EURO AT 20: BACKGROUND READER

COLLECTION OF STUDIES AND ASSESSMENTS

DIRECTORATE-GENERAL FOR INTERNAL POLICIES OF THE UNION
POLICY DEPARTMENT FOR ECONOMIC, SCIENTIFIC AND QUALITY OF LIFE POLICIES
ECONOMIC GOVERNANCE SUPPORT UNIT

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COLLECTION OF STUDIES AND ASSESSMENTS
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FOREWORD

The Euro and the Economic and Monetary Union turned 20 on 1 January 2019. This is also a good moment to take stock on the achievements and the developments of the “European citizen’s money” exploring various dimensions of Euro project.

On 1 January 1999 11 EU Member States launched a single currency - the euro - and a single monetary policy under the responsibility of the European Central Bank (ECB). During its 20-year long journey, the common currency has witnessed significant achievements in terms of credibility, price stability, resilience and popular support. Today, the euro/US dollar exchange rate is at virtually the same level as 20 years ago. Since its inception, the average inflation in the euro area has been 1.75%. Eight additional Member States have joined the single currency since 1999. Despite serious economic and social challenges over the past years, 77% of the euro area citizens are in favour of “European economic and monetary union with one single currency, the euro”. The euro is currently the currency of 340 million Europeans, who together account for more than 15% of the world GDP, and almost 20% of international trade. The euro is the second reserve currency in the world.

This publication is a collection of studies and assessment papers, originally prepared at the request of the Committee on Economic and Monetary Affairs of the European Parliament. It aims to provide background-reading materials for the members of European Parliament and members of national parliaments participating in the Parliamentary week 2019 focusing on the Euro@20 debate.

The first part includes eight briefing papers originally prepared for the Monetary Dialogue with the ECB on the 28 January 2018, providing a critical assessment of the Euro project and going forward. The second part includes four papers aiming at supporting the scrutiny work on the functioning of the euro area, especially in view of the bi-annual Economic Dialogues with the President of the Eurogroup.

Policy Department for Economic, Scientific and Quality of Life Policies

Economic Governance Support Unit
Abstract

We analyse the first twenty years of the euro both from an economic and an institutional perspective. We find that in particular during the period since the financial crisis, convergence as measured by a variety of indicators has not improved. Design flaws in the Eurozone institutional architecture have contributed importantly to this lack of convergence. This is why further reforms are urgently needed. This document was provided by Policy Department A at the request of the Committee on Economic and Monetary Affairs.
This document was requested by the European Parliament’s Committee on Economic and Monetary Affairs.

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<th>Description</th>
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<tr>
<td>BRRD</td>
<td>Bank Recovery and Resolution Directive</td>
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<td>DSM</td>
<td>Debt Sustainability Monitoring</td>
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<tr>
<td>ECB</td>
<td>European Central Bank</td>
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<td>ECJ</td>
<td>European Court of Justice</td>
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<td>EIOPA</td>
<td>European Insurance and Occupational Pensions Authority</td>
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<td>ELA</td>
<td>Emergency Liquidity Assistance</td>
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<td>EMU</td>
<td>European Monetary Union</td>
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<td>ESCB</td>
<td>European System of Central Banks</td>
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<td>ESM</td>
<td>European Stability Mechanism</td>
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<td>ESMA</td>
<td>European Securities and Market Authorities</td>
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<td>FDI</td>
<td>Foreign Direct Investments</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GFC</td>
<td>Global Financial Crisis</td>
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<tr>
<td>HICP</td>
<td>Harmonized Index of Consumer Prices</td>
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<td>IGA</td>
<td>Intergovernmental Agreement</td>
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<tr>
<td>LOLR</td>
<td>Lender of Last Resort</td>
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<tr>
<td>MIP</td>
<td>Macroeconomic Imbalance Procedure</td>
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<tr>
<td>NEER</td>
<td>Nominal Effective Exchange Rate</td>
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<tr>
<td>OMT</td>
<td>Outright Monetary Transactions</td>
</tr>
<tr>
<td>SRF</td>
<td>Single Resolution Fund</td>
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<tr>
<td>SSM</td>
<td>Single Supervisory Mechanism</td>
</tr>
<tr>
<td>TFEU</td>
<td>Treaty on the Functioning of the European Union</td>
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EXECUTIVE SUMMARY

- With the introduction of the new currency, the euro was established next to the US Dollar as the second most important currency on international capital markets and the nominal value of the euro remained stable over the last 20 years.

- Business cycles and inflation dynamics for the core countries of the eurozone have converged and financial market integration further increased after the introduction of the common currency.

- Especially after the financial crisis, the differences in inflation dynamics and business cycles between core and periphery countries became more pronounced and financial market structures remain dispersed across eurozone member countries.

- Already at the start of the euro the fiscal space across member states differed strongly. The divergence of business cycles and the asymmetric impact of the GFC led to a further increase in these differences.

- While some of the economic and financial developments in the euro area are very encouraging; others point the weaknesses in the institutional setup, which turned out to be incomplete. It did not acknowledge a whole host of potential risks, i.e. financial stability risks, the build-up of macroeconomic imbalances and a potential loss of market access by member states.

- The original Maastricht framework is no longer alive. The institutional architecture has changed considerably over the last twenty years in four main areas, i.e. fiscal and economic policy, financial policies and crisis management. But we do not yet have a new comprehensive narrative for the post-Maastricht world that would logically tie together the steps taken in recent years.

- The status quo remains far from perfect. The crisis let the spectre of a euro exit emerge – and we have not yet been able to fully make it disappear again. Member states have not settled the question whether they are willing once and for all to forego exit as a policy option and to solve all problems within the family. Until this is the case, the euro is at risk. To make the eurozone fit for the next 20 years, we have to continue with institutional reforms.

- The reform package adopted by the Euro Summit in December 2018 is clearly not enough. It contains some steps in the right direction, but fails to respond to the main underlying challenges because many of the main elements largely consist in window-dressing.
1. **INTRODUCTION**

The euro has turned 20. It is thus time to take stock and assess how the euro itself has functioned as well as how it has contributed to economic and financial developments in Europe and in the euro area. By and large, the euro is a success story that has delivered on its promises. Yet also critics have emerged who feel that their prejudices before the introduction of the euro have been confirmed. More worrisome is the observation that the rising nationalism in many parts of Europe means that many are abusing European institutions and in particular the euro as scapegoats for national political and policy mistakes. What is needed therefore is an honest and open debate on what the euro has accomplished and what reforms are needed to complete monetary union in order to tap the full potential of the euro.

The euro has contributed in making integration and peace in Europe irreversible, as the euro’s founders had intended. The euro enjoys broad and – after difficult years during the European crisis – an increasing support from its citizens. A majority of Europeans cannot imagine a Europe without the euro as the common currency and see the euro as a symbol of European unity.

The euro also has been an economic success and has contributed to welfare and stability in its member states. Yet it is also important to look at the institutional shortcomings and the need to reform economic and monetary union (EMU) in the coming years. One essential shortcoming is that the euro was introduced without the aid of many important institutional features, such as a common or at least better coordinated fiscal policy across member states, such as a banking union and a capital market union, and such as safeguards and stabilisation mechanisms that could help countries in crisis. This has led to an imbalance across institutions and policies in the euro area, with a high burden on the European Central Bank to stabilise the euro area during the crisis without the needed support from other policy areas.

This paper offers a systematic assessment of the achievements of the euro as the common currency. Specifically, it assesses to what extent the euro has been accompanied by and contributed to the convergence of member states along a number of dimensions, in particular economic growth, the business cycle and inflation. The paper analyses the role of fiscal policy and risk-sharing as well as the international role of the euro, which has been essential for member states to reap important benefits from the common currency, such as through facilitated trade, lower borrowing costs and enhanced stability. Finally, the paper discusses the institutional features of EMU and what needs to be done to complete the euro.
2. THE FIRST 20 YEARS OF EMU – AN ASSESSMENT

In this chapter, we provide an overview about the status of the EMU. How well did EMU perform with respect to price stability, inflation and business cycle convergence, fiscal sustainability, and – last but not least – the development and integration of financial markets?

2.1. Price stability and inflation convergence

Maintaining price stability in the euro area is the mandate of the European Central Bank (ECB). The ECB’s monetary policy strategy defines price stability in terms of year-on-year aggregated EMU Harmonized Index of Consumer Prices (HICP) growth that is to be maintained at below, but close to, two percent over the medium term (ECB, 2019). From the beginning of the EMU through 2008, the ECB was quite successful in achieving its inflation target. The actual EMU inflation rate and its two- to five-year average fluctuated narrowly – albeit slightly above – the two percent target (see Figure 1). Since the outbreak of the Global Financial Crisis (GFC), the ECB has had trouble achieving its inflation target. Inflation dynamics changed substantially, with consumer price growth shown to be less stable, experiencing larger and more persistent swings. Thereby, headline inflation dynamics were mainly driven by the large fluctuations of external factors, like global demand in the course of the global financial crisis, and mainly by domestic factors, like unemployment from 2011 to 2016 (Bobeica and Jarocinski, 2017; Dany-Knedlik and Holtemöller, 2017).

Figure 1: Actual and averaged HICP inflation rates (year-on-year)

![Figure 1](image)

Source: Eurostat, own calculations.

Despite the implementation of a variety of unconventional monetary policy measures to counteract disinflationary pressures, actual and average inflation continuously declined in the period following the outbreak of the sovereign debt crisis. As a result, consumer price growth significantly deviated between 2011 and 2016 from the ECBs inflation target (see Figure 1). Although this decline coincided with a decrease of oil prices, recent empirical research emphasizes that the fall in oil prices explains the period of low inflation to a very limited extent (Bobeica and Jarocinski, 2017; Dany-Knedlik and Holtemöller, 2017; Nautz et al., 2017; Riggi and Venditti; 2015). The studies find that it is mainly

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domestic factors, particularly the slow recovery of economic activity and employment as well as a possible de-anchoring of inflation expectations to the ECB inflation target, that contributed to the low inflation rate in the aftermath of the sovereign debt crisis. Both factors imply that during the period of low inflation, monetary policy measures might not have exerted enough upward price pressure.

Since 2017 inflation rates returned to levels close to two percent. However, this development is mainly driven by a rise in oil prices. As energy and food prices are particularly volatile components of the aggregate HICP, the recent rise of the overall HICP inflation rate does not necessarily imply that consumer price growth has stabilized around the target. Looking just at the core inflation rate, which excludes the volatile components, reveals that the development of consumer price growth – other than energy and food prices – is still subdued. One reason why the core inflation rate has not reached pre-crisis levels might be that wages and salaries have grown at a modest pace until recently, despite continuously tighter labour market conditions (Figure 2).

Figure 2: Core inflation and negotiated wage indicator

![Core inflation and negotiated wage indicator](Image)

Source: Eurostat, ECB Statistical Data Warehouse, own calculations.

Homogenous inflation rates across member states of a currency union like the euro area are essential to minimize potential welfare losses due to a common monetary policy. Since the introduction of the euro, the EMU has seen further inflation rate convergence (see figure 3). This is particularly valid for core countries, namely Austria, Belgium, Finland, France, Germany, Luxembourg and the Netherlands, where business cycle synchronization has been experienced. For the periphery countries, including Ireland, Italy, Greece, Portugal and Spain, the standard deviation to the EMU aggregate inflation rate was high in the first years after the introduction of the euro and throughout the double dip recession. The high level of inflation differentials can be related to an increase of unit labour costs and a rise of current account imbalances in the periphery countries, due to the misallocation of capital across the EMU that led to persistent real exchange rate misalignments (Coudert et al., 2013, and references therein). Together with some adjustment of cyclical macroeconomic imbalances, inflation rates of the periphery countries converged again thereafter.
In summary, EMU countries have shown convergence of inflation rates over the past 20 years, which facilitates a common monetary policy. Before the GFC, the ECB was very successful at maintaining price stability. However, due to largely extraordinary international conditions, monetary policy has not been able to meet the target range for the inflation rate since the financial crisis despite the additional implementation of unconventional monetary policy tools. Recent movements of inflation back to target levels cannot yet be regarded as sustainable.

2.2. Business cycle convergence

In this section we turn to question whether the introduction of the euro has further fostered European integration by synchronizing the business cycles of EMU member states. Business cycles are defined as deviations of output from its long-term trend. The question of business cycle synchronization is of special importance for the conduct of monetary policy in a monetary union. Monetary policy is one tool to reduce the business cycle fluctuations around the long-term trend. A synchronized business cycle across the member states allows the monetary authority to stabilize business cycles efficiently within the EMU. If business cycles of member states differ substantially, the consequence is that monetary policy is relatively loose for some member countries and relatively tight for others. If not corrected, this leads to divergence instead of convergence. The prominent role of business cycle convergence in the EMU has is analysed in the 2018 report “Convergence in the EMU: what and how” by Dolls et al. (2018). Therefore, we only provide an overview and a discussion of the literature in this briefing report.

The literature analysing the business cycle in the Euro Area agrees that there are distinct convergence groups within the euro area. The first group consists of some periphery countries, i.e. Portugal, Greece, and Spain. The second group comprises the remaining countries, i.e. the core area countries. Studies finding convergence of the business cycles for the core area countries include Carvalho et al. (2005), Belke et al. (2017), Ferroni and Klaus (2015) and Borsi and Metiu (2015). In particular, Carvalho et al. (2005) even find different growth trends for each group. When looking at the cyclical movements, coherence among the core countries is high, while they observe less coherence among the periphery group. This finding is corroborated by Belke et al. (2017), who examine the business cycle synchronization in the EMU but set a special focus on the difference between the core and periphery countries after the GFC. Overall, they show that the co-movement of output between core and
peripheral countries decreased markedly in the wake of the financial crisis. Additionally, they find that core countries experienced an increase in their synchronization in the aftermath of the GFC. In contrast, at the same time the synchronization of peripheral countries among themselves decreased. Ferroni and Klaus (2015) as well as Borsi and Metiu (2015) confirm the results in their studies, which consider different set countries. A policy report by Dolls et al. (2018) illustrates the convergence of the business cycles for the different groups of countries, thus supporting the findings of the scientific studies.

An open debate remains the question whether the convergence of the business cycles within the two groups of countries can be attributed to the introduction of the euro. After all, the common experience of World War II, the strong episodes of growth in the following two decades, and the oil crises in the 1970’s led to the insight that the European economies are strongly linked and further economic integration can be beneficial. Studies by Canova et al. (2008), Giannone et al. (2008) and Camacho et al. (2006) take up this argument and reject a causal relationship between the introduction of the euro and business cycle synchronization. For instance, Canova et al. (2008) examine the effect of the Maastricht Treaty and the creation of the ECB on the dynamics of the European business cycles. Although they find a clear convergence of the EMU countries' business cycles in the 1990s, this cannot be explained through these two events, but rather from a general European convergence and synchronization process. Similar results are obtained by Giannone et al. (2008) and Camacho et al. (2006), detecting no significant difference in the business cycle synchronization of euro area countries before and after the introduction of the EMU.

On the other hand, newer studies provide evidence showing that the EMU indeed impacted business cycle synchronization. Lee and Mercurelli (2014) provide evidence showing how the adoption of the euro accelerated the convergence process for France, Germany, and Italy, despite the 2007 global financial crisis. Schiavo (2008), examining the role of financial integration on business cycle synchronization, shows that monetary integration enhanced the capital market integration of euro area countries, which results in closer business cycle synchronization. Crespo-Cuaresma and Fernández-Amador (2013) show that the synchronization of fiscal policy initiated by the implementation of the Maastricht Treaty led to stronger business cycle convergence.

In summary, business cycle convergence is important for the optimal conduct of monetary policy. While the core countries of the EMU experience synchronization of the business cycle, countries at the periphery are not part of this convergence. Whether or not the business cycle convergence of the core countries is due to the introduction of the Euro and the corresponding treaties is not answered conclusively.

### 2.3. Fiscal policy as a stabilization mechanism

In this section, we investigate the fiscal performance of EMU member states over the past 20 years and assess the potential of national fiscal policy as a stabilizing tool in case of asymmetric shocks hitting EMU member states. Membership in a monetary union, such as the EMU, entails a loss of autonomy over domestic monetary policy and of exchange rate flexibility. Therefore, a counter cyclical fiscal policy is the only instrument left that - next to a high degree of factor and labour mobility amongst member states - could potentially dampen country specific shocks to facilitate a single monetary policy and to avoid business cycle divergences among member states. The idea is that countries exercise a fiscal stimulus in recessions and a fiscal contraction in booms.2

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2 There is a broad literature showing that fiscal stimulus can be valuable in a recession. For instance, Auerbach and Gorodnichenko (2017) provided empirical evidence that a debt-financed fiscal expansion in a crisis can sufficiently stimulate GDP to lead to a lower debt-to-GDP ratio.
The most important precondition that needs to be fulfilled to be able to use fiscal policy as a stabilization tool is that governments have enough fiscal space to counteract economic contraction in a crisis, i.e. through an increase in government spending. When financial markets start casting doubt about an individual country’s fiscal sustainability, the risk is high that these countries will lose access to financial markets and that risk premia on government bonds rise, which could end up in a market-driven spiral into debt unsustainability. Moreover, Nickel and Tudyka (2014) show that the effectiveness of fiscal stimulus may be impaired when debt is already high. Thus, fiscal space can be defined as the room for undertaking discretionary fiscal policy without endangering market access and debt sustainability.

During the GFC and the sovereign debt crisis in the euro area, the banking sector in several EMU countries struggled with either liquidity or solvency problems. Governments had to intervene, supporting their banks with various measures like capital injections, the acquisition of financial assets, and state guarantees. The financial support measures had significant fiscal effects. Figure 4 shows the debt-to-GDP ratio of the current 19 EMU member states. According to a study by the ECB (2018), for eight EMU member states, the debt-to-GDP ratio increased between 2008 and 2015 by more than 10% due to financial sector support measures. In Ireland, these measures increased the debt-to-GDP ratio by almost 50%-points, in Greece and Cyprus by more than 20%-points. At the end of 2018, the debt ratio of 11 out of the 19 countries exceeds the debt limit of 60 percent, which was set by the Stability and Growth Pact.

However, the debt-to-GDP ratio does not necessarily measure fiscal space. Fiscal space is determined by multiple factors, such as the availability of favourable financing conditions, the trajectory of public financing needs, market perceptions, and interest-growth differentials. Moreover, as argued by the IMF (2018), one also needs to take into account the dynamic impact that discretionary fiscal policy could have on financing availability and debt sustainability. Therefore, to measure fiscal space, one needs to adopt a rather forward-looking and dynamic concept. Since starting a pilot project to assess fiscal space in a large sample of countries, the IMF (2018) finds that “despite elevated levels of public debt, most countries had at least some space. This reflected generally low financing needs, extended debt maturities, a greater share of local currency borrowing, and favourable interest rate-growth differentials” (p. 5). However, for the five euro area countries contained in their sample, they claim that only Germany and the Netherlands have substantial fiscal space. For France, Italy, and Spain they see the ability to use discretionary fiscal policy as constrained.

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Another precondition to implement a discretionary fiscal policy next to automatic fiscal stabilizers is that policymakers have to have reliable information on a country’s cyclical stance in real-time at hand. In view of substantive time lags and data revisions in the publication of official national account statistics, this condition is rather challenging (see Bernoth et al. (2015) for a more detailed discussion).
The latest edition of the Debt Sustainability Monitor (DSM 2017) of the EU Commission evaluates the sustainability challenges faced by EMU member states. This framework combines results on debt sustainability analysis and a broad set of fiscal sustainability indicators, which allows gaining a consistent overview of fiscal sustainability challenges across different time horizons. Relying on 2017 data, the DSM concludes that no EMU member country appears to be at risk of fiscal stress in the short-term. However, in the medium-term, which is the relevant time horizon to focus on when assessing the potential for fiscal stabilization, the picture is different. As shown in Table 1, seven out of 19 EMU countries show high fiscal sustainability risk in the medium-term. These identified high-risk countries broadly conform to the sample of EMU members, whose current debt-to-GDP level exceeds the Treaty’s debt limit of 60 percent shown in Figure 1. In four additional countries, namely Lithuania, Austria, Slovenia and Cyprus, medium-term fiscal sustainability risks are ranked as medium.

We can summarize, that several indicators suggest that a substantial number of EMU member states have constrained possibilities to use discretionary fiscal policy as a cyclical stabilization instrument. This means that a further aggravation of business cycle convergence would be the consequence and that the highly indebted countries have especially limited capacities to react to future crises. This hinders a single monetary policy and poses a threat for financial stability.

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2.4. The euro as an international currency

It is important not to confuse the terms ‘crisis in the euro area’ and ‘euro crisis’. Despite the numerous problems that the current crises reveal, the euro itself has crystallized as a stable currency that has gained worldwide acceptance on international capital markets. Figure 5 shows the nominal effective exchange rate (NEER) of the euro against the currencies of the euro area’s 12 most important trading partners. The value of the euro proofed to be relatively stable. In the first year after the introduction of the euro, the European currency depreciated by about 20 percent. In the following ten years, however, the euro gained competitiveness and appreciated by about 40 percent. This appreciation process has stopped with the outbreak of the global financial crisis and the crisis in the Eurozone beginning 2008. It followed two years of depreciation of around 20 percent, but since 2012, the value of the euro has been relatively stable and hovers around the NEER measured at the start of EMU.

Figure 5: Nominal effective exchange rate of the euro

Following its introduction, the euro rapidly became the second most important currency on international capital markets following the US Dollar. Together, these two currencies account for around 80 percent of foreign currency reserves as well foreign currency denominated debt issuance. Despite the crisis in the euro area, the share of the euro in global holdings of foreign exchange reserves was relatively stable over the past 20 years, hovering between 20 and 30 percent (Figure 6). The US Dollar’s share, in comparison, accounts for about 60 to 70 percent. The share of the euro in the gross issuance of foreign denominated debt securities showed much more variation over time. In the first years of EMU, the euro increased its acceptance on international capital markets and its share increased at expense of the US Dollar share, rising from about 30 percent in 1999 to 40 percent in 2008 (Figure 7). With the outbreak of the global financial crisis, the spirit of success of the euro came to a stop and the US Dollar again regained its dominant role in international debt markets. Since the peak of 2008,

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5 These are Austria, Canada, Denmark, Hong-Kong, Japan, Norway, Singapore, Korea, Sweden, Switzerland, the United Kingdom, and the United States. This group of countries account for roughly 60 percent of total euro area manufacturing trade in 1999-2001.
the share of the euro has declined by about twenty percentage points, while that of the US dollar has increased by about 20 percentage points.

Figure 6: Share of official foreign reserves (in %)

![Graph showing the share of official foreign reserves from 1999Q1 to 2017Q4 for US Dollar and Euro.](image)

Source: International Monetary Fund.

Figure 7: Share of gross issuance of int. debt securities (in %)

![Graph showing the share of gross issuance of international debt securities from 1999Q1 to 2017Q1 for US Dollar and Euro.](image)

Source: Bank of International Settlement and own calculations.

Despite this latest decline, we can summarize that the euro is the second-most important currency after the US Dollar in international capital markets, whether in the private or in the official domain. All other currencies cover only minimal shares in international capital markets. This should be viewed as a big success of the EMU and the euro itself.
2.5. Integration and development of financial markets

Highly integrated financial markets are favourable in a currency union, as the free movement of capital across borders facilitates consumption smoothing and income insurance in case of local shocks (e.g. Sørensen et al. 1998). Moreover, better integrated and deeper financial markets contribute to the welfare gains of a monetary union in terms of the growth benefits of financial development (Levine 2005). Therefore, in this section, we analyse the progress of financial integration and development within EMU.

Figure 8: Intra-euro area external assets (relative to GDP)

With the introduction of the euro, transaction costs of investing abroad declined. Consequently, cross-border capital flows significantly increased. The literature documents positive effects of the introduction of the euro on financial integration both in the banking sector (Blank and Buch 2007, Kalemli-Ozcan et al. 2010) and in equity and bond markets (Coeurdacier and Martin 2009). Figure 8 plots the evolution of external asset holdings within the euro area; that is, external assets held by euro area countries that are issued by other euro area countries. It confirms that financial integration between the euro area countries has significantly increased since the beginning of the 2000s. Given the dominant role of banking in the European financial system as reflected by a high bank-to-market ratio (Langfield and Pagano 2016), the increase in cross-border portfolio debt positions and other investments (including bank loans) was particularly pronounced until the onset of the GFC. However, since then, euro area banks have significantly reduced their cross-border activities, such that financial integration has come to a halt in this financial market segment in subsequent years (ECB 2015). In

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6 For a short survey on capital market integration and international risk sharing, see Bremus and Stelten (2017).
7 For a review of the related literature, see for example Lane (2009).
8 Following Lane and Milesi-Ferretti (2017), intra-euro area asset holdings are computed as the difference between the sum of external assets of the individual euro area countries (i.e. including both external assets issued by euro area countries and the rest of the world) and the external asset holdings of the euro area as a whole (i.e. all external assets issued outside of the euro area).
contrast, foreign direct investment (FDI) and portfolio equity investments show a continued upward trend, even in the post-crisis period.\textsuperscript{9}

Starting from the observation that financial markets have become more closely connected since the introduction of the euro, how has financial development evolved in the euro area countries? Regarding the size of financial markets relative to GDP – an indicator for financial market depth – Figure 9 reveals considerable heterogeneity across the EA-12 countries.\textsuperscript{10} While the capitalization of domestic debt and equity markets was less than 50 percent of GDP in Greece in 2016, Irish market capitalization stood at more than twice its GDP at that time. Having a look at the evolution of market capitalisation across time, it appears that the size of capital markets (relative to GDP) fell in one half of the considered countries and increased in the other between 2000 and 2016. While equity market size converged over this period, as measured by the variance in equity market size across countries in 2000 versus 2016, debt market size diverged. When taking also domestic banking sector assets into account (not reported), the data reveal that, since the GFC, the euro area banking sector has lost importance, so that overall financial market size (relative to GDP) has broadly declined since 2008/09 across the member countries considered here.

Figure 9: Capital market size (percent of GDP)

![Figure 9: Capital market size (percent of GDP)](image)


Apart from market size, the development of financial markets relates to further aspects. In order to summarize the multidimensional nature of financial market development, Svirydzenka (2016) provides a set of indices that capture the depth, efficiency, as well as access to financial markets and institutions (banks, insurances, mutual and pension funds).\textsuperscript{11} Figures 10 and 11 plot average values of the different indicators for the period 1990 to 1999 against average values for the period 2000 to 2016. In general,

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\textsuperscript{9} For further details on the evolution of FDI, see Lane and Milesi-Ferretti (2018).

\textsuperscript{10} We focus on the 12 countries that have been members of the euro area since the beginning of the 2000s due to data availability and in order to show evolutions over time.

\textsuperscript{11} For detailed information on how the indexes are constructed based on different data sources, see Svirydzenka (2016), Table 1.
Euro area financial markets tend to be less developed than financial institutions, as illustrated by the Financial Markets and Financial Institutions Index.

Since the introduction of the euro, financial market development has increased – mostly driven by a significant deepening of and better access to financial markets (Figure 10). Regarding the efficiency of financial markets, measured by the stock market turnover ratio, the results are somewhat mixed. Starting from a higher level to begin with, the depth of and access to financial institutions have also increased in the large majority of the countries (Figure 11). Yet, the development of financial institutions has improved less than that of financial markets since the introduction of the euro. With respect to the convergence of financial development across countries, the range in “depth” and “access” for both financial markets and institutions has increased after the introduction of the euro.

Summing up, while financial integration and development have broadly increased since the introduction of the euro, financial market structures remain dispersed across the members of the currency union and show no clear pattern of convergence.

Figure 10: Financial market development before and after the introduction of the euro

Source: International Monetary Fund, Svirydzenka (2016), own calculations.

12 Of course, the improvements in financial integration and development that are illustrated in the Figures shown here are not only attributable to the introduction of the euro, but also to various other factors like efforts at the EU-level to promote a single capital market also outside the euro area.
2.6. **Summary of the economic development in the EMU**

Where does the EMU stand at the age of 20? Following the introduction of the common currency, business cycles and inflation dynamics for the core countries of the Eurozone have converged and financial market integration further increased. At the same time, the differences in inflation dynamics and business cycles between core and periphery countries became more pronounced, especially after the GFC. Financial market structures remain dispersed across EMU member countries. Even at the start of the EMU, the fiscal capacities across member states differed strongly. The divergence of business cycles and the asymmetric impact of the GFC led to a further increase in these differences. Consequently, the range for classification of fiscal risk of EMU member countries is between low and high risk. With the introduction of the new currency, the Euro became, following the US Dollar, the second most important currency on international capital markets. The nominal value of the Euro has remained stable over the last 20 years. Furthermore, the ECB was able to fulfil its mandate of price stability up to the GFC. Following the GFC and in light of the deep and prolonged economic crisis, the ECB is struggling to achieve its inflation target.

Some of these economic and financial developments in the euro area are very encouraging; others highlight the weaknesses in the institutional setup, which turned out to be incomplete. The crisis in the Eurozone has painfully demonstrated that maintaining price stability does not also guarantee financial stability. No attention was given to potentially disastrous spillovers throughout the euro area of a banking system collapsing in one or several member states. Thus, banking regulation, supervision, and resolution remained national. In a currency union with free movement of capital, this was an invitation to engage in supervisory competition and regulatory arbitrage. The credit crunch and the retrenchment of European banks from their cross-border business in the realm of the GFC have highlighted the importance of alternative, non-bank, financing sources for firms, as well as the limited role of European capital markets in international risk sharing. Moreover, the Eurozone lacks a
mechanism to account for asynchronous business cycles and the large fiscal impact of financial sector support measures during the GFC underlines the importance of further reinforcing the institutional framework in the euro area to reduce the tax payers burden of public interventions in case of banking sector stress. Finally, the founders of the euro did not account for the possibility that a country could lose the confidence of markets and, hence, access to funding. In a world where avoiding unsustainable national fiscal policies was the main objective, preparing for such a scenario would have raised moral hazard concerns.
3. THE EUROZONE’S INSTITUTIONS AT 20

Chapter 2 shows how the Eurozone’s economy has fared according to a number of quantitative benchmarks. But how well have its institutions worked? And how should they evolve in the future to achieve a stable macroeconomic environment for all its members?

In this chapter, we shed light on three stages of the Eurozone’s institutional development: First, we review the Maastricht setup as it was originally intended. Second, we show how this setup has evolved into a new institutional framework during the crisis. Third, we argue that the Eurozone is – institutionally speaking – not in a safe space, neither politically nor economically.

3.1. How it was planned – The main pillars of Maastricht

When the common currency was founded, its institutional architecture was supposed to rest on three fundamental principles:

- A clear division of labour: Monetary policy should be set at the European level while economic policy-making should remain under the responsibility of each member state, but as Article 121 TFEU states, be conducted at as a “matter of common concern”.
- Monetary policy should be decided by an independent central bank, the ECB, with a clear price-stability-focused mandate.
- To avoid fiscal dominance and spillovers from one member state to the next, national fiscal policies should be subject to three constraints: First, the stability and growth pact set common rules for the conduct of policy. Second, the monetary financing prohibition was established. Third, the no-bailout clause should make clear to markets that they better take a good look at individual governments before lending to them as they would not be bailed out.

This setup had an internal consistency to it; yet it reduced the acknowledged risks to eurozone stability to only two factors, inflation and irresponsible fiscal policies. However, as mentioned above, it did not acknowledge a whole host of other potential risks, i.e. financial stability risks, the build-up of macroeconomic imbalances, and loss of market access.

In addition to these institutional features, the common currency was also based on two very fundamental assumptions, which initially sounded like truisms, but triggered considerably more debate during the first 20 years than initially foreseen.

- First, the assumption that the Euro was irreversible. Exit was not foreseen as an option and, hence, also neither as a policy tool neither for member states to alleviate adjustment pressures nor for the Union to discipline individual countries. However, exit became a real option twice, in 2012 and in 2015. The ECB referred to “redenomination risk” in justifying some of its policies, thus explicitly reacting to market pressure related to a possible euro-area break-up.
- Second, the assumption that the Euro would not put into question national democratic sovereignty, beyond the limits defined in the Treaty. Indeed, the Eurozone was built on the idea that it could work without major competence shifts on core economic policy matters besides monetary policy proper. However, the discussion about the adjustment programs in both the donor and the recipient countries was only one example of how the rule-based fiscal surveillance framework was transformed into an exercise of whether and how to adapt the sovereign conduct of domestic policies to the requirements of a currency union.

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As we argue below, the ultimate status of these two key assumptions still remains fundamentally unclear.

3.2. How it turned out – institutional developments in the last 20 years

The combination of the GFC and then the crisis in the euro area between 2008 and 2015 was the ultimate test of the euro’s architecture. Ultimately, if the Euro passed that test quite successfully, then clearly it was not because the crisis response worked as originally intended, but because the euro-area architecture proved to be sufficiently adaptable. What saved the euro during the crisis was not the sophistication of its institutional setup – it was the political resolve of those involved and the insight that a breakup would have disastrous consequences. The steps taken over the last years have one very important but simple implication: the original Maastricht framework is no longer alive. The institutional architecture has changed over the last twenty years in four main areas:

Fiscal policy: Over the last twenty years, the three constraints on national fiscal policies have morphed from generalized but ambiguous principles into workable arrangements: The monetary financing prohibition is alive and well, but the European Court of Justice (ECJ) has made clear that it does not prevent the ECB from engaging in large-scale sovereign bond purchases as long as it follows certain principles. The fiscal rules have evolved in an interesting fashion: While the 3%-deficit bar has become an important consideration in all national budget debates, the rules and their enforcement have become so detailed and complex in an attempt to account for all possible states of the world that they hardly serve their purpose of inducing sound fiscal policies anymore (see Chapter 2.2). Further, the no-bailout clause has also been clarified by the courts: As long as they attach conditionality to it, member states can provide loan-based financial assistance to their peers when they lose market access.

But the most important insight in Eurozone fiscal policymaking in the last 20 years came from a different corner: The crisis demonstrated forcefully that fiscal policy is more than the budget. Indeed, the health of a banking sector and the overall sustainability of the economy are as important to look at as the budget itself – and they can crash budgets in a very short timeframe even when fiscal policy looks very sound at the outset. That is why arguably the most important institutional innovations to protect fiscal policies in the future from getting overwhelmed come from non-fiscal reforms: Banking union and the Macroeconomic Imbalances Procedure (MIP).

Economic policy: As explained above, one important lesson from the crisis was that economic policymaking in its broad sense, as well as the impact of a common monetary policy on convergence and divergence, cannot be overlooked when it comes to the stability of the common currency. Labour market policies and outcomes matter. Price competitiveness matters. Current account (im)balances matter. Private debt matters. Yet all these factors were not even monitored centrally prior to the crisis, let alone dealt with collectively. This is why the introduction of the Macroeconomic Imbalances Procedure and more generally the European Semester have been, at least in theory, such an important step in the right direction. However, the enforcement of these new rules and procedures remains meagre (Efstathiou and Wolff (2018)).

Financial policies: As explained in Box 1, the banking union was the most momentous change in the architecture of the euro area since the start of the common currency. Its promise was twofold: First, it makes sure that taxpayers do not shoulder the burden of financial crises. Second, it breaks the link between sovereigns and their financial sectors. Moving the responsibility for supervision and resolution to the European level was the first real shift of power from capitals to Frankfurt and Brussels since the start of the common currency, effectively ending the Maastricht division of labour described above.
Crisis management: Out of sheer necessity, the Eurozone has developed a fully-fledged crisis management toolbox to deal with the once unthinkable: Member states coming under pressure from markets to an extent that market access is in peril or even lost. The ESM Treaty and the Two-Pack now clearly describe the steps for a country to receive “financial assistance”, i.e. loans. In parallel to this technocratic process, a political consensus was forged: Once a country receives financial assistance, it also moves away from the original Maastricht division of labour: fiscal and economic policies of that member state become not only subject to the scrutiny of European institutions, but to the political influence of the country’s peers. Thus, in addition to the banking union, crisis management is the second major post-Maastricht innovation: Temporary responsibility sharing in exchange for temporary financial assistance. This arrangement is underpinned by the ECB’s Outright Monetary Transaction (OMT) announcement to fight against any disturbance of the monetary transmission mechanism deriving from redenomination risk.

The institutional reforms in these four areas have ensured that we are now thoroughly in a post-Maastricht world. While the adopted reforms have corrected some of the main design flaws of the Euro’s original setup, they have not yet led to a new, internally consistent institutional framework that provides a stable equilibrium. It is still unclear, how these reforms fit together with the elements that have survived the first twenty years largely intact – e.g. the ECB, the Single Market – and how they are compatible with each other. Furthermore, important pieces are clearly still missing as we outline below. It therefore remains essential to carry on with the work of making the euro’s architecture sustainable at last.

Box 1: The Banking Union: A legal perspective

The banking union is the most important development in the EU since the launch of the Euro (See generally Lastra, 2015). While the Draft Statute of the ESCB had included prudential supervision amongst the basic tasks of the ESCB, the opposition of some countries (notably Germany) to such an inclusion meant that the final version of the ESCB Statute and of the Treaty only referred to supervision in a limited way. However, a compromise solution was found with the inclusion of an enabling clause, Article 127(6) TFEU, which left the door open for a possible future expansion of supervisory responsibilities following a simplified procedure (see Lastra, 2000). This clause was the legal basis for the establishment of the SSM, the first pillar of banking union.

The rationale of European supervision is rooted in the confluence of four factors: (1) a flawed institutional EMU design combining a strong monetary pillar with weak economic and supervisory pillars, (2) the ‘vicious link’ between banking debt and sovereign debt (3) the need for independent supervision (Veron, 2014, pp.18) and adequate conditionality and the (4) the so-called financial ‘trilemma’ developed by Thygessen (2003) and Schoenmaker (2003), namely that it is difficult to achieve simultaneously a single financial market and financial stability while preserving a high degree of nationally based supervision.

The ‘banking union’ that the European Commission advocated in September 2012 is based upon three pillars: micro-prudential supervision, single resolution, and deposit protection. The first pillar is now fully operational since the entry into force in 2014 of the SSM Regulation. The second pillar of ‘single resolution’ with a Single Resolution Mechanism (SRM) - which should be aligned with the EU BRRD - and a Single Resolution Fund can be characterised as an evolving pillar or ‘work in progress’, given the time that will be required to build adequate funding. The SRM Regulation is complemented by an Intergovernmental Agreement (IGA) between Member States that participate in the SSM on the transfer and mutualisation of contributions into the SRF. A fully operational SRF
should act as a common financial backstop. However, during the build-up period of this Fund, bridge financing is available from national sources, backed by bank levies, or from the European Stability Mechanism, in accordance with agreed procedures.

In its December 2018 Euro summit statement, EU leaders agreed to endorse the reform of the ESM reform and asked the Eurogroup to prepare the necessary amendments to the ESM Treaty (including the common backstop to the Single Resolution Fund) by June 2019.

The third pillar, a European Deposit Insurance Scheme remains at the level of proposals, with no concrete commitment for making it a reality any time soon, despite common deposit protection being a fundamental part of the banking union, since in order to prevent a flight of deposits from troubled countries to countries perceived to be ‘safe’, one needs to convince ordinary citizens that a Euro in a bank account in one Euro area Member State is the worth the same and is as secure as a Euro in a bank account in another Euro area Member State.

A ‘broader’ banking union should encompass all these elements plus a clear lender of last resort role for the ECB (the ‘missing pillar’) and a fiscal backstop outside the ECB (Russo and Lastra, 2018). Indeed, notwithstanding the major achievement of banking union, a number of challenges remains, from (1) incomplete pillars to (2) missing pillar/s to (3) issues of jurisdictional design and coordination and, of course, (4) the fundamental cornerstone of accountability.

Coordination amongst numerous authorities and entities can both frustrate accountability and render crisis management ineffective. The creation of the SSM and the SRM coexists with the architecture for competition and state aid in the single market (EU/EEA). The European Commission (Directorate-General for Competition) remains in charge of watching over the compliance of State aid with EU rules. The banking union, as the name indicates, centralizes banking policy, but responsibility for other sectors of the financial system (securities, insurance) remains decentralized, albeit subject to increasing ‘federalisation’ through ESMA (which deals with many conduct of business type of rules that are not part of the remit of the SSM/ECB) and EIOPA. The coordination with the ESM - which provides a limited fiscal backstop in the case of banking crises - must be further clarified as resolution policy evolves and the needs for assistance could potentially increase significantly.

The missing pillar of banking union is the lender of last resort role (LOLR) or Emergency Liquidity Assistance (ELA) of the ECB. It is worth recalling that ELA/LOLR comes in two forms. The 1st is market liquidity assistance typically in the form of Open Market Operations, which is, according the ruling of the ECJ in the Gauweiler case (see Case C-62/14 Peter Gauweiler and Others [2014] OJ C129/11), the competence of the ECB (thus centralized) and forms part of its monetary policy responsibilities in accordance with Article 18 of the ESCB Statute and Article 127 TFEU (the ‘monetary approach’). The 2nd is individual liquidity assistance (the ‘credit approach’). Though the ECB is competent to provide liquidity assistance to “financially sound” banks as part of its regular discount policies, the provision of ELA to troubled illiquid but solvent banks in an emergency situation is a national competence of the National Central Banks (thus decentralized), performed on their own responsibility and liability, in accordance with Article 14.4 of the ESCB Statute and a Governing Council decision of 1999, though subject to the fiat of the ECB’s Governing Council. While it might have made sense to keep LOLR at the national level, while supervision was still national, it does not really make sense now that supervision is European (and note issue and monetary policy are ECB competences, not national competences).

In order to have the ECB in charge of both market liquidity assistance and individual liquidity assistance, no treaty revision is needed. Article 18 ESCB Statute, Article 127 TFEU and the principle of
subsidiarity provide sufficient legal basis, in particular in the context of the SSM/Banking Union since 2014 (Lastra, 2015; Gorstos, 2015).

LOLR/ELA links monetary policy, supervision and financial stability. The restrictive interpretation by the ECB of the ESCB Statute preventing it from acting as a lender of last resort to individual banks should be revisited, in particular for those significant credit institutions (banking groups) that are now supervised by the ECB.

Box drafted by R. Lastra (Queen Mary University).

3.3. How we should proceed – Eurozone institutions and the next 20 years

The remainder of this chapter will look at the underlying political questions and how the deal found by the Euro Summit in December 2018 has or has not contributed to answering them. We will not again discuss the detailed agenda of how the euro area should be reformed. The proposals made by 14 French and German economists at the beginning of last year (Béna ssy-Quéré et al. 2018) offers an exhaustive list and remains valid to this day. Instead we want to look at the underlying fundamental questions: As discussed at the beginning of the chapter, there are two fundamental questions that the Maastricht architecture tried to answer but could not successfully.

First, it tried to ensure that a country would never leave the Euro. But the crisis let the spectre of a Euro exit emerge – and we have not yet been able to fully make it disappear again. There are three technical reasons for this: Banking union remains unfinished and the sovereign-bank nexus, hence, remains alive and well; it is still not clear if and how a country with an unsustainable debt burden can default orderly inside the Euro and can remain there; and the toolbox of the ESM is not fit for purpose to avoid liquidity crises due to contagion for countries that have otherwise sound policies.

In our view, there is also a fundamental political reason: Member states have not settled the question whether they are willing once and for all to forego exit as a policy option and to solve all problems within the family. This is, by the way, symmetric – it applies to both governments that play with the idea of leaving as well as for governments that would like to preserve the threat of kicking out other countries. At the same time, markets are well aware of this continuing political discussion and, thus, act rationally when pricing-in a possible redenomination risk, which in turn can trigger an intervention by the ECB as deriving from the OMT announcement. In sum: as long as the spectre of Euro-exit remains present, the Euro is at risk. A single currency with an exit option is not much different from a fixed, but adjustable exchange rate regime. For this reason the Treaty absolutely rightly made the Euro irreversible. Yet as the first 20 years have shown, the political implications of this irreversibility are not yet sufficiently taken into account both at European and national levels.

Second, the crisis and subsequent policy moves have made clear that the old division of labour no longer holds – but it is not yet clear what the new division of labour should look like. With the European Semester and the MIP, member states have opened up to European institutions and peers scrutinizing their national policies in core areas like labour market institutions – but it is not clear to what extent this is coupled with the willingness to actually change course if such a change were in the interest of the Union as a whole. In banking matters, resolution and supervision are now European tasks – but we will only really see whether this de jure division of labour holds in practice if a big institution in a large member state must undergo treatment. Finally, the crisis has made clear that fiscal policy cannot remain a purely national task if lasting imbalances are to be avoided; yet it is profoundly unclear what fiscal responsibilities member states would be ready to pool. In our view, the question of the new
division of labour is the one that needs to be answered comprehensively before new institutional steps, such as a European finance minister, make sense.

How does the reform package adopted by the Euro Summit fare in responding to these two questions? In short: Not well. As we argue above, there are still some fundamental political and strategic questions that need to be addressed. The package mentions them, but does not foresee further in-depth work to address them.

In some areas, the compromise goes in the right direction. It brings the Euro area closer to a real banking union by establishing a backstop for the Single Resolution Fund (SRF). It clarifies the roles of the Commission and ESM staff in crisis management. It establishes for the first time the principle of common fiscal policy in the Eurozone. And it makes orderly debt restructuring a bit more achievable.

All these elements can be important pieces leading to a logical overall architecture. However, as long as there is no comprehensive blueprint, it is unclear whether these elements really fulfill their planned task. For example, orderly debt restructuring can be a beneficial component of a fully-fledged architecture, as long as there are strong protective elements against contagion (e.g. a euro-area safe asset or limitation to concentrations of sovereign bond holdings in individual banks). If such elements are missing, a discussion about orderly debt restructuring can have the exact opposite effect.

This leads directly to the most important downside of the current package. There is too much window-dressing. Most areas are covered, but only superficially. For many challenges, this implies that, although it presents broad measures, these may not actually resolve issues. At the same time, these partial or superficial measures will take a number of issues off the agenda for now as they are considered settled, thus making it almost impossible to review them in the near future.

Two examples: The summit agreed to change the rules for ESM precautionary assistance. However, rather than designing useful instruments that prevent liquidity shortages for countries with sound fundamentals, the summit turned precautionary assistance into an instrument that is very unlikely to be ever used – it is a paper tiger. At the same time, the topic of precautionary assistance will now disappear from the Eurozone debate as it is settled for now, thus increasing the likelihood of needing to make ad-hoc changes to the framework when a real crisis occurs. So instead of presenting workable long-term solutions, the package’s window dressing approach will contribute to further political uncertainty.

Second example: The summit agreed to a budgetary instrument for the Eurozone – so to enter a new division of labour between the national and the European levels. However, upfront, it implicitly excludes the area where the euro area could have benefitted the most: cyclical stabilization. Instead of triggering a real discussion about a real euro-area fiscal capacity, the package now recommends a small-scale and, content-wise, highly limited solution that is unlikely to help rebalance the allocation of competencies between the EU/EMU and its member states.

To make the Eurozone fit for the next 20 years, policymakers will have to answer the underlying political questions – technical fixes will not solve problems that are ultimately political in nature.
4. CONCLUSIONS

This paper has discussed the achievements of the euro during its first 20 years of existence. It is argued that the euro by and large has been a success story, with many important contributions to economic welfare and stability for all of its member states, including the economically strongest and the weakest. The euro played an important role in helping economic and financial convergence during the first 10 years. But the paper also shows that this convergence process was only partial and temporary as economic and financial divergences increased massively during the European financial crisis after 2010.

Yet it is not the euro to blame for this divergence, but rather the absence of other institutions and policy instruments which are important for every monetary union. The paper has discussed the role of fiscal policy in relation to monetary policy and has highlighted the lack of sufficient risk-sharing within the euro area, both through private capital markets and through coordinated fiscal policy across member states. In fact, such a risk-sharing and stabilisation mechanism was weakened during the financial crisis as financial fragmentation increased massively, making it more difficult for the euro and the ECB’s monetary policy to function symmetrically for the entire euro area.

The paper also has highlighted an often ignored benefit from the euro, namely its international role which has seen many central banks holding substantial amounts of their reserves denominated in euros, companies also outside the euro area issuing debt in euros and the euro as a transaction currency for goods and services. The ECB’s credibility and track record have been crucial in generating trust in the euro, both within and outside of the euro area. Households, companies and governments in all euro area countries have benefited from such credibility through lower borrowing rates, better financial intermediation and improved financial stability.

Finally, the paper has discussed the institutional features of the euro and has argued that EMU remains incomplete, even if important additional reforms have been partly implemented over the past 10 years. The reform of the SGP, the commitment to banking union and capital market union, the introduction of the ESM have all been important intermediate steps for the completion of EMU. Yet it is important to acknowledge that these reforms are incomplete and additional steps are required to make the euro a lasting, permanent success.

There is a sense of urgency to complete these reforms as the euro area is not yet equipped to manage another crisis or strong economic downturn. Policymakers all over Europe, in its member states and in European institutions therefore would act wisely to develop an agenda to complete EMU and do so swiftly.
REFERENCES


Abstract

20 years after the start of the monetary union, this briefing takes stock of accomplishments and challenges. In response to the sovereign debt crisis and in its attempts to support fiscal and structural reforms and later to lift inflation back to target, the Eurosystem has manoeuvred itself in a difficult position causing unintended side-effects. At the same time, broad consensus on reforming the institutional framework of monetary and fiscal affairs is still lacking among Eurozone members.

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<td>ECB</td>
<td>European Central Bank</td>
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EXECUTIVE SUMMARY

- On the surface, the euro performed well during the first 20 years of its existence, with price stability broadly achieved according to the ECB’s definition (although with a tendency to undershoot the target in recent years) and the external value broadly stable over time. However, in the early years of the monetary union, the seed of future crises and conflict was sown as monetary policy allowed rapid money and credit growth and macroeconomic imbalances gradually built up under the surface of thriving economies. The reduction of financing costs and a strong credit expansion triggered a boom in the periphery of the Eurozone that was insufficiently recognized by policy makers and supervisors.

- The Global Financial Crisis 2007/2008 and the subsequent Great Recession 2008/2009 strained government finances, triggering a confidence crisis in several Eurozone member states that was aggravated by the disclosure of domestic mal-investments during the preceding boom. The Eurosystem took drastic actions to provide extra liquidity in the crisis countries involving it in monetary balance-of-payments financing as reflected in accelerating Target2-imbalances.

- Policy makers responded to the European debt crisis by substantially changing the Eurozone fiscal architecture. Following the financial and sovereign debt crises, banking sector and capital market regulation received renewed attention globally as well as in the European Union. In its attempts to support fiscal and structural reforms and later to lift inflation back to target the Eurosystem has manoeuvred itself in a critical position causing unintended side-effects. Considerable macroeconomic vulnerabilities within the Eurozone persist.

- Two paradigms struggle to dominate the political debate for institutional reforms in the Eurozone with one emphasizing diversity, competition and self-responsibility (Maastricht 2.0) and the other promoting harmonization, coordination and risk-sharing (Fiscal Union). The search for consensus is complicated by a legacy-restart-nexus, meaning that restart (the adoption of a new framework) requires resolution of legacy problems, while resolution of legacy problems (debt overhang) in turn requires consensus on a new framework.

- The European sovereign debt crisis has revealed problems in the architecture of the Eurozone with its combination of centralized monetary policy and decentralized fiscal policies and raised demands for increased fiscal risk sharing. Numerous ways to implement fiscal risk sharing have been proposed implying steps in the direction of a fiscal union, but all of them need to be designed carefully in order to keep the incentives to employ prudent policies that help preventing a crisis in the first place.

- Strict enforcement of fiscal rules and imposition of painful reforms as a condition for fiscal support risk reducing the political fabric of the Union. Policies such as fiscal consolidation or structural reforms on goods and labour markets to increase the growth potential will be more successful if they are owned by national decision makers and their voters.

- Progress in the direction of Maastricht 2.0 around the cornerstone of a re-established no-bailout clause seems to be the most promising direction for future reforms for more self-responsibility. A necessary condition for the no-bailout rule to be credible is to break the sovereign-bank-doomb loop. Thus, completing the banking union, including a financial backstop on a supranational level, appropriate regulation of banks to reduce the vulnerability of banks to their own sovereign, and implementation of an orderly debt restructuring mechanism for countries in fiscal distress should be given top priority.
1. INTRODUCTION

Over decades before the single currency was introduced, it became clear that being part of the European Union (EU) was beneficial to all Member States, as the Single Market brought about increased trade integration and economic advantages on all sides. Entering the Monetary Union was considered the next step to benefit even more from international cooperation and economic integration. In the late 1990s and early 2000s, this expectation was broadly fulfilled for most Member States, as governments, firms and households alike enjoyed lower transaction costs, price stability and low risk premia. However, countries with entirely different traditions in terms of monetary and economic policy were merged into a single currency regime. At the same time, Eurozone membership had vast implications for policy makers and economic institutions beyond the field of monetary policy alone (e.g. fiscal policy, labour market regulation, wage setting): First, it is no longer possible to depreciate the national currency, so real exchange rate misalignments within the Eurozone are more difficult to correct. Second, governments are now indebted in a quasi-foreign currency, so they cannot (implicitly) guarantee the nominal value of issued government bonds.

In the early years of the monetary union, the seed of future crises and conflict was sown as macroeconomic imbalances gradually built up under the surface of thriving economies and a promising performance of the Eurozone as a whole. During the European debt crisis, it became clear that the Eurozone was vulnerable to fiscal failure of single Member States. The fiscal fragility affected the financial stability of the Eurozone’s banking sector and by doing so directly inflicted the transmission mechanisms of monetary policy.

Ten years after the onset of the crisis, perceptions on the current state of the monetary union are mixed at best, and there is still large disagreement on the appropriate steps forward. Draghi (2019), as a prominent representative of the single currency, is quite optimistic when he states that “today, we can say that the Eurozone has emerged from a crisis so severe as to threaten at times its existence. We are out of it .... Our policy response and the important changes to the architecture of the EMU in the meantime also helped the Eurozone out of the crisis. In many ways we have a stronger monetary union today than we had in 2008... But more work is still necessary to complete the EMU, so as to make it more resilient in the face of future crises.” Eichengreen (2019), who believes that a smooth functioning of the monetary union requires far-reaching steps towards a fiscal and political union, is pessimistic that “the euro will stumble forward. No one will be happy with its operation. Equally, no one will leave. Progress will be minimal.”

20 years after the start of the monetary union, this briefing aims to take stock of accomplishments and challenges. Part 2 collects data on the internal and external credibility and stability of the joint currency, compares the relative economic performance in terms of GDP per capita, and portrays the evolution of popular support for the euro within Member States. Part 3 outlines the major stages of the evolution of the monetary union during the first two decades and critically assesses the current situation. Part 4 discusses the question whether a joint monetary policy also requires a fiscal counterpart on the supranational level. Part 5 concludes.
2. **TAKING STOCK**

2.1. **Internal credibility and stability**

The major criterion to assess internal stability of a currency is price stability. In its definition of price stability, the ECB aims to keep inflation – measured by the harmonized index of consumer prices (HICP) – below, but close to 2%. Between 1999 and 2008, this target was broadly met (Figure 1). Since 2009, and in particular since 2014, inflation was often considerably below the 2%-level and the ECB struggled hard to push inflation back up.

**Figure 1:** Consumer price inflation (HICP)

Quarterly data, change over previous year. Source: ECB.

**Considering 20 years of its existence, the euro was remarkably stable in terms of consumer prices.** Year-on-year headline inflation in the first decade of the joint currency – 1999 to 2008 – was 2.2% on average, in the second decade – 2009 to 2018 – average consumer prices increased by 1.2% (Table 1). Core inflation that abstracts from the most volatile price components (prices for energy and unprocessed food) was 1.8% in the first decade and 1.2% in the second decade. Therefore, the decline of inflationary pressure was less pronounced in terms of core inflation. Over the entire 20 years of its existence, the Euro was remarkably stable with average core inflation of 1.5% and average headline inflation of 1.7% per annum. In recent years the ECB was more worried about CPI inflation being persistently below its target of below but close to 2% than about upward inflationary risks.

**Table 1:** Average consumer price inflation and core inflation

<table>
<thead>
<tr>
<th></th>
<th>Total HICP</th>
<th>Core rate</th>
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<tbody>
<tr>
<td>1st decade: 1999-2008</td>
<td>2.2</td>
<td>1.8</td>
</tr>
<tr>
<td>2nd decade: 2009-2018</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>1999-2018</td>
<td>1.7</td>
<td>1.5</td>
</tr>
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Core rate: HICP excluding energy and unprocessed food. Source: ECB, own calculations.
**Monetary aggregates increased disproportionately.** Since 1999, common monetary aggregates such as M1, M3 and currency in circulation increased by considerably more than economic activity (Figure 2): Nominal GDP between Q1/1999 and Q3/2018 increased by 77%, whereas at the same time cash (currency in circulation) increased by 260 percent, M1 increased by 350% and M3 increased by 175%. From a monetarist perspective, the disproportionate monetary expansion sounds alarming. However, nominal GDP may not be an ideal benchmark, since money is also required to process transactions of intermediates, exports and imports beyond “net exports”, real and financial assets as well as durable goods on secondary markets, each of which are not included in GDP. Moreover, consumer price increases have been moderate despite the steady monetary expansion.

Figure 2: Monetary aggregates relative to nominal GDP

![Figure 2](image1.png)

In percent of nominal GDP; Cash: currency in circulation. Quarterly data. Source: ECB; Eurostat.

Figure 3: Contributions of credit growth to nonfinancial private sector by country

![Figure 3](image2.png)

Monthly data, change over previous year (y-o-y). Source: ECB, own calculations.
The strong credit expansion during the early years of the monetary union stopped with the global financial crisis. In the years before 2008, loans to the non-financial private sector in the Eurozone increased by more than 10% per year (Figure 3). Countries like Italy, Spain, Greece and Ireland contributed extensively to this uneven credit expansion, as market participants in these countries encountered much lower interest rates in the new monetary regime, resulting in annual credit growth rates of 20-30% for several years. Clearly, as interest rates declined markedly for these countries, both public and private sector agents were tempted to take on more debt. However, the same countries that experienced excessive credit growth entered deep crises some years later.

2.2. External credibility and stability

The Euro was broadly stable in its international value. The nominal effective exchange rate (NEER) shows the external valuation of the Euro against a number of trading partners, weighed by the share of Eurozone exports into these countries. The NEER with a narrow set of 18 partner countries was stable over the whole period of 20 years, as the level in late 2018 was the same as in early 1999 (Figure 4, blue line). Against a broader set of 38 countries, the Euro appreciated somewhat (red line), probably because this broader set entails a number of emerging economies with generally higher inflation rates than the Euro, which led to exchange rate adjustments. Considering the NEER for the narrow group of partners consisting of advanced economies mainly, the Euro depreciated considerably in the first years of the monetary union but recovered after 2002 and appreciated substantially in the subsequent years. Later, it depreciated “in batches”, for example when the European sovereign debt crisis started in Greece (2010), and also when markets expected the ECB would introduce a quantitative easing program in late 2014.

Figure 4: Nominal Effective Exchange Rate (NEER)

So far, the US dollar has remained the lead currency in the global economy. Among official foreign exchange reserves, the Euro broadly maintained its share of about 20% since the onset of the monetary union (Figure 5). By closer inspection, the euro appears to have temporarily increased its share to about 25% between 2003 and 2013. In recent years, however, the euro has lost importance relative to the
USD. A broad measure of the international role of the Euro, which incorporates its share in cross-border loans and deposits as well as in foreign exchange settlements, also indicates that the Euro lost importance in recent years (European Central Bank 2018). The still dominant role of the USD is also reflected in its share in currency trading pairs, where the USD is involved in 88% of exchanges, whereas the Euro share is only 31 percent (Bank for International Settlement 2016) – as any exchange involves two currencies, the sum of all currency shares is 200 percent. Overall, the revealed fragilities and political disagreements within the currency union appear to have reduced the ability of the Euro to challenge the dollar substantially as reserve currency.

Figure 5: Currency composition of official foreign exchange reserves (COFER)

![Currency Composition Chart]

Monthly data. Source: IMF.

### 2.3. Economic performance

**GDP per capita developed similarly in major currency blocks, but the variance among Eurozone Member States has been quite large.** Between 1998 and 2017, per capita GDP in the Eurozone increased by a little bit less than in the United States and in the United Kingdom, but by slightly more than in Japan and Denmark (Figure 6). Sweden, whose GDP per capita record in the 1990’s was rather disappointing, had a disproportionately high increase since 1998. Among Eurozone Member States, the development of GDP per capita was more heterogeneous. Notably, Italy and Greece underperformed relative to the Eurozone average, in particular after 2008, whereas countries like Germany, Spain and the Netherlands experienced above-average increases in GDP per capita (Figure 7).
Figure 6: GDP per capita relative to major advanced economies

Annual data, price adjusted. Percentages indicate how 2017 per capita GDP changed relative to the level of 1998. Note that absolute levels depend on market exchange rates in 2010 and do not properly represent today’s purchasing power of average incomes. Source: World Bank, WDI, own calculations.

Figure 7: GDP per capita in selected Eurozone economies

2.4. Popular Support: Eurobarometer

Despite the deep and protracted crisis, popular support for the euro has been steadily on the rise. In its Eurobarometer survey (European Commission 2018) the European Commission enquires about attitudes toward the joint currency on a regular basis. Question 1.1 of the survey is of particular importance in this context: “Generally speaking, do you think that having the euro is a good or a bad thing for your country?” In autumn 2018, a clear majority of 64% of respondents – representative for Eurozone residents – answered that the euro is “a good thing” for their country, when 25% said it is “a bad thing”. The remainder of about 10% of respondents did not provide a clear answer (either “do not know” or “can’t decide spontaneously”). Quite surprisingly, the approval rate has been steadily increasing over time despite the extensive crises that the monetary union went through. From 2007, the approval rate in the Eurozone increased from 45% to 64%. Even at times when the currency union almost broke apart due to the sovereign debt crisis of 2010-2012, the approval rate did not decline in a visible way.

Among the big countries, the generally positive assessment of the joint currency was quite homogeneous recently. The share of respondents assessing the euro “a good thing” for their country was about 70% in Germany and the Netherlands, and about 75% in Austria and Finland (Figure 8). In France, Italy, Spain, Belgium, Greece and Portugal, approximately 60% of respondents called the euro “a good thing” for their country. Ireland stands out at 85%, whereas Lithuania (42%) and Cyprus (47%) were lowest in their support. Again, the support over time was surprisingly stable in individual countries, in particular after the sovereign debt crisis hit a number of periphery countries, where unemployment rose sharply, and the general perception was that the joint currency was responsible to some extent.

Figure 8: Eurobarometer: Having the euro is a good thing or a bad thing for your country?

Survey held in autumn of each year. Question: “Generally speaking, do you think that...? Having the euro is a good or a bad thing for your country?” Share of respondents answering “A good thing”. Source: European Commission.
3. THE BIG PICTURE

3.1. Onset of the single currency

The Eurozone as outlined in the Maastricht treaty basically replicated the role model of the Bundesbank. The political ambitions to create a common European currency (dating back to the Werner plan in the 1970s) gained momentum in the aftermath of German reunification. It was a response to the dominance of the Bundesbank whose monetary policy stance had not only prevailed in the D-Mark block of smaller countries (Austria, Benelux, Denmark, Finland) but had also heavily influenced the monetary conditions of larger countries participating in the European Monetary System (EMS). While the Bundesbank’s hard currency regime had gained worldwide recognition, the concentration of monetary decision-making in a single country was a source of continuous dissatisfaction for other EMS members. The signatories of the Maastricht treaty reached the agreement to basically replicate the Bundesbank’s position on the European level. This included the independence of the European Central Bank and all national central banks participating in the Eurosystem, a primary mandate for price stability, a ban on monetizing public debt, and a no-bailout clause for sovereigns by other Member States or by the union as a whole. The ECB’s acting on a supra-national level not being mirrored by a corresponding EU or EMU fiscal authority was considered an additional advantage of the institutional design strengthening the independence of the monetary authority even further ("gold standard without gold") and making government financing via the money press even less likely. To enhance fiscal discipline, all EU Member States agreed on the Stability and Growth Pact ruling that the two fiscal criteria for a country’s admission to the Eurozone (3-percent deficit-to-GDP, 60-percent public debt-to-GDP) shall remain in force after the start of the common currency. However, these rules may have implicitly weakened the credibility of the no-bailout clause and, therefore, the fiscal discipline enforced by investors. Also, the admission of Italy and Belgium (and later Greece) despite debt-to-GDP ratios beyond 100 percent based on the assessment of sufficiently large convergence towards the Maastricht level may have cast some doubt on the strictness of the fiscal regime before the Eurozone had even started to operate.

When the euro was introduced investors trusted the stability promise of the new currency. In the run-up to the official kick-off of the euro in 1999, interest rates in those countries that were expected to join the common currency came down near the lower German levels indicating that risk premia almost equalized among Eurozone Member States. Inflation expectations also indicated trust in the price stability approach of the newly established Eurosystem. Obviously, the adopted monetary strategy (inflation rate below 2 percent in the medium term, a reference level for the growth rate for M3, a broad economic assessment of prospects and risks for price stability) capitalized successfully on the reputation of the preceding monetary tradition with the ECB’s two-pillar approach (monetary and economic analysis) being similar but not identical to the former approach of the Bundesbank that put a money supply target at the centre of its communicated strategy. In 2003 this strategy had been further modified by moving in the direction of inflation targeting. Price stability has been redefined as “below but close to 2 percent” in the medium term and the analysis of monetary aggregates – in line with monetary policy makers from other major central banks and the academic mainstream – seemed to have lost some of its former weight. This new policy design has important implications. While so far monetary policy was considered not too expansionary as long as consumer prices do not rise by more than two percent (in the medium term), in the new framework monetary policy was considered not expansionary enough as long as consumer price inflation falls markedly short of the 2 percent target (in the medium term).
The reduction of financing costs and a strong credit expansion triggered a boom in the periphery of the Eurozone that was insufficiently recognized by policy makers and supervisors. The adoption of the euro by former weak currency countries had worked as a positive policy shock. The stability dividend in the form of markedly reduced risk premia reflects a cost-free reputation spill-over from the core of the Eurozone (the former D-Mark block) to the periphery. Lower financing costs for borrowers and the assessment of lower risks by lenders (reflecting the elimination of exchange rate risks in particular) redirected capital flows to countries like Portugal, Spain, and Greece. At the same time, credit creation in the Eurozone picked up, with the periphery countries (Ireland in particular) showing the strongest momentum. The inflow and creation of purchasing power in these countries stimulated economic activity and led to above-average inflation and unit labour cost hikes (implicit appreciation in real terms). For quite some time these developments were considered mainly as the effect of fundamentally sound factors reflecting the catch-up process of these economies. With the Eurozone inflation rate being on target (despite stronger than envisaged money and credit growth), the diagnosis of overheating and imbalanced growth in the Eurozone was further complicated by methodological problems in estimating output gaps. These estimations are particularly prone to sending wrong signals when it comes to identifying booms in real-time (Ademmer et al. 2018).

3.2. The Mechanics of the Crisis

The Global Financial Crisis 2007/2008 and the subsequent Great Recession 2008/2009 strained government finances, triggering a confidence crisis in several Eurozone member states that was aggravated by the outcome of domestic mal-investments during the preceding boom. The Global Financial Crisis and the Great Recession triggered massive extra government expenditure programs for bailouts of distressed banks and counter-cyclical deficit spending in all Eurozone Member States. As a result, public debt levels rose sharply, and investors began to question the creditworthiness of some economically weaker Eurozone Member States as reflected by sharply rising risk premia on government bonds of Greece, Ireland, Portugal, Spain, Cyprus, and Italy (and several rounds of downgrading by rating agencies) while the sovereigns of core countries like Germany enjoyed safe-haven effects of cheap access to funding. The situation was aggravated in those countries where the preceding boom had created strong distortions in the domestic capital stock and the productions structures putting an additional strain on government budgets (higher structural unemployment) and the financial sector (additional non-performing domestic financial claims). High stocks of domestic public debt on the balance sheets of the national banking sectors revealed a problematic bank-sovereign-loop as the devaluation of these assets reduced the capital base of the banks while at the same time making national bailout operations for the banks in crisis countries less credible. As a result, the playing field for the banking industry in the Eurozone became more uneven as the solvency of banks was strongly correlated with the solvency of their sovereigns. This and the rising fears that distressed countries may leave the Eurozone triggered capital and liquidity flight from the periphery to the core countries.

The Eurosystem took drastic actions to provide extra liquidity in the crisis countries involving it in monetary balance-of-payments financing as reflected in accelerating Target2-imbalances. The confidence crisis concerning financial stability in distressed Member States brought the interbank markets to a standstill, revealing a pronounced national segmentation of the banking industry in the Eurozone (lack of a banking union). Thus, outflowing euros were no longer channelled back to the periphery such that commercial banks there were threatened by illiquidity (Fiedler et al. 2016). The Eurosystem took various measures (full allotment policy combined with softer collateral eligibility criteria in refinancing operations, Emergency Liquidity Assistance, Securities Markets Programme,
Long-term Refinancing Operations) to provide additional central bank liquidity for the periphery member states. Thus, outflowing liquidity was replaced by newly created central bank money which, then, was again transferred to the banks in the core. This asymmetric money creation substituted the interbank market mechanism and implied massive balance-of-payments financing via the Eurosystem, the extent of which showed up in accelerating Target2-imbances. While this mechanism prevented distressed banks from collapsing, it also offered private investors (both from periphery and core countries) the opportunity to sell assets to the Eurosystem at above-market quotes. Liquidity flight alone (transferring sight deposits from domestic banks to foreign banks) would have been a one-off shift of the pre-crisis levels of money held in the periphery to the core. It would not have affected the liquidity position of non-banks in the crisis countries, but rather promoted the Europeanization of the banking industry. By contrast, the ongoing replacement of drained liquidity via newly created central bank money has fostered a process of current-account and capital-flight financing that otherwise would not have persisted (Kooths and van Roye 2012, Fiedler et al. 2017b). Had there been no balance-of-payments financing via the Eurosystem, capital positions would have been revalued or enclosed in the investment destinations until maturity (with repayments also potentially revalued). Without the option to bypass market mechanisms, investors would have had to absorb the losses from former investments in line with the fundamental principle of liability in a market economy. Thus, the beneficiaries of Target2-imbances can hardly be identified along national borders (Target2-deficit countries vs. Target2-surplus countries) but rather as a conflict between savers and investors on the one hand and money users (and tax payers as the ultimate owners of central banks) on the other hand irrespective of their nationality. While the announcement of “Outright Monetary Transactions” (unlimited future government bonds purchases for distressed countries conditioned on the country’s implementation of EFSF/ESM reform programs) in August 2012 successfully contained the first wave of the fiscal and financial confidence crisis, it also revealed the fragile fiscal situation of several Member States that were unable to convince investors of their creditworthiness without this monetary backup. At the same time, the Eurosystem drifted more and more into a territory where the line between monetary policy and government financing became increasingly blur raising serious questions about whether the ECB overextends its mandate which is of a strict monetary nature only.

When coping with a financial crisis, policy makers face a trade-off between short-term excessive liquidation costs and a drag on longer-term growth due to unsolved legacy problems and anew misalignments in the economic system. A financial crisis is the flipside of systematic real sector mal-investments (or deficit spending for consumption) over a prolonged period of time that leave the economy with distorted production structures. As a result, production capacities exist that are unable to earn the returns necessary to comply with the financial claims that where once issued to finance the now distressed capital stock. Unlike idiosyncratic mal-investments (that form a normal part of economic activity) systematic mal-investments affect a wide range of the economy typically resulting from too easy access to funding and/or a general lack of risk awareness due to investor overconfidence. The strong Eurozone-wide credit growth in the run-up to the European debt crisis indicates overly easy financing conditions leading to systemically misdirected investments, in particular in those countries

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15 It is widely held that any amount of Target2-imbances must be accepted in order to ensure the free flow of euros within the currency area. This view misses the point because it does not distinguish between already existing and newly created euros. To ensure the free flow of already existing euros, the Eurosystem would have to accept assets from illiquid banks (with decent haircuts) to process the transfer of deposits to (foreign) competitors. If illiquid banks were liquidated, they would lose the capacity to create new money and the process of deposit and capital flight stops. Only by refinancing distressed banks and allowing them to keep operating in the market could Target2-imbances grow even further than the shift of deposit positions would have implied (or, put differently, a euro that is not created cannot be transferred abroad).
like Spain that experienced a pronounced construction boom. Once the deformation of the capital stock and the associated production structures becomes evident, the free market response is a liquidation crisis which entails a drastic revaluation of the relevant capital goods and their corresponding financial claims. As the initially envisaged business models have turned out not to be marketable, the liquidation of these mal-investments (and the revaluation of financial claims) represent the attempt by market participants to find the next-best use of the existing capital goods. At the same time, the debt overload in the economy is drastically eliminated via write-offs. However, this clearing process typically turns out to be disruptive and may come at high short-term cost also affecting fundamentally sound segments of the economy. In particular, massive write-offs on non-performing assets held by commercial banks threaten to affect the money stocks in a credit-backed monetary system. As money is held by solvent and insolvent market participants alike (and even over-proportionally by solvent agents) the collapse of a bank that wipes out substantial parts of sight deposits would necessarily infect the sound segments of the economy and increase the adjustment cost accordingly. Protecting the money stocks is thus an eminently important task to contain the crisis. However, a public bailout of failed banks in general protects all their creditors and shifts the debt burden to the government which – if public finances are fragile – potentially feeds into a negative bank-sovereign-loop. Also, by offering cheap refinancing of distressed banks via the Eurosystem does not solve the problem of non-performing loans but rather prolongs the clearing period. As a result, high public debt stocks and large shares of non-performing loans in the balance sheets of the banks weigh heavily on the economic process for a long period of deleveraging. As interest rates are held extraordinarily low, the liquidation process in the real sectors of the economy is also hampered (Fiedler et al 2017a). This slows down the necessary restructuring (shifting resources from unproductive to productive uses) and keeps firms in the market that survive thanks to low refinancing cost only (zombification).

3.3. Crisis Management and Steps towards Crisis Prevention

Policy makers responded to the European debt crisis by substantially changing the Eurozone fiscal architecture. Starting with the Greek sovereign debt crisis, the Maastricht no-bailout principle was de facto suspended. While the European Financial Stability Facility (EFSF, launched in 2010, volume: €440 billion, enlarged in 2011 to €780 billion) had been designed as a temporary vehicle to support fiscally distressed member states (Greece, Ireland, Portugal), its successor, the European Stability Mechanism (ESM, launched in 2012, volume: €700 billion), was established as a permanent intergovernmental institution of Eurozone member states. The key motivation of these rescue packages had been to contain upcoming fears that distressed countries may leave the Eurozone as this would create implicit exchange rate risks among member states increasing risk premia even more. Recipients of rescue funds had to commit to structural reforms and fiscal consolidation programs (principle of conditionality). To reduce the probability of fiscal crises, the Stability and Growth Pact was reformed in 2012 into the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (TSCG) that combines more economic policy supervision and coordination.

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16 Systemic mal-investments require a key variable in the economic system to be distorted such that it affects the general pattern of economic activity. The interest rate is such a key variable. As any product and service price contains an interest component (that increases with the temporal distance of the respective product or service to final consumption) a change in the interest rate does not only affect the consumer price level (as assumed in standard monetary policy models) but all relative prices in the economic system. Production structures follow these relative price changes. Therefore, real estate markets respond particularly strongly to changes in financing conditions as buildings are very durable goods.

17 The EFSF was complemented by the smaller-scale European Financial Stabilization Mechanism (EFSM, launched in 2010, volume: €60 billion) as an emergency funding programme under the control of the European Commission using funds of the EU budget.
After the financial and sovereign debt crises, banking sector and capital market regulation received renewed attention globally as well as in the European Union. A number of prudential regulatory changes, including but not limited to more stringent capital and liquidity requirements for banks, were introduced. To prevent fragmentation between Member States, a Single Supervisory Mechanism (SSM) was introduced. The SSM includes the ECB, which now supervises the larger banks directly, as well as the relevant national authorities, which support the ECB in its tasks and supervise the smaller banks. The SSM covers all Eurozone countries as well as those non-euro countries which choose to participate. For the case that a bank should fail, a Single Resolution Mechanism (SRM) was also set up. The SRM is supposed to provide orderly default procedures for banks and increase the role of bail-ins as opposed to bail-outs. It is overseen by the Single Resolution Board, which works together with the relevant national authorities and manages the Single Resolution Fund financed by the banking sector. Finally, some politicians believe that the completion of the banking union also requires a unification of deposit insurance. While some regulations were already introduced which harmonized the configurations of national insurance schemes, no commonly financed European Deposit Insurance Scheme (EDIS) has been set up, in particular because the legacy problem of high stocks of non-performing loans still weighs on the banking sectors in distressed countries. The EU has also adopted a large number of rules for capital markets. These are intended to increase the stability of, competition on, and investor protection in financial markets in the European Union and the European Economic Area. The harmonization of rules is also supposed to improve access to capital markets for European borrowers, in particular Small and Medium-sized Enterprises, which are traditionally reliant on bank credit to cover their funding needs. Completing the banking and capital markets union is clearly the key approach to make the Eurozone more resilient and to enable the smooth functioning of monetary policy in integrated financial markets. This includes enhanced equity buffers and bail-in instruments to substantially increase the loss absorption capacity of commercial banks. Using ESM funds exclusively as a back-stop for the SRM would help to put even more focus on stabilizing banks rather than stabilizing their sovereign debtors. However, breaking the bank-sovereign-loop requires to address the extraordinary privilege that sovereigns still enjoy in their role as debtor. Government debt should no longer be considered a risk-free asset such that banks must increase their capital buffers when taking public debt positions on their balance sheets. Likewise, large-scale credit constraints should also apply to financing governments in order to further reduce concentration risk. Only when sovereign debt restructuring no longer threatened to erase substantial parts of the banking sector would monetary policy gain full independence to exclusively focus on price stability.

In its attempt to support fiscal and structural reforms the Eurosystem has manoeuvred itself in a critical position causing unintended side-effects. Since 2010 the Eurosystem has been operating in crisis-mode. After responding to the Global Financial Crisis/Great Recession by cutting interest rates from 4.25 percent to 1 percent in 2008/2009, the Eurosystem engaged more and more in expansionary monetary policy to contain the European debt crisis. This included further interest rate cuts (starting in 2012 and bringing the main refinancing rate down to 0 percent in 2016) and a so far unseen provision of liquidity, in particular via the large-scale asset purchases starting in 2015 (since then, the monetary base has increased by 250 percent and Target2-imbalances soared to unprecedented levels). The massive purchases of government debt have not only risen concerns whether the Eurosystem is overstretching its mandate by de facto practicing monetary financing of sovereigns but also whether the easy financing conditions for governments may turn out counter-productive with respect of

necessary reforms. While the ECB argued that its extraordinarily loose monetary policy stance was primarily intended to bring back inflation rates nearer to its target, it has also communicated over and over again that monetary policy cannot replace structural reforms and fiscal consolidation but only “buy time” to facilitate these processes. However, low financing costs for governments do not only make reform programs easier to handle, they also make it less costly in the short-term not to reform.

Thus, the risk exists that fiscal consolidation and structural reform efforts wane. Ten years after the crisis, public debt stocks in the distressed Member States are still near their historic highs (large amounts of it held by the domestic banking sector) although financing conditions for governments have been extremely easy for more than half a decade. Likewise, substantial structural reforms are currently not in sight. While the volume of non-performing loans is on the decrease, the absolute levels are still high in countries like Greece, Portugal or Italy. At the same time, low interest rates over a longer period of time increases the risk of zombification as mentioned above. Finally, the monetary experiment is not over yet. It is too early to say, whether the Eurosystem will be able to manage an exit strategy to bring the monetary environment back to normal conditions. The litmus test for monetary policy comes if inflation rates pick up with the fiscal and financial sector still being fragile and depending on monetary support. In this situation, the Eurosystem would face a severe conflict of targets (price stability vs. financial stability).

**Considerable macroeconomic vulnerabilities within the Eurozone persist (European Commission 2018a).** If another crisis were to hit in the near future, the room for manoeuvre would be alarmingly restricted: First, the ECB can hardly loosen monetary policy even more. Second, fiscal space to cope with adverse shocks has become much more restricted in many countries. Third, the political landscape has changed in many countries over the past 10 years. Another crisis, accompanied by economic hardship, may further eradicate political capital for necessary reforms and willingness to cooperate internationally. Given these constraints to crisis management looking forward, it is a key challenge to ensure macroeconomic stability and resilience to shocks within the Eurozone.
4. DOES THE MONETARY UNION NEED JOINT FISCAL POLICY INSTRUMENTS?

The European sovereign debt crisis that followed on the Great Recession has revealed problems in the architecture of the Eurozone with its combination of centralized monetary policy and decentralized fiscal policies and raised demands for increased fiscal risk sharing. As neither the possibility to adjust the exchange rate nor monetary policy instruments on national level are available to cushion country-specific shocks anymore, the role of fiscal policy in absorbing such shocks has increased. However, the capacity of fiscal policy to do so has proved to be limited. In a number of countries, fiscal space turned out to be insufficient to smooth out fluctuations in activity and deal with banking sector problems. This gave rise to liquidity runs and steep rises in yield spreads of some countries, reflecting solvency risks that threatened to be self-fulfilling in an environment where national monetary authorities that could have guaranteed repayment of government debt (at least in nominal terms) had ceased to exist, whereas the Maastricht Treaty had introduced a no bailout rule and an explicit ban on monetization of debt by the ECB. While, with the introduction of the ESM, a safety net for fiscally distressed countries has been introduced and a need for completion of the banking union is widely acknowledged, additional elements of fiscal risk sharing are discussed, including a meaningful Eurozone budget, a rainy-day fund, or an area-wide basic unemployment insurance scheme.

There is a trade-off between crisis mitigation and crisis prevention, although fiscal risk sharing can reduce moral hazard in theory. Generally, a system that is effective in stabilizing economic activity, i.e. that is reducing the economic pain in a country in the case of a crisis, may reduce the incentive to employ prudent policies that help preventing a crisis in the first place (moral hazard). In theory, there is, however, also the possibility that the introduction of fiscal risk sharing (at modest levels), will reduce moral hazard. This can be the case if the no-bailout rule is not credible anymore due to unacceptably large costs of a sovereign default for the Eurozone as a whole. Reducing the probability of such an event by introducing some degree of fiscal risk sharing would then increase the credibility of the no-bailout rule and hence the incentive to employ good policies to avoid a country-specific negative economic shocks (Berger et al. 2018). A first best solution to this problem would be a situation that would allow governments to respond to solvency problems by coming to a debt restructuring agreement with their creditors in an orderly process, which would become possible once systemic risks to the banking sector of such an event were eliminated.

A rainy-day fund can provide some mitigation of idiosyncratic shocks but could also give rise to additional tensions in the political process. One way to introduce fiscal risk sharing would be the introduction of a EMU-wide fund that would give one-off fiscal support in times of substantial economic trouble, e.g. when a country was hit by a disproportionately large downturn leading to a situation where area-wide monetary policy is inappropriately tight. Such a scheme could be designed like a reinsurance mechanism, covering only a share of economic costs above a certain threshold in order to limit moral hazard (Bénassy-Quéré et al. 2018). The fund revenues would be raised by symmetric government contributions or taxes. Pay-outs should be temporary and not be triggered by a slowdown due to structural problems. A serious challenge in this approach is to determine when a country is qualified to draw on the fund, given the inherent difficulties to calculate the cyclical component in output (the output gap) and potential output, respectively. There remains a serious risk that such a scheme leads to political issues in the process of execution and results in persistent transfers.
While a common unemployment insurance scheme could provide significant fiscal risk sharing it is prone to problems of moral hazard and faces difficulties to discriminate between structural and temporary changes in unemployment. A common European unemployment scheme stabilizes household incomes directly in countries facing a country-specific shock to the labour market. The idea has a long history – back to the Marjolin Report of 1975 – and many proposals have been made over the past decades and especially in recent years (Strauss 2016). However, implementation of even a basic common unemployment insurance scheme (which could be topped up by individual countries at their own discretion) would require at least partial harmonization of country-specific rules. It would also need to have provisions to prevent the system to produce systematic transfers from countries with low structural unemployment to countries with high structural unemployment, otherwise it would reduce incentives to establish labour market institutions that reduce structural unemployment. Again, there remains the problem of how to accurately decide in real-time whether a change in unemployment is cyclical or structural in nature, potentially raising contentious political debates.

A larger central budget would be stabilizing over the cycle, but the political foundations for such a fiscal union are missing. A central budget financed by revenues that would be sensitive to country-specific shocks, such as a share of cyclically sensitive tax revenues or contributions relative to GDP, and jointly issued bonds would imply fiscal risk sharing to the extent that spending would be unaffected. Currently, the EU budget is tiny at only 1 percent of GDP, compared to 15-20 percent of GDP in federal states such as Switzerland, the US or Canada. A theoretical rationale for a central budget is to finance the provision of public goods and investment in European infrastructure. There is certainly potential to shift expenditures from the national to the European level from an economic point of view, especially in fields such as defence or public investment, but centralization of policies lacks political support on the national level. However, the EU budget is not confined to the Eurozone and thus not a well-targeted tool to deal with Eurozone problems. Proposals for an EMU-based fiscal capacity face the problem that it is difficult to identify EMU-specific public goods. Providing funds for long-term public investment in order to smooth out country-specific shocks is apt to problems of timing of expenditures, identification of shocks, and risks introducing a persistent transfer system similar to those that prevail within many member states.

Joint debt instruments on the Eurozone level would violate the nexus of liability and control. At the peak of the sovereign debt crisis in 2012, demands were raised to immediately introduce Eurobonds. Such a step would certainly have offered relief to distressed countries in terms of financing conditions, because joint debt instruments and joint liability imply to pool credit ratings of countries, so that countries with a bad rating would have benefited most. For example, the proposal by Depla and Weizsäcker (2010) favoured a setting where Member States would be allowed to issue Eurobonds up to the Maastricht threshold of 60 percent of GDP (“blue bonds”), whereas debt beyond that threshold would have to be financed by subordinate country-specific bonds (“red bonds”). Such demands for Eurobonds were highly controversial and firmly rejected by governments of “safe-haven”-countries, who did not want to jeopardize their own good credit rating and expected that this would create bad incentives for fiscal discipline looking forward. Moreover, joint liability without joint decisions on how to spend the money clearly violates the principle that liability and control should always go together. Later, demands to resolve the sovereign debt crisis via Eurobonds largely vanished after the ECB managed to calm down bond markets primarily with its OMT announcement. Nevertheless, the idea to create European bonds backed by different countries reappeared, for example in proposals to create a fiscal capacity on Eurozone level, designed to allow for fiscal stimulus in area-wide severe downturns when monetary policy is constrained by the zero-lower bound (e.g. Ubide 2015). Recently, the Commission proposed to create regulatory incentives so that banks would purchase “European Safe Bonds” (or “Esbies”) which bundle Eurozone bonds of higher and lower credit
rating (European Commission 2018b). Overall, as long as the existence of the Eurozone is not at stake, joint debt instruments will likely be refused from countries with above-average credit ratings (see also Heijdra et al. 2018).

The idea of the aggregated Eurozone fiscal stance as a guideline for national fiscal policies is flawed. When some countries’ fiscal policies are restrained by consolidation requirements (stemming from fiscal rules or capital market pressure), a situation may arise in which not all countries can employ the national fiscal stance that would be appropriate given the country’s cyclical position. Then the Eurozone fiscal stance (the aggregate of national fiscal stances) could also be inappropriate with respect to the Eurozone’s aggregate cyclical position. This problem could be especially relevant in the current situation where monetary policy is constrained in its policy by the zero-lower bound on interest rates. As the European Commission has no budgetary power to accomplish the desired aggregate fiscal stance directly, in such a situation she would like to ask countries with sound debt positions to provide extra fiscal stimulus, with the intention to loosen the joint fiscal stance to the desired level and to indirectly help countries that cannot afford the appropriate (from a purely cyclical point of view) expansionary stance. However, additional stimulus in a country beyond its own business cycle needs will reduce welfare there risking overheating the economy or compromising fiscal sustainability. In addition, in order to be effective this policy requires the size of spill-overs to be substantial, which is generally not the case according to most studies.

Strengthening fiscal rules and conditional fiscal support risk reducing the political fabric of the Union – ownership is key. Most proposals for introducing more fiscal risk sharing include elements to strengthen fiscal rules in order to reduce moral hazard. In the past years the European system of macroeconomic monitoring and fiscal supervision has been extended in the form of the European Semester and has become increasingly complex. At the same time, compliance with the rules and implementation of country-specific recommendations seems to have declined and the system seems to become increasingly irrelevant. Rather than introducing ever more control and interference into national fiscal affairs that could ultimately severely damage popular support for the European project, reforms should lead into the direction of more self-responsibility. Policies such as fiscal consolidation or structural reforms on goods and labour markets to increase the growth potential can be expected to be more successful if they are owned by national decision makers and their voters.

To re-establish the no-bailout rule, sovereign default of a member state must no longer trigger a currency crisis. Political preferences on the desirable degree of fiscal stimulus differ considerably between countries, and there is no consensus to take far-reaching steps towards political and fiscal integration for the time being. Ideally, each country would be enabled to take their own fiscal policy decisions, whereas bad decisions that may ultimately lead to unsustainable public debt would not have the potential to harm the currency union as a whole. In that case, there would be no need for fiscal rules and surveillance, and the no-bailout rule could credibly be re-established. What are the prerequisites to get there? First, a debt restructuring mechanism is required. Instead of bailing out creditors in advance by tax-payers, actual solvency crises need to be distinguished from mere liquidity crises, and in the former case unsustainable debt must be restructured in an orderly fashion (Andritzky et al. 2016). Second, banking regulation needs to incentivize a diversification of risk, in particular to reduce the home bias in bank’s bond portfolio and to reduce the vulnerability of banks to their own sovereign (Benassy-Quéré et al 2018). Third, the home government must not be responsible to stabilize the domestic financial sector, but there has to be a financial backstop on supranational level that prevents systemic crises from escalating even if the respective government is in financial trouble. If, as a result, the domestic financial sector becomes sufficiently resilient to deal with a default of their home government, the vulnerability of the Eurozone would be substantially reduced, and the no-bailout rule
could regain credibility. However, the main obstacle to get there is legacy debt, because both the envisaged debt restructuring mechanism and a reduction of the home bias would probably reduce demand for bonds of issuers with relatively bad credit rating, thereby increasing refinancing costs for countries with a high level of public debt. Governments of these countries are clearly reluctant to take steps in that direction.
5. CONCLUSION

The measures to manage the crisis created disharmony between governments and peoples. The mutual dependence within the currency union appeared like a bone of contention between European nations: Some have got the perception to pay for the lack of discipline of foreign governments. Others suffered from high unemployment, saw their national policies overly restricted by common rules or blamed partner countries for the economic problems they faced (e.g. via current account imbalances). Inter-state conflict in Europe, growing nationalism, and the erosion of democracy are nurtured by the dissatisfaction with the status quo. Meanwhile, during the second half of its existence, the European Central Bank (ECB) has been operating in crisis mode and has basically maintained a zero-interest rate environment, while stretching its mandate by taking far-reaching extraordinary monetary policy measures to prevent inherent problems of the monetary union from escalating.

Two paradigms struggle to dominate the political debate for institutional reforms in the Eurozone. The way forward looks unclear as there seems to exist no consensus in monetary and fiscal affairs among Eurozone members. Consensus is the prerequisite for workable institutions though (consensus must precede institution building, it does not work the other way around). This is particularly important for such a fundamental institution as the currency and its monetary framework. The two competing approaches can be classified as (1) Maastricht 2.0 and (2) Fiscal Union. Maastricht 2.0 denotes the original Maastricht concept enlarged by more emphasis on financial stability. Pronouncing diversity and competition as strengths of the Eurozone, it follows a rule-based approached that builds on the principle of subsidiarity, re-establishing a strict no-bailout rule, fiscal discipline via capital markets (including the possibility of sovereign defaults and public debt restructuring), decentral macro stabilization by solvent Member States, no form of monetary government financing, and reliable bail-in instruments to shield commercial banks from fiscal turmoil.

By contrast, the Fiscal Union builds on harmonization and deepening, in particular via common fiscal mechanisms on the Eurozone level. This concept allows for more discretion, mutualization of debt (Euro bonds), fiscal support (possibly conditioned on reforms), macro stabilization on the Eurozone level (cross-country automatic transfers) for risk sharing and shock absorption, and generally more fiscal and economic policy coordination. These two concepts follow different monetary traditions that in the past (prior to the establishment of the euro) have coincided side by side on national levels. Clearly, the Fiscal Union would be quite different from what has initially been envisaged in the Maastricht treaty. It is unclear, whether mixing up elements from both concepts lead to a workable currency framework.

The Eurozone is impaired by a legacy-restart-nexus. The search for consensus is complicated by the fact that national perspectives are biased by the economic situation and the challenges countries face. Propositions to introduce and broaden elements of risk-sharing often are under the suspicion that their effect will rather be legacy-sharing and that their result might be permanent one-sided transfers. Conversely, demands to strengthen self-responsibility and impose market discipline tend to underestimate difficulties and economic hardship that some countries would face given their crisis legacy. If decision makers were under the “veil of ignorance”, unaffected by their specific national perspective, finding a consensus would be easier. But in reality, there is a legacy-restart-nexus, meaning that restart (the adoption of a new framework) requires the resolution of legacy problems, while the

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19 The Bundesbank once owed its independence by wide-ranging support among the German population while its juridical status was regulated in a simple law only. Formally, this law could have changed by a simple majority vote in the Bundestag, but de facto this option did not exist, and the Bundesbank turned out to be an extremely strong institution. By contrast, the formal juridical status of the Eurosystem is much stronger, but this does not guarantee automatic institutional stability as long as it is not backed by vast consensus among citizens in all Eurozone Member States.
resolution of legacy problems (debt overhang) in turn requires a consensus on a new framework. As a result, the reform process to improve Eurozone governance was basically stuck lately, and the political reality was rather a process of “muddling through” with minor steps forward. Nevertheless, as a consequence of the past crises, Eurozone governments agreed to implement a number of changes regarding financial regulation and crisis management. The open question is whether the current institutional setup is still too fragile and insufficient to manage the next crisis, or whether things have already improved considerably compared to the situation 10 years ago, thus rendering “muddling through” a strategy that might actually work.
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Twenty years of the euro

Resilience in the face of unexpected challenges

Abstract

The first 20 years of the euro were very different from what had been anticipated. Deflation, rather than inflation became a problem. Financial markets, which had been neglected, became a major source of instability. However, the euro area proved resilient and support for the euro is at historic highs. Looking to the future, the greatest danger might not be another financial crisis, but sluggish growth and an increasing gulf between countries that have successfully adjusted their public finances and those where this goal remains increasingly distant.

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EMU    Economic and Monetary Union

GDP    Gross Domestic Product
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EXECUTIVE SUMMARY

• The first 20 years of the euro were very different from what had been anticipated. Deflation, rather than inflation became the key problem. Moreover, financial markets, which had been neglected by the Maastricht construction, became a major source of instability for which the euro area was ill prepared.

• The economic performance of the euro area has been modest on average, when considering the two decades as a whole. However, other advanced economies have not done much better over the same period.

• The labour force participation rate in the euro area continued to increase and has surpassed that of the US today. Moreover, the growth rate on a per capita basis declined after 2007/8, but not more so than that of the US or the UK.

• This relative resilience of the euro area is also surprising in light of the fact that both fiscal and monetary policy were less used to stimulate the economy than across the Atlantic and across the Channel.

• In fact, the dramatic increase in public debt in the US and in the UK has not led to spectacular outperformance by these countries relative to the euro area.

• The modest economic performance of the euro, coupled with the ambivalence of many Europe’s national leaders and the widespread tendency to blame the euro for most problems, has perhaps resulted in the euro being not much loved. However, the currency appears to be recognised as an integral part of European integration and of peoples’ lives. Support for the euro reached historic highs in 2017 and 2018, with about 65% of the population expressing support for it.

• Financial markets were the neglected pillar in the construction of EMU and the main source of instability, both economic and political. The financial crisis and the understanding of how it played out in the euro area led to two important lessons. First, the financial cycle has become more important than the traditional business cycle, leading to very long expansions and sometimes deep recessions. The second is that while financial integration in the euro area is key for the purpose of the transmission of monetary policy, deep integration driven by cross-border exposures can contribute to financial instability, instead of risk sharing.

• The biggest challenge today for the euro might be to avoid looking in the rear-view mirror: the greatest danger for the euro area might not be another outsized financial crisis. If history is any guide, dynamics in the real economy (and politics) will shape the challenges in the years to come, rather than financial market turbulence.

• The resilience of EMU will be tested by sluggish growth in key sectors due to a lack of an integrated market and an increasing gulf between those countries that have adjusted successfully in bringing their public finances under control and those where this goal remains increasingly distant.
1. INTRODUCTION

January 1999 saw the start of the ‘third stage’ of Economic and Monetary Union (EMU), under which the exchange rates among the original 11 Member States were ‘irrevocably’ fixed. From that date the new European Central Bank was solely responsible for the monetary policy of this group of countries.

For ordinary citizens little changed in January 1999. The euro in the form of cash was only introduced three years later. However, the epochal change was still perceived by the public as well. Acceptance of the EMU ‘project’ increased just prior to 1999 to a positive balance of around 40 points of those favouring EMU compared to those against.20

Conventional wisdom at the time was that Germany had most to lose from the euro. First of all, the country had given up its monetary hegemony; thus exposing itself to the risk that the European Central Bank would not be as tough an inflation fighter as the Bundesbank had been for decades. Moreover, in 1999, the Deutsche Mark was over-valued and Germany was running a current account deficit. Fixing exchange rates at the level of the time exposed German industry to severe competitive challenges. For Italy, the opposite seemed to be the case: the country was running a current account surplus, partially because it had entered at a rather competitive exchange rate. Moreover, membership in the euro was lowering the interest burden on the sizeable Italian public debt.

Today, the opposite seems to have materialised: inflation is even lower then under the Bundesbank and Germany’s persistently high current account surpluses are seen as a sign that German industry is too competitive relative to the other partners. Expectations were also not met for Italy, but in a negative sense. There, growth slowed down and, even after the crisis, the cost of financing the large debt remains a constant problem. Given this reversal of fortunes it is not surprising that that public opinion turned in both countries, with Germans becoming much more supportive of the euro, and Italians much less.

This reversal of fortunes is important if one takes a longer term view. The success of individual countries in the euro is not foreordained and any longer term evaluation of the economic performance of the entire area comprises different sub-periods during which the fate of countries changes. In this respect, the euro area can be usefully compared to the United States, where there have also been significant changes in the relative fortunes of different regions. But there is an important difference between the euro area and the US: reporting and popular perception of the euro area tends to be coloured by the countries that are doing badly, whereas for the US the national average dominates the news. To avoid this bias, this contribution will thus concentrate on euro area averages.

The euro area’s constitution was crafted while looking in the rear-view mirror.21 The main concern during the 1970s and 1980s had been high and volatile rates of inflation, often driven by double-digit wage growth. The design for the ECB was based on the intellectual consensus of the time: an independent central bank was needed to achieve low and stable inflation. In addition, price stability was expected to deliver financial stability. Financial crises had almost always been linked to bouts of inflation and had been limited because financial markets were much smaller and less interlinked.

All this was about to change radically. Wage pressures abated across all developed economies. By contrast, financial market activity, especially cross-border, grew exponentially (after having been repressed for decades). For example, the cross-border assets of euro area member countries, mostly in the form of bank and other credit, doubled between the introduction of the euro and the time the great financial crisis struck. This was the first crisis in living memory (in fact since the 1930s) that was

20 See Roth et al. (2011).
21 See Gros (2017).
deflationary and it was rendered all the more virulent by the mountain of debt that had accumulated in the meantime.

The euro area was of course not the only economy to be surprised by the financial crisis, which had actually started in the US with supposedly safe securities based on sub-prime mortgages. But the US was able to weather the crisis more quickly because it had a unified financial (and political) system.

In the euro area, the financial crisis of 2007/8 mutated into a crisis of many Member States and the euro survived only because, when pushed to the brink, its political leaders were willing to expend their political capital to make the necessary reforms. The design of the ECB also proved robust as its leadership recognised that it had to change from fighting inflation to fighting deflation. And, not least, because financial stability became an explicit ECB objective in addition to price stability.

The following section briefly reviews the overall performance of the euro area in terms of some key indicators, growth and employment, always in a comparative perspective. The last twenty years have been dominated by a number of global trends which have affected most advanced countries. It thus seems appropriate to look at the performance of the euro area relative to other large economies, rather than in absolute terms. There is no presumption that the introduction of the euro was responsible for any of the over- or under-performance of the euro area. Instead many judgements of success or failure of the euro are informed by the comparison with other advanced economies.

Section 3 focuses on financial stability and the links with financial integration, which, while often claimed as one of the biggest achievements of the monetary union, is also one of the factors behind the build-up of the imbalances which led to the crisis. The final section draws conclusions and offers some considerations about future challenges.
2. COMPARING THE PERFORMANCE OF THE EURO AREA TO MAJOR ADVANCED ECONOMIES

2.1. Economic growth

The general impression that growth in the euro area has been disappointing seems to be confirmed by the headline data for real GDP growth. The average growth rate for the euro area has only been about 1.5 % (p.a.) versus about 2.5 % for the US, since the introduction of the euro. Growth has been particularly disappointing for the euro after the Great Financial Crisis, with only about 0.5 % per annum (5 % total over a decade). However, as can be seen from Figure 1, growth also fell by a similar amount for the US (to about 1.5 % p.a.) so that there was little change in the transatlantic growth difference. The chart below shows that the UK experienced a similar dramatic slowdown, but Japan much less.

Figure 1: Total growth in real GDP, before (1997-2007) and after (2008-2017) the crisis, selected countries

![Chart showing growth in real GDP](chart.png)

Source: Own calculations based on AMECO data. GDP at 2010 prices.

However, headline growth rates can be misleading since there is also a substantial difference in the population growth rates across the Atlantic. From Figure 2, which shows the total growth in terms of GDP per capita, it is apparent that there is little difference among these four large economies following the crisis. The US does slightly better than the euro area, the UK and Japan on this account. But the difference is very slight; only 2 percentage points over ten years, or 0.2 % per annum. The impression that the euro was particularly hard hit by the financial crisis and its aftermath is thus only very partially correct. As mentioned in the introduction, this judgment depends largely on the experience of certain countries.
2.2. Employment

Labour markets constitute the one area where there has been undoubted improvement in the euro area over the last 20 years. During the 1980s and 1990s Europe’s labour markets were widely considered sclerotic. Employment used to be much lower and unemployment much higher than in the US, which was widely seen as the benchmark to which the euro area should aspire. One key obstacle at the time was held to be that in Europe too few participated in the labour market.

There has been considerable improvement on this front. Figure 3 shows the labour force or activity rates (defined as the percentage of those in working age either employed or looking for a job) in the euro area and the US. It is apparent that there has been a continuous improvement, with the euro area starting out more than 8 percentage points below the US in 1997. Since 2010, the euro area has had a higher activity rate than the US.

The euro area has still a higher unemployment rate than the US (above 6%, compared to less than 4% for the US). But, on average, this has not stopped more people looking for a job. The fact that the activity rate in the euro area has continued to increase through the crisis years is important in itself because it is generally held that a prolonged period of high unemployment produces ‘discouraged workers’, i.e. persons who stop looking for a job when they cannot find one for a long time. The drop in the US activity rate after 2010, which is visible in Figure 3, has thus been ascribed to this discouraged worker phenomenon, especially among males. This did not occur in the euro area despite an even deeper recession. The labour markets of the euro area thus seem to have experienced one structural improvement.
The first reason for this different increase in participation rates in the euro area is that female labour market participation has shown a persistent increase since the 1980s. This was largely driven by the overall improvement in education levels, which are positively correlated with participation rates, as well as socioeconomic factors that increased the likelihood of new cohorts participating in the labour market. The latter seems a distinctive feature relative to the US. At the same time, while male participation exhibits a secular decline in the US, in Europe the trend is more resilient, led by a rising participation among workers closest to retirement. Gradual tightening of early retirement schemes is likely to have contributed to such trend.

Educational attainments and social factors are clearly independent of the euro, although they are part of the Europe 2020 strategy, but the second factor, namely increase in the labour participation of those close to retirement age might have been reinforced by peer pressure and the fiscal rules, which tend to constrain pensions expenditures.

While an increase in activity rates increases the pool of potential workers, a key question is whether they also find jobs. From a political point of view, the more important variable is the employment rate, rather than the activity rate.

A key goal of the otherwise ill-fated ‘Lisbon Strategy’ (European Council (2000)) was: “to raise the employment rate from an average of 61% today to as close as possible to 70%”. This goal has now been achieved. Figure 4 below shows that in 1997 the euro area had by far the lowest employment rates, defined as employed persons as a percentage of the working age population (age 15-64), of the four large advanced economies considered here. The gap between the employment rate in the US (73.6 %) and that of the euro area (61.9 %) was almost 12 percentage points. By 2017, this gap had shrunk to less than 2 percentage points (and it has approached zero in the meantime). The UK has also progressed in terms of employment rate, but less so than the euro area even if from a higher starting point.

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point. Japan stands out in this comparison because of the extraordinary increase in the employment rates of its elderly.

Figure 4: Employment rates (employed persons as % of working age population - age 15-64)

Source: Own calculations based on AMECO data.

2.3. Fiscal policy

A key element of EMU construction were the Maastricht rules on deficit and debt. In this perspective, fiscal policy was and still is an important component of the ‘euro package’.

There are many ways to assess the performance of fiscal policy. With a longer term view, it is preferable to concentrate on debt levels, as opposed to deficits. The evolution of debt (relative to GDP) irons out the shorter term effects of deficits on demand and differences in the evolution of the business cycle.

The Maastricht rules on ‘excessive’ deficit and debt are one key distinguishing feature of the euro area. The 3% (of GDP) deficit limit has been honoured more often in the breach, but ex-post, over two decades, fiscal policy has been notably different in the euro area than elsewhere in the advanced world. This is illustrated in Table 1.

Table 1: General government debt (gross) as % of GDP, compared

<table>
<thead>
<tr>
<th></th>
<th>EA</th>
<th>US</th>
<th>Japan</th>
<th>UK</th>
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<tbody>
<tr>
<td>1997</td>
<td>73.8</td>
<td>59.3</td>
<td>115</td>
<td>44.0</td>
</tr>
<tr>
<td>2017</td>
<td>86.8</td>
<td>96.7</td>
<td>224</td>
<td>88.6</td>
</tr>
<tr>
<td>Change</td>
<td>13.0</td>
<td>37.4</td>
<td>109.0</td>
<td>44.6</td>
</tr>
</tbody>
</table>

Source: Ameco.
Government debt as a percentage of GDP of the euro area was about 15 percentage points of GDP higher than that of the US in 1997, but it was 10 percentage points of GDP lower in 2017. Compared to the UK, the relative change has been even more significant: twenty years ago the debt to GDP ratio of the UK was about a third lower than that of the euro area. In 2017 it was at the same level.

This reversal (a total of 25 percentage points of GDP) relative to the US means that, on average, fiscal policy has been more ‘austere’ in the euro area than in the US and any other large advanced economies. As shown above, during these two decades the euro area slightly underperformed the US in terms of growth, but out-performed the US in terms of increases in employment and labour market participation. Combining these results suggests that the widespread perception that excessive austerity has kept the euro area back is not confirmed by this longer term overview of performance.

It is also interesting to look at the evolution of public debt separately over the decade before and that since the Great Financial Crisis. From Figure 5, which shows the gross debt of general government of the euro area, the US and the UK, it is apparent that a major change occurred around 2007/8. Until that date, the debt ratios evolved in a parallel way in all these three economies. But following the crisis (when the US and the euro area had similar levels of debt) a transatlantic divergence started. The response to the crisis was different in that the debt ratio rose by more in the US than in the euro area. Compared to the UK, the change is again most evident only after 2007/8. The debt level of the UK, which had been much lower than that of the euro area increases by a similar amount to that of the US, bringing it up to that of the euro area.

It has often been argued that a key problem for the euro area after the crisis was excessive austerity and that higher deficits would have stimulated the economy enough to result in lower debt-to-GDP

23 A comparison with Japan is more difficult since the gross public debt figures for Japan are not comparable given that the postal savings system, which belongs to the state, is a large holder of government bonds.
ratios. However, the data on the debt ratios do not bear out this second argument: in the euro area the debt/GDP ratio has increased less than in the UK or the US ‘despite’ austerity.

The argument that higher deficits would have led to a stronger recovery is also not borne out in this, longer term, transatlantic perspective. There is very little difference in the decadal growth rates of GDP per capita between the euro area and the US (or the UK, for that matter) since 2007, and this is partially due to demography. This suggests that the much higher increase in the debt ratios of the US and the UK did not ‘buy’ any outperformance in terms of growth of GDP per capita.

Though the Maastricht fiscal rules are usually pushed beyond their letter and spirit and the 3 % of GDP reference value for deficits has been breached dozens of times, it also seems that this value has become a soft threshold beyond which few governments dare to go for a prolonged period of time. One conclusion from the comparison above is that this has kept deficits lower than in most other large advanced countries, without any apparent impact on longer term economic performance, at least in relative terms.

2.4. Popular support

Popular support for the euro has held up well over the last two decades. This is even surprising to a certain extent, given the widespread tendency of national political leaders to blame the euro for their domestic problems.

Figure 6 shows the outcome of the Eurobarometer surveys since the introduction of the euro notes and coins in 2002 and suggests an upward trend in support for the single currency despite some blips. In particular, the proportion of respondents who think having the euro is a good thing for their country has continued to increase since 2007, reaching its highest ever level in 2017 and 2018. The balance between supporters and those against fell with the financial crisis, but since then both trends started to diverge.

Figure 6: Support for the euro (2002-2018)


Note: Question: Generally speaking, do you think that...? Having the euro is a good or a bad thing for your country (\% - euro area).
One simple reason for this continuing popular support for the euro might be that the euro has become a natural element of citizens’ lives and is no longer a variable factor. Another reason could be that economic performance in the euro area has not been, on average, as bad as one could deduct from endless headlines about economic problems in euro area Member States. As documented above, the growth of GDP per capita has of course slowed down over the last 20 years, but not much more than in the US or other developed economies. Moreover, continental European labour markets have seen an under-reported structural improvement with the labour force participation rate increasing every year, even during the crisis. In addition, in recent years, employment has reached record highs and unemployment, though still high in some parts of the south, is declining.
3. FINANCIAL MARKETS: THE ACHILLES HEEL OF THE EURO

Until 2008 it appeared that the euro had ushered in a period of macroeconomic stability. The largely congratulatory evaluations of the first ten years of EMU were based on a track record of high growth in trade alongside monetary stability, with the ECB achieving almost exactly the goal it had set itself, namely an inflation rate of below, but close to, 2%.

The financial crisis that started in 2007-08 destroyed this pretty picture. Two aspects of the financial crisis were difficult to reconcile with the philosophy underlying Maastricht: the global financial crisis had struck in the absence of any inflation; and in 2010, the crisis became a sovereign debt crisis, which had no parallel elsewhere.

With hindsight, the increasing potential for a financial crisis is apparent in the sharp increase in leverage, or debt-to-GDP ratios, almost everywhere, during the period of what was called the Great Moderation.

The increase in leverage had both domestic and cross-border dimensions. The domestic aspect mostly concerned the banking sector in Europe. As shown in Figure 7, inter-bank lending activity doubled between 1997 and 2007, and grew faster than GDP. It then declined before rebounding to approach the peak of 2008.

Figure 7: Euro area MFI loans and debt securities held vis-a-vis other Euro area MFIs, Million euro, 1997-2018

Source: ECB Statistical warehouse.

Overall, the ratio of credit to the private sector in relation to GDP increased by more than 50%, in the three ‘Atlantic’ advanced economies. BIS data show that that the euro area, UK and US shared the same broad trend: an increase in the credit ratio up until 2007/8, followed by a decline after the crisis.\(^{24}\) This

\(^{24}\) Japan, by contrast, had had its bubble and crisis earlier. Its credit to GDP ratio had been falling throughout the 1990s. It should also be noted that the picture would be very different if one were to include credit to the public sector. Ratios would be of the order of 100 pp of GDP higher in 2017 for euro area, UK and the US, with the UK being the highest line and not anymore hump-shaped. In fact, only in the euro area total credit is on a declining path in the last part of the
observation illustrates what has become part of conventional wisdom: a sharp increase in the credit-to-GDP ratio is a good predictor of a financial crisis. But this was not appreciated when the euro started and even less so at the time the Maastricht Treaty was signed.

Figure 8: Total credit to private non-financial sector, % GDP

As Figure 9 shows, the external assets of the euro area countries, which amounted to little more than one-half of GDP in 1990, had more than doubled by the time EMU started, increasing the ratio of external assets to GDP to over 100 %. By the outbreak of the financial crisis the figure had again more than doubled, exceeding 300 % of GDP in 2007-08.\(^{25}\)

Figure 10 also displays the same ratio of external assets to GDP at the global level (dotted line). It is apparent that until about the mid-1990s Europe was not special in terms of cross-country financial activity. However, starting a few years after the completion of the internal market and the complete lifting of capital controls in the EU, the dark line for the euro area countries increases much more sharply than the global one. At the global level, cross-border assets peaked at close to 200 % of GDP just before the outbreak of the financial crisis, considerably lower than the value of over 300 % for euro area countries.

A large and increasing share of the cross-country assets of euro area countries involved intra-area financial activity, as can be seen in the difference between the two blue lines (the light blue line represents the position of the euro area as whole vis-à-vis the rest of the world). Within the euro area, cross-border claims increased from about 50 % of GDP at the start of EMU to over 150% of GDP just before the outbreak of the euro crisis and have now risen above 200 % of GDP.

\(^{25}\) Figure 4 in the 2014 ASC report also shows that cross-border assets of the European banks (a subset of all foreign assets) grew exponentially during the 1990s and up to 2008.
This extraordinary increase in intra-area cross-country financial activity was not recognised as a potential danger until it was too late. On the contrary, as mentioned above, as late as 2008, the explosion of cross-border lending was viewed as evidence of the financial integration driven by the euro and a benefit that supposedly allowed for a better distribution of risks.

As matter of fact, aggregate data hid large differences in the concentration of risk between euro area Member State. They are well described in the 2014 Report of the Advisory Scientific Committee (ASC) of the European Systemic Risk Board, which noted that:

“…bank credit-to-GDP had increased everywhere in Europe, but the extent of the increase varies. Four EU countries (Finland, Germany, France and Austria) experienced only modest increases in credit to GDP over 1991-2011. Elsewhere, bank credit grew very substantially relative to GDP: in nine countries, the ratio more than doubled. Five countries where bank credit grew most substantially –Cyprus, Ireland, Spain, Portugal and Greece – needed (and received) financial assistance during the crisis (2010-14).”

Total claims of EU banks vis-à-vis Ireland and Spain increased by about 8 times in less than a decade\(^{26}\) and these two countries experienced very large house price bubbles and then painful bursts. When the crisis started, claims fell almost as quickly as they had risen. By contrast, domestic credit had barely increased in Germany where house prices were on a declining trend, but Germany was one of the main lenders.

The explosion of cross-border lending embedded two interlinked dimensions: first, within the euro area, a group of countries began running very large current account deficits, mirrored essentially in a growing German surplus. Second, the gross positions of all countries, both (current account) deficit and surplus countries increased rapidly. Obstfeld (2012) argues that both aspects deserve attention. In the case of the euro area, the crisis was caused by large gross positions, coupled with net debtor positions of some countries, which, *ex post*, appeared unsustainable. In the, ‘ naïve’ (also *ex post*) or ‘consenting

---

\(^{26}\) According to BIS data.
adults’ view of the ‘One Market, One Money’27 (OMOMO), the fact that the large net debt positions run up through large current account deficits in the periphery might have been unsustainable ex post, this should not have been too much of a concern since the individual debtors (firms, banks or even governments) would then simply have gone bankrupt. What neither OMOMO, nor most policymakers, appreciated was the fact that with large gross positions the insolvency of a large group of borrowers could bring down the entire financial system. It was this threat to systemic financial stability, combined with an outsized financial system overall, that made the bail-outs inevitable.

3.1. Financial integration and financial cycles

One additional aspect, which was only understood after the crisis, is that linkages between financial developments and the real economy had been underestimated and the implications of significant common swings in financial variables,28 often dubbed financial cycles, can severely affect the real economy.

Financial integration, enhanced by the introduction of the euro, fuelled the expansionary phase of financial cycles in several countries through increased cross-border bank lending. By contrast, when house prices started to fall, the bubbles burst and the recessionary phase of the financial cycle started; banks cut their international exposures and, instead of risk sharing, there was financial disintegration.

Empirical findings29 suggest that these financial cycles are often synchronised across countries, as they are driven by global factors. As illustrated in Figure 8 above, the credit boom that started in the mid-1990s was a phenomenon common to all advanced economies. In the euro area, as shown in Alcidi (2017), the beginning of the financial cycle coincided, in most Member States, with the introduction of the single currency in 1999. Alcidi (2017) also shows that within the euro area, cycles were highly correlated, with the notable exception of Germany where, the financial cycle has always been very flat and the correlation vis-à-vis any other euro area countries low and became lower since 1999. By contrast, Spain, Ireland and Greece experienced the largest swings in the cycle.

One interesting aspect in all this is that the process of financial integration in the euro area corresponded almost one to one to the booming phase of the financial cycle.

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27 The study published in 1990 constituted the basis for the evaluation of the potential benefits and costs of forming an economic and monetary union.

28 In principle, the set of variables is large and can include measures of credit, house prices, equity, other asset price aggregates and banks’ balance sheets.

29 See for instance Drehmann et al. (2012).
Figure 10: Quantity- and price-based indicators of financial integration in the euro area and euro area (average) financial cycle

Source: Alcidi (2017).

Note: The variable ‘financial cycle’ is defined as common movements in credit growth, credit-to-GDP and house prices, at country level and then averaged out. Indicators of financial integration are provided by the ECB.

After 2008, financial integration declined, as did the financial cycle. The average financial cycle for the euro area shows a descending phase which bottomed out in 2016. As result, the latest euro area financial cycle – the distance from trough to trough – seems to correspond precisely to the life of the euro.

Two conclusions can be drawn from these observations.

The first is that high financial integration, while a desirable outcome for the functioning of the euro area, and monetary policy in particular, is not overall a guarantee for financial stability nor for the distribution of risks (risk sharing). On the contrary, high financial integration can fuel crises, and this is why prudential policies are crucial.

The second consideration is about future challenges. Historically, financial cycles exhibit a very long duration. In the euro area countries, data suggest their average length is about 17 years. Since the trough was reached around 2016, the next half decade should be associated with the ascending phase of the financial cycle. While these periods are still characterised by typical business cycle fluctuations, i.e. expansions and recessions, they tend to be relatively calm in terms of financial dynamics.

If this is correct, a large, systemic financial crisis should not be the main concern ahead for the euro area. Instead, weak growth dynamics in the real economy may be the main source of concern.

In addition to that, specific risks in individual Member States that struggle to correct increasing debt, whether private or public, will exacerbate the divide with other Member States that achieve the necessary adjustments and will test the resilience of the euro.
4. CONCLUSIONS

The first twenty years of the euro were very different from what had been expected. This should be the most important lesson of all: the future is likely to be different from the past. Only flexibility and the willingness to rise to new challenges will in the end ensure the success of Europe’s common currency.

The crisis of 2011/12 showed that, when push comes to shove, when the very existence of the euro is in danger, Europe’s political leaders find a way out.

The assessment of the performance of the euro yields a mixed picture. Growth was below expectations, on a per capita basis, if not significantly worse than in other advanced economies, including the US. Combined with the ambivalence of many of Europe’s national leaders and the widespread tendency to blame the euro for any domestic problems, the result is that the euro is perhaps not much loved. However, the euro appears to be recognised as an essential part of European integration and of peoples’ lives. About 65% of the population of the euro area supports the euro, with only 20% against.

The biggest challenge today might be to avoid looking in the rear-view mirror. Today, attention is focussed on avoiding another outsized financial crisis. But the key problem for the next decade might be sluggish growth in key technological sectors due to the lack of an integrated market and an increasing gulf between those countries that have adjusted successfully in bringing their public finances under control, and those where this goal remains increasingly distant.
REFERENCES


- Obstfeld (2012).

Abstract
The euro project has had a difficult second decade but it is worth remembering its successes. The ECB has successfully achieved its primary goal of price stability and the common currency is popular among the euro area’s citizens. This popularity has made the euro more resilient than many people thought possible twenty years ago. A significant number of improvements have been made to the architecture of EMU, have been implemented in the past decade but serious problems remain, relating to fiscal capacity, sovereign default and financial stability. To keep the euro together, Europe’s politicians need to make the euro area less crisis-prone and also an easier place to be during the inevitable cyclical downturns that will happen in the future. The economics profession has provided many plans for future improvements. It is up to Europe’s politicians to implement them.

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<tr>
<td>CAC</td>
<td>Collective Action Clauses</td>
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<td>ECB</td>
<td>European Central Bank</td>
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<td>ELA</td>
<td>Emergency Liquidity Assistance</td>
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<td>EMS</td>
<td>European Monetary System</td>
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<td>EMU</td>
<td>European Monetary Union</td>
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EXECUTIVE SUMMARY

- The euro project has had a difficult second decade but it is worth remembering its successes.
- The ECB has successfully achieved its primary goal of price stability and the common currency is popular among the euro area’s citizens.
- The second decade of the euro highlighted many problems that had been highlighted before EMU and a number that had not been mentioned so often.
- The absence of national fiscal capacity and the problems caused by pro-cyclical fiscal policy were flagged by many critics prior to 1999 but other problems relating to sovereign default and financial stability have caused just as much difficulty.
- A significant number of improvements to the policy structures underlying EMU have been implemented over the past decade.
- However, a number of important weaknesses have not been addressed fully. The absence of progress in these areas is likely to see the euro area continue to come under serious pressure during the next economic downturn. This paper highlights five areas for improvement. (i) Fiscal rules (ii) Joint fiscal capacity (iii) Sovereign debt restructuring (iv) Banking: Sovereign bonds and deposit insurance (v) The lender of last resort.
- The euro has proved to be remarkably resilient due to its popularity with citizens. Support for the single currency reflects satisfaction with price stability but also fears of the major short-term crisis that could affect a member state that chooses to leave.
- Even if the economic case favours remaining in the euro, the events surrounding Brexit provide an example of how populist sloganeering can convince the public to favour proposals that do substantial economic damage.
- To keep the euro together, Europe’s politicians need to make the euro area less crisis-prone and also an easier place to be during the inevitable cyclical downturns that will happen in the future.
- The economics profession has provided many plans for wide-ranging institutional improvements for the euro area, most notably the recent Franco-German plan authored by fourteen eminent economists.
- It is up to Europe’s politicians, in all of its branches – Council, Commission, Parliament – to continue to work hard to turn these and other suggestions into concrete actions in the coming decade.
- Only by continuing to work on its weaknesses can policy makers reduce the chances of a large-scale future existential crisis for the economic and monetary union.
1. INTRODUCTION

In November 2008, the ECB hosted a conference on the “The Euro at Ten” that, even as the global financial crisis was underway, focused mainly on self-congratulation among the ECB officials and eminent European economists about how successful the euro had been. The celebrations to commemorate the Euro’s 20th birthday appear thus far to be somewhat more restrained, reflecting a tough second decade for the common currency. This past ten years have exposed many of the structural weaknesses that critics of the euro prior to Economic and Monetary Union (EMU) had suggested would affect the single currency area as well as some other important weaknesses that were largely overlooked.

This paper reflects on the first twenty years of the euro project and considers its future. The paper first discusses the successes associated with the euro project. These successes are considerable. The ECB has successfully achieved its primary goal of price stability and the common currency has facilitated a series of improvements such as savings on exchanging currencies, more efficient payments systems and greater integration of euro area financial markets. Most importantly, the common currency is popular among the euro area’s citizens.

Despite these successes, the euro area remains a work in progress and is still likely to face existential threats in the future. The rest of the paper thus focuses on the economic problems that have affected the euro area, on progress made (and not made) since the euro crisis of 2010-12 and finally considers the resilience of the euro project and the future challenges it is likely to face.

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30 See ECB (2009).
2. **SUCCESSES**

The legal and organisational infrastructure underlying the European Central Bank stems from the Maastricht Treaty which was signed in February 1992. Its signing followed a long period in which many EU member states were unhappy with monetary policy outcomes, with inflation being higher than desired in many countries and exchange rate stability proving elusive under the European Monetary System (EMS) which aimed to keep currencies within pre-specified bands.

One can point to two areas of the academic macroeconomics literature that inspired the perceived need for a common monetary policy and the subsequent design of the Eurosystem. The first is the literature on exchange rate crises.

The period after the introduction of the EMS in 1979 ran parallel with the economics profession developing sophisticated models of how current account problems could lead to exchange rate crises with key contributions including Krugman (1979), Flood and Garber (1984) and Obstfeld (1986). Fiscal and monetary policies that produced current account deficits would lead to the erosion of foreign currency reserves. Eventually, investors would anticipate a state running out of foreign exchange and thus being unable to defend its fixed exchange rate. This would lead to a self-fulfilling run in which investors would sell the currency and force a devaluation. The history of the EMS, which was subject to regular crises and realignments, fitted well with the predictions of these models.

In fact, the signing of the Treaty was immediately followed by the most disruptive of all the crises to hit the EMS. With tensions driven by macroeconomic events in Germany that followed unification, the UK exited from the EMS’s Exchange Rate Mechanism in September 1992 after a speculative attack, which reportedly made over $1 billion for George Soros. The subsequent months saw most other EMS members also devalue against the Deutsche Mark and a significant widening of the bands within which the currencies of the continuing members could fluctuate.

Viewed from today’s perspective, the EMS crisis of 1992-1993 could be viewed as a sign that large asymmetric shocks were always likely to prevent EMU from being a successful project. However, for many European leaders and academics, the events of this period strengthened the arguments for monetary union. The years prior to this crisis had seen a significant easing of restrictions on capital movements as well as financial deregulation. The large capital flows associated with sterling crisis of 1992 convinced many that the self-fulfilling speculative crises outlined in the academic models were going to be ever more virulent and make a system of quasi-fixed exchange rates impossible to operate.

Once Europe’s politicians decided to adopt a common currency, the design of the European Central Bank reflected the academic thinking of the 1980s and 1990s. The disappointing macroeconomic performance of many countries during the 1970s, which often featured the “stagflation” combination of high unemployment and high inflation, led to an increased emphasis on the need for central banks to focus on managing the public’s expectations about policy and on the advantages gained from central banks committing to a low-inflation policy and being given independence from political control. By the 1990s, these ideas were having a dramatic effect on monetary policy institutions around the world as that decade saw a number of central banks adopt explicit inflation targeting regimes and others, such as the Bank of England, be given far greater independence from political control.

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31 The advantages of committing to a policy of low inflation, rather than continuously setting policy in a discretionary manner, can be found in many famous papers from the era prior to the signing of the Maastricht Treaty, such as Kydland and Prescott (1977) and Barro and Gordon (1983).
The ECB’s mandate reflects the thinking of this time. The ECB is a highly independent central bank with various restrictions in place that prevent politicians from influencing the monetary policy decisions of its Governing Council. The ECB also has one primary goal which is the maintenance of price stability. All other economic goals are only to be pursued provided the primary goal of price stability is not endangered.

Given its mandate (and how it interprets that mandate) the European Central Bank has been a successful organisation. Its management of the euro area economy has produced a period of subdued inflation, with the average inflation rate (as measured by the HICP) since January 2000 being 1.75 percent, which comes in close to the ECB’s own definition of price stability as “close to but below two percent”. This success was by no means pre-ordained. Despite its Bundesbank-like legal structures, some would have feared that an ECB Governing Council comprised of representatives from several countries, many of which had records of high inflation, would struggle to match the Bundesbank’s inflation record. In fact, the ECB has improved upon it.

![Graph of Euro Area Consumer Price Inflation](https://example.com/graph)

**Figure 1:** Euro Area Consumer Price Inflation as Measured by the Year-over-Year Percentage Change in the Harmonised Index of Consumer Prices

Source: ECB, Statistical Data Warehouse.

One can quibble a little with this success. For example, the ECB has been lucky to have operated during a period where various global trends have contributed to a low inflation environment across the world. One could also point out that in recent years, inflation in the euro area has tended to fall short of the ECB’s own definition of price stability: Average HICP inflation since January 2010 has been only 1.35 percent. But, the fact remains that the ECB has delivered a high degree of price stability for millions of Europeans, many of whom were previously used to substantially higher average inflation rates.

The ECB has also generally performed well in the communication of its policies to financial markets and the wider public. Governing Council press conferences have generally been handled well, particularly under the leadership of President Mario Draghi. Communications in various forms, including speeches
of executive board members and other publications are generally of a high quality, backed by a large highly-qualified staff of professional economists.

In addition to the benefits of low inflation, the existence of the common currency has removed exchange rate fluctuations between euro area member states as a factor that firms and consumers in the euro area have had to deal with. The changeover to euro area notes and coins in 2002 went smoothly and the common currency has saved consumers from not having to exchange their local currencies when travelling abroad or buying goods from other European countries. That said, it appears that pre-EMU arguments that the euro would provide a significant boost to intra-European trade have not been confirmed.\footnote{See Glick and Rose (2016).}

In the area of financial markets and banking, the single currency has facilitated efficiencies in payments systems, most notably via the real time settlement of large transactions via the TARGET system operated by the Eurosystem. The common currency also played a role in forging increased financial integration during the early years of the euro but these patterns were reversed during the financial crisis and subsequent euro crisis. Figure 2 shows two measures of financial integration published by the ECB. The yellow line is a price-based indicator based on differences across countries in pricing in money markets, bond markets, equity markets and the banking sector while the blue line is a quantity-based indicator based on the extent of cross-border holdings of bank loans, bonds and equity by banks and investment funds.

At first, monetary union effectively removed the perceived devaluation risk for investors in countries such as Germany when making investments in euro area countries that had previously been known for devaluing their currencies in the EMS era. This had a significant effect on cross-border capital flows as investors became more willing to purchase financial assets in “peripheral” euro area countries and banks became more interested in opening branches in other euro area member states. This was reflected in significant increases in the ECB’s measures of financial integration. From 2008 onwards, increased concerns about default risk in peripheral economies and, subsequently, concerns that these countries might exit the euro and re-issue their own weaker currency, led to a reversal of this pattern of financial integration. As the euro crisis has eased in recent years, financial integration has increased again but still remains short of the levels that prevailed just prior to the global financial crisis.
Another factor that people sometimes look at when assessing whether the euro has been a success is its use by investors outside the euro area. In general, there is little reason for the euro area member states to place much weight on increased international use of the euro as a policy goal but, thus far, the evidence suggests that, as with euro area financial integration, international use of the euro tends to rise when the project is viewed as working successfully but fall when there are doubts about whether the euro area will remain intact as a common currency area. See Figure 3 below, from Efstathiou and Papadia (2018), which shows a strong relationship between one of the ECB’s measures of euro area financial integration and the share of euro-denominated foreign bond issuance.

The explanation for this pattern is fairly clear. Investors are likely to be extremely wary of holding euro-denominated bonds in a situation in which many countries have left the euro and have perhaps passed laws re-denominating securities issued in their states.

Finally, and perhaps most importantly, the best indicator of the euro’s success is that the common currency is popular with the euro area’s citizens. The most recent Eurobarometer survey shows that 75 percent of euro area citizens are in favour of “a European economic and monetary union with one single currency, the euro.”33 This means the euro is more popular than any government in Europe. Even acknowledging the problems of the past decade, I suspect the founders of EMU would be very happy to see the common currency being held in such high regard by the public after twenty years.

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Figure 3: Financial Integration and the Share of Euro-Denominated Foreign Bond Issuance

3. PROBLEMS

Despite the successes just noted, the second decade of the euro has illustrated a number of serious difficulties with running a common monetary and exchange rate policy across a wide range of countries. Some of these difficulties were widely anticipated by pre-1999 critics of EMU, others were not.

3.1 Fiscal Policy and Slow Macroeconomic Adjustment

Perhaps the most predictable failure of the euro has related to the use of fiscal policy.

As documented by Jonung and Drea (2010), during the 1990s, the debate about EMU tended to divide between European economists who, by and large, viewed the EMU project positively and U.S. economists, many of whom were sceptical. American sceptics of the euro established a strong case that the new currency union did not satisfy the criteria for being an optimum currency area. Critics such as Feldstein (1992) pointed out that the euro area would not have a substantial federal budget to allow centralised transfers and taxes to ease the burden of asymmetric shocks. Others, such as Christopher Sims (1999) worried about the “precarious fiscal foundations of EMU” with concerns that excessive debts accumulated by member states could endanger price stability.

In relation to the latter point, the “founding fathers” of EMU were also concerned by the influence of fiscal debt on the euro. The Maastricht treaty contained a number of articles that were aimed at minimising the impact on price stability of fiscal problems. An article known as the “no bailout” clause was widely described as preventing countries from assisting other member states with sovereign debt problems and the ECB was prevented from engaging in “monetary financing” via direct purchases of sovereign bonds. As it turns out, the no bailout clause didn’t prevent bailouts and the monetary financing clause did not prevent the ECB from purchasing sovereign bonds, so these articles were of questionable effectiveness.

That said, the main instrument through which the euro’s founders believed they would control fiscal debt was the Stability and Growth Pact (SGP). Unfortunately, the early years of the common currency showed the pact was unlikely to be successful. In 2003, the Commission assessed both Germany and France to be in violation of the SGP and recommended to the Economic and Financial Affairs Council (ECOFIN) that prescriptive steps be required for these countries under the excessive deficit procedure. The politicians on the ECOFIN committee declined to follow the Commission’s recommendations. With the euro area’s leading economies unwilling to comply with the terms of the SGP, the pact was violated almost as often as honoured by euro area member states in the following years.

The fiscal rules have been revised in recent years but the increased complexity brought by these revisions has not obviously done much to improve their effectiveness and the rules are probably not held in much higher esteem today by economists or politicians than they were in 2002, when the then European Commission President, Romano Prodi, labelled the rules “stupid” and “rigid”.

Even if the SGP had worked successfully during its first decade to contain deficits and produce lower debt-GDP ratios on the eve of the global financial crisis, it is unlikely that rules of this sort would have countered the basic problem that euro area countries lack the macroeconomic adjustment tools to respond adequately to large negative shocks that have particularly acute effects on their country.

It may have been hoped that countries in EMU would manage their national budgets carefully during expansions so they would have sufficient “fiscal space” to counter-cyclical fiscal policy to make up for the absence of a national interest rate instrument or an adjustable exchange rate. In practice, even countries that entered the global financial crisis with apparently strong public finances, such as Ireland
and Spain, where unable to use active fiscal policy to counteract the large country-specific shocks. In fact, in these economies as well as Greece, Portugal and others, fiscal policy has effectively been pro-cyclical throughout the past decade. With fiscal multipliers in most of the euro area’s smaller countries being small, even if some of these states had been able to run independent expansionary fiscal policies during the crises, they would perhaps have less effect than a co-ordinated euro-area-wide fiscal expansion that could boost demand across the whole area.

With only the ECB’s monetary policy to provide stimulus and no independent exchange rate, the adjustments of many euro area economies to the large shocks of 2008-2010 have been extremely slow when compared with the recoveries from crises seen in other countries that can use all available macroeconomic policy tools, including a national monetary policy and an exchange rate than can be devalued.

One way to examine the slow path of adjustment is to look at current account balances. The global recession and change in financial market conditions in 2008 left public and private sectors in peripheral euro area countries in precarious positions, requiring improvements in both public and private sector balances. Traditionally, public sector balance can be achieved via fiscal adjustment but private sector balances can be improved via devaluation of the exchange rate. For example, in the East Asian crises of the late 1990s, current account balances swung rapidly from deficit to surplus, accompanied by large devaluations. In contrast, as Figure 4 shows, the gradual return of current accounts to balance in Greece, Italy, Spain and Portugal took about a decade, with the domestic economy being squeezed by fiscal austerity and pressure on domestic costs throughout this period.

The slow pace of adjustment from the crisis – and the huge long-term human costs associated with this adjustment – can also be illustrated by examining the unemployment rates in euro area countries affected by debt crises. It has taken a decade for the unemployment rates in Portugal and Ireland to return to close to their pre-crisis levels of unemployment. Unemployment in Spain and Greece still remains well above the levels seen prior to 2008.

This pattern of slow adjustment to large shocks reflects the absence of an independent exchange rate, which would almost certainly have been devalued during a major crisis if these countries were outside the euro. However, it also reflects the fact that the ECB continued to provide funding to banks in these countries when private investors were withdrawing funds. In the absence of the ECB’s full allotment policy on credit provision, these countries would likely have experienced shorter but sharper crisis in response to the “sudden stop” in capital flows. This would have meant a faster decline in current account deficits and steeper initial rises in unemployment but also would likely have meant a quicker recovery.

One can debate which of these options works better but it is questionable whether the countries that suffered most from the euro crisis are prepared to suffer another “lost decade” should another large recession occur in the next few years.
3.2. **Sovereign Default**

It took about a decade for sovereign default within the euro to become an important topic but it probably should have been a central part of the policy discussions from the start. Indeed, in many ways, the story of the boom and subsequent crisis of the euro area centres around a widespread misunderstanding about the possibilities for sovereign default within the euro and the gradual dawning of the true reality.
As Reinhart and Rogoff (2009) demonstrated, sovereign debt sustainability problems are as old as sovereign debt itself and they have tended to be solved via some combination of high inflation, financial repression and default. With the price stability mandate of the ECB and the EU’s requirements for free movement of capital making the first two difficult to achieve, it could have been argued that it was always likely that a euro area member state that got into severe fiscal trouble would have to default. Indeed, as reviewed in Whelan (2013), you can find predictions from a number of eminent economists during the 1990s that sovereign default was going to be a likely feature of the euro area given the absence of alternative tools for resolving debt unsustainability.

Despite these predictions, and despite the failure of the SGP to enforce the strict fiscal discipline that had been envisaged, governments and markets still saw very little risk of a sovereign default inside the euro area during the early years of EMU. Financial markets had not seen a sovereign debt default in Europe in the post-war period but were well attuned to the risks associated with regular currency devaluations. As the prospect of devaluations receded in the run-up to the introduction of the euro and then (apparently) disappeared altogether in 1999, yields on sovereign debt across all member states—which had previously differed substantially—converged within a narrow band and remained this way until 2009. Figure 6 shows the long-term sovereign bond rates of a selected group of euro area member states. Despite substantial variations across euro area member states in their underlying fiscal positions, financial markets barely priced default risk into sovereign debt yields.

By 2010, however, it became apparent that Greece and other countries in the euro had substantial public debt problems that could require debt restructuring or could even result in these countries leaving the euro. This resulted in the re-emergence of substantial differences in sovereign yields across euro area member states. Concerns about potential sovereign default were confirmed as having reasonable foundations it was agreed in 2011 that Greece would restructure its debt in 2012. While sovereign yields have converged again following the easing of the euro crisis and the return of economic expansion, they are no longer fully aligned and financial markets are now extremely sensitive in their pricing of risk related to potential default or to prospects of countries exiting the euro e.g. Figure 6 illustrates the notable uptick in Italian sovereign bond yields after the election of the current government.

The confusion related to sovereign default was not simply a “bad luck” story for EU policy makers or the ECB. Both the ECB and European government economic officials should have been clearer in communicating the possibility of default for countries that had taken on too much public debt and should have done more preparatory work in anticipation of these problems showing up during a recession. Instead, the EU did nothing to discourage financial markets from pricing all euro area sovereign debt the same and when the Greek crisis began, most leading European politicians denied reality.
Typical among the initial reaction of senior European politicians to the Greek crisis was the comment of Joaquin Almunia, the European Commissioner for Economic and Financial Affairs, in early 2010, “No, Greece will not default. Please. In the euro area, the default does not exist.” As documented in Whelan (2013), this kind of denial was widespread among euro area leaders at this time and fuelled an inadequate policy approach to the Greek situation.

The ECB also performed poorly in relation to questions surrounding sovereign default. From the beginning of the Greek crisis, the ECB played a crucial role in presenting a Greek default as a potential disaster for the euro area and delaying the decision to allow such a default. Members of the Executive Board, such as Lorenzo Bini Smaghi regularly gave speeches depicting a potential Greek default as something that would provoke “an economic meltdown”. For example, Bini Smaghi (2011) argued that a default should be avoided because it would “punish patient investors” who believed in the adjustment program could restore sustainability, that a default would discourage investors from providing money to any euro-area member state and that

*the payment of debts should be enforced, through sanctions if need be*

ECB officials regularly threatened to cut off credit to the Greek banking system if a default was implemented and this hard line was maintained right up to the decision to restructure Greece’s debts, with ECB President Jean-Claude Trichet still insisting on July 11, 2011 that

*no credit event, no selective default, no default. That is the message of the Governing Council.*

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In the event, the Greek restructuring took place without any major euro-wide financial stability effects and it is now widely accepted that sovereign default is something that can occur within the euro area without triggering a widespread crisis or the need for the defaulting country to exit the euro.

### 3.3. Financial Stability Problems

Another area that received little attention prior to the introduction of the euro was the idea that financial instability – and in particular banking sector instability – would become a major concern for the ECB and euro area leaders. As with investment in sovereign debt, the perception that devaluation risk had been eliminated meant that private borrowing rates in euro area member states generally tracked sovereign yields after the introduction of the new currency leading to a substantial harmonisation of private borrowing rates across the area.

Much of the focus in the pre-EMU discussion centred on whether the euro area was an “optimum currency area” with critics pointing to the widely different economic structures across the area is implying there would be important “asymmetric shocks” i.e. shocks that affecting some areas more than other. EMU optimists argued that the currency union would increase trade links between member states and that countries with close trade links tended to have more correlated business cycles. It is ironic, then, that this near-harmonisation of private borrowing rates proved to be a far greater asymmetric shock than had been envisaged in this debate. Interest rates in Germany and other “core” euro members remained at pre-EMU levels but private borrowing rates for firms and households in many other euro area states declined dramatically and this had a big impact on these countries.

The elimination of devaluation risk also greatly encouraged intra-EMU financial flows. With borrowing costs well down and many willing providers of this cheap credit, it is perhaps unsurprising that private debt levels in the euro area’s “peripheral” member states soared. With hindsight, it is easy to see that these increases in private debt represented an important risk factor for the sovereign debt of these countries. For example, while Spain and Ireland had low and declining public debt ratios during the pre-crisis years, the explosion in private debt fuelled housing bubbles that masked underlying problems with public finances in these countries.

The global recession provoked by the financial crisis hit Europe’s economy hard and led to a substantial worsening of budgetary positions. In addition, the crisis brought a worldwide re-evaluation of risk and of banking models based on high leverage and risky investments. Creditors that had been happy to lend to banks in Europe’s periphery became less enthusiastic about continuing to lend into economies with high debt levels and deep recessions. Increased debt levels for households and businesses that had seemed sustainable when the economy was expanding now looked less so, triggering concerns about solvency problems for banks due to non-performing loans.

These banking problems in the euro area’s peripheral members made an already sharp global recession even more severe in these countries. Europe’s politicians came to understand the “doom loop” between sovereigns and banks: Decisions to provide support for banks placed additional pressure on state finances and concerns about potential sovereign defaults affected perceptions about the risks to solvency of private banks. With external funding fleeing and banks struggling to meet regulatory capital ratio requirements, banks in peripheral economies cut back sharply and suddenly on lending, thus making recessions deeper. The increased perception of sovereign and banking risk played an important role in tipping the euro are back into a slump during 2012 at a time when the rest of world was enjoying a solid recovery.

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37 See, for example, Frankel and Rose (1997).
While the banking sector had played little role in pre-EMU discussions, it turned out that euro area countries were particularly vulnerable to systemic banking pressures. The free movement of capital within the EU meant that investors and depositors could pull their money without cost from struggling banks. Deposit insurance funding also operates on a national level, so the perception that a state might not have the funds to deal with defaulting banks could further trigger withdrawals. This interaction between concerns about bank- and state-level solvency was perhaps seen most intensely in Ireland in 2010 when the state’s attempt to bail out its banking sector lead to concerns that the sovereign would end up defaulting. Similar concerns, however, have affected other countries, including Cyprus and Greece, at various times in the past decade. Other problems related to the banking sector including a lack of harmonisation in rules concerning how to wind up banks and the complexities of coping with failing cross-border banking entities.

The ECB played a central role in dealing with the euro area’s banking crisis, with mixed results. The Eurosystem’s move to full allotment in its regular monetary policy operations prevented a full-scale liquidity crisis across the euro area’s banking system and, as noted above, prevented some countries from experiencing the massive dislocation usually associated with financial “sudden stops”.

Less positive were the ECB’s dealings with various banks that developed severe solvency problems. As I have written about on several occasions (Whelan, 2014b, 2015, 2016), the ECB’s policies in relation to collateral policies for refinancing operations and, in particular, Emergency Liquidity Assistance (ELA) to banks are not fit for purpose. There were a number of examples of lending to severely insolvent banks, a lack of clarity surrounding the terms under which the Eurosystem caps or withdraws ELA and a series of decisions where the granting or curbing of ELA appeared to be directly related to political developments in various countries. I will not repeat these examples here but will note merely that the uncertainty surrounding the ECB’s performance of its role as lender of last resort to the banking system has tended to worsen banking crises and that the politicisation of this role has damaged the reputation of the ECB as an institution.

### 3.4. Economic Performance

At the time of the launch of the euro, there was optimism in some parts that the efficiencies associated with EMU would provide a boost to economic growth. Reductions in trading frictions were seen as a way to boost intra-European trade and efficiency and the euro area’s poorer members could benefit from the external investments that would be facilitated by greater financial integration. While the euro may have contributed to some efficiency gains, it seems to have done little to facilitate intra-euro-area trade (see Glick and Rose, 2016) and the process of greater financial integration has thus far proved to be a destabilising factor for the euro area rather than a force for sustainable growth.

The overall growth performance of the euro area has been disappointing. From 1999 to 2017, the average annual growth rate for the area was 1.37 percent per year. This is down from 2.17 percent per year for the same group of countries over the previous decade.38

It is possible to attribute some of the blame for this comparatively poor performance to the ECB. While the ECB has contributed to macroeconomic stability by maintaining stable inflation, it is fair to say that it was too slow to react to the consistent economic weakness in the euro area from 2008 onwards: It was too slow to cut policy rates to zero and too slow to introduce non-standard measures such as asset

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38 These calculations were based on the dataset for the ECB’s Area Wide Model. See [https://eabcn.org/page/area-wide-model](https://eabcn.org/page/area-wide-model).
purchase programmes.\textsuperscript{39} This slowness to react has likely meant lower economic growth in recent years than would have been possible otherwise.

That said, as I discussed in my previous briefing paper (Whelan, 2018), the principal sources of slow growth in the euro area relate to slow growth in supply capacity, most notably the declining work-age population and the weak levels of growth in total factor productivity. The ECB is not responsible for these developments and there is little it can do about them, though I would like to see the ECB being as vocal about the desirability of increasing immigration to boost the euro area workforce as it is about the potential growth-enhancing benefits of structural reforms.

\textsuperscript{39} See Whelan (2014a) for a summary of these arguments from a few years ago.
4. PROGRESS MADE (AND NOT MADE)

The past decade has presented many challenges for the ECB and for the governments of euro area member states. Faced with these challenges, there has been a series of changes to the architecture of EMU. In Section 4.1, I will briefly discuss a number of areas where significant progress has been made. In total, it represents a significant amount of institutional change over a relatively short amount of time and challenges the conventional wisdom that the EU is unable to come up with agreements to implement important changes. That said, there are many areas where progress has not been made and this means that some of the problems that have affected the euro area over the past decade are likely to reappear in the future. These are discussed in Section 4.2.

4.1. Progress Made

I will briefly discuss the progress made in the last decade towards a more effective economic and monetary union under four headings (i) Monetary policy (ii) Macroeconomic and financial monitoring (iii) Crisis management and sovereign default (iv) Banking

Monetary Policy: While I have criticised the ECB for being slower than it should have been over the past decade to respond to macroeconomic weakness, by now, the ECB has in fact gone further than any other major international central bank in designing new and innovative monetary policy tools. In addition to the kind of asset purchase programmes operated by the Fed and Bank of England, the ECB is also operating a negative deposit rate on reserves. This rate, combined with the large increase in the stock of bank reserves due to the Eurosystem’s asset purchase, has likely had a strong impact in bringing down bond yields in the euro area in recent years.\footnote{For evidence on how individual euro area banks are adjusting their balance sheets in the presence of negative rates and large increases in reserves, see Ryan and Whelan (2019).}

The ECB has also radically changed its refinancing operations, moving them towards full allotment instead of rationing off fixed amounts of liquidity, providing credit to banks over longer time horizons via the Long-Term Refinancing Operations (LTRO) and using them to encourage lending into the real economy via the so-called Targeted Long-Term Refinancing Operations (TLTRO).

The ECB has also developed a new tool, which has not yet been used. Developed in 2012 following Mario Draghi’s “whatever it takes” comment about defending the euro, the announcement of the Outright Monetary Transactions (OMT) instrument had a substantial effect in curbing negative sentiment about peripheral sovereign bond yields at the peak of the euro crisis in 2012. However, the OMT instrument has never been deployed and there remain many questions about how it would work in practice.

Given how low policy rates are at present and the likelihood of another recession in the coming years, it is likely that the ECB will need to use all of its newly-developed tools (and perhaps some new ones) to fight any future severe recession but with these tools in place, it is possible the policy response to the next crisis will be quicker.

Macroeconomic and Financial Monitoring: The monitoring of macroeconomic policy by the European Commission that took place prior to the global financial crisis was narrowly focused on budget deficits and debt sustainability. It failed to sport the build-up of important imbalances and threats to the financial system. With the introduction of the Macroeconomic Imbalance Procedure (MIP), the ongoing monitoring process looks at wider range of indicators, including current account deficits, house prices and credit growth. While by no means perfect, this kind of process may help to curb some of the excessive imbalances that had built up across member states during the euro’s first
decade. More generally, there is a wider acknowledgment among national and European authorities of the dangers posed by financial instability and the need for better financial regulation and supervision.

**Crisis Management and Sovereign Default:** One problem that emerged quickly during the early days of the euro crisis was that the IMF was ill-prepared for the scale of financial commitments required to run a large and long financial adjustment programme for a euro area countries that are facing severe macroeconomic adjustment problems. The setting up of the European Stabilisation Mechanism (ESM) has rectified this absence and the ESM now has experience dealing with financial adjustment programmes and their associated conditionality in Ireland, Greece and Portugal. The next crisis should see less time wasted on which institutions need to arrange financial assistance and how these programmes should operate.

**Banking:** As outlined above, banking sector problems played a major role throughout the crisis years of 2008-2012 and the legacy of non-performing loans continues to hang over the banking sectors of a number of euro area member states. A number of significant institutional reforms have taken place in this area over the past decade.

The ECB has been appointed the single supervisor for the euro area’s banking system. This has helped improve transparency, as previously the euro area had different national regimes for strictness in supervision, accounting standards and protocols for valuing and dealing with non-performing loans. The application of a common high standard in each of these areas will hopefully play some role in minimising the future build-up of serious banking problems. The Bank Recovery and Resolution directive has provided European authorities with a series of important tools to intervene to restore banks to health where necessary, to minimise threats to financial stability and to apply resolution tools where a bank is failing. These tools should help to minimise the cost to taxpayers of dealing with future banking failures.

### 4.2. Progress Not Made

Despite the substantial progress on building new economic institutions for the euro area, there are a number of areas where no progress (or insufficient progress) has been made. The absence of progress in these areas is likely to see the euro area continue to come under serious pressure during the next economic downturn. Here, I will focus on (i) Fiscal rules (ii) Joint fiscal capacity (iii) Sovereign debt restructuring (iv) Banking: Sovereign bonds and deposit insurance (v) The lender of last resort.

**Fiscal Rules:** The “fiscal compact” revised the original SGP fiscal rules but not in a way that has made them more effective. The rules remain focused on arbitrary limits such as the 3 percent deficit. The introduction of a “cyclically adjusted” budget deficit to the rules has done little to help because the European Commission’s methodology for estimating potential output itself induces pro-cyclicality by revising down potential during recessions and revising it up during expansions. A replacement of these rules by simpler rules that facilitate more counter-cyclical fiscal policy while maintaining a focus on longer-term reductions in debt-GDP levels would be welcome.

**Joint Fiscal Capacity:** The lack of national fiscal capacity could be offset by introducing some level of joint fiscal policy across the euro area. There have been lots of ideas for how such a scheme could work. One approach is to increase the scale of jointly-funded public infrastructure projects with expenditure adjusted across the business cycle and across countries, with additional spending to provide cyclical boosts to economies in recession. There have also been various proposals for either a formal euro-wide unemployment insurance scheme or a more informal system of transfer payments related to fluctuations in unemployment levels.
The general principle of the desirability of a greater level of euro area fiscal capacity has featured in many different high-level political documents over the past decade, including, for example, the “four presidents” report of 2012.41 More recently, the French and German governments have developed a limited joint proposal that would see an increase eurozone budget that could play some role in stabilising national economies.42 This proposal, however, was rejected at the December 2018 Eurogroup meeting.

The comments of the Dutch finance minister about this proposal give a good flavour of why we are unlikely to see any progress on this issue this side of another crisis: The Financial Times reported Wopke Hoekstra as saying “The need for such a budget is less than convincing. It is unclear how this will help, and why this would be in the interest of Dutch citizens. If this is not in the interest of the Netherlands or the Dutch taxpayer, then we are out”.43 Until the government of each euro area state sees that their citizens have a national interest in a more stable euro area, then we are unlikely to make progress in this area.

In the absence of progress on joint fiscal capacity, there is merit in having more discussion about the appropriateness of the fiscal stance of the euro area as a whole. There were a number of years during the euro crisis where the combined fiscal stance of the euro area was far too negative. While there was nothing that countries undergoing debt crises could do about this, a co-ordinated effort to have other nations adopt a more counter-cyclical fiscal policy would have helped. The new European Fiscal Board has been set up recently by the European Commission to provide some of the analytic work to underpin discussions around the overall euro area fiscal stance. Time will tell whether this body’s work does anything to improve macroeconomic co-ordination across member states.

**Sovereign Debt Restructuring:** The Greek debt restructuring was an important milestone because it showed that sovereign debt could be restructured in the euro area without creating a broader financial crisis. However, as documented by Zettlemeyer, Trebesch and Gulati (2013), the Greek restructuring was very generous to “holdout” investors and may have set a bad precedent for getting investors to agree to restructuring even in the presence of conventional access clauses (CACs).

The December 2018 Eurogroup meeting signalled the intention to introduce “single limb” CACs into all new euro area sovereign bonds by 2022, meaning all such bonds could be restructured together with an agreement of a qualified majority of investors across all bonds. This will eventually make it harder for individual investors to take large positions in individual bond issues and then block their restructuring. That said, it will be a long time before a large fraction of euro area debt carries these single limb clauses, so this will not help much with any restructuring required over the next five years.

Another issue is the danger that the ESM funds are used to “throw good money after bad” by lending to a member state to allow it to pay off private creditors and then later seek debt restructuring from ESM, as occurred with Greece. An important aspect of the ESM, however, is that the possibility of sovereign debt restructuring is acknowledged. The treaty underlying the ESM states

\[
\text{In accordance with IMF practice, in exceptional cases an adequate and proportionate form of private sector involvement shall be considered in cases where stability support is provided accompanied by conditionality in the form of a macro-economic adjustment programme.}
\]

In this sense, the need for sovereign restructuring in some circumstances is now part of official euro area policy.

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43 See [https://www.ft.com/content/5ac73768-ebe5-11e8-8180-9cf212677a57](https://www.ft.com/content/5ac73768-ebe5-11e8-8180-9cf212677a57).
Ideally, however, the ESM would have the legal power to restructure private debt, via maturity extensions, as a potential condition of providing a financial support package. The December Eurogroup statement contained the following “If requested by the Member State, the ESM may facilitate the dialogue between its Members and private investors. This involvement would take place on a voluntary, informal, non-binding, temporary, and confidential basis.” While the reassuring words are clearly intended to soothe investors in, for example, Italian government bonds, this may signal a move towards a more formal approach to restructuring debt once ESM gets involved.

**Banking: Sovereign Bonds and Deposit Insurance**: Two of the key aspects of the “doom loop” between sovereigns and banks remain unresolved. One is the treatment of sovereign bonds by bank regulators. European banks are not required to have a diversified portfolio of sovereign bonds and these bonds continue to have a zero risk weight. This means we continue to have banks that are encouraged, by regulators and by their own governments, to keep a large fraction of their assets in the form of bonds issued by their national governments. Changes to these regulations may increase the cost of sovereign debt issuance for some euro area countries but these costs are currently very low and now would be as good a time as any to make these sensible changes.

The other unresolved aspect is the absence of any common deposit insurance scheme. Without such a scheme, depositors will link the safety of their bank deposits with the fiscal strength of their national government. This means that some depositors will respond to a national fiscal crisis by transferring their deposits to another country, potentially triggering a liquidity crisis for the banking sector to accompany the fiscal crisis. With all of the euro area’s banks under the shared supervision of the ECB and following capital adequacy rules set by the EU, there is a strong argument that a common deposit insurance scheme would be an important stabilising factor. However, such a scheme is unlikely to be in place prior to the next recession or crisis to affect the euro area.

**The Lender of Last Resort**: I have noted above that the ECB’s procedures for acting as a lender of last resort have been problematic. In particular, its guidelines for providing ELA to banks are ad hoc and rely on a complex set of arrangements in which ELA is granted by the national country central banks but ELA programmes then need to be continually renewed by the ECB Governing Council. Given the importance of a well-functioning lender of last resort function, I recommend that the ECB adopt a new policy structure in this area. The distinction between centralised refinancing operations and ELA provided by national country central banks should be eliminated and the ECB should formulate official guidelines for lending to banks undergoing crisis.44

Importantly, these guidelines should indicate that the ECB will provide emergency loans to banks that it assesses as solvent. This latter point is important because, in 2017, the Spanish bank, Banco Popular was deemed “likely to fail” and put through resolution because it was undergoing a bank run and the ECB did not approve providing it with liquidity. The ECB stated “The reasons that triggered that decision were related to the liquidity problems. There was a bank run. It was not a matter of assessing the developments of solvency as such, but the liquidity issue.”45 Subsequent events have shown that Banco Popular may well have been insolvent but language suggesting that the ECB does not consider solvency when deciding whether to provide funding is dangerous. Closing solvent banks that are under severe liquidity pressure during a systemic bank run would not be a feasible policy.

Before the next crisis hits, the ECB should clarify and streamline its procedures in this area.

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44 For more discussion of this issue, see Whelan (2014b).
5. RESILIENCE AND THREATS

So what is the future of the euro? Despite all of the negative events of the past decade, the euro has remained intact as a common currency area. In Section 5.1, I discuss the reasons for this resilience. Section 5.2, on the other hand, discusses some scenarios in which the euro area could break up.

5.1. Resilience

The most important factor keeping the euro together is its popularity with citizens. Remarkably, given the multiple crises of the last decade, support for the euro among people living in the single currency area has grown steadily in recent years and now stands at 75 percent (see Figure 7). This shows that the euro project has been far more resilient than many people thought it could be. Indeed, the common currency has survived many events that pre-EMU commentators would have thought likely to trigger the exit of one or more countries: Decade-long economic slumps in some member states, EU-IMF financial conditionality programmes, the imposition of capital controls in Greece and Cyprus and the loss of depositor funds in Cypriot banks. In each of these cases, an exit from the euro would have been an alternative option and the fact that governments chose to accept these difficult events is a sign of the importance placed on maintaining euro membership.

The popularity of the euro amongst the public plays an important role in restricting political movements to take countries out of the euro. To give two examples, support for the euro stands at 67 percent in Greece and 63 percent in Italy. This level of support means that even political parties in these focused on nationalist rhetoric have tended to back off from proposing an exit from the euro since it is not seen as a “winning” message.

One can point to two sets of factors underlying public support for euro membership. There are positive factors relating to the successes associated with the euro and there are negative factors related to the fear of what would happen to a country that left the euro.

The positive factors are the ECB’s ability to deliver a positive long-term inflation performance and the convenience savings to consumers and firms from not having to pay currency exchange costs when buying from many other European countries. In relation to the inflation performance, many citizens will doubt the ability of the politicians in their own country to design central bank institutions that would maintain the low inflation rates achieved in the euro area.

The negative, fear-related, factors are perhaps more important. Beyond the question of the long-run economic performance of a country that leaves the euro, the process of leaving is likely to trigger a major short-term crisis. It will be hard for any country to leave without a democratic process in which there is a referendum or vote in parliament authorising this decision. With such votes taking time to set up, there would be a period of enormous capital outflows as investors anticipate their investments possibly being redenominated into a new currency that would trade at a lower value than the euro. This would likely result in the imposition of capital controls until the decision to leave had been executed.

A new currency would then end up, whether pegged to the euro or floated, trading at a substantial discount to the euro. This large devaluation would probably lead to a surge in inflation which could end up being countered by tight monetary policy by the national central bank which could then put the departing economy into recession.
Once a country has left, there would be substantial legal problems centring around contracts with payment amounts denominated in euros. The government of the departing country could pass laws declaring all domestic contracts that previously mentioned euros should now be interpreted as meaning the new currency but this would be challenged in international courts. Disruptive legal disputes would likely rumble on for years after a euro exit causing persistent damage to the economy. The departing country’s status within the EU could also come into question.

Many of these negative factors are independent of the question of whether joining the euro was a good idea or not in the first place. Rather, they reflect an asymmetry that could be dubbed the “Hotel California” factor: Even if it wasn’t a good idea to join, leaving may now still be a very bad idea.

5.2. Threats

Despite the high levels of popularity of the euro amongst citizens and the substantial problems that an exit from the euro would cause any country, it would be dangerous to assume that the worst has passed and there will be no further existential threats.

One reason is that it is hard to extrapolate to the future based on what has happened over the past decade. For example, just because a country’s citizens accepted a multi-year slump once without seeking to leave the euro doesn’t mean the euro will continue to be popular if a second long slump were to occur. This is particularly likely to be the case in countries where the next recession sees the restrictions of euro membership leading to further imposition of pro-cyclical austerity.

The past may not also be a good guide when looking at how countries react to specific events. For example, not all countries may react to the possibility of sovereign default in the same way as Greece, particularly countries were there are large domestic holdings of sovereign debt. A number of countries so far have coped with externally-imposed financial adjustment programmes in return for official support but others may be less comfortable in the future. Also, while many point to the ECB’s OMT programme as a way to prevent a crisis in the euro area, nobody really knows how an Italian programme of OMT purchases, combined with a formal ESM adjustment programme, would work at a political level. Similarly, citizens in other countries may decide that leaving the euro is preferable to the
capital controls that were accepted in Greece and Cyprus or the haircuts that were imposed on depositors in Cypriot banks. The rise in support for populist\nationalistic parties in many countries in Europe make it difficult to be sure that, in the future, these kinds of events will not trigger campaigns to exit the euro.

Once one country has left the euro, it would likely become difficult to prevent speculation that other countries could follow. As such, it is not impossible that the exit of a single country, in particular a larger euro area member state, could trigger a process in which the whole of the euro area ends up breaking apart.
6. CONCLUSIONS

Economic and monetary union has brought some important gains for European citizens and the euro is popular with the public. The euro project has proven to be robust to events such as a sovereign default, the imposition of capital controls, haircuts for depositors and a slump that has taken a decade to recover from. This might lead people to conclude that the worst has passed and the euro is now bound to succeed. I think this would be overly optimistic.

History never stops. Nothing lasts forever. Officially, the euro may be “fixed and immutable” but the years of hearing European finance ministers’ talk about how Greece may have to leave the euro has shown that this was not necessarily the case. More generally, it is not enough to assume that the economic arguments against leaving the euro that have just been detailed are sufficient to prevent political movements that lead to euro exit.

There are lessons for the rest of Europe from the Brexit process. In many ways, the economic benefits from euro membership are smaller than the benefits of being a member of the EU: Hence, some countries that are EU members have chosen not to be members of the single currency. In the case of the UK, there were no reputable economic arguments for leaving the EU and plenty of expert analysis indicating the large losses that would occur under various leave scenarios. All of these were dismissed by populists who relied on catchphrases about “talking about control” and dismissed all counter-arguments as part of a “Project Fear” conspiracy being promoted by various unseen elites.

Despite the obvious short-term and long-term potential economic downsides of leaving the euro, talking points about “taking back control of our money and our budgets” may at some point become very effective in the hands of nationalist parties who will have learned from Brexiteers how to dismiss counter-arguments as elitist fear-mongering. While we can rely on opinion polls as a reliable indicator of opinion at a point in time, the Brexit process shows that opinions of large parts of the electorate on economic issues can become radicalised in a relatively short time in the right conditions.

For example, recent polls show surprisingly high levels of support in the UK for an extremely hard Brexit to enable the UK to pursue new free trade deals with non-EU countries. There was little evidence of support for this idea prior to the Brexit referendum and there is no economic basis for this as a good proposal but, in a short space of time, this idea went from being the opinion of a few think-tank radicals to official UK government policy. One could make similar arguments for UK policy on migration, where the concerns of a minority of the electorate ending up leading to a radical change, with negative economic effects, becoming official government policy.

To keep the euro together, Europe’s politicians need to make the euro area less crisis-prone and also an easier place to be during the inevitable cyclical downturns that will happen in the future. Despite their image as slow to agree on change, Europe’s leaders have actually implemented an impressive amount of positive institutional changes to the euro area’s economic and financial architecture, in a way that involves more sharing of sovereignty than many would previously have thought possible. But that has still left a number of key weaknesses in the areas of fiscal capacity and financial stability.

The economics profession has provided many plans for wide-ranging institutional improvements for the euro area, most notably the Franco-German plan authored by fourteen eminent economists (Benassy-Quere et al, 2018). It is up to Europe’s politicians, in all of its branches – Council, Commission, Parliament – to continue to work hard to turn these and other suggestions into concrete actions in the coming decade. Only by continuing to work on its weaknesses can policy makers reduce the chances of a large-scale future existential crisis for the economic and monetary union.
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Abstract

Twenty years of euro history confirms the euro’s stability and position as the second global currency. It also enjoys the support of majority of the euro area population and is seen as a good thing for the European Union. The European Central Bank has been successful in keeping inflation at a low level. However, the European debt and financial crisis in the 2010s created a need for deep institutional reform and this task remains unfinished.

This document was provided by Policy Department A at the request of the Committee on Economic and Monetary Affairs.
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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BLEU</td>
<td>Belgium-Luxembourg Economic Union</td>
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<td>BU</td>
<td>Banking Union</td>
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<td>EA</td>
<td>Euro area</td>
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<td>ECB</td>
<td>European Central Bank</td>
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<td>ECOFIN</td>
<td>Economic and Financial Affairs Council</td>
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<td>ECU</td>
<td>European unit of account</td>
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<td>EDIS</td>
<td>European Deposit Insurance System</td>
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<td>EDF</td>
<td>Excessive Deficit Procedure</td>
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<td>EEC</td>
<td>European Economic Community</td>
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<td>EFSF</td>
<td>European Financial Stability Facility</td>
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<td>ELA</td>
<td>Emergency Liquidity Assistance</td>
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<tr>
<td>EMCF</td>
<td>European Monetary Cooperation Fund</td>
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<tr>
<td>EMI</td>
<td>European Monetary Institute</td>
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<td>EMS</td>
<td>European Monetary System</td>
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<tr>
<td>EMU</td>
<td>Economic and Monetary Union</td>
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<tr>
<td>ERM</td>
<td>Exchange Rate Mechanism</td>
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<tr>
<td>ESCB</td>
<td>European System of Central Banks</td>
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<td>ESM</td>
<td>European Stability Mechanism</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GG</td>
<td>general government</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<td>MIP</td>
<td>Macroeconomic Imbalance Procedure</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<tr>
<td>MRO</td>
<td>Main Refinancing Operations</td>
</tr>
<tr>
<td>OCA</td>
<td>optimum currency area</td>
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<tr>
<td>SGP</td>
<td>Stability and Growth Pact</td>
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<tr>
<td>TEU</td>
<td>Treaty on European Union</td>
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<tr>
<td>TFEU</td>
<td>Treaty on the Functioning of the European Union</td>
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<tr>
<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>US</td>
<td>United States (of America)</td>
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<tr>
<td>USD</td>
<td>United States dollar</td>
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<tr>
<td>WWI</td>
<td>World War I</td>
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<td>WWII</td>
<td>World War II</td>
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EXECUTIVE SUMMARY

- The road to the European currency took more than 20 years. From the first memorandum of the European Commission on this topic in 1969 and the Werner Report in 1970, to signing the Maastricht Treaty in 1992, it took nearly 30 years until the euro was launched on 1 January 1999. This road was not easy. The collapse of the Bretton Woods system in 1971, two oil price shocks in the 1970s and the resulting stagflation delayed political approval of the project by more than a decade. Then the crisis of the European Monetary System in 1992-1993 complicated Stage 1 of the preparatory phase.

- The first two decades of euro functioning confirmed its stability, its role as the second most important global currency, and the ability of the European Central Bank (ECB) to keep inflation low. The euro enjoys the support of the majority of the euro area population and is seen as a good thing for the European Union (EU).

- In most of its first decade (1999-2008), the European economy enjoyed high growth and macroeconomic and financial stability. This changed, however, in the second decade (2009-2018) when the global and European financial crises hit the European economy. The monetary response of the ECB was largely adequate – the euro area managed to resist deflationary pressure coming from a far-reaching financial disintermediation. However, countries which suffered from a sovereign debt or banking crisis (or both) had to resist market pressures on their exit from the euro area. Greece, which experienced the longest and most painful crisis, found itself on the verge of leaving the euro area in July 2015, which was eventually avoided by the third rescue package provided by the European Stability Mechanism (ESM).

- All crisis-affected countries that lost market access received a conditional bailout provided by other euro area countries and the International Monetary Fund, with the support of the ECB. This meant, however, circumventing a no-bailout clause in the Treaty on the Functioning of the European Union. The content of rescue packages and how they were delivered remains a subject of political, economic and legal controversy until now.

- The crisis experience triggered a series of institutional reforms in the EU and euro area. They included, among others, strengthening the Stability and Growth Pact (SGP) and adopting the Fiscal Compact, introducing national fiscal rules, launching the Macroeconomic Imbalance Procedure and European Semester, setting up the ESM and Banking Union (without the European Deposit Insurance System (EDIS), which is still a subject of political discussion).

- The reform of the euro area needs to continue. The reform agenda was elaborated in the Five Presidents Report in 2015. However, there is a lack of consensus with respect to several proposals, for example, the degree of further fiscal and political integration, debt mutualization, the euro area budget, financial instruments which could cushion asymmetric shocks, etc.

- Given the high level of public debt in several euro area countries and the fiscal roots of most crisis episodes, strengthening fiscal discipline is the most important task. This can be done by restoring the no-bailout clause (market discipline) on the one hand and simplifying the SGP on the other.

- The EU member states that remain outside the euro area should consider euro adoption in the not-so-distant future. This would make the EU more homogenous economically and politically and help avoid institutional problems related to multi-speed integration.
1. INTRODUCTION

1 January 2019 marked the 20th anniversary of the launch of the European Union (EU)'s common currency – the euro (EUR), after almost three decades of political and academic debate and preparatory work. It constituted a major step forward in the process of economic and political integration in Europe. After the first relatively tranquil decade, the beginning of the second decade brought with it a series of strains and institutional challenges, which originated first from the global financial crisis of 2007-2009 and then from the series of debt and financial crises in the Euro area (EA) periphery. The sovereign debt and financial crisis in Greece in 2010-2016 proved the most dramatic case in this series – the country was on the verge of exiting from the common currency area in the summer of 2015.

Since 2010, under pressure from the crises, EA countries started reforms aimed both at resolving the ongoing crises and increasing resilience against future turbulences. These measures involved the creation of common rescue funds, which provided financial aid to countries in trouble, under the condition that they conduct their respective macroeconomic adjustments and structural and institutional reforms. The EA countries also strengthened fiscal discipline at the national level, adopted a common monitoring framework of macroeconomic and structural policies, and created a Banking Union (BU). However, towards the end of the second decade when the macroeconomic situation improved and economic growth resumed, the political appetite for continuing those reforms faded. For example, the BU, the most important piece of reforms adopted in the 2010s remains unfinished because of the lack of consensus on how the European Deposit Insurance Scheme (EDIS) should be designed (see Schoenmaker, 2018).

Overall, despite the crisis-related shocks in the first half of the 2010s, the common currency project proved successful. The Euro (EUR) is the second most important global currency, after the US dollar (USD). It has a largely stable exchange rate against other major currencies and annual inflation in the EA has not exceeded the targeted 2% for most of its life time. However, looking ahead, there are at least three challenges which should be addressed. First, the reform of the EA should be continued in order to increase its resilience against future potential shocks. Second, the international role of the Euro should be increased; this question was raised in the second half of 2018 by the European Commission. Third, nine EU members states remain outside the EA (the so-called “outs”) even if seven of them accepted the legal obligation to adopt the common currency when they joined the EU. This creates various economic and political problems, including the phenomenon of multi-speed integration. Again, since 2017, the European Commission (EC) initiated the policy of encouraging the “outs” to join the EA once they are economically and politically ready.

The purpose of this briefing paper is to summarise the history of the Euro project and its implementation, review its main accomplishments and unsolved problems and discuss the direction of its further evolution in the subsequent decades of its existence.

The paper’s structure is as follows. In Section 2, we present a brief history and theoretical background of the common currency project and its implementation both before its launch in 1999 and in the first two decades of its functioning. In Section 3, we analyse the macroeconomic performance of the EA in terms of exchange rate stability, inflation and its role as a reserve currency, growth and unemployment, fiscal indicators as well as the attitude of EU citizens towards the common currency. In Section 4, we discuss potential directions of the EA reform, including the perspectives for EA enlargement.

Our analysis has a narrative character and is based largely on a literature review and supported by statistical presentations.

The author would like to thank Paulina Szyrmer for her editorial assistance.
2. HISTORY OF THE COMMON CURRENCY PROJECT AND ITS IMPLEMENTATION

In this section we present a brief history of the Euro project, including its historical roots and theoretical background (Subsection 2.1), the road to the EMU (Subsection 2.2), the preparatory phase in the 1990s (Subsection 2.3), and the first two decades of its functioning divided into two subperiods: 1999-2008 (Subsection 2.4) and 2009-2018 (Subsection 2.5)

2.1. Historical and theoretic background

The history of monetary unions of largely sovereign states in Europe preceded the post-WWII projects of political and economic integration that led to the birth of the EEC in 1957 and then the EU in 1993. It goes back to the 19th century when three monetary unions existed in Europe: the German Monetary Union (prior to German political unification in 1871), the Latin Monetary Union (1865 -WWI, formally until 1927), the Scandinavian Monetary Union (1873-WWI). The German Monetary Union was gradually created in the 1830s and 1840s and was preceded by a customs union (Zollverein) since 1834 (James, 1997).

Due to the technical specifications of monetary systems based on metallic standards, the 19th century unions were concentrated on the unification of the gold and silver content of national coins and their free circulation across unions’ member states (Cohen, 2008).

The gold standard, which dominated the world economy since the 1860s until WWI and then, in a modified form, until the Great Depression of 1929-1933, can also be considered a looser form of a monetary union (a system of permanently locked exchange rates to gold).

In the 20th century, the Belgium-Luxembourg Economic Union (BLEU) which had a common currency (the franc) and existed between 1922 and 1998, can be considered a successful example of monetary unification, albeit on a geographically smaller scale. After 1998, the franc was replaced by the Euro.

The modern intellectual background of monetary unification was provided by the optimum currency area (OCA) theory, first elaborated by Mundell (1961) and then further developed by McKinnon (1963) and other scholars. The original OCA theory tried to balance the advantages of stable exchange rates (lower cross-border transaction costs) against the disadvantages coming from giving up an exchange rate adjustment tool in the case of an asymmetric shock.

Consequently, the OCA was to be the area that would be unlikely to suffer from shocks due to its internal synchronisation of the business cycle. Alternatively, if an asymmetric supply-side shock happened anyway, it could be absorbed by either factor mobility (of labour and capital) or by fiscal transfers within the OCA.

The OCA theory arose at a time when the Bretton Woods system of fixed-but-adjustable exchange rates, indirectly linked to the gold parity via the USD started to experience increasing strains. The inconsistency of national fiscal and monetary policies, especially in the US, the central country of this system, with its established pegs was a major cause of these tensions. Furthermore, activist monetary policy and free capital movement were inconsistent with fixed exchange rates – the principle of the “impossible trinity” (see e.g. Frankel, 1999) or the “macroeconomic trilemma” (see e.g. Obstfeld et al, 2004), both based on the Mundell (1963) – Flemming (1962) model of an open economy.

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46 For various definitions of monetary unions see Dabrowski (2015a).
Because economic policies in the post-WWII period referred predominantly to the Keynesian school, they were based on the assumption of sticky prices and wages (at least in the short-term) and, therefore, they preferred to use monetary and fiscal policies in business cycle management and adjustment to shocks. This led to an interpretation of the OCA theory in favour of exchange rate flexibility rather than monetary unification.

However, three important arguments were missed in this early debate. First, many existing national states with single currencies did not constitute OCA according to Mundell (1961) and McKinnon’s (1963) criteria but nobody suggested their monetary fragmentation. Second, once established, a monetary union may help in the internal harmonization of economic policies and synchronisation of business cycles, i.e., it leads to the endogenization of the OCA criteria (Frankel and Rose, 1998). Third, for countries that face historical legacies of monetary instability and high inflation, and therefore, limited public trust in their currencies, joining a monetary union provides an opportunity to overcome these problems at a relatively low cost by importing credibility from the outside.

Interestingly, Mundell in his later publications (1973a, 1973b, 1997) supported the euro project, referring to some of the above-mentioned arguments.

Nevertheless, the idea of a monetary union in Europe has been always controversial in academic circles, both in the period of its formation (late 1980s and 1990s) and during its actual functioning, especially when the debt and financial crisis hit the EA periphery between 2010 and 2016. Critiques of the single currency have come both from representatives of the Keynesian school (e.g., Paul Krugman, 2011) and the monetarist school (e.g., Friedman, 1997). However, a review of this debate remains beyond the scope of this paper.

2.2. From the Werner Report to the Maastricht Treaty (1969-1992)

The first initiatives towards a single currency in the European Economic Community (EEC) go back to 1969 when the European Commission (1969) produced a memorandum on the co-ordination of economic policies and monetary co-operation within the Community. It was followed by a decision at the EEC summit in The Hague that same year to build the Economic and Monetary Union (EMU). In response to the Council’s request, a group of experts, led by the Prime Minister and Minister of Finance of Luxembourg, Pierre Werner, elaborated the first plan in 1970, according to which the EMU was to be built in stages through the end of the 1970s47.

However, the collapse of the Bretton Woods system in 1971 followed by a series of macroeconomic turbulences and magnified additionally by two oil shocks (in 1973 and 1978) delayed the implementation of the EMU project by almost two decades. In the meantime, EEC member states tried to undertake partial coordination of monetary policies. First, in 1972, they established the “snake in the tunnel”, a mechanism of limited managed floating of their currencies against each other. Then, at the Brussels 1978 summit, they implemented the European Monetary System (EMS) based on a mechanism of fixed-by-adjustable exchange rates, similar to the Bretton Woods system (see Muorlon-Druol, 2017). This mechanism was called the Exchange Rate Mechanism (ERM1). Simultaneously, the same EEC summit in Brussels created the European unit of account (ECU).

After adopting the Single Market program in 1985, interest in building the EMU came back. Although in political and legal terms the common currency constituted a separate integration component from the Single Market, in economic terms, it was a logical continuation of the former. The elimination of cross-border barriers to the free movement of goods, services, capital and people cannot be complete

when each member state has its own currency, some with floating exchange rates (see European Commission, 1990).

The first step in the new round was taken at the Hannover EEC summit in June 1988, which confirmed the goal of building the EMU and asked the Committee chaired by the European Commission President Jacques Delors to produce a report that would propose the concrete steps to achieve that goal. The Delors Report (Committee, 1989) presented in April 1989 was subsequently approved at the EEC summit in Madrid in June 1989. At this summit, it was also decided to take the first concrete step towards monetary and financial integration, that is, to abolish the remaining restrictions on capital movement by 1 July 1990.

At the next EEC summit in Strasbourg in December 1989, policymakers decided to call the Inter-Governmental Conference to negotiate the respective Treaty changes. This resulted in drafting a new Treaty on the European Union, accepted by the EEC summit in Maastricht in December 1991 and formally signed on 7 February 1992.


The smooth negotiation and approval of the EMU blueprint was possible due to the strong political partnership between the President of France, François Mitterrand, and German Chancellor Helmut Kohl (Mourlon-Druol, 2017). Geopolitical changes in Europe – the demise of the Soviet bloc, the reunification of Germany and the disintegration of the Soviet Union itself – also helped this process.

However, the ratification of the Maastricht Treaty did not go smoothly in some countries. The first ratification referendum in Denmark on 2 June 1992 was narrowly lost. This led to granting this country an opt-out provision from adopting a common currency (similar to the UK, which received such an option at the time of negotiating the Maastricht Treaty). The second referendum in May 1993 approved the treaty changes. A similar referendum in France in September 1993 was only narrowly won (50.8%). In the UK, the treaty was ratified by only a very narrow majority in the Parliament.

In addition to political troubles or perhaps partly as a result of them, in 1992-1993, the EMS was exposed to a series of speculative attacks (see Buiter et al., for their overview). They resulted in the devaluation of the British pound and the Italian lira (see Demertzis et al., 2017) in September 1992 and their withdrawal from the ERM1. In the subsequent months, Spain, Portugal and Ireland also had to devalue their currencies and the three Scandinavian countries (Finland, Norway and Sweden) had to abandon their unilateral pegs to the ECU (in the case of Finland and Sweden, the consequences of their domestic financial crises in the early 1990s also played an important role). The French franc was also subject to several rounds of speculative pressures. Eventually, in August 1993, the ERM1 fluctuation bands were broadened from +/-2.25% to +/- 15% against central parity.

Struggling with the ERM1 crisis consumed most of the remaining Stage 1 time of the EMU implementation timetable (ending, according to the Maastricht Treaty, on 31 December 1993). This was a serious blow to the credibility of the EMS and the perspectives for a common currency project. Many commentators, in particular, those who were not enthusiasts of the EMU, saw it as its end.

On the other hand, many economists interpreted this crisis as an empirical confirmation of the “impossible trinity” (see Subsection 2.1) and the unsustainability of the so-called intermediate or hybrid exchange rate regimes under which authorities try to manage simultaneously both money supply (or interest rates) and the exchange rate, in a world of unrestricted capital movement (see Eichengreen and Wyplosz, 1993; Obstfeld and Rogoff, 1995). Going towards a common currency (one of the forms of the so-called hard peg) should have eliminated this vulnerability.
Stage 2 of EMU implementation (1 January 1994 to 31 December 1998) happened under more tranquil and orderly economic circumstances. This period brought several important institutional and policy steps in preparation for launching the common currency:\footnote{See, among others, \url{https://www.ecb.europa.eu/ecb/history/emu/html/index.en.html}}:

- Establishing the European Monetary Institute (EMI) on 1 January 1994 based on the existing (since 1973) European Monetary Cooperation Fund (EMCF). The EMI was replaced by the European Central Bank (ECB) and the European System of Central Banks (ESCB) on 1 July 1998;
- Introducing a ban on central bank credit to government and non-banking institutions/companies;
- Adjusting the national central bank legislation to the requirement of the Maastricht Treaty;
- Adjusting national monetary and fiscal policies to meet the EMU accession criteria established by the Maastricht Treaty;
- Accepting the name of the new currency (EUR) in December 1995;
- Adopting the Stability and Growth Pact (SGP) by the European Council meeting in Amsterdam on 16-17 June 1997 aimed at strengthening fiscal discipline on the national level;
- Selection of 11 original members of the EMU (Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain) which were to adopt the euro as of 1 January 1999 by the European Council in Brussels on 3 May 1998;
- Fixing irrevocable exchange rates between national currencies and EUR.

2.4. **The first decade (1999-2008)**

On 1 January 1999 the new currency was launched along with the single ECB monetary policy and the SGP entered into force. The new ERM2 mechanism was also launched which served as a two-year trial period before the adoption of the Euro.

However, the monetary union was not complete in the first three years of its existence because there were no Euro banknotes or coins. Therefore, all cash operations had to be conducted in old national banknotes and coins. Together with the continued quotation of prices and wages in national currencies (parallel to quoting in EUR) not much changed in the daily perception of the population and other cash users. This change came three years later (since 1 January 2002) when EUR banknotes and coins replaced the remnants of national currencies.

In the first decade of its functioning, the number of EMU members increased from the original 11 to 15 after admitting Greece (1 January 2001, probably the most controversial accession decision given Greece’s chronic fiscal imbalances and the poor quality of its fiscal statistics), Slovenia (1 January 2007), Cyprus and Malta (both on 1 January 2008). In addition, two countries outside the EU unilaterally adopted the EUR as their national currencies: Montenegro (November 1999) and Kosovo (January 2002). The EUR is also used in four European microstates – Andorra, Monaco, San Marino and the Vatican and in some overseas and dependent territories of the EU member states.

The ECB monetary policy was run smoothly, drawing on the credibility, track record, and operational experience of the German Federal Bank (Bundesbank), institutionally the strongest central bank in the EU before launching the euro, and the issuer of the EMS anchor currency (German Mark).

The primary objective of the ECB has been to maintain price stability, which has been operationalized by the ECB Governing Council as maintaining “…inflation below, but close to, 2% over the medium term”
In its monetary policy decisions, the ECB has followed the stability-oriented two-pillar strategy based on economic and monetary analysis (ECB 2011, p. 69-72), which differs from both traditional monetary targeting and direct inflation targeting frameworks but draws from the experience of both.49

In the first decade, the ECB interest rate for main refinancing operations (MRO) varied between 2.00% and 4.75% with the lowest level of 2.00% in the period between 6 June 2003 and 6 December 2005 and the highest level of 4.75% in the short period between 6 October 2000 and 11 May 2001.50

The actual inflation exceeded the 2% maximum inflation target through most of the examined period (see Subsection 3.1) but the economy grew at a relatively high pace (see Subsection 3.2). Both trends reflected the period of economic boom in the world economy, especially between 2003 and 2007, which preceded the global financial crisis of 2007-2009 (see Dabrowski, 2018).

However, there were some warnings, especially towards the end of the first decade, which signalled the possibility of later troubles.

First, fiscal discipline in most EMU member states remained weak, and both the Maastricht Treaty and SGP criteria were not observed (see Subsection 3.3). This included the two largest member states – France and Germany – which successfully pushed for the relaxation of the SGP rules in 2005. As a result, most of EA did not build sufficient counter-cyclical fiscal buffers for the subsequent downturn period (Dabrowski, 2015a).

Second, due to weak banking prudential regulations, the banking system in the EA and EU became “infected” by imprudent practices and instruments originating from the US housing market and US financial sector, which eventually led to banking crises in several EU member states (see Subsection 2.5).

Third, the successful introduction of the EUR led to a substantial decrease in nominal interest rates in peripheral EA countries which, in many instances, became negative in real terms. This led to local credit booms and housing bubbles in countries such as Spain, Ireland, Cyprus, Slovenia and others (similar to the US) that busted once the global financial crisis started.

The last year of the first decade (2008) was already marked by the global financial crisis that started in the US subprime mortgage market in the summer of 2007. Although this crisis reached Europe with some time-lag, in the second half of 2008 all EA economies were already suffering from a recession and serious tensions in the financial sector.

2.5. The second decade (2009-2018)

Most of the second decade of the EUR functioning had to be devoted to adopting various anti-crisis measures and developing institutional changes aimed at increasing EA resilience in case of future turbulences.

The second decade started in the aftermath of the global financial shock caused by the Lehman Brothers collapse on 15 September 2008, which hit Europe immediately. The ECB reacted with gradual cuts of MRO interest rates – from 4.25% in July 2008 to 1% in May 2009. Then after a short episode of hiking the MRO rate to 1.25% in April 2011 and to 1.50% in July 2011, it was cut again to 1.25% in

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49 A focus on monetary conditions (second pillar) can be considered an advantage as compared to “pure” inflation targeters because it allows for detecting potential credit bubbles in their early stages (see Issing, 2003).

November 2011 and then gradually down to 0.25% in November 2013 and further down to 0.05% in September 2014 and 0.00% in March 2016.

The ECB deposit facility interest rate became negative in June 2014 and since March 2016 it has amounted to -0.40%51.

Apart from cutting interest rates, the ECB also used several “non-standard” measures aimed at addressing the consequences of the global financial crisis and then, since 2010, of the European sovereign debt and financial crisis. They both had an EA wide and country-specific character, for example, the Emergency Liquidity Assistance (ELA) in the case of Greece (Praet, 2016).

In January 2015, after its short-term interest rates hit the zero-level band (see above), the ECB launched large-scale quantitative easing operations (Constancio, 2015), which primarily targeted the sovereign debt market, due to an insufficient supply of commercial bonds and papers.

Overall, the ECB seemed to be successful in resisting deflationary trends originating from the post-crisis financial disintermediation and subsequent tightening of banking regulation. At the end of 2018 and beginning of 2019, the main challenge that the ECB faces is the “normalisation” of its monetary policy after a decade of using unconventional measures and very low interest rates (Dabrowski, 2018).

Apart from monetary shock, the global financial crisis of 2007-2009 led to banking crises in most EU and EMU member states. To resolve those crises, substantial budget injections were needed, which together with aggressive countercyclical fiscal policies and a recession led to a rapid increase in public debt in relation to GDP in several countries (see Subsection 3.3).

Laeven and Valencia (2012, Table A2) estimated gross and net direct fiscal costs of policy responses to systemic banking crises for the period 2007-11, which covered the first phase of the global financial crisis and the early part of the European financial crisis52. Gross direct fiscal outlays involve government expenditure for bank recapitalization and asset purchases. Net fiscal outlays are equal to the difference between gross outlays and amounts recovered.

The highest gross fiscal outlays were recorded in Ireland (40.7% of GDP), Greece (27.3% of GDP), the Netherlands (12.7% of GDP) and the UK (8.8% of GDP). However, in the Netherlands and the UK, part of the government support was recovered, so the net outlays in the analysed period amounted to 5.6% and 6.6% of GDP, respectively.

As a result of mounting public debt and banking troubles (most frequently, a combination of both) several EMU countries had to ask for external assistance – usually provided by the “Troika”, that is, the International Monetary Fund (IMF), European Commission and ECB. A series of crises started from Greece (May 2010) and then involved Ireland (November 2010), Portugal (April 2011), Spain (June 2012) and Cyprus (June 2012). Italy (2011-2012 and then again 2017-2018) and Slovenia (2013-2014) also experienced serious problems in their banking sectors (both) and in serving its public debt (Italy) but avoided external assistance.

The Greek crisis was the longest and most painful. It lasted more than 8 years: Greece successfully ended the last aid program in August 2018. In the summer of 2015, it was on the verge of leaving the EA. At the very last minute, the government of Prime Minister Alexis Tsipras, which played with the idea of Grexit in the first half of 2015 and took a confrontational approach to “Troika”, and a substantial part of Greek society reflected on the devastating consequences that such an exit would have for the

52 The analysed time span left out the later stages of banking crises in Greece, Spain, Cyprus, Slovenia and Italy.
country and they returned to the negotiating table (see Dabrowski, 2015b; Darvas and Wolff, 2015). This was probably the most dramatic test of sustainability of a common currency.

In the initial phase of the crisis, there were a lot of financial market speculations on the perspective of leaving the EA by countries in trouble. In principle, there were two misconceptions behind those speculations. The first was that sovereign default was considered equivalent to leaving the EA. The second misconception considered an exit from the common currency area as another form of ordinary devaluation. However, over time, markets learned that the construction of the EMU was much stronger than any exchange-rate arrangement (like the ERM1) in the past or even a currency board (for example Argentina which was forced to leave the currency board in 2002) and speculations gradually stopped. On 26 July 2012, ECB Governor Mario Draghi famously declared that within its mandate “…the ECB is ready to do whatever it takes to preserve the euro.”53 This also contributed to making markets less nervous.

Despite internal troubles the EMU admitted four new members: Slovakia (1 January 2009), Estonia (1 January 2011), Latvia (1 January 2014) and Lithuania (1 January 2015).

The ongoing crisis encouraged the EU governing bodies and EU member states to undertake several reform steps. They included, among others, the so-called Six-Pack legislation, which strengthened the SGP, obliged member states to establish national fiscal rules and initiated the Macroeconomic Imbalance Procedure (MIP) (in force since December 2011) and Two-Pack legislation (May 2013), the European Semester (operational since November 2010), the European Financial Stability Facility (EFSF, operational since June 2010) and the European Stability Mechanism (ESM, operational since October 2012), the Treaty on Stability, Coordination and Governance in the EMU (the so-called Fiscal Compact, in force since January 1, 2013), and the Banking Union (2013).

The future-oriented debate on the new EMU institutional architecture initiated in this period led to the publication of the so-called Five-Presidents Report (Juncker et al., 2015). However, the implementation of this blueprint is going slowly. There is still a lot of intellectual and political disagreement on the direction in which the EMU reform should go. We will return to this question in Section 4.

The flagship reform of the 2010s, the Banking Union, remains unfinished because of the lack of consensus on how the EDIS should be designed (Schoenmaker, 2018). The main concerns relate to high banks’ exposure to sovereign debt in some countries, the varied quality of this debt and the high-level of non-performing loans (Stark, 2018).

The MIP procedure does not work in practice and both its conceptual foundations and practical implementation raise various doubts (Dabrowski, 2015a). Despite its strengthening in 2011, the SGP is not observed by all member states (see Subsection 2.3). The European Semester does not play the expected role in peer-review and guiding countries’ fiscal, macroeconomic and structural policies (Efstathiou and Wolff, 2018).

3. **EA PERFORMANCE IN ITS FIRST TWENTY YEARS**

This section summarizes the macroeconomic performance of the EA since the launch of the common currency project in 1999, the international role of the EUR and the attitude of EU/EA citizens to a common currency. In subsection 3.1 we analyse inflation performance, the EUR-to-USD exchange rate and the role of the EUR as the second most important reserve currency. Subsection 3.2 includes an analysis of GDP and unemployment and Subsection 3.3 includes an analysis of fiscal indicators. Subsection 3.4 presents the attitudes of EU/EA citizens to a common currency.

**3.1. Inflation, exchange rate and the share in global official reserves**

Figure 1 presents the end-of year inflation in the EA in comparison with the US and Japan, for the period of 2000-2018. For most of the examined period, except for 2001, 2003, 2008, 2010, and 2012, the EA had lower inflation than the US. However, until 2012, the EA inflation rate frequently exceeded 2% (the upper inflation target of the ECB). This occurred in 2000-2002, 2004-2005, 2007, and 2010-2012. In several years (2000, 2002, 2004-2007, 2011, and 2016-2017), US inflation also exceeded 2%, the official inflation target of the Federal Reserve System since 2012. Furthermore, US inflation performance has been slightly more volatile as compared to the EA, especially in the period preceding the global financial crisis.

**Figure 1: Inflation, end of period, 2000-2023 (in %)**

Note: data for 2018 based on the IMF staff estimate.

Source: IMF World Economic Outlook database, April 2018.
On the other hand, Japanese inflation was the most volatile among the three analysed currency areas and was systematically lower than in the EA and US, except for a short episode in 2014. During several years (2000-2003, 2005, and 2009-2012), it was even negative. Since 2000, the US has not recorded a negative inflation rate, and the EA—only once in 2014 (-0.2%). This means that the fear of deflation so prevalent in the economic debates of both the early 2000s and the early 2010s was not well grounded.

Figure 2 shows the EUR exchange rate against the USD. Between 1999 and 2018, it fluctuated in the range of 0.8 USD to 1.6 USD for 1 EUR, which reflected a divergence in business cycles and monetary policy cycles in the US and EA. The weakest exchange rate of the EUR (below 1 USD for 1 EUR) was recorded between 2000 and 2003, and the strongest was recorded just before the global financial crisis (2006-2008). Since 2015, the fluctuation band has narrowed and the exchange rate has been oscillating around 1.10-1.20 USD for 1 EUR. Interestingly, in the period of the debt and financial crisis in the EA periphery, the EUR remained relatively strong – between 1.20 to 1.50 USD for 1 EUR. This means the credibility of the EUR was never questioned by financial markets despite speculations of countries in trouble potentially exiting the common currency area.

Source: ECB.

Figure 3 presents the composition of the global official foreign exchange reserves by major currencies. The EUR occupies the second position after the USD and is well ahead other currencies. However, its share did not increase in the reported period (2010-2018). It fluctuates in the range of 20-20% of total allocated reserves depending on changes in its exchange rate (in the beginning of the 2010s it was higher because of a stronger exchange rate).

Central banks’ demand for reserve currencies are determined mainly by private sector transactions and their needs and preferences. In turn, the latter depend on the so-called network externalities and depth of financial markets in a given currency and the liquidity and sophistication of available financial instruments. In this respect, due to the unfinished process of building a Banking Union and Capital
Market Union, the EA remains behind the USD currency area. Therefore, changing this situation and increasing the international role of the EUR as declared in the State of the Union address to the European Parliament in September 2018 will take time and will require a coordinated effort in many policy fields (see Efstathiou and Papadia, 2018) 

Figure 3: Currency composition of official exchange rate reserves, 2010-2018, in % of total allocated reserves

Source: IMF COFER (as of 13 January 2019).

3.2. GDP growth and unemployment

Figures 4-5 present the annual changes in real GDP and unemployment rates in the US, the EA, and Japan for the period of 2000-2018.54

Regarding GDP dynamics, Figure 4 clearly shows that the three largest advanced economies have not been leaders in terms of the world’s economic growth (in fact, they lost their leadership roles in the early 1990s). Global growth has been increasingly driven by the catch-up growth of emerging-market and developing economies before, during, and after the global financial crisis of 2007-2009.


54 This subsection draws from Dabrowski (2018).
Figure 4: Annual change in GDP, constant prices, 2000-2018 (in %)

Note: data for 2018 based on the IMF staff estimate.
Source: IMF World Economic Outlook database, April 2018.

Figure 5: Unemployment rate, 2000-2018 (in % of total labour force)

Note: data for 2018 based on the IMF staff estimate.
Source: IMF World Economic Outlook database, April 2018.
Comparing the EA with the US, the former had two periods of lower growth—between 2002 and 2005 and between 2009 and 2015. In 2016-2017, the growth rates of both economies tended to converge.

A decade after the eruption of the global financial crisis, it is also clear that neither the EA, nor the US are going to return to their pre-crisis rates of growth, at least not in the near future. This is not only a consequence of the unhealthy character of the pre-crisis boom, which was based on several financial bubbles (see Dabrowski, 2010) and crisis-related wounds (for example, far-reaching financial deleveraging—see Subsection 3.1). It is also a result of changes in supply-side factors—not always necessarily in favour of faster growth. They include a decline in the working-age population (Europe and Japan), population aging, and the end of the main phase of the third industrial revolution based on the mass implementation of information and communication technologies, which caused slow growth in total factor productivity as compared to the second half of the 1990s and early 2000s (Gordon, 2016, pp. 601-602).

Figure 5 shows that the differences in the unemployment rates of the three analysed currency areas have a systematic character. Japan has had the lowest unemployment rates, despite also having the lowest inflation and growth rates. The US has also recorded relatively low unemployment rates, except for the post-crisis period of 2009-2012, but they are higher than those of Japan. The EA has had the highest level of unemployment. The differences in unemployment rates seem to be determined by the differences in the labour market institutions in individual economies.

3.3. Fiscal performance

Tables 1 and 2 present basic fiscal indicators – general government (GG) net lending/borrowing (that is, GG balance) and gross debt, both in relation to GDP – for all EA countries and, for comparison, for the US, UK and Japan. Both tables cover the period of EUR functioning, that is, 1999-2018.

As seen in Table 1, all EA countries except Estonia did not observe the deficit criterion (max. 3% of GDP) for at least a few years, sometimes much longer as in the case of Greece, Portugal, France, Cyprus, Italy or Spain. There is little comfort in the fact that Japan, the UK and US are doing even worse.

Despite some improvement in current fiscal balances since 2015 and an ongoing economic boom, in several countries this is not enough to significantly decrease the debt-to-GDP ratio and create fiscal buffers for the future. One must remember that 2015-2018 were characterised not only by growth recovery (Figure 4) but also by record-low interest rates (see Subsection 2.5).

Table 2 shows that there is still a substantial number of EA countries in which GG gross debt exceeds the Maastricht limit of 60% of GDP. In 2018, seven countries recorded a very high debt level: Greece (188.1% of GDP), Italy (130.3% of GDP), Portugal (120.8% of GDP), Cyprus (112.3% of GDP), Belgium (101.1% of GDP), Spain (97.2% of GDP) and France (96.7%). Among previously highly-indebted countries, only Ireland and Germany managed to substantially reduce their debt levels.

This situation makes the EA vulnerable to any future shocks, especially in the case of growth deterioration, banking troubles, increase in market interest rates or political turbulence.
## Table 1: General government net lending/borrowing, 1999-2018 (in % of GDP)

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Note: red font IMF staff estimate.

Source: IMF World Economic Outlook database, April 2018.
IPOL | Policy Department for Economic, Scientific and Quality of Life Policies
IPOL | Economic Governance Support Unit

Table 2:

General government gross debt, 1999-2018 (in % of GDP)

Country

1999

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

2017

2018

Austria

61.1

65.7

66.4

67.0

64.9

64.8

68.3

67.0

64.7

68.4

79.6

82.4

82.2

81.7

81.0

83.8

84.3

83.6

78.6

74.2

114.4 108.8 107.6 104.7 101.1

96.5

94.7

91.1

87.0

92.5

99.5

99.7 102.6 104.3 105.5 107.0 106.1 106.0 103.4

101.2

97.5

112.3

Belgium
Cyprus

55.7

56.0

57.5

61.0

63.0

64.7

64.0

59.0

53.1

44.1

52.8

55.8

65.2

Estonia

6.0

5.1

4.8

5.7

5.6

5.1

4.5

4.4

3.7

4.5

7.0

6.6

6.1

9.7

10.2

10.7

10.0

9.4

9.0

8.8

Finland

44.0

42.5

40.9

40.2

42.7

42.6

39.9

38.1

34.0

32.7

41.7

47.1

48.5

53.9

56.5

60.2

63.5

62.9

61.3

60.5

France

60.5

58.9

58.3

60.3

64.4

65.9

67.4

64.6

64.5

68.8

83.0

85.3

87.8

90.6

93.4

94.9

95.6

96.6

96.8

96.7

Germany

60.0

58.9

57.7

59.4

63.1

64.8

67.0

66.5

63.7

65.2

72.6

80.9

78.6

79.8

77.5

74.6

70.9

67.9

63.9

59.8

Greece

98.9 104.9 107.1 104.9 101.5 102.9 107.4 103.6 103.1 109.4 126.7 146.3 180.6 159.6 177.9 180.2 178.8 183.5 181.8

188.1

Ireland

46.6

68.6

66.6

99.8 102.4 112.5 115.4 116.5 123.4 129.0 131.8 131.5 132.0 131.8

130.3

Italy

36.1

33.2

30.6

29.9

28.2

26.1

23.6

109.7 105.1 104.7 101.9 100.5 100.1 101.9 102.6

23.9

42.4

61.5

79.2 102.1 107.5 107.5 106.6

86.0 110.9 119.9 119.8 104.3

76.9

73.6

Latvia

11.8

12.1

13.9

13.1

13.9

13.8

11.2

9.2

7.2

16.2

32.5

40.3

37.5

36.7

35.8

38.5

34.9

37.4

36.3

35.0

Lithuania

28.1

23.5

22.9

22.1

20.4

18.7

17.6

17.2

15.9

14.6

29.0

36.2

37.2

39.8

38.8

40.5

42.6

40.1

39.7

37.0

Luxembourg

7.1

6.5

6.9

6.8

6.8

7.3

7.4

7.8

7.7

14.9

15.7

19.8

18.7

21.7

23.7

22.7

22.0

20.8

23.0

22.8

Malta

69.5

64.2

70.1

64.9

68.7

71.1

70.0

64.5

62.3

62.6

67.6

67.5

70.1

67.7

68.4

63.7

58.6

56.3

50.7

45.1

Netherlands

57.5

50.9

48.2

47.5

48.7

49.1

48.5

44.1

42.0

53.8

55.8

58.6

60.8

65.5

67.0

67.1

64.0

61.3

56.5

53.1

Portugal

51.0

50.3

53.4

56.2

58.7

62.0

67.4

69.2

68.4

71.7

83.6

90.5 111.4 126.2 129.0 130.6 128.8 129.9 125.7

120.8

Slovakia

47.1

49.6

48.3

42.9

41.6

40.6

34.1

31.0

30.1

28.5

36.3

41.2

43.7

52.2

54.7

53.5

52.3

51.8

50.9

49.2

Slovenia

22.0

29.0

28.5

28.4

27.0

26.8

26.3

26.0

22.7

21.6

34.5

38.2

46.4

53.8

70.4

80.3

82.6

78.6

73.6

69.7

Spain

62.5

58.0

54.2

51.3

47.6

45.3

42.3

38.9

35.5

39.4

52.7

60.1

69.5

85.7

95.5 100.4

99.4

99.0

98.4

97.2

131.1 137.9 146.8 156.8 162.7 171.7 176.8 176.4 175.4 183.4 201.0 207.9 222.1 229.0 232.5 236.1 231.3 235.6 237.6

238.2

Japan
UK

39.8

37.0

34.3

34.4

35.6

38.6

39.8

40.7

41.7

49.7

63.7

75.2

80.8

84.1

85.2

87.0

87.9

87.9

87.5

87.4

US

n/a

n/a

53.2

55.6

58.7

66.2

65.6

64.3

64.8

73.8

86.9

95.5

99.9 103.3 104.9 104.6 104.8 106.8 105.2

106.1

Note: red font IMF staff estimate.
Source: IMF World Economic Outlook database, April 2018.

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PE 624.431


### 3.4. Public attitude to common currency

Public attitudes to the EUR can either be measured by the results of opinion polls or analysed by the observation of microeconomic behaviour (portfolio choices). The first approach is represented, among others, by the European Commission’s annual Eurobarometer surveys (see e.g. Eurobarometer, 2018), which provide comparable results of opinion polls for long periods of time.

Measuring support for the EUR as a home country currency started in 2002 when EUR cash was introduced into circulation. This support has remained relatively stable, above 50% (Figure 6). Only in 2007 was a substantial drop in support recorded. Since 2011, a period of debt and financial crisis on the EA periphery, support for the EUR has grown systematically, reaching 64% in 2017.

![Figure 6: Support for the EUR as a home country currency, 2002-2018, in % of total number of respondents in the EA](source)

Looking at the survey results by individual countries (Figure 7), a differentiation of support is obvious but not as dramatic as one might expect following national political discourses. In 2018, the highest support was recorded in Ireland (85%) followed by Luxembourg (80%) and Austria (76%). The lowest support (below 50%) was recorded in Cyprus (47%) and Lithuania (42%).

Interestingly, in Italy where two ruling political parties voiced a sceptical approach to EUR, public support for the common currency increased dramatically (by 12 percentage points) between 2017 and 2018. In countries which suffered from debt and financial crises just a few years earlier and whom many commentators and experts advised to leave the EA (Greece, Ireland, Portugal, Spain, Slovenia), support for the EUR remains high. Cyprus is the only post-crisis country where support is low.

Figure 8 presents support for the EUR as a potentially good thing for the entire EU. The time series is shorter (since 2010) but results look even better than in the case of the previous question. However, it is worth remembering that this question is more “abstract” for most respondents than the question related to their home countries.
An analysis of microeconomic behaviour is even more interesting but not always easy to measure. And such behaviour quite often contradicts the expressed political and economic opinions. The near-Grexit in 2015 provided a very good example of that. The government, which brought the country to the verge of Grexit, enjoyed broad popularity (winning the referendum on 5 July 2015 against the bailout proposed by "Troika"). Meanwhile, the same people who supported the government and its risky policy...
tried to protect their own money balances in EUR to avoid having to convert to a new national currency. They transferred money abroad, they hoarded EUR cash, etc. Thus, economically they voted to remain in the EA.

The same could be said about portfolio preferences. Use of currencies other than the EUR by economic agents and the population in EA countries remains marginal while the use of EUR (the phenomenon of spontaneous euroization) is substantial in most EU member states which have not adopted the EUR yet and EU candidates.

Figure 8: Support for using the EUR in the EU, 2010-2018, in % of total number of respondents in the EA

4. **LOOKING AHEAD: HOW TO REFORM THE EMU?**

This section deals with the question of how to reform the EMU in order to make it more efficient and resilient to potential future shocks. This is a complex topic and policy agenda and we concentrate on just a few key issues. First, we analyse whether a monetary union needs deeper fiscal and political integration as suggested by many participants of the debate on the future of EA (Subsection 4.1). This is followed by a discussion on what is the right way of deepening political and fiscal integration (Subsection 4.2). In Subsection 4.3 we try to find a way of strengthening fiscal discipline within the EMU (and entire EU). In our opinion, this is a key economic condition to increase EA resilience and decrease the risk of macroeconomic and financial turbulence in the future. Finally, Subsection 4.4 is devoted to perspectives of the EMU enlargement and the role of such enlargement in increasing the EU’s economic, political and institutional homogeneity.

4.1. **Does a monetary union need a deeper fiscal and political union?**

As mentioned in Subsection 2.5, the debt and financial crisis on the EA periphery triggered a debate on the supposedly incomplete architecture of a monetary union within the EU (see Dabrowski, 2015a for an overview). However, the opinions on what should be done to increase the monetary union’s resilience to adverse shocks differed substantially.  

The dominant view is that a monetary union must be accompanied by a fiscal and political union in order to survive. Perhaps surprisingly, this is the opinion of both supporters and opponents of the EUR project. However, while the former (e.g. De Grauwe, 2006; Wolff, 2012) believe this is both possible and desirable, the latter (e.g. Feldstein, 1997; 2012) doubt it will ever happen due to the long historical tradition of sovereign nation states in Europe.

Empirically, the US serves most frequently as the reference for this view (see, e.g., Bordo et al, 2011; Henning and Kessler, 2012; Gros, 2013), which might be justified by the similar size of economies, their global importance and the role of the US as the EU’s major partner and competitor. However, such a comparison overlooks the historical process of the evolution of the US federation, which is much more centralized today than it was at the beginning of 20th century, not to mention the first half of the 19th century, including its monetary and fiscal dimensions (Frieden, 2016). It also disregards the other historical and contemporary experiences of monetary unions (see e.g., Cohen, 2008; Deo, Donovan & Hatheway, 2011; Dabrowski, 2015b), including those formed by sovereign states.

The two largest contemporary monetary unions outside Europe, the West African Economic Monetary Union and the Central African Economic and Monetary Community, have virtually no political and fiscal integration, their trade and economic integration are still in rather initial stages but they have used a common currency (the CFA franc) since 1945, i.e., for more than 70 years.

The conclusions that can be drawn from this debate can be summarized as follows: while deeper fiscal and political integration (beyond what has been accomplished so far) is not critical for EMU survival, the OCA theory (see Subsection 2.1) suggests that greater factor mobility and some fiscal redistribution on a federal level can decrease adjustment costs in the case of asymmetric shocks. This underlines, once again, the importance of deepening the Single European Market, completing the Banking Union and Capital Market Union projects and liberalising the market on a national level, especially with respect to the labour market (Fuest and Peichl, 2012; Issing, 2013; Balcerowicz, 2014; Draghi, 2015).

Subsections 4.1-4.3 draw from Dabrowski (2016).
However, looking at the historical experience of monetary unions in the 19th and 20th centuries and the role of political factors in both their creation and disintegration one can conclude that further deepening of political integration within the EU/EMU (and resulting higher degree of fiscal integration) might be helpful in increasing the sustainability of the EA.

4.2. How to deepen a fiscal and political union?

When discussing the economic rationale for deeper political and fiscal integration, the theory of fiscal federalism should serve as primary guidance. This theory helps us understand “which functions and instruments are best centralized and which are best placed in the sphere of decentralized levels of government” (Oates, 1999, p.1120).

Therefore, a discussion about a deeper political integration should start from a functional analysis aimed at identifying those policy areas and public goods where the centralization of competences and resources could either offer increasing returns to scale or help address cross-border externalities. As a result, any new area of integration (or closer integration in the policy fields already delegated to the EU/EMU level) should be justified by the potential benefits of pooling resources to carry out common policies and provide supranational public goods. This means that the potential benefits of greater centralization in any policy areas should outweigh its potential costs in the form of lower efficiency of centralized decision making and expenditure (as compared to decentralized), wrong policy incentives at the national level (risk of moral hazard and free riding) or a redistribution conflict between member states.

In its Preamble and Article 5, the TEU declares the principle of subsidiarity, which must serve as additional guidance in the debate on the EU integration architecture. According to this principle, the functions of higher levels of government should be as limited as possible and should be subsidiary to those of lower levels (Mortensen, 2004).

Unsurprisingly, looking at the challenges the EU currently faces, the strongest arguments in favour of a further transfer of competences and pooling resources at the Union level relate to non-economic spheres of governance such as external border protection, migration policy, asylum system, internal security, foreign policy, defence, environment protection, climate change policy, etc., although many of them also have their economic dimensions.

Increasing the degree of integration in the above-mentioned areas and delegating new mandates to the EU should result in an increase in the size of the EU budget. This, in turn, may gradually create more room for countercyclical fiscal policy at the EU level or federal transfers aimed at cushioning asymmetric shocks (which is what happened in the US in the first half of the 20th century). This is a more natural and politically acceptable way than the creation of a special redistribution fund for the EA as suggested by De Grauwe, 2006; Wolff, 2012; and Cottarelli, 2012b.

4.3. Fiscal sustainability challenge

4.3.1. Importance of fiscal discipline

Fiscal discipline is very important for currency stability (Wyplosz, 2013) and, more broadly, financial and macroeconomic stability in any country/territorial entity. However, it becomes even more important within federations, confederations and closely integrated economic blocks, due to cross-border spillovers and contagion, more opportunities to free ride at the cost of neighbours, and the moral hazard problem (the expectation of bailout). This was confirmed by the European debt and financial crisis in

56 The examples of such analyses are provided by Berglof et al. (2003) and Wyplosz (2007; 2015).
the first half of the 2010s (see Subsections 2.5 and 3.3), especially in the case of Greece. However, this was also the experience of those federal states that failed to ensure the fiscal discipline of their subnational governments. Countries such as Argentina, Brazil (see Bordo et al, 2011; Cottarelli, 2012b), Mexico, Russia and Spain, which provided their sub-national governments with bailouts, have suffered serious fiscal and monetary stability problems at the federal level.

Thus, fiscal discipline should be considered an important common public good for the entire EU, not only for the EA.

4.3.2. Market discipline vs. fiscal rules

Fiscal discipline may be ensured by market mechanisms (danger of sovereign default) and formal fiscal rules (formal constraints), or a combination of both. In turn, fiscal rules can be divided into fiscal targets and fiscal procedures, which are either imposed by a federal centre, self-imposed by a sub-federal entity, or negotiated by both (Eyraud and Gomez Sirera, 2013).

Historical experience demonstrates the superiority of market discipline: the credible danger of default serves as the strongest incentive to put sub-federal finances (in the case of the EU/EMU, those of member states) in order (Bordo et al, 2011; Henning and Kessler, 2012). For example, the US federal authorities have not bailed out any state since the 1840s and this has created a strong incentive for states to adopt fiscal discipline rules in their constitutions and secondary legislations (the federal government has imposed none of them). Similarly, counties and municipalities cannot expect a bailout from either the state or the federal government. The similar ‘no bailout’ practice governs the Canadian and Swiss federations (Bordo et al, 2011; Cottarelli, 2012b).

In the EU/EMU, the original mechanism of fiscal stability was based on both market discipline and fiscal rules. The former was built around the ‘no bailout’ clause in Article 125 of the Treaty on the Functioning of the European Union (TFEU) and the ban on debt monetization by the ECB - Article 123 of the TFEU. On the other hand, Article 126 of the TFEU, the accompanying Protocol No. 12 and the EU’s secondary legislation, i.e., the SGP determined fiscal rules. They included numeric criteria on the maximum annual fiscal deficit (3% of GDP) and gross public debt level (60% of GDP), the so-called Maastricht criteria, backed by administrative and financial sanctions for breaching them within the Excessive Deficit Procedure (EDP). After 2010, those fiscal rules were further amended and strengthened (see Subsection 2.5).

However, as seen in our analysis in Subsection 3.3 the EU/EMU fiscal discipline mechanism does not work well. Financial markets have never taken the ‘no bailout’ clause seriously, as demonstrated by very low yield spreads prior to the global financial crisis and since 2013, in spite of big differences in the fiscal positions of individual countries. It was finally compromised with the adoption of the first financial assistance package to Greece in May 2010 and the creation of the EFSF and ESM bailout facilities (see Subsection 2.5). Thus, the ‘no bailout’ principle was replaced by a policy of conditional bailout, that is, financial assistance in exchange for a country’s commitment to fiscal adjustments and necessary reforms.

De facto suspending the market discipline mechanism in 2010 was to be compensated by stronger fiscal rules at both the EU and national levels, which were to be backed by stronger sanctions, including financial ones. However, their enforcement has not improved. The large number of various exceptions written into the EDP is one reason for this failure.

Another, and perhaps more important, cause relates to the collective action problem, which is when there is no sufficient majority among member states in favour of fiscal rules enforcement. As illustrated in Tables 1 and 2, most EA countries have not complied with the Maastricht criteria for a considerable
period of time. They have also frequently been the subject of EDP. The same reason can explain the repeated circumvention of the ‘no bailout’ clause since 2010. Having high public indebtedness, high debt exposures to the sovereign debt of countries in trouble and fragile banking systems impaired by the global financial crisis, most EMU member states have been afraid of cross-country crisis contagion. This has decreased their appetite to enforce the ‘no bailout’ principle.

Finally, the economic and political debate during the global and European crises has been influenced by advocates of continuous fiscal stimulus or at least those who opposed fiscal tightening. Opponents of “austerity” frequently questioned the rationale of the existing EU/EMU fiscal rules and their enforcement (see Krugman, 2012a, b, 2013; Layard, 2012; Soros, 2012). In such an intellectual atmosphere, it was not easy to build political consensus in favour of strict enforcement.

4.3.3. Debt mutualization: the wrong sort of federalism

Some of the proposals of fiscal and political union are, in fact, dysfunctional from both the economic and political points of view. They can produce the wrong fiscal incentives on a national level, distributional conflict among member states (as observed during Greece’s crisis) and provoke political backlash against deeper integration.

The ‘Deep and Genuine EMU’ proposal of the European Commission (2012) was one such example. It suggested the creation of a European Redemption Fund, an idea originally developed by the German Council of Economic Advisors, which meant a step further towards a conditional bailout policy as compared to the current solutions. On the other hand, it wanted to further increase its prerogatives to monitor national budgets (currently under the European Semester procedure), including some kind of veto power with respect to national budget decisions (an instrument rarely used in federal states – see Cottarelli, 2012a). This would make EU fiscal rules increasingly intrusive and rather incompatible with the dominant political and legal architecture of the EU, i.e., a sort of limited federation or confederation. Furthermore, in the context of rising Euro-skepticism, such intrusiveness could serve only as a convenient argument against “Brussels bureaucracy” in the hands of populists of various political colours. This has been clearly seen in the case of the controversy between the European Commission and the Government of Italy on the size of its planned fiscal deficit for 2019.

Fortunately, the “Five-Presidents Report” (Juncker et al., 2015) did not follow the European Commission’s (2012) proposal of the European Redemption Fund and moving towards direct controls of national budget policies. Nor did it mention any other form of debt mutualization mechanism.

However, debt mutualization proposals, largely issuing Eurobonds, are continuously coming back into the public debate in various contexts – not only rescuing countries in fiscal troubles but also building deeper financial markets in the EA. Some of them can still be considered a form of conditional bailout, e.g., the Blue Bond proposal of Delpla & von Weizsaecker (2010). Others represent either an unconditional bailout or a bailout with weak conditionality and substantial moral hazard risk (see e.g., Soros, 2012; De Grauwe, 2013; Eichengreen and Wyplosz, 2016).

The idea of Eurobonds might make sense if it served financing EU budget needs, under the condition that the EU would have a sufficient number of its own revenue sources in the future to pay back this debt. Currently the gap between EU spending commitments and available budget resources is financed in the form of payment arrears, i.e., by suppliers and beneficiaries of EU programs and transfers.
4.3.4. How to overhaul the EU fiscal discipline mechanism?

As discussed above, fiscal discipline at the national level should be based, in first instance, on credible default threat and national fiscal rules. The EU fiscal rules can play only a supplementary role. If they go too far and become too intrusive, the chances of their effective enforcement will only diminish due to the collective action problem and technical difficulties with the implementability of too complex, arbitrary, and sometimes, internally incoherent rules.

However, rebuilding market discipline will not be an easy task in the context of the fresh memory of a series of sovereign bailouts carried out during the European debt and financial crisis, some of which (as in the case of Greece) remain unfinished. It will also require rebuilding intellectual and political consensus on the importance of medium- and long-term fiscal sustainability constraints, economic benefits of low public debt level, and the importance of supply-side reforms in increasing individual countries' growth potential.

In practical terms, the first step to rebuilding the credibility of Article 125 of the TFEU should be the transformation of the ESM into a fiscal backstop of the Single Resolution Mechanism and future EDIS. As result, the ESM sovereign bailout mandate would be terminated, at least for financing new rescue programs.

The EDP should be simplified as much as possible by eliminating various exceptions and loopholes as well as stopping the use of variables such as a potential output, which are subject of ex-ante forecast and expert judgment error and, therefore, subject to political bargaining between member states and the European Commission. On other hand, financial sanctions, which proved unimplementable, should be replaced with automatic political sanctions, for example, suspending a member state’s voting rights in the Economic and Financial Affairs Council (ECOFIN) if its budget deficit or public debt breaches Treaty criteria in a systematic way.

Fortunately, as a result of the Six-Pack legislation and Fiscal Compact, the EU member states adopted or strengthened already existing national fiscal rules such as upper deficit and debt limits written into countries’ constitutions and secondary legislation. This can help in strengthening fiscal discipline on a national level without the need for further developing bureaucratic and intrusive surveillance procedures at the EU level.

4.4. EMU enlargement

The process of EMU enlargement has stalled since Lithuania joined the single currency on 1 January 2015. Six out of eight “outs” - Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania and Sweden – do not have an opt-out from EMU membership (like the UK and Denmark) but most of them have not been in a hurry to join the common currency, for various political and economic reasons. On the other hand, the 19 “ins” have not always been enthusiastic about admitting new members to the club, at least in the short-term, and a similar approach has been represented by both the ECB and the European Commission.

However, the Commission’s approach started to change with the 2017 State of the Union Address by President Jean-Claude Juncker who expressed the desire that the EUR be a single currency of the EU as whole rather than of a select group of member states. In its post-2020 proposal of the Multiannual Financial Framework, the European Commission (2018) offers a dedicated Convergence Facility for the

---

57 Proposals by Eichengreen and Wyplosz (2016a) are going in the same direction.
58 This subsection draws from Dabrowski (2017).
EU member seeking to adopt the EUR within the Reform Support Programme. Such a new approach offers the opportunity to restart EA enlargement and reconsider the “pros” and “cons” of EUR adoption both from the point of view of the entire EU and the individual member states with an “out” status.

From the perspective of the entire EU, three kinds of arguments – political, institutional and economic – should be taken into consideration in the question of potential enlargement of EMU.

Historically, EMU membership proved the most powerful factor in “multi-speed” integration, leading to an increasing degree of internal differentiation between “ins” and “outs”. This might have had a negative impact in terms of political ownership of EU rules and decisions, undermining solidarity in addressing common challenges, and creating differentiation of economic and political interests. For example, during and after the European debt and financial crisis, “outs” were rather reluctant to contribute to the repair of the EA architecture. As a result, some major reform steps, such as the Fiscal Compact, had to be introduced through intergovernmental treaties outside the existing body of EU law. Other initiatives such as the BU were limited de facto to EA countries, even if it would be desirable that all EU countries join. (Formally the “outs” can join the BU but only in 2018 did Bulgaria start to move in this direction as a condition to be admitted to the ERM2 – see Lehmann, 2018).

Many other economic governance frameworks – the SGP, MIP and European Semester – are more intrusive and rigorous with respect to the “ins” than the “outs”, even if there is no economic justification for the differentiation. Fiscal, financial or balance-of-payments fragility in any member state could be equally destabilising for the entire EU, regardless of whether a given country uses the EUR or its national currency.

This dual economic governance regime can also have a negative impact on the functioning of EU institutions. The European Commission, Council and European Parliament represent all member states, but some of their decisions only relate to the EMU members. This might lead to conflicts of interest when representatives of “outs” have to take part in deciding on issues of vital importance for the “ins”. They may block the new integration steps within the euro area because they fear marginalisation (see below). On the other hand, “ins” can ignore the side effects their initiatives might have for the “outs”.

Since the beginning of the European debt and financial crisis in 2010, one can observe the increasing role of the Eurogroup, consisting of the EA’s finance ministers, at the expense of the ECOFIN, which is often limited to rubberstamping Eurogroup decisions.

If the EA integrates further, for example, by adopting a separate EA budget or an EA budget line within the EU budget, it would complicate even more the functioning of the EU’s governing bodies, especially the European Parliament, and would result in pressure for separate EMU governing bodies.

Thus, if the current “outs” join the EMU, it would substantially reduce the degree of “multi-speed” integration and make the EU more homogenous politically and institutionally.

Economically, a common currency is an integral component of the single market even if it is considered a separate integration project, subject to different membership criteria (see Subsection 2.2). The development of the BU since 2012 has brought new challenges to the single market for financial services, with increasing differentiation between regulatory regimes and degrees of cross-border integration for “ins” and “outs”. If the process of establishing the BU continues, supplemented by deeper capital and labour market integration within the EA, there will be a risk of a formation of a de facto two-tier common market (closer for “ins” and looser for “outs”) (Sapir and Wolff, 2016). Again, the EMU enlargement (which also means current “outs” joining the BU) might reduce this risk.
Apart from single market considerations, the instability of national currencies can also lead to financial crises in “outs” (as happened in 2008-09 in Hungary, Latvia and Romania), with negative implications for the entire EU.

On the negative side, if any country that does not meet accession criteria and is not ready to follow common rules after accession (especially those related to fiscal discipline) is allowed to join the EA, there will be a risk of new financial turbulence. Therefore, membership criteria cannot be compromised, as happened in the past.

The “outs” also have good reasons to think seriously about joining the EA. Politically, remaining outside the EMU means risking becoming second-order member states with limited influence over several EU policy decisions determined by the interests of “ins”. Furthermore, after Brexit, the bargaining power of “outs” in the Council will substantially decrease. The risk of political marginalisation will further increase if a deeper integration of the EA goes ahead (see above).

Apart from trade and investment creation due to lower transaction costs, joining the EA could strengthen macroeconomic and financial stability in the current “outs”. First, it would move monetary policy decisions beyond domestic politics. Second, it would give national central banks access to the ECB’s refinancing facilities, which may be helpful in times of market stress. Third, membership in the BU would mean, in most cases, tighter regulatory standards enforced by the regulatory authority independent of domestic politics. Finally, adopting the EUR would help to reduce the high share of foreign-currency denominated loans in total loans and foreign-currency denominated liabilities in total liabilities, especially in Croatia, Bulgaria and Romania.

Even if according to the OCA theory, exchange rate flexibility can serve as an adjustment tool in cases of macroeconomic imbalances or idiosyncratic shocks, in the contemporary environment of financial globalisation, exchange rate movements are not always driven by changes in trade and current account balances. More frequently, they respond to changes in global capital flows. That is, for small open economies, exchange rate flexibility will not necessarily deliver the desired direction of exchange rate adjustment in a given period (from the point of view of the trade balance). For the same reason (unrestricted capital movement), central banks in small open economies have limited room to manoeuvre in “leaning against wind”, i.e. conducting interest rate policies that differ from those of major central banks. In the long run, exchange-rate flexibility cannot replace microeconomic flexibility, i.e., be a substitute for structural reforms.

Furthermore, larger-scale currency depreciation can easily damage financial sector stability and the balance sheets of non-financial corporations and households.

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60 Bulgaria with its currency board and Croatia with a tightly managed peg to the euro cannot benefit from exchange rate flexibility. These two countries seem to be the most interested in joining the EA soon.
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The euro at 20

A concise critical assessment

Abstract

Eurozone monetary governance was framed for a stable macroeconomic environment. While the ECB policy framework changed much after the global financial crisis, this did not prevent important nominal divergences. These ones prove the importance of non-monetary factors affecting relative nominal prices, such as fiscal policy and labor market institutions. New tools are necessary to limit these nominal divergences, otherwise real divergence will continue to weaken the euro.

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<td>ECB</td>
<td>European Central Bank</td>
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<td>EMU</td>
<td>European monetary union</td>
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<td>GFC</td>
<td>Global financial crisis</td>
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<td>LTRO</td>
<td>Long term refinancing operations</td>
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<td>MRO</td>
<td>Main refinancing operations</td>
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<td>OMT</td>
<td>Outright monetary transactions</td>
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EXECUTIVE SUMMARY

- The adoption of the euro in 1999 was a new step in the process of European integration. To strengthen the credibility of the euro area, the mandate of the newly created independent central bank, the European Central Bank (ECB), imposed a hierarchy between the inflation and output objectives: the former has the priority. The framework at the origin of this institutional setting assumed that inflation was a monetary phenomenon. Overall, the institutional setting was framed for a stable macroeconomic environment.

- On average, inflation has been close to 2% until the Global financial crisis (GFC), in accordance with the definition of the inflation target decided upon by the ECB.

- The advent of the GFC highlighted the contradiction between the original monetary setting and the real economy. While conventional monetary tools like lower short-term rates initially managed the economic slump, the protracted crisis at the zero-lower bound urged the ECB to resort to a long list of unconventional tools that culminated with the Assets Purchase program of 2015-2018. These ones have highlighted the lack of coordination with national fiscal policies and the lack of a stabilization tool at the Eurozone level. The under-estimation of non-monetary determinants to inflation has also proved harmful to the euro area where the unemployment rate still stands close to 8% of the labour force 10 years after the GFC. Despite below-target average inflation, it is remarkable that the discrepancy of inflation rates across Eurozone member states has remained stable since 1999. This has testified for the persistency of nominal divergence within the euro area.

- Nominal divergence has led to financial imbalances and to real divergence within the euro area, e.g. in France, Germany, Italy or Spain.

- The euro area thus requires operational tools to limit imbalances: a stabilization function at the Eurozone level, such as a European unemployment insurance or a European budget, and a change of mandate for the ECB. The latter has proved pragmatic during the crisis but the single mandate shall not impair the future use of pragmatism if a new crisis occurs. Consequently, the adoption of a double mandate, like the Fed, or a triple mandate, embedding price, output and financial stability, should be on the agenda.

- The monitoring of macroeconomic imbalances should also be refocused on these domestic imbalances with large spillovers and general equilibrium analyses should originate from national productivity boards and coordination improved in the European Semester.
1. INTRODUCTION

The adoption of the euro on January the 1st of 1999 was a new step in the process of European integration, leading to the advent of the European and Monetary Union (EMU) as laid down in the Maastricht Treaty (1991). To help enforce the credibility of the euro area, the Maastricht Treaty embedded the creation of an independent European Central Bank (ECB) meant to curb inflation as its major objective. Public deficits were capped and fiscal rules adopted in 1997 within the Stability and Growth Pact, yet no coordination strategy between monetary and fiscal policy was imposed. Under this institutional framework, the euro area should have become an area of monetary and financial stability generating investment and economic growth. History has shown that mere compliance with the academic constraint of rules/independence/credibility did not deliver the expected results (Creel et al., 2018).

The Maastricht institutional framework (see the appendix) was forged for a stable macroeconomic environment where GDP would smoothly tend towards its potential level at a stable inflation rate. The global financial crisis (GFC) tore the Maastricht framework apart. The Great Recession revealed the sensitivity of euro area Member States to three different factors: external financial shocks, growing public debts, and internal competitiveness. The financial crisis in the US spread to the euro area and required a substantial change in the implementation of monetary policy. Fiscal policy has had to come to the rescue, leading to substantial increases in deficits and debts. The early years of the euro area also showed the weaknesses of the institutional framework: it did not pay sufficient attention to nominal divergences – taking for granted that these were a transitory byproduct of real convergence – that spurred banking and financial crises in so-called peripheral countries of the euro area. Diverging nominal trends translated into current account imbalances, heterogeneous financing conditions and probably heterogeneous productivity trends.

While the performance of the ECB at achieving its objectives has been relatively good on average, the persistency of inflation divergence and financial fragmentation across Eurozone member states has revealed that whatever it takes, the ECB cannot dampen all imbalances in the euro area.

Some institutions must be carefully (re-)designed to monitor and manage the necessary nominal convergence. Some proposals have already been made such as new councils and a European budget for stabilization, but their focus on nominal convergence should be clearly defined. Otherwise, the risk is that the euro could become a parenthesis in the history of Europe.
2. **THE EURO AREA ECONOMY: A BRIEF ASSESSMENT**

The euro area monetary policy’s prime objective is “to maintain price stability” (Article 127, TFEU). Accordingly, the ECB announced in 1998 an operational definition of “a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%”. In 2003, the ECB clarified its operational definition of price stability: the increase in the HICP should be “below, but close to, 2% over the medium term”. As far as this objective is concerned, the ECB performance has been relatively good: the average inflation rate between 1999 and 2018 is equal to 1.7%. However, mixed evidence emerges from figure 1. It took more than a year for the ECB to reach a 2% inflation rate. Then and until 2007, the inflation rate remained close to but above 2%. It peaked at more than 3% after an oil shock before plummeting in the recession year of 2009. Since 2013, the inflation rate has remained substantially below its target. The inflation swings reveal either a strong external component or real downward determinants. They highlight the difficulty to prevent or dampen shocks rapidly in the Eurozone.\(^{61}\)

![Figure 1: The inflation rate of the euro area, in percent](chart.png)

Source: Ameco, varying composition of the euro area, computations by the authors.

In a monetary union, inflation deviations across Member States can be destabilizing. Indeed, since 1999, the standard deviation of yearly inflation rates across Eurozone countries has been stable: therefore inflation divergence has remained despite the EMU creation. This generates diverging real interest rates and a pro-cyclical feature that can trigger financial stability risks (see e.g. Franks et al., 2018): under a single interest rate, countries with higher (resp. lower) inflation than the average will have lower (resp. higher) real interest rates than the average. The situation of real interest rates in the euro area in 2006 is very evocative in this respect (figure 2). Only three Member States (Austria, France

\(^{61}\) Hartmann and Smets (2019) show evidence that the ECB was effective in anchoring 5-year ahead inflation expectations to its inflation target, although less so throughout the financial and sovereign debt crisis. They also show that “the higher uncertainty around the expected longer-term inflation forecast and the emergence of a significant negative skew in the balance of risks after the beginning of the sovereign debt crisis in particular suggests that the ECB was not able to fully dispel the probability of ending up in a low inflation/deflation regime (as had happened in Japan)”.

and Ireland) had a real interest rate close to the average whereas all the others were largely above, e.g. Germany, or largely below, e.g. Portugal and Spain. The core-periphery divide is clearly visible here: peripheral countries which were in a catching-up process towards the core countries benefited from a positive monetary impetus which accelerated economic growth above potential, hence high inflation. In contrast, core countries had subdued economic conditions with low inflation while undergoing a negative monetary impetus.

Figure 2: Real interest rates in the euro area in 2006, in percent

Note: 10-year sovereign yields deflated by the contemporaneous consumer price index.

Source: Ameco, computations by the authors.

Evidence reported in figure 3 confirms this original drawback of the euro area. While real long-term interest rates declined substantially between 1999 and 2008, the discrepancy across Member States remained stable. Figure 3 also highlights the consequences of the GFC on interest rates. Unlike in the US where the real long-term interest rate decreased rapidly after its peak in 2009, the euro area rate stayed long at a level higher than before the crisis. More importantly, the standard deviation rose sharply but in contrast with the previous period, real interest rate hikes occurred in the periphery, not in the core. This is clear evidence of the continuous pro-cyclical feature of the ECB’s monetary policy.

The performance of the euro area in terms of unemployment has also been mixed. The unemployment rate declined by two percentage points between 1999 and 2008 but the GFC and the European crisis pushed it to a historical peak at 12 percent of the labour force (figure 4). Although the unemployment rates of the euro area and the US were very similar in 2009 –the rise in the US unemployment rate was substantial after the GFC-, divergence has been very large after 2010. The US recovery was early and steady whereas the euro area entered into a second period of recession in 2012-2013.

The smooth functioning of the euro area embodied in the Maastricht Treaty assumed a stable economic environment that clearly disappeared with the advent of the GFC and led to important changes in the euro area policy mix. Contrary to the FED, economic stabilization is not given the same weight as inflation in the ECB’s mandate. The high unemployment rate is nevertheless the likely cause of the low inflation rate, below target. Indeed, the Phillips curve is still a valid framework within the Euro area economy (Mojon and Ragot, 2018).
Figure 3: The real long-term interest rate in the euro area, in percent

Note: 10-year sovereign yields deflated by the contemporaneous consumer price index.
Source: Ameco, computations by the authors.

Figure 4: Unemployment rate, in percentage points of the labour force

Source: Ameco.
3. MONETARY POLICY DURING THE CRISIS: A NEW FRAMEWORK

The global financial crisis and the sovereign debt crisis were followed by a double dip recession in the euro area raising important challenges for policy makers. They have led the ECB to modify significantly the conduct of monetary policy, implementing notably unconventional measures, which served three purposes: fixing a liquidity squeeze in the banking system, dealing with fragmentation and impaired transmission of monetary policy, and mitigating the risk of deflation. These changes have sometimes brought the ECB into new paths that had not been contemplated in the Treaty. This new policy has not been sufficient to stabilize inflation, and to allow for re-convergence. This is the main lesson of European crisis: the key-role of factors outside the scope of monetary policy affecting nominal dynamics (aggregate demand) and nominal divergences (wage dynamics and financial imbalances). The implications will be derived in the next Section. This one presents a summary of the evolution of monetary policy in this environment.

The ECB had first to meet high liquidity needs. To that end, it has modified the provisions of liquidity to banks with the fixed-rate full-allotment MRO (Main Refinancing Operations) procedure since October 2008 and several longer-term refinancing operations, with an extended maturity. These changes represented an evolution more than a revolution in the implementation of monetary policy. The operational framework had been established recently so that liquidity could already be allocated to a large number of financial institutions against a large set of eligible assets; in the end, changes have only concerned the maturity of operations and the auction system, i.e. the rules through which liquidity is allocated. However, the nature of the crisis and the deep recession in the euro area required more substantial changes. The ECB launched its first assets purchase programme – the Covered Bond Purchase Programme (CBPP) – in June 2009 to revive the covered bond market, an important source of market funding for commercial banks. Compared to initial measures, the implementation of assets purchase has more radically changed the way monetary policy was implemented. For the first time, the ECB intervened on financial market – though assets purchases – rather than through direct lending to the financial institutions. The aim was to influence assets’ price on a targeted market. The programme initially amounted to 60 € billions of assets that should be bought by the Eurosystem from June 2009 to June 2010. The programme was then extended in November 2011 (CBPP2) and in June 2016 (CBPP3). With the CBPP programmes, for the first time, the ECB aimed at easing financing conditions on a single and targeted market. By the end of 2011, the ECB was still concerned with risks of the banking system as a vicious feedback loop arising from the connections between banks and sovereigns. In December 2011 and March 2012, it decided to provide a 3-year maturity funding for the banking system – the VLTRO (Very long-term refinancing operation) – to secure access funding for the banking system. Even though, this operation took the form of a LTRO, the extension of maturity to 3 years indicated that the ECB was intervening beyond the standard maturity of monetary operations. The frontier between liquidity and solvency problems was reached. All those “liquidity” measures were not only important to avoid a systemic liquidity crisis, they also helped to stabilize the economy by notably supporting credit supply.

The financial crisis and the recession have put public finances under pressure and highlighted weaknesses of the euro area. Financial markets have considered that public debt might become unsustainable in some – peripheral - countries and asked higher risk premia. Besides, macroeconomic

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62 The aim here is not to provide an exhaustive description of all the measures taken by the ECB during the crisis but to highlight the major changes and discuss how they radically modified the framework of monetary policy.

63 See Shambaugh (2012).

64 See Giannone et al. (2012).
imbalances, which had been overlooked before 2007, suddenly erupted as a concern. Cross-border banking flows have strongly slowed down leading to financial fragmentation.65

The sovereign debt crisis, which started with Greece at the end of 2009 resulted in a sharp increase of sovereign yields. The ECB felt concerned with those issues as it implied an impaired transmission of the common monetary policy notably in those peripheral countries. To that end, it launched the Securities Market Programme (SMP), through which it could buy government bonds issued by countries facing higher risk premia. It was a radical change for the conduct of monetary policy as, this time, the ECB purchased public debt on the secondary market, a measure that was unconceivable before the crisis. The main objective of the SMP was not primarily monetary easing per se but most and foremost to improve its transmission across Eurozone countries and therefore implicitly to thwart the forces of market sentiment. However, during the summer of 2012 the contagion of the Greek financial crisis amplified towards other peripheral countries (Portugal, Spain, Ireland, Italy). The President of the ECB announced that the ECB “would do whatever it takes to preserve the euro” and he announced a new program, Outright Monetary Transactions (OMT), of conditional purchases of government bonds, which has never been activated. These measures contrasted with those taken by other central banks as they were designed to address the specific features of the crisis in the Eurozone and of its institutions (Cour-Thimann and Winkler, 2012). The aim was to repair the broken transmission of monetary policy. However, it acknowledged that a single monetary policy would not be able to cope with financial fragmentation. Without fiscal solidarity between members and stabilisation mechanism, only the selected assets purchase policy implemented by the ECB within the SMP and potentially within the OMT could cope with financial fragmentation and imbalances.

The SMP was challenged by Jürgen Stark, a member of the Governing Council, who considered that those assets purchases were financing public debt issued by Member States. In his view, it was violating two provisions of the Treaty: the clause of non-bailout of States within the euro area and the ban on funding of budget deficits by the central bank. The OMT was also strongly criticized by the Bundesbank and by German citizens considering that it might lead to a budgetary transfer between European countries. The opinion of the Court of Justice of the European Union (CJEU), delivered in June 2015, validated the legality of the OMT, the Court considering not only that “the purchase of sovereign debt securities constitutes a measure of monetary policy”, but also “that the acquisition of sovereign debt does not constitute monetary financing prohibited by the Article 123 of the TFEU”. These episodes highlight the fact that the ECB has implemented measures that had been unforeseen before the crisis. It clearly raised the question of the appropriate instruments that can be used by the central bank. Exceptional circumstances call for exceptional decisions. Even though the CJEU gave credit to the decisions taken by the ECB, it certainly call for further clarifications about the set of tools that can be implemented to achieve the goals assigned to the ECB. These clarifications are all the more important that empirical evidence suggests that unconventional tools have been effective in reducing sovereign yields in crises countries.66

The assets purchase policy amplified in 2015. The ECB implemented a quantitative easing (QE) programme to deal with low growth and low inflation in the euro area. It must be noticed that the Assets Purchase Programme (APP) followed several decisions taken in 2014 as the ECB worried about

65 See Bouvatier and Delatte (2015) and Mayordomo et al., (2015) for empirical assessments of the consequences of the crises on international financial flows. Durré et al. (2014) report that “cross-border claims of euro area banks on monetary and financial institutions (MFIs) located in other euro area countries decreased by €670 billion between September 2008 and September 2012” while “cross-border loans [to the domestic nonfinancial private sector] decreased by €450 billion over the same period”.

the macroeconomic situation of the euro area and the persistence of low inflation. From March 2015, the PSPP has become the main tool through which monetary policy eased. Between the announcement of the Extended Assets Purchase Programme (EAPP) in January 2015 and 2018-Q3, the amounts of ECB’s assets and liabilities expressed in percentage points of euro area GDP almost doubled to reach 40% (figure 5). It is close to what was done earlier by the Federal Reserve and the Bank of England and implied not only a sharp increase in the size of the Eurosystem’s balance sheet but also a radical change in the composition of the assets held by the Eurosystem.

Figure 5: The size of central banks’ balance sheet

Sources: ECB, BoE, Federal Reserve, Eurostat, ONS, BEA.

QE acted as a complement to standard monetary policy and helped to ease financing conditions by directly influencing the longer end of the term structure. It resulted in a much wider monetary stimulus as illustrated by shadow rates, measuring the implicit stance of monetary policy when non-standard measures are encompassed (figure 6). The effectiveness of this change is still hard to measure and this policy has some side effects. First, it has been criticized for the inflation risk it could produce. Until 2018, this risk has not materialized though. This is an important lesson against economists defending a naïve quantitative theory of money. Second, its effectiveness at fixing the issue of fragmented interest rate channels across euro area Member States remains disputable (see, e.g. Horvath et al., 2018, for a recent empirical investigation). A third criticism, assuming these unconventional policies have been effective, states that without a fast and sharp reduction in the size of the balance sheet, the ECB would lack margins for manoeuvre if a new crisis occurs. This argument is not very convincing as it is simply time-inconsistent: there will always be a next crisis, it is not a reason not to act in the current

67 The APP includes all assets purchase programmes: CBPP, PSPP (public sector purchase programme), ABSPP (asset-backed securities purchase programme) and CSPP (corporate sector purchase programme).

68 Empirical evidence on unconventional measures has suggested that they have been effective at reducing long-term interest rate either through the signalling or the portfolio balance channels.
one. \textsuperscript{69} Swanson (2018) wrote recently about the Federal reserve that it was “not very constrained by the lower bound on nominal interest rates” as central banks may implement negative interest rate policies and have now additional tools available (forward guidance and assets purchase).

Figure 6: Shadow rates for the euro area

\begin{center}
\includegraphics[width=\textwidth]{shadow_rates.png}
\end{center}

Sources: Wu & Xia (2016), Krippner (2013), Thomson Reuters.

Finally, despite a historical monetary policy easing, with shadow rate reaching between -6\% and -8\% in the euro area, headline inflation remains below the 2\% target and the economic recovery is still fragile. Unemployment rate remains above its pre-crisis level and mass-unemployment is still an issue in some countries (Greece and Spain, notably). Though monetary policy is effective, it cannot fix all the problems and the ability for central banks to achieve price stability still relies on the Phillips curve. The latter highlights that inflation is also driven by aggregate demand. Consequently, fiscal policy plays a key role. Automatic stabilizers should remain the first shock-absorber at the national level. Their efficiency should therefore not be mitigated by austerity measures that reduce the scope of the welfare state otherwise; they need to be complemented at the euro area level through a stabilization mechanism. A budget for the euro area or an unemployment insurance mechanism (Aparisi de Lannoy and Ragot, 2017) are options which have been raised in the public debate. However, with large negative shocks, discretionary fiscal policies are also needed and should not be excessively constrained by fiscal rules. In any case, a better coordination of monetary and fiscal policy is necessary to deal with global and domestic shocks.

The protracted crisis in the euro area also gave rise to a new crisis management institution empowered to make loans between euro area member states. The risk of default of the Greek government led in May 2010 to the development of an emergency plan which revealed one of the shortcomings of

\textsuperscript{69} This claim is similar to the parable of the last taxi of Goodhart (2015).
European governance, namely the absence of a lender of last resort. To remedy this and to cope with the persistence of the Greek crisis, the euro zone set up a European Financial Stability Facility (EFSF) which has become the European Stability Mechanism (ESM). The latter has a conditional capacity of loans for the benefit of a State experiencing financial difficulties. A loan may be granted by the ESM provided it is accompanied by an IMF loan or the conditions for debt restructuring have been previously defined.

Beyond, those new institutional features, the ECB has shown that it may resort to some monetary tools to deal with fragmentation and heterogeneity of the transmission of monetary policy. These tools may yet not be enough and the issue of imbalances deserves a special attention.
4. DEALING WITH IMBALANCES IN A MONETARY UNION

The real divergences within the Euro area are impressive. Unemployment rates, GDP per capita, public debt, or current account have moved apart. One should obviously avoid attributing all these dynamics to the euro. Many other factors, such as international trade and technology dynamics, occurred during the same period. Nevertheless, the single currency, by definition, prevented using standard macroeconomic instruments to deal with imbalances, such as the nominal interest rates and exchange rates movements. In addition, underlying nominal divergences were not monitored carefully, due probably to the implicit assumption that increased competition on the goods market and financial integration were sufficient to insure convergence. This assumption has been wrong and underlying divergences have been costly managed after the crisis with new monetary policy instruments, as seen in the previous Section, but also with internal devaluations (i.e. change in institutions on the labor market to ensure convergence in unit labor costs).

The goal of this part is to provide a tentative framework to think about divergences, within the Eurozone and to think first about nominal trends as potential cause of these divergences and, second, to analyze if nominal evolutions within the euro area, can be a solution to reduce these divergences. Both parts of the analysis are key to think about the “Euro at 20”. Finally, this high-level analysis will refer to some existing works, because it is possible to justify rigorously each claim, within the pages of this policy brief.

First, a survey of the literature on Euro imbalances identifies three broad types of imbalances: 1) Financial imbalances, 2) real imbalances 3) Nominal imbalances.

Figure 7: Three types of imbalances
Some examples help identifying causalities. In bracket, we refer to the type of imbalances (real, financial and nominal)

1. Capital inflows in Spain before the crisis generates an over-evaluation of house prices and a deficit of the current account (Financial), this generated a mis-allocation of capital and labor in the construction sector (Real), contributing to transitory wage inflation (Nominal). Many economists now insist on financial imbalances being the cause of real and nominal imbalances in, at least some countries. (Martin and Philippon, 2017)

2. Wage moderation in Germany, starting after the German reunification (Dustman at al. 2014) decreased substantially unit labor cost in Germany compared to other countries with roughly the same productivity trends, as France (Nominal). This contributed at least partially to the major European disequilibrium, which is the German current account (Financial)(Le Moigne et Ragot, 2015).

3. High inflation and low real interest rate in Italy contributed to low credit costs. These ones benefited mostly low productivity firms, having strong connections with banks (Financial). This contributed to a mis-allocation of capital in Italy, (Gopinah et al. 2018). (Real). The low growth of income per capita, generated some social concerns. To deal this legitimate concern some measures generating additional inflation could be implemented, contributing to additional nominal imbalances, due to inflation pressure (Nominal).

4. Inflation dynamics higher than in other countries after the introduction of the Euro (as Germany) or after the 2008 crisis (as Spain), generated a high relative exchange rate of France (Nominal). The outcome is that France is a country with one of the most negative current account in Europe (Financial). This competitiveness issue was partially the motivation of an attempt of internal devaluation with the Crédit d’Impôt pour la Compétitivité et l’Emploi (CICE). The outcome of this policy is still under debate (Ducoudré et al. 2017)

Finally, the management of these divergences generated the social demand for heterogeneous fiscal policies (fiscal devaluation as CICE affecting the French budget in 2019, transfer to decrease inequality and the social cost of convergences in Spain and Italy). This translated, ultimately into divergence in public debt dynamics, which should be seen as the result of the public management of these three types of divergences.

Although nominal imbalances have been put at the top of Figure 7, these ones should also be seen as the cumulative outcome of real and financial imbalances. In addition, the poor macroeconomic policy mix until 2014 in some European countries (cf. the austerity debate), generated additional diverging nominal trends.

An assessment of the cumulated nominal imbalances can be provided by measuring the amount if internal devaluation necessary to reach an internal equilibrium (ie. to close the about gap), and external equilibrium (ie. to stabilize net foreign asset position, and to have a sustainable current account position).

The following Table is taken from Ducoudré et al (2018). It provides the nominal adjustment (GDP deflator) to reach this definition of a sustainable equilibrium (See the paper for an analytical presentation of the methodology).
Table 1: Nominal adjustments to correct imbalances, 2000-2017 (relative to the Eurozone average, in %)

<table>
<thead>
<tr>
<th>Year</th>
<th>AUT</th>
<th>BEL</th>
<th>DEU</th>
<th>ESP</th>
<th>FIN</th>
<th>FRA</th>
<th>GRC</th>
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</table>


Table 1 confirms well-known trends. German relative undervaluation is 11% in 2017, whereas France overvaluation is 9%. Italy does not see a major price level problem. Spain and Portugal experience a continuous reduction of the overvaluation of their prices. In addition, the dynamics of the imbalances is somehow reassuring. One can observe a global reduction in imbalances in many countries.

The reduction of imbalances after the crisis of 2008 is only very partially the results of market forces. Some very active policy interventions were implemented to correct economic imbalances. Labor market reforms in some countries as Spain and France, contributed to decrease nominal wages and thus unit labor cost, contributing to reduce the price level. (iAGS, 2017 on labor market reform).

The Spanish economy shows that although nominal divergences may be the result of financial imbalances. Some policies directly affecting price and wage level have a solution of these imbalances. Macroeconomic imbalances were restored at the cost of some new undesirable evolutions, such as the decrease in the labor share and increasing inequality.
5. **INSTITUTIONAL IMPLICATIONS**

Some recommendations stem from the preceding developments. They all require some institutional changes: some are minor and could be easily implemented (\#1 and \#2), whereas the others are major (\#3 and \#4).

\#1 *Macroeconomic Imbalances.* These imbalances are monitored during the European Semester and one can say that they are already embedded in the Macroeconomic Imbalance Procedure (MIP). This procedure is indeed useful, but as many economists have acknowledged, it lacks two key aspects (Ragot, 2017). The first one is a clear focus on issues in each country with high externality on other member states, or on the resilience of the Eurozone as a whole. Second, a clear hierarchy of the problems should lead to assessment of key imbalances (compared to less severe ones).

As an example, information in Table 1 should be key to provide a hierarchy of recommendations, as nominal imbalances are, at the end of the day, the main problem in a monetary union.

\#2 *National Productivity Boards.* National Productivity boards (NPB) are independent institutions to analyze productivity and competitiveness. These institutions should analyze nominal divergences, which are an important aspect of competitiveness (as seen in Table 1). These nominal divergences can be understood only in general equilibrium. The reduction of the competitiveness of one country within the euro area is the counterpart of the rise of competitiveness of other countries. As a direct consequence, the convergence of competitiveness (measured by relative factor costs for instance) implies that some high exporter countries see a relative reduction of their competitiveness. Hence, only the relative evolution of competitiveness matters.

The same reasoning does not apply to productivity. An increase in productivity (correctly measured, i.e. taking into consideration environmental issues) is a good thing as it reveals a more efficient use of factors of production\(^{70}\).

NPB’s insights should also be carefully coordinated during the European semester: general equilibrium issues that help identify nominal divergences shall be understood at the level of the Eurozone. Domestic recommendations elaborated during the European semester shall also be embedded in Eurozone-wide estimations, to help identify the spillovers of the recommended solutions to other member states.

\#3 *Euro area stabilization function.* Although the final statement of the Euro Summit of December 2018 limits the scope of a Eurozone budgetary instrument to "convergence and competitiveness for the euro area", the capacity of Eurozone members to dampen either domestic or global shocks must improve. Pro-cyclical fiscal policies during the latest crisis have been doubly counterproductive: first, on GDP outcomes, via large fiscal multipliers, and, second, on the necessity to resort almost entirely on ECB’s policies. The burden of stabilization should be better shared between Eurozone governments and the ECB. A European unemployment (re)-assurance scheme or a European budget would help.

\#4 *ECB’s mandate.* In practice, one can argue that the mandate of the ECB has moved from a single one to a dual and even a triple mandate with the adoption of unconventional measures and the Banking Union. The strengthening of the euro area, most importantly in the case of a new financial crisis, should urge an institutional change in the ECB’s mandate with three objectives – price, output and financial stability-, so that deeds would definitely match words. International examples show that having multiple objectives does not prevent accountability and efficiency.

\(^{70}\) We do not discuss here the difference between factor productivity and total factor productivity, which is should be part of the analysis of National Productivity Boards.
REFERENCES


APPENDIX: THE INSTITUTIONAL FRAMEWORK FOR MONETARY POLICY IN THE EUROZONE

While 11 countries adopted the euro in a first stage (Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain), there were 19 out of 28 EU Member States for the 20-year birthday of the euro. Greece joined in 2001, Slovenia in 2007, Cyprus and Malta in 2008, Slovakia in 2009, Estonia in 2011, Latvia in 2014 and Lithuania in 2015.

EMU institutional provisions, applicable since 1 January 1999, were mainly laid out in the Maastricht Treaty, signed on 9-10 December 1991. The Amsterdam Treaty in 1997 introduced additional provisions, mostly related to fiscal policymaking after the adoption of the euro (2 regulations on the SGP). The Lisbon Treaty in 2007 amended the Maastricht Treaty or Treaty on the European Union (TEU), e.g. by establishing the euro in article 3. The Lisbon Treaty also amended the former Treaty of Rome, now Treaty on the Functioning of the European Union (TFEU), and consolidated the organisational and functional details of the EU.

The European System of Central Banks (ESCB) is composed of the ECB and the national central banks of the 28 EU Member States. It is entrusted with the euro area’s monetary policy whose prime objective is “to maintain price stability” (Article 127, TFEU). Article 127 adds a secondary objective: “without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union”.

The tasks of the ESCB are not limited to the implementation of monetary policy for the design of which the ECB retains full independence of means. They also include foreign-exchange operations, the operation of the payment systems, and contributions to the prudential supervision of credit institutions and the stability of the financial system. In the latter case, it is only after the GFC arose that a Banking Union emerged, with a single supervision mechanism left to the ECB.

All EU Member States must ensure that the ECB and their national central banks are independent from “Union institutions, bodies, offices or agencies, from any government of a Member State or from any other body” (Article 130, TFEU). The TFEU has introduced accountability provisions, e.g. a monetary dialogue between the ECB, on the one hand, and the European Parliament, the Council, the Commission and the European Council, on the other hand (Article 284, TFEU).

The TFEU forbids monetary financing of public debt: “overdraft facilities or any other type of credit facility with the ECB or with the (national) central banks in favour of (…) public authorities (…) shall be prohibited, as shall the purchase directly from them by the ECB or national central banks of debt instruments.” (Article 123, TFEU).

The TFEU also adds a “no bail out” provision that shall entirely limit risk-sharing between the EU Member States: “The Union (or a Member State) shall not be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of any (or another) Member State, without prejudice to mutual financial guarantees for the joint execution of a specific project” (Article 125, TFEU).

While the ESCB is given the task of implementing foreign-exchange operations, it shares with the Council the responsibility of exchange rate policy: “In the absence of an exchange-rate system in relation to one or more currencies of third States (…), the Council, either on a recommendation from the Commission and after consulting the European Central Bank or on a recommendation from the European Central Bank, may formulate general orientations for exchange-rate policy in relation to these currencies. These general orientations shall be without prejudice to the primary objective of the ESCB to maintain price stability.” (Article 219, TFEU)
Abstract

To review the strengths, weaknesses and robustness of the Euro system after 20 years is an enormous project. This paper picks out three of the less usually discussed themes, at least in this context. It focuses on the policy lessons and where design improvements are needed. It makes three points. i) the achievements in the single market are palpable and substantial, but they derive more from investment and productivity growth than they do from trade as such. This carries its own dangers: if the markets are allowed to use low real wages to substitute cheap labour for more expensive capital, these gains will be lost. ii) The Euro area needs to reassess its use of monetary policy, and the need to introduce an explicit financial stability mandate. We find that financial stability and traditional monetary objectives can be achieved without one limiting the achievement of the other because the ECB has new policy tools derived from the regulatory metrics introduced to handle the expanded balance sheets of the post-crisis macro-prudential framework. iii) Fiscal governance remains a crucial issue. The North remains divided from the South over how much coordination (possibly loans or transfers) to allow. But, despite the Euro system being based on the separation of monetary and fiscal powers, the economic consequences of using those powers cannot be separated in practice. More active debt management policies offer a better and more robust way to deal with this difficulty.

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EXECUTIVE SUMMARY

Much work has been done since the Great Financial Crisis in 2008-12 to introduce new prudential and surveillance techniques to protect financial markets, financial institutions and the euro-area banking system from the consequences of excessive risk taking, external financial shocks, globalised financial links or internal destabilising behaviour.

The new prudential system includes a variety of different prudential or regulatory metrics which the ECB or other policymakers can use to ensure sufficient liquidity cover their lending and to underpin the stability and safety of the banks; to influence the growth of credit up or down; to limit excessive lending; to steer interest rates; and to stabilise financial markets (including insurance, pensions) and to damp down asset price bubbles.

This paper picks out three of the less usually discussed themes, at least in this context. It focuses on the policy lessons to be learned and where design improvements are needed in the post-crisis era. It makes three points.

i) The achievements in the single market are palpable and substantial. But they derive more from investment and productivity growth than they do from trade as such. This carries its own risks of course. If the markets are allowed to use low real wages to substitute cheap labour for more expensive capital, these gains will be lost. Policy changes are suggested to reduce that risk.

ii) The Euro area needs to reassess its use of monetary policy, and the need to introduce an explicit financial stability mandate. We find that financial stability and traditional monetary objectives can be achieved without one limiting the achievement of the other because the ECB has new policy tools derived from the regulatory metrics needed to handle the expanded balance sheets of the post-crisis macro-prudential framework.

iii) Fiscal governance remains a crucial issue because it so nearly brought the Euro to its knees after the financial crisis and could do so again. The North remains divided from the South on what to do; one side wanting more policy coordination and the other separation. However, despite the Eurosystem being based on the separation of monetary and fiscal powers, the economic consequences of using those powers simply cannot be separated out in practice. So, there is no avoiding the issue. More active debt management policies (rather than fixed deficit rules, or deficit management) offer a better, more robust long-term strategy for dealing with this difficulty.
1. INTRODUCTION

To review the strengths, weaknesses and robustness of the Euro system after 20 years is a massive project. This paper picks out three areas where there has been trouble in the past and where there are policy lessons and design improvements that could be made:

i) The achievements in the single market are palpable and substantial, but they derive more from investment and productivity growth than they do from trade as such. This carries its own risks: if the markets choose to use low real wages to substitute cheap labour for more expensive capital, these gains will be lost.

ii) The Euro area needs to reassess its use of monetary policy and introduce an explicit financial stability mandate. We find that financial stability and traditional monetary objectives can be achieved without one limiting the achievement of the other, because the ECB has new policy tools derived from the regulatory metrics introduced to handle the expanded balance sheets of the new prudential framework.

iii) Fiscal governance remains a crucial issue. The North remains divided from the South over how much coordination, or loans and transfers, to allow (if any). However, despite the Euro being based on the separation of monetary and fiscal powers, the economic consequences of using those powers cannot be separated in practice. More active debt management policies offer a better and more robust way to deal with this difficulty.
2. **THE GAINS ACHIEVED THROUGH THE SINGLE MARKET**

The title supplied for this paper does not define “the Euro project”. It could be taken to mean the achievements of the Eurozone’s single market together with the single currency designed to support it; or the achievements of the Euro currency system alone. Logically these two components are quite separate - it is quite possible for one to exist without the other71. In fact, the single market construct is concerned with the real side of the economy (growth, job creation, competitiveness, trade balances); the single currency per se is concerned with the nominal side (inflation, the external exchange rate, financial stability and financing flows).

That said, the two components are obviously very closely related via competitiveness, trade creation/diversion and financing flows if nothing else. Consequently, few estimates have been made that attempt to disentangle the economic gains/achievements due to one component from those due to the other. Hence, for the purposes of this paper, I will take both together in this section and the next – recognising that some of those gains may be due to the trading arrangements rather than the single currency itself. Then in Section 4 onwards the focus will be on the strengths and weaknesses of the Euro currency system, and for financial stability.

2.1. **The Gains in Trade from the Single Market, with the UK as an example**

Estimates have been made of the impact of Brexit on the UK, but few for regional economies such as Scotland. They produce UK losses of about 1% to 2% of GDP. These losses are about the same as reversing the gains estimated for membership of the single market when it was first set up. The Cecchini report estimated gains of 5% in GDP over 5 years in 1992. The EU’s post-mortem study completed in 2000 showed GDP gains of 1% by the time the Euro arrived. Later estimates put the figure at 2.15% of GDP in 2006, or 2.13% of GDP in 2014. For Scotland, the Fraser of Allender Institute has estimated the costs of Brexit (gains lost) at about 2.8% of GDP or 80,000 jobs. These gains will not have been distributed evenly of course. So, the corresponding gains in the single market (or losses under Brexit) will hit some sectors, such as manufacturing, and some countries much harder than others depending on their industrial structures and trade patterns.

For the UK, the UK Treasury now estimates (rather late in the day) that UK GDP will be lower by 3.9% after 15 years of Brexit (an average of ¼% lower each year) if the UK government’s preferred plan is used; but 9.3% lower (or 0.62% each year) under no deal at all72. This is costly in terms of losses, given that it does not also account for the potential investment or productivity increases foregone. Interestingly, these calculations do not evaluate any of the compromise models available73.

Scottish government figures for Scotland alone suggest losses of 7.4% after 12 years, or 0.62% per year. This lies half way between the UK government’s proposal and the “no deal at all” solution. So Scotland would appear to be made worse off than the rest of the UK (rUK); although that damage could be less, on UK Treasury figures, with any of the compromise arrangements that are currently ruled out (5% under a free trade association with the EU, 1% in a Norway type deal). Interestingly, the Treasury’s argument is that the smaller losses would arise because Scotland is partly sheltered by the energy sector. I am not aware that London has announced any plans to devolve oil or gas revenues to provide such financial sheltering so it is not clear where this result is coming from. Nevertheless, the argument itself is of interest because it shows how easily the economic outcomes can shift with relatively small changes in the rules governing trade in any new association with the EU.

On these results, by 2030, the loss of productivity improvements explains 60% of the losses between no deal and continued EU membership, restricted migration 26%, but new trade barriers and tariffs only 14% [Scottish

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71 For example, the EU itself has countries that participate in the single market, but not in the single currency. Equally, many countries share a currency with others without sharing a single market regime (Montenegro, Ecuador, Panama, Zimbabwe, the Francophone African countries among others).

72 Figures are UK government estimates calculated as of 2018 [see BBC (2018)]. The Scottish figures that follow are taken from Scottish Government (2018). It may seem odd to include the impact of Brexit on a specific region. But those costs (or gains) are of importance in this context because they may well persuade that region to reconsider or change its relationship with the national economy, especially if the government in question has made an unfortunate or damaging choice in pursuing its interests within the EU (Scotland vs. UK, or Catalonia vs. Spain for example)

73 The Norwegian free trade model; the Swiss sectoral free trade, or the Canadian rules of origin models.
Government (2018)]. Clearly the loss of investment and productivity gains are the major driving factors here, with restrictions on EU migration a distant second. Comparable figures for the UK as a whole are not available. Finally, restricting net migration to zero is said to reduce incomes by 5.4% per capita in the long term.

The reason why the trade impacts are not larger is that EU tariffs against outsiders average 2%-3%. Since the pound has depreciated 15% since the leave vote, the cost of UK exports to the EU has fallen. As a result, UK firms are now reporting increased business. But imports also cost more (around 23% more so far) – raising the prospect of inflation. Since UK inflation is still within its 2%-3% target range, this is not a problem. Hence, reversing the argument across the EU as a whole, there will have been some downward pressure on prices as a result of the Euro project, but rather small.

These estimates from a negative experiment (the loss of the single market) therefore give a pretty good idea of the contributions of the single market component to the Euro project. That said, the estimates so far report the estimated trade effects only. They do not look at the impact of lost investment and consequent losses in output and productivity growth. Hence there is a great deal more to add to these estimates of Brexit costs.

2.2. The Collective Gains to Single Market Membership: the EU View

To evaluate the gains from the single market that accrue directly to an individual country is one thing. But equally important are the collective gains, identifiable at the Euro level, which accrue to individual member countries indirectly. We identify some of the most important ones in this section using the same negative experiment of Brexit, but viewed from the perspective of the collective benefits potentially lost by the EU as a whole.

First, there are strong incentives for the UK to delay negotiating: the longer the delay, the more the pressure on the EU to compromise builds up. One can see these pressures in the German employers’ proposals for a single market type arrangement with work permits; in the worries that the Brexit slowdown puts the stability of Italian banks at risk; the anticipated movement to short time working in German manufacturing plants; and in the worries that the Dutch do not have the personnel, expertise or resources to set up a new customs system for their largest EU trading partner under a “no deal” scenario. In fact, the OECD estimates that the Netherlands will probably lose about 17% of its exports that way [OECD (2018)].

Second, the complexity of negotiating a replacement trade association (where London also lacks expertise, and the EU lacks focus) means that it almost certainly cannot be done in the 2 transition years remaining. From their point of view, better to delay the Article 50 process till a good part of the design work on the agreement to follow has been done.

There are also good incentives on the EU side to dilute the pressures triggered by Brexit, to make space to create agreements on the future form of the EU from within, and to allow financial pressures created by the UK’s withdrawal to subside. The extra costs generated by the Markets in Financial Instruments and Derivatives Initiative 2 is one example; more expensive financial services/financing imposed by breaking up the existing financial markets is another. Fragmented liquidity, reduced access to financing, shallower or narrower financial markets, and a loss in the ability to pool financing and currency risks, is a third. These issues impose costs on everyone (consumers and businesses alike) in the EU or UK, but mostly on the EU side given the depth and greater scope of the UK financial markets. It is estimated that the EU would need additional margins of €77bn to underwrite the same volume of trades as are undertaken today. Disengagement really is a two-way street. It is not surprising, then, that the EU side has from time to time indicated a desire for some degree of compromise. But, again, no firm proposals have materialised – perhaps because the EU is still unclear what it wants to achieve with a new association agreement, aside from limiting damage to the European integration movement.
3. THE KEY ROLE OF INVESTMENT IN THE EURO PROJECT

3.1. How important has investment spending been to the Euro project?

Investment spending plays three key roles. First, it builds capacity: the ability to produce competitively in the future. The specific quantity spent therefore has a magnified effect on output and employment going forward; and investment lost through Brexit would have a likewise magnified effect in lost output/growth. We can build up an example from a region within an existing monetary union. It is hard to put numbers on the investment gains since we often lack comprehensive investment data. But, in the Scottish case, we can make estimates: grossing up the figures for public investment in the same proportion as the UK shows that new investment runs at around 3.3% of GDP annually, a little over half the UK rate (6%). On these numbers, a region such as Scotland could ill afford further losses in investment from Brexit, whether due to a slowdown or to lost passporting. But they also show the investment gains are almost certainly larger than the trade gains in the Euro project.

Second, an inability to passport your services/goods into the EU could be very damaging to investment spending. For obvious reasons we have no data on how much investment in Scotland is made to facilitate passporting. But given that 15.3% of Scottish exports go to the EU (ex-UK), and 63.8% to rUK (surveys say 70% is passported on), the loss of passporting rights directly or via the UK would mean a loss of more than 16% in investment. Scottish government figures are more sanguine (7.7% or between 6.3% and 9% lost over 12 years), the difference being that the loss of passporting exports through rUK is not included.

Third, and most important, investment is the way productivity growth enters into the economy. In fact, productivity growth is the only source for permanent increases in growth and employment (Scotland’s working population is static or shrinking). Hence lost investment for Brexit reasons would inflict greater long-run damage to the Scottish economy than the current weak investment performance because the capacity to incorporate new productivity gains would shrink. Again, this example shows how important investment will have been to the Euro project participants.

3.2. The link to productivity growth

Continuing the same example: Scotland has labour productivity which is 3% lower than the UK. Yet wages are roughly 6% lower. This implies that unit labour costs are 3% lower in Scotland. However, per unit production costs are not lower since otherwise the Scottish economy would have grown faster. It has not. Growth has been consistently slower by ½%-1% per year than in the UK. Hence total factor productivity (meaning the way in which the inputs to production are combined) must be lower in Scotland. Scots work harder than their counterparts, but to less effect because cheaper labour has been substituted for capital and productivity increases. Hence the sustained pressures to keep real wages low. In that case, a sensible policy would be to adopt a two-pronged approach: a general drive to increase total factor productivity with improved technology, capital deepening, better work practices; plus policies that shift the industry mix towards the high productivity activities and those with specialised services, skills, and (internal or external) economies of scale. In short, we need more investment in order to exploit trade and national comparative advantages; not less as would happen if the single market underpinned by the Euro were not there.

3.3. Investing in productivity growth

Digging deeper, Scotland ranks highly on R&D and innovation in the public sector – notably in the higher education sector – but does less well in business and industry. In fact, business R&D spending runs at half the UK rate. And most of it is done by US, Scottish and EU owned firms: very little by UK owned firms, a clear “branch office” problem. This must be a weakness for smaller economies in the Euro area too. In figures, 53% is done by US firms, 25% by Scottish owned firms, 16% by EU firms and 3% by UK owned firms. At the same time, 8% of firms in Scotland by value added are US owned, 31% are non-UK and 61% are UK owned. Taken together, this means that UK based firms undertake just 5% of the R&D or innovation spending, per unit value added, relative to non-

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74 The Scottish government figures are more likely to be correct. Given growth rates 1% slower than in rUK, and an incremental capital-output ratio of 2.5, we should expect an investment loss of 7¾%.
UK firms. This argument generalises to the UK as a whole. The simplest strategy would then be to find ways to bring high productivity activities to the local economy by investing in productivity growth and by encouraging foreign trade and ownership in order to make UK markets and UK firms more contestable (raising competitive pressures). Again, the opposite of what Brexit would bring. Instead, it appears that (by 2030) 60% of the loss of output/jobs under no deal vs. EU membership would be due to an emerging productivity gap; 26% from the loss of migration, but only 14% from trade barriers and market access issues that have taken up so much of the negotiators’ time.

3.4. **The costs of a productivity slowdown**

There is very little work in the existing literature that would allow us to estimate the impact of the loss in productivity growth that one might expect in the absence of the Euro project. This is because the only estimates available typically measure the impact of productivity losses arbitrarily imposed from the outside, rather than from losses that we would expect to be induced (endogenously) by the Euro process itself; and because those productivity losses have been imposed on labour productivity when, in view of sections 3.2 and 3.3 above, they should have been obtained from the effects on investment and total factor productivity. Nevertheless, imposing an arbitrary 5% loss in productivity (a standard assumption), leads to a large negative shock on top of any trade losses such as those in Section 2. That confirms the general argument of the last two sections.
4. **FINANCIAL STABILITY: CENTRAL BANK ASSETS AND THE SUPPLY OF LIQUIDITY IN THE EURO SYSTEM**

Central banks can increase/decrease an economy’s money supply and hence reserve balances, by acquiring or shedding assets. This creates/destroys central bank money by expanding or shrinking both sides of their balance sheets. The obvious policy questions are then how large the balance sheet should be, and the best composition of balance sheet (which assets should be held). Different operational parameters and choices about the assets held can yield the same level of monetary supply and interest rates, but may have quite different impacts on the regulatory metrics and hence on financial stability. The argument here is that, in the “new normal”, these effects need to be recognised and the choices made pro-actively – preferably under some transparent financial stability remit, currently missing from the statutes of some of the world’s leading central banks: in particular, at the ECB (Mersch 2018).

4.1. **The optimal size of central bank balance sheets**

The choice of the optimal size of the balance sheet is not a purely hypothetical issue: as of mid-2018, the US Federal Reserve, the ECB, the Bank of England (BoE) and the Bank of Japan (BoJ) were all contemplating how much, and how quickly, to reduce their asset holdings (BoE, 2018). Their public announcements implied that monetary policy should determine how much QE (Quantitative Easing) is unwound. What is certainly required is that reserves need to be held at levels consistent with policy interest rates: in theory, the money supply should be kept precisely in line with the demand for reserves at any given level of interest rates.

Pre-crisis the size of the central bank balance sheet was seldom debated. Interest rates were set to target the price level and, at that rate, the level of notes that would be demanded and supplied. But given both outcomes, a level of reserves would be supplied consistent with the policy rate. If need be, that level of reserves could be forced by the use of reserve targets and penalty interest rates.

The optimal size of a central bank balance sheet could therefore be calculated by adding the demand for cash and the demand for reserves (together with some other autonomous factors that are generally small). But in practice it is often difficult to do that successfully because the interest elasticities of the demand for both cash and reserves are seldom well determined. Econometric estimates for money demand equations have an unfortunate habit of breaking down as soon as one tries to rely on them for policy making (Goodhart’s Law). And estimating such demand equations in the new normal would be even harder for the following reasons:

- i. structural breaks in the demand for cash, reflecting new technology developments,
- ii. structural breaks in the demand for reserves, reflecting new prudential regulations; and
- iii. changing trends in the reserves data as a result of QE.

Consequently, it is likely, for the reasons given, that the level of reserve balances and optimal balance sheet size will remain higher than pre-2008 levels for some time, even if the demand for cash by the public falls somewhat.

Second, it is also possible that, in the new normal, the precise quantity of narrow money no longer matters so much for setting monetary policy. In principle, any excess money balances ought to be inflationary. But very large expansions of the narrow money supply over the past 10 years, in many large developed economies simultaneously, did not result in high inflation (even if they reduced the threat of deflation). We can partly explain why that would be the case – the extent to which the bank lending channel of QE was offset, first via the financial crisis itself and then by higher liquidity requirements. But there are two further points to make.

- i) QE puts base money into circulation in place of purchased assets. This is a powerful mechanism in a liquidity crisis when markets are dysfunctional: liquidity is precious and asset prices would otherwise be at a discount. In such circumstances it may not be possible, or even cheap to obtain base money in the market itself even when

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75 This section and the next follow the analysis in Hughes Hallett and Fisher (2018).
offering to repo out the most liquid securities such as US Treasury bills. To make the point, the sustained peaks of dysfunction were in 2008-9 after the collapse of Lehman Brothers and AIG, and again in 2011-12 as the Euro-area crisis unfolded.76 These, of course, were the periods when the Federal Reserve and BoE were undertaking most of their QE operations. In the US, some markets also had to adapt to the negative impact of the Dodd-Frank regulations on market-making liquidity.

As market conditions have stabilised again, it is likely that this impact of QE on financial markets has diminished considerably – although no reliable or precise quantification is available to prove it. It is also possible that the continuing stretches of QE in the US and Euro area have become increasingly ineffective as market functioning has improved.77 These improvements in market functioning, albeit not back to unsustainable pre-crisis conditions, gives a prima facie reason to suppose that the sale/maturing of QE assets will not have an equal and opposite effect to their purchase during the crisis period.

ii) The reason that the monetary policy imperatives have weakened in the new normal is the assertion that monetary policy will only have short run or second-order effects on real outcomes. However, it is likely that real interest rates today are in fact driven by real factors, in particular by sluggish productivity growth in the developed world, and less by monetary policy. If QE unwinds slowly, perhaps by allowing assets to roll off as they mature78, then that process is not likely to have a large impact on real interest rates.

Overall, one might reasonably argue that a wide range of reserves balances is now consistent with any particular policy interest rate. As a result, the financial stability implications of balance sheet size have become relatively more important: the supply of narrow money affects the ease with which banks acquire the high-quality liquidity asset (HQLA) quotas needed to meet their liquidity cover ratio (LCR) requirements.

The challenge here, of course, is that the actual size of central bank balance sheets in this regime need to be determined by trial (and possibly error). If QE is unwound and banks see their HQLA ratios shrinking too far or too fast, one can expect strong signals back from the market as the price of liquidity starts to rise – being bid up for deposits for example. To the extent that this is consistent with the intentions of monetary policy, it would not be a problem. But if the monetary base is reduced too far then it could lead to volatile and excessive changes in market interest rates as banks struggle to meet their regulatory requirements.

4.2. Excess cash or shortage, and the ability to influence market rates

A generic decision for a central bank, in the new normal or in crisis, is whether to operate with an ex ante excess of liquidity or to allow a shortage. At the margin, moving from one to the other simply requires a slightly larger or smaller balance sheet. The main consequence is whether the central bank ends up supplying or draining liquidity in order to adjust to the ‘right’ level.

Direct asset purchases have long been part of the tool kit used to adjust the size of a central bank’s balance sheet. Conventional open market operations can take the form of either outright purchases/sales or collateralised lending/deposit facilities. Pre-crisis, it was common for the major central banks to operate their balance sheets in such a way as to maintain a general but small ex ante shortage of base money on a regular basis – which they then offset by routine lending to meet the demand for reserves exactly.79 These short-term operations were generally undertaken at the policy rate so that market rates would be set, or strongly influenced by the policy rate.

Under this shortage approach, to force a precise quantity for reserves, commercial banks might be required to meet target levels for their reserve accounts, at least during a ‘reserve main-tenance period’ (typically between rate-setting meetings). Once the target level for reserves is known, any shortage can

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77 The QE fatigue argument in Hughes Hallett (2017). That paper details reasons why we should expect QE fatigue.
78 This is the publicly stated policy for a number of the purchase operations undertaken by the ECB; one reason being that selling large quantities of less liquid assets would likely cause severe disruption to those markets.
79 Alternatively, one could operate by buying short-term bills at close to the policy rate, rather than making short term loans. This is not a significant distinction for this paper.
be estimated and supplied by routine lending, subject to a few small ‘autonomous factors’ – usually other banking flows across the central bank balance sheet. A wide variety of related operating procedures is then possible. For example, some central banks operate in the markets every day (e.g. Sweden) and others once a week (e.g. BoE, ECB).

It is also possible to operate with a small amount of excess liquidity. This would be appropriate, for example, where the level of foreign exchange earnings is high and an exchange rate target is maintained as a nominal anchor. If those foreign currency earnings are converted into domestic currency there will be an excess supply of domestic liquidity. To prevent the risk that this excess liquidity becomes inflationary, the central bank will need to drain that liquidity through a deposit facility in a way that also allows the central bank to set a base interest rate. In effect, this is short-term sterilisation, managed internally without the risks or complications of buying and selling in the markets for short-term bonds.

A hybrid approach, combining an ex ante excess supply within a system designed for a shortage, is also possible. When operating with a shortage, it is normal for the central bank to offer only as much liquidity as is needed for the system as a whole and for banks to bid for their share. The banks can then trade among themselves so that each and every firm’s requirements are met. But in a crisis, when the inter-bank market may not function well, this approach is problematic. An unlimited amount needs to be offered by the central bank with ‘full allotment’ (every bidder gets exactly the cash they need at a pre-determined rate). This was the approach taken by the ECB in 2007 when the first signs of crisis appeared, but it contains its own risks of lax monetary conditions or inflationary tendencies.

4.3. **Implementation: A corridor or floor system for interest rates?**

Although central banks can set a policy rate to influence market interest rates, in a market-based economy they can never be sure that market rates will follow the policy rate precisely, even at short-term rates. So arrangements are made to try to guide market interest rates to stay close to the policy rate (Fisher, 2011). Maximum and minimum rates can then be set to define a ‘corridor’ around the policy rate to limit volatility. These rates can be set by offering special facilities for commercial banks to borrow or deposit overnight, such that there is never an incentive for commercial banks to operate at rates above or below the corridor bounds.

Under QE, where excess base money is created by the authorities, most central banks elected to switch to a ‘floor’ system for rates, rather than a corridor. At the ECB, the marginal deposit rate *de facto* became the policy rate, displacing the higher refinancing rate at which the ECB offers to lend reserves. In the new normal, central banks can decide which of these operating systems they prefer. If the demand for reserves remains high because of liquidity requirements, then short rates need to stay close to the policy rate because the regulatory requirements set a minimum level of cover. For tactical reasons most firms would hold an excess of HQLA over that required by their LCRs to avoid the regulatory consequences of falling below it. Commercial banks would then not be constrained to go into the market immediately to borrow when faced with an unanticipated outflow. Nor would commercial banks lend in the market at less than the policy rate, if they can earn the policy rate without limit on their reserve balances.

4.4. **Access to the central bank’s balance sheet**

If central banks allow LCRs to be met principally by reserves, possibly with a default to ex ante excess, then their balance sheets will *remain* expanded; in which case complicated rate-setting systems would neither be necessary, nor attractive. To continue to operate with excess base money and a floor system for interest rates, will probably work well to guide market rates close to the policy rate.
A simple floor system does raise other challenges however. If procedures are chosen that require a central bank to be precise about the quantity of reserves, then it has to take account of any autonomous factors which wash over its balance sheet on a daily basis: e.g. deposits by non-banks such as government entities. Under a shortage system, any fluctuations in domestic currency need to be tightly monitored and controlled so that the shortages are precisely known. Access to the central bank’s balance sheet – including by government accounts – is then a potential disturbance and, as such, access needs to be curtailed.

Second, a floor system relaxes the technical necessity for the central bank to set a target value for the precise aggregate amount of reserves they wish to see held by banks. Instead the market can be left to decide. The central bank can discover whether it has supplied approximately the right amount of reserves by observing the market rates that emerge. If it wishes, it could even vary its balance sheet to see how sensitive demand really was.

A corollary of this arrangement, possibly unwelcome, is that central banks may find themselves under pressure to take deposits from, or lend to, a wider variety of institutions. Given a context in which non-banks have become more influential in providing intermediary services or have become a systemic risk, this could become an important consideration. No longer would an appeal to ‘monetary policy’ allow a central bank to deny such proposals, and the pressure for change could become uncomfortable. A new policy approach could be needed to determine exactly what systemic risks the central bank balance sheet could and should be asked to mitigate, or what economic benefits an active use of the balance sheet could bring. Answering such questions would then determine what size the balance sheet should be.

4.5. The composition of balance sheet assets

We have argued that, even if monetary policy remains the principal determinant of the size of the balance sheet, that choice will affect financial stability. A large balance sheet would facilitate the HQLA requirements being met by reserves. A smaller balance sheet might force commercial banks to buy more HQLA in the market. But the size of the balance sheet is not the only factor affecting the outcome for liquid asset holdings and funding ratios. Asset composition may be even more important.

To illustrate the point, we take the BoE as an example. As of now, it could continue to hold a large portfolio of gilts to maintain reserves at a high level.° Gilts are HQLA. If the BoE sold some of its gilts, reducing the reserves supplied and hence its balance sheet, the total quantity of HQLA in the market would be unchanged. But if commercial banks then end up holding large portfolios of gilts or other long-dated liquid assets instead of reserve balances, that would increase the market risk held on their balance sheets. And that could add to the risk of financial instability. That is unlikely to be desirable for either the ECB or firms. Alternatively, commercial banks could optimise risk vs. return across all the HQLA available which would likely make them want to hold credit assets (loans), or other short-term liquid securities, rather than gilts. So simply swapping gilts for cash is unlikely to have much effect in practice. But other choices certainly could.

One alternative for the ECB is to keep the size of its balance sheet unchanged, but alter the composition of the assets purchased. Suppose that the ECB replaced its gilts with a portfolio of purchased illiquid assets which were non-HQLA, leading to portfolios of loans (credit easing rather than just monetary

° Technically the BoE’s QE gilts are held off balance sheet in a special purpose vehicle (SPV). On the balance sheet is a loan to the SPV to finance those purchases.
easing). Since they were on the balance sheet of the ECB, this would be equivalent to an injection of HQLA – hence liquidity – into the system: a powerful policy tool.

There are other options. Suppose the ECB sold all its QE assets and carried out direct large-scale lending instead. That would maintain its balance sheet and reserve balances, and hence HQLA, at a similar level. But relying on short-term funding on a large scale from the central bank could represent a significant replacement risk to the individual institutions; they would have to continually rebid for their needs even while market conditions were changing. The funding that commercial banks receive indirectly from central bank asset purchases is in practice likely to change slowly and be more predictable.

However, there are also risks associated with the purchase of large quantities of assets. Buying government bonds can be thought of as a credit risk-free strategy for a central bank; but it does not leave the central bank completely free of risk. First it ties the central bank to uncertain fiscal outcomes which may affect future borrowing conditions. And if a serious possibility of government default does emerge then the central bank puts its independence at risk. Moreover, buying government bonds implies a one-off monetary financing of government expenditure – ruled out for the ECB under the Lisbon Treaty. The obvious solution, to get government indemnities for its asset purchases, may be ruled out under the Lisbon Treaty on similar grounds (although it would actually represent government funding for monetary purchases).

In sum, buying private sector assets outright or making private loans in the new normal is not an attractive proposition – especially for the ECB where political constraints and absence of a fiscal union in the EU make it harder to get agreement or set up the necessary support mechanisms.

4.6. **Collateral policy**

To the extent that a central bank chooses to use lending or draining operations, the immediate question becomes what collateral it should accept or offer. By changing the eligibility of less liquid collateral, a central bank can influence commercial banks’ liquidity metrics. Such a policy of ‘Eligibility Easing’, a variant of credit easing, has been suggested by Huertas (2018). It reflects what some central banks actually did in the crisis.

If the central bank takes non-HQLA as collateral, as the ECB appears to do at the margin, then it offers a powerful liquidity transformation that would directly impact the LCR measures. Most central banks would be wary of doing that for two reasons: First because it increases contingent credit risk and interest rate risk in the markets. The use of appropriate haircuts could equalize the risk to the central bank to a large degree, although the haircuts may become both large and difficult to calculate correctly given the uncertainty of future financial events.

A downside of large haircuts for very illiquid collateral is that the larger the haircut, the more conservative it needs to be to ensure protection and the less support is offered. Against that, collateral which is completely illiquid in the market has virtually no opportunity cost for the commercial bank. So haircuts will not deter commercial banks from trying to use as much illiquid but eligible collateral as they can in order to get more HQLA in return.

A second consequence of a very broad definition of collateral eligibility (in normal times) is that commercial banks would be less independently liquid and less resilient than they appeared. It is also likely to distort markets by reducing illiquidity premia, and hence price differentials between assets that were both eligible and traded, whilst increasing demand for and supply of them. The central bank would then be encouraging growth in markets that only exist on account of their own collateral policy. Some might argue that this would be a positive outcome. But unless done to offset some other externality, it carries risk and increases market distortions.
The distortions can be offset by introducing rules for lending against illiquid collateral, in which three different collateral sets are defined with varying liquidity characteristics against which different quantities and prices can be lent. Index-Linked Term Repo operations are conducted in which any of the three collateral sets can be used, with different bid prices allowed in each case. Greater quantities are offered automatically for less liquid collateral as commercial banks bid up prices to be allowed to use it. This was based on a design by Klemperer (2008). It is technically complex to implement but has functioned reasonably well in the BoE since 2010.

In contrast, the ECB is currently offering to lend “full allotments” against a very broad collateral set, including some non-HQLA (where the risks are born by the National Central Banks). The ECB’s collateral policy was originally determined by the need to treat all euro-area countries equally (Mercier and Papadia 2011). To make that work led to a very broad eligibility regime, much which was relatively illiquid (or was so; a degree of liquidity being endogenized by central bank acceptability). Since then, emergency measures have expanded the eligibility definition even further. Given the risks involved, this may not be the safest way to operate.

Now that more normal conditions have returned, the ECB needs to review whether it wishes to retain such a broad collateral set in the future. The pressure to use less liquid collateral in ECB operations will inevitably increase when the ECB reduces its supply of reserves.

4.7. **A Summary**

In summary, there are a number of things that the ECB should take into account to improve the performance of monetary policy, and reduce the risks in those policies going forward:

i) Adopt a clear mandate for safeguarding financial stability. The Banking union does some of that, but is incomplete in respect to requiring macro-prudential oversight and regulation.

ii) Given the wide range of conventional policy settings consistent with the same objectives for monetary policies, and the range of unconventional policies that could be applied, the twin goals of monetary policy and of financial stability can be achieved without one damaging the other.

iii) Monetary policies will need to operate with expanded balance sheets, not revert to their pre-crisis status quo ante levels

iv) To support more careful regulation in a world of greater volatility, the ECB should operate a corridor, or at least an interest rate floor when setting monetary policy. It also has a choice of operating with a default position of an ex-ante shortage or excess liquidity, but **not** a mix of the two. Excess liquidity seems more suitable for the Euro area.

v) The ECB could usefully review its policy on obtaining government indemnities in the loan programmes it operates (they are not really a target of the Lisbon Treaty).

vi) It should likewise review its policy on collateral eligibility for such loans.
5. DEBT MANAGEMENT

Commitment may induce some implicit coordination between monetary and fiscal authority, preserving their independence. But how to commit fiscal policies to a consistent set of objectives in such an environment remains a difficult question. It is important because, as Dixit and Lambertini (2003) point out, monetary policy cannot be committed with credibility if fiscal policies cannot be committed at the same time.

Persson et al. (2006) provide a theoretical answer to this problem. Optimal fiscal to monetary consistency can be achieved together if each government arranges to leave the economy with a debt maturity structure that exactly matches the marginal benefits of surprise inflation with its marginal cost. That suggests fiscal restraints based on debt targets would be the answer: the key elements being the stock of debt and its structure. That is a quite different proposition from placing strict limits on the size of deficit, as Europe’s Fiscal Compact does. We need to make sure that fiscal leadership, with debt targets or the equivalent, will provide the dominant regime.

The literature that analyses such regimes starts with Dixit and Lambertini (2003) and Hughes Hallett and Weymark (2007) who allow policymakers to have conflicting objectives, state contingent rules, uncommitted policies, and the possibility of leadership by one player. They provide welfare and performance comparisons based on numerical simulations. Fiscal leadership is usually superior – although that result depends on how expectations are formed; on the degree of fiscal commitment; and the degree of conservatism at the central bank.

The question is, do these results also hold in general? It is important to demonstrate if they do because fiscal leadership provides a practical way of pre-committing fiscal policy, given a committed monetary policy: and because fiscal commitment allows a degree of implicit coordination between fiscal and monetary policies, even under conflicting goals.

5.1. Fiscal leadership

Normally we draw a distinction between managed long-run policies and short-run policies based on automatic stabilizers. This necessarily gives fiscal policy a leadership role in the sense that it sets the long-run perspective, which will be the one in place when the short-run policies (fiscal or monetary) act. That in turn allows fiscal and monetary policies to be better coordinated, without either losing their ability to act independently.

Formally, we arrive at a Stackelberg game whose solution lies between the discretionary, but Pareto superior, cooperative solution, and the fully independent but non-cooperative outcomes (Figure 5.1); these two cases in fact contrast the mandates of the Fed and ECB respectively). In this fiscal leadership/Stackelberg view of the economy, fiscal policy is designed to achieve certain long-term objectives: low debt, adequate public services, social equity, economic efficiency, and sustainable public finances in the long term. The income stabilizing aspects are left passive, to act through the automatic stabilizers. Monetary policy can then be used to take care of any emerging inflation or stabilization problems that remain.

In reality, fiscal and monetary authorities have to balance long- and short-term goals. Although they share some of them, they typically apply different priorities because they have different institutional responsibilities. Moreover, they act independently and at different times (asynchronously).

We now distinguish: i) Discretion/no cooperation; ii) Fiscal leadership; iii) Monetary leadership; iv) Full Coordination. In addition, we assume that stabilisation is costly for both fiscal and monetary policymakers since it implies a deviation from the long-term targets; that markets cannot immediately
adjust to unexpected disturbances because prices are sticky; that the central bank is inflation averse, but the government more deflation averse.

Given these assumptions, possible interactions are illustrated in Figure 1, where policy outcomes are defined in inflation–deflation space (more deflation, an increasingly negative output gap, is a move to the right; but more inflation an upward movement).

Figure 1: Policy outcomes under different institutions in inflation-deflation space

Clearly, the leadership equilibria (M and F) allow fiscal and monetary policies to be better coordinated – but without either losing the ability to act independently – between the cooperative solution (C) and the independent but non-cooperative outcomes (N).

The advantages of leadership over the Nash solution are clear from the figure. The rationale is that leadership implies a sort of implicit coordination between the two policy makers. The outcome is that F is superior to M (justified below). This is the kind of fiscal regime recommended by Taylor (2000). By forcing the focus onto long-run objectives, a measure of pre-commitment is imposed on fiscal policy (and thus a potential for electoral punishment if the policies should fail) because governments naturally wish to see their own goals achieved. But the regime remains non-cooperative. There is no incentive to renege on earlier plans, in the absence of any changes in information, since the expectations of future behaviour are generated on the basis of what each agency would do best in their own interest – not as a result of announcements imposed by either player. In short, expectations are generated internally. Hence, these policies will be sustained by the government of the day.81

Of course, either policy might be chosen to lead. But fiscal policy leading produces better outcomes: first because its goals are long term, second because monetary response are already committed. This is evident from Figure 5.1, and for the following reasons.

First, the two reaction functions in Figure 5.1 form an acute angle as shown. This depends only on the slopes of the aggregate demand and supply functions underlying the diagram. An obtuse angle would imply that increasing deflation would cause one of the players to perversely increase inflation.

Second, because the central bank is the more inflation averse player, its preferences have to lie to the left and lower in the diagram. That means the bank’s monetary reaction function is necessarily lower,

81 Stackelberg games, with fiscal policy leading, imply subgame perfection (hence time consistency: Başar 1989) since the leader knows the follower will retaliate according to the follower’s preferences if the leader were to deviate. Commitment is therefore assured by the independence of the monetary authority in a repeated game.
and the fiscal leadership Stackelberg point closer to the (Pareto optimal) contract curve than the monetary leadership point. Hence fiscal leadership and long-run objectives, such as debt targets, are the mechanism to provide long-run commitment.

5.2. Debt targets as a commitment device

Why would debt targeting be the best way to implement this approach? The crucial point is that debt, unlike a deficit, is a stock not a flow. That introduces persistence in the target variable, especially in countries with high levels of public debt. Debt targets can therefore be used to anchor fiscal policies to a path that ensures sustainable public finances.

A debt ceiling, with a debt target set lower, and a fiscal adjustment rule around that target value, therefore has several advantages.

First, it introduces flexibility in policymaking: the pro-cyclicality of hard targets that must be achieved on an annual basis is removed, together with the tendency of rigid targets to block structural reforms when the latter have short run fiscal costs that violate the limits on deficit imbalances or solvency.

Second, because a debt target is a stock and persistent, a debt rule gives the policymakers an incentive to obey the rule: first, to preserve some freedom of manoeuvre in the future; second, to save at the top of the cycle (saving for a rainy day) and remain below the ceiling in future periods; third because persistence in the target gives policymakers the space (where the temptation to follow a more relaxed path is clearly present) to create the reputation, credibility and commitment to future policies that we need.

5.3. Fiscal Rules, debt targets and sustainable public finances

Economic research has examined how benevolent policymakers might use fiscal policy to respond to economic shocks that affect government debt levels, directly and indirectly, while restoring the main macroeconomic balances. It highlights the fact that policymakers must trade off the short-run costs and benefits of fiscal austerity or expansion vs. the long-run benefits of lower, more stable debt.

The striking result is that this balance is rather fine. It is optimal to use fiscal policy to stabilize the economy and debt at a certain target level following a shock, but returning debt to its pre-shock level should be undertaken gradually and carefully. However, this result describes policies that depend on a benevolent policymaker who is able to make credible promises for future behaviour. In the real world, fiscal policy is implemented by governments who face the constraints of the political process. This has resulted in “deficit biases” which account for rising government debt levels in many economies.

Recognizing the costs of such biases, many politicians have sought to tie their own hands by adopting fiscal rules which typically require fiscal consolidations in the short time. However, since such rules violate the need for gradual adjustments, they often get violated as soon as they start to bite. The result is that these rules have little credibility.

The most common rule is a balanced budget rule such as the European Union’s fiscal compact and stability pact, which can be applied to nominal or structural deficits. However fiscal deficits and debt are endogenous; they are driven by the state of the economy as well as by policy decisions. Governments only have imperfect control. This has consequences. Strict deficit rules are often violated,

---

82 Leith and Wren-Lewis (2013) show that the costs to society of not being able to promise to stabilize debt levels gradually can be large; Demertzis et al. (2004) show that political constraints will typically bias fiscal deficits up and worsen the other performance indicators, biases that become all the more severe when voters react to the state of the economy.
even in the absence of irresponsibility or indiscipline by policymakers, and especially if a full correction is required in each year.

To get around this by monitoring structural deficits instead (deficits averaged across the cycle) has its own problems given the difficulty of measuring potential output accurately (necessary to measure cyclical budget deviations). In fact, given delays, errors and revisions in the underlying data, to do so in real time (necessary if monitoring is to be useful) introduces so many errors that there are likely to be as many false alarms (*false positives*) and missed alarms (*false negatives*) as there are correct signals. Again, rules of this type will have little credibility.

However, there is an alternative that preserves the principle of gradual adjustment. The steady state level of debt from a rule designed to maximize the rate of economic growth (say) gives us an optimal debt target. It depends on the marginal product of public capital.83 Sustainability can be secured by applying a primary surplus rule (before interest) in which the average primary surplus or deficit is set *above* the growth-adjusted level of interest payments. The degree to which that primary surplus/deficit exceeds this threshold determines the speed at which we return to the debt target, and hence the debt ceiling that can be tolerated before collapse. Because the target is a stock not a flow, this produces a *structural* balance rule without calculating accurate cyclically adjusted deficit figures. The space between the debt target and the highest permitted value will then allow debt ratios to rise in the bad years, but promote an automatic return in good years.

To be specific, an economy’s debt burden will evolve according to the usual dynamics:

\[
\Delta d = p_d + (r - g)d - \Delta m
\]

where \(d\) represents the public debt-to-GDP ratio at \(t\) (\(\Delta d\) denotes its change per unit of time); \(p_d\) is the primary deficit (a deficit when positive); \(r\) the average real rate of interest charged over the different maturities making up the debt burden; \(g\) the real rate of growth; and \(\Delta m\) the change in the money stock to GDP ratio at \(t\).

If debt reduction is not to result in inflation, the central bank must rule out undue expansions of the money supply:

\[
\Delta m = 0
\]

If that is done, the debt ratio will stabilize (\(\Delta d = 0\)) when:

\[
[p_b = (r - g)d]
\]

where \(p_b = -p_d = (T - G)/Y > 0\) is the primary surplus, \(G\) is government spending net of interest payments, and \(T\) the total government revenues.

Thus, if the average rate of interest on the debt burden is greater than the rate of growth (\(r > g\)), the government must run a primary surplus to stop the debt burden rising and a larger one than that to reduce the debt. Second, these primary surpluses need to be bigger, the larger is \(r > g\) or the greater is the initial value of \(d\). But if \(r < g\), the government may run a primary deficit as long as it is not larger than the term on the right of [5.2].

Notice that the European Union’s Fiscal Compact does not automatically satisfy [5.2] because it imposes a fixed numerical limit on the gross deficit in each period; and because it implies limits on the net budget (\(p_b\)).

Hence, the EU’s balanced budget rule is neither necessary nor sufficient to stabilize the debt ratio. In good times (\(g > 0\)) a balanced budget rule will appear to be too tight; debt reductions require only a gross budget above a certain threshold. In bad times (\(g < 0\)), it will be too loose; debt will rise despite the discipline and austerity applied. Hence if we have been able to define and identify an optimal level

---

83 For a fully articulated proof and estimates for the OECD, see Checherita et al. (2014).
of debt $d'$ to maximize growth, the best strategy would be to create a set of fiscal policy reactions that permit the primary surplus to be lower than the right of [5.2] if current debt is below its optimal value ($d < d'$); but force a primary surplus above the right-hand side of equation [5.2] if $d > d'$.

### 5.4. Temporally separated objectives and asynchronous games

Do the results in this section still survive when policies are no longer enacted simultaneously? Monetary policy usually offers more and more frequent opportunities to intervene because there are shorter design and recognition lags (the decisions do not have be debated and voted on by national parliaments), and there are notably fewer data revisions – meaning fewer errors to be corrected from real time decision making. Fiscal policy, by contrast, does have to be approved by national parliaments and, with longer policy horizons, data errors in real time decisions have to be corrected. There are therefore clear incentives to smooth spending and tax revenues to support that spending over time. Equation [5.2] only shows the single period correction case; the multi-period solution with spending/tax smoothing is more complicated but produces similar looking results.

Suppose we have two players, both on fixed but different decision periods. One can intervene only once every five periods, the other once every three periods. If they both start together, the cycle of interventions will be repeated every 15 periods. If there were no cost to intervening, no discounting of future outcomes, and if the gains to being in the best state at the end of each cycle are large compared to other periods, then the short-term player (the follower) will discipline the player with long-range objectives because the follower can always intervene one last time (without retaliation) before the current intervention cycle ends and is repeated. Knowing this, the leader will not try to deviate even at the start of the game.

It is easy to see that this discipline result will still hold if the costs of conflict in the interval, plus the victory gains from the follower’s last intervention, exceed the losses incurred if the follower were to surrender from the start. However, there must be a minimum period for which the follower is able to impose his gains to make this inequality hold. If that minimum is reached, the leader will not deviate even in the first period. Likewise, there is a reverse calculation to show the maximum period for which the leader can dominate the follower.

Fortunately, with an infinitely lived independent central bank, and day-to-day government responsibility for debt management, we are above the minimum for the bank and below fiscal policy’s maximum.

---

84 This represents the fiscal space proposition put into action: see Checherita et al (2014), Figure 1.
86 The formal proof for this case is given in Hughes Hallett et al. (2014).
6. **CONCLUSIONS**

The Euro project has made a lot of progress over the past 20 years of its existence, and for much of that time against a background of as an unpromising set of economic circumstances as we have seen in a century. This, in itself, implies a certain resilience or robustness. But in the new era where new rules of behaviour apply, there is still some easy design work to be done to ensure that the project moves from being a “fair weather” system to an “all weather” regime – particularly with respect to financial stability.

a) The single market part of the project has shown solid, if not spectacular, gains. But, for a stronger underlying performance, more attention needs to be paid to designing policies that would boost investment, (TFP) productivity in particular, and real wages.

b) To ensure a free and stable flow of financing and investment funds, the ECB needs to adopt a mandate for financial stability and the prudential policies that go with it. These policies would act to support conventional monetary policies, not as a substitute for them.

c) Stabilising public finances is crucial to further progress in the Euro-zone. The way to deal with that is to pay greater attention to debt management. Several suggestions are made for how that can be done, but the shift of emphasis from deficit to debt management in the recent Italian budget negotiations is a useful, if small step forward.
REFERENCES


EURO project, 20 years on

A critical assessment and the road ahead

Abstract

20 years have passed since EURO was first introduced in 1999. Several restructurings and crises later, the Monetary Union remains, but in a different shape and size to when it was first introduced. Against this background, the current paper critically explores the following dimensions of the Euro Area project: Credibility and stability, economic performance, uneven developments, and the main avenues/challenges for the project in the years to come. The document includes two comparative aspects: a domestic dimension from a historical perspective and a global comparison in terms of economic and monetary performance to other advanced economies during the past two decades. This document was provided by Policy Department A at the request of the Committee on Economic and Monetary Affairs.
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<th>Description</th>
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<tbody>
<tr>
<td>CAD</td>
<td>Canadian Dollar</td>
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<tr>
<td>CB</td>
<td>Central Bank</td>
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<td>CHR</td>
<td>Chinese Rimmibi</td>
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<td>EA</td>
<td>Euro Area</td>
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<tr>
<td>EC</td>
<td>European Commission</td>
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<td>ECB</td>
<td>European Central Bank</td>
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<td>EMU</td>
<td>European Monetary Union</td>
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<tr>
<td>ESRB</td>
<td>European Systemic Risk Board</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>HICP</td>
<td>Harmonized Index of Consumer Prices</td>
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<td>JPY</td>
<td>Japanese Yen</td>
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<td>MU</td>
<td>Monetary Union</td>
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<td>QE</td>
<td>Quantitative Easing</td>
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<tr>
<td>Trojka</td>
<td>EU rescue mission involving the European Commission, the ECB, and the IMF</td>
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<tr>
<td>UMP</td>
<td>Unconventional Monetary Policy</td>
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<td>USD</td>
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EXECUTIVE SUMMARY

20 years after the EURO was first introduced, the economic and financial landscape looks very different. The euro area has undergone geographical expansion, two severe financial crises, economic stagnation, and a deepening. From the initial 11 members in 1999, the area has expanded to the current 19 members. Moreover, realizing some of the shortcomings of the initial monetary union, the project has deepened by including a (weak) fiscal backstop, extended capacities for the European Central Bank, (imperfect) banking union, and a capital markets union in progress. However, these changes have occurred during very difficult times involving a severe financial crisis, several sovereign debt runs, and a stagnating growth in income.

Against this background, the time has arrived to critically assess the monetary union and explore in detail some of the dimensions of the euro project. In particular, the current paper will focus on: credibility and stability; economic performance; and the main avenues and challenges ahead. Credibility and stability of the single currency in relation to its international dimension – e.g. in terms of exchange rate movements, global payment currency shares, and in terms of capacity to deliver stable prices. Economic performance of the monetary union in terms of long-term per capita GDP growth compared to other advanced economies such as the US, Japan, UK, or other EU member states outside of the euro area. Here, heterogeneities inside the union as well as uneven developments inside and outside of the euro will also be considered. The paper will also briefly lay out the main threats, challenges and opportunities for the Euro project in the years to come.

Euro has delivered a stable currency, both in terms of exchange rate and price stability target. The effective exchange rate against a basket of major currencies (including USD, GBP, JPY, CHR, CAD) has, since the introduction of the Euro in 1999 been more stable than at any point since 1970. It has also fallen since the introduction of the Euro. Moreover, gap in nominal versus real effective exchange rate has reduced, pointing towards an increase in purchasing power in the EMU. With respect to inflation, the ECB has been successful in maintaining it close to its 2% target, although over recent times it has consistently undershot it. Price levels, on the other hand, have indeed been more stable and grown more moderately since 1999.

Empirical evidence shows that Euro has partially succeeded in achieving the goal of international currency status. A new ECB index of the euro’s international role – computed as a simple arithmetic average of the share of the euro across a broad range of indicators was at the end of the sample period in 2018 lower than at the start of the Euro project. While its role increased at the early stages of the Euro, it reverted starting from the sovereign debt crisis. Yet, a snapshot of the international monetary system in 2017:Q4 shows that Euro remains the second most used currency, both for monetary and financial settlements. It’s strongest position is in the global payment systems, and weakest in the foreign exchange market. Despite the second position of the Euro, the distance to the USD remains large, and represents on average a third of its volume.

In terms of economic performance, the EA economy enjoyed the longest period of growth around the time it was formally established. If you compare to earlier episodes of upturns, the 15-year period between 1996 and 2011 was the longest without any interruption or negative business cycle shocks. However, this smoothness came at the cost of slower growth compared to previous historical episodes. Since the establishment of the Euro and until the subsequent recession in 2011, GDP grew by 30%. In contrast, during the previous expansion, GDP had grown by 40%. Expressed differently, the 30% growth rate had been achieved in only 9 years during the previous upturn (1984-1993).

At the same time, the degree of disparity and uneven distribution in economic performance has indeed increased over time inside the EMU. The North, represented by Germany, France, Netherland, Belgium,
Finland, and Austria remain at the core throughout, sharing a number of similarities. They experienced low inflation all the way through and more recently, they share similar low long-term interest rates. On the other hand, countries such as Spain and Ireland have increasingly distanced themselves from the core. They were closer to the core at the launch of the single currency, suggesting an idea at the time that they might converge towards it, but by 2013 the distance had increased considerably. Italy made a U-turn during this period, evolving from a country closer to cluster 1 to a country in cluster 3. Even within the cohort of the newly joined smaller member states, there is significant heterogeneity. Countries that are geographically closer to the Northern core managed to perform better and climb the cluster ladder compared to those further away (Grancay, et al., 2015). Buti and Turrini (2015) argue that the post crisis challenges of managing divergence were exacerbated by the lack of structural economic convergence in the preceding years.

While it is hard to speculate on the precise road ahead for the Euro, we look at a number of opportunities and challenges ahead. This includes the recent policy packages (fiscal, structural, financial) and the banking and capital-market unions. We also propose measures to boost Euro’s international status, both as an asset and reserve currency. Most importantly, though, we look at the challenges of boosting growth and reduce income disparities across the member states, and propose a social contract 2.0 for the bumpy road ahead.

Questions for the Monetary Dialogue

- What are the concrete steps that the ECB expects to take in order to boost Euro as an international currency? Is there an action plan or does it simply remain a political ideal?
- How challenged does the ECB feel about the emerging market currencies? How realistic do you believe that JPY or CHR will take up the territory lost by the Euro since the sovereign debt crisis?
- Disparities in economic performance within the EMU have increased over the past decade. Looking ahead, several EU member states are waiting to join the Euro. How do you expect to avoid further divergences or disparities between EMU member states over the coming decade considering that several candidate states have weaker economies and there is prospect of Low for Long?
1. INTRODUCTION

In 1999, one of the largest projects in monetary history had begun. A union of 11 European states had decided to give up their national currencies, sovereignty in monetary policy, and an aggregate demand booster for the sake of price stability, removal of currency transaction costs in trade, access to international finance, and a common (political) objective. The idea was that only a monetary union could lead to a genuine integration of markets in the EU, and pave the way to the Single Market.

20 years on, and the monetary-, economic-, financial-, and political situation are very different from those early days. First, the monetary union has expanded in multiple ways. Currently, the number of member states adds up to 19, and more are expected in the near future. Moreover, six other states are using the currency without actually being a part of the union (Montenegro, Kosovo, Andorra, Monaco, San Marino, and the Vatican City). Second, European economies have experienced challenging economic times since the start of the 2007-08 financial crisis. At first, financial and real estate markets were affected by the downturn in the US. However, as the number of bank bailouts increased and the real economy became constrained by the poor financial performance, the problem turned from a financial into an economic. Intra-euro area trade also declined as a result of falling income. It then turned into a fiscal-and financial issue, which the union still struggles to recover from. Third, this wave of shocks and poor economic performance has pushed the ECB into unchartered territory, both in terms of number of policies it has employed and in terms of stretching its mandate. What has been denominated as unconventional monetary policy has in the case of the euro area been unconventional in terms of its size, composition, design, and reach, extending as far as into the territory of national fiscal policies and political sovereignty. Fourth, out of the crises came a realization that the initial monetary union was incomplete, and that in order to make it more resilient and shock absorbent, the monetary union needed to be complemented by a banking-and financial market union. Over the past years, a large share of union efforts has been put into integrating the banking market, increasing the cross-border banking activities, creating a joint supervisory mechanism, and a coordinated macroprudential platform (ESRB-ECB). Fifth, and as a result of these challenging times, the political landscape has also changed. Anti-euro sentiment has increased, primarily in the countries subject to the sovereign bailout rules. However, with fiscal strain and migration issues, the sentiment has spread to other member states that were not subject to the Trojka (or equivalent debt restructuring plans). Meanwhile, disparities in economic performance between different regions inside the EMU has resulted in further divisions and segregation between the member states, and between the parties within the member states, creating a tense and difficult political landscape for members of the monetary union, as well as those outside of it but inside the EU.

In light of this, the time has come to reflect on the Euro project, assess its achievements and failures, as well as speculate on the road ahead. In particular, this paper evaluates the following dimensions of the MU: Credibility and stability of the single currency in relation to its international dimension - e.g. in terms of exchange rate movements, global payment currency shares - as well as its domestic dimension - e.g. in terms of capacity to deliver stable prices (inflation); economic performance of the Monetary Union in terms of long-term per-capita GDP growth and in terms of uneven developments within the union. The paper will finish by briefly speculating on the main opportunities and challenges for the Euro project in the years to come.
2. CREDIBILITY AND STABILITY

A large part of the success of the Euro comes from its low volatility over time, its success in achieving price stability, and a strong and stable exchange rate against other global currencies. Its legacy comes from the strong and stable position of the Deutsche Mark, which for decades provided a solid benchmark for many other European currencies. Institutional set-up of the EMU, and ECB in particular, has largely ensured that this tradition is continued. With 20 years of track record, it is time to evaluate Euro’s performance and achievements in terms of stability and credibility.

2.1. Exchange rate volatility

Under non-turbulent (or normal) times, the relative strength of a currency with respect to its peers is determined by mainly three factors in the foreign exchange market. The market is one of the biggest financial markets in the world and trades 5.3 trillion USD a day. The demand for the currency is determined by the interest rate. The higher the interest rate, the more the currency appreciates, and investors will exchange their currency holdings for the more valued currency. They proceed to save it in that country’s bank (or paper) to receive a higher return. The value of the currency is also determined by the money supply. The higher the money supply (i.e. the lower the interest rate), the higher the inflationary pressure is in the economy, pushing the real value of the currency down. Finally, the rate of growth of the economy and the degree of confidence in the financial system of that currency determines the demand for its goods and services. The higher the rate of growth and confidence, the higher the demand for that country’s goods and services from abroad, and consequently the higher the demand for its currency. The common difficulty in valuing the currency is the fact that the exchange rate is a relative price, which requires the analyst to value the three factors above of the currency of the host economy relative to that of the foreign economy (economies).

For the Euro, the track record has, so far, been good. The effective exchange rate against a basket of major currencies (including USD, GBP, JPY, CHF, CAD) has, since the introduction of the Euro in 1999 been more stable than at any point since 1970, as Figure 1 shows. The figure depicts the evolution of the Euro since 1970. For the pre-1999 period, the series had been constructed as an index using weighted shares of the constituent currencies of the current Euro. Two things are evident from the graph. First, the exchange rate has decreased since the formal introduction of the Euro. Notice that the trend of the effective exchange rate has been downward sloping. Second, the exchange rate with respect to the major currencies has lied just below 1 ever since early 2000’s.

Figure 1: Evolution of the effective exchange rate and the Euro/USD exchange rate

With respect to the nominal versus real effective exchange rates in Figure 2, we see considerable differences between the two prior to the Euro introduction. While the nominal rate has increased over time, the real rate has maintained a relatively constant fluctuation around 100. This means that over time, inflation differential has been reduced so that the nominal and real exchange rates have been brought to very similar levels. In other words, the purchasing power of Euro Area has increased over time to such extent that, relative to the other major global currencies, investors and economic agents in EA can buy more of foreign goods and services. The reasons behind this can be several, including a better control of domestic inflation, worse control of inflation abroad, higher demand for the domestic currency, lower demand for foreign currency, higher domestic productivity, or lower productivity in the foreign economies. In the case of the Euro, the first factor has a very high contribution since inflation has remained low and stable in the entire union, and for some member states much lower than the inflation rate enjoyed prior to joining the Euro.

Moreover, since mid-2000 the effective exchange rate against the basket of goods has lied somewhere between 90 and 110. Together with the previous graph, this shows that the exchange rate with most major currencies has remained stable, an important achievement of the Euro project.

A closer look at the USD-to-EUR exchange rate in Figure 3 confirms this stability since 2004. Ever since the Euro surpassed parity in 2003, it has fluctuated somewhere between 1.1 and 1.5 USD per Euro. Considering that this interval has remained constant for 15 years (despite the turbulent times), this interval could be taken as the fair value of the Euro with respect to the USD. Hanke (2018) goes even further to propose that in order to induce further stability in trade and cross-border financial transactions, these two largest global currencies should, via a formal agreement, trade at between 1.2 and 1.4 USD per Euro. Under such peg, the ECB would be obliged to maintain this peg interval by defending a weak Dollar via Dollar purchases. Likewise, the UST would be obliged to defend a weak euro by purchasing Euros. When the Euro-Dollar exchange rate was less than 1.20 USD per Euro and the Euro was weak in Figure 3, the UST would have been purchasing euros. When the Euro-Dollar exchange rate was above 1.40 USD per Euro and the Dollar was weak, the ECB would have been purchasing Dollars.
2.2. International currency status

A currency acquires the status of international money if it assumes the role of a vehicle in international transactions, if it is used internationally to denominate assets, and if it is stored as official reserve. During its early days, ECB argued that the economic size of the country, a sound institutional and regulatory framework of the issuing economy as well as the previous use of the currency are fundamental determinants of international money (Issing, 2003). The key issue here is whether EMU and ECB have achieved this, and if other factors may interfere in a currency’s international status. Before assessing, however, let us first look at the specific concepts that ECB uses to self-evaluate.

In relation to economic size, Issing (2003) mentions GDP and a country’s degree of openness as two determining factors for a currency’s international status. Regarding the second, a large cross-border trade volume generally implies lower transaction costs in using this country’s currency to channel global trade. If traders find it convenient to use this country’s currency as a means of exchange also for transactions with other countries’ traders, then it becomes a vehicle currency and its status is enhanced to international money. More recently, the depth and width of financial markets of a country has also been pointed out as an important economic determinant since the likelihood that its money is chosen as an international currency is higher. Large and liquid markets imply low transaction costs. In other words, to conduct their financial transactions, foreign agents have an economic incentive to use this country’s financial markets or financial instruments denominated in its currency as opposed to another currency with larger transaction costs.

The role of institutions, political stability, and good governance in the issuing country provides important supporting infrastructure for agents using that currency, as well as their confidence in it. Thus, the country with a wise fiscal authority, a sound legal and judicial system, efficient regulatory authorities and with a monetary authority geared towards achieving price stability is more likely to have its currency used as international money. In this regard, price stability is an important precondition for the development and maintenance of the international role of a currency. It is a necessary condition for foreign investors’ confidence that their purchasing power will be preserved. Internal monetary stability is also a precondition for external stability in the sense of contributing to lower exchange rate volatility and helping in preserving the confidence in the currency (Issing, 2003).
Lastly, past track record of the currency is equally important (Issing, 2003). Traders' preferences for a specific currency appear to change very slowly, because imperfections in goods and asset markets generate economies of scale in using the existing currency. As often pointed out, the pound sterling kept its international status for decades despite the strength of the US economy relative to the British economy. In the case of the Euro, the track record is still very short, and continues to partially rely on the attainments of its main constituent, Deutsche Mark.

Empirical evidence shows that Euro has partially succeeded in achieving this goal. A new ECB index of the euro’s international role – computed as a simple arithmetic average of the share of the euro across a broad range of indicators was at the end of the sample period in 2018 lower than at the start of the Euro project (ECB, 2018). While its role increased at the early stages of the Euro, it reverted starting from the sovereign debt crisis.

Figure 4: Indices measuring the international role of the Euro

Yet, a snapshot of the international monetary system in 2017:Q4 shows that Euro remains the second most used currency, both for monetary and financial settlements. It’s strongest position is in the global payment systems, and weakest in the foreign exchange market. Despite the second position of the Euro, the distance to the USD remains large, and represents on average a third of its volume.

However, a longitudinal analysis shows that in some of the international markets the share of the euro has declined. In particular, this was the case for outstanding amounts of international debt, international deposits, and for shipments of Euro banknotes to destinations outside the Euro area. Likewise, other persistent factors continue to suppress the international role of the Euro. One such factor is the increasing importance of emerging market economies as issuers of foreign currency debt since the global financial crisis. This may explain some of the decline in the share of the Euro in international debt markets despite the historically low levels of interest rates prevailing in the Euro Area. Many emerging markets have a traditional preference for the US dollar. Another factor is the on-going deleveraging by Euro Area banks, which have cut lending abroad to restore their capital ratios. The
stock of cross-border loans in Euro remains well below its peak prior to the global financial crisis of 2007-08.

Figure 5: International Monetary System in 2017:Q1

![Graph showing the international monetary system in 2017:Q1](source: ECB (2018)).

Table 1: Share of Euro in international monetary and financial markets

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Latest</th>
<th>Comparison period</th>
<th>Difference (% points)</th>
<th>Total outstanding amounts (at current exchange rates)</th>
<th>Unit</th>
<th>Difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock of global foreign exchange reserves with known currency composition, at constant exchange rates</td>
<td>20.1</td>
<td>21.0</td>
<td>-0.9</td>
<td>11,426</td>
<td>USD billions</td>
<td>6.6</td>
</tr>
<tr>
<td>Outstanding International debt securities: narrow measure, i.e. excluding home currency issuance, at constant exchange rates</td>
<td>23.4</td>
<td>24.1</td>
<td>-0.7</td>
<td>14,936</td>
<td>USD billions</td>
<td>13.9</td>
</tr>
<tr>
<td>Outstanding International loans: all cross-border loans, excluding Interbank deposits, at constant exchange rates</td>
<td>23.2</td>
<td>23.5</td>
<td>-0.3</td>
<td>7,630</td>
<td>USD billions</td>
<td>12.1</td>
</tr>
<tr>
<td>Outstanding International deposits all cross-border deposits excluding Interbank deposits, at constant exchange rates</td>
<td>25.3</td>
<td>25.8</td>
<td>-0.5</td>
<td>7,622</td>
<td>USD billions</td>
<td>11.0</td>
</tr>
<tr>
<td>Foreign currency-denominated debt issuance at constant exchange rates</td>
<td>20.7</td>
<td>19.8</td>
<td>0.9</td>
<td>3,878</td>
<td>USD billions</td>
<td>11.2</td>
</tr>
<tr>
<td>Euro nominal effective exchange rate (broad measure against major trading partners, annual change)</td>
<td>8.1</td>
<td>24 April 2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily foreign exchange trading (settled by CLS), annual averages, at current exchange rates, as a percentage of foreign exchange settlement</td>
<td>37.0</td>
<td>36.1</td>
<td>0.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign currency-denominated loans in CEESEE countries, as a percentage of total loans, at current exchange rates¹</td>
<td>38.1</td>
<td>39.6</td>
<td>-1.5</td>
<td>145.6</td>
<td>EUR billions</td>
<td>-4.4</td>
</tr>
<tr>
<td>Foreign currency-denominated deposits in CEESEE countries, as a percentage of total deposits, at current exchange rates²</td>
<td>32.0</td>
<td>32.9</td>
<td>-0.9</td>
<td>135.9</td>
<td>EUR billions</td>
<td>7.1</td>
</tr>
<tr>
<td>Invoicing of goods exported from the euro area to non-euro area countries, at current exchange rates</td>
<td>57.1</td>
<td>57.0</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invoicing of goods imported to the euro area from non-euro area countries, at current exchange rates</td>
<td>45.4</td>
<td>46.2</td>
<td>-0.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign holdings of euro area debt denominated in euro (as a percentage of total euro-denominated debt)</td>
<td>16.3</td>
<td>17.1</td>
<td>-0.8</td>
<td>16,794</td>
<td>EUR billions</td>
<td>0.2</td>
</tr>
<tr>
<td>Cumulative net shipments of euro banknotes to destinations outside the euro area (net seasonality adjusted)</td>
<td>166.2</td>
<td>Dec. 2017</td>
<td></td>
<td>172.8</td>
<td>EUR billions</td>
<td>-3.8</td>
</tr>
</tbody>
</table>

Sources: BIS, CLS, Dealogic, IMF, national sources and ECB calculations.
Note: Outstanding amounts refer to outstanding amounts of foreign currency total amounts.


Reconnecting with the three categories of factors, it is accurate to say that the EA partially satisfies the first two. While the economy grew during the first decade of the Euro project and the financial system
expanded, times have been very challenging since the onset of the 2007-08 financial crisis. In particular, since the sovereign debt crises, the economy has stagnated and the financial system has contracted. Moreover, the confidence in the global financial system remains well below the 2007 level, which may put further downward pressure on the international usage of the Euro. In relation to the second category of factors, times have been equally challenging for the ECB and the Eurosystem. While ECB showed determinism in maintaining price stability even during the most turbulent times, and intervened in markets to reassure confidence, over the past 7 years it has undershot its target. Moreover, while the Single Supervisory Mechanism has brought the EA financial regulation under one roof, the step may not be enough in order to generate the confidence in its financial and judicial system (considering the lack of fiscal union, partial risk sharing mechanism, and a lack of solid backing of the Euro in international transactions). It should therefore be the focus of the EMU to improve its regulatory and governance aspects so to provide the necessary infrastructure that can boost the confidence in its monetary system. Deeper and better connected European capital markets, for instance as a result of moving towards an EU capital markets union, as well as a completed banking union, may contribute to the depth and liquidity of euro area financial markets. This could be the next step to improve the international standing of the currency.

2.3. Reserve currency status

Another important aspect of an international currency is its use as reserve in third-country central banks. Reserve assets include exchange resources, foreign securities, and gold reserves (Puszer, 2014). Figure 6 reports the composition of world’s allocated foreign exchange reserves. First, there has been a relative stability of participation of main currencies over time, even in the period after 2012. Second, the dominant position of the USD has remained unchallenged throughout the sample period. Third, the importance of the Euro has slightly increased over time, as the share of that currency in allocated reserves surpassed 20% around mid-2000’s. However, since the financial crisis, the share has started to decline. Fourth, the share of other currencies, in particular emerging market, has increased substantially over the last few years in the sample, positioning as a close third to the Euro. Although Euro is the second largest reserve currency, it is much smaller (both in absolute volume terms and percentage share) to the dominant position enjoyed by USD.

Figure 6: Distribution of allocated reserve currency around the globe

![Figure 6: Distribution of allocated reserve currency around the globe](image)

Source: Puszar (2014).

In terms of the geographical distribution in the use of reserve currency, it is obvious that Euro is the dominant foreign currency in the non-euro EU, with a significantly smaller share outside of the EU.
(Puszer, 2014). Yet, even inside the EU, the shares look very different across countries. While Euro has a dominant position in the smaller Eastern European countries, in Poland and Sweden the share is much smaller, and has declined over time. Likewise, outside of the EU, the share declined in other industrialised countries such as Canada, Norway, and Turkey. Yet in bigger G7 economies, such as the UK, Russia, and even the US, the share increased. Thus, we see a very mixed picture for the Euro. On one hand, it enjoys a dominant position in the smaller non-euro Eastern European countries and some of the largest G7 economies such as the UK and the US. On the other hand, it has lost terrain over time in other non-euro European economies such as Poland, Sweden and Norway, as well as in the larger advanced economies such as Canada, Russia and Turkey. It is possibly this high level of heterogeneity across geography and time that impedes the Euro from becoming a truly international reserve currency across the board. In order to gain that international status, the confidence in it needs to remain geographically solid and constant over a long period of time.

A direct comparison with the USD for a period of 20 years in Figure 7 further confirms this. The combined share of the dollar and euro has declined over the past 20 years as the use of other currencies, including the Chinese renminbi and British pound, increased substantially. They climbed from about 11% to 17% of the global total. Setting aside the other currencies, the dollar reserves were, on average, 3.5 times as large as euro reserves over this period. But the pattern over time has been highly volatile. In 1999, the share was 4:1 for the USD. It steadily declined until 2009, when the share of dollar reserves was only 2.2 times as large as the value of euro reserves. Since then, dollar reserves grew slightly, while euro reserves declined by 27%, ending at 3.1 times as many dollars as euros in central banks by 2017 (Maggiori, 2018).

2.4. Capacity to deliver stable prices

The success that is usually attributed to the EMU and ECB is its consistent and aggressive pursuit of price stability. Continuing the legacy from the Deutsche Bundesbank, the ECB has as its first and main objective to maintain price stability.

Figure 6 depicts the evolution of the HICP inflation since 1999. For the early part of the project, it is clear that the capacity to deliver stable prices was strong. Up to 2008, inflation fluctuated between 1.5 and 2.5%, or very close to the 2% target. However, during the second half of Euro’s short history, swings in inflation became much heavier. The interval in which inflation fluctuated increased to between -0.5% and 4%. At a first glance, it seems that ECB’s capacity to deliver stable prices has been significantly undermined since the onset of the 2007-08 financial crisis.

Figure 8: Time-varying inflation in Euro area

Source: ECB Data Warehouse (retrieved on 15.01.2019).
Turning to price levels in Figure 7 (the explicit target of the ECB), the graph portrays a more positive picture. While both the consumer and producer price indices have increased over time, their increase has been much more moderate and smooth since the formal introduction of the Euro, in particular for consumer prices. Thus, while ECB’s capacity to deliver stable 2% inflation has been significantly undermined since the 2007, price levels have been more stable and grown more moderately, in particular from a longer historical perspective.

Figure 9: Evolution of producer price (PPI) and consumer price indices (CPI) in Euro area

3. ECONOMIC PERFORMANCE

The next level in the performance analysis of the EA concerns the subject that matters the most to citizens of the union: economic growth and the degree of equality in the distribution of that income. This issue is very complex and consists of many layers. It includes the distinction between growth in aggregate income versus other more disaggregate or microeconomic indicators, union wide GDP performance over time, growth in income versus wealth, difference between union-wide growth and growth in each of the member states, or the growth and distribution of income within the member states. While it is impossible to include all aspects on the topic of economic performance in this paper, we will try to discuss two of these layers. First, we will investigate the Euro area wide GDP performance over time, including trend versus cycle, and with respect to the evolution of income and global GDP. Second, we will analyse the disparities in income distribution across member states of the monetary union.

3.1. GDP and income growth

To begin with, let’s have a look at the long-run evolution of EA GDP since 1970:Q2 in Figure 10. Again, for the pre-Euro period, the series was constructed using the individual country GDP figures and their respective weights. This long-run series is useful in order to directly contrast the performance of the union economy before and after its formal establishment.

The first striking observation is that the EA economy enjoyed the longest period of growth around the time it was formally established. If you compare to earlier episodes of upturns, the period between 1996 and 2011 was the longest without any interruption or negative business cycle shocks. By 2010 GDP had started to decrease, but it wasn’t until 2011 that the CEPR Business Cycle Committee considered it sufficient to call it a recession (the shaded grey area in the graph). Thus, to grow 15 years uninterrupted is amazing. A priori it is not clear how much of that growth is down to the establishment of the Euro, but the date coincides well with the second phase of the convergence process, and later with the formal introduction of the currency. Moreover, unlike the US, EA avoided the dot.com bust in 2001-02, at which point the common monetary policy was already in place and which it managed to avoid.

However, it is probable that this smoothness came at the cost of slower growth compared to previous historical episodes. Since the establishment of the Euro and until the subsequent recession in 2011, GDP grew by 30%. In contrast, during the previous expansion, GDP had grown by 40%. Expressed differently, the 30% growth rate had been achieved in only 9 years during the previous upturn (1984-1993).

Figure 10: Time-varying trend of real GDP in the Euro area

Since 2010, however, GDP growth has basically flattened, and has remained at roughly the same level throughout. Thus, in terms of GDP levels and GDP growth, the introduction of the EMU had resulted in an unprecedented period of uninterrupted expansions, but with a (relative) cost in terms of lower GDP growth rates, in particular since the sovereign debt recession.

Turning to the business cycle evolution of EA GDP, and comparing it to the global GDP in Figure 11, the EA series lags slightly the global GDP. It means that upturns (as well as downturns) first begin in global income before they spill over to EMU. Otherwise, both series are tightly correlated which means that EA is a very open economy and highly influenced by the movements in the global market. With respect to the EA business cycle, we see again that the economy enjoyed an unprecedented period of smooth growth during the first part of the EMU project, but experienced historically the largest contraction during its second decade.

Turning to wage per capita in Figure 12 (a common measure of the income level per person) we find that ever since the introduction of the Euro, income volatility has dropped. Compared to early 1990’s or 1980’s, swings in income were 50% to 70% smaller, even during the period of sovereign debt turmoil. The downside is that growth in income has also been much more moderate, both in historical perspective, and compared to GDP. Compared to previous episodes, growth in wage per capita was, on average, 2 to 3 times smaller. Compared to the business cycle, income growth has also been, on average, 2 to 3 times smaller since 1999. Prior to that, on the other hand, growth in wage per capita had been similar to that of GDP and sometimes even larger. Thus, income stability (or lower volatility) has also come at the cost of lower income growth, similar to GDP.
3.2. Income distribution and disparities inside the EMU

There are many ways in which the distribution of income across countries can be examined. One way would be to look at the individual GDP patterns and compare to the aggregate EA series. While simple, this method suffers from three shortcomings: The size of the EMU has changed over time which makes it problematic to compare the EA GDP to an individual country’s GDP prior to joining the monetary union. Also, GDP is a bad distributional measure, overlooking many other important income and wealth variables. Finally, an aggregate measure such as GDP tells us very little of the deep underlying (or structural) factors that make countries grow at different rates. For that, more disaggregate or complementary information is required.

Haynes and Haynes (2016) propose a more comprehensive method to examine the degree of evenness in economic pattern between the member states of the EMU. They use Agglomerative Hierarchical Cluster Analysis (Bailey, 2012) to explore country patterns and to hypothesise about country cluster sets. The hypothesis that certain clusters exist is then tested using conventional bivariate analysis. This method starts from the assumption that all countries are different and then seeks to group them into hierarchical clusters on the basis of their similarity. They repeat the cluster analysis for two different time periods: 2002 (representing the episode of the EMU) and 2013 (more recent period). The approach allows for the possibility that countries may change cluster membership over time. The authors use several macroeconomic variables that measure economic performance, besides the Maastricht convergence criteria, to build a multivariate cluster analysis. The study also includes other variables regarding the general business environment (for further details on the variables and method, see the Haynes and Haynes (2016) paper).

Figure 13 depicts the results of the cluster analysis for 2002, using the twelve countries that were members of the Euro at that point. Three main clusters are formed at point 5 on the horizontal axis. The first comprises France, Germany, Netherlands, Austria, Finland and Belgium. Second cluster includes Ireland and Spain. They share some proximity to the first cluster. Third cluster comprises of Greece, Portugal and Italy. Luxembourg is an outlier. Authors find that mainly four factors influenced the clustering of the countries in 2002: state control of regulation, labour productivity per hour worked,

---

87 The grouping in cluster analysis goes from the left of the dendrogram, according to the basis of their mathematical similarity. If two small groupings are fairly similar, the hierarchical analysis links them together at the next step (point 5 on the horizontal axis).
consumer confidence and HICP. Notice that all the variables are linked to consumer characteristics and household income.

Figure 13: Cluster Analysis for EMU in 2002

Source: Haynes and Haynes (2016).

Based on this, the clusters can be characterised as (Haynes and Haynes, 2016):

**Cluster 1**: High productivity, low inflation, low regulation, and average confidence.

**Cluster 2**: Average productivity, high inflation, average regulation, and high confidence.

**Cluster 3**: Low productivity, average inflation, high regulation, and low confidence.

In the 2013 cluster analysis, the new EMU member states had been included. Figure 14 reports the clustering results. In cluster 1, the core countries of Austria, Germany, Netherlands, Belgium, France and Finland remained, but were joined by a new member, Slovakia. Cluster 2 is comprised of three new, small economies: Latvia, Malta and Estonia. Cluster 3 is now instead a mixture of cluster 2 and 3 from 2002 and includes Italy, Spain, Portugal and Ireland. New members also join them: Slovenia and Cyprus. Luxembourg remains as an outlier, but is by this time joined by Greece (Haynes and Haynes, 2016). Overall, cluster 1 is the only one that roughly remained the same throughout the sample period. Clusters 2 and 3 have changed dramatically. Considering that the total number of clusters is assumed to remain the same throughout time, this means that significant divergences have occurred within the EMU over a decade only. There seems to be a higher degree of heterogeneity across economies of the EMU in 2013 compared to 2002.
The only variable to remain influential on both the 2002 and 2013 models is labour productivity per hour worked (Haynes and Haynes, 2016). On the other hand, in 2013 it is aggregate income and financial variables that matter more: GDP growth, interest rates, and government gross debt. Thus, unlike the early stages of EMU, aggregate economic performance has mattered more for defining disparities across EA in more recent times. The 2013 clustering groups are defined as follows:

**Cluster 1**: Average GDP growth, low interest rates, high labour productivity, and average government gross debt.

**Cluster 2**: High GDP growth, average interest rates, low labour productivity, and low government gross debt.

**Cluster 3**: Low GDP growth, high interest rates, average labour productivity, and high government gross debt.

To summarise, the degree of disparity and uneven distribution in economic performance has indeed increased over time inside the EMU. The North, represented by Germany, France, Netherland, Belgium, Finland, and Austria remain at the core throughout, sharing a number of similarities. They experienced low inflation all the way through and more recently, they share similar low long-term interest rates. On the other hand, countries such as Spain and Ireland have increasingly distanced themselves from the core. They were closer to the core at the launch of the single currency, suggesting an idea at the time that they might converge towards it, but by 2013 the distance had increased considerably. Italy made a U-turn during this period, evolving from a country closer to cluster 1 to a country in cluster 3. Even within the cohort of the newly joined smaller member states, there is significant heterogeneity. Countries that are geographically closer to the Northern core managed to perform better and climb the cluster ladder compared to those further away (Grancay, et al., 2015). Buti and Turrini (2015) argue that the post crisis challenges of managing divergence were exacerbated by the lack of structural economic convergence in the preceding years.
4. OPPORTUNITIES AND CHALLENGES AHEAD

It is very difficult to speculate on the road ahead for the EMU considering the turbulent developments so far, in particular during the second decade following Euro’s launch. As shown in section 3.1, the EA economy is very open and highly synchronised with the global economy. Moreover, Gerba and Leiva-Leon (2018) show that the level of exposure to US macro-financial developments is very high, in particular on the financial side. Therefore, the impact of global factors, global shocks or structural changes is hard to anticipate. However, taking the *ceteris paribus* assumption seriously, we could speculate on the institutional, monetary, and economic road ahead for the EMU, their opportunities as well as challenges.

The sovereign debt crisis and the subsequent events exposed some of the weaknesses in the initial EMU design. During turbulent times, price stability and confidence in the currency could not be maintained with conventional monetary tools only. Unconventional measures became necessary, and additional agreements on fiscal support, structural economic policy, and financial regulation and integration were quickly needed. While steps have been taken in that direction, they are not sufficient and, as the time goes by, self-complacency and sense of stability may take over again. The current problem is that the agreements (or reforms) don’t go far enough.

**Fiscal support** is not the same as joint fiscal action. A joint fiscal action (even if only implicit) is necessary going ahead. **Structural economic policy** is a long-term objective and therefore has to be dynamically consistent. Quick fixes are not a good substitute and persistent commitments needs to be assured. Room for fiscal-, monetary-, and welfare policy relief needs to be given in order to support the agents through those structural changes. Potential benefits of those changes are two-fold. Income disparities inside the EMU will reduce while boosting the international status of the currency as the size of the union economy grows. **Financial integration** is key to further monetary stability and to boost the currency’s international status, both as an asset and reserves. Banking-and capital markets union go in the right direction, but stop short. Their largest drawback is that it is of regulatory nature. It focuses more on the regulatory and supervisory aspects than the operational, risk, logistics, global market developments, and market challenges, in particular under the Low for Long scenario. European politicians and policy-makers must understand that regulatory and supervisory infrastructure is a necessary but not sufficient condition in order to ensure financial market integration. Moreover, in the case of EMU, integration needs to go hand in hand with deepening in financial services, which requires innovation, R&D, and market-based alternatives. Those can’t be regulated, but incentivised, supported, and, in best of cases, directed. Also high-level expertise amongst policy-makers is required on this front in order to safeguard a workable solution and optimal policy plan.

In relation to Euro’s **status as international money**, the situation is more challenging. The distance to the USD is huge, and the distance between the Euro and emerging market currencies is quickly narrowing, in particular in the reserve and debt markets. The above policy suggestions can partially improve Euro’s status, but more affirmative and reassuring actions will be required on the global arena. So far, the discussion on Euro as a global currency have mostly been theoretical and archetype, with little action to back it. Most of the track record of the Euro rests on the reputation and historic performance of the Deutsche Mark. If Euro is to challenge the USD dominance, then the involvement of ECB, Eurosystem, EC, and Treasuries of the EMU in the international monetary system must be more aggressive and reassuring. Examples include advantages given to third-party countries and their central banks for holding Euros. At the same time, assurance must be given that debt and assets issued (or even denominated) in that currency will not be neglected or allowed to default. Only then can the confidence in the currency grow, and with time, challenge the position of the USD.
Finally, in relation to the union’s economic performance and the rising disparities amongst EMU member states, two things need to be recognised. First, there was a trade-off in EMU’s economic growth performance. Stability and lower volatility was prioritised over heavy and quick growth. Second, disparity in income and other macroeconomic indices has increased within the union over time, in particular over the past decade. The longer the Euro remains in low growth environment, the higher the risk that disparities will increase. Thus, most efforts should be put into steering the economy back into sizeable growth. At the same time, a type of Euro-wide social contract may be required in order to bring all the parties on board (labour, capital and technology owners, financiers, politicians, and charities) to ensure growth commitment and smooth path ahead. Most probably, it will need to be constructed and enacted across border. Ultimately, it should be seen as a type of social contract 2.0, updating, innovating, and going further on the original post-war social contract that was established throughout Western Europe during the Golden Age.
REFERENCES


Abstract

There is no need for Europe to replicate the International Monetary Fund (IMF). The European Stability Mechanism (ESM) can provide the backstop for sovereigns, even without a financial contribution from the IMF. In this sense, the ESM already constitutes to a large extent a ‘European Monetary Fund’. Other IMF functions such as surveillance and policy coordination should remain with the European Commission, the Eurogroup and other existing bodies. The ESM will be called upon to act as a backstop only intermittently, in times of great financial market instability. The need for it will evolve as a function of the nature of financial markets and their cross-border integration. It is not possible to forecast with any precision when the next financial crisis might break out and what form it will take. Any evolution in the functioning of the ESM should thus aim at enhancing flexibility and clarity of its overall mandate (financial stability), rather than revising the details of the rescue mechanism (which should be extended to the Single Resolution Fund) and its modus operandi. Moreover, the ESM should be viewed as the natural instrument for unifying the euro area’s representation in the IMF.
This paper was requested by the European Parliament’s Economic and Monetary Affairs Committee.

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<td>BRRD</td>
<td>Bank Resolution and Recovery Directive</td>
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<td>CMU</td>
<td>Capital Markets Union</td>
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<td>DSA</td>
<td>Debt Sustainability Analysis</td>
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<td>EMU</td>
<td>Economic and Monetary Union</td>
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<td>EMF</td>
<td>European Monetary Fund</td>
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<td>ESF</td>
<td>Single Resolution Fund</td>
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<td>ESRB</td>
<td>European Systemic Risk Board</td>
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<tr>
<td>FDIC</td>
<td>Federal Deposit Insurance Corporation</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<td>IIP</td>
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EXECUTIVE SUMMARY

The term European Monetary Fund (EMF) should be used with caution. The International Monetary Fund (IMF) has two main functions:

i) coordination/surveillance and
ii) backstop for sovereigns, including program design.

The first function is performed in the euro area by a variety of institutions (European Commission, Eurogroup, etc.), and there is no need to change these arrangements. The second function is now performed by the European Stability Mechanism (ESM), at least in terms of providing the backstop for sovereigns, which raises the question of whether the ESM already acts as an EMF.

There are several differences between the ESM and the IMF in terms of philosophy (rationale for lending), decision-making, staffing and the role played by the staff in operations. These differences are likely to persist, mostly because the fiscal risks from ESM operations are an order of magnitude larger than those of IMF lending, and because ESM financing can represent a much larger share of the overall financing needs of a country than IMF credits. It is thus understandable that ESM programmes are of a much higher political importance than those of the IMF. Majority decisions on programmes will therefore remain necessarily more difficult in the case of the ESM. The same applies to the delegation of programme design to the staff level, which is the one function the ESM does not perform at present. But even with this constraint, there should be room for enlarging the professional staff of the ESM and to give it, at least de facto, greater autonomy to take some decisions on its own, particularly on programme design. Small, evolutionary steps in this direction could make the ESM equivalent to an EMF.

This is not to say, however, that there is no need to introduce more formal substantive changes. Two in particular are especially desirable:

i) ESM programmes should be made independent of the IMF, and no further IMF co-financing (as opposed to technical advice) should be solicited in future ESM programmes.
ii) Euro area member states should pool their IMF quotas in the ESM, which would represent the entire euro area at the IMF. The pooled IMF quota, about €60 billion, might then be placed at the disposal of euro area member states in difficulties with a ‘lighter’ decision-making procedure.

Once the Single Resolution Fund (SRF) is fully established, it would also be desirable to clarify that the direct recapitalisation instrument of the ESM would no longer be needed and that the ESM would then serve to provide a back-up to the SRF.

It would also be desirable to bringing the ESM into the Treaty framework in the long run, but this is not a priority compared to the two substantive changes.

Instead of concentrating on the minor changes needed to transform the ESM into a European Monetary Fund, it might be more constructive to view it as the nucleus of a euro area fiscal instrument for financial stability, which could later be used to bundle the euro area’s contribution to global financial stability via the IMF. The balance between providing a back-up to national governments, or to common euro area institutions (such as the SRF or a future deposit insurance system) is likely to change over time and in ways that are difficult to anticipate.
1. INTRODUCTION

This paper was requested by the European Parliament under the supervision of its Economic Governance Support Unit.

When the constitution of the euro area, the Maastricht Treaty, was agreed, it appeared inconceivable that a member country could ever experience difficulties rolling over its debt, let alone not be able to service its debt in full. Moreover, just to forestall any doubts that public debt might become a common liability, the so-called bail-out clause was inserted.

Experience has shown, however, that even euro area member countries can sometimes lose market access. Insistence on the simple ‘no bail-out’ principle proved impossible when euro area financial markets seemed on the verge of a meltdown, which would have created enormous costs for the entire euro area economy given the large cross-border financial activity that had built up in the meantime. This is why, after some hesitation, the European Stability Mechanism (ESM) was created as a permanent ‘bail-out’ mechanism, to operate alongside the IMF, which alone could not provide the financing required to calm euro area financial markets.

The overall economic justification for both the IMF and the ESM is of course similar. It is grounded in the view that financial markets are not always efficient. This does not mean of course that financial markets never give the right signal, but experience has shown that, for a variety of reasons, financial markets sometimes become unwilling to provide financing at any cost (Stiglitz and Weiss, 1981). In the final analysis, it is not a question of economic theory, but one of experience; see the excellent recent summary in Weder di Mauro and Zettelmayr (2017).

The overwhelming majority of IMF programmes have succeeded in the end. As far as the ESM is concerned, one can only say that the same holds for four of its five programmes (counting also Spain). Only in one of these five cases, namely Greece, has success so far been elusive. This illustrates the general philosophy underlying official rescue operations: neither financial markets, nor politicians are always right. But financial markets panic with sufficient frequency to justify (ex post) most rescue operations. The relatively high success rate of IMF programmes is also due to the existence of a large professional and experienced staff, which can not only design adjustment programmes, but also provide a realistic view of their probability of success.

Having established the rationale for a lender of last resort or back-up for sovereigns, the next question is how this function should be fulfilled. At the global level the IMF provides a model that seems to have worked well for decades. When the euro crisis broke in 2009-10 it was thus natural that the idea of creating a ‘European Monetary Fund’ came about. At that time, the euro area seemed to lack not only a financing mechanism for sovereigns in difficulty, but also an institution with the professional capacity to design and monitor assistance programmes as well as perform an independent analysis of the sustainability of (public) debt (Debt Sustainability Analysis, DSA).

The euro area now has the ESM, which can fulfil the back-stop function of the IMF. Nevertheless, it is often argued that the ESM should somehow be ‘transformed’ into a European Monetary Fund, implying that it does not really perform those functions at the present time. But it is often not clear what would

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88 The German Finance Minister Wolfgang Schäuble made a first proposal in 2010 http://www.spiegel.de/international/europe/greek-debt-crisis-proposal-for-european-monetary-fund-wins-eu-support-a-682296.html. Mayer (2009) was the first contribution in this direction. Gros and Mayer (2010a and b) published a first concrete outline, which was subsequently elaborated and extended in a number of other publications (Gros and Mayer, 2011a and b and 2012). The discussion has usually concentrated on the particular ‘need of the moment’, as Annex 1 shows with the reaction to Gros and Mayer (2010).
be needed to transform the ESM into an EMF (taking into account that the EMF would operate within one currency area whereas IMF members have their own national currencies). The main differences seem to be in the underlying rationale for the lending, the decision-making and staffing as well as the role the staff is playing in actual operations. These issues are discussed in the following two sections. Section 4 then turns to a speculation of the evolution of the need for a financial back-up for sovereigns, and section 5 makes a concrete proposal on how to give the ESM a slightly different function. Section 6 concludes.

See for example the press report at: http://www.reuters.com/article/us-eurozone-esm-idUSKBN16Q0SL
2. DIFFERENCES BETWEEN THE LENDING RATIONALES OF THE IMF AND THE ESM

The International Monetary Fund (IMF) has two broad functions, whose relative importance changes greatly depending on the circumstances. During tranquil times in the global economy, the IMF represents the premier forum for the analysis and discussion of global economic developments. There exist of course other fora, such as the G-7 and the G-20, which also engage in high-level discussions of global economic issues, but none of them has the permanent highly qualified staff and the universal membership of the IMF. In Europe this function as a forum and of surveillance is performed by the Commission and the Council together with a large array of sub-groups and committees which ensure that high ranking officials meet their counterparts from other EU or euro area countries, on a regular basis.

The more attention-catching function of the IMF is to provide a backstop for countries in balance-of-payment difficulties. With the outbreak of the financial crisis, this function has again dominated the image of the IMF, especially in Europe where the Fund, as it is often called, has participated in four rescue programmes. This participation in rescue programs within a monetary union constituted a novel experience for the IMF as well. Its own internal evaluation office (IMF Evaluation Office (IEO)) has provided a somewhat critical review of the operations of the IMF in Europe90.

There are subtle differences in the (official) underlying rationales given for the backstop or rescue functions of the IMF and the ESM. In principle the IMF provides financing to cover temporary-balance-of-payment difficulties. The aim is to help countries. The ESM, by contrast, has been designed to intervene only if financial stability of the entire euro area is in danger. The purpose of the ESM is thus to safeguard the overall euro area, not to help individual countries. This can be done only as an \textit{ultima ratio} when the entire system is in danger. The IMF does not operate under this constraint and has often provided financing even in the absence of any risk for global financial stability.

Another difference is of course the currency issue. The IMF can provide a country with external finance or foreign exchange when the country has lost access to international financial markets. The ESM does not formally provide ‘foreign exchange’ since it lends euros (to countries for which this is the domestic currency). In reality, however, debt in euro is in one respect similar to the foreign currency debt of a developing or emerging economy: the country in question does not have control over the currency (de Grauwe 2011). From an economic point of view there is thus little difference between the IMF providing Argentina with a loan in USD (or SDR) and the ESM lending euros to a euro area Member State.

Another subtle difference concerns the distinction between public and private debt. In some IMF programme cases, the external financing need arises in the first instance from the private sector (as for example during the Asian financial crisis of about 20 years ago). The ESM, by contrast, was explicitly designed to provide financing for governments in difficulties; with only a limited facility for direct bank recapitalisation added later. A government might face re-financing difficulties even if the country as such does not face an overall balance-of-payments deficit (as in Italy, for example).

In practice, the difference between a balance of payments crisis and a fiscal crisis is not that great since the IMF disburses its funding to governments, and the public sector usually runs large deficits if the country experiences a balance-of-payments crisis, even if the origin of the crisis is an imbalance of the private sector. There are two reasons for this. First, the government usually has little choice but to

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90 See IEO (2016), which noted that the IMF had “never articulated how currency union considerations should be incorporated in program design”.
intervene and rescue major financial institutions once these run into difficulties. Second, economic activity tends to contract sharply with any balance-of-payments crisis; and this means government revenues fall. In reality a balance-of-payments crisis is thus usually also associated with a public-debt crisis. This is the background to the old adage that the acronym IMF stands for “it’s mostly fiscal”. Section 4 below will discuss in more detail how this aspect will be mitigated by financial market integration.
3. The Difference in Relative Size Requires Different Modalities of Governance

The governance of the ESM has been criticised because its lending decisions usually require unanimity, whereas only a qualified majority is needed in the IMF. The ESM Treaty also considers an emergency procedure under which a qualified majority of 85% of the capital would be sufficient to start a programme. But it appears highly unlikely that this emergency procedure would ever been used against the explicit vote of a member state.

The basic reason for this is that IMF programmes, even taking all of them together, are of an order of magnitude smaller, relative to the size of the global economy, than ESM programmes vis-à-vis the entire EU economy. Even a total loss on the IMF’s biggest programme would mean only a negligible loss for its member states (and the monetary financing of IMF programmes should ordinarily have a negligible impact on the global money supply91). This is the reason why IMF programmes do not touch vital fiscal interests of the creditor countries, which can thus accept being put potentially in a minority.

There are a couple of reasons for this difference in relative importance:

- The countries that could conceivably require IMF assistance constitute a much smaller share of world GDP than the countries that might require assistance from the ESM. The shares of Italy or Spain in the euro area’s GDP are (now) between 10 and 15%. This is much more than that of the biggest country that might conceivably need IMF assistance. At the global level, the largest countries are usually also providers of reserve currencies, which guarantee market access (and if the US, the euro area or China were to lose market access because the dollar, the euro or the RMB are no longer reserve currencies, they would be too big to save for the IMF anyway).
- A second reason is that (cross-border) financial integration is much stronger within the euro area than globally. The liabilities that might have to be re-financed by an ESM programme are thus much larger (relative to the GDP of the country needing assistance) inside the euro area and contagion effects will also be much stronger. Euro area countries have on average external liabilities equivalent to close to 400% of GDP, which is eight times more than emerging market economies (the main clients of the IMF until recently92). This aspect is documented more fully below.

Stronger financial inter-linkages have two implications.

In the first instance, the amounts to be financed by an ESM programme are larger (relative to IMF programmes). The aim of any ESM programme is to safeguard financial stability of the euro area. This implies that ESM programme had to cover the financing needs of the banking system as well. Until now this was done indirectly as the ESM lends to the government, which then props up its banks for example via capital infusions and/or guarantees for various liabilities. This was particularly the case for Ireland. If the Banking Union with the Single Resolution Fund and the bail-in rules of the BRRD become effective the need to re-finance the banking sector might be much diminished.

Secondly, contagion effects are stronger when intra-area cross-border financial linkages are so important. This implies that when a euro area country (and usually its banks as well) experience

91 The financing of the IMF is ‘monetary’, via the national central banks of its member states, but its function is mainly fiscal.  
92 Over the last few years euro area countries have become the IMF’s largest borrowers (and have financed most of its budget via interest rate surcharges and fees).
difficulties an accessing financial markets, this will have a strong impact on their cross-border counterparties.\footnote{Tirole (2015) shows that these cross-border effects make bail-outs by the creditor countries optimal.}

Of course, contagion operates also outside the euro area. This could be seen in the Asian crisis. But the fact that the crisis spread from one country to another was not due in the first instance to financial linkages between them, but because investors began to look for similarities across countries.

The combined result of all these factors is that the potential fiscal risks from rescue operations inside the euro area are much larger than from the operations of the IMF. The peak of the lending of the various euro area rescue mechanisms (including all the pre-ESM ones) was about €350 billion outstanding at the end of 2014, representing roughly 3.3% of euro area GDP\footnote{The exposure of the ESM has fallen to less than €250 billion (2.4% of euro area GDP) today.}. By contrast, the total IMF credit outstanding during the Great Financial Crisis never went above 0.19% of global GDP, which is almost 20 times lower than the euro area value.

Figure 1 shows the evolution of IMF credit outstanding as a percentage of global GDP over a long period. During the 1980s, the IMF was more important, with its lending peaking at 0.3% of global GDP in 1985, at the height of the developing countries’ lending crisis. The longer-term average is also below 0.15% of global GDP, implying that potential fiscal liabilities through IMF lending operations have usually been negligible for the creditor countries.

A third reason, hopefully temporary, why ESM programmes need to be large is that public debt in the euro area is generally much higher, as a proportion of GDP, than in the countries that typically might require IMF assistance. The average euro area public debt-to-GDP ratio now stands now at close to 90% of GDP. This is not far from the OECD average. But the euro area average is more than twice as much as that of the group of emerging economies. The countries needing assistance are typically the ones that have higher debt than the average among their peers, but it remains true that the public debt-to-GDP ratio of the euro area countries that have needed ESM assistance has been much higher than that of countries receiving IMF financial assistance only, e.g. Argentina and several Asian countries had public debt-to-GDP ratios below 50\%\footnote{See International Monetary Fund (IMF) (2016), “Debt—Use It Wisely”, Fiscal Monitor, Washington, D.C., October. (https://www.imf.org/external/pubs/ft/fm/2016/02/pdf/fm1602.pdf).}.
The total size of the IMF quotas and the ESM capital are actually similar. The sum total of all IMF quotas is slightly below $700 billion (460 billion SDR), which is equivalent to about 0.8% of 2015 global GDP. The capital of the ESM is €700 billion, which is equivalent to about 6.4% of (2015 euro area GDP). The effective lending capacities are in both cases somewhat lower than the capital (or its equivalent), but the relative differences remain. The lending capacity of the ESM is €500 billion, or about 4.5% of the euro area’s GDP. The headline lending capacity of the IMF is supposed to be around €750 billion, but the actual ‘forward commitment capacity’ is much lower. And the actual lending is even lower, as a percent of global GDP, as shown below.

A final difference is that IMF lending is considered ‘super senior’, i.e. the IMF is to be repaid before any other creditor. This has contributed to a track record now spanning over half a century during which the IMF has never made a significant loss on its lending operations.

But super-seniority is the not the only reason why the IMF can be much more confident that its loans will be repaid. The key is that its lending is much smaller than the lending of the ESM. This is again

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96 The exact percentages change over time. IMF quotas were recently doubled. They were thus worth less than one-half of one percent of GDP until the last quota review (the 14th) came into force. The nominal capital (for the ESM) and the quotas (for the IMF) tend to remain unchanged for long periods of time. With nominal GDP growing, this implies that over time the fire power of both institutions will decline. But their relative importance should be rather stable. The fiscal risk as a percent of GDP will be higher for creditor countries with a GDP per capital below the euro area average since the shares in the ESM are based on the average GDP and population shares in the euro area. One should keep in mind that the euro area accounts now for less than one-sixth of global GDP. For the same programme size, this means a higher burden for euro area members. (The weight of the euro area in the global economy continues to shrink and might drop to around 10% by the end of the next decade.)
related to the size of the quotas. As mentioned above, quotas are typically equivalent to less than 1% of GDP. For poorer countries they might be somewhat higher (around 1% of GDP) because one of the key elements in the quota calculation is GDP at purchasing power parity). Under the new rules adopted this year, access is limited to less than 5 times the quota, or roughly less than 5% of GDP. The ESM has no such limitation and in the case of Greece, the combined loans of the euro area partners (under the ESM, EFSF and Greek Loan Facility) amount to over 100% of GDP. The relatively small amounts loaned by the IMF imply that even a country in serious payments difficulty can still afford to reimburse the IMF. But this would not be possible for a future ESM programme if the size of the lending is anything like it is in the case of Greece. In the case of Portugal and Ireland the ratio of euro area to IMF financing was ‘only’ 2:1; but the general principle remains that IMF lending is much less important both for creditors and for debtors.

97 See http://www.imf.org/en/About/Factsheets/Sheets/2016/07/14/12/21/IMF-Quotas
## 4. DESIGNING THE ESM FOR THE FUTURE

The evolution of the ESM should be seen in a broader and longer-term perspective, and not just viewed simply on the basis of today’s environment. One key element in this context is the degree of integration of the euro area’s financial system. But it is not clear whether a more integrated financial system will increase or diminish the probability that ESM programmes will be needed.

### 4.1 The trends so far

One key reason for the large size of existing euro area adjustment programmes is the sheer magnitude of intra-area cross-border financial assets and liabilities. Intra-area capital flows are difficult to measure since capital is generally fungible. But one rough measure of intra-area cross-border financial activity can be obtained by comparing the external assets of the euro area as a whole to the sum of international assets of the euro area countries taken individually. This is done in Figure 2, which shows three lines: i) the ratio of external assets to GDP for the euro area as whole (derived from its international investment positions (IIPs), ii) external assets as a percent of GDP for euro area countries when one considers their IIPs individually, and finally, for comparison, iii) the global average of IIP assets to GDP. The importance of intra-area cross-border assets can be gauged by looking at the difference between the first two (the yellow and the red lines). This difference amounted to about 50% of GDP when the euro was introduced, but it has steadily increased since then and is now around 200% of GDP. If this trend continues, future financial crises might involve even larger financing needs.

The third line (blue) in Figure 2 shows that until about 1992, when the Maastricht Treaty was concluded, there was little difference between the average value for the world (IIP assets as a percent of GDP) and that of the (future) euro area countries. However, a difference emerged after capital movements were completely liberalised in the context of the Single Market programme. From the start of Economic and Monetary Union (EMU), most of the higher cross-border activity seems to have been intra-euro area, since the cross-border assets for the euro area as whole and those for the average of the entire world were quite close in 1999 and have remained of a similar order of magnitude.
The euro area crisis has shown that debt is the category of cross-border financial flows that poses the greatest challenge to financial stability. Figure 3 therefore concentrates on cross-border debt flows\(^{98}\) (i.e. all assets that are fixed in nominal amounts, like bank loans, other forms of debt and derivatives). It is apparent that at the start of EMU intra-area debt was not relevant since, at that time, most external debt was in dollars (and with financial centres, such as London or New York). However, after the introduction of the euro, intra-area debt (calculated here as the difference between debt external to the euro area and the sum of overall external debt of the aggregate of individual euro area member countries) increased from around 25% to over 100% of GDP. The growth of debt has considerably slowed down since the start of the financial crisis, and has now become somewhat irregular. Over the last few years there has even been some retrenchment, but the level of intra-area debt today is still higher than it was in 2008, and the aggregate debt level continues to climb, implying a high potential for financial crisis and thus a continuing need for a large ESM.

\(^{98}\) A detailed breakdown between public and private debt is unfortunately not available for all years. However, the available data points suggest that the bulk was private debt. For example, in 1999 cross border, intra-area public debt was negligible (around 5% of GDP), rising over time a little above 20% of GDP, still a fraction of the total, both intra and extra-euro area.
4.2 Scenarios for the future

It is very difficult to gauge the course of financial integration in the euro area and its impact on the need for a large, potentially larger, ESM. If the longer-term trend of increasing cross-border debt were to continue, future ESM programmes might even need to be larger than the present ones, making it even more difficult to render the decision-making of the ESM closer to that of the IMF (because the burden on creditor countries would be so large that decisions could not be delegated to the technical level).

But a different scenario is also possible. For example, more cross-border banking consolidation could lead to a banking system that is more integrated and one in which idiosyncratic shocks in one country would not necessarily lead to a banking crisis in the country concerned, as the large banks could offset losses in one market with profits elsewhere. Moreover, experience has shown (Belke and Gros, 2015) that cross-border banking integration via ownership stakes is stabilising, as the headquarter banks can take a long term view and usually do not cut their subsidiaries off from credit flows.\textsuperscript{99}

By contrast, as argued above, integration of the banking market via inter-bank lending, which is often short-term, would be de-stabilising as the banks in a country with difficulties might be cut off from short-term credit, thus exacerbating the local downturn.

Another scenario is also possible. One reason for the large size of the euro area adjustment programmes is the dependency of the economy on bank financing and the large size of the banking sector in Europe (see ASC, 2014). This dependency of banks should be diminished by the European Commission programme to form a Capital Markets Union (CMU), which should foster the development

\textsuperscript{99} Perhaps even more importantly, the headquarters has full information about the real situation of its subsidiaries. Other lenders not have this information, which can lead to credit rationing under asymmetric information, as analysed by Stiglitz and Weiss (1981).
of pan-European capital markets for both debt and equity (Valiante, 2016). Full implementation of the CMU programme might reduce the size of future ESM programmes if local banking systems are smaller and more cross-border finance takes the form of equity or other market-based debt instruments (instead of bank loans).

Full implementation of the EU Bank Resolution and Recovery Directive (BRRD) should in principle also reduce the need for public funding since it requires that the Single Resolution Fund can be used only if at least 8% of the liabilities (except equity) have been bailed in beforehand. Assuming full application of the bail-in rules, De Groen and Gros (2015) show that the target size of the SRF (about €55 billion) should be sufficient to deal with a financial crisis even as severe as the one experienced by the euro area over the last few years. Recent events in Italy, however, have shown that in reality governments remain extremely reluctant to allow a bail-in, mostly because of the political cost of inflicting losses on voters or other financial institutions that might hold the bail-able capital.

Others have argued, on the contrary, that the ‘bail-in’ provisions of the BRRD would increase contagion, making a financial crisis more severe and thus increasing the need for public funding. This might be the case if there had been no bank failure, and thus no bail-in of any liabilities, for a long time. Investors might then have come to the conclusion that bank liabilities represent safe assets in general. The sudden realisation that this is not the case when a bail-in is applied might then lead to widespread contagion via fire sales and greater financial instability. The financial instability could be particularly severe if bail-inable instruments are held by leveraged institutions that might face insolvency proceeding if their holdings are bailed in.

Completion of the Banking Union with a common deposit insurance scheme would diminish the danger of a run on domestic banks, thus reducing the risk of a broader banking crisis following, for example, another real estate boom-and-bust cycle. The BRRD, the SRF and a putative common deposit insurance scheme would all help to reduce one side of the feedback loop between banks and the sovereign, namely weak banks that could require large financing from their sovereign.

But something could also be done to deal with the other side, namely the impact of a weak sovereign on the strength of its banks. At present, most banks hold large amounts of the debt of their own sovereign on their balance sheets. Setting limits on the concentration of the holdings of sovereign bonds would reduce the impact of a refinancing problem of the sovereign on its banks. All this should reduce the probability of a new financial crisis and the need for an ESM programme.

The conclusion that emerges is that measures to limit contagion and to break the link between banks and the sovereign are at least as important as reforms to the ESM.

A first key step would be to impose concentration limits on the holdings of sovereign bonds by banks. At present banks in many countries hold over two times their capital in bonds of one (their own) sovereign. This implies that financing difficulties of the sovereign will immediately have very negative implications for the banks. This needs to be changed (see also ASC (2015) and de Groen (2015) for precise calculations of the consequences of potential exposure limits). It is clear that these limits should be introduced gradually, maybe the concentration limits could even be applied only to new purchases of sovereign debt, thus allowing banks to keep their present exposure. The ESM in particular noted that “The effect of the new regulations on sovereigns depends on the modality and timing of the introduction. A gradual increase in the risk weights and a relatively long phase-in period could alleviate the pressure on sovereign debt markets and help avoid strained fiscal adjustments. In this way, both the banking sector and the sovereigns would have time to adjust, which could significantly lower the macroeconomic cost of the new regulations. Nevertheless, if banks frontload the regulation as was the
case for some recent regulatory reforms, price effects might be substantial despite well-designed transition arrangements.” (ESM (2016))

Second capital markets should be strengthened. Inter-bank relations still dominate to a large extent cross-border exposures. The Capital Markets Union project should thus be given priority, by looking especially at all obstacles to cross-border capital market and especially equity flows. Larger cross-border assets might not constitute magnifiers of financial crisis if they are not among leveraged institutions like banks. Cross-border equity should even have a stabilising function because it is loss-absorbing without bankruptcy costs. Achieving an integrated capital market might thus potentially reduce the required size of ESM programmes, reduce contagion and allow for tougher conditionality.

Finally, governments need to stop interfering with the market for corporate control of ‘their’ banks. Cross-border banking groups would also help to break the link between the sovereign and the banks operating on its territory.

But the completion of the Banking Union would also raise the issue of the lender or guarantor of last resort for the common deposit fund and the Single Resolution Fund (SRF). A tighter integration of financial markets and more, potentially larger, cross-border banking groups would increase the risk being shared, but this would also increase the risk of a larger crisis, which would be systemic at the level of the entire euro area. In such a situation, the funding of the SRF might not be sufficient (especially if there continues to be strong political opposition to bail-in). In an area-wide banking crisis it might thus be necessary to have a back-up for the SRF, much like the back-up role now played by the US Treasury for the US Federal Deposit Insurance Corporation (FDIC), which was devised during the last crisis. The FDIC can now count on a line of credit from the Treasury of up to $100 billion, which might be increased under certain conditions (consent from the Federal Reserve Board, for example) to $500 billion. In this respect, it is worth observing that there is no federal mechanism in the United States for financial stabilisation nor does there exist a (domestic) monetary fund to rescue states in trouble. Annex 2 explores some reasons why this is the case.

A change in the ESM Treaty might be required to allow it to provide financing for the SRF, and this would constitute a major political step. It is thus difficult to see how the ESM could acquire this function in a gradual or evolutionary way and it is unlikely to transpire before the SRF has reached its full size and the Single Resolution Mechanism has assumed its full powers. But one should keep in mind that it took a financial crisis of unprecedented proportions for the US to arrive at the present situation in which the Treasury backstop for the FDIC was made explicit. Until the crisis there had only been political declarations that the FDIC would be backed by the ‘full faith and credit’ of the US.100

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100 Congress, in 1987, passed a “Sense of Congress” to that effect, but such enactments do not carry the force of law.
THE ESM AND THE IMF

Considering the ESM as nascent EMF raises the issue of the relationship with the IMF. This has two aspects:

4.3 Is the IMF needed in the euro area?

It is sometimes argued that the ESM (or an EMF) is not really needed, given the existence of the IMF. It was argued above that the high level of intra-area cross-border finance implies that the IMF would probably not be sufficient to deal with a future crisis in the euro area. But the existence of two rescue mechanisms has important consequences for the incentives facing euro area leaders. Weder di Mauro and Zettelmeyer (2017) argue that regional financial safety nets might lead to unsound policies as countries perceive that, given the high degree of financial integration, the creditor countries would have a strong incentive to bail them out. The requirement in the ESM Treaty that the IMF be part of the programme seems to have been at least partially motivated by the fear of moral hazard.

The assumption was that since the IMF lends only to solvent states the ESM would then not be able to lend to insolvent euro area governments. Formally the ESM Treaty already also contains the rule that the ESM should help only solvent countries. As Weder di Mauro and Zettelmeyer (2017) also note, however, the experience of Greece has shown that a relatively large amount of official financing on sufficiently concessional terms can make almost any debt burden sustainable. A corollary of this observation is that the highly concessional terms of ESM financing might indeed increase moral hazard, i.e. the temptation of a highly indebted government to count on a bail-out by the ESM. The IMF rules, and the restrictions in the ESM Treaty itself, might be of little value if cross-border finance continues to expand, increasing the incentive for euro area countries to avoid the disruption resulting from a sovereign insolvency in a highly leveraged financial system. In reality, however, the political cost of accepting an ESM program is so high that it is unlikely any government would consciously speculate on a bail-out by the ESM given that accepting a program usually means the fall of the government itself.101

Moreover, even from a purely financial point of view, co-funding from the IMF does not make sense for existing ESM programmes at present102 since the IMF charges almost 3% more on its lending than the ESM. The higher interest paid by Greece and other euro area countries provides the IMF with additional income at the expense of the euro area taxpayer, since the ESM statutes make IMF credits senior to its own claims. Moreover, the IMF credits are usually much shorter term in nature than those of the ESM (at least today). This implies that ESM lending carries a higher risk than IMF credits.

For the present situation the logical conclusion from this mismatch between a substantially higher cost and seniority combined with the short-term nature of IMF credits is clear: the ESM should lend Portugal, Ireland and Greece (plus Cyprus) the funds necessary to repay as quickly as possible existing IMF credits to these countries. This would not increase the risk for the ESM (and thus for Member States) since these claims would be senior to its own claims anyway. The savings that could be achieved in this way would be substantial, in light of the fact that these three countries have IMF credit outstanding of about €25

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101 An indication of the very high political cost of accepting a program can be seen in the behavior of the Portuguese government in 2016/7: it prefers to pay a risk premium of over 300 basis points on longer term market debt, rather than accept a new ESM program which would provide the country with much more favorable financing terms.

102 And in future, unless the ESM charges a higher penalty rate than the IMF. For the present situation, see Gros (2016).
billion. The cost of IMF credit is about 2–3 percentage points higher than ESM funding. The operation ‘send the IMF home’ would thus save the ESM (and therefore indirectly the euro area taxpayer) about €500-700 million per annum.

These considerations suggest two conclusions:

i) Making future ESM programmes contingent upon a parallel IMF programme does not seem to offer great advantages in terms of credibility.

ii) The participation of the IMF in existing ESM programmes might as well be discontinued given the high cost of IMF lending.

4.4 The ESM/EMF in the IMF

The purpose of the ESM is to safeguard financial stability of the euro area. Its main task is thus ‘domestic’. Moreover, the ESM will probably have to carry most of this burden given that the financial contribution of the IMF would anyway remain marginal (relative to the sums the ESM can mobilise). It might thus be best to recognise this reality and abolish the (mainly politically motivated) requirement that any ESM programme should proceed in parallel to an IMF programme.

This would not require a big change in the ESM Treaty since the ESM might still benefit from collaborating with the IMF staff on the design of the programme and the debt sustainability analysis. All the references to cooperation with the IMF in the ESM Treaty could thus remain, and only the two references to the IMF programmes and the financial contribution of the IMF would need to be eliminated.

Another important aspect concerns the external representation of the euro area. Gros (2013) proposed that a revamped ESM could become the vehicle for a unified representation of the ‘fiscal interests’ of euro area countries in the IMF.

This would, inter alia, have the advantage of taking care of the inherent contradiction that the contributions to the IMF are considered a fiscal issue, and thus the preserve of Member States, while its actual financing is monetary and thus account for the books of the national central banks, although monetary policy is unified. In practice this does not matter that much given the relatively small size of IMF operations documented above, but a unification of the euro area members’ quotas in the IMF and the bundling of the fiscal function via the ESM would offer important advantages.

There is no contradiction between the idea that economic policy coordination and surveillance can remain with the Commission and the idea that the ESM might represent the euro area’s fiscal interest in the IMF. Economic policy coordination within the euro area (and indeed within the EU) has developed a complex set of instruments and procedures, often at an annual or even higher frequency. This activity has little connection with the much less formal and less detailed global coordination process in which the ESM would participate via its membership in the IMF.

The advantage of having the ESM represent the euro area at the IMF is that the staff of the ESM would be informed of ongoing IMF programmes (on which it would have to prepare opinions for the ESM

---

103 Formally IMF operations are recorded on the balance sheets of the national central banks. This should be changed as well since EMF members are supposed to put their ‘national’ currency at the disposal of the IMF, but this national currency is now the euro. In principle only the ECB should be allowed to issue euros. A bundling of the fiscal consequences of IMF operations in the ESM would probably have to involve some prior bundling at the ECB.

104 For a broader discussion of the arguments for a unified representation of the euro area more generally, see Giovannini et al. (2012).
representative at the IMF) and could learn from their successes and failures. This experience would also be useful if the ESM needs to consider a new programme in the euro area itself.
5. CONCLUSIONS

The creation of the ESM (and the other temporary bail-out mechanisms) was justified, both as a signal that the leaders of the eurozone were prepared to do ‘whatever it takes’ to save the euro, and because it corresponded to a pressing practical need. Its decision-making structure appears somewhat cumbersome, but this was difficult to avoid given the large sums involved. In four out of its five rescue operations, the country concerned was able to exit the programme.

There are enough different instruments to cover most short-term contingencies. In a short-run perspective, the current set-up is not ideal, but it seems adequate.

The ESM seems to be building up the technical staff necessary to monitor and design programmes on its own as staff numbers have increased considerably since the institution was created.\textsuperscript{105} Given that only one programme is still ongoing, the ESM would not need a very large staff to be able to monitor the limited number of potential ‘candidates’ for future or renewed programmes. The main question is whether the finance ministries which dominate the decision-making in the ESM will allow this build-up to continue and give more leeway to the staff. But at any rate, no big formal decisions would be needed to allow this to happen and thus allow the ESM to be the equivalent of a European ‘Monetary Fund’.

When the euro area was caught unprepared by the Great Financial Crisis, it was paramount to create the safety net quickly and ensure that it had sufficient fire power. Attention should now shift from crisis management to crisis prevention. The first step is to endow the ESM with its own professional staff and analytical capacity. The next step will be to provide a framework for the division of labour and cooperation between the ESM and the Commission. This will not be easy, certainly from a formal point of view as long as the ESM remains an inter-governmental institution.

One danger to avoid is creating a situation in which the ESM staff has nothing to do, possibly for decades until the next crisis arrives. Another danger to guard against would be the rise of constant rivalry between the Commission and the ESM if the two are performing the same function. An acceptable compromise would be that the Commission remains responsible for coordination and general surveillance in the context of the existing institutions and procedures. The staff of the ESM, however, would be involved in those aspects of surveillance that concern dangers to financial stability.

This would seem appropriate in particular for the Macroeconomic Imbalances Procedure (MIP), whose purpose is to prevent economic and financial crises by monitoring a number of parameters that in the past have usually signalled a potential financial crisis. Responsibility for preparing the reports under the MIP might thus be shared between the Commission and the ESM. The ESM might then also be involved in drawing up any ‘corrective action plans’ that the Council might require from countries identified as having ‘excessive imbalances’. The need to enable a formal involvement of the ESM in these Union procedures provides another argument to bring the ESM Treaty into the overall EMU governance framework and thus into the Treaty. (A first argument would be that this would also strengthen the democratic accountability of the ESM itself, see Alcidi et al. 2014 and Alcidi et al. (2017)).

In the longer-run, the ESM should certainly evolve further. But the term ‘European Monetary Fund’ might not be appropriate to describe what is most needed. In principle the need to provide financial

\textsuperscript{105} The 2015 Annual report says, “the ESM reached a total of 156 staff, secondees, trainees and interims at year-end. It is set to grow to a final headcount of 169, excluding trainees and interims, in 2016”. (see p. 105 of \url{https://www.esm.europa.eu/sites/default/files/esm2015annualreport.pdf}). Personnel costs have increased from less than €14 million to over €22.5 million in 2015. See also \url{https://www.esm.europa.eu/sites/default/files/esm2013annual-report.pdf}
support to member states should diminish over time under the combined influence of the Fiscal Compact, the Banking Union and the Capital Markets Union. Under the Fiscal Compact public-debt ratios should in principle decline continuously, at least towards 60% of GDP. This alone would diminish the need for an EMF. The Banking Union, combined with the bail-in rules of the BRRD, should in principle significantly reduce the pressure on national public finances in the event that a banking crisis erupts. The Capital Markets Union should in principle lead to more cross-border financing in the form of FDI, equity and other forms of long term capital, thus reducing the potential for ‘sudden stops’ in cross-border capital flows. Moreover, an integrated capital market would also make it more likely that the ‘bail-inable’ capital will be distributed across borders, entailing a further degree of inter-country risk sharing.

If all these elements were fully implemented, the ESM might never be needed to provide financing for member states. In reality, however, none of these three elements is likely to be fully implemented; and a number of member states will remain in a precarious situation with large public debts, banking systems nationally concentrated and most cross-border financing in the form of debt. The back-up function of the ESM for euro area sovereigns will thus remain important for some time to come.

To the extent to which the combination of Banking Union and Capital Markets Union leads to an integration of financial markets, the risk of local banking crises should diminish, but that of a generalised crisis at the euro area level might increase. This implies that at some point it would be important for the ESM to become the back-stop for the Single Resolution Fund, which should make the direct recapitalisation instrument redundant. The same should apply to the common deposit insurance, if it is ever created. Moreover, member states could pool their IMF quotas in the ESM, paving the way for a common representation of the euro area in the international financial institutions.

The ESM should thus be viewed more broadly as the nucleus of a euro area fiscal instrument for financial stability and, more generally, as an institution that can represent the common fiscal interests of the euro area abroad, especially at the IMF. But reforms of the ESM make sense and can succeed only if other measures are taken to reduce the potential for further crisis by reducing leverage both in the private and public sectors.
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ANNEX 1: COMMENTS IN RESPONSE TO GROS AND MAYER (2010)

From ‘Free exchange’ in The Economist:

OVER the past few days, several economists, both in America and Europe, have weighed in on Daniel Gros and Thomas Mayer’s proposal for a European Monetary Fund (EMF). They have raised questions both about the need for an EMF in principle, and about its feasibility and usefulness in the present context, i.e. Greece’s troubles. I think it’s fair to say that Messrs Gros and Mayer’s ideas came in for a good deal of criticism from our invited experts on all these counts.

The guest piece argued that:

“The difficulties facing Greece and other European borrowers expose two big failures of discipline at the heart of the euro zone. The first is a failure to encourage member governments to maintain control of their finances. The second, and more overlooked, is a failure to allow for an orderly sovereign default.”

Our commentators were by and large unconvinced that there was a need for a new institution to do what existing institutions were already doing bits of. This applied particularly strongly to the idea of the EMF as a way to enforce fiscal discipline.

Desmond Lachman wrote:

"What is even less clear is why Gros and Mayer would want to reinvent the wheel by creating a European Monetary Fund, when one has the International Monetary Fund that already has the expertise to impose the appropriate conditionality on lending to wayward countries like Greece."

But maybe the EMF would do a better job than the IMF? Edwin Truman was sceptical, saying that "if the EMF were tougher than the IMF is on average in terms of its economic and financial conditions, then Euro area countries would prefer to go to the IMF for assistance".

Tyler Cowen argued that the "underlying problems of European multilateral governance" are unlikely to "be solved by creating an entirely new and different institution". He would rather the ECB were reformed by broadening its focus beyond price stability, than an EMF set up. Carmen Reinhart worried about the ECB and the EMF (if one were indeed to be set up) butting heads.

Our commentators were also not convinced an EMF would work. Roberto Perotti, for example, argued that:

"(B)ly the authors' calculations this facility would today give Greece access to something like .65 percent of its GDP ... plus any additional discretionary fund from the pool of all accumulated savings. However, 65 percent of GDP would make no difference to Greece today; and ... the intervention needed would eat up the whole fund just for a small country like Greece. The key problem country, Spain, with a public debt just above the Maastricht level this year, would have made virtually no contribution to the EMF. In the end, effective intervention, especially when the risk of contagion is high, is likely to depend on the discretion of Germany and other non-problem countries, just as it does now."

Ms Reinhart, though, was a bit more supportive of the second bit of the proposal, relating to orderly sovereign defaults. She argues that a regional institution would indeed “be filling a gap in the existing financial architecture”. But she would like their proposal to go beyond sovereign debts to thinking about how to sort out the messy blur that currently exists between public and private debts: the "quasi-sovereigns". During crises, she points out, "private debts often become public ones".

Then there is, of course, the question of feasibility, given where we are now. Could such a fund even be set up? Several commentators pointed out that any negotiations to set up a new institution would be protracted and messy. Mr Lachman argues:

“(I)t is fanciful to think that markets will patiently hold onto their Greek paper while the Europeans take their sweet time to set up as far-reaching an institutional change as Gros and Mayer are now proposing.”
Mr Cowen also argued that conditions are hardly ideal for the negotiations surrounding an EMF-type institution - winners and losers are too clearly known \textit{ex ante}, whereas ideally such negotiations would be done behind a "veil of ignorance". More generally, several experts argued that the problem is a political one, not a technical one: what needs to be done is known; how to do it is a matter of politics.

So what might be done? Mark Thoma suggested fiscal federalism could serve as part of a solution to the eurozone's problems, but was realistically pessimistic about its prospects. But most would appear to agree with Jean Pisani-Ferry, who wrote:

"The real choice at least in a first step is between IMF and EU assistance. As the EU in this respect has no legal basis, no mechanism, no financial instrument and no track record, a strong case can be made for calling in the IMF."

Source: http://www.economist.com/blogs/freeexchange/2010/02/emf_roundtable_9?zid=294&ah=71830d634a0d9558fe97d778d723011d
ANNEX 2. WHY NO ‘AMERICAN MONETARY FUND?’

The institutions of the United States have served as the principal model for many structural aspects of Economic and Monetary Union in Europe, and many plans for the completion of EMU – for example, the introduction of fiscal shock absorbers or area-wide unemployment insurance – point to the US experience as a justification. But there has been little discussion of the lessons to be learned from the history of state finances in the US.

In the 1840s, a number of US states defaulted on their (mostly foreign) debt. There were petitions to Congress to provide them with financial support, but this was rejected. In the wake of this experience most states adopted balanced budget amendments obliging their own legislatures to follow prudent policies in order to convince investors that they would be able to service their debt.

The US has never had any federal mechanism to support individual states in financial difficulties. But, in principle at least, one should apply to individual US states the same analysis as is applied to euro area member states: For Texas, a debt in US dollars is also in a currency that the Texan state authorities cannot control and thus is also equivalent to ‘foreign exchange’ debt, as for Greece or Portugal. In principle, individual US states could also be subject to a loss of access to credit markets.

Municipal bonds, a term that encompasses bonds issued by states or other municipalities, are generally exempt from federal income tax (and often from state taxes as well). They constitute thus an attractive investment vehicle, but their importance has always been secondary to federal debt. However, one has to consider a US state’s debt in relation to the revenues it has and not in relation to its GDP, because it is the former, i.e. its revenue, that determine the state’s debt service capacity.

If one looks at debt service capacity in this way, the difference between the euro area’s general government debt and US state debt is not that large.

Figure A1 below shows the longer term evolution of the debt/revenue ratio for the aggregation of state and municipalities in the US (unfortunately, figures were not available for states and the sub-state level separately). It is apparent that, if viewed against their revenues, US states had accumulated considerable debt in the early part of the last century, with debt/revenue ratios above 200%. This suggests that balanced budget amendments were often not fully honoured. Since that time, however, the debt/revenues ratio of individual states has declined considerably and on average today it stands at around 80-90%.
Figure A1: The longer-term evolution of debt at the sub-federal level in the US as a percent of revenues


Figure A2 shows the debt/revenue ratios for a number of euro area countries, four of which experienced financial stress (IT, PT, IRL, SP) and three of which did not (DE, BE, FR). It is interesting to note that the four countries that experienced financial stress had debt/revenue ratios above the peak of the sub-federal level in the US in the 1930s of about 250%, whereas those that did not have remained below this value. This euro area’s Fiscal Compact can be compared to the balanced budget amendments in the US as a reaction to the realisation of the high cost of a default. If the provisions of the Fiscal Compact on declining debt ratios were fully implemented, debt ratios in the euro area should over time decline first towards 60% of GDP. If the provisions on the cyclically adjusted deficit were also implemented, debt should then decline further towards even lower debt ratios, possibly achieving even the values of the US states today. Unfortunately, it seems that many euro area countries do not take the Fiscal Compact seriously because for them the ‘lesson learnt’ from the crisis has not been that high debt levels imply a danger of financial stress, but rather that a government needs to spend more to get its economy going again.
Another interesting instance of sub-federal financing in the US is that a private sector insurance mechanism developed in the late 1980s in the form of municipal debt insurance, such as AMBAC (American Municipal Bond Assurance Corporation), which provided insurance for issuers of municipal bonds, i.e. debt issued by states or lower-level entities. Initially only a small proportion of the municipal debt was insured this way, but over time this became more important. This line of business ended abruptly with the financial crisis of 2008-09 because the municipal bond insurers had engaged in large-scale operations in the securitisation of sub-prime mortgages (although they had been called ‘monoliners’).

In principle, a private sector-based insurance scheme should be possible in Europe as well, at least for the smallest Member States, whose debt is of a similar magnitude as that of some US states. The advantage of this type of private sector solution is that it provides investors with an asset of uniform quality. Investors in a bond guaranteed by an insurer can base their investment decisions on the rating and financial standing of the insuring entity and do not need to have detailed knowledge of the quality of the individual bond issuers. Ratings agencies provide similar standardised information, but the service provided by a bond insurer would be more ‘tangible’ in that it guarantees full payment. The bond insurer will naturally charge a premium to the entity that issues the bond, presumably based on the probability of a default (and the loss given default). The savings for the bond issuer might thus be limited, but for smaller states it might still be useful to use this service to open a wider market for their bonds.

Source: Own calculations based on Eurostat data.
Another difference between European and US states is that the latter, as lower-level government entities, can avail themselves of protection against creditors under Chapter 9 of the US bankruptcy code. But this protection comes at a cost: any entity invoking this provision must then also accept to be managed and overseen by a bankruptcy judge. When Puerto Rico recently became insolvent, it attempted to be brought under a Chapter 9 procedure, but its claim was rejected owing to the fact that it has a special status (as an unincorporated territory of the United States as opposed to a ‘State’) (see Gros, 2015).

For the euro area, the desirability of a sovereign debt restructuring mechanism remains an open issue (see Fuest et al., 2014 or ECB, 2016 for a survey of the issues). If sovereign failures were frequent low-level events, one could argue that a set of rules could make the process more predictable for investors and the country concerned. Moreover, a sovereign debt restructuring mechanisms could also provide the ESM with a tighter framework for its own interventions. Sovereign insolvencies, however, are likely to remain very rare, occurring only in exceptional and politically highly charged circumstances. Moreover, euro area Member States remain fully sovereign countries. It is thus difficult to imagine norms or rules that could constrain them, especially under exceptional economic circumstances.
Abstract

The creation of a European Monetary Fund seems a natural next step to improve upon the European Stability Mechanism. This paper argues that such a step is neither necessary nor desirable, for many reasons. First, the European Stability Mechanism is a fundamental contradiction with the no-bailout rule, which is arguably the most crucial instrument to foster fiscal discipline in the Eurozone. Second, any insurance mechanism creates moral hazard. A European Monetary Fund would be deeply immersed in conflicts of interest among its members. Third, it would have to fit in alongside the Commission and the Eurosystem, already in charge of monitoring the Eurozone countries, preventing crises, lending in last resort and developing debt-restructuring principles. Fourth, it would need a highly competent staff to deal with crises but idle in quiet times. Fifth, its governance should guarantee fast action when needed, with proper accountability and undue politicisation. These are serious hurdles and the IMF can perform the task.
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<tr>
<td>AMF</td>
<td>Asian Monetary Fund</td>
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<td>CAC</td>
<td>Collective action clause</td>
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<td>DSA</td>
<td>Debt Sustainability Analyses</td>
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<td>ELA</td>
<td>Emergency Liquidity Assistance</td>
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<td>ECB</td>
<td>European Central Bank</td>
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<td>EFSF</td>
<td>European Financial Stability Fund</td>
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<td>EMF</td>
<td>European Monetary Fund</td>
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<td>ESM</td>
<td>European Stability Mechanism</td>
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<td>Eurosyste   m</td>
<td>ECB and National Central Banks of the euro area</td>
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<td>FCL</td>
<td>Flexible Credit Line</td>
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<td>IEO</td>
<td>Internal Evaluation Office</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>MoU</td>
<td>Memorandum of Understanding</td>
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<td>OMT</td>
<td>Outright Monetary Transaction</td>
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<td>TFEU</td>
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EXECUTIVE SUMMARY

During the Eurozone crisis, the initial reluctance to involve the IMF has led member countries to progressively develop their own lending capacities, starting with bilateral loans, then creating the temporary multilateral European Financial Stability Fund to finally establishing the European Stability Mechanism. Would it not be natural to complete this evolution and go all the way and create a European Monetary Fund?

The idea of establishing regional monetary funds is not new but none has been adopted so far. In addition to possible resistance by the IMF and many of its shareholders, a European Monetary Fund would face a number of daunting challenges.

The first and more difficult one concerns the treatment of moral hazard, that is the risk of doing more harm than good by providing incentives to governments to borrow excessively, or to allow excessive private borrowing, in the anticipation that they will be bailed out. Another source of moral hazard concerns public and private lenders that grant excessive loans in the anticipation that the international lender will bail them out. The international lenders may also succumb to excessive lending if they expect that private lenders and taxpayers will pay for losses if and when they arise.

The moral hazard issue is inescapable and its treatment is fraught with major difficulties. The IMF has grappled with this issue for seven decades now and it will continue its search for decades to come. In many respects, this challenge is steeper at the regional level among closely-knit countries. Conflicts of interest loom large, and conflicts can be highly damaging to the bigger picture of economic and financial integration.

The main treatment of moral hazard is the imposition of conditions that a borrowing country must commit to. Because the first reason why a country requires help is that it has pursued unsustainable macroeconomic policies, the conditions aim at modifying these policies. However, it is often the case that these policies were mistaken responses to structural flaws. This is why lending programmes may include structural conditions. While macroeconomic conditions amount to some loss of sovereignty, the loss is deeper and more politically difficult in the case of structural conditions, because they permanently redistribute income and wealth. Finding the right mix and number of conditions is a complex undertaking, fraught with economic and political difficulties.

Yet another moral hazard issue concerns the treatment of external and public debts inherited from the past. Reducing old debts is obviously an encouragement to build new debts. On the other hand, old debts may represent a near-impossible hurdle. Very unfortunately, there is no way to determine when a debt is excessive. The current methodology, known as debt sustainability analysis, is both highly imprecise and open to all sorts of prejudices and conflicts of interest. The IMF has been vacillating on its approach to the issue. A regional fund is bound to find the challenge even more forbidding, because the conflict of interests are bound to be more intense, given the maze of financial linkages among countries and financial institutions.

Beyond the moral hazard question, the creation of a European Monetary Fund is bound to raise difficult questions regarding the Eurozone institutions. At present, the European Commission is in charge of crisis prevention, through its surveillance mechanism, and now of crisis management. Would these two functions be transferred to the European Monetary Fund? If so, what would be its governance structure? The current lending arrangement is far from ideal. Lending decisions are formally taken by the Council of Ministers, in fact the Eurogroup, in agreement with the Eurosystem. The European Stability Mechanism is in charge of raising resources and making them available to crisis countries. Its own governance guarantees that Council’s decisions will be followed through. This process is not just cumbersome, it also injects a heavy dose of politicisation into highly complex technical considerations. Should the Mechanism be
transformed into a Fund, a different arrangement would have to be designed. It should combine technical expertise and accountability, not just to member governments but also to taxpayers.

Another thorny issue concerns the relationship between the European Monetary Fund and the Eurosystem. The experience so far is that the main decisions have been taken by the Troika, which brings together the European Commission, the IMF and the ECB. By now it is widely agreed that this is not a desirable arrangement and one reason is the presence of the ECB. As the central bank of the country receiving assistance, the ECB faces a conflict of interest. It is duty bound to support all member countries, which makes it difficult to impose conditions. In addition, according to the treaties, the ECB is prohibited from issuing recommendations to member governments. A proper arrangement with the ECB is required.

The ultimate goal of a European Monetary Fund should be to avoid debt crises, which requires achieving fiscal policy discipline in each and every member state as well as to prevent financial stress that may lead governments to borrow heavily. The current arrangement, built on the Stability and Growth Pact, has repeatedly failed. As a result, it has been reformed several times, but it remains doubtful whether the pact will be more effective in the future. Fiscal discipline will be at the heart of the Fund’s prevention function, if it is given this function. What would be its role and how would it coordinate with the European Commission, formally in charge of implementing the pact? Digging deeper, the Maastricht Treaty established a no-bailout clause as the lynchpin for establishing fiscal discipline, but this clause has been implicitly dismissed during the Eurozone crisis. The very existence of a European Monetary Fund, an institution designed to bail countries out, would be last nail in the coffin of the no-bailout clause.

In the end, given these difficult challenges, the question remains of whether we need a European Monetary Fund when we have an International Monetary Fund. One reason to do so is that the IMF’s resources are insufficient to deal with a major crisis that affects developed countries that are deeply integrated financially, especially if the crisis is contagious. When the situation arises, the usual practice is for the IMF to design and implement country programmes, and to collect funds from friendly – typically neighbouring – countries.
1. INTRODUCTION

The Maastricht Treaty did not envision any mechanism of the kind now embedded in the expression European Monetary Fund (EMF). Quite to the contrary, it explicitly forbade any form of assistance to a member country facing financing needs, even acute ones. Yet, when the Eurozone debt crisis gathered momentum in early 2010, Gros and Mayer (2010) argued in favor of a European Monetary Fund. They noted that the risk of systemic financial turmoil implied that the no-bailout clause could only be relative, not absolute, and they invoked the Treaty's solidarity principle to provide legal backing. Eventually, the Eurozone member countries created first the European Financial Stability Fund (EFSF) and next the European Stability Mechanism (ESM). The question is whether the rocket now needs a third stage.

This question raises a number of issues. The first one is that we already have an International Monetary Fund. Why, then, is a European one needed? Two answers have been provided. The first one is technical: the IMF does not have the financial resources needed to deal with emergency needs of advanced countries. The second is political, best encapsulated by the ECB’s initial fierce opposition to any IMF involvement in Eurozone affairs.106

The second important issue concerns the moral hazard of lending and its containment. The ESM lends within the framework of a Memorandum of Understanding (MoU), which involves strict conditions and their surveillance. This is a practice borrowed from the IMF, which would be retained in any EMF. However, the design and surveillance of conditions very much depend on the decision process. The current process in the Eurozone is cumbersome as it involves the European Commission, the Eurogroup and the Council. In some countries, lending to other countries must be approved by the national parliament. One reason to establish a EMF is to streamline this process, following best practice, which currently is IMF practice. IMF lending and the associated conditions are prepared by the staff, with internal supervision by several departments, before they are presented to the Executive Board, with extensive justification. This leads to in-depth debates and it leaves a trail of how the decision was reached. This trail is available for possible ex post evaluation by the Independent Evaluation Office (IEO) and, sometimes, by an internal evaluation by the staff, which is made public.

The third issue concerns the European Central Bank (ECB). The experience so far is that the main decisions have been taken by the Troika, which brings together the European Commission, the IMF and the ECB.107 By now it is widely agreed that this was not a desirable arrangement (IEO, 2016; Blustein, 2016; Weder di Mauro and Zettelmeyer, 2017). One reason is the presence of the ECB. Although each Eurozone country has its own central bank, national central banks are not autonomous since all key decisions are made by the Eurosystem. In turn, the ECB acts on behalf of the Eurosystem. De facto, therefore, the ECB acts as the central bank of all member countries. Its presence in the Troika leads to a conflict of interest. It is duty bound to support all member countries while the Troika imposes conditions. In addition, according to the treaties, the ECB is prohibited from issuing recommendations to member governments. Should it be created, the EMF would have to work out a proper arrangement with the ECB.

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106 Its President, Jean-Claude Trichet said: “If the IMF or some other body exercises the responsibility in lieu of the Eurogroup or instead of governments, it is evidently very, very bad”, Reuters, 25 March 2010, http://www.reuters.com/article/france-trichet-idUSLDE62O2C420100325.

107 With the third Greek programme in 2015, the Troika was replaced by “the Institutions”, which now include the ESM with an uncertain participation of the IMF.
Fourth, the ultimate goal of the EMF must be spelled out unambiguously. When the first rescue of Greece was decided, it was justified as follows:

“In the wake of the crisis in Greece, the situation in financial markets is fragile and there was a risk of contagion which we needed to address. We have therefore taken the final steps of the support package for Greece, the establishment of a European stabilisation mechanism and a strong commitment to accelerated fiscal consolidation, where warranted.” (Economic and Financial Council, Council Conclusions, Brussels 9-10 May 2010). Thus the rescue’s objectives were to calm financial markets down, to prevent contagion and to speed up fiscal consolidation. Conspicuously missing is improving the situation of the Greek population “in the wake of the crisis”. In contrast, the IMF’s mission is described as follows:

“A core responsibility of the IMF is to provide loans to member countries experiencing actual or potential balance of payments problems. This financial assistance helps countries in their efforts to rebuild their international reserves, stabilize their currencies, continue paying for imports, and restore conditions for strong economic growth, while undertaking policies to correct underlying problems.” (http://www.imf.org/en/About/Factsheets/IMF-Lending).

Fifth, the original proposal for an EMF by Gros and Mayer (2010) was focused on dealing with the public debts that were the direct cause of the crisis:

“In the recent financial crisis, policy has been geared solely towards preventing failure of large institutions. In the future, however, the key policy aim must be to restore market discipline by making failure possible. For the Eurozone this means that the system should be made robust enough to minimise the disruption caused by the failure of one of its member states.”

(Gros and Mayer, 2010).

They anticipated what has become, and remains, a key disagreement between the IMF and the other Troika members, with wide-ranging implications. The point is that orderly debt restructuring cannot be divorced from international lending in emergency. Unsurprisingly, it is also central in the proposal for an EMF by Weder di Mauro and Zettelmeyer (2017). In fact, its importance has been officially recognized in the treaty that gave birth to the EMS. The treaty requires that all future borrowing by Eurozone member states include a collective action clause (CAC) designed to facilitate debt restructuring.

Finally, the ultimate goal should be to avoid debt crises, which requires achieving fiscal policy discipline in each and every member state. The importance of fiscal discipline was clearly recognized by the Maastricht Treaty. It was recalled from the start of the crisis, as evidenced in the Council quotation above, and it led to amendments to the Stability and Growth Pact. Yet, the pact is deeply flawed and remains highly unlikely to deliver lasting fiscal discipline in each and every country (Wyplosz, 2016). What would be its role in the EMF and how would it coordinate with the European Commission, formally in charge of implementing the pact?

The idea of setting up an EMF has been revived recently, when the Managing Director of the EMS argued that it should be an ESM+, an institution with a broader mandate and a slimmed down decision process (Regling, 2017).

This note examines what such a transformation would entail. The suggestion that regional monetary funds could be set up alongside the IMF is not new. Previous debates are recalled in the next section, which also examines some specificities of the Eurozone. Section 3 takes a step back, as it presents what are the functions of an international lender. It points out how deeply challenging the task is. Section 4 applies this analysis to the case of a European Monetary Fund. It examines both the operational and
institutional aspects of such an undertaking. All along, the reference is the International Monetary Fund, against which the merits of a European Fund must be assessed. The last section concludes.
2. **HISTORY OF A CONTROVERSY**

2.1 **The East Asian crisis**

In September 1997, in the early phase of the South-East Asian crisis, the Japanese government proposed to create an Asian Monetary Fund (AMF). After considerable hesitation, the Thai government had applied to the IMF. The conditions imposed by the IMF were widely seen in Asia as excessively stringent – especially regarding fiscal austerity – and were soon relaxed somewhat. The amounts that the IMF could provide under its own rules were too small for the task. The support package totalled $17.2 billion, with contributions of $4 billion by the IMF, $4 billion by Japan, and smaller amounts by Asian countries, the World Bank and the Asian Development Bank. Importantly, the US did not contribute. In spite of its minority contribution, the IMF was in charge of designing and monitoring the program, including authorizing disbursements. The AMF proposal was motivated by this perceived imbalance, but not only. Katada (2001) mentions the risk of contagion, the need to protect Japanese investments in the region and the desire by some countries interested in providing financial support, such as Australia, to move from politically difficult case-by-case funding to a more structured framework.

Paramount in these efforts was the regional desire to escape the Washington Consensus, the then-dominating view that national economic institutions should follow the principles of trade opening, market-friendly reforms, fiscal discipline and a monetary policy aiming solely at price stability, including exchange rate flexibility. The IMF and Western governments interpreted the criticism of the Washington Consensus as a call for less disciplined policies. As a result, the AMF was perceived as a way of offering easier conditions to crisis countries. This led to the rejection of the AMF on the ground that it would undermine the IMF and create a dangerous moral hazard by encouraging policies that eventually lead to a crisis that are then financed far too leniently. China too was opposed to the AMF but for political reasons: it saw the AMF as an effort by Japan to assert its influence in the region, which was indeed another motivation. Faced by such opposition, Japan shelved its proposal, but pursued a less ambitious strategy, which eventually led in 2000 to the Chiang Mai Initiative, a series of bilateral swaps among central banks of the ASEAN + 3 countries. Over time, the Chiang Mai Initiative has been further developed to include a permanent office. Yet, the initiative is careful enough to place the IMF at the centre of its assistance: in order to benefit from the swaps, a country must first agree to an IMF program, which provides the first line of defence.

Many aspects of this failed attempt at establishing a regional monetary fund are relevant to the debate about an EMF.

- First, several of the same motivations were invoked when the Greek rescue was put in place: fear of contagion, desire to protect foreign investments – especially foreign bank loans to the Greek government – and a political desire to dispense with direct involvement by the IMF in regional affairs.
- Second, the resources of the IMF are quite limited, so that a large rescue package must involve contributions by other countries. Usually in previous cases (e.g. Mexico in 1995, South East Asia in 1997-8) the countries most willing to contribute are those that have the stronger economic ties with the crisis country. The “law of trade gravity” implies that countries from the same region are the most likely contributors.  

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108 Trade gravity is probably one reason why regional development banks have developed alongside the World Bank.
• Third, moral hazard is always a major issue. The Troika (during the Eurozone crisis) has been more demanding than the IMF alone (in other crises) in setting conditions, in delaying debt restructuring and in tightening the approval process. In so doing, the Troika has shifted the balance between borrower and lender moral hazard from the former to the latter, an issue explained and examined in Section 4.3.1.

• Fourth, politicisation is always a concern. A recurrent criticism of the IMF is that it is a political institution. This is unavoidable. However, once a programme is completed, the IMF ‘disappears’ from the country, usually leaving a trail of inconsequential resentment. Regional funds remain part of the regional landscape and resentment stands to pollute relationships between closely-knit states.

2.2 The Eurozone crisis

The management of the Eurozone crisis has evolved over time, in response to unexpected and unwelcome events rather than along a well thought-trough strategy. The first rescue of Greece in May 2010 was explicitly described as a unique and exceptional response to a unique and exceptional event. The programme conditions were coordinated by teams from the European Commission and the IMF. Financial support came in the form of bilateral loans from Eurozone governments. Soon thereafter, the European Financial Stability Fund (EFSF) was created in the form of a private status special purpose vehicle. As the crisis spread from Greece to Ireland, Portugal, Spain and Cyprus, the arrangement became increasingly permanent. Eventually, a treaty set the ESM up as an international organization that took over from the EFSF.

An important aspect is that a condition for ESM to lend is that it be accompanied by an IMF loan. “whenever appropriate and possible” (EMS treaty, art. 13-1(b)). The loan conditions should normally, therefore, be coordinated between the European Commission and the IMF and approved by the ECB, thus creating the Troika. From the start, tensions have characterized the relationship between the three institutions, especially between the Fund and the Commission (IEO, 2016; IMF 2017). These tensions have grown over time. The latest ESM loan to Greece, decided in 2015, was not accompanied by an IMF loan. Officially, the IMF will join later on but, in practice, the Troika is not operational any more, and is now replaced by “the Institutions”.

The disagreements have concerned various aspects. The most important one has been the question of the initial restructuring of the Greek debt.109 The ECB and the Commission strongly opposed any discussion of debt restructuring, while the IMF reluctantly went along, which forced it to change its exceptional access lending procedure designed to allow for loans far in excess of the agreed ceiling. Indeed, the IMF is not allowed to make such a loan unless its staff certifies that the debt is sustainable, in the sense that there is a high probability of being fully honored. As the IMF staff could not provide such an assessment, a new clause was subreptically added, waiving the debt sustainability condition in presence of a serious risk of systemic contagion. This systemic exemption clause has since been revoked and replaced in 2016 by a clause that allows exceptional lending, even if debt sustainability cannot be ascertained, when there exist other sources of financing, including “intended debt restructuring”, so that the Fund’s loan is safeguarded.

The 2010 adoption of the systemic exemption clause created considerable turmoil within the IMF. It was an unmistakable indication that the Fund felt it necessary to go along a programme that: 1) it did

109 By 2012, this position had become untenable and it was decided to deeply restructure the privately held part of the debt, a process labelled Private Sector Involvement. The need for an Official Sector Involvement is now an actively debated issue, strongly supported by the IMF and recognized by the EU as a possibility “for later”.

not control; 2) it deemed risky for both Greece and its own resources. The new clause is also significant because 1) it is an explicit acknowledgement that the previous one was mistaken, and 2) it officialises the co-management of programmes by “other sources”, thus opening the door to regional funds.

When the Asian Monetary Fund project was put forward in 1997, it was promptly dismissed by the IMF and its main shareholders, especially the US and the European countries, while the European intervention during the Eurozone crisis was fully supported by the Fund and its main shareholders. Several explanations have been put forward. The first one is that a monetary union is a very different animal. The common currency indicates a profound pre-existing degree of regional cooperation, sealed by extensive institutional and legal arrangements. This includes the existence of a common central bank, whose responsibilities already expand to all member countries. The second explanation is more political and has been a source of frictions within the IMF, including its Executive Board. Critics have asserted that the EU exerts power that exceeds its actual importance and that the US sided with the Europeans because it feared for its own financial institutions and the badly shaken world financial system in the wake of the Global Financial Crisis. A third explanation is that the European project was essentially pragmatic and less ambitious than the full-fledged AMF. The move to a true EMF could reactivate some of the fears generated by the Asian project.

2.3 The Eurozone oddity

The IMF has been designed to provide countries with the foreign currencies that it needs when its central bank runs out reserves and when borrowing from the private sector has become impossible. The ESM, instead, provides euros to a Eurozone government that runs a fiscal deficit – including debt service – and has lost market access. The ECB can also provide euros to solvent financial institutions when they too are unable to borrow from other financial institutions. This Emergency Liquidity Assistance (ELA) is conducted by the local national central bank, which takes the corresponding risk, but must be authorized by the ECB.

This may seem odd, but it is not. Much as a central bank cannot create foreign currency that its government or financial institutions need, in the Eurozone national central banks cannot create euros on their own, as they need prior authorization by the ECB. In that sense, the euro is a foreign currency for the Eurozone member countries. As a consequence, a Eurozone country may run out of euros, pretty much as any country that is not the US may run out of dollars. When it happens, a Eurozone country may go either to the IMF or to other countries that will lend euros. In that case, the IMF will draw on its own reserves and the other countries will borrow on the financial markets the euros that they need. The ECB can create euros to conduct ELA operations, but it is forbidden by the treaties to lend directly to member governments. Yet, nothing prevents the ECB to buy government debt on open, secondary financial markets, which is a well-known way to circumvent the direct lending prohibition. In the event, the ECB has done it repeatedly through its Long-Term Refinancing Operations (LTRO) and its Securities Market Programme (SMP), although it has always been careful to justify these actions as measures to correct misfunctioning financial markets. The ECB’s Outright Market Transactions (OMT) programme was a commitment to buy public debts to contain large spreads affecting the crisis countries.

As noted by de Grauwé (2012), this specific feature of the Eurozone is a major source of fragility. Imagine that the US federal government would lose access to financial markets. No one seriously doubts that the Federal Reserve would immediately step in and buy any amount of US bills and bonds – the US government always borrows in US dollars – that it would deem necessary to reassure the markets. Knowing this, the financial markets are most unlikely to ever close the door to the US federal government. In contrast, each Eurozone member government operates under the threat that it may lose market access. Eurozone countries may seem to be in the same situation as individual US states or
municipalities, since the Federal Reserve is forbidden not just to lend to these public entities, but also to buy, or even deal with their debt instruments. This is not quite accurate, though. The ECB is allowed to buy and deal with public debt instruments, hence the possibility of circumventing the general prohibition of direct lending to governments. As a result, the financial markets are uncertain whether the ECB will or will not intervene in the case where a member government’s debt become seen as potentially unsustainable. The normal market tendency is to “test the water” and see what happens. The ECB’s refusal to step in during the early phase of the crisis alarmed the markets and forced the countries under pressure to seek help from the IMF and the other member governments. It is only when the ECB stepped in with the full allotment LTRO and OMT programmes that the crisis started to abate. Several implications follow from these characteristics of the Eurozone.

- First, the ECB could virtually eliminate the risk of a public debt crisis if it were known to act as other central banks do. This is forbidden by the Treaty, and for good reason. The risk is that some member country governments would act as if there were no limit to borrowing, in effect no budget constraint. In the case of the US, or other countries with their own central banks, such behavior would result in large scale creation of money, leading to inflation and a depreciation of the exchange rate, as repeated experience has shown. When the central bank is independent and legally committed to deliver low inflation and a stable value of the currency, the threat of inflation and exchange rate depreciation acts as an effective brake on fiscal indiscipline. In the Eurozone, however, a single government can calculate that it is too small for its indiscipline to lead to Eurozone-wide inflation and to a depreciation of the euro.

- Second, a natural conclusion would be to emulate the situation in the US regarding states and municipalities by preventing the ECB from holding and dealing with national public debt instruments. Since it is not case, the Eurozone finds itself in an intermediate and therefore fragile situation.

- Third, the existence of the ESM means that there is another source of assistance than the ECB. The corresponding moral hazard can only be contained by imposing punitive conditions on countries that seek support. Punishing undisciplined governments (or their successors) may indeed make sense from a moral hazard viewpoint, but the punishment is mostly borne by the population at large, and often by its most fragile members. The political repercussions of such collective punishments, imposed by friendly neighbours and partners, are highly disturbing. As an external agent, the IMF is in a better position to act as a temporary enforcer of discipline.

- Fourth, when the ESM lends to a single country, especially a small one, it can easily borrow or use its resources to provide a limited amount of assistance. If contagion sets in, as it did during the crisis, more countries borrow from fewer countries. One can imagine that contagion spreads because markets calculate that, when all but one countries will have been rescued, the last remaining healthy country will become contaminated, as its loans to other countries will have been financed by repeated borrowings. At this stage, there is no solution but large-scale interventions of the ECB, since the IMF will not have adequate resources. This is a most unlikely outcome, undoubtedly, but so were the Great Financial Crisis and the Eurozone crisis, or Brexit. Failure to prepare for extreme events is always a mistake.

2.4 A natural evolution

At present, the ESM is merely an arm of the Euro area Member States. Lending and conditionality decisions are taken by the Council after vetting by the Eurogroup Working Group, following negotiations led by the Commission, which involve the ECB and are conducted alongside the IMF. In some countries, the decisions require parliament approval. This is a complicated setup, especially when

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110 It is not an EU institution, therefore not accountable to the EU Parliament and not audited by the EU Court of Auditors.
dealing with a financial crisis that often requires emergency action. The setup reflects the conditions under which the ESM was created, including the then-dominating view that it was meant to be a response to a rapidly spreading crisis that was not supposed to happen. This has led to the revision of the TFEU and the adoption of other legislation designed to strengthen the Stability and Growth Pact (the two pack-six pack). Yet, support for maintaining the ESM and to transform it into an EMF belies doubts about the effectiveness of the new rules. In fact, there is a deep two-way relationship between the Stability and Growth Pact and the existence of the ESM or an EMF, see Section 4.3.4 below.

Regling (2017) suggests that it is natural to undertake a transformation of the ESM into a streamlined and more efficient EMF. As noted above, outside of managing its balance sheet, the ESM has virtually no power on its own. This would not be a problem if the ESM process – deciding to provide support to a country, setting up conditions and monitoring compliance – were efficient. A large body of literature concurs that the experience so far has been seriously wanting and that the decision process is largely responsible for the outcome.¹¹¹ This suggests that there is indeed much room for improvement and that this may require transforming the EMS in depth.¹¹² However, while urgency and inexperience may explain some of the shortcomings, setting up an emergency lender is an intrinsically challenging undertaking and the challenge is magnified when it is an international lender, and even more so when it is a regional lender.


¹¹² In-depth changes may require a new treaty. This issue is not taken up in this note as it involves legal and political considerations.
3. THE GENERIC CHALLENGES OF AN INTERNATIONAL LENDER

The seminal case for an international lender was made in Bretton Woods in 1944, and it remains valid today. A country that faces a lack of foreign exchange reserves must be prevented from being forced into effective economic and financial autarky because the costs would be immense and no world economic order could survive a succession of such crises. Over time, the nature of crises has changed. The development of international finance has replaced trade deficits as the main cause of shortage of reserves with capital outflows. Slow-moving and relatively small shortages have been replaced by rapid and large-scale “sudden stops”. International liabilities have been built increasingly less \textit{vis à vis} other governments and more toward private financial institutions. The international lender, the IMF, has had to develop accelerated procedures and to increase its lending capacity. That has been the easy part of adjusting to new challenges.

The bedevilling challenge has always been the moral hazard that goes with rescues. Emergency lending is a form of insurance, and any insurance mechanism creates a moral hazard. Over the decades since the Bretton Woods conference, the IMF has developed a wide array of responses, and is likely to continue to struggle with this challenge. The main responses have been prevention, conditionality and size limits. Each one is appropriate but also faces further challenges.

3.1 Prevention

Short of avoiding the occurrence of crises, prevention can try and reduce their frequency and size. This requires close monitoring, access to relevant information in real time, ability to evaluate the situation, issuing warnings and being listened to. Each of these elements is challenging because most governments would rather not be told that something is going badly and, when told, they often are extremely reluctant to take remedial action, let alone to even admit the existence of a problem. To make matters worse, the moral hazard encourages this kind of behaviour.

Effective prevention operates at the limit of national sovereignty. The international lender’s best chance of success is to combine a carrot and a stick. The carrot can take various forms, such as technical advice or the appointment of officials. The stick is more delicate because it is quickly portrayed as an infringement of national sovereignty. The most often used stick is a non-explicit threat to apply tougher conditionality when and if a loan is eventually needed. Its effectiveness is quite limited. Carrots and sticks can be combined. A good example is the IMF’s Flexible Credit Line (FCL), which promises immediate access to loans for countries that have demonstrated good policies while the countries not selected are implicitly branded as non-cooperative. However, only three countries have accepted so far to apply for the FCL procedure, which undermines the stick effect.

The ESM has established a similar arrangement, the precautionary credit line, which allows for loans without the usual conditionality; this is the carrot. A key difference is that lending is not pre-authorized but conditional on existing economic and financial conditions when the request is made. The stick, therefore, is that non-compliance with the Stability and Growth Pact, enhanced by the two pack-six pack, closes the door to the carrot. An advantage is that it does not require a country to apply in good times, which avoids the stigma effect of the IMF’s FCL. A disadvantage is that an ESM loan under the precautionary credit line procedure requires authorization by the EU Commission and the ECB, a process that can be lengthy at a time when a crisis erupts and requires urgent treatment.

A reasonable conclusion is that prevention is a necessary tool of international lending, but that implementation is highly challenging. In spite of decades of experience all over the world, the IMF has
not yet found a way to prevent a government from courting disaster. The failure of the Stability and Growth Pact is another example of the limits of prevention.

3.2 Conditionality

Conditions set for a loan represent the central tool to limit moral hazard. Conditionality means that applying for a loan implies some loss of sovereignty. In addition, because the conditions are inherently painful, some element of punishment is present. Every country that ever applied for an IMF or an ESM loan remembers it as painful, sometimes humiliating. Indeed, it is not uncommon for conditions to provoke turmoil, including street actions and the fall of the government. It follows that conditionality is universally perceived as ‘political’ in the sense that ‘foreigners’ redistribute income and wealth among citizens, hurting some more than others. Suspicions about the foreigners’ motives naturally arise. These are all symptoms of a temporary loss of sovereignty.

The nature of the conditions matters a lot in this respect. In principle, the conditions are meant to address the economic imbalances that created the need for the lender to intervene. Because the lack of reserves is a macroeconomic syndrome, macroeconomic conditions are natural. They may include fiscal policy measures to restore budget balance, monetary policy actions to bring inflation down and correction of the exchange rate overvaluation. However, quite often, structural weaknesses lie behind the surface and explain why the government has adopted unsustainable macroeconomic policies. In these instances, correcting macroeconomic imbalances will not deliver macroeconomic stability once the programme is over. This is particularly the case within the Eurozone where the exchange rate is not an adjustment tool anymore. An overvaluation requires a reduction of prices, and therefore wages; price and wage flexibility, in turn, often requires structural reforms.

This has led to the addition of structural to macroeconomic conditions, a further infringement of sovereignty. Over the years, the IMF has expanded the list of structural conditions, as did the Troika during the Eurozone crisis. Heavy criticism of structural conditions during the East Asian crisis (Feldstein, 1998) led the IMF to decide in 2002, and further in 2009 to streamline their numbers and to justify them as being ‘macro-critical’. Figure 1 shows that this decision has effectively reduced the average number of conditions included in IMF’s programmes. Clearly, finding the right balance between what makes good economic sense and what is deemed acceptable is a key challenge, with no obvious best answer.

Figure 1: Structural Conditionality in IMF Stand-By Arrangements, 1997–2000 vs. 2008–11 (Number of conditions per programme per year)

Source: Takaji et al. (2014)
3.3 Size limits

When a country has embarked on an unsustainable path, it will eventually need either to correct the situation or, failing that, seek help from an official lender. The first question is: how much? A country is compelled to ask for help when it is running out of the international reserves while running an external deficit, or because its government cannot borrow any more to finance its budget deficit, or both. The simple answer is that the financial support must be sufficient to finance these deficits until they are eliminated or until it can borrow from the private sector. This is often called the financing gap. In practice, the answer is more complicated. Any deficit can be closed quickly by various means, but this calls for stern measures that always have a detrimental impact on economic activity and on citizens’ living conditions. Spreading the hardship over time, to make it less painful and to give time for remedial actions to take effects, is a goal of external lending. Assessing the financing gap, therefore, requires passing judgment on the trade-off between the pain of adjustment and the cost of the program. The literature is rife with arguments in favour and against speed.

Moral hazard is another important consideration. Course correction is always easier when undertaken earlier rather than later, if only because the adverse effects of being on an unsustainable path (domestic and foreign indebtedness, inflation, exchange rate misalignments, wrongly set asset prices, etc.) accumulate over time. Yet, there is strong evidence that policymakers typically delay corrective action and rather apply for help. This moral hazard is one reason why the IMF has set size limits to its loans. Unfortunately, because late interventions require large amounts and because capital mobility has led to increasing rescue needs, it is often the case that these limits are breached under crisis pressure.

Another reason for limits is that lending is always risky. Size limits are a protection against risky lending. In addition, there may be true limits because the lending capacity cannot be expanded. This applies to the IMF and the ESM. Yet, when limits are reached, they can be circumvented. As previously indicated, when faced with very large needs, until the Eurozone crisis, the IMF has often committed to an amount inferior to the presumed financing need and then collected the rest from friendly countries. In every case, the IMF has remained sole in charge. During the Eurozone crisis, a new arrangement has been set up as the ESM – actually, first individual Eurozone countries, next the EFSF and then the ESM – and the IMF have both provided funds and have both managed the rescues. Since the ESM has contributed significantly more than the IMF, its decision power has been dominant. The IMF has accepted this historical arrangement under the condition that its debt be senior to ESM debt.

While such an arrangement reduces the risk borne by each contributor, it leaves the moral hazard untreated or even mistreated. Figure 2 shows the amounts committed by the IMF during its largest rescue operations, expressed as a percent of each country’s quota. It shows that the loans to Greece, Ireland and Portugal have exceeded previous records. It is also important to note that the IMF lent only a small part (typically 20%) of the total amounts made available by the Troika. As if to compensate, the Troika has sought very demanding conditions, thus combining financial generosity with severe conditionality. This could be defended, were it not for the fact that countries with initial large debts, such as Greece and Portugal, saw their indebtedness further increase precisely because of the immense size of the loans.
3.4 Interest charge

The celebrated “Bagehot rule” for supporting troubled banks is to promptly lend to solvent banks against collateral and at penalty interest rates. Governments are very different economic entities, but the Bagehot principle is often considered as a proper way of thinking about moral hazard in rescue operations. The question of solvency is treated in the next subsection. In international rescues, the collateral is almost never required, since a government collateral is mostly its ability to raise tax revenues.

Regarding interest, the IMF charges the market rate plus a small administrative fee, except for structural programmes specially designed for reforming low income countries, for which the interest rate is virtually nil. Thus, the IMF policy is neither to penalize nor to subsidize. The interest rate is not used to limit moral hazard. The logic, instead, is that the Fund substitutes for loss of market access, at market conditions, and uses surveillance and conditionality to mitigate the moral hazard. During the Eurozone crisis, the EMS has sought to apply the Bagehot principle of a penalty rate. It soon emerged, however, that the combination of a pre-existing large debt, high interest rate and low growth (often negative in many cases) had become a massive source of debt pileup, the well-known snowball effect.113 Figure 3 shows how powerful it was in Greece over 2010-12, when the public debt rapidly increased. In the face of a clearly explosive evolution, the Troika changed its strategy radically in 2012. The penalty on the interest rate was brought down from 4% to 0%, the debt held by the private sector was partly cancelled and the debt held by the public sector – by then some 80% of the total – was reprofiled, with a long grace period of 10 years and a considerable extension of its maturity (on average, to more than 30 years).114 Similar rebates were granted to the other EMS loans, prompting Weder di Mauro and Zettelmeyer (2017, p.28) to conclude that “by late 2012, European crisis lending had become highly concessional”.

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113 This is made clear by the budget accounting identity: $D_b = d + (i - g - p)b$, where $b$ is the debt/GDP ratio and $D_b$ its increase, $d$ the budget deficit as a proportion of GDP, $i$ the interest rate, $g$ the real growth rate and $p$ the inflation rate.

114 The IMF conditions were not changed.
Once again, we see that finding the appropriate balance between conditions designed to stabilize the situation and measures apt at containing the moral hazard of emergency lending is challenging. A natural tendency is to use the market rate, as the IMF does, but which market rate? During the Eurozone crisis, many countries faced very high market rates, reflecting fears of default. Since a key purpose of a rescue is to calm market jitters, it would seem contradictory to adopt those rates. Adopting the lower rates faced by non-crisis countries, however, amount to a subsidy since the crisis country effectively borrows at a rate cheaper than its own market rate.

A further complication is the risk borne by the lenders and their taxpayers. The IMF takes virtually zero risk as it never offers any concession and always requires seniority status. Throughout its seven decades-long history, defaults on IMF loans have been very rare and mostly circumscribed to countries that face civil or external wars. The European loans, on the other hand, have already been partially written down in present value terms, as described above, through interest rate cuts, extended grace periods and lengthened maturity. Since these loans are financed through borrowings (by governments and the EFSF/ESM) that do not benefit from similar write-downs, the costs are effectively borne by the lenders.

3.5 Debt restructuring

Another aspect of the Bagehot rule is to only lend to solvent entities. For firms, there is a simple, legal definition of solvency based on their balance sheets. Nothing of the sort applies to governments, whose key asset is the ability to raise tax income over the indefinite future. Casual statements about a government being ‘bankrupt’ miss this simple point and are therefore misleading. This observation represents yet another massive challenge for international lenders. Indeed, two leading proposals (Gros and Mayer, 2010; Weder di Mauro and Zettlemeyer, 2017) emphasize the need for debt restructuring as a key reason for establishing an EMF.

The IMF has tried to respond to the challenge by conducting Debt Sustainability Analyses (DSA). For large – exceptional access – loans, if the calculations indicate that the public debt is unsustainable, the IMF is duty bound not to lend unless the government first restructures its debt, which means that it defaults, at least partially. Since a default results in losses to stakeholders, such a decision cannot be made lightly and should be based on strong evidence.
DSA consists in comparing a government’s liabilities, usually its explicit debt, to its assets, chiefly the present value of present and future tax collections. This requires making assumptions about future income, public spending and tax rates, and to choose the interest rate at which future income is to be discounted, which can be approximated by the whole path of future interest rates on public debt. Since a country, and its government, is expected to exist forever, these calculations must extend into the infinite future; in practice the IMF look at 30 year horizons, sometimes even further out. It stands to reason that forecasts of income growth and interest rates over such lengthy horizons are very hazardous, to say the least. Unfortunately, because of the snowball effect, minor changes to growth and interest rate assumptions result in very large differences in the results. Furthermore, these calculations produce a path for the debt over decades, and one must make a judgment. Is such a judgment at all meaningful? It is inevitably arbitrary, resting as it does on speculative assumptions. In addition, in every country, citizens and firms benefit from entitlements such as pensions or health care, which are legal spending obligations. They should therefore be computed as liabilities, which is rarely done, even though their sizes may well dwarf the existing public debt.

In summary, DSA calculations are extremely fragile, their interpretation is arbitrary and significant components are often ignored. The unmistakable conclusion is that DSA will never be able to provide a clear, black and white answer (Wyplosz, 2011). How then can an international lender decide whether to call for a debt restructuring before agreeing to a loan? Indeed, during the Eurozone crisis, the IMF and the Commission have occasionally reached opposite conclusions. Lending when the debt is too large will create massive risk for the lender and the taxpayers that stand behind it. It will also impose hardship on the borrowing country’s citizens to no avail, since the debt problem will remain unsolved. Not lending when the debt is in fact sustainable, on the other hand, means that the very purpose of the international lender is not fulfilled, which will impose suffering upon the country’s citizens. One can hardly think a higher-stake decision for an international lender. Given the stake and given the impossibility of a robust evaluation, the quality of the decision rests entirely on the international lender ability to make a good judgment. This is why the quality of lender’s management and governance is crucial to its task.

### 3.6 Summing up

This section has reviewed the many, often daunting challenges faced by any international lender. In a way, lending is easy but dealing with the moral hazard is highly challenging, and there is no magic bullet. Part of the solution comes from the conditions attached to the loan. These conditions should be designed to correct the imbalances that made the loan unavoidable in the first place. In nearly all cases, these conditions are painful and this is why they contain the moral hazard. There may exist a temptation to toughen the conditions, especially structural conditions, to reinforce their deterrent aspect but the IMF experience is that it often backfires.

Prevention is another important way of dealing with moral hazard, but it faces the limits of national sovereignty. There is little that can be done to nudge governments intent on disregarding warning signals and on delaying remedial action as long as possible. Lending limits may convince governments to move faster, but they have to be credible. Here again, the track record is not reassuring. The cost of borrowing from the international lender involves a similar trade-off between the objective of alleviating the pain and dealing with the moral hazard. Here again, there is no agreement on what is the best answer.

Finally, one of the most delicate issues is whether the lender should require a debt restructuring when the pre-existing debt is very large. There is no simple answer, if only because it is impossible to
determine whether a debt is sustainable or not. A complicating factor is that a debt restructuring imposes potentially large losses to debt holders, some of which may be governments.

It should be clear, by now, that international lending is a particularly difficult undertaking. The question is whether an EMF is well suited for the task, or whether the IMF is better placed.

4. THE CASE OF A EUROPEAN MONETARY FUND

4.1 Comparative advantages

The “spirit of solidarity” among member countries (formalized in Art.122 (1), TFEU, but not a valid legal basis) was initially given as a “legal/formal justification” for the rescues undertaken during the Eurozone crisis. Indeed, solidarity is likely to be more developed within a region that at the world level. In economic matters, solidarity is likely to be enhanced by deep economic and financial linkages. A serious crisis in one country stands to affect the others, including through potential contagion. It seems therefore natural to provide mutual insurance at the level where it matters most.

In addition, prevision, programme design and oversight require an in-depth knowledge of the country. It stands to reason that close and densely related countries have a comparative advantage in acquiring and keeping up to date information about each other. In the case of Europe, the Commission is already well informed about member countries through a great many channels, including enforcement of the Single Market, the Stability and Growth Pact and the associated Macroeconomic Imbalances Procedure. Tapping this information is both relatively inexpensive and efficient. A related information advantage lies within the Eurosystem. The ECB and national central bankers are in frequent communication. This make it possible for the ECB-based Single Supervisory Board, along with the European Banking Agency, to have detailed and real-time access to information on significant European banks, even though this does not seem the case at this stage.

Finally, throughout the Eurozone crisis, the European Commission and the ESM have acquired knowledge on international lending operations. This was not the case at the outset and could have been an argument to rely exclusively on the battle-experienced IMF. Indeed, it was a key reason why it was seen as necessary to involve the IMF. Institutional learning can be seen as an investment and it is now available to draw upon.

4.2 Comparative disadvantages

Solidarity may have been a key political argument in favour of a European solution to the Eurozone crisis, but it could not conceal conflicts of interest. It is now widely agreed that, facing crises in several Eurozone member countries, the other members were primarily concerned with protecting their own banks that were significantly exposed. This is why they opposed, and continue to oppose, debt restructuring: it would represent a cost to their taxpayers. Even the debt reprofiling enacted in 2012, as described above, was structured in a way that made it hard to grasp by public opinions, thus avoiding a political backlash. This is not to deny that conflicts interest do not arise at the IMF. In fact, the IMF accepted to be a junior partner and to bend its exceptional access rule because it wanted to be part of a historical operation after years of quietude. In addition, its main shareholder, the US, was deeply concerned about its own banking system (Blustein, 2016). Yet, given the deep integration that binds Eurozone countries together, the scope for conflicts of interest is very large, not to mention rivalry. In addition, the fact that Eurozone politicians are constantly working together means that they are naturally inclined to make mutual concessions as part of on-going deals. While political deals are not
reprehensible *per se*, it represents an additional reason why the EMF stands to be more politicised than the IMF.

A little noted aspect of politicisation is the treatment of a crisis by the media and, more widely, by observers. A remarkable aspect of the Eurozone crisis is that the media have taken a mostly national view of events and of lending conditions. This is not original, much the same happens for most major crises that require international lending. It has been observed at the time of the Mexican crisis in 1982, of the South East Asian crisis in 1997 and of the Argentinean crisis in 2001. In each case, public opinions in lending countries – in these instances, lending via the IMF or direct bilateral lending orchestrated by the IMF – have been prone to blame the borrowers for inept policymaking or corrupt politics, often both. Yet, within the European Union, sharp comments, to put it mildly, undermine the principles of solidarity and common destiny that underpin the Union. Surprisingly, this bias has even affected the economist profession. While economists are known to be prone to disagree, in this case disagreements have often been along countries of origin. The result has been the growing entrenchment of diverging views among economists, which may have weighed on politicians’ views, and the other way round.

The role of an international lender is to provide insurance to its members. A basic principle of insurance is risk diversification. In the present case, it means that the wider the membership, the more diversified the risk is. Risk diversification is not only achieved through wider membership, but also by insuring events that are little correlated or, even better, negatively correlated. Within a region, especially one where countries are deeply integrated, correlation is likely to be positive and large. Figure 4 confirms this conjecture. Even though national growth rates around the world have become more correlated over time, the correlation is significantly smaller than within the Eurozone. The EMF may therefore find itself facing funding pressure in the front of a crisis, especially if contagion occurs.

![Figure 4: Correlation of GDP growth rates](image)

Source: World Development Indicators, the World Bank.

Note: Unweighted average correlation of individual countries growth rates with either the Eurozone or the World growth rates.

The knowledge advantage of an EMF may turn into a disadvantage. Crises are never exactly alike and their treatment must be adjusted to each case. Rightly or wrongly, the IMF prides itself that its decades-
long experience of dealing with crises in every part of the world contributes to a unique knowledge that is put to work when facing a new crisis. How critical this IMF advantage may be is hard to assess, but it is a fact that each programme is prepared by the relevant regional directorate and carefully vetted by ‘horizontal’ directorates that are expected to bring experiences gleaned from previous interventions.

Finally, during the crisis, the Eurosystem has faced well-publicized internal conflicts. From the start of its existence, the Eurosystem has recognized the risk of disagreements along national lines within its own ranks. This is why, officially, it only concerns itself with Eurozone aggregates (inflation, growth, financial conditions, etc.) and studiously avoids to take into account national conditions. This rule cannot be maintained when one country finds itself in a crisis situation. The Eurosystem must then look at local conditions and potential repercussions on other member countries. The most glaring example of this conundrum is the evolution of interest rates. In theory, the Eurosystem sets the interest rate that prevails throughout the Eurozone. During the crisis, however, national interest rates have diverged, sometimes by considerable amounts. In this situation, it becomes impossible to think of a common monetary policy. Yet, with only one interest rate to set (its own lending rate against solid collateral), the Eurosystem cannot fine-tune its policy to the needs of every member country. During the crisis, the ECB has often acknowledged this fact. The OMT programme was designed to limit interest rate divergences. The programme has had an undeniable success in this respect, but it also fed sharp disagreements that still linger. There is no solution to this problem inherent to any monetary union, but it raises the issue of the role of the common central bank. It also concerns the EMF, which stands to be pulled apart by diverging national interests in the design of programmes: should it aim only at providing relief to the crisis country or should it take into account the interest of its shareholders?

The IMF itself is not immune to the problem, which it has acknowledged but not resolved. Its rule of engagement, however, is to concern itself with the interests of crisis countries. Its shareholders often weigh in, though, hence the frequent complaints about politicisation. Yet, its membership is global, and it is reflected in the composition of the Executive Board, which goes some way toward alleviating the problem.

4.3 Governance

One reason to transform the ESM into an EMF is to improve governance (Regling, 2017). The overly complex, and at times counter-effective, arrangement adopted in the midst of the crisis is the result of conflicting viewpoints and interests that are not likely to be easily brushed aside. This calls for careful and rigorous preparations. Governance must be designed to cope with a number of issues previously mentioned and now examined in more detail.

4.3.1 Moral hazard

The overwhelming importance of moral hazard has been emphasized over and again in previous sections, which suggests that it is probably impossible to fully eradicate it. Moral hazard is challenging because it comes in different guises, which are not always carefully distinguished. There is a borrower moral hazard, the temptation to borrow excessively in the expectation of being bailed out in case of acute difficulties. There is the opposite case of a lender moral hazard, the temptation to lend excessively in the same expectation that the borrower will be bailed out with no cost to the lender.

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115 When the monetary union was being mooted in the 1990s, the literature clearly identified asymmetric shocks as the Achilles’ heel of a common currency.

116 Rose (1999) notes that the presence of moral hazard is not a reason to dismiss regional monetary funds but a reason to build good funds.
Noting that borrowers and lenders can be official or private, one can further decompose these two types. These various possibilities are represented by the four quadrants in Figure 5.

The various crises of the Eurozone have involved different types of moral hazard and the treatment of the crises has transformed some types into other ones. At the risk of oversimplification, the figure can illustrate the evolution of the crises. In the Greek case, it started from the case labelled ‘2’ in the figure: the Greek authorities had borrowed excessive amounts from private lenders, including foreign banks. The decision to bail the government out without debt restructuring allowed the foreign private lenders to dispose of a substantial portion of their loans, which ended it up in the hands of both international official lenders, migrating to ‘1’ in the figure, and private domestic and Cypriot banks, still ‘2’. Portugal was in a similar position. In the cases of Ireland and Spain, the crisis arose from excessive borrowing by firms and households from banks, which correspond to ‘4’ in the figure. When the crisis broke out, the Irish and Spanish governments were prompted to assume much of the distressed loans, moving to ‘3’. To do so, these governments borrowed the required amounts from the financial markets, taking us to ‘2’. The resulting massive increase in public debts led to EFSF/ESM interventions, hence a further shift to ‘1’.

Figure 5: Types of moral hazard

<table>
<thead>
<tr>
<th>Lender</th>
<th>Borrower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Official</td>
<td>1</td>
</tr>
<tr>
<td>Private</td>
<td>2</td>
</tr>
<tr>
<td>Official</td>
<td>3</td>
</tr>
<tr>
<td>Private</td>
<td>4</td>
</tr>
</tbody>
</table>

Thus the movements are always from the private to the public sector, on both sides of lending. The national authorities and the international (official) lender transform private losses into public losses. This primal moral hazard is well known. Yet, as indicated above, the migration across categories has been orchestrated as part of the EFSF/ESM bailouts. In principle, the private lender moral hazard is now contained thanks to the new “bail-in” rule of the Bank Resolution and Recovery Directive that came into effect in January 2016. According to this rule, if a bank needs to be rescued because risky loans are not fully repaid – as would have been the case if Greece had been allowed to default in 2010 on its excessive borrowings – the stakeholders must take the first losses. The adoption of this rule is an important step forward. At the same time, it is an implicit admission that great mistakes were made during the crisis. This makes it even more surprising that explicit debt reductions are not on offer by the official lenders for governments that were forced to assume private loans, as in Ireland or Spain, to prevent their taxpayers from bearing alone the cost of the mistakes.

117 In the case of Greece, the Greek banks acquired a significant share of loans previously granted by foreign banks, but this was done at the request of the government, which implicitly promised a bailout.
Both lenders and borrowers must be held accountable for excessive loans, which applies to both public and private lenders and borrowers. The bail-in rule effectively clarifies this point, as far as private lending is concerned, but there is no equivalent rule for public lending, including the international lender. The IMF’s excessive access procedure is designed to prevent the occurrence of such a situation, but the limited reliability of DSA implies that mistakes are likely. In that case, the seniority that the Fund avails itself regarding its loans leaves the borrower to bear alone the consequences of such mistakes. The situation is far worse with EFSF/EMS lending, since there is no excessive access rule. The only safeguard is DSA, which is both highly imprecise and manipulable, as noted above and documented in IEO (2016).

A key challenge for setting up an EMF will therefore be to address this issue. It comes into two parts.

- First, the EMF will need the equivalent of the Fund’s excessive access procedure. It should be prevented from lending large amounts, unless the pre-existing debt is small enough. Defining “large” and “small” is no easy task, but it can be done. If the debt is deemed to be too large, the EMF should be required to subject any fresh loan to a debt reduction of appropriate size. Fortunately, this step is already made reasonably easy by the ESM treaty that requires that all sovereign borrowing include a Collective Action Clause (CAC) clause.\(^\text{118}\) Importantly, given the legacy of excessive official debts accumulated by some countries, mandatory debt reduction must not be confined to private lending. This observation underlines the ever-present conflict between the existence of an EMF and the no-bailout principle.

- Second, as explained above, the risk that official loans be excessive cannot be ruled out. This should be recognized with an evaluation procedure that can identify ex post a loan as excessive and mandate a debt reduction. This is a delicate step, since the instinctive tendency of any lender is to blame the borrower for not having fulfilled all the conditions (the conditionality issue is taken up in the next sub-section). A proper resolution is to delegate to an independent body the task of evaluating all loans by the EMF. It could even possibly suggest a debt restructuring.

4.3.2 Conditionality

Section 3.2 describes the tendency of the IMF to impose an increasing large number of conditions, especially structural conditions, and how the IMF has endeavoured to buck the trend, with some success. Conditionality is an essential requirement to limit official borrower moral hazard but it can, in fact, increase both official lender and borrower moral hazard. Long lists of conditions leave the borrower to pick and choose the easier conditions, while explaining that it was impossible to enact everything. They also protect the lender if the outcome is disappointing, as it will be possible to find conditions that were not fulfilled and use this as an explanation for any failure of the programme. Structural conditions are especially handy, since they typically are politically difficult. The borrower, who often approves the conditions, can use the programme to pressure domestic opponents. The lender can point to political failures to blame the borrower, even though it well knows that most structural reforms take years to produce favourable results. It is no wonder that conditionality easily proliferates, for wrong reasons.

Parsimony in programme design has much to recommend. It forces both sides to agree on key causes of the circumstances that led to the need for official lending. It leaves no space for the borrower to escape its commitments, while requiring the lender to be precise in its requests. It makes it more likely to achieve programme ownership by the borrower, the Holy Grail of all IMF interventions.

\(^\text{118}\) For reasons well explained in Weder di Mauro and Zettelmeyer (2017), the chosen CACs are not well designed to prevent the holdout problem, whereby minority shareholders can easily block any agreement.
The EMF should adopt best practice and be committed to few, carefully chosen and well-designed conditions. Structural conditions should not be used to force reforms on a reluctant government, no matter how desirable these reforms may be. Structural reforms are politically difficult because they always imply income and wealth transfers among citizens. As such, they are truly a matter of national sovereignty, which should be kept to a strict minimum. The IMF criterion, that structural conditions should be included only if they can be shown as crucial to correct the macroeconomic difficulties that prompted the need for a rescue, is today's best practice.

For those who design rescue programmes, condition parsimony is more difficult than serendipity. It is easy to throw the net wide, drawing up lengthy lists in the hope that they will catch up what is really necessary. Instead, in order to zero in on the essential causes of a crisis, the lender must deploy solid analytical skills, which requires a wide range of competences. As explained above, the IMF rests on extensive internal – and confidential – debates involving many different directorates. The staff analysis and proposals are then put for decision by its Executive Board, which brings together (usually) skilled representatives of the shareholders and which can ask for details and clarification. The Executive Directors further draw on their own staff, who are usually highly competent. Most of the IMF mistakes occur when the Board is not given enough time because of the urgency of the situation.

The EMF's governance must fulfil these requirements. It must be structured into independent divisions (analogous to the IMF's directorates), each with particular areas of competence. Open debate must be guaranteed. The final say must belong to the shareholders, keenly aware that mistakes may lead to losses, as argued in the previous sub-section. While they represent their authorities, the decision makers must justify the position that they take explicitly on the basis of cogent arguments, not political fiat.

For this to be the case, the EMF must be accountable, not just to their governments, but also to the citizens as well. Accountability is deeply rooted in transparency. It can be achieved in many ways, as explained in De Gregorio et al. (1999). The crucial ingredients are the following. All internal debates must be recorded and made available when the programme is concluded. Each programme is to be evaluated by an independent body, which can be set up within the EMF structure like the IMF's IEO, or composed of external experts. The evaluation must be made public, as well as the deliberations of the decision-making body.

4.3.3 The Commission, the EMF, the governments and the Parliament

The respective roles of the European Commission and of the governments is a perennial issue, now extended to the role of the European Parliament. The creation of an EMF will inevitably rekindle these old controversies, as was the case when the EFSF and the ESM were established. In this case, the chosen solution was to put the Commission in the driving seat, but to tie it within the Troika and to leave the final decision to the Eurogroup/Council backed by the Eurogroup Working Group, leaving the EFSF/ESM to execute the financing. This has not been a satisfactory construction. It has led to infighting within the Troika, to considerable secrecy, to an oversight procedure of uneven quality, to heavy politicisation and to occasional blame games.

Quite independently of the question of the relationship with the IMF, which is examined below, the EMF must be structured in a way that makes it possible to deal effectively with a challenging task in an already crowded field. It is possible to envision two polar blueprints. The first one is the creation of a full-blown monetary fund (the EMF), the second one is a beefing up of the ESM.

A full-blown monetary fund would combine the prevention and lending functions. It should be able to fulfil the requirements listed above. It would be a fairly large institution, given a large degree of independence. Its staff should be highly skilled, covering a large array of competences, ranging from
macroeconomics to public finance, financial markets, asset management and the relevant legal aspects. It is easy to foresee a number of difficulties. If the EMF is in charge of prevention, how would this mesh with the Commission's responsibilities under the revamped Stability and Growth Pact? The logic would be to transfer these responsibilities to the EMF but that would require wide-ranging treaty changes, as well as predictable opposition by the Commission (and the Parliament?).

It is unclear, therefore, whether the EMF's large staff would duplicate the supervisory function of the Commission – and how divergences would be reconciled – or whether it would be actively used only during crises, which are relatively rare events. A simpler arrangement would be keeping the oversight function within the Commission and arranging for a seamless transfer of information to the EMF. This is unlikely to work.

- First, the repeated experience is that information never flows seamlessly from one institution to another, for classic reasons (confidentiality, house culture, power, etc.).
- Second, the EMF staff would only have second-hand information about member countries, leaving it unprepared to react in real time to an unfolding crisis.
- Third, it would create tensions between the Commission and the EMF at the time of the crisis, the latter blaming the former for poor supervision and, conversely, the former possibly disagreeing with the conditions required by the latter.
- Fourth, the tension between the need for a competent and diversified staff and rare spates of activity would be magnified.
- The current Treaty assigns this task to the Commission (art. 121 and art. 126 TFEU).

Undoubtedly, the governments will want to retain the final say on all matters of importance. Could the model here be the ESM and its Board of Directors? These high-level Ministry Officials are both competent and well in tune with the positions of their countries. However, during crises, the tasks of the EMF would be more demanding than those of the ESM, so it is an open question whether they would be given the authority to make decisions. On the other hand, it would be a mistake to put the decision in the hands of the Council – or the Eurogroup – because that would lead to unwarranted politicisation. It bears remembering that the Board of Governors of the IMF, the highest authority that brings together ministers or central bank governors, meets once a year. In the meantime, they delegate responsibility to the Executive Board, which meets several times a week (but the Fund oversees 189 countries).

4.3.4 The future of the Stability and Growth Pact

There is another, deeper link between the EMF and the Stability and Growth Pact. Prevention and moral hazard are ill-served if fiscal discipline is lax. The repeated failures of the pact, spectacularly demonstrated by the debt crisis, have not been officially acknowledged so far, but a well-run EMF would not want to bury the issue. Re-thinking fiscal discipline procedures should be a central objective. At the same time, the very existence of the EMF – and, for the time being, of the ESM – would be a permanent source of weakness as it negates the no-bailout clause; this is merely a restatement of the general observation that any insurance mechanism generates moral hazard.

One way of dealing with this issue is to specify the EMF's rules of engagement. As noted, conditionality has a major role to play, but this is an ex post treatment while ex ante prevention is always better. This aspect is well understood by the IMF, but solutions are difficult to design. One response is ex ante conditionality, which means that lending is possible with no or light conditions only for countries that are deemed to have demonstrated adequate fiscal (and monetary) discipline. The resulting Flexible Credit Line (FCL) facility, however, has not taken off. In the Eurozone, it might be easier to achieve and indeed, the ESM has already set up the precautionary credit line as mentioned in Section 3.1 above.
Following this antecedent, the EMF could treat differently countries that are in good standing with the Stability and Growth Pact (as Ireland and Spain were at the time of the crisis) from those that are not (as were Greece and Portugal).

A more direct and more desirable approach is to put in place robust fiscal discipline procedures. From the start, the Stability and Growth Pact has been struggling because its implementation runs against the fact that fiscal policies are part of national sovereignty (Wyplosz, 2013). This is a familiar feature among federal states. The usual solution, as adopted in the US and Switzerland for instance, is to fully decentralize the responsibility for achieving fiscal discipline (with an unbreakable balanced budget law at state level) and to make the no-bailout rule credible. The crucial element of the fiscal discipline armoury of the Maastricht Treaty is the no-bailout rule but it has lost all credibility when it was overlooked during the crisis. The de facto discarding of the no-bailout rule was meant to be compensated by the Fiscal Compact provision that each Eurozone member country designs a structural fiscal balance rule to be written into its constitution. Not all countries have adopted a well-designed rule and not all have included it into their constitutions. It is difficult to overstress that the very existence of the EMS and of a future EMF is a contradiction with the no-bailout rule for the simple reason that these are institutions primarily created to provide bailouts.

4.3.5 The role of the Eurosystem

The ambiguity of the Eurosystem at crisis time is presented in Section 4.2. During the crisis, the IMF has been blamed for accepting that the ECB “sits on the wrong side of the table” as part of the Troika, in contrast with the usual procedure whereby the IMF faces a government and its central bank (IEO, 2016). The problem arises because the euro is in many respects a “foreign currency”, as explained in Section 2.3. Even though the ECB has generally limited its role within the Troika to financial issues, it has been part of negotiations that dealt with fiscal policies and structural reforms, issues that are explicitly not part of its mandate. As noted above, the ECB has also been at the forefront of the fatal initial decision not to allow Greece to default, as well as to require that the Irish government guarantee all bank deposits, which increased its public debt by 32% of GDP virtually overnight.

The situation is made even more complicated by the fact that the newly created single supervision mechanism for the significant banks in the euro area has been set up under the ECB, and that the supervision of smaller banks is delegated to national supervisors. The treatment of banks during a crisis is often a key issue and, as such, it frequently figures among the conditions for a loan agreement. When the supervisor is a government agency, the conditions are part of the negotiations between the lender and the government. When the central bank is the supervisory agency, it sits alongside the government. This suggests that the ECB should be on the side of the government, not that of the lender.

A related consideration is that central banks are de facto lender of last resort to their banking system. Within the Eurozone, this is the ELA function of the Eurosystem. As previously indicated, the ELA procedure leaves all the risks to the national central bank and therefore to the local taxpayers. ELA interventions and potential bank resolution must be therefore negotiated between the national central bank and its government. However, the Eurozone has also set up a Single Resolution Authority, which is to set all the parameters of any bank resolution in accord with the national authority. This is too cumbersome a procedure to function well and it will have to be modified. It further complicates how

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119 Importantly, this is not the solution adopted in Germany and, indeed, several Länder exhibit very large public debts. In many respects, the Stability and Growth Pact has been inspired by the German model. For the relevance of the US model for the Eurozone, see Henning and Kessler (2012). It can also be noted that debt levels in US states are low while some German Länder are saddled with very high debts.
lending conditions should be negotiated and how ELA interventions should be decided. Formally, ELA is decided by the Eurosystem, which requires negotiations with the government in question. For this reason, the ECB must sit on the side of the lender.

It is difficult to imagine a perfectly satisfactory resolution of this conundrum. Since each Eurozone country is equipped with its own central bank, one could imagine that the ECB sits on one side of the table and the national central bank on the other side, along with its government. Unfortunately, this is likely to be impractical since national central banks do not have any autonomy within the Eurosystem. It might even be hurtful if it were to pitch one national central bank against the others.

4.4 Relationship with the IMF

A key reason why the proposal to set up an Asian Monetary Fund was rejected was that it would undermine the IMF. To recall, the fear was the regional fund would offer softer conditions than the IMF, which would increase the borrower moral hazard. It could also increase the lender moral hazard if the regional fund were acting to protect regional banks and financial institutions. The Chiang Mai Initiative, which is the scaled-down version of the Asian Monetary Fund, has won acceptability by formally subjecting its interventions to IMF approval. Any regional monetary fund must therefore define its relationship with the IMF.

The Eurozone experience differs from the Asian one. As a minority contributor to the Eurozone rescues, the IMF has been side-lined. Its main bargaining power came from the fact that the ESM treaty requires that its loans be coordinated with IMF loans ‘wherever possible’. In July 2015, this has proven to be impossible in the case of Greece and Europe is now on its own, officially waiting for the IMF to come along. Unsurprisingly, the disagreement concerns the sustainability of the Greek government debt. The IMF claims that it is not sustainable and will not lend until it is restructured. The Commission considers that previous restructurings have considerably reduced debt service through the reprofiling of debt service, which is true but is not the same as debt sustainability. At any rate, the Troika arrangement has been suspended and may never be reinstated.

Greece has always been a category on its own. Can we draw some general lessons from the Eurozone so far? In particular, are the EU institutions softer than the IMF? The answer is mixed. The evidence is that, initially, the EU Institutions were generally tougher on the conditions associated to the rescue plans and in the interest rates that the ESM charged. Having rejected any notion of debt restructuring, the EU Institutions have pushed for front-loading ambitious deficit reducing measures. It has also seized on the occasion to push through structural reforms that it had long advocated. On the other hand, the interest rates have then been slashed to virtually nil, so that the ESM is now much softer than the IMF. This suggests that the Eurozone lending programmes started as too tough on both conditionality and lending rates, but eventually had to retreat somehow. Lending rates were slashed along with implicit debt restructuring, an admission that it would have been better to restructure some debts ex ante. If anything, the non-financial conditions have been made stricter.

A plausible conclusion is that the European lending arm is not undermining the IMF with softer conditions, but with its readiness to lend large amounts against tougher conditions. In doing so, the Eurozone puts greater emphasis on the borrower moral hazard by imposing demanding conditions, than on the lender moral hazard, by rejecting ex ante debt restructuring. This choice could be ascribed to the interests of the lending countries that dominate the decision-making process, since there are fewer borrowers than lenders. Thus, the competition between the Eurozone lenders and the IMF concerns the overall philosophy. A future EMF will have to refine its strategy. The IMF’s strategy has been informed by a long experience, the Eurozone now has its own experience, from which to learn and clarify how it intends to compete with the IMF.
It remains to be seen whether this is true competition. It would be if the countries in need of loans could choose freely between the IMF and the EMF. The experience during 2010-12 is that the crisis countries of the Eurozone were under pressure not to apply for loans directly from the IMF, where the European countries wield a blocking minority position (Blustein, 2016). The ECB was also instrumental, given its control over ELA and, more generally, its money creation power. Thus, the EMF must decide whether it intends to compete with the IMF or whether the IMF will be the required first port of call in case of a crisis.
5. CONCLUSIONS

When we have an IMF, why should we build an EMF? The official reason is that the IMF does not have the resources to deal with the need of advanced economies that are economically larger than the traditional ‘customers’ of the IMF, especially in view of the huge needs required to deal with financial flows among wholly integrated countries. This is not a valid argument, though. Until the Eurozone crisis, the IMF could collect loans from friendly countries while remaining in charge of all aspects of rescue operations. The Eurozone can follow this practice without setting up a full-blown EMF. All it would need is a financing arm to be mobilized at crisis time, without building an institution that has the manpower to negotiate and enforce conditions. The ESM is available. All that is needed is that its governance be made lighter to allow for rapid and efficient contributions.

The only fundamental reason for the setting up of an EMF is to be able to make do without the IMF. This is a political reason, which is pretty much what motivated in time of crisis the supporters of the Asian Monetary Fund (Rose, 1997). Can the IMF block again the emergence of a competitor? In 1997, the US and the European countries, which jointly are majority shareholders, were united in refusing the creation of an Asian Monetary Fund. The US and the non-European countries might attempt to block an EMF but it remains to be seen whether they want to and, if so, whether they can succeed. An alternative scenario is that they let an EMF emerge as a precedent for further regional monetary funds. Such an evolution would represent a major transformation of the international monetary system.120

That an EMF is politically possible does not mean that it is economically desirable. A key argument in its favour is that it would allow the Eurozone to improve upon what was created in the midst of a crisis. This is not a strong argument either. The record of the European rescue operations is mixed, so improvement is needed indeed, but the alternative is to dismount the construction once it has completed its mission and can close its books, and rely on the IMF should the need arise again. The natural tendency of institutions is to never die, but this tendency should be resisted if there are good reasons to close it down. Fixing the ESM is not a good enough reason.

This paper has shown that the creation of an EMF would be a more complex undertaking than meet the eyes. The various types of moral hazard loom large. Over past decades, the IMF has struggled to find a balance between emergency support and moral hazard; it is likely to struggle further over the decades to come. The EMF would have to climb up the learning curve under more challenging conditions, because the national interests are deeply entangled within such a tightly integrated region. Finding the right governance structure, defining the role of the Eurosystem in its functions as a collective central bank and a commercial bank supervisor, delineating the attributions of the EMF and the Commission and specifying the relationship with the IMF are challenging issues.

It is also important to take into account the need to equip the EMF with a high quality staff, because dealing with a crisis is technically one of the most daunting tasks that an economic institution can face. With few countries to deal with and with crises (hopefully) infrequent and far apart, the EMF would have to maintain its staff occupied and in shape, like fire brigades do. One solution, examined above, would be to transfer the economic supervision tasks currently performed by the Commission to the EMF. Even then, a concern is that supervision and crisis management are different exercises. Simulating emergencies keep fire brigades fit, but would that work for a monetary fund?121

120 Weder di Mauro and Zettelemeyer (2017) offer an analysis of such a modified system.
121 Lack of fitness was a concern at the IMF during the benign decade of the Great Moderation that preceded the Great Financial Crisis.
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An evolutionary path for a European Monetary Fund? A comparative perspective

Abstract

Eurozone reformers are looking to the United States and other federations as they seek to craft a more sustainable architecture for the Euro. This paper first extracts lessons about mechanisms of intra-regional insurance and redistribution, and then turns attention to related debates about moral hazard and fiscal discipline. In the United States, intra-regional fiscal stabilization is achieved through a progressive income tax. Contrary to common wisdom, federal direct expenditures and grants are targeted neither to states suffering from short-term asymmetric negative shocks nor to relatively poor states in the long term. Fiscal policies of state and local governments are highly procyclical, and partially undermine the stabilizing role of the system of federal taxes and transfers. Thus the U.S. experience suggests a number of design challenges facing any future Eurozone stabilization mechanism. The paper also places proposals for even stronger top-down surveillance and correction mechanisms of Eurozone member states' fiscal policies in comparative perspective, arguing that such powers are not found in unions of sovereigns like the United States, Canada, and Switzerland. Moreover, there are reasons for concern about the credibility of such efforts in the Eurozone as currently structured. Unless political will can be found for extraordinary political and fiscal centralization, reformers should assume that member states will continue as sovereigns, and hence will be disciplined (or not) by voters and credit markets rather than European regulators. Thus it might be useful to consider policies that would make the “no-bail out clause” credible.
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<tr>
<td>ECB</td>
<td>European Central Bank</td>
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<td>EMF</td>
<td>European Monetary Fund</td>
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<td>EMU</td>
<td>European Monetary Union</td>
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<td>ESM</td>
<td>European Stability Mechanism</td>
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<td>EU</td>
<td>European Union</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>SGP</td>
<td>Stability and Growth Pact</td>
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EXECUTIVE SUMMARY

Institutional reformers in the European Union frequently mobilize the examples of the North American federations—the United States in particular—when explaining the need for reforms that will advance the next stage of European unification. The purpose of this briefing paper is to clarify some aspects of federalism in the United States and elsewhere that have not been emphasized in existing literature and are especially relevant to current reform debates in the European Monetary Union.

Above all, the United States is widely viewed as having achieved a form of fiscal union in which federal taxes and transfers smooth unanticipated revenue shocks of state governments, thus allowing them to respond to events like the Great Recession without experiencing the level of pain borne in EU member states like Spain and Ireland. I document that the reality is more complex than the typical portrayal. All of this vaunted federal insurance comes from reduced federal income taxes, not from increased federal expenditures to state governments. In fact, federal grants to subnational governments are highly pro-cyclical. Thus dramatic and sustained decreases in state revenues can offset much of the federal assistance during recessions. Using case studies from the recent recession, I show that both grants and direct federal expenditures were very poorly targeted to suffering communities, and were in fact much more generous in states that were untouched by the recession.

I argue that the poor targeting of federal assistance to communities affected by the recession was not a fluke, but is a basic feature of U.S. federalism, which tends to distribute resources according to political bargains and the locations of existing federal facilities. Political bargaining over the spatial allocation of funds is quite beneficial to smaller U.S. states with disproportionate political representation. These facts have implications for debates about the potential growth of a system of fiscal stabilization in the European Union.

An underappreciated contrast with European member states is the highly pro-cyclical fiscal behaviour of the U.S. states, which rely on income and sales taxes that are highly sensitive to the business cycle but are unable to smooth shocks through borrowing. State-level fiscal contraction during recessions partially undermines the stabilizing impact of federal taxes and transfers. The adoption of the U.S. model in the Eurozone would imply a reduction in the potential for stabilization via fiscal policies of member states.

Since many European reformers are convinced of the need to dramatically enhance the fiscal capacity of the European Union, and some argue that this is an evolutionary necessity, it is useful to examine the conditions under which the fiscal capacity of the central government has been enhanced in the North American federations. The major moments of fiscal centralization in the United States and Canada were not fiscal crises, but rather large military conflicts. It remains to be seen whether a centralized tax system can be constructed in a union of sovereigns without collectively fighting a war.

Next, I address an additional question of great importance in the European Monetary Union: once the federal government has a large tax base and involves itself in the role of risk-sharing and inter-state redistribution, how is it possible to induce fiscal discipline among member states? For better or worse, the U.S. states are responsible for their own fiscal decisions, and unlike many other sub-national entities around the world, they approach credit markets and voters as miniature sovereigns. In stark contrast to many of the proposals for the future of the European Monetary Union, the U.S. federal government does not regulate or even monitor the budgetary decisions of U.S. states, and has maintained a relatively credible “no bailout” commitment for many decades. The same is true of the Canadian federal government vis-à-vis the provinces. The experiences of the North American federations demonstrate that it is entirely possible for the center to become involved in financing at least some risk-sharing and even redistribution without generating unsustainable moral hazard.
The Eurozone is currently envisioned as a union of sovereigns in which the center can, under some conditions, assert direct control over the budgets of member states. For the most part, such powers are currently only seen in far more centralized unitary systems. Perhaps the EMU can successfully create a new hybrid of sovereignty and centralization—improving on the past failures of the Stability and Growth Pact without undermining national sovereignty—but there are good reasons to be skeptical, based on comparative evidence and Europe’s recent history.

Concerns about moral hazard are unavoidable in a monetary union, especially one that has recently created a bailout fund. Strict conditionality associated with ESM lending is an effort to combat moral hazard among borrowers, but does little to reduce the problem of moral hazard among lenders. If comparative experience is instructive and hierarchical control of member-state budgets via the Commission or the ESM is unlikely to succeed, it will be necessary to return to the original notion of a U.S. style no-bailout commitment. Clearly this would require a rethinking of the ESM. Thus next steps in the architecture of the European Stability Mechanism might be to perfect the banking union, attempt to reduce member state debt burdens, and eventually embrace the notion of orderly defaults, building something akin to a European bankruptcy framework.
1. **INTRODUCTION**

From the beginning, architects who envisioned the evolution of the European Monetary Union have applied a notion of history resembling the dialectical materialism of Friedrich Engels. Classic contributions like the Padoa-Schioppa Report (1987) and the Delors Report (1989) argued that it was desirable to develop a union in a series of stages. The successful completion of one stage would reveal internal contradictions that would create demands for a transition to the next stage.

Viewed from this perspective, the recent crisis in Europe was a painful but necessary moment at which the contradictions and costs of monetary union without fiscal union were finally revealed, and the time has come to move on to the next, more advanced evolutionary stage. A consensus is emerging that monetary unions cannot work without banking and fiscal union, and given the moral hazard associated with the latter, greater centralized control over member states' budgets must naturally follow as well (see, e.g. Baldwin and Giavazzi 2016).

A more sobering application of the evolutionary metaphor is natural selection, whereby failure to adapt to one’s environment leads to extinction, and only the well-suited adaptations survive. This view calls European institutional designers to take an empirical approach—much like James Madison and Alexander Hamilton in *The Federalist*— and ask which forms of federalism have survived and thrived elsewhere under comparable conditions.

Indeed, this is also a time-honored tradition in the analysis of the European Monetary Union. Institutional reformers in the European Union frequently mobilize the examples of the North American federations—the United States in particular—when explaining the need for reforms that will advance the next stage of European unification. For another overview of the U.S. system, see Kirkegaard (2015). The purpose of this briefing paper is to clarify some aspects of federalism in the United States and elsewhere that have not yet been emphasized in the European literature but are especially relevant to current reform debates.

Above all, the United States is widely viewed as having achieved a form of fiscal union in which federal taxes and transfers smooth unanticipated revenue shocks of state governments, thus allowing them to respond to events like the Great Recession without experiencing the level of pain borne in EU member states like Spain and Ireland. I document that the reality is more complex than the typical portrayal. All of this vaunted federal insurance comes from reduced federal income taxes, not from increased federal expenditures.

I make a broad distinction between forms of federal expenditure that flow through grants to state and local governments—many of which are tied to the co-financing of specific programs like Medicaid—and expenditures that are made directly by the federal government. The latter include expenditures for defense and inter-personal expenditures for income security and old-age pensions, as well as health care.

Federal grants make up only 10 percent of all federal expenditures, but they can make up a substantial portion of state revenues, especially among relatively poor states. Federal grants to subnational governments are typically pro-cyclical, and they are not designed to insure against asymmetric shocks. Thus dramatic and sustained decreases in state revenues can offset much of the federal assistance that occurs via direct expenditures during recessions. Using case studies from the recent recession, I show that both grants and direct federal expenditures were very poorly targeted to suffering communities, and were in fact much more generous in states that were untouched by the recession.
I argue that the poor targeting of federal expenditures to communities affected by the recession was not a fluke, but is a basic feature of U.S. federalism, which tends to distribute funds according to political bargains. The vast majority of “automatic” stabilizers in the United States go to senior citizens. Pension and healthcare payments to senior citizens do not have strong stabilizing properties. Unemployment insurance is shared between the federal government and the states, and makes up a very modest share of the federal budget. In the absence of automatic stabilizers, responses to recessions involve a highly politicized ad hoc attempt to implement short-term increases in federal support for unemployment insurance and grants for programs like Medicaid (see Kirkegaard (2015)). This bargaining process is quite beneficial to smaller U.S. states, which are dramatically over-represented in the United States Congress. These facts have implications for debates about the potential growth of a more robust European system of fiscal federalism, where fiscal decisions will also inevitably involve political bargaining.

Since many European reformers are convinced of the need to dramatically enhance the fiscal capacity of the European Union, and some argue that this is an evolutionary necessity, it is useful to examine the conditions under which the fiscal capacity of the central government has been enhanced in the North American federations. An important initial improvement in the fiscal capacity of the U.S. federal government came about as a result of Hamilton’s assumption of revolutionary war debts. However, it is clearly the case that the major moments of fiscal centralization in the United States and Canada were not fiscal crises, but rather, large military conflicts. It remains to be seen whether a centralized tax system can be constructed in a union of sovereigns without collectively fighting a war or any other major crises.

Next, I address an additional question of great importance in the European Monetary Union: once the federal government has a large tax base and involves itself in the role of risk-sharing and inter-state redistribution, how is it possible to induce fiscal discipline among member states? Returning once again to the example of the United States in the Great Recession, I show that in spite of extraordinary federal assistance, the U.S. states had to undergo substantial fiscal adjustment, and promulgated deep, politically painful expenditure cuts. Waiting for federal bailouts was not an option.

For better or worse, the U.S. states are responsible for their own fiscal decisions, and unlike many other sub-national entities around the world, they approach credit markets and voters as miniature sovereigns. In stark contrast to many of the proposals for the future of the European Monetary Union, the U.S. federal government does not regulate or even monitor the budgetary decisions of U.S. states, and has maintained a relatively credible “no bailout” commitment for many decades. The same is true of the Canadian federal government vis-à-vis the provinces. The experiences of the North American federations demonstrate that it is entirely possible for the center to become involved in financing at least some risk-sharing and even redistribution without generating unsustainable moral hazard.

In fact, many EU reformers seem to envision the “evolution” of a creature that does not currently exist in reality: a union of sovereigns in which the center can, under some conditions, assert direct control over the budgets of member states. Undeterred by the inability of the Stability and Growth Pact to achieve this, many reform proposals rely on stronger hierarchical controls over the budgets of member states. For the most part, such powers are currently only seen in far more centralized unitary systems, and the political context of the Eurozone creates serious impediments to successful enforcement. Perhaps the EMU can successfully create a new hybrid of sovereignty and centralization, but there are good reasons to be skeptical.

Concerns about moral hazard are quite understandable, of course, since the European Monetary Union has not only provided emergency bailouts in the recent past, but has also created the facility to provide such bailouts in the future. Nevertheless, if hierarchical control is simply not possible in a union of
sovereigns, U.S.-style market discipline might be the only viable option. Thus next steps in the architecture of the European Stability Mechanism might attempt to prepare for future crises by perfecting the banking union and embracing the notion not of conditional bailouts, but of orderly and conditional defaults, building something akin to a European bankruptcy framework. Given the problem of unfunded pension liabilities, the United States might also benefit from the construction of such a framework.

Unfortunately history does not provide a road map in this endeavor. But for all their attention to history, Madison and Hamilton also lacked an obvious road map in attempting to improve their troubled 18th century union. It is possible that as then, even imperfect outcomes of contentious bargains can produce institutional innovations that will stand the test of time.
2. FISCAL FLOWS AND FISCAL ADJUSTMENT IN THE U.S. STATES

Drawing on Mundell (1961), the MacDougal Report (Commission of the EC, 1977) suggested that in the absence of the exchange rate mechanism for adjusting to asymmetric shocks, an eventual European Monetary Union would require a centralized system of taxes and transfers aimed at smoothing out such shocks. The Five Presidents’ Report (2015) reflects widespread consensus that such a system of centralized “shock absorbers” is long overdue.

The United States receives a good deal of attention in this literature. A common claim is that U.S. states like Florida and Nevada weathered the recent housing crisis much better than Spain and Ireland did, not only because of labor mobility and the presence of a banking union, but because they had access to increased fiscal flows from the rest of the federation while paying less in taxes (Krugman 2012). If architects of institutional reform in the EMU wish to take full advantage of the example of the United States, it is necessary to dig deeper into the details of the U.S. experience. I begin with the econometric literature, and then focus on a case study of the recent recession.

2.1 Taxes, Fiscal Flows, and Grants

Inspired by the claims of Mundell (1961), a large empirical literature has attempted to measure the role of U.S. federal taxes and transfers in absorbing asymmetric economic shocks. Key contributions include Sali-i-Martin & Sachs (1992), Bayoumi & Masson (1995), van Wincoop (1995), Brunila et al (2003), Melitz & Zumer (1998), Sorensen & Yoshia (1997), and Obstfeld and Peri (1998). These studies conclude that a decrease of $1 in a state’s real per capita personal income is associated with an increase in net fiscal transfers in the range of $0.25 - $0.40.

Two recent papers emphasize an important fact that is frequently overlooked in the earlier literature. Feyrer and Sacerdote (2013) and Malkin and Wilson (2013) point out that none of this insurance effect can be attributed to transfer payments from federal programs and services. Rather, the entirety of the effect comes from differences across states in federal tax payments. While some crucial services are funded by the federal budget and are unaffected by asymmetric shocks, and the federal government sometimes supplements state unemployment insurance in a temporary, discretionary way, the econometric evidence shows that states hit with asymmetric negative shocks cannot expect relative increases in federal funds. Stabilization is achieved by the fact that their unemployed and under-employed citizens can expect to pay less in federal income taxes.

Another important distinction that is not often emphasized in this literature is between federal grants to state and local governments and other forms of federal expenditures that do not flow through the hands of these governments. Although lively discussions are taking place about the possibility of a European unemployment insurance scheme, most realistic scenarios of an enhanced fiscal union in Europe do not involve direct European expenditures, but rather, some form of intergovernmental grants to member state governments. While it is in theory possible to imagine an unemployment insurance scheme, or even a European basic income scheme, that can be implemented via direct electronic payments to individuals, the European Union does not yet have the administrative capacity or geographic reach to make direct expenditures in a wide range of policy areas.

Thus it is useful to examine not only overall expenditures, as in Feyrer and Sacerdote (2013), but also to examine intergovernmental grants. Using data from the United States and several other federations over a period of decades, Rodden and Wibbels (2010) show that intergovernmental grants do not shift to adversely affected states in response to negative shocks, and on the whole, the flow of intergovernmental grants is highly correlated with the business cycle. Evidence of pro-cyclical
intergovernmental grants can also be found in Blöchlinger and Egert (2016) as well as Foremny & Solé-Ollé (2016).

In short, the econometric evidence from the United States and other federations suggests that it is no simple task to build a system of intergovernmental expenditures that act as shock absorbers for regions hit by asymmetric economic shocks. The best-case scenario might be a situation in which higher-level expenditures continue unabated while tax payments from the affected region are reduced. Needless to say, to achieve something like this, the European Monetary Union would require a rather dramatic centralization in the collection of income-elastic taxes.

2.2 A Case Study of the Great Recession

The studies mentioned thus far are based on time series analyses of federal fiscal flows over long periods of time. In order to better understand the results, it is useful to zoom in on an illustrative case study of the Great Recession. In an illuminating book, Gros and Belke (2015) focus on the experiences of the U.S. states that were hit hardest by the housing crisis, and contrast them with the European member states that were hardest hit by very similar crises at the same time. Their analysis makes it very clear that the shock absorber associated with the U.S. banking and financial market union was substantial, and the housing-induced fiscal crises of Spain and Ireland could have been avoided with a similar type of insurance scheme in Europe.

Figure 1: Inflation-adjusted per capita income in selected states, 2005-2015

![Graph showing inflation-adjusted per capita income in selected states, 2005-2015.]

Source: United States Bureau of Economic Analysis, Regional Income Division

It is useful to take a similar approach to fiscal flows. I first address the three states that were hit hardest by the great recession: Arizona, Florida, and Nevada. The panel on the left in Figure 1 plots real per capita income over time in these three states. While growth was already stalling in Nevada in 2006, each state suffered a large decline in 2008 and especially 2009, and in Arizona the contraction continued to 2010. By 2015, none of these states had returned to their pre-recession income levels.

The Great Recession did not affect all U.S. states equally. In fact, much like the natural resource driven growth of countries like Brazil, some U.S. states thrived throughout the entire period. The panel on the right in Figure 1 tracks the experience of the three most successful U.S. states during this period:
Alaska, North Dakota, and South Dakota. Each experienced impressive income growth throughout the decade, even if the Dakotas experienced a temporary flattening in 2009.

2.2.1 The Experience of Adversely Affected States
The federal response to the housing and fiscal crises of 2008 was rather extraordinary. As described above, the federal government did not have the option to sit back and wait for a system of automatic stabilizers to do their job. Rather, over the objections of the Republican opposition, the recently elected Democratic president worked with Democratic majorities in both chambers of the legislature to quickly craft a very controversial Keynesian stimulus package called the American Recovery and Reinvestment Act, which was signed into law in February of 2009. A large part of the logic of the legislation was to combat the typical problem of pro-cyclical grants by temporarily increasing support to states for programs like Medicaid, unemployment benefits, and nutritional supplements. The program also featured grants and direct expenditures for infrastructure projects.

The left panel in Figure 2 shows that as is typical with U.S. recessions, federal grants fell in the first year of the crisis in Florida and Nevada in the absence of special legislation, and were relatively flat in Arizona. This is consistent with the broader findings of Rodden and Wibbels (2010). Only after the promulgation of a rather extraordinary stimulus package in the second year of the crisis did grants temporarily increase, by around $500 per capita. Note that by 2014, however, intergovernmental grants had fallen back below their pre-recession levels.

Figure 2: Inflation-adjusted federal grants per capita in selected states, 2005-2014

Figure 3: Inflation-adjusted direct federal expenditures per capita in selected states, 2005-2014


Figure 3 displays data for direct federal expenditures, which include various personal transfers. As one would expect from a category that includes some automatic stabilizers, these increased already in 2008, and continued a steady increase for 2 to 3 more years before levelling off. Though trending downward, by 2014 these expenditures were still well above their pre-recession levels.

In short, these states indeed received an increase in federal support during the recession, especially via the mechanism of direct federal expenditures, while also reducing their tax contributions to the federal budget. However, it is also useful to examine what was happening with the states’ own budgets during this period of rapidly contracting economic activity. Figure 4 reveals that state and local tax revenues started to fall in 2008, and then fell much further in subsequent years. By 2013 they had not even begun to recover.

Figure 4: Inflation-adjusted state and local tax revenues per capita in selected states, 2005-2013

Source: Urban Institute/Brookings Institution Tax Policy Center (assembled from U.S. Census Bureau and Census of Governments).
The long-term loss of revenue in Florida and Arizona was quite large—on the order of $1000 and $700 per capita from 2007 to 2010. In Florida this was a 25 percent decrease. Recall from above that the increase in grants was only for two years and on the order of $500 per capita. Thus increases in federal grants were only partial and inadequate efforts to replace revenues from state and local taxes that were in free-fall.

Figure 5: Inflation-adjusted state and local expenditures per capita in selected states, 2005-2013

Source: Urban Institute/Brookings Institution Tax Policy Center (assembled from U.S. Census Bureau and Census of Governments).

Next, let us examine the implications for state and local expenditures. The left panel of Figure 5 demonstrates that although they continued on an upward trajectory in the first year of the crisis, governments quickly started cutting expenditures in 2009, and have continued to do so in rather dramatic fashion each year thereafter. The relatively small short-term spike in grants did not absolve state governments of the need to conduct serious fiscal retrenchment. By 2014, real expenditures per capita were lower than their 2008 levels by at least $1000 per capita. These long-term cuts in state expenditures are almost as large as the long-term increases in direct federal expenditures displayed in Figure 3 above. Recall that Figure 3 includes all direct federal expenditures—including inter-personal transfers—that do not flow through state and local governments. Thus much of the potential stabilizing effect of increased federal support was undone by decreased state and local expenditures.

2.2.2 The Experience of Unaffected States

In short, the states that were most severely affected by the housing crisis did experience increases in federal assistance, even if these were largely offset by fiscal retrenchment among state and local governments. In order to understand the relative fiscal flows envisioned by optimal currency theory, it is necessary to examine what happened in the states that continued to grow during the same period.

Let us begin with federal grants. Remarkably, the panel on the right in Figure 2 shows that states that were experiencing rapid economic growth and rapid increases in own-source taxes also received a temporary spike in federal grants as a result of the Recovery and Reinvestment Act. In fact, even though federal grants per capita were already far higher in these states than in the struggling states of the Sun Belt, the spikes were twice as large. Real federal grants per capita were well over twice as high during...
the worst years of the recession in the states experiencing good times than in the states experiencing bad times.

Figure 3 shows something similar for direct federal expenditures. If these behave purely as automatic stabilizers, we should expect them to be flat or even fall during this period in the states experiencing rapid economic growth. On the contrary, the increases in direct federal expenditures in response to the recession were even larger in these states than in the states mired in crisis.

One might imagine that these rather stunning increases in federal support for the most fortunate U.S. states during the Great Recession are anomalies related to natural resources. Figure 6 displays data across the U.S. states. In the panel on the left, it plots the change in federal grants from 2008 to 2009—the year of the major spike in federal assistance associated with the stimulus package—against the change in real per capita income, leaving out Alaska and the District of Columbia. The panel on the right plots changes in all other federal expenditures in the states. Figure 6 shows that if anything, the correlation between changes in income and changes in federal grants is slightly positive, and the extent of changes in direct federal expenditures is uncorrelated with changes in income.

The lack of stabilization associated with federal expenditures implied by Figure 6 can be verified with time-series econometrics. Using the same data analyzed in Figure 6, Feyrer and Sacerdote (2013) discovered that states experiencing larger negative asymmetric income shocks receive slightly smaller increases in total federal expenditures, though statistical significance was marginal. I have replicated their analysis through 2014, and the result has not changed.

2.2.3 A Comparison with Europe

Let us now contrast the experience of the U.S. states most affected by the housing crisis with Spain and Ireland. Figure 7 plots real per capita public expenditures and revenues for Ireland and Spain over the same period, using U.S. dollars to facilitate comparison with the graphs above.

The graph shows that Ireland and Spain were running nominal budget surpluses up to 2007. As is well known, they experienced a crisis of banking and finance with roots in the housing sector rather than a
loss of confidence due to irresponsible fiscal behavior. As in Arizona and Florida, revenues suddenly plunged with the onset of the crisis. However, the difference in expenditures is striking. While expenditures fell immediately and dramatically in the U.S. states, and continued to fall for several years, real per capita expenditures in Ireland and Spain continued to increase after the recession before leveling off. Note that the large spike in Ireland in 2010 captures the bank bailout. While real public expenditures per capita had not yet recovered to their 2005 levels by 2013 in Arizona, Nevada, and Florida, they were well above those levels by 2013 in Spain and Ireland.

Figure 7: Inflation-adjusted public revenues and expenditures per capita, Spain and Ireland, 2005-2014

![Graph showing inflation-adjusted public revenues and expenditures per capita, Spain and Ireland, 2005-2014.](Image)

Source: Eurostat and European Central Bank

By contrasting Figure 7 with Figures 4 and 5 above, one can see that E.U. member states are still able to smooth expenditures over the business cycle by pursuing counter-cyclical fiscal policy. U.S. states do no such thing. Rather, since their revenue losses during downturns are not compensated by increased grants and states face curbs on borrowing, they pursue dramatic expenditure cuts. Thus while direct federal expenditures increase in response to a downturn, state and local fiscal policy pushes in the opposite direction.

This aspect of U.S. fiscal federalism has received relatively little attention in European debates. Net stabilization via the federal government is indeed achieved via the progressivity of federal income taxes, even if federal expenditures do not flow disproportionately to troubled states. Yet much of this stabilization is undone because of the countervailing fiscal contraction that takes place among credit-constrained state and local governments, which are dependent on revenue sources that are highly sensitive to the business cycle. The full-scale adoption of a U.S. model by Europe would imply discarding the possibility of stabilization by fiscal policies of member states, and replacing it with stabilization via a progressive European tax system and a set of politicized direct expenditures and transfers to member states that are largely uncorrelated with income.
3. REDISTRIBUTION IN FISCAL UNIONS

In European discussions on the need for a fiscal union, the presumption is that other fiscal and monetary unions, like the United States, are quite adept at redirecting resources to member states facing asymmetric shocks. Along with this comes a concern among rich member states that fiscal schemes initially envisioned as intra-regional insurance against asymmetric shocks can evolve into long-term redistribution from rich regions to poor regions. Such redistribution has emerged, for instance, in federations like Canada and Germany. Indeed, fear of such a “transfer union” among rich member states like Germany is one of the impediments to building a European fiscal union.

Yet in the previous section, I showed that the United States is actually quite bad at targeting resources to adversely affected regions in response to negative shocks. In order to see why this is the case, it is also useful to examine the larger issue of intra-regional redistribution. In fact, grants from the U.S. federal government to the states are not especially progressive in the long run. While some grants are formulaic and indexed to correlates of income, many are not. Intergovernmental transfers—even those governed by formulae—are subject to intense political bargaining. The same is true of direct federal expenditures, which are also driven by the location of defense installations and other federal facilities. As a result, total grants per capita, as well as total direct expenditures per capita, are either uncorrelated or positively correlated with per capita income across U.S. states (see, e.g. Rodden 2009; Feyrer and Sacerdote 2013).

For instance, see Figure 8 below, which plot average real per capita grants (in the top panel) and average direct federal expenditures per capita (in the bottom panel) against average real per capita income over the years 2005 to 2014. For both intergovernmental grants and the much larger category of direct expenditures, there is no discernible relationship between per capita federal funds and state income.
Figure 8: Real federal grants per capita (top panel), real federal direct expenditures (bottom panel), and state real per capita income, averages from 2009 to 2014

Note: The size of the data marker corresponds to the state’s population.

Source: See sources for Figures 1 and 2 above.
Intense bargaining between member states over transfers is a fact of life in federations. In previous research, I have shown that the distribution of resources flowing from these bargains is heavily influenced by asymmetries in the size of member states. In a study of grants received by states and provinces in a group of 9 federations including the United States, Dragu and Rodden (2011) show that in each federation, there is a striking long-term correlation between legislative seats per capita and federal grants per capita. Relatively small member states in federations are typically over-represented—usually in the upper legislative chamber but sometimes in both legislative chambers—and as a result, they receive a disproportionate share of federal transfers.

In some federations, like Canada, Germany, and Australia, the over-represented states were relatively poor, which has facilitated the progressivity of the transfer system. However, in federations like Mexico, Argentina, and the United States, the over-represented member states were relatively wealthy, which has undermined progressivity. Indeed, the bargaining power of small, sparsely populated U.S. states like Alaska and the Dakotas in the legislature helps explain their ability to extract disproportionate benefits from programs like the Recovery and Reinvestment Act.

Those hoping to design a strengthened European fiscal union seem to anticipate a very finely targeted insurance scheme in which political bargaining plays no role. However, it is useful to note that a strong imprint of political bargaining can be discerned in the distribution of transfers not only in the United States and other federations, but also in the existing fiscal system of the European Union itself. Rodden (2002) and Aksoy and Rodden (2009) provide evidence of a strong and persistent bias in favor of small, over-represented member states in the distribution of EU funds across all programs. Figure 9 provides an update of their analysis using the most recent data (2005 to 2015). Larger countries with less per-capita representation receive fewer transfers, and smaller, over-represented countries receive larger per-capita transfers. This relationship holds up when controlling for income, and as in other federations, the impact of relative representation assuages the progressivity of the transfers.

**Figure 9:** Log of qualified majority votes per capita and total EU funds received per capita for EU member states, 2005-2015

Note: The size of the data marker corresponds to the country's population.

Source: European Commission: European Structural and Investment Funds Data
In sum, the evidence from other federations as well as the EU itself suggests that it is no simple matter to design a fund that is targeted exclusively toward insurance or even long-term assistance to poor member states. Such a system would require an atypical level of insulation from political bargaining. Institutional designers in the Eurozone may wish to view the United States as a cautionary tale of discretion and ad hoc political bargaining to be improved upon rather than as a model to be emulated.
4. ON THE EVOLUTION OF FISCAL UNIONS

A common claim among those who take an evolutionary perspective on the European Monetary Union is that a stable monetary union is not possible without fiscal union, which is defined as a well-developed system of intra-regional insurance orchestrated by the central government. As explained above, such a system requires that the center play a substantial role in taxation. Thus it is useful to ask: when and how did the United States and other modern fiscal unions develop this feature?

It is tempting to give credit to Alexander Hamilton, the centralizing entrepreneur who crafted a plan for federal assumption of revolutionary war debts that also included the first independent source of revenue for the federal government. However, his tariffs on imports and taxes on whiskey had more to do with protecting domestic industry than anything like intra-regional stabilization. The United States federal government relied primarily on tariffs until the introduction of the income tax on the eve of World War I, and thus had no tools for conducting intra-regional stabilization. The income tax was still quite small until World War II. Thus it is fair to say that, with the exception of the Civil War period, the United States had a common currency without fiscal union for around 150 years. The Canadian federal government also had a common currency since the mid-19th century and relied exclusively on tariffs until World War I, and had no tools for conducting intra-regional stabilization until the middle of the 20th century.

In both Canada and the United States, there is a common thread in the development of the central government’s fiscal power: war. Figure 10 displays the evolution of federal expenditures as a share of total expenditures in the United States since 1900. The federal government’s fiscal presence was small prior to World War I. Federal expenditures jumped dramatically during the War, but quickly returned to almost their pre-war level thereafter. Next, the size of the federal government vis-à-vis the states and municipalities jumped during the New Deal, but the most important and permanent increase came during World War II. A similar story can be told about Canada: the federal government’s role in income taxation was in large part a response to the need to raise revenue to fight wars. More generally, in other federations as well, wars seem to produce a ratchet effect in fiscal centralization.
In both Canada and the United States, the development of the central government’s power to tax income, and the ability to conduct intra-regional insurance that came later, were outcomes of long and contentious battles that raged for decades. In the United States, the federal income tax ultimately required a constitutional amendment. Viewed with North American history in mind, the current resistance to centralized taxation and insurance in Europe is not surprising.

William Riker (1975) famously argued that a union of sovereigns cannot generate a centralized system of taxation and risk sharing without an overwhelming, existential military imperative. He argued that no other type of crisis, and no other desired collective good, was sufficient to generate fiscal centralization. Unlike many of the federations that experienced fiscal centralization in the early 20th century, however, the member states of the European Union already have their own militaries. It remains to be seen whether an existential fiscal crisis, or the desire to produce other public goods, can take the place of war as an impetus to overcome the resistance to centralized taxation.
5. FISCAL DISCIPLINE IN FISCAL UNIONS

Advocates of a stronger European fiscal union often stop drawing upon the North American example when they get to the question of fiscal discipline. The United States federal government attempts to affect state and local spending priorities via conditional grants, and states often complain about federal “unfunded mandates,” but the U.S. federal government has never attempted to regulate or even monitor the overall revenues and expenditures of the states through tools like those built into the Stability and Growth Pact. Nor is there anything resembling the conditional loans associated with the European Stability Mechanism. The same can be said about Ottawa with respect to provincial governments. Yet a consensus seems to be emerging among architects of future EMU institutions that “in exchange for enhanced risk sharing capabilities, member states would have to accept a more intrusive external interference in national fiscal policy,” including “the authority to veto national budgets” (Tabellini 2016).

5.1 Prospects for successful hierarchical oversight in Europe

Such powers are difficult to imagine in the United States or Canada. The power to tax and spend are at the heart of sovereignty, and any such effort at centralized control over fiscal decisions of U.S. states, even if only in emergencies, would likely be deemed unconstitutional (McConnell 2016). Some reform architects in Europe seem to envision something more like the relationship between U.S. state governments and their municipalities, or between the German Bund and Laender. For instance, the state of Michigan has the ability to appoint a relatively powerful emergency manager in the event of a municipal fiscal emergency.

There are large differences between the relationship connecting the city of Flint and the state of Michigan, however, and that between Italy and the EMU. The status of Flint in the Michigan constitutional structure is not that of a sovereign. Flint also cannot threaten to secede from Michigan and issue its own currency. Nor does Flint have an anti-Michigan political movement. Michigan also has significant leverage over Flint because of the latter’s dependence on the state for transfers that fund many of the city’s operations.

If we limit our attention to existing unions of sovereign or at least quasi-sovereign member states, it is difficult to come up with examples of the strong central fiscal intervention powers envisioned by some European reformers who wish to strengthen and add credibility to the current EU economic governance framework, such as the Excessive Deficit Procedure. One possibility is the Brazilian Fiscal Responsibility Law, which was implemented as part of negotiations associated with federal assumption of state debts in the 1990s.

The Brazilian Fiscal Responsibility Law requires states and municipalities to publish information on a variety of budget items, and allows not only for the prosecution of so-called “fiscal crimes” via the judiciary, but the withholding of crucial federal transfers if fiscal targets are not met. An important warning from the Brazilian case, however, is that such schemes depend heavily on the incentives and credibility of the enforcers. In the face of federal efforts to withhold transfers, Brazilian states can sue in federal court, and the courts have ruled overwhelmingly in favour of the states. The states, in turn, have failed to meet targets for debt reduction, and as part of the current fiscal crisis in Brazil, they are once again seeking a renegotiation of debt burdens and further federal bailouts.
Closer to home, after being forced by courts to provide bailouts to Bremen and Saarland in 1992, the German Federal Government attempted to enforce tight conditionality on the bailouts. After 25 years, these Laender continue to struggle with a large debt overhang, and continue to receive special federal transfers. Recent reforms have offered the Laender additional transfers in exchange for additional federal controls via the Stability Council.

Both the Brazilian and German examples are similar to the EMU in that they were post-hoc efforts to manage the moral hazard problem that took center stage after a high-profile bailout undermined the credibility of the center’s “no bailout” pledge going forward. Both cases have involved a mix of bilateral conditional bailout deals and a more general effort to enhance the center’s oversight authority going forward. In both cases, the credibility of the central government and the judiciary as overseers of subnational fiscal discipline has been in doubt at times. Yet even in these cases, the center is in a far more powerful position than the European Commission or the ESM. While the Brazilian states and German Laender are highly dependent on intergovernmental transfers raised from federal or shared taxes, European authorities have no such carrots to withdraw.

Rather, in the midst of a bilateral bailout deal, the ESM can merely threaten to withhold the next tranche of funding from countries that have not met targets. However, such threats lack credibility when the express purpose of the ESM is to avoid the panic associated with fears of default. A political logic might unfold such that what start out as highly conditional low-interest loans from the ESM could evolve into long-term entitlements that are up for occasional renegotiation, much like the special transfers that still flow to Bremen and Saarland. If debt restructuring is understood to be off the table and future transfers cannot be withheld, it is difficult to see how conditions might be enforced.

Perhaps the largest problem of credibility lies with the politics of exit threats. Many European member states now have serious political parties that are actively calling for exit from the Euro. Even if the enforcers are highly technocratic appointees with the best intentions, it is difficult to imagine harsh penalties being applied to a struggling member state in the run-up to an election where anti-Europe parties are in a position to win (see Leino and Saarenheimo 2016). Lenience may become necessary to save the entire Euro project. Any sign of this calculation will in turn create incentives for louder exit threats. This dynamic simply does not exist in other monetary unions—certainly not in those that attempt to impose top-down fiscal discipline.

In another paper solicited by the European Parliament’s Economic and Monetary Affairs Committee, Wyplosz (2017) points out that conditionality is an effort at solving the problem of moral hazard among member state borrowers. It sweeps under the rug, however, the problem of moral hazard among lenders, for whom the ESM can be viewed as a bailout guarantee when making decisions about loans. Not only does this undermine market discipline, but it could enhance a basic political economy problem facing the ESM. A crucial moment in the history of U.S. federalism was the debt crisis of the 1840s, when a group of states was on the precipice of default, and a pro-bailout lobby fell short in Congress. An important reason for the failure of the bailout movement was the fact that holders of state debts, many of them foreigners, were not politically powerful. Given the importance of home bias in state bond purchases owing to the U.S. tax system, it may still be the case that the credibility of the central government’s “no bailout” commitment is enhanced by the lack of concentration of state debt in the hands of large and powerful financial institutions. However, the European context is quite different, and a danger is that questionable loans with strict conditionality will be made to insolvent member states in order to protect the interests of important banks. Even if this is not the case, it is likely to be the perception among citizens of the struggling member state. Attempts to enforce stringent conditions under these circumstances could further erode solidarity among member states. All of the conflicts of interest and inefficiencies associated with politicization in intergovernmental transfer
systems discussed above will also be present in a body like the ESM. For this reason, Wyplosz (2017) raises the possibility that task of enforcing conditional loans be given to the IMF rather than the ESM.

5.2 Prospects for market discipline in the Eurozone and the United States

In sum, few would argue that the preventive role (targeting a structurally balanced budget) and the corrective role (the Excessive Deficit Procedure) of the SGP have been fully credible in the past. If anything, the potential credibility of hierarchical mechanisms as a way to enforce fiscal discipline in the European Monetary Union has only eroded in the wake of emergency loans, ECB bond purchases, and Brexit. Moreover, there appears to be no historical precedent for a hierarchical system of fiscal regulation or intervention in a union of sovereigns where the center lacks substantial tax authority.

If there are strong reasons to doubt that hierarchical discipline will work, or that the consensus to achieve the requisite fiscal and political centralization can be mustered, it may be necessary to consider other options.

The notion of so-called “market discipline” has become anathema in the Eurozone because it has become synonymous with the sudden and dramatic restrictions of market access that plagued weaker European member states during the crisis, even those that had been running surpluses. Indeed one might interpret the mission of the ESM as an elaborate scheme to put an end to deleterious market discipline once and for all, by reassuring creditors that default will not be tolerated.

The European consensus on market discipline seems to be that it works either with too much irrational ferocity—as during the crisis—or not at all, as during the pre-crisis years when member state risk premiums were too tightly clustered.

It is worthwhile to reconsider this consensus in light of the possibility that the failure of market discipline in the Eurozone was primarily a function of deficiencies in the European financial system rather than the fiscal system. First let us consider the weakness of market discipline prior to the crisis. Large European banks, especially in Germany and France, invested not only in ill-fated real estate developments, but also in bonds of other member state governments. Banks were not required to set aside additional reserves when buying government debt, which was viewed as essentially risk free by banking regulators and policy makers. This lowered the price of government debt and distorted bankers’ incentives. It became clear that large banks in both Northern and Southern Europe had significant exposure to debts of member states. Investors understood that the center was unlikely to tolerate a wave of major bank failures, which chipped away at the credibility of the “no bailout” commitment.

Sudden loss of confidence and panic then came with the realization that member state governments might suddenly become responsible for failing banks, and the realization that the member states would face a serious political challenge in orchestrating a coordinated bailout mechanism.

It is entirely possible that markets would have been more discerning before the crisis in the presence of different banking regulations, and that panic would have been avoided if the Eurozone had constructed a U.S.-style banking and financial market union (Gros and Belke 2015). We will never know. An important question now facing the Eurozone is whether it might be possible—after reforming banking regulations and completing the construction of a full and robust banking union—to resurrect the possibility that prudent fiscal policy of member states can be achieved without hierarchical oversight.

This idea may seem fanciful, given that the Eurozone has now constructed an intergovernmental financial institution with the explicit goal of assuaging market fears of default. However, even with the successful construction of the ESM and the continuation of the ECB’s bond-buying program, sovereign
spreads have not converged in the post-crisis environment, and spreads appear to be responsive to fiscal and political developments in member states (see, e.g. De Santis 2017).

The *conditio sine qua non* of market discipline is not evidence that markets punish increases in the deficit, but that governments conduct sustainable fiscal policy due to the desire to obtain credit at favourable rates. The mere existence of a monetary union generates moral hazard, but the problem may be augmented if member states, along with their voters and creditors, are sufficiently comforted by the prospect of eventual assistance. Yet it is plausible that calling upon the ESM can cause sufficient pain, political embarrassment, and loss of sovereignty that member states will make hard decisions in order to avoid it. Indeed, the ESM is structured around the notion of loans involving strict conditionality.

Other long-lasting unions of sovereigns, like the United States and Canada, have not erected such institutions. As demonstrated in the case studies of Arizona, Florida, and Nevada above, the U.S. states typically behave as if the prospects of an eventual federal bailout are low. They eschew the countercyclical fiscal policies pursued by European member state governments, and adjust expenditures rapidly in response to negative fiscal shocks.

Many of the self-imposed balanced budget requirements in U.S. states originated as attempts to bolster states’ creditworthiness in the wake of the wave of 19th century defaults mentioned earlier. The federal government had no involvement in the emergence of these rules. The American system of balanced budget rules has a dark side, however. These rules have encouraged elected politicians to promise future benefits to public workers without funding them. State governments often balance budgets during recessions by, among other tricks, failing to make payments to pension funds. While balanced budget rules can make it difficult to increase salaries for workers, it is much easier to make unfunded promises of future benefits. In some cases, these promises are protected by the state constitution. In the U.S. state of Illinois, this class of issues threatens the sustainability of the state’s debt path.

As a result, some have called into question the long-term credibility of the central government’s “no bailout” commitment, arguing that rather than waiting for states like Illinois to reach the final stage of fiscal crisis when default is imminent, the federal government should offer assistance shoring up state pension funds in exchange for politically painful reforms (Rauh and Novy-Marx 2010).

Because of the pension crisis, the U.S. system of market discipline is under stress. Although the system has avoided both formal bailouts and defaults of state governments for many decades, the United States may still have to grapple with a dynamic, not unlike the ESM, where conditional loans or other subsidies are exchanged for reforms. As with the case of the Brazilian states in recent decades, this would generate concerns about moral hazard for state governments going forward. In both the United States and the Eurozone, it may be useful to consider innovative approaches to this problem.

5.3 From bailouts to bankruptcy?

A concern in the United States is that a state like Illinois might eventually reach a moment like that experienced with Greece in the Euro crisis, where disorderly default is on the horizon and there is no clear resolution in sight. This would lead to a chaotic rash of lawsuits from pensioners and various classes of creditors attempting to assert their rights. It is possible that this would create externalities for other troubled states, who might suddenly find themselves unable to obtain credit. As in the Eurozone on the eve of the crisis, the United States federal government has no pre-established mechanism for mobilizing a bailout. The executive and the legislature would be forced to craft an ad hoc response as the crisis unfolded.
If the United States federal government follows the path of the Eurozone and orchestrates a bailout at that moment, perhaps even formalizing the process for the future, its long history of market discipline among the states would be undermined.

Is there a way for the United States to avoid this fate, and is there a way for Europe to unravel it? One possibility is to replace the logic of bailouts with that of bankruptcy. A bailout regime, even if governed by the logic of loans for reforms, sends the message to creditors that defaults will not be tolerated and creditors will be paid whole, even if this requires the imposition of tremendous pain for vulnerable populations in the member state. An alternative is to clarify that member state debt issues do not carry an implicit higher-level guarantee, and in the event that a member state is truly insolvent, the pain will be borne not only by pensioners and social workers in the affected member state and taxpayers in the contributing member states, but also by creditors.

Such a policy regime might still involve conditional loans and a strong oversight role for the ESM, but it might also include a set of rules that clarify the responsibilities of creditors ex ante. Indeed, it is difficult to see how conditions or threats to stop making loans can be credible if there is no real alternative to keeping a crisis-struck country liquid. The threat of disorderly defaults produces a high degree of uncertainty that can lead to sudden, herd-like credit stoppage. One rather extreme way to prevent this is to reassure creditors that there is ultimately a higher-level bailout guarantee. Another way to reduce uncertainty is more consistent with market discipline: crafting a set of clear rules for orderly partial defaults, specifying the rights of all parties involved, and the legal process through which inevitable disputes will be resolved.

For an overview of potential approaches to such a system, see Fuest, Heinemann, and Schröder (2014). The presence of such a mechanism would not absolve the ESM of the need to make very difficult decisions. On the contrary, the ESM would need to set up a procedure for determining whether a member state is insolvent. This is a very difficult task, and the answer will never be clear. Presumably the ESM must find a way to make this difficult determination in any case, however. As with bankruptcy procedures that rely on courts, this is a challenging task—one that would be fraught with conflicts of interest, and would require considerable insulation from political influence, possibly via the judiciary.

As Wypolsz (2017) argues, even without a bankruptcy-type procedure, it will be necessary for the ESM (or a future European Monetary Fund) to devise a way to determine the point at which officials loans are excessive and a debt restructuring might be required—a task that is best left to some type of independent but transparent body.

Needless to say, the time to craft such rules and procedures is not in the midst of a crisis. Markets reacted very negatively whenever the words “orderly default” were uttered by German officials during the Greek crisis, and officials quickly learned to excise them from public vocabulary. In the recent case of the U.S. territory of Puerto Rico, the United States Congress had to cobble together an 11th hour legislative deal to add some structure to the Puerto Rico’s default—a one-off quasi-bankruptcy arrangement—that was highly influenced by intense lobbying by various creditors.

A sovereign debt restructuring would have major political and economic consequences for the EMU—most likely larger than that of a state for the U.S. federation. Unlike the U.S. Federal Reserve Bank, the European Central Bank holds debt instruments of member states on its balance sheet, which adds considerable complexity to the notion of a sovereign debt restructuring. Moreover, the role of the public sector is much larger in EU member states than in U.S. states, as is their public debt.

Of course the goal of laying out the details of the process through which debts might be restructured if they become truly unsustainable is not to bring about a restructuring of existing debts. Rather, it is to be prepared for a crisis that one hopes never to experience while also improving the incentives of
future lenders. Unfortunately, however, there is a danger that even the serious discussion of a formal insolvency procedure could be interpreted as a signal of impending default, and would push the EMU back into crisis. Thus it would be necessary to pursue something like the lagged implementation strategy recommended by Fuest, Heinemann, and Schröder (2014).

It is possible that a strong banking union can eventually restore the prospect of a credible no-bailout commitment, but of course this is not possible if the ESM cannot credibly promise not to lend to insolvent member states. It is difficult to see how any such promise can be credible without specifying what will happen in the event of an insolvency and preparing for such a moment. Perhaps the United States has been able to get by without an orderly default procedure for states in part because it never developed an explicit bailout fund. Once such a fund has been created, without some prospect of debt restructuring, it is in danger of becoming a long-term transfer payment along the lines of the Sanierungshilfe for Bremen and Saarland. The clarification of an orderly default process might even find political support at a time when austerity and intervention are fostering anti-European sentiment in weaker member states and bailouts are fostering similar reactions in stronger member states.
6. CONCLUSION

The European Union has always been a union of sovereign states. A strong system of hierarchical control over the budgets of member states is not consistent with such a union, and federations like the United States and Canada have never attempted to assert such powers. While more centralized federations like Germany and Brazil have attempted to do so in response to fiscal and financial crises, all of these federations have far more central tax power—gained in large part by through the necessity of fighting costly wars—than the European Monetary Union.

Without centralized taxation and a political consensus to partially give up fiscal sovereignty to the center, a system of member-states with primary responsibility for taxing, spending, and borrowing with a credible no-bailout commitment from the union was the only realistic option for the Euro.

It is difficult to argue with the retrospective assessment that it would have been advantageous for the weaker member states to have been part of a fiscal union with a strong central role in income taxation, like the United States, that provided shock absorbers to the member states most effected by the crisis by continuing to fund certain sensitive expenditures while collecting less in taxes.

However, this paper has pointed out that the system of intra-regional fiscal insurance in the United States is less well targeted than often portrayed in European discussions, and is offset to a large extent by extremely pro-cyclical fiscal policies of state and municipal governments. If the Eurozone embarks on the construction of a system of intra-regional fiscal insurance, it should endeavour not to replicate, but to improve on the U.S. experience.

The most proximate cause of the demise of market discipline in the Eurozone was not the lack of fiscal union, but rather, the lack of banking union. In response to a market panic, it became necessary to bail out member states for whom default would have led to the collapse of large banks in both Northern and Southern Europe. The new “bail in” rule of the Bank Resolution and Recovery Directive requires that investors and certain creditors take the first losses in the event that a bank needs to be rescued because of risky private loans. This is an important development. A further step would be to extend this logic to public lending.

The political will for dramatic centralization of taxation and regulation in the Eurozone does not seem to have increased in the aftermath of the crisis. And if anything, the credibility of the center in dictating fiscal policies to troubled member states may be weaker than ever. Thus as argued by Eichengreen and Wyplosz (2016), the best course of action might be to recognize that member states will maintain themselves as fiscal sovereigns, and work to complete the banking union and reduce member states’ debt overhang in order to pave the way for a better-functioning system of market discipline in the future. If this path is taken, it may be necessary for the ESM to slowly transition from a pure bailout or backstop mechanism to a forum through which an orderly restructuring of debt can take place in the event of insolvency.
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Parliament.


Euro Area Scrutiny

External expertise on economic governance issues during the 8th Parliamentary term

Abstract
This document provides the summaries of all external experts papers published during the 8th parliamentary term (2014-2019) by the Economic Governance Support Unit, aimed at supporting the scrutiny work on the functioning of the Euro Area, especially in view of the bi-annual Economic Dialogues with the President of the Eurogroup.
This document was prepared for the European Parliament’s Committee on Economic and Monetary Affairs.

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**ABOUT THE EDITOR**
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INTRODUCTION

This document provides the summaries of all external experts papers published during the 8th parliamentary term (2014-2019), aimed at supporting the scrutiny work on the functioning of the Euro Area, especially in view of Economic Dialogues with the President of the Eurogroup. During this parliamentary term, the President of the Eurogroup has appeared, as a matter of practice, twice a year for a dialogue in the competent Committee of the European Parliament.

The papers have been provided twice a year, aligned with the spring and autumn work programmes of the Eurogroup. They have been written by prominent external experts, upon request of the competent Committee of the European Parliament and under the supervision of its Economic Governance Support Unit (EGOV). The topics addressed by these papers relate to the economic governance framework of the Economic and Monetary Union.

In addition, papers supporting the scrutiny of the Banking Union, in particular in advance of public hearings with the Chair of the Single Supervisory Mechanism and the Chair of the Single Resolution Mechanism, have been provided upon request of the competent Committee during the whole parliamentary term.

External expertise is also made available in advance of Monetary Dialogues. As part of this scrutiny work on the euro area by the competent Committee(s) of the European Parliament, the EGOV Unit has also prepared and published, on regular basis, briefings related to the implementation of the economic governance and banking union frameworks. These briefings are also available on the homepage of the ECON Committee.

On 1 January 1999, 11 countries of the European Union (EU) adopted fixed exchange rates, adopted a shared monetary policy under the European Central Bank and launched a new common currency: the euro. It was initially a currency used in financial markets and for cashless payments. Three years later, euro banknotes and coins entered into circulation. Today, the euro is the currency of 19 EU countries and over 340 million Europeans, and has become one of the most important currencies in the world.

On 1 January 2019, the Euro celebrated its 20th anniversary.
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DEBT SUSTAINABILITY ASSESSMENTS: THE STATE OF THE ART

November 2018

In their paper, C. Alcidi and D. Gros (CEPS, Brussels) differentiate DSA as a standard instrument of fiscal surveillance in normal times (“economic surveillance DSAs”) and as a tool for taking decisions about the provision of financial support (“hard DSAs”). Given the fundamental relationships between debt, deficits, interest rates and growth, the result of a DSA depends ultimately on the assumptions about the parameters. One caveat of this approach is that it applies empirical regularities from the world-wide economies and in the pre-euro period to estimate such parameters; the authors note that this may be misleading for euro area countries. The paper presents the main differences between the IMF and the COM approaches, and notes that such differences are more relevant when DSA is used in the context of financial assistance, than in regular surveillance. An important difference is due to the time horizons: the IMF uses the five-year horizon of its Word Economic Outlook projections for both “surveillance” and “hard” DSA, while the COM has usually a ten-year horizon. This is related to the size and scope of the respective potential financial assistance: the IMF provides limited amounts of financing, of a short- to medium-term nature and with a substantial top up over risk free rates; therefore, the DSAs of the IMF focusses on the ability of a country to finance itself in the market and repay the IMF after 5 years. Financing by the ESM in the Euro Area, by contrast, can be large, cheap and of such a long maturity that the program itself can have a major impact on the long-term debt sustainability. On fiscal sustainability indicators used in the context of “economic surveillance DSAs”, the authors argue that they are somewhat less judgmental: on the one hand, certain indicators have proven to be useful warning signals of future fiscal stress, on the other hand, they point to different directions and it is difficult to extrapolate a univocal conclusion.

In his paper, G. Corsetti (University of Cambridge) notes that the approach to DSA has substantially evolved after the global economic and financial crisis. The main goal now is to improve the detection of risks. To this scope, DSAs make use of an increasing number of indicators and systematically include both implicit and contingent liabilities; DSAs also use statistical methods to quantify highly risky “tail events”. Furthermore, DSAs more and more often set “debt limits”, by adopting thresholds for debt and payment flows, which are used to single out enhanced vulnerability. While these developments mark true progress, this paper argues that some issues should be incorporated to improve the predictive capacity of DSA, focusing mainly on liquidity (versus solvency) risks and contagion risks. The identification of fixed “debt thresholds” is another critical area, limiting DSA effectiveness: the author argues that such limits should not be fix, neither across countries nor over time. In the paper, the author explains why DSA should embed potentially available official support: according to this approach, therefore, the limited clarity of the design of the financial support - as currently in the EMU - constitutes a hurdle for a comprehensive DSA. The author also shows that different risks require different financial assistance tools, and that the (negative) role of self-fulfilling expectations can be prevented by designing appropriate instruments, while taking into account moral hazard aspects. The paper concludes with a comparative assessment of current standard DSAs models and applications, suggests directions for further improvement, and discusses the correct use of DSAs in light of the strengths and weaknesses inherent the underlying methodologies.
THE SIMPLIFICATION OF THE STABILITY AND GROWTH PACT

April 2018

C. Cottarelli (Observatory on Public Accounts Università Cattolica) argues in his paper that the complexity of the SGP, which may have contributed to its limited effectiveness, reflects largely the conflict between the need to make the original SGP rules more stringent and the desire to allow flexibility with respect to various country circumstances. Once that the effects of the largest economic shock since the 1930s have faded away, a major simplification of the system could be achieved by removing some margins of flexibility, without changes in the legislation. Another approach would be legal simplification, including relaxing some of the SGP long-term parameters or reconsidering the coexistence of the MTO rule and the expenditure benchmark. A more radical solution would be shifting to a single rule in which an “operational target” responds to deviations of public debt from its long-term objective.

F. Heinemann (Centre for European Economic Research (ZEW) Mannheim and University of Heidelberg) acknowledges in his paper that past reforms of the Stability and Growth Pact (SGP) have improved its economic rationale, but this progress has come at the expense of simplicity, transparency and, possibly, enforceability. This study surveys and evaluates reform models that could reduce complexity without compromising the SGP’s indispensable flexibility. From a holistic perspective, the greatest potential for simplification will result from a shift of discretionary power to an independent fiscal institution. Independence is a substitute for complexity. With a narrower focus on the potential streamlining of the SGP and a reduction of excess complexity, first, the preventive and corrective arms could be integrated into one procedure. Second, this integrated procedure should be centred on a net expenditure rule that is combined with a debt feedback mechanism and a memory for expenditure overruns. Third, further fiscal indicators that are currently treated as parallel targets (headline deficit rule and structural balance) could be downgraded to non-binding reference values. And fourth, the planned transposition of the Fiscal Compact into European law should follow SGP reforms, in order to promote consistency between European and national fiscal rules.

G. Kopits (Woodrow Wilson Center and Portuguese Public Finance Council) states in his paper that an assessment of the present SGP fiscal rules reveals a significant deterioration in simplicity, undermining their effectiveness. In fact, in both design and process, they have become the most complex worldwide. Three options for future reform are offered to correct this deficiency. Under the first, the structural balance and the debt convergence targets are replaced with a debt-stabilizing or -reducing primary surplus target, while retaining the expenditure benchmark. The second consolidates all current rules into a single operational debt rule by setting a limit on the discretionary budget deficit, derived from the debt reduction target. The third option consists of a market-based approach which is essentially an autonomous regime of rules, in contrast to coordinated or centralized regimes.
CONVERGENCE IN THE EMU: WHAT AND HOW?

May and June 2018

M. Dolls and C. Fuest et al (CESifo) note in their paper that convergence is one of the key goals of the European Union and has been at the centre of many recent debates. This paper strives to identify the types of convergence that are pivotal to the well-functioning of the euro area and discusses their role in the context of the EMU’s governance framework. Evidence suggests that key economic indicators have converged for some Member States before coming to a halt (or even diverge) with the onset of the global financial and euro area debt crises. As economic convergence depends mostly on the policies of the Member States, the authors call for a strengthening of national responsibility for structural reforms. The authors discuss strengths and shortcomings of the recently proposed reform delivery tool and present our proposal of ‘national convergence roadmaps’. They propose that member states can apply for resources from the European Structural and Investment Funds by committing to convergence targets and submitting reform plans in the context of the European Semester. If positively assessed by the European Commission and approved by the Council, the reform efforts could be financially rewarded – conditional on the potential for positive spill-overs, continuous implementation of the reforms and achievement of the convergence targets.

In his paper, J. Creel (ESCP Europe & OFCE, Sciences Po) notes that one major characteristics of an optimal currency area is its ability to maintain or foster integration and convergence among its Member States. This objective requires reaching a stable economic and financial situation and developing resilience to shocks. After reviewing the state of convergence in the euro area, this paper proposes a number of recommendations, aimed at improving convergence towards the so-called “steady state”, as well as financial and cyclical convergence. Recommendations focus on several policy areas, including cohesion policy, the statute of the ECB, public and private debt sustainability, fiscal rules and minimum wage policy.
C. Alcidi and D. Gros (Centre for European Policy Studies) state in their paper that the emphasis of the European Semester should shift from economic policy coordination – intended as the process through which Member States commit to common rules and recommendations adopted by the Council of the European Union under the surveillance of the European Commission – to a stronger national ownership. Coordination of national policies may be essential at times of crisis, when cross-country spillover effects tend to be large, but it may not be very effective when economic conditions return to normal, as spillovers tend to be small and the incentives for governments to coordinate lessen. Stronger national ownership should lead to better enforcement of commonly agreed rules, regardless of economic conditions and should take away the perception that rules are hierarchically imposed. National ownership could be improved by involving the national fiscal councils and the national productivity boards explicitly in the elaboration of EU recommendations for national governments. This should be done without increasing the complexity of an already complicated EU governance system of governance or damaging their reputation as independent bodies. Reforms aiming to improve the structural functioning of the EU’s economies are of critical importance for Member States, yet the reasons why specific reforms should be embedded in the Semester are not always clear. Moreover, strengthening the Semester by further linking the EU budget to reforms undertaken in the Member States is fine in theory but very difficult in practice. Reforms cannot be ‘bought’ as such and it would be extremely difficult to measure the implementation of the CSRs precisely enough to make implementation a condition for funds. The role of the Commission should remain predominant in fostering coordination in case of economic crisis and in providing technical support for reforms whenever needed.

X. Ragot (OFCE and SciencesPo-CNRS) acknowledges in his paper that the improvement of the European Semester is an on-going process. However, this process of annual coordination should focus more on macro-economic policies with potentially strong spill-overs, which can only be addressed at the European level. Among these, one can identify diverging nominal trends and deflationary pressures at the euro area level, an inadequate fiscal stance, and unsustainable current account imbalances. To address these issues, he puts forward seven specific suggestions on how to further improve the current economic coordination and surveillance process:

1. Request National Productivity Boards to focus more on nominal trends across tradable and non-tradable sectors and on the labour markets;
2. Based on the inputs of National Productivity Boards and the Commission, define a nominal wage stance in the euro area consistent with the ECB target. Use this nominal stance to issue relevant CSRs;
3. Provide a hierarchy of CSRs based on a degree of spill-overs the requested reforms have onto other Member States;
4. Systematically add CSRs about environmental issues and possibly energy policy, as these recommendations tackle issues with clear externalities;
5. Add a temporal dimension to recommendations, with a possible medium-run time horizon, distinguishing between intermediate steps and final goals;
6. Start the European Semester with an assessment of the European economic situation on key aspects: Fiscal aspects (fiscal sustainability and fiscal stance), social aspects, financial aspects (based on current account imbalances) and nominal aspects (nominal and wage stance);
7. To improve democratic debate, a systematic communication on CSRs with externalities would considerably ease national ownership. The Commission has to be heard by national parliaments to discuss potential European externalities, while the European Parliament should scrutinize the assessment by the Commission of these policies with strong externalities.
FEASIBILITY CHECK: TRANSITION TO A NEW REGIME FOR BANK SOVEREIGN EXPOSURE

November 2017

N. Véron (Bruegel & Peterson Institute for International Economics) makes in his paper a concrete proposal for a Sovereign Concentration Charges Regulation (SCCR), including calibration and careful transitional arrangements to avoid any disorderly market impact. The SCCR and EDIS together could realistically receive political approval in 2018 and be fully implemented within a decade. Achieving the aim of Europe’s banking union project, to break the vicious circle between banks and sovereigns, requires new policy initiatives. The most direct bank-sovereign linkages are national deposit insurance and concentrated domestic sovereign exposures. Thus, simultaneously with a European Deposit Insurance Scheme (EDIS) as proposed by the European Commission in 2015, the European Union should introduce regulatory disincentives against highly concentrated sovereign exposures of euro area banks.

Y. M. Schneider (University of Mannheim), and S. Steffen (Frankfurt School of Finance & Management) argue in their paper that excessive sovereign debt exposures of banks contributed to the gravity of the financial and sovereign debt crisis in 2011 and 2012, as well as to the slow and asymmetric recovery of European countries. Various policies that improve banks’ resilience were introduced in recent years, however the regulatory regime for the sovereign debt exposure of banks has not changed. The authors identify four criteria that a new regime for bank sovereign exposures should fulfil: (1) attenuate the home bias to the domestic sovereign, (2) break the doom loop, (3) avoid a flight-to-quality of assets, and (4) mitigate risk spillovers. The authors assess the implications for banks’ balance sheets for five policy proposals, based on simulations on a sample of European banks. They show that none of the proposals would fulfil all four criteria in the absence of a safe asset. They conclude that a new regime for bank sovereign exposure should be conditional on restoring the value of sovereign bonds as a safe asset.
AN EVOLUTIONARY PATH TO THE EUROPEAN MONETARY FUND

May 2017

C. Wyplosz (the Graduate Institute, Geneva) notes in his paper that the creation of a European Monetary Fund seems a natural next step to improve upon the European Stability Mechanism. Prof. Wyplosz argues that such a step is neither necessary nor desirable, for many reasons. First, the European Stability Mechanism is a fundamental contradiction with the no-bailout rule, which is arguably the most crucial instrument to foster fiscal discipline in the Eurozone. Second, any insurance mechanism creates moral hazard. A European Monetary Fund would be deeply immersed in conflicts of interest among its members. Third, it would have to fit in alongside the Commission and the Eurosystem, already in charge of monitoring the Eurozone countries, preventing crises, lending in last resort and developing debt-restructuring principles. Fourth, it would need a highly competent staff to deal with crises but idle in quiet times. Fifth, its governance should guarantee fast action when needed, with proper accountability and undue politicisation. These are serious hurdles and the IMF can perform the task.

According to a paper by D. Gros (CEPS, Brussels), there is no need for Europe to replicate the International Monetary Fund (IMF). The European Stability Mechanism (ESM) can provide the backstop for sovereigns, even without a financial contribution from the IMF. In this sense, the ESM already constitutes to a large extent a ‘European Monetary Fund’. Other IMF functions such as surveillance and policy coordination should remain with the European Commission, the Eurogroup and other existing bodies. The ESM will be called upon to act as a backstop only intermittently, in times of great financial market instability. The need for it will evolve as a function of the nature of financial markets and their cross-border integration. It is not possible to forecast with any precision when the next financial crisis might break out and what form it will take. Any evolution in the functioning of the ESM should thus aim at enhancing flexibility and clarity of its overall mandate (financial stability), rather than revising the details of the rescue mechanism (which should be extended to the Single Resolution Fund) and its modus operandi. Moreover, the ESM should be viewed as the natural instrument for unifying the euro area’s representation in the IMF.

In his paper, J.A. Rodden (Stanford University) presents the EMF from a comparative perspective with the USA. Eurozone reformers are looking to the United States and other federations as they seek to craft a more sustainable architecture for the Euro. This paper first extracts lessons about mechanisms of intra-regional insurance and redistribution, and then turns attention to related debates about moral hazard and fiscal discipline. In the United States, intra-regional fiscal stabilization is achieved through a progressive income tax. Contrary to common wisdom, federal direct expenditures and grants are targeted neither to states suffering from short-term asymmetric negative shocks nor to relatively poor states in the long term. Fiscal policies of state and local governments are highly pro-cyclical, and partially undermine the stabilizing role of the system of federal taxes and transfers. Thus the U.S. experience suggests a number of design challenges facing any future Eurozone stabilization mechanism. The paper also places proposals for even stronger top-down surveillance and correction mechanisms of Eurozone member states’ fiscal policies in comparative perspective, arguing that such powers are not found in unions of sovereigns like the United States, Canada, and Switzerland. Moreover, there are reasons for concern about the credibility of such efforts in the Eurozone as currently structured. Unless political will can be found for extraordinary political and fiscal centralization, reformers should assume that member states will continue as sovereigns, and hence will be disciplined (or not) by voters and credit markets rather than European regulators. Thus it might be useful to consider policies that would make the “no-bail out clause” credible.
THE ROLE OF MACRO-PRUDENTIAL POLICIES IN THE EURO AREA

May 2017

M. Rubio (University of Nottingham) reviews in her paper the key issues that are relevant for the implementation of macroprudential policies in the euro area and questions the current institutional framework. Finally, it gives some policy recommendations on how to improve the current situation. In the aftermath of the financial crisis, there is consensus among academics and policy makers on the need for the so-called macroprudential policies. Additionally, the current low interest rate environment creates further risks to financial stability. However, the implementation of such policies in a monetary union is a rather complex issue. Housing and credit markets heterogeneity across countries calls for action at national level. The role of the ECB in macroprudential policy is a matter of debate because monetary policy can conflict with the ultimate goal of macroprudential policy.

Drawing on an inventory of the current practices and the teachings of recent academic work, J. Couppey-Soubeyran (Université Paris 1, Centre d’économie de la Sorbonne & CEPII) and S. Dehmej (Bank Al-Maghribwe) formulate in their paper 15 proposals which aim to identify effective macro-prudential instruments to achieve this stability and, in a context of institutional transformation (Banking Union, Brexit, etc.) likely to facilitate changes, to streamline the institutional framework. The euro area suffers from economic and financial imbalances between its members. Macroprudential policy can help remedy this in as much as it can be deployed both at euro area level and Member State level. A macro-prudential policy framework to regulate financial cycles at Member State level and improve the resilience of systemic groups at euro area level would improve the economic and financial stability of the euro area and each of its members.
STRUCTURAL REFORMS AND THE ROLE OF THE EUROGROUP

November 2016

H. Enderlein and J. Haas (Jacques Delors Institut – Berlin) analyses in their paper the role of the Eurogroup in European economic governance. Since the euro crisis, there can be no doubt about the importance of coordinating economic policies in area currency union. But the main coordination framework, the European Semester, is not yet working as intended. Some hopes rest on a stronger role of the Eurogroup. In 2014, it started holding “thematic discussions on growth and jobs”, i.e., on structural reforms. They argue that there is no single criterion for evaluating the effectiveness of the Eurogroup. Instead, success depends on how one sees its ideal role in economic policy coordination. The Eurogroup can act as: (1) a consensus-builder through policy learning and persuasion, (2) an EMU architect on the basis of hard coordination, and (3) a supervisor of the member states via peer pressure. The authors find that thematic discussions are moderately effective in building consensus, but mostly ineffective in helping implement CSRs for the entire euro area and ineffective in monitoring reform implementation in the member states. The important, and increasingly formal, tasks the Eurogroup has been assigned in the European Semester are not mirrored in the group’s working methods and legal foundations.
THE EURO AREA FISCAL STANCE

July 2016

A. Bénassy-Quéré (Paris School of Economics, University Paris 1 Panthéon-Sorbonne) notes in her paper that the concept of fiscal stance aims at assessing the “voluntary” impulse induced by fiscal policy, as opposed to “automatic stabilisers”. In the current economic governance framework, where only coordination among euro area Member States is possible, the design and implementation of a Euro area fiscal stance is especially difficult, in the absence of a Euro area budget. Therefore, the only possibility is to coordinate national fiscal policies, in order to mimic what a federal budget could achieve. She argues that such “top-down” approach should apply only in “exceptional” times, when fiscal spillovers are high and the Euro area is at risk. In “normal” times, the usual “bottom-up” approach remains appropriate. The author highlights the weakness of the concept of “fiscal stance”, due to changes in the forecasts of both the actual and potential GDP growth: to overcome this problem, she proposes to rely on the current account estimates, which seem more reliable and less volatile. In order to “distribute” the fiscal stance among euro area countries, both the output gap and current account of each country need to be taken into account, on the top of each country’s “fiscal space” that results from the debt ratio. She also proposes a calendar that could better fit the European semester and the preparation of Member States’ budgetary plans. As far as democratic legitimacy is concerned, the legitimacy of a “top-down” approach for fiscal policy would mainly rely on “output legitimacy” (i.e., it would be based on its efficacy). However, the recently established European Fiscal Board could have an impact, by raising the level of awareness within the European and national Parliaments; the President of the EFB would appear in front of the EP and selected Member States. Since national governments and parliaments will remain responsible for national fiscal policies, fiscal coordination will remain fragile, especially when the macroeconomic situation differs largely across Member States. Therefore, the coordination of national fiscal policies should be complemented by the development of a “fiscal capacity” for the euro area.

K-J. Gern et al. (Kiel Institute for the World Economy) argue in their paper that the joint euro area fiscal stance is not a useful concept, because i) only national authorities can conduct fiscal policies and ii) the concept abstracts too much from the relevant information at country level (especially debt sustainability concerns). Furthermore, from the methodological standpoint, the structural balance is a weak indicator, because it depends on the output gap and on the potential output of an economy, which have proven very volatile. The authors note that in the current context, the EU Commission requires Member States with fiscal space (i.e. sound debt position, e.g. Germany) to provide fiscal stimulus, in the hope that loosening the joint fiscal stance would help countries that cannot afford a more expansionary fiscal stance. The authors argue that this would damage the national economy and its sustainability, and would induce further business cycle divergence among euro area Member States. Furthermore, the impact on the other MSs might be opposite to the expected one, because of the monetary policy, which might consequently get tighter and of the limited trade spillovers. As a result, imposing an “aggregate fiscal stance” could be politically contested, and seen as not legitimate. The authors propose the creation of a joint budget to support stabilisation policies, financed with member States’ contributions, focused only on addressing genuine cyclical risks. Nevertheless, such a solution might favour moral hazard, while reducing both the willingness to implement structural reforms and the high levels of public debt. Furthermore, a euro area fiscal framework should be transparent and responsive to euro area political preferences: the current framework seems not adequate and would require an institutional reform of the EMU.

F. Giavazzi (Bocconi University, Milan) argues in his paper that the concept of euro area fiscal stance has recently come to the forefront of the policy debate because the ECB reached the zero lower bound on interest rates, thereby curtailing its ability to use monetary policy to affect aggregate demand. The euro area fiscal stance could be therefore the relevant tool to offset cyclical fluctuations in output. The
Author’s analysis suggests that about one half of the savings that the euro area currently exports to the rest of the world (measured, at the end of 2015, by a current account surplus equivalent to 4% of the euro area GDP) could be spent (for consumption and/or investment) inside the euro area, in an attempt to move output and employment close to potential. However, difficulties arise from the fact that the euro area lacks instruments to control the euro area fiscal stance directly: in fact, the stance of fiscal policy can currently only be managed through individual actions at the level of individual Member States – and such actions run into the difficulties of fiscal policy coordination. As a possible solution, the author proposes a procedure whereby the Commission first decides the desired change in the euro area fiscal stance, and then the allocation of such a change among individual Member States, based upon their relative output gaps. Another proposal, which would require changes in the Treaty, envisages the creation of a fiscal capacity at the euro area level, through the transformation of the European Stability Mechanism in a new institution designed to play a central role in managing euro area domestic demand. The paper concludes by discussing some characteristics of the new institution, namely its governance, its resources (which would come from the issuance of “Stability Bonds”), the moral hazard concerns it may raise and its relationship with the European Commission and the European Fiscal Board.
ECONOMIC POLICY RECOMMENDATIONS IN THE EURO AREA UNDER THE EUROPEAN SEMESTER

November 2015

In the paper by K.J. Gern, N. Jannsen and S. Kooths (Kiel Institute for the World Economy), the authors note that after three years of mixed operational experiences, the European Semester has been streamlined and further reform has recently been suggested by the European Commission. They outline the major modifications and evaluate to what extent this streamlining has affected the nature of the 2015 country-specific recommendations. Any mechanism for policy coordination depends crucially on the institutional framework that it is supposed to operate in. Consequently, proposals for further improvement of the European Semester must take the institutional environment into account. The authors therefore work out the compatibility of different aspects of policy coordination with respect to the existing EU architecture and discuss the proposals to modify this architecture put forward recently in the Five Presidents Report. On this basis, they develop proposals for improving the efficiency of the European Semester.

A. Bénassy-Quéré (Paris School of Economics, University Paris 1 Panthéon-Sorbonne) states in her paper that the European Semester is a well-intentioned attempt to foster macroeconomic policy coordination between Member states. However, the concept of euro area fiscal stance lacks operational instruments, the concept of macroeconomic imbalances is loosely defined, the Macroeconomic Imbalance Procedure (MIP) is weakened by its complexity, and its blurred frontier with respect to the Europe 2020 process further obscures the Semester. The euro area is still not well equipped to design a consistent macroeconomic policy and reduce the risk of long-lasting stagnation. The author proposes to use the future European Fiscal Board to promote an integrated view of fiscal policy, to make the MIP symmetric to the Stability and Growth Pact (SGP), with a flagship indicator (the current account) complemented with a limited number of indicators related to medium-term imbalances. Growth-enhancing policies would all fall under the Europe 2020 process (“integrated guidelines”), with alternating building blocks.

The paper by F. Zuleeg (European Policy Centre) assesses the economic policy coordination process in the euro area under the European Semester, and makes recommendations on how implementation could be enhanced and what further developments are necessary to improve coordination of economic policies within the EMU.

In their paper, C. Alcidi and D. Gros (CEPS) note that the implementation record of the Country Specific Recommendations has declined over time, as financial turbulences lessened and the economic outlook started to improve. Urgency for reforms seemingly receded to leave room to request from Member States towards more accommodative stances. It is mainly the small countries that implement, at least partially, the recommendations addressed to them. Unfortunately there is little that the EU can do to change the status quo. Yet, the President of the Eurogroup could be held accountable for the implementation of the recommendations addressed to the euro area. The creation of National Competitiveness Boards risks making the European Semester even more complex and likely to have little impact in the countries which need them most, namely large countries and those with poor governance. To make it effective, a procedure would be needed to make national wage norms consistent at the euro area level, which may be a very difficult objective to achieve.

Z. Darvas and A. Leandro (Bruegel) state in their paper that the Semester is a yearly process of the EU to improve economic policy coordination and ensure the implementation of the EU’s economic rules. Each Semester concludes with recommendations for the euro area as a whole and for each EU member state. They show that implementation of recommendations was poor at the beginning of the Semester in 2011, and has deteriorated since. According to the authors, the European Semester is not particularly
effective at enforcing even the EU’s fiscal and macroeconomic imbalance rules. They assess that euro area recommendations with tangible economic goals are not well reflected in the recommendations issued to Member States. Finally, they review various proposals to improve the efficiency of the European Semester and conclude that while certain steps could be helpful, policy coordination will likely continue to have major limitations.
In his paper, J.F. Kirkegaard (Peterson Institute for International Economics) summarizes the history and organization of the principal economic governance institutions in the United States. Particular emphasis is given to the main U.S. fiscal actors at the federal and state and local governmental level. Sources and beneficiaries of, and trends in government revenues and expenditures are analyzed, and the lines of democratic oversight relations over other appointed U.S. economic governance institutions are described. Debt issuance procedures at all governmental levels are examined, including the legal circumstances of U.S. local government bankruptcies. In-depth explorations of also the U.S. central bank in the Federal Reserve System, and the U.S. bank deposit and resolution framework centered on the Federal Deposit Insurance Corporation (FDIC) are presented, and brief descriptions of other relevant U.S. financial regulatory agencies provided.
DEBT SUSTAINABILITY AND ECONOMIC CONVERGENCE OF EURO AREA MEMBER STATES: CHALLENGES AND SOLUTIONS

February 2015

In his paper, P. Mauro (Peterson Institute of International Economics) argues that the Eurozone is at risk of economic stagnation and that the crisis has led to the most pervasive and pronounced increase in government debt-to-GDP ratios since the Second World War. Member countries are facing vastly differing economic growth rates, with some displaying hardly any recovery since the crisis began. His paper puts forward proposals aimed at fostering economic convergence, while ensuring debt sustainability for the Member States.

In the paper by X. Ragot (Fondation Nationale des Sciences Politiques), the author states that countries within the euro zone are facing three main perils: nominal divergences, materializing in unit labour cost differences; the lack of aggregate demand in Europe, the main issue in the short run; the high level of public debt, generating an issue of sustainability in some countries. The exclusive focus on both public debt and unit labour costs has produced a demand crunch in the euro area, which is the main cause of the deflation risk and high current account. The lack of demand is creating concerns about debt sustainability. A sustainable debt is not in fact a low or rapidly decreasing public debt, but one with no risk of default. The default risk in advanced countries is not an economic risk, but a political risk. High unemployment and a long-lasting recession are eroding political support for the European project, which can ultimately reduce countries' ability to generate a sufficiently high primary budget. All the flexibilities in the current treaty should be used to boost demand in Europe, without increasing the public debt burden of the heavily indebted countries. As some surplus countries, like Germany, decided not to use their fiscal space, one way to promote public demand is to design a public investment plan much bigger than the initial Juncker Plan and financed by funds backed by either national or European debt, which could be bought by the ECB. In addition, the European Semester should clearly start with an assessment of the aggregate fiscal and monetary stance in the euro area to provide the desired orientation for the European policy mix, consistent with country-specific recommendations.

C. Fuest (IFO) notes in his paper that several member countries of the Eurozone are plagued by increasing government debt and weak economic growth, raising concerns about fiscal sustainability. His paper discusses policy options to improve fiscal sustainability, focusing on two proposals: more public investment and growth oriented tax reforms. In recent years, a significant part of fiscal adjustment has been achieved by cutting public investment, rather than consumption spending. This suggests that there is potential for viable investment projects, but additional investment should be financed by restructuring public expenditure, not by additional public debt. Proposals to revise the Stability and Growth Pact by extending the room for debt financing of investment or to interpret the existing rules more 'flexibly' would undermine the credibility of the pact and question the commitment to fiscal sustainability. Tax policy can contribute to more growth by reducing taxes on corporate and labour incomes financed through higher taxes on consumption and higher recurrent taxes on immovable property. Various options for temporary tax changes would stimulate private consumption and investment spending in the short term.

The paper by P. Manasse argues that fiscal convergence in the Euro area has been achieved at the expenses of real divergence in unemployment, investment and, at least temporarily, growth. Statistical and econometric analysis supports the view that the current fiscal framework addressed debt sustainability concerns, but imparted a pro-cyclical bias, which contributed to economic divergence. The recent flexibility guidelines are a step in the right direction, but they are unlikely to have sizable effects. A reform of the fiscal framework and a mechanism for an intra-European unemployment insurance scheme is proposed.
FISCAL AND MACRO-STRUCTURAL CHALLENGES AND POLICY RECOMMENDATIONS FOR THE EURO AREA AND ITS MEMBER STATES UNDER THE 2014 SEMESTER CYCLE

August 2014

The paper by J.F. Kirkegaard focuses on the need for euro area policy makers to sustain their recent crisis-induced reform eagerness to pull the region away from the threat of economic stagnation. Important policy challenges in ensuring that fiscal consolidation protects public investment spending, and in overhauling national bankruptcy procedures to facilitate private debt deleveraging and complementing the Banking Union is presented. The President of the Euro Group should be made a full-time position, and the post could have its democratic legitimacy enhanced through an expansion of the recent innovative spitzenkandidat-framework to also include it. This would require that the European Parliament created a new euro area-only institutional setting. Proposals to enhance the working of the Euro Group and its President are also presented.

P. Bofinger’s paper states that the European Semester is an extremely important tool for economic policy coordination. In the absence of an integrated fiscal policy a monetary union requires a coordination mechanism to avoid negative spill-overs and to achieve an appropriate aggregate fiscal policy stance. In its present form, the focus of the Country Specific Recommendations (CSRs) is on the surveillance of fiscal policy consolidation and of structural reforms. A genuine coordination of national policies is virtually absent. There is also no systematic analysis of challenges for the main macroeconomic targets. The 2014 CSRs neglect the fact that target of price stability is not met and that there is a serious risk of deflation and economic stagnation. There is no systematic analysis whether the aggregate fiscal policy stance of the Euro Area is adequate. In the area of wage setting, the CSRs propose asymmetric wage reductions for many Member States which would increase deflationary tendencies. Therefore, the President of the Eurogroup should prepare a coordinated programme for public investments that could be implemented rapidly if the deflationary tendencies become manifest. In addition, (s)he should monitor wage relevant structural policies to avoid competitive (real) devaluations and encourage stronger wage increases in countries with a very high current account surplus.

D. Gros and C. Alcidi (Centre for European Policy Studies) note in their paper that most of the country-specific recommendations (CSRs) issued over the years 2011-13 concentrated on the need to reduce budget deficits “in a growth-friendly way” and to increase competitiveness. Both policy goals remain appropriate today. However, the CSRs have seldom indicated what concrete policy actions would make budget consolidation growth-friendly. The authors argue that the emphasis on boosting investment as a precondition for sustainable growth is misplaced and that fundamental reform of bankruptcy and insolvency procedures is needed to deal with the debt overhang in the euro area periphery. They also argue that the accountability of the President of the Eurogroup should be improved and that he/she should promote more collective action on common matters. Priorities for the next six months should focus on financial stability: completion of the banking union and dealing with the results of the asset quality reviews (AQRs).
This publication is a collection of studies and assessment papers, originally prepared at the request of the Committee on Economic and Monetary Affairs of the European Parliament. It aims to provide background-reading materials for the members of European Parliament and members of national parliaments participating in the Parliamentary week 2019 focusing on the Euro@20 debate.