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# Euro at 20: The Monetary Union from a Bird's-eye View

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# Euro at 20:
# The Monetary Union from a Bird's-eye View

A concise critical assessment


**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.

This document was provided by Policy Department A at the request of the Committee on Economic and Monetary Affairs.


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# LIST OF ABBREVIATIONS

| | |
|---|---|
| **ECB** | European Central Bank |
| **EU** | European Union |
| **GDP** | Gross Domestic Product |

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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-doom 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."

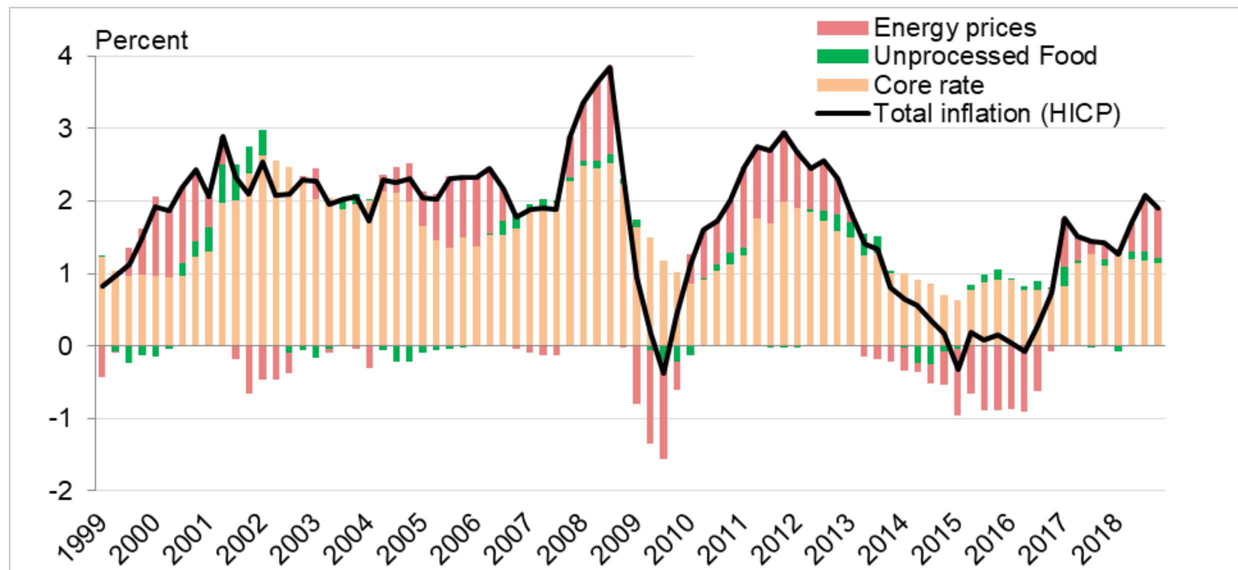
20 years after the start of the monetary union, this briefing aims to take stock of accomplishments and challenges. Part 2 collects data on the internal and external credibility and stability of the joint currency, compares the relative economic performance in terms of GDP per capita, and portrays the 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.

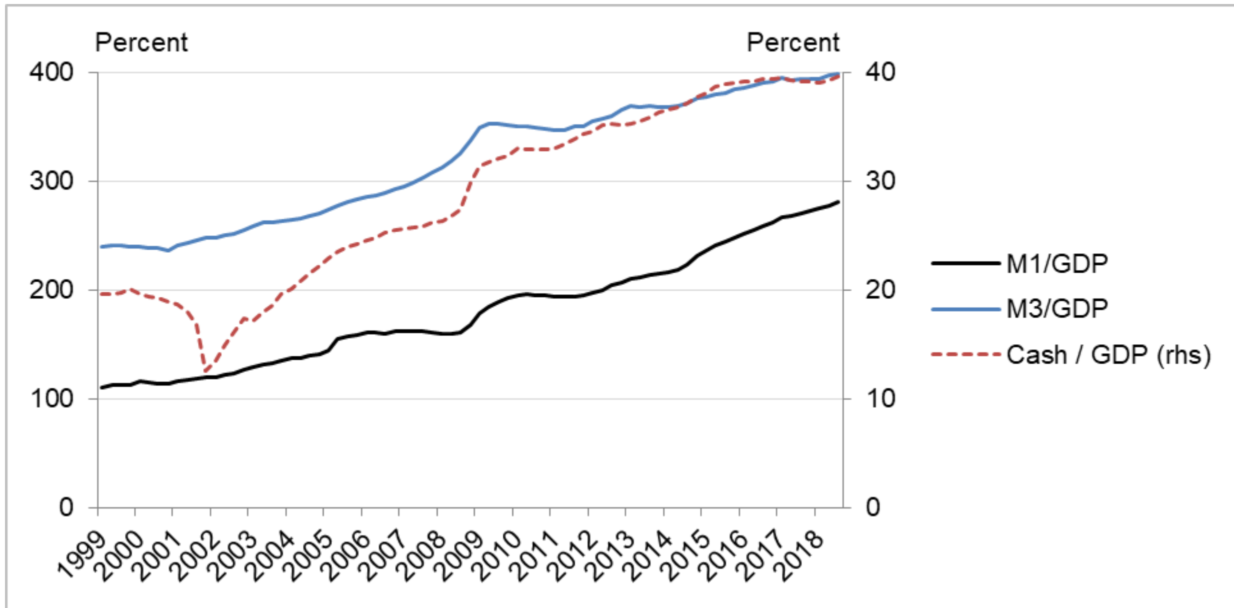
Table 1: Average consumer price inflation and core inflation

| | Total HICP | Core rate |
|---|---|---|
| 1st decade: 1999-2008 | 2,2 | 1,8 |
| 2nd decade: 2009-2018 | 1,2 | 1,2 |
| 1999-2018 | 1,7 | 1,5 |

Core rate: HICP excluding energy and unprocessed food. Source: ECB, own calculations.

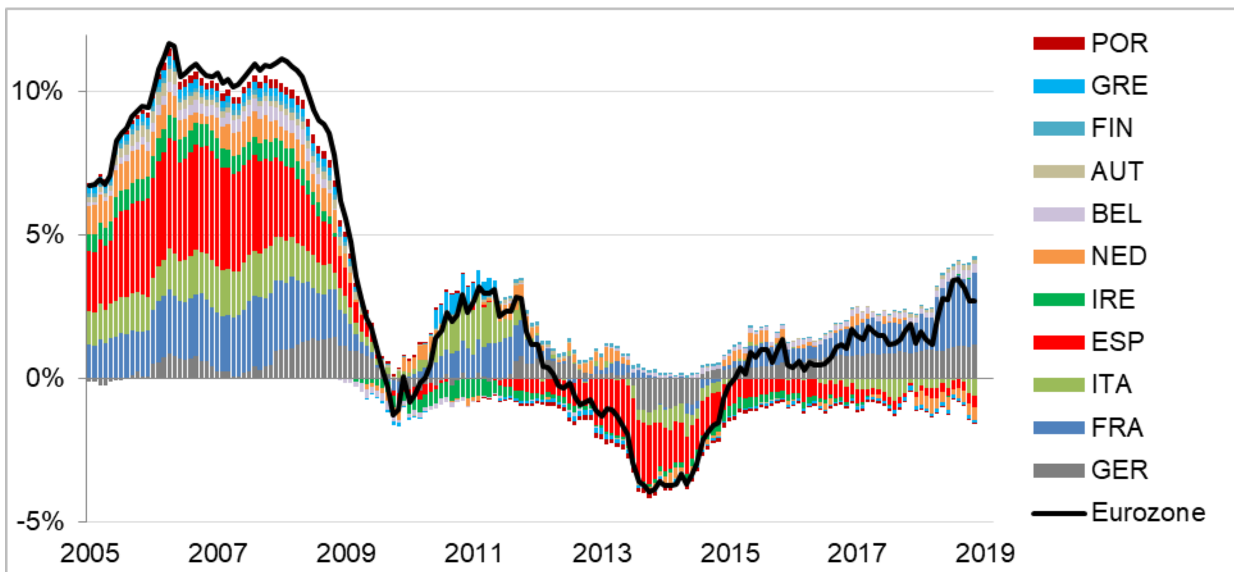
**Monetary aggregates increased disproportionately.** Since 1999, common monetary aggregates such as M1, M3 and currency in circulation increased by considerably more than economic activity (Figure 2): Nominal GDP between Q1/1999 and Q3/2018 increased by 77%, whereas at the same time cash (currency in 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




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



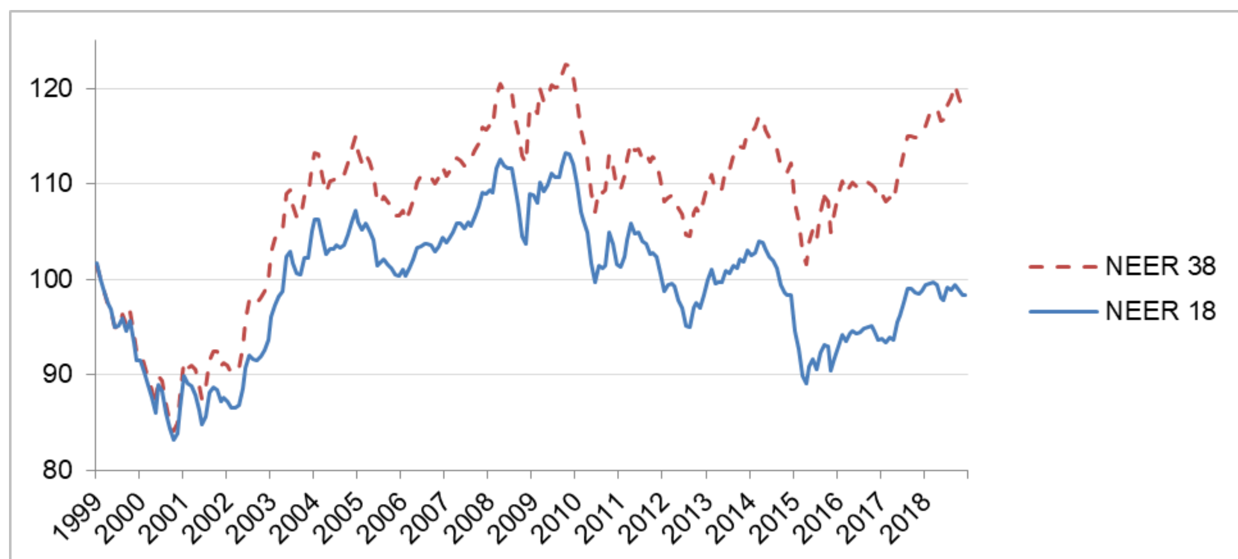

Monthly data, change over previous year (y-o-y). Source: ECB, own calculations.

**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)

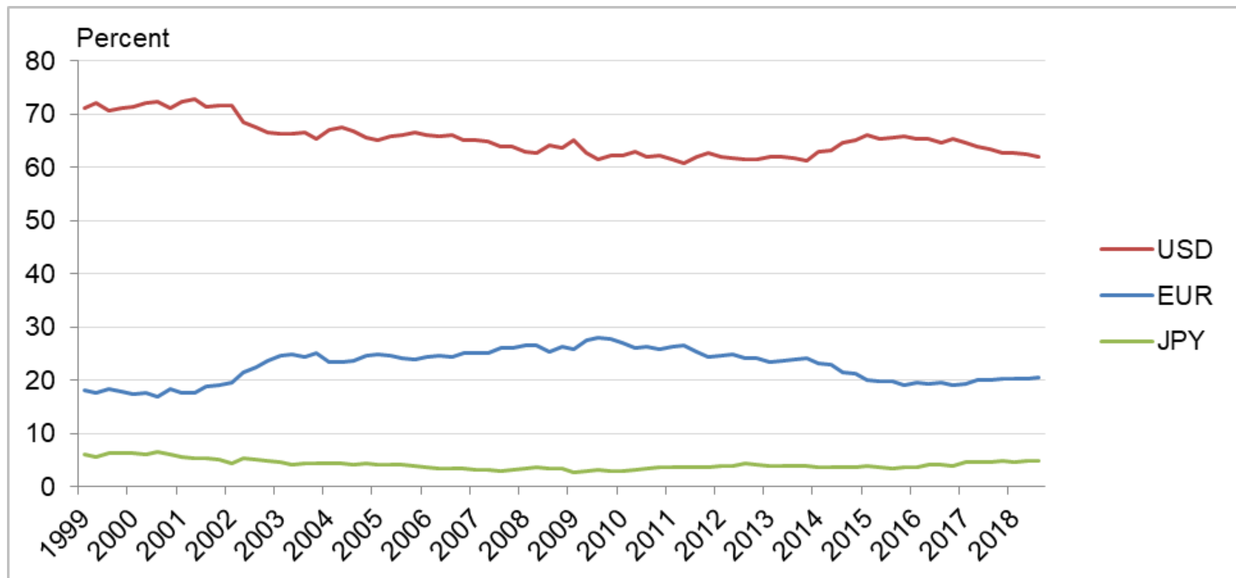



Monthly data. NEER 18: Against narrow group of 18 partners, NEER 38: Against 38 partners. Source: ECB.

**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)

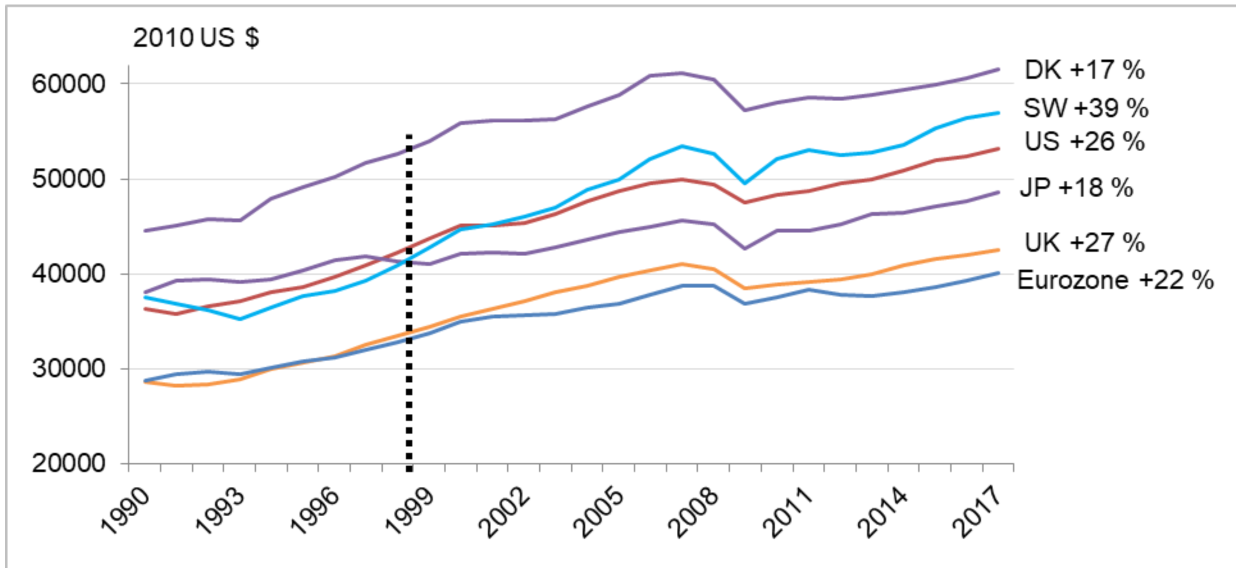



Monthly data. Source: IMF.

## 2.3. Economic performance

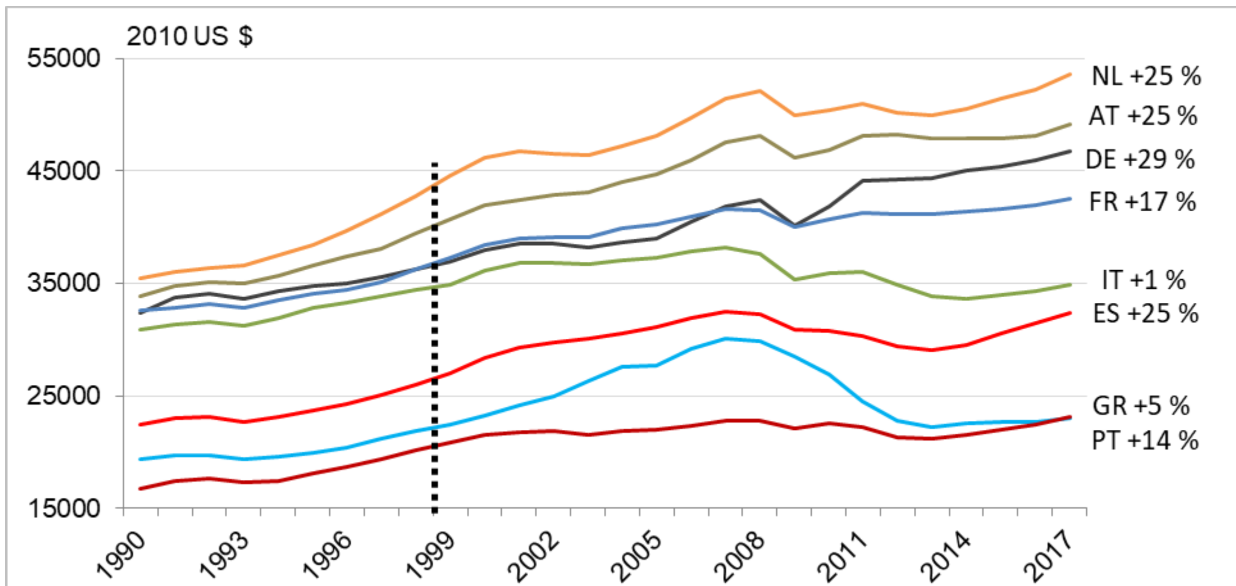
**GDP per capita developed similarly in major currency blocks, but the variance among Eurozone Member States has been quite large.** Between 1998 and 2017, per capita GDP in the Eurozone increased by a little bit less than in the United States and in the United Kingdom, but by slightly more than in Japan 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



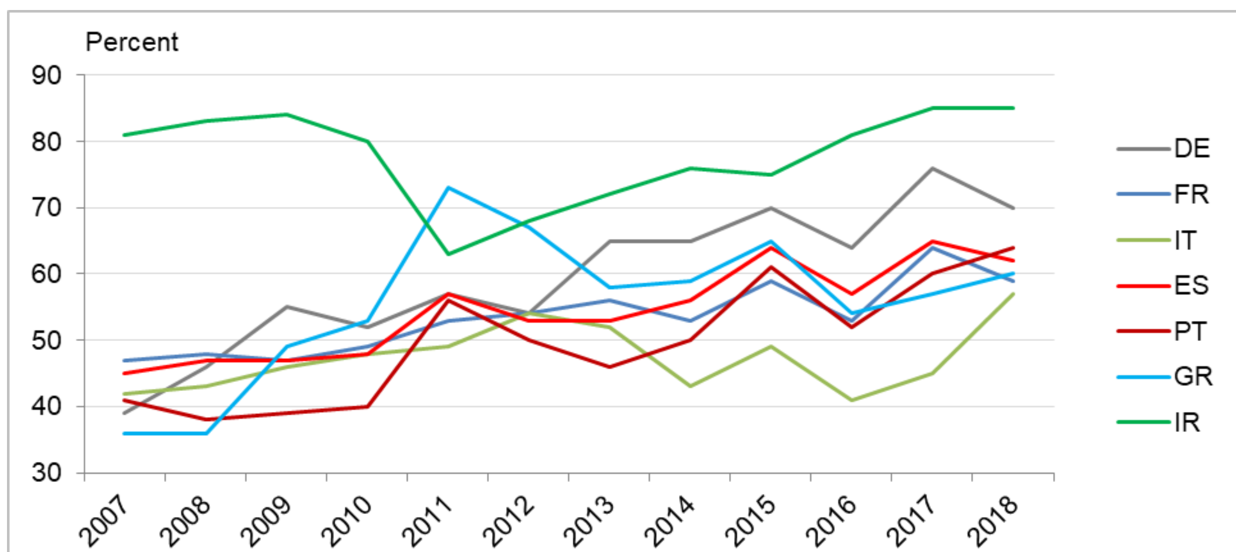

Annual data, price adjusted. Percentages indicate per capita GDP change between 1998 and 2007. Source: World Bank, WDI.

## 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-imbalances. 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).[2] 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-imbalances 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 overstretches 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

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[2] It is widely held that any amount of Target2-imbalances 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-imbalances 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).

indicates overly easy financing conditions leading to systemically misdirected investments, in particular in those countries like Spain that experienced a pronounced construction boom.[3] 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)[4] 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

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[3] 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.

[4] 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.

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 (Macroeconomic Imbalances Procedure) with stricter deficit rules (Fiscal Compact) for all Eurozone member states (Bulgaria, Denmark, and Romania have also opted in).

**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.[5] 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

[5] Cf. https://ec.europa.eu/info/law/law-topic/eu-banking-and-financial-services-law_en for an overview.

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).[6] 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,

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[6] 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.

meaning that restart (the adoption of a new framework) requires the resolution of legacy problems, while the 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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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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