potential robustness for the future. It builds on expert research commissioned specifically for the purpose and provided by ReFi Laboratory of Excellence supported by heSam Université consortium.

Abstract

This 'Cost of Non-Europe Report' examines the robustness of the Banking Union framework under various stress scenarios and identifies the cost of the lack of further European action in this field.

The study suggests that the potential gains from a deepened Economic and Monetary Union would be substantial, should a new financial and/or sovereign crisis materialise. It comes to the conclusion that the currently proposed regulatory framework for Banking Union is not sufficient in terms of reserves and resources to fully mitigate the systemic impact of a new crisis. The report notably shows that, even if the Banking Union architecture foreseen for 2023 were already in place today, bailouts would still be needed at the expense of the European taxpayer, in order to withstand shocks, of a size comparable to that of 2007-2009.

The costs at the euro-area level of a medium-sized financial shock are estimated to amount to a cumulated loss of 1 trillion euro in GDP (about -9.4% of GDP), job losses of 1.91 million and an increase of 51.4 billion euro in government debt. Assuming that such a shock occurs every ten years on average, the annualised costs would potentially amount to around 100 billion euro in output loss and 0.19 million job losses per annum.

Actions at EU level could significantly reduce the likelihood of financial shocks materialising and of their impact on the real economy. This 'Cost of Non-Europe' report points to shortcomings in the current Banking Union architecture and identifies policy options to address them.

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List of abbreviations

AGS	Annual Growth Survey
AMR	Alert Mechanism Report
AQR	Asset Quality Review
BEPGs	Broad Economic Policy Guidelines
BRRD	Bank Recovery and Resolution Directive
CET1	Common Equity Tier 1
CRD	Capital Requirement Directive
CRR	Capital Requirements Regulation
CSR	Country-Specific Recommendations
DRI	Direct Recapitalisation Instrument
EBA	European Banking Authority
ECB	European Central Bank
EDIS	European Deposit Insurance Scheme
EDP	Excessive Deficit Procedure
EFSF	European Financial Stability Facility
EIOPA	European Insurance and Occupational Pensions Authority
EIP	Excessive Imbalance Procedure
EMU	Economic and Monetary Union
ESM	European Stability Mechanism
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
GDP	Gross Domestic Product
HICP	Harmonised Index of Consumer Prices
IMF	International Monetary Fund
JER	Joint Employment Report
MIP	Macroeconomic Imbalance Procedure
MTO	Medium-Term Budgetary Objectives
NCAs	National Competent Authorities
NPLs	Non-Performing Loans
OECD	Organisation for Economic Cooperation and Development
ONDs	Options and National Discretions
RQMV	Reverse Qualified Majority Voting
SDGS	Single Deposit Guarantee Scheme
SGP	Stability and Growth Pact
SMEs	Small and Medium-sized Enterprises
SRB	Single Resolution Board
SRF	Single Resolution Fund
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism
TFEU	Treaty of the European Union

1. Note on methodology

'Cost of Non-Europe' Reports are intended to evaluate the possibilities for gains and/or the realisation of a 'public good' through common action at EU level in specific policy areas and sectors.

The aim of this report is to determine the benefits that would stem from strengthening the European Banking Union. It looks at possible gaps and analyses inconsistencies in the current framework, and the cost – expressed where possible in quantitative terms – to citizens and society of not making Banking Union more resilient.

This study relies both on quantitative and qualitative analysis of data, and where possible on the use of counter-factual analysis. Specific and relevant case studies have been selected to illustrate the main findings.

Various scenarios were developed in the simulations, based on alternative architectures for Banking Union. The intention is to help policy-makers understand what potential gains may stem from a set of distinct options aiming to reinforce Banking Union resilience at a macroeconomic level.

Underlying scenarios can be continuous, representing a permanent upward shift in GDP once all measures have been implemented; or non-continuous, representing alternative one-off costs in an adverse scenario in which preventive action has not been implemented.

This paper has been drawn up by the European Added Value Unit of the Directorate for Impact Assessment and European Added Value, within the European Parliament's Directorate-General for Parliamentary Research Services.

It builds upon expert research commissioned specifically for this purpose and provided by the ReFi Laboratory of Excellence, supported by heSam Université consortium. All estimates mentioned in this report are based on the two research papers presented in Annex I and Annex II.

2. Executive Summary

The stability and efficiency of financial institutions is a key prerequisite for sustainable growth. They are pivotal in ensuring the provision of liquidity needed for the smooth running of the economy. Financial risk, if it materialises, can spread rapidly and reach systemic levels, thus causing uncertainty and disrupting economic activity – ultimately destroying wealth. Millions of people across the EU and beyond would be seriously affected.

Several steps have already been taken to strengthen the resilience of the financial sector. In particular, a set of crisis management tools has been made available to address local crises and prevent local problems spreading into an EU-wide shock.

The *first best* situation, as far as a crisis management instrument is concerned, would be its non-use – as its existence alone should, in an optimal context, be conducive to significantly reduce systemic risk. However, this would only work if third parties consider the structures credible and fit for purpose. The newly created structures have not yet been tested to see whether they would provide adequate protection and thus gain market credibility.

A first Cost of Non-Europe Report (2014)[1] evaluates the robustness of a strong economic and monetary union faced with a new crisis scenario. It estimates that the potential gains of deepening Economic and Monetary Union (EMU) would be substantial, should a new financial and/or sovereign crisis materialise (Table 1).

Table 1: Estimates of the Cost of Non-Europe (first report)

Cost of 'non-Europe'	Scenario of a sovereign crisis		Scenario of a financial crisis	
	EUR bn	(%)	EUR bn	(%)
Improved budgetary coordination	**85**	**0.65 (GDP)**	**58**	**0.45 (GDP)**
Common deposit guarantee scheme	**33**	**0.25 (GDP)**	**64**	**0.49 (GDP)**

Source: EPRS

A second Cost of Non-Europe Report[2] aims to assess the potential costs entailed by different shocks under various scenarios regarding the implementation of the Banking Union's resolution pillar[3]. It shows that the currently proposed regulatory framework is not resilient enough to withstand a shock of a size comparable to that of 2007-2009 for Banking Union (section 5). Bailouts would still be needed at the European taxpayer's expense.

[1] Marius Frunza, The Cost of Non-Europe of an incomplete Economic and Monetary Union, 2014.
[2] Gael Giraud, Thore Kockerols, Making the European Banking Union Macro-Economically Resilient: Cost of Non-Europe Report, 2015.
[3] See Section 5.2 of this report and the Commission's webpage on the Single Resolution Mechanism.

Table 2: Estimates of the Cost of Non-Europe (second report)

Cost of 'non-Europe' (Banking Union)	Cumulated effect	Annual effect
Potential GDP loss (EUR billion)	**1000.6 (-9.4% of GDP)**	**100**
Potential job losses (million unemployed)	**1.914 (-1.19% of total workforce)**	**0.19**
Potential increase in government debt (EUR billion)	**51.4 (+0.5% of total debt)**	**5.14**

Source: EPRS

The costs at the euro-area level of a medium-sized financial shock (-10 % losses in bank assets compared to 2007-2009) are estimated at a cumulated loss of 1 trillion euro in GDP; job losses would amount to 1.91 million; and government debt would increase by 51.4 billion euro (table 2). Assuming a shock to occur every ten years on average, the annualised costs would potentially amount to around 100 billion euro in output loss per annum and 0.19 million job losses per annum. The costs would be much higher in the absence of the resolution pillar of Banking Union, which is not scheduled to be fully in place until 2023.

2.1. Key areas to explore

In order to prevent or mitigate the negative effects of a potential financial crisis, the following policy options could be considered:

1. **Increasing the size of the Single Resolution Fund (SRF) to 165 billion euro and accelerate gradual merging of the national compartments within it** (from 2023 to 2017), so as to protect taxpayers' money from a medium-sized shock to the banking sector.

2. **Establishing a credible common fiscal backstop to the SRF**, which should be fiscally neutral over the medium term and funded through risk based contributions from the banking industry. Exploring the option of enabling the European Stability Mechanism (ESM) to provide a credit line to the Fund, noting that the establishment of such an instrument would require an ESM Treaty change.

3. **Requiring an increase in bank (non-risk based) leverage ratio – , i.e. Tier 1 capital[4] as a proportion of total adjusted assets – to 9% or more,** as this turns out to be sufficient to significantly dampen the effects of a shock in the medium-term.

[4] Under Basel III, Tier 1 capital comprises Common Equity Tier 1 (CET1) and Additional Tier 1 (IMF, 2013a). On the one hand, CET1 is the sum of (i) common shares issued by a bank that meet the regulatory criteria for classification as common shares; (ii) stock surplus resulting from the issuance of instruments included in CET1; (iii) retained earnings; (iv) accumulated other comprehensive income and other disclosed reserves; (v) common shares issued by consolidated subsidiaries of the bank and held by third parties that meet the criteria for inclusion in CET1 capital; and (vi) applicable regulatory adjustments. On

(Continued from previous page)

4. **Ensuring that the Bank Recovery and Resolution Directive (BRRD) is fully transposed into national legislation by EU Member States as soon as possible** (the deadline for the transposition of the BRRD into national law was set at 31 December 2014). Similarly, **ensure that the 2014 Deposit Guarantee Scheme Directive is fully transposed into national law by EU Member States** (the deadline for the transposition of the BRRD into national law was set at 3 July 2015).

5. **Establishing both a Single Deposit Guarantee Scheme (SDGS) and a credible fiscal backstop to the Fund attached to the SDGS.**

2.2. Additional areas to explore

- Evaluating the effectiveness and efficiency of the Single Resolution Mechanism (SRM) decision-making process under various stress scenarios.
- Reviewing, in close coordination with global stakeholders, the treatment of bank exposure to sovereign debt and, in particular, the zero-risk weighting.
- Exploring the possibility of relaxing the requirements for accessing the ESM Direct Recapitalisation Instrument in the medium-term, as well as of increasing the ceiling currently set at 60 billion euro.
- Modifying the institutional frameworks of the European Stability Mechanism (ESM) and Single Resolution Fund (SRF) so that the Community method ultimately prevails. Attach high democratic and accountability standards to both mechanisms.
- Establishing equal treatment (taxation) between debt and equity in the balance sheets.

2.3. How to get there?

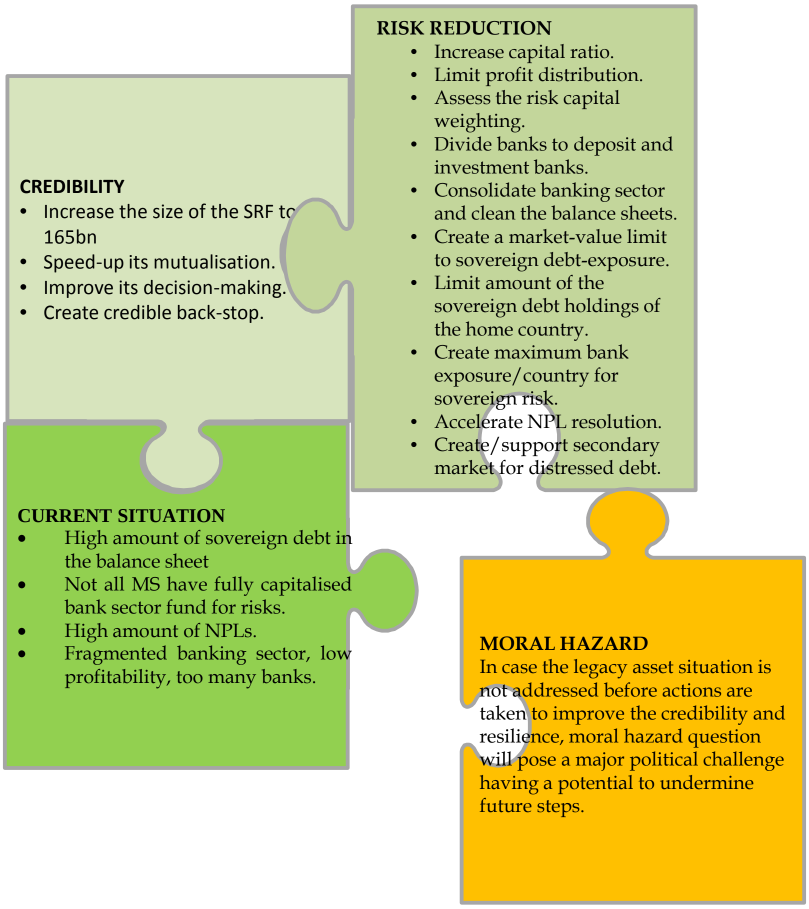
The policy options identified aim to improve the robustness of the Banking Union structure. Their partial implementation is possible, but might leave the structure vulnerable to risks, notably due to the high degree of interdependence of various policy options. It is therefore desirable to have an overview of the key factors affecting Banking Union mechanisms, in order

the other hand, Additional Tier 1 is the sum of (i) instruments issued by banks that meet the criteria for inclusion in Additional Tier 1 capital (and are not included in CET1); (ii) stock surplus resulting from the issuance of instruments included in Additional Tier 1 capital; (iii) instruments issued by consolidated subsidiaries of the bank and held by third parties that meet the criteria for inclusion in Additional Tier 1 capital and are not included in CET1; and (iv) applicable regulatory adjustments.

to enable EU policymakers to assess and to make informed decisions on the best policy options in terms of feasibility and risks.

Increasing systemic resilience requires first and foremost a reduction in the risk of possible future financial turmoil. As such a risk cannot be completely mitigated, it is important to build up a robust risk management system. The credibility of such a system is assessed by the markets, and, if considered credible, a positive assessment will increase confidence, which in turn reduces the risk of systemic events.

Figure 1: Banking Union risk dynamics



Source: EPRS

A major difficulty in implementing the options above derives from what is known as 'legacy assets'. Bank balance sheets across Europe are not of an equal quality. Non-Performing Loans (NPL) are not equally distributed across the EU, and the provisions for NPLs vary significantly from one bank to another. NPLs constitute a major risk to the financial system and could be instrumental in creating systemic shocks as well as constituting a hindrance to the establishment of normal bank lending activity. Small and medium-sized banks (which are not currently supervised by the Single Supervisory Mechanism (SSM), although the single supervisor could decide to extend the supervision in case of need) possess high numbers of NPLs (Bruegel, 2015). Not all EU Member States have fully capitalised funds to cover potential financial risks. As long as the issue of the uneven distribution of 'legacy assets' before further mutualisation of bank risks is unresolved, and as long adequate checks and balances are not put in place to mitigate the temptation of transfer of national problems to the EU level, the question of moral hazard will remain.

The key issue for euro area policy-makers is to significantly dampen the impact of a new financial shock on the economy. In the boom part of an economic cycle, banks should strengthen their resilience by raising further capital and building up financial buffers. In contrast, in the bust part of the economic cycle, the buffers would step in and help banks to withstand shocks and continue to finance the real economy. One of the main policy suggestions for considerations in this Cost of Non-Europe Report is to raise the non-risk based leverage ratio, for example, to around 9%. Such a measure appears to be one of the most effective means of safeguarding the banks' capacity to continue operations even under financial stress, and thus avert a credit crunch – which could lead to a significant drop in investment and in GDP, as well as to a rise in unemployment.

Encouraging banks to further raise capital buffers, without dampening lending and therefore economic recovery, is deemed to be crucial, even though banks did increase capital by about 100 billion euro between mid-2013 and 2015. One option would be to require banks to gradually increase equity ratios when the euro area economy experiences a growth cycle. In addition, a stress test exercise carried out by the European Central Bank (ECB)/European Banking Authority (EBA), including appropriate adverse scenarios, could play a vital role in strengthening the resilience of the banking sector. It could also provide ex-ante information on the potential increase of systemic risk which could in turn necessitate further ex-ante recapitalisation of the banks so that they meet requirements on equity even under an adverse scenario.

As a response to the financial crisis, global financial governing bodies have pushed for higher capital standards for banks to contribute to the adequate recapitalisation of financial institutions and, ultimately, to financial stability, by strengthening the resilience of the sector as a whole (Nouy, 2015). Basel III sets a minimum capital equity ratio plus a capital conservation buffer of 7.0% of risk-weighted assets, meaning that at least this share of bank assets has to be backed by stockholders (through equity), rather than by creditors (through debt).

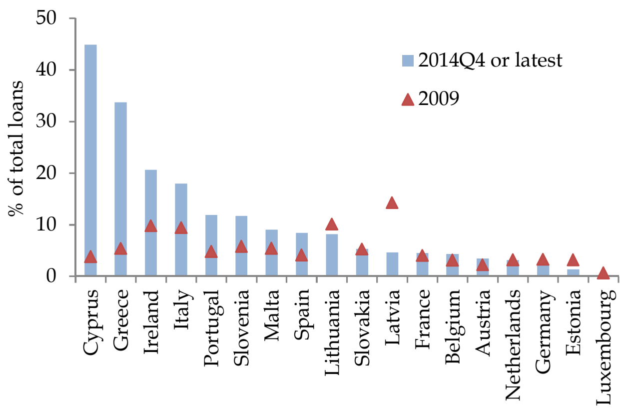
However, there are diverging opinions as to what the ideal level of capital is and what effect more stringent requirements have on financial activities (Angeloni, 2015). The fundamental reason behind requiring higher bank equity holdings is that this will make financing safer and cheaper for financial institutions, while providing an increased safety net in case of a negative shock, thus reducing the risk of bankruptcy. Some believe that the new bank capital ratio set by Basel III is not sufficiently high to withstand a new banking crisis and argue that it should be raised to around 20% of risk weighted assets (Miles et al., 2012). This analysis contradicts the widely accepted assumption that a higher equity ratio has a negative impact on a bank's funding costs and ability to reinvest deposits, but this assumption is not supported by historical evidence (Miles, 2011). Nonetheless, while banks adapt their business models in order to increase their capital requirements, they may incur some adjustment costs (Ratnovski, 2013). If new reforms were to be undertaken in order to minimise these costs, this transition phase ought to be gradual, to ease bank undertakings, but should not be extended for too long in case a new banking shock were to occur before the reforms were fully implemented.

Moreover, binding non-risk weighted targets, such as the leverage ratio, could be set in order to complement the gradual Basel III phase-in arrangements focusing on bank capital and liquidity. Those non-risk weighting indicators help assess the true degree of the resilience of financial institutions. The planned Commission report expected by the end of 2016 on the Capital Requirement Directive package is welcome, as it could lead to the introduction of binding targets for bank leverage ratios to be met as of 2018. Importantly, coordination at international level is required to ensure a level playing field across the banking sector.

In a similar vein, it transpires that treatment of bank exposure to sovereign debt is no longer adequate. Setting limits on bank exposure to a sovereign and removal of the sovereign zero-risk weighting are options to explore, aiming to further sever the link between banks and sovereigns. Again, coordination at global level is required to ensure a level playing field across the banking sector.

In addition, the SSM could implement tougher supervision and incentivise write-offs and debt restructuring through the use of macro-prudential tools, e.g. setting higher capital surcharges or time limits on longstanding NPLs (IMF, 2015b). That would encourage banks to gradually put an end to 'extend and pretend' policies with regard to those assets. A quicker resolution of banks' impaired loans – which have continued to increase to systemic levels since the start of the crisis (figure 2) – would help restore bank profitability and, ultimately, stop acting as a drag on lending and economic recovery.

Figure 2: Non-performing loans across the euro area



Source: IMF Financial Soundness Indicators, EPRS

Changes in corporate taxation, including for financial institutions, can be used to encourage or discourage the accumulation of debt. Interest payments on debt are tax deductible, while dividends are paid out of after-tax income. The current structure creates an incentive towards debt and increases the cost of equity. In order to increase the resilience of financial institutions against financial shocks, a change in the taxation system could be envisaged to provide better incentives to strengthen financial institution balance-sheets.

3. Introduction

The Europe economy has not yet fully recovered from the consequences of the global financial crisis of 2007-2008 and the sovereign debt crisis that started in 2009. Economic growth has been sluggish and heterogeneous, in particular in the euro area whilst (structural) unemployment – including youth and long-term unemployment – and social inequality have grown and remained high. The European Central Bank (ECB) has forecast a 1.7% growth in GDP during 2016 for the euro area, driven by the ECB's accommodative monetary policy, the sharp depreciation of the euro, gradual fiscal easing, and low oil prices; all supporting a growing outlook in domestic demand (ECB, 2015). However, growth prospects in Europe are relatively modest when compared to the USA, whose GDP is forecast to grow 2.7% in 2016 (World Bank, 2016). This growth gap is in part due to low lending by financial institutions to consumers and businesses in Europe and to fragmented credit markets, which prevent the European economy from attaining its potential growth. Furthermore, high public and private debt persists in parts of the euro area where the deleveraging process has been slow and uneven. In order to restore trust in the economy, so as to allow liquidity to flow efficiently, further steps and growth enhancing structural reforms need to be undertaken at the institutional level; this would also reassure households and companies that Europe is safely returning to a path of sustainable growth.

The series of financial, economic and sovereign debt crises that have affected Europe during recent years have exposed the inherent design weaknesses of the Economic and Monetary Union (EMU) architecture that led to the negative feedback loop of banks, corporates and sovereigns. Previous failure to tackle the macroeconomic imbalances that had been building up in several Member States of the euro area since its inception, as well as the spill-over effects to other Member States generated by the macroeconomic imbalances, reinforced this vicious circle and pushed certain Member States into unsustainable situations due to the lack of safety nets which could reassure local and international agents and investors. This raised questions regarding the economic governance, and even the integrity, of EMU, and the institutional response has been to reinforce EMU to tackle the issues revealed by these crises.

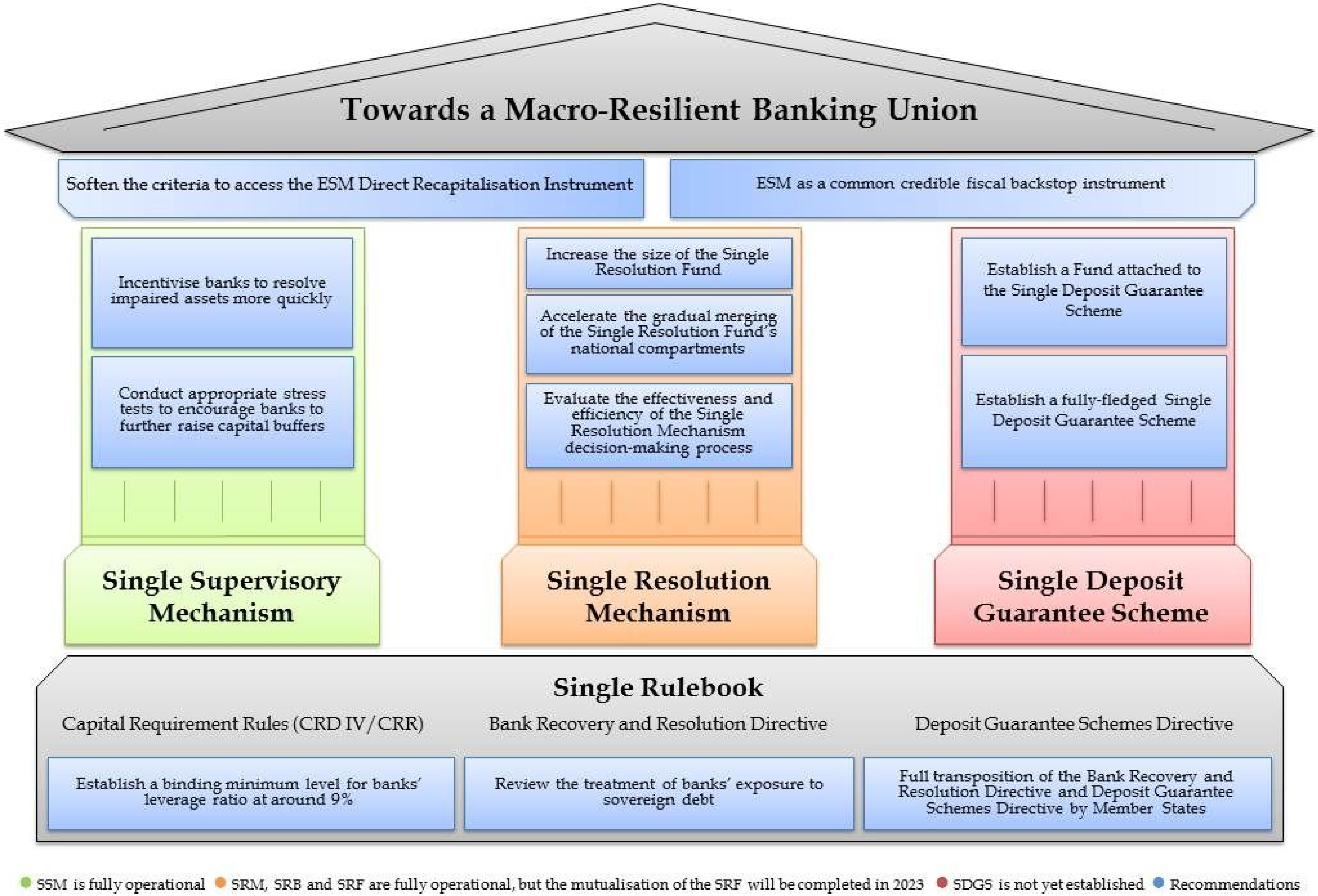
Reforms were undertaken to address the flaws of the initial EMU design and to strengthen the enforcement of fiscal rules and monitoring of macroeconomic imbalances to address the long-term asymmetries that had developed in the euro area. New rescue and crisis management mechanisms were introduced, such as the European Stability Mechanism (ESM), and a wider range of macroeconomic surveillance tools and rules, such as the 'six-pack' and 'two-pack', the Treaty on Stability Coordination and Governance (TSCG) and the Euro Plus Pact. The closer review of government expenditure and revenue and increased coordination by Member States and the European institutions instigated by these reforms has increased budgetary and economic coordination between countries (assuming that rules are properly enforced). However, ensuring fiscal stability in all countries has proven to be necessary but insufficient in an incomplete monetary union such as the euro area, as sovereigns are still threatened by instability emanating from the financial markets and vice versa.

The most important measure taken to sever the adverse feedback loop between banks, corporates and sovereigns has been the creation of European Banking Union. The lack of common supervision of banks and the absence of homogenised standards on resolution and deposit protection, and of efficient safety nets for those standards, jeopardised the stability of the financial sector. It had become evident that the euro area needed new tools to address systemic risks in the integrated financial market. In June 2012, euro area leaders took a political decision to move forward with Banking Union. Substantial progress has been made since then, but some pieces of this new, but incomplete, framework are still missing as it transitions to full Banking Union.

The purpose of this Cost of non-Europe report is to evaluate the robustness of EMU under different crisis scenarios. The report seeks to address the following key questions:

1. Given the current state of play of the European Banking Union framework, what would be the effects of new financial shock(s) on the European banking sector? How would the European banking sector absorb losses due to this shock? Would there be a need for additional taxpayers' money?
2. In case of sovereign rescue of a bank, would all EU sovereigns be capable of providing the necessary funding?

This report is structured as follows. The first part provides an overview of the historical path towards genuine EMU and explains why completing a European Banking Union is a fundamental step in this process. The second part analyses in-depth the background that made Banking Union both possible and necessary, outlining its key components and detailing recommendations to ensure that it becomes macro-resilient. This would ultimately minimise the effects of a new major shock, such as that which led to the recent series of crises experienced in Europe.


Towards a Macro-Resilient Banking Union
Soften the criteria to access the ESM Direct Recapitalisation Instrument
ESM as a common credible fiscal backstop instrument
Incentivise banks to resolve impaired assets more quickly
Conduct appropriate stress tests to encourage banks to further raise capital buffers
Single Supervisory Mechanism
Increase the size of the Single Resolution Fund
Accelerate the gradual merging of the Single Resolution Fund's national compartments
Evaluate the effectiveness and efficiency of the Single Resolution Mechanism decision-making process
Single Resolution Mechanism
Establish a Fund attached to the Single Deposit Guarantee Scheme
Establish a fully-fledged Single Deposit Guarantee Scheme
Single Deposit Guarantee Scheme
Single Rulebook
Capital Requirement Rules (CRD IV/CRR)
Bank Recovery and Resolution Directive
Deposit Guarantee Schemes Directive
Establish a binding minimum level for banks' leverage ratio at around 9%
Review the treatment of banks' exposure to sovereign debt
Full transposition of the Bank Recovery and Resolution Directive and Deposit Guarantee Schemes Directive by Member States
SSM is fully operational
SRM, SRB and SRF are fully operational, but the mutualisation of the SRF will be completed in 2023
SDGS is not yet established
Recommendations

4. Economic and Monetary Union

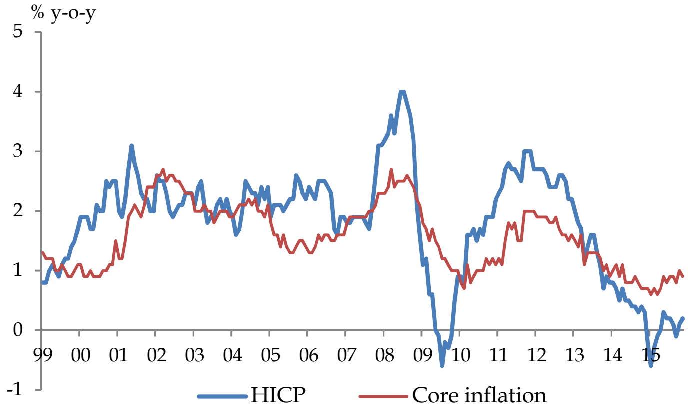
Economic and Monetary Union (EMU) was conceived to create prosperity and stability across Europe by supporting sustainable economic growth and high employment. Its central element is the creation of the single currency, which has helped reinforce the Single Market as the main pillar of the European Union economy. With the creation of the euro, participating Member States transferred their competence over monetary policy to the European System of Central Banks (ESCB), whilst retaining high level of sovereignty over economic policies at national level whilst the fiscal policy of a Member State is much more restricted through the SGP. Structural differences, including substantial divergences in competitiveness and a lack of policy coordination between countries may cause frictions that hinder EMU ability to deliver on its objectives. For this reason, reforms have taken place over time to enhance coherence and convergence across EMU to ensure its success.

This section sets out the path EMU has taken as it has evolved over time when facing different challenges. It begins with an overview of the SGP, the weaknesses of the original design and its reform at the height of the crisis. The section continues with an outline of the changes made to ensure fiscal and economic policy coordination and that pave the way for genuine EMU.

4.1. Stability and Growth Pact as a tool to ensure coherence and convergence

The original institutional design of EMU was largely based on the predominant economic policy paradigm of the time, which stated that monetary policy has no long-term effect on the real economy and that expansionary fiscal policy is destabilising (Hall, 2012). The ECB's mandate was influenced by this period, known as the Great Moderation, when emphasis was placed on price stability, as it was believed to be the best way to ensure overall stability in the economy. The ECB's price stability objective is defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of close to, but below, 2%. This objective was more or less achieved from the creation of the euro until 2008, when the series of crises affecting European and world economies started complicating the ECB's task. The high volatility of energy prices and its effect on other goods has been a key determinant in the variation of the inflation rate since then (See figure 3). This poses an interesting questions regarding central banks' real ability to influence inflation expectations.

Figure 3: Euro-area inflation rate



Source: Eurostat, EPRS

In order to not hamper the (medium-term) objective of price stability, Member State public deficits should be framed by a set of rules (Scharpf, 2011). Monetary integration in the form of currency union leads to a high level of interdependence between its members. Accordingly, different assumptions were debated during the creation of EMU that made the case for common fiscal rules. For example, if the level of debt of one member of the currency union is deemed unsustainable, the risk of being forced to share the fiscal burden might emerge (Buiter et al., 1993).

Common fiscal rules are also relevant, under the assumption that a Member State with a high level of public debt might influence the central bank to lower interest rates. This might lead to high inflation that could affect other members of the currency union (Beetsma and Uhlig, 1999). Also, spending-induced inflation in one Member State might be tackled by higher interest-rates set by the central bank (Hodson and Maher, 2001). This could hinder growth in low-inflation countries. Accordingly, an internalisation of these potential externalities may be reached via common and central rules (Buiter et al., 1993).

On the basis of these concerns, the Maastricht Treaty introduced several convergence criteria of which two were incorporated into the SGP, namely the limit of government debt to 60% of GDP and the limit of government deficit to 3% of GDP. The convergence criteria were meant to assess if a sufficient degree of convergence had been attained before a Member State would be allowed join the euro area. It is the SGP's role to ensure that the levels do not diverge again once a Member State is in the euro area. Alongside the aim of reducing the risk of negative spill-overs, the idea behind this rule-based approach was also that the institutional framework would induce structural reforms at national level, which would eventually lead to the convergence of the economies of the euro area Member States (Hall, 2012) as deemed necessary by the Optimum Currency Area theory (see Box 1).

Box 1: EMU as a currency union

EMU is a monetary union with a single currency thus forming also a currency union, but not an ideal one as defined by the Optimal Currency Area (OCA) theory. According to this theory, a monetary union is considered optimal when the participating members have homogeneous economic structures and therefore react similarly to shocks (Mundell, 1961). If this condition of symmetry is not satisfied, as is the case for most of the euro area, the theory suggests that price and wage flexibility and high labour mobility are needed for the adjustment to an asymmetric shock to be automatic. Otherwise, a currency union can also be complemented by budgetary coordination, as this would allow countries to engage in fiscal transfer to counter the asymmetric shock (De Grauwe, 2014).

When a state joins a currency union, it gives up autonomy over its monetary policy (Mongelli, 2002). Hence, euro area Member States are unable to externally devalue their currency to increase external competitiveness and boost exports. The key remaining instrument available for governments as a stabilising tool is now fiscal policy; however this tool is not available for those Member States which have high level of public debt, especially if a Member State is under support programme. This means that a country hit by an adverse asymmetric economic shock can devalue internally, which is probably the only adjustment variable available in short term in case of a loss of competitiveness.

In order to prevent euro area Member States from deviating from these fiscal objectives after joining the currency union, the Stability and Growth Pact (SGP) was adopted in 1997 (Scharpf, 2011)[5]. Fiscal surveillance and coordination under the SGP is carried out under the preventive arm (Regulation (EC) 1466/97) as well as under the corrective arm (Regulation (EC) 1467/97). The preventive arm aims to ensure, via multilateral surveillance, that Member States do not breach the deficit rules of the pact. Euro area Member States therefore have to submit stability programmes on an annual basis; and the EU Member States which are not part of currency union put forward convergence programmes. Under the corrective arm, which only applies to euro area Member States, the Excessive Deficit Procedure (EDP) can potentially lead to sanctions, including financial ones. The SGP was reformed in 2005, introducing more flexibility under the Excessive Deficit Procedure.

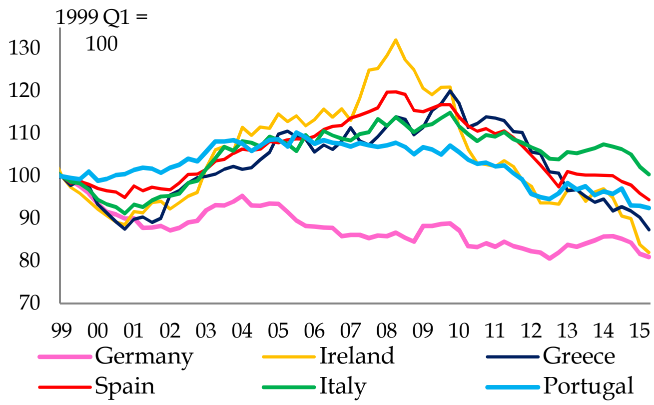
4.2. Weaknesses of the original EMU set-up

Monetary integration was expected to lead to increased economic convergence among Member States, but this assumption has proved to be over-optimistic. Although some countries, particularly on the periphery, did enjoy above-average economic growth and their per capita income levels partly caught up with wealthier European countries, this convergence can be better explained by the availability of

[5] There is a third part to the SGP, which is the actual 'Pact': Resolution of the European Council on the Stability and Growth Pact (Amsterdam, 17 June 1997) [Official Journal C 236 of 02.08.1997]. The 'Member States undertake to abide by the medium-term budgetary objective of positions close to balance or in surplus.' In essence, this means that deficits need to be offset with surpluses, e.g. 2 years with a deficit of 3 % of GDP must be compensated with 2 years with a surplus of 3 % of GDP, or one year with a surplus of 6 % of GDP, or any other combination. This aim of 'balanced or in surplus' has been reaffirmed several times since 1997, including in the TSCG, Article 3, 1(a).

cheap money than by increases in productivity or productive capacity in these countries (Aiginger et al., 2012, Bertola, 2013, Ederer and Reschenhofer, 2013). The convergence of interest rates throughout the euro area towards the lowest rates lowered credit costs and facilitated access to credit markets for both public institutions and private agents. It can be argued that the low interest rates did not anymore reflect risks correctly. In turn, the debt-financed growth in some countries led to an erosion of their external competitiveness, worsening their situation once the crisis hit. This led to increased sovereign debt levels. The borrowed funds were not always used for growth enhancing investments which would have ensured future cash-flow and an increased level of sustainable growth and employment, but were instead used to increase living standards. As one consequence, the situation led to deteriorating external competitiveness (figure 4).

Figure 4: Harmonised Competitiveness Indicator: Real Effective Exchange Rate



Source: European Central Bank, EPRS

Note: Unit labour cost deflated effective exchange rates in 19 trading partners and euro area currencies; an increase in this indicator implies a decrease in competitiveness.

The SGP (as a rules-based system) did not fulfil the objectives it was set out to achieve, as can be deducted by the large number of infringements of its rules since its inception (See figures 5 and 6).

In the first years of the euro, actually the years until the financial crisis, the general economic environment was very favourable. According to the SGP, these years should have been used to build up a financial buffer, or for some Member States to at least reduce their excessive debt. That wasn't done. Rather, the very low interest rates acted as an incentive to increase public debt. The fiscal rules were deemed too strict by some Member States, which argued for more fiscal space for their domestic economies, and too lax as regards the sanctions against those countries who infringed the rules. The aftermath of the 2008 financial crisis, in particular the sovereign debt crises since 2009 demonstrated that profound reform of the SGP and EMU economic governance was necessary to ensure its integrity.

Figure 5: Compliance with the Stability and Growth Pact: Number of breaches of the deficit and debt rules by Member States (2003-2014)

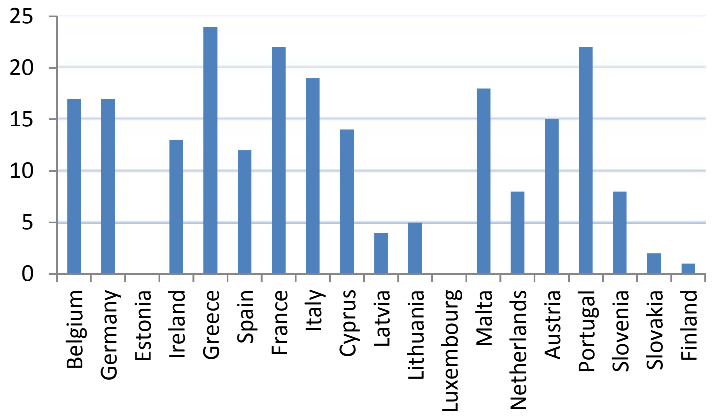
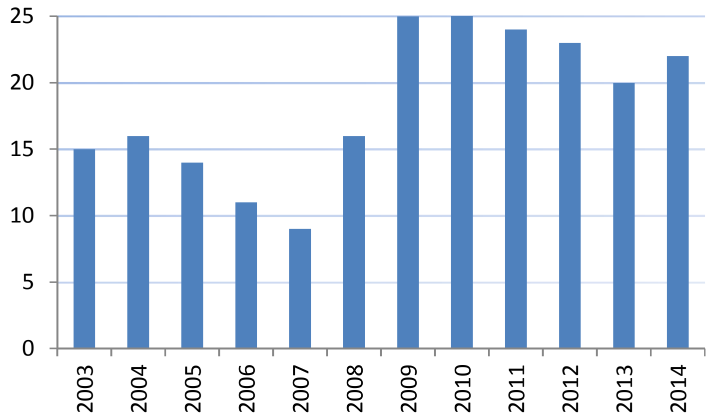


Figure 6: Compliance with the Stability and Growth Pact: Number of breaches of the deficit and debt rules by year (2003-2014)



Source: Eurostat, EPRS

4.3. Reform

The overall institutional framework of fiscal and economic policy coordination was reformed in the wake of the European sovereign debt crisis through the 'six-pack', the 'two-pack', the Treaty on Stability, Coordination and Governance and the Euro Plus Pact. Furthermore, the reformed framework is integrated in the timeline and institutional setting of the European Semester.

The European Semester (as laid down by Regulation (EU) No 1175/2011) is an annual cycle of economic policy coordination, proposed by the Commission in 2010. It is launched by the Commission's publication of the Annual Growth Survey (AGS) that 'sets out general economic priorities for the EU and provides Member States with policy guidance for the following year'; it includes an Alert Mechanism Report (AMR) that aims to detect possible macroeconomic imbalances. Based on the AGS, the European Council adopts economic priorities for the EU. In order to focus on the interdependence of economic and fiscal policies, Stability and Convergence Programmes for fiscal policies under the SGP and National Reform Programmes for economic and employment policies are submitted by Member States in April each year. Once the programmes are assessed, the Commission proposes Country-Specific Recommendations (CSR) providing guidance on economic, employment, and fiscal policy areas, which are endorsed by the June European Council before being adopted by the ECOFIN Council in July.

4.4. Fiscal policy coordination

Under the preventive arm of the SGP, multilateral surveillance should ensure that Member States meet their Medium-Term Budgetary Objectives (MTO). Failing to meet MTOs can lead to a Council recommendation. If the Member State concerned does not comply with the recommendation, the Council can issue a decision. Furthermore, still under the preventive arm, if the Member State concerned 'failed to take action', the Commission can then recommend that the Council take a decision imposing an interest-bearing deposit. Such Commission recommendations can only be rejected by 'Reverse Qualified Majority Voting' (RQMV), meaning that a recommendation by the Commission is adopted unless a majority in the Council rejects it (Regulation (EU) No 1173/2011, Art. 4 (1-2)). However, there is an important part in the Fiscal Compact (TCSG) where the Member States engage themselves to refrain to vote against a recommendation under certain circumstances (see TCSG Article 7). This has been added as the RQMV couldn't be extended to some key decisions due to legal constraints in Article 126 TFEU.

Under the corrective arm of the Pact, triggering financial sanctions for non-compliance has been made easier by the introduction of RQMV (Regulation (EU) No 1173/2011, Art. 6 (1-2)). Furthermore, under the reform introduced by the 'six-pack', the Excessive Deficit Procedure can also be triggered on the basis of the debt criterion, whilst previously only the deficit criterion was monitored (Regulation (EU) No 1175/2011, Art. 6 (2)). The 'two-pack' further strengthened the monitoring powers of the European Commission, as euro area Member States are now obliged to submit their draft budgetary plans to the Commission every October. The Commission can then request a revision of the plans in the case of non-compliance with the rules of the SGP (Regulation (EU) No 473/2013, Art. 7 (1-2)).

Despite possible severe sanctions and the fixed limits for national fiscal policies, the Pact is subject to defined flexibility arrangements. With the first reform of the Pact in 2005, the legislator introduced the provision that any 'severe economic downturn' may be considered when assessing the fiscal situation of a Member State. Furthermore, the Commission shall give due consideration to economic developments, such as possible growth and/or expenditure that might be positive for European goals, when assessing the fiscal position of a Member State (Regulation (EC) No 1056/2005, Art. 1 (2-3)). More recently, in the context of the crisis and the debate on its policy implications, the Commission published a communication (European Commission, 2015a)[6] on its use of SGP flexibility instruments. Therein, the Commission announced that it will, under precise conditions, look positively upon contributions to the European Fund for Strategic Investments, as well as national investment during the assessment of fiscal policy. Structural reforms undertaken by the Member States can also favourably influence the assessment.

4.5. Economic policy coordination

Whilst monetary policy was transferred to the European level, economic policy did not become a European competence, but was considered a matter of common concern to be coordinated within the Council (Article 121 TFEU). In order to prevent negative spill-overs occurring due to this

[6] European Commission, Making the best use of the flexibility within the existing rules of the stability and growth pact, 2015.

asymmetrical institutional design, Member States choose to rely on soft-coordination under what is known as the 'Open Method of Co-ordination'. Until the overall reform of EMU in the wake of the crisis, soft-coordination of economic policies was mainly based on the quinquennial Broad Guidelines for the Economic Policies of the Member States and of the Union (BEPGs) (2010/410/EU). Contrary to the more constraining institutional setting of the Stability and Growth Pact (SGP) for fiscal policy coordination, non-compliance with the BEPGs could only be challenged by the adoption of a non-binding recommendation (Hodson and Maher, 2001). The guidelines have not been renewed since their adoption in 2010, and in essence have been replaced by the European Semester, although there are no formal decisions concerning this.

Before the 6-Pack it was the implied task of the Eurogroup to monitor possible macroeconomic imbalances and to find ways to correct them, but the Eurogroup failed to do so. Consequently, in addition to the above provisions, economic policy coordination has been strengthened by the introduction of the Macroeconomic Imbalance Procedure (MIP). As with the SGP, this instrument is based on both a preventive (Regulation 1176/2011) and a corrective arm (Regulation 1174/2011) and aims for the timely detection and correction of macroeconomic imbalances. The MIP is launched upon the publication of an Alert Mechanism Report (AMR) in which, based on a scoreboard, the Commission identifies which countries might be at risk of imbalance. Should the scoreboard's indicators exceed given thresholds, the Commission carries out an in-depth review (now part of the country reports). Where the Commission detects a Member State experiencing macroeconomic imbalances, it recommends the adoption of a Council recommendation that can eventually be included in the country's CSRs.

If excessive imbalances are identified in a Member State, the Excessive Imbalance Procedure (EIP) can be launched by the Council on a recommendation by the Commission. Under the EIP, a Member State which fails to comply with the recommendations issued in order to correct its excessive imbalances potentially faces financial penalties (European Commission, 2015c).

Regardless of the fact that the Council has considered several Member States to have been affected by excessive macroeconomic imbalances, the EIP has never been triggered. During the 2015 MIP exercise, France, Bulgaria, Croatia, Portugal and Italy were found to have excessive imbalances. In 2014, excessive imbalances were found in Croatia, Italy and Slovenia. In 2013, Spain and Slovenia had excessive imbalances.

4.6. Towards Genuine EMU

At the height of the sovereign debt crisis it became evident that the vicious circle between banks, corporates and sovereigns threatened the integrity of the euro area and that a qualitative step had to be taken to break this adverse feedback loop. This required going beyond the re-adjustment of the fiscal rules followed by Member States or enhancing macroeconomic policy coordination in the euro area. It became necessary to add some of the missing pieces needed to complete monetary union and safeguard the stability and integration of the European financial market to protect agents from this vicious nexus (and avoid fragmentation). Euro area leaders thus took the decision in June 2012 to establish Banking Union, with the intention of ending the fragmentation of this sector by restoring confidence in the single currency. Much had already been done to safeguard the banking sector through improving financial supervision at the height of the financial crisis, before the sovereign debt crisis could fully hit. Banking Union very much builds on the financial supervision package initially consisting of 6 pieces of legislation.

5. Incomplete Banking Union

'The establishment of a banking union is a key factor in the completion of monetary union and probably a turning-point in the current crisis, with profound repercussions for the financial sector and the real economy alike.' (Benoit Coeuré, ECB Board Member)

Box 2: Roadmap to Banking Union

- The Commission's Blueprint For a Deep and Genuine EMU (November 2012) called for the setting-up of a Single Supervisory Mechanism (SSM) subsequently complemented by a Single Resolution Mechanism (SRM). The European Stability Mechanism (ESM) should also be used as a common public backstop to directly recapitalise banks. In the longer term, a euro area safe asset could be established as a powerful and credible financial backstop to safeguard euro area stability.

- The Four Presidents' Report (December 2012) also called for an integrated financial framework comprising a SSM, a SRM with an appropriate financial backstop, an ESM direct recapitalisation instrument and harmonised deposit guarantee schemes.

- The Five Presidents' Report (June 2015) puts special emphasis on the completion of Banking Union. This includes inter alia the following requirements:
  - The full transposition into national legislation of the Bank Recovery and Resolution Directive (BRRD) by all Member States;
  - An agreement on a bridge financing mechanism for the Single Resolution Fund up to 1 January 2016;
  - Establishment of a credible common backstop to the Single Resolution Fund, potentially through a direct credit line from the ESM;
  - Creation of a European Deposit Insurance Scheme;
  - Relaxation of the eligibility criteria attached to the use of the ESM direct recapitalisation instrument.

- The Thyssen report (October 2012) recommends that European Banking Union comprise: (i) a Single Supervisory Mechanism for banking institutions; (ii) a single European recovery and resolution framework whose financial structure is based on *ex ante* contributions from financial institutions; and (iii) harmonised deposit guarantee schemes. Deposit Guarantee mechanism. The resolution and deposit guarantee mechanisms should be backed by appropriate levels of funding and, ultimately, public money reduced to its minimum possible extent. Lastly, the Banking Union framework should meet high democratic and accountability standards.

The 2008 financial crisis revealed the vicious circle between banks, corporates and sovereigns in the euro area. Prior to the financial and property bubbles bursting, a number of banks had grown to reach systemic levels. Most banks were deemed to be 'too big to fail'[7] and, as a result, those which were on the brink of a failure were rescued by sovereigns aiming to stabilise and restore confidence in the

[7] Speech by Lorenzo Bini Smaghi, former Member of the Executive Board of the ECB, Nomura seminar, The paradigm shift after the financial crisis, Kyoto, 15 April 2010: 'For example, in 2007 the liabilities of Barclays exceeded the UK's GDP, the liabilities of Deutsche Bank stood at 80% of Germany's GDP, and the liabilities of Fortis were several times larger than the GDP of its home country, Belgium. As some observers rather provocatively remarked, such financial institutions may not just be "too big to fail", but in fact "too big to exist"'.

financial system. Public intervention in the financial sector has reached unprecedented levels since 2008: between 2008 and 2013, about 15% of GDP (i.e. 1.4 trillion euro) was used to support the banking sector across the euro area while 41% of GDP (i.e. nearly 4 trillion euro) was approved for the financial sector over the period 2008-2014 (table 2).

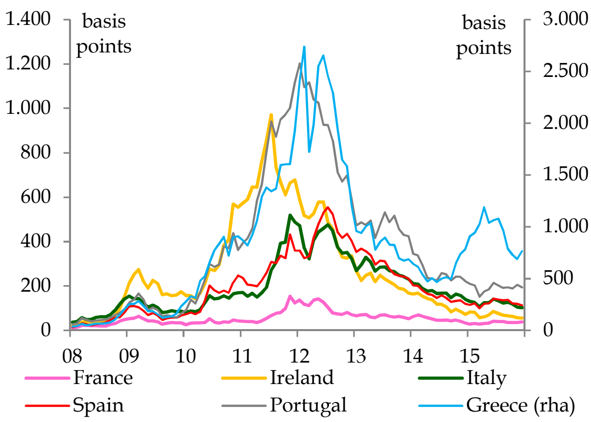
Table 3: Public support for the financial sector over the period 2008-2014

		Used amounts (2008-2013)		Approved amounts (2008-2014)	
		EUR bn	% GDP	EUR bn	% GDP
Euro area	Recapitalization	333.68	3.5	648.83	6.8
	Guarantees	861.60	9.0	2642.39	27.6
	Asset relief	147.10	1.5	417.62	4.4
	Liquidity support	66.22	0.7	215.03	2.2
	TOTAL	**1408.60**	**14.7**	**3923.88**	**41.0**
EU-27	Recapitalisation	448.16	3.4	821.13	6.3
	Guarantees	835.84	6.4	3892.57	29.8
	Asset relief	188.24	1.4	669.13	5.1
	Liquidity support	70.15	0.5	379.91	2.9
	TOTAL	**1542.38**	**11.8**	**5762.74**	**44.1**

Source: European Commission

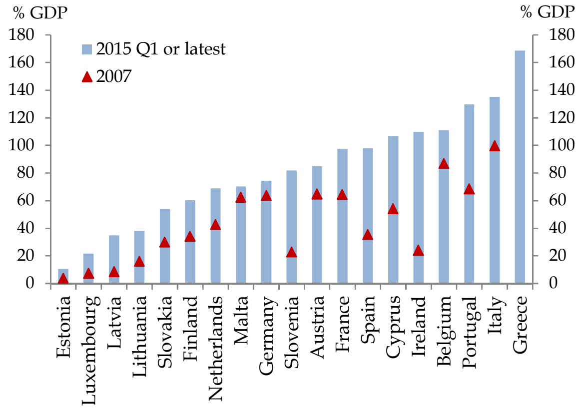
The injection of substantial amounts of funds into the financial system led to a sharp deterioration in public finances and an increase in funding costs in markets for stressed euro area sovereigns (figure 7). As a consequence, public debt increased to record highs (figure 8). At the same time, the adverse feedback loop between banks and sovereigns was reinforced by the massive purchase of sovereign bonds by European banks, multiplying the potential damage if any of these were to fail.

Figure 7: Yield spreads over German 10-year bonds



Source: Eurostat, EPRS

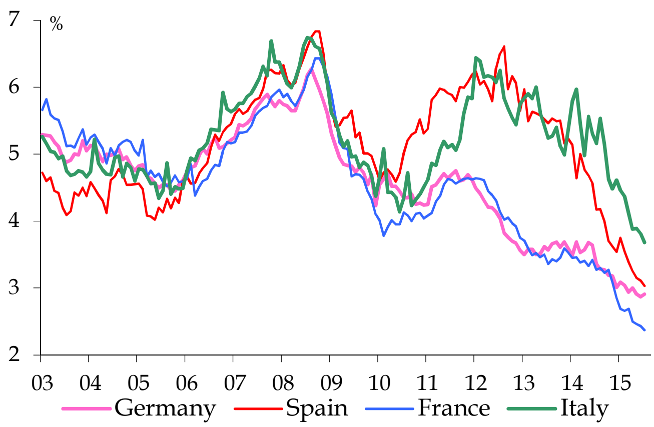
Figure 8: General government debt



Source: Eurostat, EPRS

The euro area financial system, which was (relatively) integrated since the creation of the single currency, also began to break apart as the confidence within the system decreased and interest rates diverged significantly as the markets started to differentiate between the quality of sovereign debt of Member States, with increased yields tagged to bonds from Member States with a higher probability for a state default. On the other hand monetary policy applies equally to all Member States, with no possibility to target individual Member State. New loans to corporate entities dropped as banks' credit conditions tightened significantly. At the same time, weak businesses impacted banks negatively as non-performing loans rose significantly in stressed economies. In turn, the quality of assets on bank balance sheets deteriorated. Due to the multiplying risks, banks were obliged to raise margins on new loans to companies and, in particular, small and medium-sized enterprises (SMEs) (figure 9). Ultimately, this nexus between banks, companies and sovereigns had a considerable negative effect on the real economy in the euro area (IMF, 2013a).

Figure 9: Annual interest rates on new bank loans to SMEs



Source: ECB, EPRS
Note: new bank loans of up to 1 billion euro and a one to five-year maturity

Against this background, a leap towards genuine Economic and Monetary Union was critically needed. At the [June 2012 Euro Summit](), euro area leaders [agreed]() to create Banking Union to address the weaknesses in the euro area financial framework. EU Banking Union comprises a Single Supervisory Mechanism (SSM) for financial institutions and a Single Resolution Mechanism (SRM), along with a Single Rulebook for banking supervision and resolution (Capital Requirement Directive (CRD) IV package, Bank Recovery and Resolution Directive (BRRD) and Deposit Guarantee Scheme (DGS) Directive). An ESM Direct Recapitalisation Instrument (DRI) was also established to complement Banking Union.

Box 3: Financial trilemma

In a financial trilemma, a country may only achieve two of the three possible financial policy objectives simultaneously: financial stability, financial integration and autonomous national financial policies (Schoenmaker, 2011). Current institutional arrangements in the euro area allow for national financial policies and the integration of the European financial sector, yet fail to guarantee financial stability. However, the recent economic and financial crisis demonstrated the importance of financial stability in such a diverse and incomplete currency union. Given that it would be difficult and counterproductive to abandon European financial sector integration, due to the nature of today's globalised economy, the only remaining option to safeguard financial stability is a transfer of certain degree of national powers over financial policies at EU-level. Thus, the recent reforms in the euro area to create genuine Banking Union intend to harmonise financial policies and regulation by shifting them to supranational governance bodies.

Fully-fledged European Banking Union seeks to meet five objectives (Constancio, 2014b):

- Restore financial stability and confidence in the banking sector (see box 3);
- Prevent the build-up of macro-financial imbalances, such as the significant private debt accumulation in the pre-crisis period;
- Foster financial integration by breaking the nexus between sovereigns and banks;
- Restore and preserve the European Central Bank's monetary policy transmission mechanisms, so that interest rate levels are similar across Member States. This would encourage bank lending for financing SMEs and, ultimately, aims to maintain price stability in line with the ECB's primary objective; and
- Improve bank efficiency, which is particularly needed in the context of the European economy where financial intermediation through banks amounts to 80% (contrary to the situation in the United States).

This section reviews the elements of Banking Union and discusses the potential limitations of this new institutional set-up. Some recommendations are advanced to address those shortcomings.

Box 4: A single rule book for banking supervision and resolution

EU regulatory framework

The Capital Requirements Regulation (CRR) and the Capital Requirement Directive (CRD IV) establish a single set of harmonised rules for all banks in the EU, generally in line with Basel III. The overarching aim stemming from this new regulatory framework is enhancing EU banking sector resilience. In other words, banks should better withstand shocks and thus be able to continue to finance the real economy. Financial institutions began applying the new rules in 2014, and full implementation is scheduled for 2019.

Under the new regime, banks are required to hold total capital of at least 8% of risk-weighted assets as in the previous arrangement, but of a higher quality, as the Common Equity Tier 1 (CET1) has gradually gone up to 4.5% from 2%. In addition, CRD IV introduces five new capital buffers: the capital conversation buffer (i.e. CET1 capital-to-risk-weighted-assets ratio of 2.5% on top of the CET1 capital requirement); the countercyclical buffer, the capital buffer for systemically important institutions; the systemic risk buffer; and the other systematically important institutions buffer.

The new regulatory framework also requires banks to publicly disclose their leverage ratio as of 2015 in line with Basel III. A close monitoring of *excessive* leverage is carried out by supervisors (i.e. Pillar 2 measure). By the end of 2016, the Commission will report on whether a legislative proposal will be put forward introducing a binding target for bank leverage ratios from 2018.

All in all, the establishment of a single rule book through the CRD package is a significant step as it ensures harmonisation of capital requirements. However, it still leaves substantial room for discretion at national level, with potential consequences regarding bank equity capital endowments (Juncker, 2015b). In addition, monitoring only risk-weighted capital ratios may not be optimal for assessing capital adequacy, in particular owing to the use of diverse internal models by banks (OECD, 2014). In this context, further measures are required to address these issues. Monitoring and targeting levels of leverage ratio on top of the risk-weighted capital ratios could be an option (Archaya and Steffen, 2013). For example, Swiss authorities decided that systemic banks are required to have a leverage range of at least 5% by 2019.

Box 4: A single rule book for banking supervision and resolution (*cont.*)

EU framework for Bank Resolution

The EU Bank Recovery and Resolution Directive (BRRD) seeks to provide national authorities with adequate instruments for the orderly management of bank failures, including cross-border failures. Ultimately, it aims to contribute to safeguarding financial stability and minimise costs for taxpayers in future financial crises. The BRRD has been gradually implemented since 2015 and will be fully operational as of 2016. The Five Presidents' report calls on all Member States to fully transpose the BRRD into national legislation, as ten EU Member States had failed to do as of late October 2015 (European Commission, 2015b).

The framework specifically requires that banks prepare recovery and resolution plans showing how they would manage a situation of financial stress or failure. National authorities also draw up resolution plans for banks and evaluate the efficiency of each available tool. In the early intervention phase, bank supervisors have the power to take critical decisions, for example, on the bank's management or restructuring plan.

The set of tools granted to resolution authorities include: (i) selling the business to another bank (art. 38-39 BRRD/Art. 24 SRM); (ii) establishing a temporary bridge bank (Art. 40-41 BRRD/Art. 25 SRM); (iii) separating toxic assets from healthy assets and transferring the former to a 'bad bank' or a special vehicle (Art. 42 BRRD/Art. 26 SRM); and (iv) converting shares and/or writing down equity and debt, i.e. bail-in (Art. 43-55 BRRD). Authorities can implement the latter instrument to recapitalise a failing financial institution. In this respect, a specific ranking applies to claims: first, shareholders have to absorb resolution costs and losses in full, followed by subordinated debtholders and then senior creditors. In the event of a systemic crisis, public intervention may occur only if, first and foremost, the bank's shareholders and creditors incur losses of at least 8% of the liabilities (Art. 56-58 BRRD). Note that, in this specific case, state aid rules would also apply.

Ultimately, these tools seek to ensure that the failing institution's shareholders and creditors bear appropriate losses. This represents a stark contrast with the period 2008-2010, when only one bank bailed-in private investors for an amount exceeding 8%, while for all other banks, bail-ins averaged only 3% (Constancio, 2014c). The BRRD framework also aims to limit moral hazard and risk-taking behaviour by banks. At the same time, the framework safeguards critical functions of the banks. In the event of a cross-border banking group failing, the new resolution regime established by the BRRD seeks to enhance cross-border coordination between resolution authorities.

5.1. The Single Supervisory Mechanism (SSM)

The SSM is the first pillar of Banking Union and has been operational since 4 November 2014. The SSM consists of the European Central Bank (ECB) – as an overarching authority – and the national banking supervisors (i.e. National Competent Authorities or NCAs) of participating EU Member States. The aim is to safeguard EU financial stability and ensure the safety and soundness of financial institutions and 'a level playing field in the supervisory requirements to be met by banks' (ECB, 2014). A better quality of supervision and a more homogeneous implementation of regulations and standards should also help consolidate banking system resilience (Constancio, 2014c).

The ECB directly supervises about 120 significant banks[8] in the euro area while the NCAs are responsible for the remaining 3,500 less significant banks. Nonetheless, the ECB, i.e. the overarching authority, can take over direct supervision of any bank at any moment.

All euro area Member States participate in Banking Union. It is possible for other EU Member States to decide to opt into the SSM in the future, and therefore 'close cooperation' between the ECB and their NCA is required (article 7 of the SSM Regulation). This, in turn, also means that all participating Member States' banks are covered by the Single Resolution Mechanism.

However, this new supervisory architecture may raise potential shortcomings. For instance, a clear separation between supervisory and monetary policies must be strictly ensured. The ECB has agreed and published a set of rules to fulfil this requirement to avoid potential conflicts of interest. In addition, the sharing of responsibilities between the ECB and NCAs might lead to a heterogeneous assessment of prudential standards (OECD, 2014). Moreover, Member States outside the euro area would not be treated completely equally compared to euro area peers if they decide to enter the Banking Union. This is particularly relevant in the area of representation, as they would not have a seat within the ECB Governing Council. Similarly, those Member States would not have access to common fiscal backstops nor to common liquidity. Some aspects of Banking Union remain unclear, in particular regarding coordination between the ECB and NCAs and between prudential policies and local monetary policies (IMF, 2015a).

Prior to assuming its new tasks, the ECB – in close cooperation with the EBA – carried out a Comprehensive Assessment consisting of an Asset Quality Review (AQR) and a stress-test exercise in 2014. The Comprehensive Assessment represented a health-check of the 130 largest banks across the

[8] Based on the two SSM Regulations, a bank is deemed 'significant' when (i) its total asset value exceeds 30 billion euro; (ii) it is important for the EU economy or any participating Member State; (iii) it holds substantial cross-border activities; (iv) it has requested or received direct financial support from the ESM or the EFSF; and (v) it is one the three most significant credit institutions in a participating Member State, regardless of size. Overall, the 120 banks directly supervised by the ECB represent around 85 % of euro area bank assets.

euro area with a view to evaluating their solvency. The defined objectives of this exercise were to strengthen the banks’ balance sheets, enhance transparency and restore confidence in the European banking sector. Results revealed that 25 banks (out of 130) were found to experience a capital shortfall of 24.6 billion euro overall. Nonetheless, 12 banks had already raised their capital to cover any shortfalls prior to the release of the Comprehensive Assessment results. The remaining 13 banks for which capital shortfalls (worth 9.5 billion euro) were identified in the AQR, or under the baseline or adverse stress test scenarios, had to present recapitalisation plans by the end of April 2015 and July 2015, respectively. These banks have reinforced their balance sheets by taking additional capital measures and this strengthened resilience has contributed to restoring stakeholder confidence. However, these recapitalisations only amounted to 5.5 billion euro. The 4 billion euro difference against the figure expected by the ECB might be explained by the fact that, instead of issuing equity, these banks preferred to execute other capital measures such as asset sales, contingent convertible capital instruments (CoCo) conversions, or regulatory capital requirement reductions (Breuer, 2015).

Although the standards of the AQR and stress tests performed by the ECB improved substantially, at least five key shortcomings should be highlighted. Firstly, deflation was not an underlying assumption in the adverse scenario. However, inflation in the euro area economy has been very low for some time and even briefly negative, despite the ultra-accommodative monetary policy conducted by the ECB and particularly the implementation of a Quantitative Easing programme since March 2015. Moreover, an analysis of several adverse scenarios would have provided further insight into the resilience of European banks (Breuer, 2014). Secondly, if slightly harsher assumptions are used in the adverse scenario, the results of the Comprehensive Assessment vary significantly across the 130 largest banks. In other words, testing a handful of shock magnitude says much more about the effective robustness of the banking sector. Indeed, a few Italian banks failed the ECB/EBA stress tests whereas, for example, all German and French banks passed, thereby implying that French and German banks are more resilient than Italian banks. However, this does not provide any information on the robustness of the French and German banking sector per se. It might be the case that in the event of a shock of a slightly larger magnitude, some banks in those countries would also fail. For example, if a stressed leverage ratio of 4% is considered for 2015, the shortfall estimate of the banks is of 88 billion euro of Tier 1 capital (Arnould and Dehmej, 2015). In addition, the ECB stress test exercise also failed to include any degree of political risk; it is therefore unclear whether the banks hold enough capital to counter a more unstable political scenario, such as a sovereign default (Beck, 2014). Thirdly, national competent authorities might have used significant discretion in analysing transitional arrangements as a measure of regulatory capital (Archaya and Steffen, 2014). Fourthly, risk-weights based on banks' internal models were criticised as they may not, ultimately, reflect actual risks on bank balance sheets (Archaya and Steffen, 2014). In addition, the discretionary power of the NCAs and the use of different internal risk models across banks raise an issue of comparability between institutions (Arnould and Dehmej, 2015). Lastly, the treatment of sovereign debt held by banks was not adequate, as a zero-risk weighting was used for all sovereign debt regardless sovereigns’ heterogeneous capacity to serve the debt. Since zero-weighting means that debt-holding does not “consume” bank’s capital, this could incentivise banks to raise their holdings in government bonds.

In the future, these shortcomings should be addressed by regulators, to strengthen the credibility of the exercises and further restore confidence in resilient banks. EU authorities should explore establishment of a minimum level for bank leverage ratios (i.e. an unweighted indicator) – e.g. within the framework of the Capital Requirement Directive package report by the European Commission in 2016 – similar to the Swiss authorities' recent agreement for systemic banks (5%) and other banks (4.5%). The European Systemic Risk Board (2014) clearly highlights that:

> '*Following Goodhart's law, as risk-based regulatory ratios increasingly became the 'gold standard' of perceived resilience in successive generations of Basel accords, they became decreasingly useful as an indicator of future distress probability. [...]Banks' Tier 1 capital ratios in 2006 were uninformative about their true default probabilities. Several banks with high regulatory capital ratios in 2006 subsequently failed; conversely, several banks with low regulatory ratios in 2006 did not.*'

5.2. The Single Resolution Mechanism (SRM) and Fund (SRF)

The second element of Banking Union complementing the Single Supervisory Mechanism is the Single Resolution Mechanism, together with the Single Resolution Fund. The SRM aims to manage swiftly and orderly resolution of failing banks in the euro area and other participating Member States. It contributes to breaking the link between banks and sovereigns. A single system is expected to deal with cross-border banks in an unbiased way in order to curtail spill-over effects and contagion across the single currency area. The primary aim also remains to spare taxpayer contribution.

The SRM consists of a central authority, the Single Resolution Board (SRB), and a network of national resolution authorities from all Member States participating in Banking Union. The former – operational since 1 January 2015 – is directly in charge of preparing and overseeing the resolution of the most significant financial institutions, while the latter are responsible for all other banks,[9] as per the SSM framework. In addition, national resolution authorities assist the SRB with resolution preparation, and implement resolution decisions. In turn, the SRB monitors the proper implementation of those measures. Importantly, BRRD resolution rules must be applied to all participating Member State banks.

In addition, a Single Resolution Fund (SRF) was established by the SRM Regulation. However, an intergovernmental agreement between 26 EU Member States mainly regulates: (i) transfers of the contributions levied by national resolution authorities to the national compartments of the SRF; (ii) mutualisation of the national compartments' funds over a transition period of eight years;[10] (iii) lending between national compartments and (iv) the potential contribution of non-euro area participating Member States to the SRF.

The Single Resolution Board is responsible for the SRF. The Fund's resources are based on *ex ante* contributions from the financial industry and will be drawn on for the resolution of failing banks only after the implementation of the bail-in rules set out in the BRRD. The target level of the SRF to be reached by 2024 amounts to 1% of the covered deposits of all banks in participating Member States, i.e. about 55 billion euro (article 69 SRM Regulation). In the event of the Fund running out of money, extraordinary *ex-post* contributions could be raised from banks (article 71 SRM Regulation).

However, flaws in the design of the SRM/SRF continue to be underlined. The decision-making process remains cumbersome (IMF, 2014a). Indeed, any bank resolution scheme adopted by the SRB must be transmitted to the Commission for endorsement or objection. If the Commission approves the proposal from the Board, or does not object within 24 hours, the implementation of the resolution

[9] However, whenever the Single Resolution Fund is to be drawn upon, the SRB automatically takes over the resolution of the bank regardless of its size. Likewise, it is directly responsible for all cross-border groups and all entities for which the ECB has decided to take over direct supervision within the framework of the SSM.
[10] More specifically, 40 % of the money available in the national compartments will be mutualised the first year, followed by an extra 20 % the second year and 6.7 % in each of the remaining six years.

scheme is expected to be straightforward. On the other hand, the Council in turn may be involved in the process in the event that the Commission does not approve the Board proposal. The resolution scheme would have to be amended should the Council approve the new proposal by the Commission (Constancio, 2014b). All in all, streamlining the decision-making process should be further explored with a view to ensuring swift, predictable and orderly resolutions for failing banks, ultimately, safeguarding financial stability.

The size of the Fund is also likely to be too small given the characteristics of the EU banking system. Although a 55 billion euro SRF could address a shock specific to an asset or a small group of assets, it cannot be excluded that the Fund's resources would be completely depleted in the event of widespread bank failures or one big systemic bank failure. If this situation materialises, it would likely jeopardise the credibility of the Mechanism and substantially dampen its effectiveness. In addition, the implementation of bail-in rules may cause contagion through losses spread to other banks (Schoenmaker, 2015). For these reasons, the Fund's financing capacity and efficiency should be enhanced. In other words, the Fund should be able to draw on additional temporary resources (Constancio, 2014a). In this regard, a common fiscal backstop should also be set up both in the transition period and steady state, for instance through a credit line from the European Stability Mechanism to the SRF (Juncker, 2015). The ESM would intervene whenever the SRF runs out of resources and, consequently, would serve as a fiscal backstop with substantial firepower.[11] A new instrument of this type would require an ESM Treaty change, as for the creation of the ESM Direct Recapitalisation Instrument (DRI) (see below). Yet, the strength and credibility of that potential instrument hinges on the political capacity of the ESM.[12] In other words, a qualified-majority voting process with regard to bank recapitalisations would ensure swift decision-making in times of crisis. In contrast, unanimity would hinder the ESM's efficiency (Schoenmaker, 2014). Ultimately, this would help withstand systemic crises and further severe the negative feedback loop between banks and sovereigns.

Establishment of a short-term bridge financing mechanism for the SRF is also a key element. If, during the transition period, Fund resources – not yet fully built up through mutualisation – fall short of recapitalisation needs, a mechanism is required to cover those needs so as to ultimately ensure an orderly resolution of the failing banks. The ECOFIN Council agreed, in early November 2015, that this bridge financing will be set up through national credit lines from the participating Member States in order to back up their respective national compartments (Council, 2015). *Ex post* contributions from the banking industry will be made as part of reimbursement. However, this arrangement fails to sever the feedback loop between banks and sovereigns (with excessive public debt), as Member States will likely tap global markets and issue sovereign debt to cover any shortfalls in their national compartment. As a result, it could potentially further weaken sovereigns with already high debt levels. Accelerating the mutualisation of the national compartments of the SRF would limit the lifespan of this bridge financing mechanism.

The transitional period of eight years (i.e. to 2023) is deemed to be too long. The gradual mutualisation of the national compartments' funds should be accelerated and reach its full potential so that it helps weather a potential financial shock in the short to medium-term (Coeuré, 2014). Lastly, Member States and EU institutions should review the SRF's institutional framework. Rather, the Community method should prevail so that EU law applies (Coeuré, 2014).

[11] Any financial resources used within the framework of an ESM intervention as a fiscal backstop should be reimbursed *ex post* by the SRF, i.e. by the financial sector.
[12] Note that this would certainly raise legal issues at EU and national levels but this goes beyond the scope of this paper.

5.3. How resilient is the Banking Union architecture?

This specific report provides an evaluation of the resilience of the Banking Union framework established in recent years. Several scenarios regarding the implementation of the Banking Union resolution pillar are considered; the study also estimates the potential costs that could be incurred from a banking shock (Annex 2).

The first part of the study offers a static financial analysis, which suggests that the currently proposed regulatory framework is not sufficient to address shocks of a size compared to that of 2007-2009. Bailouts would still be needed, at European taxpayers' expense, even if the Banking Union architecture of 2023 were already in place today.

Subsequently, a new dynamic non-linear macroeconomic model is used to evaluate the macroeconomic costs of a medium-sized financial shock (i.e. -10% losses in total bank assets) at euro area level.[13] Based on that model, the key findings are as follows:

- the potential costs to the euro area economy from a medium-sized financial shock are estimated to amount to a cumulative loss of one trillion euro of GDP (i.e. -9.4% of the 2016 forecast GDP), that is, a loss of 100 billion euro per annum;
- the potential social costs to the euro area include an estimated increase in unemployment of 1.91 million people in 2016;
- public debt in euro area countries is estimated to increase by 51.4 billion euro in 2016, i.e. +0.5% of the 2016 forecast debt.

It is recommended that in order to make the euro area economy more resilient and offset the substantial negative impact of a potential banking shock, the Single Resolution Mechanism and its Fund should be strengthened. In addition, capital requirements – in particular the equity ratio – should be raised in the medium-term, concluding that this would prove to be the most effective and cost-efficient measure to withstand a potential banking crisis.

5.4. The ESM Direct Recapitalisation Instrument (DRI)

The possibility to directly recapitalise financial institutions through the European Stability Mechanism (ESM) was the other major decision made by euro area leaders in June 2012. Since December 2014, the ESM Direct Recapitalisation Instrument (DRI) has been fully operational, following approval by the 18 euro area Member States and a unanimous decision of the ESM Board of Governors.

The ESM DRI is a key element of the Banking Union. Following the establishment of the Single Supervisory Mechanism (SSM), euro area financial institutions may now – under strict conditionality – be recapitalised directly by the ESM upon the request of an ESM Member. Indeed, the ESM DRI can be triggered only if: (i) providing financial support to the benefiting bank jeopardises the fiscal sustainability of the requesting ESM Member and the financial stability of the euro area; (ii) the benefiting bank – which must be systemically relevant – is unable to meet the capital requirements

[13] That dynamic non-linear model allows for endogenous money creation, involuntary underemployment and debt-deflation phenomena. It is calibrated and estimated so that the baseline scenario coincides with the Commission's forecasts. The macroeconomic costs of a banking crisis are then evaluated through the impulse function of the model to the shocks estimated in the static financial analysis covered in the first part of the study.

and to cover any shortfalls by a private-sector contribution and using the available bail-in tools and resolution fund;[14] (iii) the future solvency of the benefiting bank is ensured, after approval by the Commission of a restructuring plan. In addition, the requesting ESM Member has to inject capital into the benefiting bank should the latter require additional equity to meet the minimum core Tier 1 capital ratio of 4.5%, in line with the CRD IV package.[15] It should also be noted that the ECB will take over direct supervision of the financial institution requiring the use of the ESM DRI if this was not the case beforehand.

However, prerequisites to access to the ESM DRI may be considered to be too stringent and may therefore dampen its effectiveness in ultimately severing the loop between banks and sovereigns as initially intended (IMF, 2015). In addition, the limit of available resources for direct recapitalisation of banks set at 60 billion euro is likely to be too low should a systemic banking crisis materialise, although the ESM Board of Governors may decide at any time to raise it.

Member States outside the euro area which can still participate in Banking Union will not have access to this tool, insofar as ESM membership is only granted to euro area Member States having ratified the ESM Treaty.

As an intergovernmental mechanism falling outside the Community method, the ESM, which has now seen its powers enhanced, poses a challenge regarding democratic oversight and accountability. At present the democratic accountability is exercised by national parliaments scrutinising and sometimes authorising their respective governments regarding ESM related decisions. In order to make this democratic oversight and accountability process more efficient the ESM should be integrated within the EU legal framework and should evolve as a Community-based mechanism, noting that this would require a Treaty change. At the same time, if the ESM becomes a Community-based mechanism, it should meet high democratic standards and be fully accountable before the European Parliament.

5.5. A Single Deposit Guarantee Scheme

A Single Deposit Guarantee remains one of the missing pillars of Banking Union. Setting up this pillar would certainly make Banking Union more resilient to shocks in the future, however politically this might not be easy to achieve[16]. The main rationale behind a Single Deposit Guarantee Scheme is to protect European taxpayers' money in the event of a bank's failure or systemic crisis. Such a scheme would aim to prevent capital flight and deposit outflows, which could have sizeable destabilising impact on a local bank or the entire banking sector and, ultimately, on the real economy. An effective and credible pan-European system would therefore help reduce spillover effects across Member States.

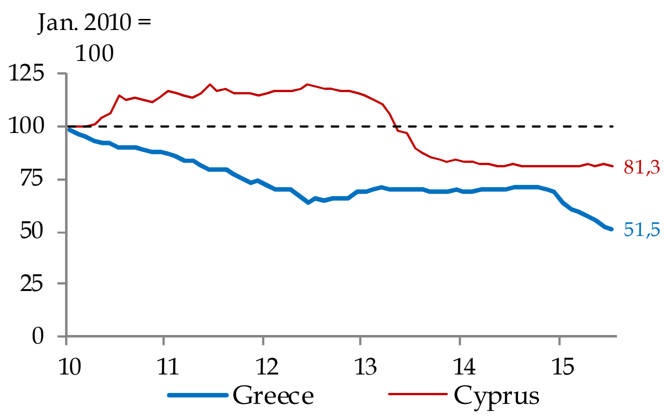
[14] Until the end of 2015, the ESM DRI can be applied if there is a contribution from the private sector, a bail-in of 8 % of eligible liabilities, including the bank's own funds, and a contribution from the Member State's national resolution fund, up to the 2015 target level of contributions in line with the BRRD and the SRM Regulation. As from 2016, in addition to a first contribution from the private sector, the bail-in must be of at least 8 % of eligible liabilities, the contribution of up to 5 % of total liabilities from the Resolution Fund and all unsecured liabilities written down in line with the BRRD (ESM, 2014).

[15] Nonetheless, a lower contribution may be granted by the ESM Board of Governors under exceptional circumstances when the ESM Member is unable to provide an up-front contribution due to a tight fiscal position.

[16] It is important to understand that a single deposit guarantee scheme means guaranteeing something in another Member State. This triggers a question namely the existence of a level playing field. This is a recurring topic with Banking Union, which is important both economically and politically. It is impossible to implement cross-border guarantees without having a common supervisory environment if moral hazard is to be avoided.

Since the onset of the sovereign debt crisis in 2010, a few Member States have experienced destabilising effects as market pressure heightens. Funds were moved in search of a safe haven. In particular, deposits in Greece and Cyprus dropped substantially – by nearly 50% in Greece between January 2010 and July 2015 and by nearly 40% in Cyprus between June 2012 and January 2014 – weakening their banking systems and the real economy (figure 10). Recapitalisation costs were higher than initially expected and recessions deeper due to these bank runs. If a Single Deposit Guarantee Scheme had been in place at the European or euro area level[17], deposit outflows due to lack of depositor confidence regarding the capacity of existing national deposit guarantee schemes from Greece and Cyprus may not have been as sizable, since depositors would have been assured that their savings would have been covered by the European level deposit guarantee scheme in case of bank failure.

Figure 10: Bank deposits by the non-financial private sector



Source: ECB, EPRS

The revision of the Deposit Guarantee Scheme Directive in 2014 was a step in the right direction (OECD, 2014). The new Directive continues to protect EU depositors of up to 100,000 euro in the event of a bank failure[18]. In addition to further transparency for depositors, quicker access to deposits will also be gradually ensured, i.e. from the current 20 working days to seven working days in 2024. As far as funds are concerned, the Directive ensures funding requirements amounting to a targeted 0.8% of covered deposits (about 55 billion euro) to be reached over a ten-year period. Those funds will be based on *ex ante* contributions from the banking industry, depending on how risky banks are, and on the amount of covered deposits held. This aims to ensure the safety of depositors' money.

However, deposit insurance schemes remain at national level, without any risk pooling across the euro area. Some Member States have limited or no national insurance schemes but have large potential risks. This entails vulnerability in case of a large shock, especially in small economies with a large financial sector. Indeed, if a Member State is perceived as unable to cover its bond redemptions through markets and economic agents - e.g. due to unsound public finances or disproportionally large banking sector – this, in turn, undermines the credibility of national guarantee funds. As a result, confidence may be lost while capital flight and deposit outflows materialise. Consequently, local banks would be substantially weakened.

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[17] Assuming, at the same time, that a common supervisory mechanism was already in place so as to limit moral hazard issues.

[18] A question arises whether in case of a major crisis all Member State would have enough means available at national level to honour that engagement.

That is why establishing a Single Deposit Guarantee Scheme beyond the gradual harmonisation foreseen by the 2014 Directive would help to further break the sovereign-banks nexus, boost trust and avert self-fulfilling crises. It would also avoid putting the SSM and the ECB's credibility in jeopardy (IMF, 2013b).

With the gradual implementation of banking reform and the Single Resolution Mechanism, a fully-fledged Single Deposit Guarantee Scheme should be set up, although it may not seem particularly crucial in the short-term (Constancio, 2014b). Nonetheless, further mutualisation should be swiftly undertaken by Member States. This could already take place under the current legal framework, as the 2014 Directive already allows for borrowing from one national guarantee system to another on a voluntary basis. Devising the pan-European scheme as a re-insurance system for national schemes would also be an option in the short-term (Juncker, 2015b).

However, these options would not be the most efficient and already present drawbacks compared to a Single Deposit Guarantee Scheme. For example, in the event of a cross-border bank failure, administrative resources and duplication of costs would materialise, as both national funds would evaluate the same bank. This would also require close coordination between the national authorities, which might turn out to be more complex than initially expected (IMF, 2013b). Ultimately, the sovereign-banks vicious circle would not be fully severed.

In addition, an effective common backstop to national deposit guarantee schemes should be considered in the near future as it would, admittedly, take time to create a fully operational Single Deposit Guarantee Scheme (IMF, 2015b). In the event of systemic crises, the scheme's resources might fall short, and for this reason, establishing a common fiscal backstop would significantly strengthen the credibility of the fund and, ultimately, avert any bank runs. Crucially, it may never be used, as is the case with the ECB's Outright Monetary Transactions announced in September 2012.

However the problem of moral hazard is important. The Member States which will be major contributors to such a backstop will only accept this if a system is put in place which guarantees that other Member States and their banks do not privatise gains and socialise losses. A central issue is that in case moral hazard isn't eliminated, than the Single Deposit Guarantee Scheme (or other risk sharing instruments such as the Single Resolution Fund) can actually contribute to the increase of the risk of a new crisis, because they might invite to excessive risk taking, both by individual banks, and by Member States.

A Single Deposit Guarantee Scheme should be fed through *ex ante* fees levied on the participating banking industry to ensure its fiscal neutrality over the long-term. Interactions with the Single Resolution Fund may also be considered. The 2014 DGS Directive allows national deposit guarantee scheme funds to contribute to bank resolution (article 109 BRRD). Similarly, the Single Resolution Fund should also be allowed to draw upon the Single Deposit Guarantee Scheme fund, up to a certain limit.

Nonetheless, the authorities would be required to estimate how much the national Deposit Guarantee Schemes should contribute to the resolution of a failing bank under the SRM within 48 hours. In addition, any estimation of the potential losses made by the Deposit Guarantee Schemes had the SRM not intervened could be biased, due to the use of more or less robust counterfactuals. At the same time, conflicts of interest between the SRM and the national schemes could arguably occur (Belke and Gros, 2015). Note that the same shortcomings would also apply for any Single Deposit Guarantee Scheme in the future, although the latter would seek to minimise national biases and prevent conflicts of interest.

5.6. The 'Cost of Non-Europe' associated with a common Deposit Guarantee Scheme

The purpose of the 2014 study (see footnote 1) was to evaluate the robustness of a strong economic and monetary union faced with a new crisis scenario, namely financial crisis and sovereign crisis. Under the two crisis scenarios, the mitigating impact of three variables were tested: common deposit guarantee scheme, improved budgetary coordination and completed Banking Union.

Main findings

- The ‘cost of non-Europe’ under a sovereign crisis scenario is estimated at 32.5 billion euro, representing 0.25 % of GDP. The flight of deposits would be reduced by 16 billion euro due to existence of the deposit guarantee scheme.
- In the event of a financial crisis, the ‘cost of non-Europe’ would be 64 billion euro, representing 0.49 % of GDP and a flight of deposits reduced by 49 billion euro due to existence of the deposit guarantee scheme.

5.6.1. Definition and crisis scenarios

The cost of non-Europe or, alternatively, the European added value, is defined as the difference between the underlying systemic costs of a crisis, assuming weak European efficiency, and those assuming strong European efficiency[19], which includes a Single Deposit Guarantee Scheme which would make it possible to reduce the price of insurance and create safer environment for savers within the EU. In the event of a new crisis, deposit insurance would make it possible to reduce the flight of deposits, leading to a reduction in negative pressure on the economy. The estimates of the cost of non-Europe are obtained on the basis of scenarios over an annual horizon and represent one-off costs which may be saved at a time when the financial or sovereign crisis materialises over a one-year horizon.

In the specific context of this report, the cost of non-Europe associated with a Single Deposit Guarantee Scheme has been considered under two distinct scenarios: a financial crisis (i.e. increase in market volatility, strong contagion within the banking system, increase in the cost of short-term liquidity for banks, increase in long-term rates, massive deposit flight and so on) and a sovereign crisis (i.e. increase in sovereign Credit Default Swap (CDS) spreads, sudden downgrading of sovereign debt rating, serious credit crisis with a sharp reduction in bank capacity to finance the economy, increased costs of bank bailouts, sharp decrease in economic production within the EU).

5.6.2. Methodology and results

A pricing model for deposit insurance is developed before the impact of a change in the level of European bank deposits on the real economy is assessed, and shows that it is more effective to have a Single Deposit Guarantee Scheme at European level than guarantees remaining at national level. Indeed, a pan-European system would limit capital flight and deposit outflows from stressed EU banks and Member States under market pressure. Ultimately, it would prevent destabilising effects on the real economy due to potentially sharp credit contraction.

[19] In the event of weak European efficiency, each country individually insures its own bank deposits and, in the event of strong European efficiency, a single deposit guarantee scheme operates at EU level.

The cost of non-Europe, assuming a sovereign debt crisis scenario, is estimated at 32,5 billion euro, i.e. 0.25 % of GDP. Establishing a Single Deposit Guarantee Scheme would dampen the effect of deposit flight on the real economy by 16 billion euro.

Should a financial crisis materialise, the cost of non-Europe would amount to about 64 billion euro, i.e. 0.49 % of GDP. Similarly, the impact of deposit outflows would be reduced by 49 billion euro if a Single Deposit Guarantee Scheme is set up at European level.

6. Enhanced budgetary coordination

- An 85 billion euro saving (i.e. 0.65 % of GDP) would be achieved through improved budgetary coordination[20] in a sovereign crisis scenario. A loss of 104 billion euro of total financing credit for the economy would be avoided.
- In the event of a new financial crisis, the 'cost of non-Europe' would be about 58 billion euro, representing 0.45 % of GDP. The loans offered to the economy would be reduced by less than 65 billion euro in an efficient monetary union.

The study simulated 10,000 scenarios aggregating the credit cycle and the debt-to-GDP ratio with a number of assumptions involving the efficiency of the European framework.[21] Thus, in a strong Europe, it is assumed that:

- countries succeed in maintaining fiscal coordination;
- there is weak dependency between the credit cycle and an increase in public debt[22] in relation to GDP.

The table below shows the contractions in terms of flows of credit to the economy by category, under two assumptions: strong and efficient banking and monetary union and weak and inefficient banking and monetary union, respectively.

Table 4: Contraction of flows of credit to the economy under different crisis assumptions

Contraction of flows of credit to the economy by scenario	Sovereign crisis			Financial crisis		
€ billions	SEE	WEE	WEE-SEE	SEE	WEE	WEE-SEE
Total loans	-478.2	-582.6	104.3	-459.2	-524.6	65.4
Commercial loans	-184.1	-224.3	40.2	-176.8	-202.0	25.2
Loans to households	-264.0	-321.6	57.6	-253.5	-289.6	36.1
Consumer credit	-29.6	-36.1	6.5	-28.5	-32.5	4.1

Source: EPRS

The results of the model show that a saving of 85 billion euro, i.e. 0.65 % of GDP, would be achieved if effective budgetary coordination was respected at the time of a new sovereign crisis. During any financial crisis, the European added value is 58 billion euro, representing 0.45 % of GDP.

[20] Budgetary discipline and coordination were weak points of the EU during the crisis. Issuing new debt at a high rate, non-observance of the target of 60 % of the debt-to-GDP ratio and the lack of efficiency in managing the costs of the new debt aggravated the economic crisis. Improved fiscal coordination and a centralised European budgetary strategy can reduce the impact of the crisis.
[21] For additional details, see Frunza (2014) p.18.
[22] Private debt is not taken into account.

7. Reducing the effects of a new crisis

Main findings

- In the event of a new sovereign crisis, the 'Cost of Non-Europe' is estimated at about 222 billion euro, representing 1.71 % of current GDP. The saving in the event of a bailout is estimated about 823 billion euro.
- Under the assumptions of a financial crisis, the savings generated by genuine Banking Union are estimated at 195 billion euro, representing 1.5 % of current GDP. The savings in terms of bailout need are estimated at 436 billion euro.

The 2014 study found that one of the main features of the current banking system is its massive undercapitalisation,[23] mainly in the countries that have low credit ratings.

Assumptions in relation to dependable Banking Union include stricter prudential requirements for banks and rules for managing failed banks, as well as establishing a single European rulebook for all the financial players of the 28 Member States of the European Union.

For the countries of the euro area, which are increasingly interdependent, more advanced integration of their banking systems is necessary. The assumption made in relation to Banking Union implies creation of a Single Supervisory Mechanism (SSM) and a Single Resolution Mechanism (SRM) for banks. Banking Union is applied to the countries of the euro area as well as to the countries outside this area.

In a new sovereign debt crisis[24], the European banking sector would require substantial recapitalisation. During the preceding euro area crisis, the cost of borrowing varied. The Single Resolution Mechanism would make it possible to considerably reduce the cost of issuing new sovereign debt and of recapitalising banks.

In the event of a new sovereign crisis, the 'cost of non-Europe' is estimated at about 222 billion euro, representing circa 1.7 % of current GDP. The savings in the event of a bailout are estimated at about 823 billion euro.

The 2014 study assumed that in a new sovereign crisis, the European banking sector would require substantial recapitalisation. During the preceding euro area crisis, the cost of borrowing varied. Single Resolution Mechanism would make it possible to considerably reduce the cost of issuing new sovereign debt and of recapitalising banks, hence the estimated savings.

Under the assumptions of a financial crisis, the savings generated by a strong union are estimated at 195 billion euro, representing 1.5 % of current GDP. The savings in terms of recapitalisation are estimated at 436 billion euro.

[23] The ECB's stress tests, conducted from a prudential perspective, indicate an undercapitalisation for just 25 banks. Nevertheless, the scenarios proposed in this study based on the once-in-a-hundred-year event go beyond prudential capitalisation and pose the problem from the perspective of economic capital.

[24] This scenario assumes the following: increase in sovereign Credit Default Swap (CDS) spreads, sudden downgrading of sovereign debt rating, serious credit crisis with a sharp reduction in bank capacity to finance the economy, increased costs of bank bailouts, sharp decrease in economic production within the EU.

European Added Value breaks down into two parts:
- reduction in economic losses thanks to robust Banking Union;
- reduction in the cost of new debt issued following a common bailout strategy.

The European added value breakdown is presented in the table below.

Table 5: European added value resulting from strong Banking Union

EAV resulting from strong Banking Union	Sovereign crisis	Financial crisis
Economic losses	211.3	185
Cost of new public debt	11	10
Total	**222.3**	**195**

Source: EPRS

8. Conclusion

The series of crises experienced in the EU over the past eight years have left considerable legacies that hamper Europe's economic recovery. After years of low or even negative GDP growth rates, economic growth forecasts remain modest and uneven in the euro area, although there are recent signs of gradually accelerating recovery. Economic activity has struggled to return to pre-2008 levels. Credit, a key growth engine, remains impaired, as confidence within the banking sector is low and its stability is not fully secured, partly due to excessive NPLs in countries such as Italy or Spain. The financial and sovereign debt crises in the euro area have left very high levels of public debt in some countries and the combination of low growth prospects and low inflation is impeding successful deleverage of this debt. Similarly, the high private debt accumulated prior to the crisis is not decreasing at the same pace as, for example, in the United States. The economic downturn following the financial crash resulted in a large number of job losses and the ensuing high unemployment levels have persisted, particularly among the young and long-term unemployed, despite a gradual recovery. Although economic growth is gradually picking up speed, there is a time lag before this will have an effect on employment levels. This has contributed to the rising levels of poverty and inequality within the EU. Establishing a more robust financial sector is not intended to correct legacies such as low growth and high unemployment, but is meant to avoid a renewed flare up of problems in the future. To tackle these legacies there are already extensive mechanisms in place at EU level, which are destined to increase competitiveness, growth and employment. Not all of these are yet being used as fully as they might be; concentrating on the existing framework can therefore help to unleash potentials.

The establishment of European Banking Union forms part of efforts that aim to complete EMU. Some of the measures adopted, such as the establishment of the European Semester or the reform of the Stability and Growth Pact (SGP), aim to tackle the initial institutional weaknesses and the incapacity of implement existing rules, which led to the sovereign debt crisis and have complicated the efficient management of the situation during and in the aftermath of the crisis. This domino effect was triggered by the negative feedback loop that tied banks, businesses and sovereigns and hindered efforts made to recover from the crisis. The main objective of Banking Union is to break the negative feedback loop that has bound the euro area to the current period of poor economic performance and low confidence within and between the different economies that make up monetary union. By completing Banking Union, the EU would enhance stability in the banking sector and contribute to restoring trust.

The rapid establishment of Banking Union may be the best way to ensure the robustness and resilience of the financial sector and of the EMU as a whole. This Cost of Non-Europe report estimates the costs of a new medium-sized financial shock to come to a cumulated loss of 1 trillion euro in GDP (approximately -9.4 % of the 2016 forecast GDP); job losses would amount to 1.91 million (-1.19 %, supposing a total workforce of 161.3 million, according to the model forecast for 2016) and government debt would increase by 51.4 billion euro in 2016 (+0.5 % of the forecast debt).

The stability and efficiency of European financial institutions is a necessary element for economic growth across the Union. To accelerate the process of building a macro-resilient Banking Union, this report identifies the following key policy options:

- expand the size of the SRF to 165 billion euro and accelerate gradual merging of national compartments within it;
- establish a credible common fiscal backstop to the SRF that is fiscally neutral and funded by the banking industry, to protect taxpayers' money;
- require an increase in the (non-risk based) leverage ratio of banks to 9 % or more;

- ensure the full transposition of the BRRD and the 2014 DGSD by EU Member States;
- create both a SDGS and a reliable fiscal backstop to the attached Fund.

In addition, further action could be taken in several areas to increase Banking Union resilience:

- evaluate the effectiveness and efficiency of the SRM decision-making process under various stress scenarios;
- review, in close coordination with global stakeholders, the treatment of bank exposure to sovereign debt and, in particular, the zero-risk weighting;
- explore the possibility of relaxing the requirements for accessing the ESM Direct Recapitalisation Instrument in the medium term, as well as of increasing the ceiling currently set at 60 billion euro;
- change the institutional frameworks of the ESM and SRF so that the Community method ultimately prevails. Attach high democratic and accountability standards to both mechanisms;
- establish equal treatment (taxation) between debt and equity in the balance sheets.

The policy options put forward by this Cost of Non-Europe Report aim to contribute to the discussion of how to enhance the robustness of Banking Union and improve the macro-resilience of the European banking sector. These measures would help to sever the negative feedback loop between banks, businesses and sovereigns that has acted as a drag on euro-area growth potential in recent years. The process towards Banking Union would help to further correct the main initial design flaws of currency union. This would contribute to restoring trust in the European financial sector, adversely affected by the series of crises occurring since 2008.

Box 5: Key recent developments

- **Commission proposal for a European Deposit Insurance Scheme**

With a view to establishing the third and last pillar completing Banking Union, in late November 2015, the Commission proposed the establishment of a European Deposit Insurance Scheme (EDIS), which would help prevent capital flight and deposit outflows. The Commission's legislative proposal entails a three-step approach. The first stage of re-insurance, to last until 2020, consists of the newly created EDIS providing funds to national deposit insurance schemes in the case that these run short. During the second stage – co-insurance – the national and European schemes would be co-financed. In the third and last stage of full insurance, to be operational as of 2024, EDIS would completely replace national schemes and would be the sole insurance scheme for deposits in euro area banks. This gradual approach should allow time for Member States to update their domestic legislation in line with the scheme developed at European level.

- **State of play of the Bank Recovery and Resolution Directive, Deposit Guarantee Scheme Directive and Single Resolution Fund**

Some EU Member States must still fully transpose two key pieces of the single rulebook into national law. These pieces of legislation, namely the BRRD and the DGSD, are central to the Banking Union framework. The initial deadlines for the transposition of the BRRD and the DGSD were 31 December 2014 and 3 July 2015, respectively. As a result, infringement procedures have been launched by the Commission against those Member States which failed to incorporate these directives into their national legislation.

Following ratification by all euro area Member States, the SRF became fully operational from 1 January 2016 and is now being built-up from national resolution funds. At the same time, the Single Resolution Board was given full resolution powers and manages the newly created Fund.

Box 6: Key recent developments *(Cont.)*

- **Financial Stability Board proposal on Total Loss-Absorbing Capacity standards**

On 9 November 2015, the Financial Stability Board (FSB) issued its final principles on Total Loss-Absorbing Capacity (TLAC) standards for global systemically important banks (G-SIBs) in resolution as to avoid contagion and guarantee financial sector stability. G-SIBs will be required to hold at least 16 % of the resolution group's risk-weighted assets from 1 January 2019 and at least 18 % from 1 January 2022. The Basel III agreement requires all banks to hold at least 10.5 % of risk-weighted assets from 1 January 2019 and all G-SIBs will also have to comply with these additional requirements. Furthermore, Minimum TLAC must be at least 6 % of the Basel III leverage ratio denominator as of 1 January 2019, and at least 6.75 % from 1 January 2022.

This FSB announcement came prior to the G-20 Antalya summit and is consistent with G-20 efforts to reduce the 'too big to fail' problem in the financial sector and improve its resilience. It builds upon other recent major regulatory changes, such as Basel III by the Bank of International Settlements (BIS) or Minimum Requirement for Own Funds and Eligible Liabilities (MREL) by the European Banking Authority (EBA), that aim to augment bank capital buffers to safeguard financial stability.

Annex 1

Marius Frunza, The Cost of Non-Europe of an incomplete Economic and Monetary Union, 2014.

Abstract

The purpose of this study is to evaluate the robustness of a strong Economic and Monetary Union faced with a new crisis scenario. We have designed an empirical statistical model that includes, from a behavioural perspective, the relationship between the characteristics of the financial markets, the macroeconomic indicators and the accounting data of the financial institutions in the 28 Member States of the European Union. By simulating the parameters of the model in the event of a new crisis, we highlight the crucial role of an efficient and integrated functioning of the European Union with a view to limiting the losses generated during a major economic and financial crisis. From the perspective of a new sovereign crisis, improved budgetary coordination between the countries of the EU should generate savings of around €85 billion, i.e. 0.65 % of the European Union's GDP. Under the same scenario, a functioning Banking Union would make it possible to save €222.3 billion, mainly engendered by a reduced need to recapitalise the EU's financial institutions.

Annex 2

Gael Giraud, Thore Kockerols, Making the European Banking Union Macro-Economically Resilient: Cost of Non-Europe Report, 2015.

Abstract

The first part of our study shows that in a static analysis the currently proposed regulatory framework is not sufficient and for shocks of a size comparable to that of 2007-2009 bailouts would still be needed at the expense of the European taxpayer, even if the Banking Union architecture of 2023 were already in place today. The second part of the study finds that the costs to the economy go much further than the billions necessary to bail out banks. Building on a non-linear dynamic macroeconomic model whose baseline scenario coincides with the Commission's forecasts, we estimate the costs at the euro-area level of a medium-sized financial shock (-10% losses in banks' assets compared to 2007-2009) occurring in 2014 at a cumulated loss of € 1 trillion in GDP (approximately -9.4% of the 2016 forecast GDP), job losses amounting to 1.91 million (-1.19% supposing a total workforce of 161.3 million according to the model forecast for 2016) and an increase of € 51.4 billion in government debt in 2016 (+0.5% of the 2016 forecast debt). Needless to say, the cost would be much higher in the absence of the resolution pillar of the Banking Union (which is not scheduled to be fully in place until 2023).

The most effective remedy, according to our simulations, would be to increase the banking sectors' equity ratio target to 9% or more and to lower dividends, in order to make the economy more shock-resistant in the medium term. The study does not claim that an equity ratio target of 9% is the optimal value, although we suspect it to be close to the lower bound, below which the purpose of dampening the impact of a significant shock cannot be reached. We show that the cost of implementing this increased equity ratio is more than offset by the reduction in losses caused by a financial shock. In addition, the separation of retail banks from investment banks, euro-area deposit guarantees and a review of fiscal policy seem to provide more efficient tools to mitigate the effects of a new crash than what is currently programmed by the European Banking Union project. An augmented Single Resolution Fund (SRF) with more timely implementation would also certainly reduce the cost of a new crash, but would be insufficient to prevent turmoil in the euro area economy.

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This 'Cost of Non-Europe Report' examines the robustness of the Banking Union framework under various stress scenarios and identifies the cost of the lack of further European action in this field.

The study suggests that the potential gains from a deepened Economic and Monetary Union would be substantial, should a new financial and/or sovereign crisis materialise. It comes to the conclusion that the currently proposed regulatory framework for Banking Union is not sufficient in terms of reserves and resources to fully mitigate the systemic impact of a new crisis. The report notably shows that, even if the Banking Union architecture foreseen for 2023 were already in place today, bailouts would still be needed at the expense of the European taxpayer, in order to withstand shocks, of a size comparable to that of 2007-2009.

The costs at the euro-area level of a medium-sized financial shock are estimated to amount to a cumulated loss of 1 trillion euro in GDP (about -9.4% of GDP), job losses of 1.91 million and an increase of 51.4 billion euro in government debt. Assuming that such a shock occurs every ten years on average, the annualised costs would potentially amount to around 100 billion euro in output loss and 0.19 million job losses per annum.

Actions at EU level could significantly reduce the likelihood of financial shocks materialising and of their impact on the real economy. This 'Cost of Non-Europe' report points to shortcomings in the current Banking Union architecture and identifies policy options to address them.

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