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# Capitalising on the euro

Options for  
strengthening  
the EMU

DeNederlandscheBank

EUROSYSTEEM





Capitalising on the euro  
Options for strengthening the EMU

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# Capitalising on the euro

## Options for strengthening the EMU



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# Summary

Soon after the Second World War, Germany, France, Italy and Benelux countries Belgium, the Netherlands and Luxembourg sought closer collaboration. Their efforts sixty years ago culminated in the creation of what would become the EU. Over time, their partnership widened to encompass 28 Member States. Concentrating mainly on economic aspects, it brought them considerable economic benefits. The Netherlands turned out to be one of the major beneficiaries, given its large export sector and its position as Europe's gateway port.

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As economic integration progressed, European countries felt an increasing need to stabilise their mutual exchange rates, but successive coordination efforts were not always successful, and exchange rate crises broke out at regular intervals. For this and other reasons, it was decided to create the Economic and Monetary Union (EMU) in Maastricht twenty-five years ago. While there were political aspects to the project, policymakers also expected the currency union to bring major economic benefits. They felt the euro would contribute to economic stability, promote trade integration and boost economic growth and income convergence.

Thus far, however, the euro has not lived up to expectations, owing in part to the global financial crisis, which led to a prolonged period of subdued growth in many western countries. The EMU member states saw their problems amplified by fundamental flaws in the structure of the currency union, such as inadequate safeguards for sound public finances, and a fundamental disregard for macroeconomic imbalances like housing bubbles and diverging current account balances. Moreover, the close interconnectedness between national governments and financial sectors and sensitivity to contagion between countries added fuel to the financial turbulence.

8 Many improvements have been made in recent years. For example, budgetary rules have been reviewed and new rules have been introduced to prevent macroeconomic imbalances. The banking union has reduced interdependencies between banks and governments, while the European Stability Mechanism and other financial safety nets should prevent capital flight. These measures have reduced the likelihood of severe financial turbulence.

However, these adjustments threaten to skew the balance between liability and control. On the one hand, with financial safety nets now in place, joint European accountability for distressed member states has increased. On the other, while European budgetary rules have been broadened and tightened, compliance leaves much to be desired. Among other things, such a skewed balance could discourage countries from making every effort to avoid problems.

A number of relatively small measures could greatly improve the balance between liability and control. Reinforcing the existing framework in this way could already significantly strengthen the EMU's functioning, thus increasing the euro area's economic and political resilience.

First and foremost, stricter compliance with the rules would benefit the EMU, given that it would help address current budgetary and macroeconomic imbalances and prevent new ones from materialising. This in turn would reduce the need for EMU member states to rely on European emergency funds. Simplifying the rules of the Stability and Growth Pact and enhancing the macroeconomic imbalances procedure by limiting the number of exceptions and ensuring they cover the most serious problems could provide incentives for compliance. In addition, enforcement could be strengthened by creating networks of independent authorities.

Likewise, private parties should again bear a larger share of the financial risks, thus reducing the need for governments to step in. This requires a mechanism that facilitates the resolution of unsustainable government debt. Also, completion of the banking union could further reduce the harmful interaction between banks and governments. This will require a European deposit insurance scheme in parallel with measures aimed at mitigating risks present in bank balance sheets. One of those measures should regulate government bonds in bank balance sheets more strictly, forcing banks to maintain more capital for such bonds (risk weights) and forbidding excessive investment in the bonds of a single government (concentration limits).

Further European integration could bring additional benefits from an economic perspective, but seems feasible only in the more distant future and subject to strict conditions, if at all. After all, for integration to be successful, public risk-sharing will need to be extended and national policy discretions restricted, neither of which enjoy broad support at the moment. If this should change, further integration may well enhance the functioning of the EMU and strengthen the European economy.

# 1 European integration offers major benefits

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Exactly sixty years ago, in 1957, the Treaty of Rome was signed, marking the establishment of the European Economic Community (EEC). The EEC is the predecessor of the present-day European Union (EU).<sup>1</sup> Its six founding members – Belgium, France, Germany, Italy, Luxembourg and the Netherlands – primarily aimed to increase economic cooperation, although political integration and further European unification were also cited as the Treaty's objects. Economic cooperation was given concrete form by setting up a common market, based on the 'four freedoms': the free movement of goods, capital, services, and labour. In principle, state aid was banned, and the member states pursued a common trade policy. The creation of a customs union in 1968 marked an important step towards further integration. The six founding members abolished mutual import tariffs and harmonised tariffs with respect to other countries. Integration was given a further considerable boost by the 'white paper' which the European Commission issued in 1985. The comprehensive proposal listed 279 measures deemed necessary to set up the single market by 1992. Over the years, the scope of these measures increased further owing to successive extensions of the EU's membership. The EU currently has 28 Member States.

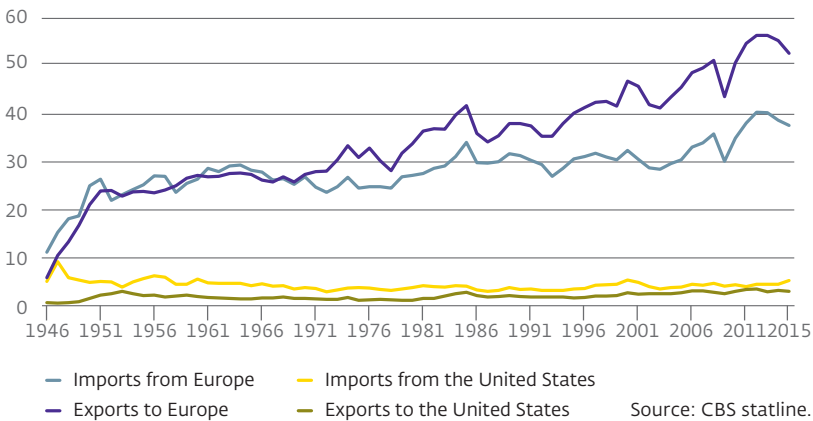
Economic integration in Europe has substantially contributed to prosperity in the Netherlands and other European countries, most obviously through simplified cross-border trade. As an open economy, the Netherlands depends on solid relationships with key trading partners. For example, its trade deficit turned into a surplus after it entered into a trade agreement with Germany in 1949 (Segers, 2014). Similarly, the value of Dutch exports to other European countries expressed as a percentage of GDP has grown

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<sup>1</sup> In 1951, the European Coal and Steel Community was created. The plan to set up a European Defence Community collapsed in 1954.

## Chart 1 Dutch imports and exports

Percentage of GDP



sharply since the 1970s (see Chart 1). Economic integration also means that, with trade barriers eliminated, products will more likely be manufactured where production is most efficient. Straathof et al. (2008) estimate that per capita income in the EU had risen by around 2% to 3% by 2005 owing to the creation of the single market, and they found the beneficial effect on the open Dutch economy to be twice as large. The authors state that benefits may in the long run reach 10% for the EU as a whole and 17% for the Netherlands. Campos et al. (2014) found similar figures for EU entrants from the 1980s and those from 2004. The World Bank (2012) therefore considers that Europe has been an effective 'convergence machine' over the past fifty years.

12 Even so, Europe still faced a major barrier to cross-border trade, as countries continued to use different currencies. Exchange rate fluctuations caused uncertainties surrounding costs and income from foreign trade and investment. Exchanging money at the bank to do business abroad also entailed costs. Both issues made it less attractive to do business abroad. Furthermore, volatile exchange rates cause movement in the domestic price level, as prices of imported goods and services rise and fall. This makes it riskier and, hence, less attractive to make long-term investments.

This is why there has always been some form of monetary policy coordination in Europe after the Second World War. Initially, this happened under the Bretton Woods system, in which the US dollar played a central role. The system collapsed, however, after US President Nixon decided in 1971 to terminate convertibility of the dollar into gold. Shortly afterwards, in March 1972, the six EEC Member States introduced the 'currency snake', setting bands of  $\pm 2.25\%$  for currencies to move relative to their central rate against the US dollar. This did not restore calm to the monetary markets, however, as there was regular speculation of adjustments to exchange rates of various currencies. The problem of speculative attacks was exacerbated as capital transactions were gradually liberalised during the 1980s and cross-border capital flows swelled strongly. This meant that the third major coordination attempt, creating the European Monetary System (EMS) in 1979, did not bring a permanent return to calmer waters either. Various countries were forced to adjust their exchange rates, and the UK and Italy had no choice but to leave the EMS, albeit temporary in the case of Italy. Following speculative attacks on the French franc, the bands within which currencies were allowed to fluctuate were widened to 15% in 1993. The Netherlands was not involved, however, having opted in the 1980s to peg the guilder to the Deutsche mark. While this ensured a stable exchange

rate with our principal trading partner, it also meant our country in fact no longer had a monetary policy of its own.

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Given that a common currency would once and for all eliminate all exchange rate uncertainties, an economic and monetary union had been the subject of discussion at a meeting as early as 1969. From the late 1980s onwards, there were more specific efforts aimed at creating a single currency. Fuelled by the fall of the Berlin wall and German re-unification, the process gained traction. Exactly 25 years ago, in 1992, Heads of Government and Heads of State signed the treaty in Maastricht establishing the Economic and Monetary Union (EMU). The euro became the single accounting currency on 1 January 1999, and citizens could use the new coins and notes for the first time on 1 January 2002.

## 2 The EMU's economic benefits have not yet fully materialised

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While there were political aspects to the EMU, policymakers also expected the currency union to bring major economic benefits (see European Commission, 1990). Firstly, the EMU was expected to contribute to macroeconomic stability. The ECB's monetary policy should keep inflation in all euro area countries low and stable, and exchange rate crises, such as the EMS crisis, could no longer occur. Secondly, the elimination of foreign exchange risks was expected to push down transaction costs, bolster the single market and foster trade and capital flows, thereby contributing to economic growth. Lastly, the EMU was expected to contribute to income convergence between countries and regions.

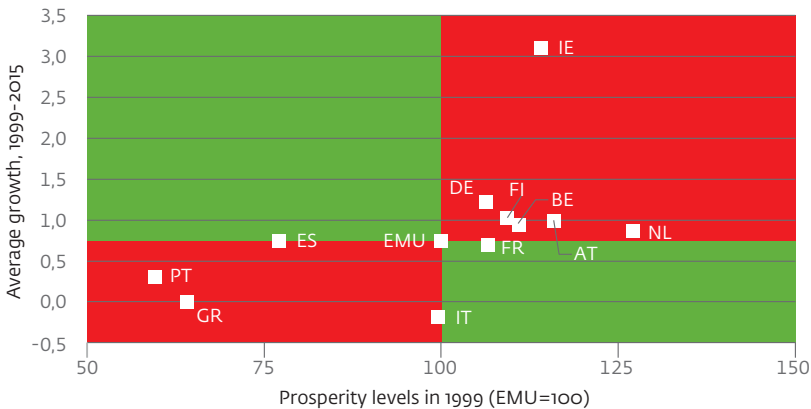
Various economic studies have indeed found positive effects from the introduction of the euro. Mutual trade flows are estimated to have increased by an average of 5% (Baldwin et al., 2008), although there are large differences between countries (Wierdsma et al., 2014). Likewise, foreign direct investment into the EMU went up more than outside the EMU.

Even so, not all of the euro's economic benefits have thus far materialised. For instance, income convergence between the member states has not yet manifested itself. Between 1999 and 2015, the original EMU members with lower prosperity have on balance fallen behind even further (see Chart 2; see also Mink et al., 2016). Similarly, large parts of the euro area have gone through a protracted period of low growth. In spite of the economy having picked up recently, unemployment, including among young people, remains high.

Growth in Europe began to slump after the global financial crisis broke out, driven by turmoil in the US housing market in 2008. Accommodative financial conditions globally had boosted lending, private debts and house prices in almost all advanced economies.



Chart 2 Prosperity discrepancies have widened further



Source: Ameco.

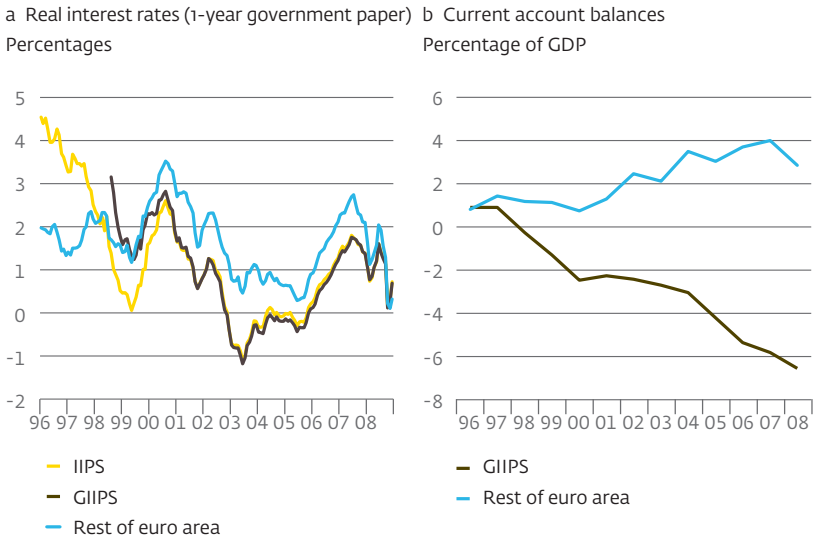
Note: the horizontal axis shows the prosperity level (GDP per capita) in 1999 in the 12 original EMU countries. The vertical axis shows average GDP growth per capita in 1999-2015. Income convergence occurs if the countries that were initially less (more) prosperous show growth that outpaces (lags behind) the EMU average (green segments). Income divergence occurs in the converse situation (red segments).

However, the crisis affected the euro area more deeply and over a longer period than many other advanced economies. Important imbalances among euro area countries had developed in the run-up to the crisis, such as prolonged divergence of current account balances, dissimilar wage and price developments, and housing market bubbles. As these imbalances arose and were subsequently corrected, the euro area saw strongly diverging growth fluctuations that proved much larger and lengthier than economic cycles usually seen (Hessel, 2017). Moreover, the burden of correcting the imbalances was borne mainly by vulnerable countries, causing euro area growth to lag behind other advanced countries for a considerable period.

16 Subdued growth depressed inflation in the EMU as a whole, necessitating a more accommodating monetary policy of the European Central Bank (ECB).

A combination of factors caused these imbalances, with financial factors predominating (Baldwin and Giavazzi, 2015; Martin and Philippon, 2015). Financial integration, which was already strongly increasing in this period, was further driven in the euro area by the elimination of exchange rate risks.

### Chart 3 Interest rate shock causes imbalances



Source: Concensus Forecasts, Thomson Reuters and Ameco.

Note: The IIPS countries are Ireland, Italy, Portugal and Spain, while the GIIPS countries also include Greece. "Rest of the euro area" includes Austria, Belgium, Finland, France, Germany, Luxembourg and the Netherlands.

This and other factors caused interest rates to plummet in various euro area countries, notably those in southern Europe, which benefited from the financial markets' confidence in the stability of the euro and the ECB. Nominal interest rates in the euro area converged and, although inflation also declined in southern Europe, in the run-up to the euro's introduction real 1-year interest rates in some southern European countries dropped by over 4 percentage points (see Chart 3). Many rates on longer maturities often slid even further. Strong declines in interest rates contributed to a surge in lending and widening current account deficits (Comunale and Hessel, 2014).

Initially, it was thought that diverging current account balances were part of a natural process of income convergence, as capital flowed from the wealthy northern countries to the emerging southern member states, where yields were highest. As became apparent later, the inflow of capital mainly caused housing bubbles and growth of domestically oriented, relatively unproductive sectors, driven mainly by the sudden surge in domestic demand (Gilbert and Pool, 2016). Likewise, within specific sectors, the beneficiaries of the credit inflow were not always the most productive companies (Gopinath et al., 2015), possibly due to the financial sector not functioning as well as it should. The accommodative financial conditions also contributed to housing bubbles and the postponement of sorely needed structural reforms, which only served to widen the structural differences seen since the euro was introduced (Fernandez-Villaverde et al., 2013; Buti and Turrini, 2015).

Meanwhile, the boom in domestically-oriented sectors also caused sharp and persistent wage and price increases. These developments were felt to a far lesser extent in the northern countries. As a result, wage and

18 price increases diverged persistently across the EMU.<sup>2</sup> This depressed competitiveness of many southern European export sectors and widened gaps between current account balances. Additionally, higher inflation in the south contributed to real interest rates falling persistently below those in the north, further fuelling the economic boom.

The fast rise in indebtedness and external debt levels without a corresponding increase in export capacity heightened the risk of countries succumbing to their debts (Giavazzi and Spaventa, 2010). The markets did not price in this risk to any significant degree, however, as many southern European countries were allowed to continue to borrow at virtually the same low rates as Germany, in spite of their surging debt levels. This allowed debts to accumulate further, until rates suddenly shot upwards as the European sovereign debt crisis unfolded. This followed a much stronger than expected worsening of public finances in the countries that faced imbalances (Gilbert and Hessel, 2012).

The EMU's structure contained insufficient safeguards aimed at curbing these imbalances. For example, its governance framework primarily focused on public finances, disregarding current account imbalances and private debt levels, sometimes even judging the former desirable, and never adjusting them in terms of policymaking. In addition, safeguards for sound public finances that were in place appeared to be deficient. Budgetary estimates were often overly optimistic, particularly if they were around the critical 3% budget deficit limit, both those of national governments and those of the European Commission (Frankel and Schreger, 2015; Gilbert and De Jong, 2017). Moreover, enforcement of the Stability and Growth Pact (SGP),

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2 Initially, divergence in wage and price increases seemed to result in converging price levels across the euro area (Hoerberichts and Stokman, 2016). Convergence proved unsustainable, however. Since the crisis, countries have been restoring their competitive positions, causing price differentials to widen again.

notably its preventive arm, was inadequate (see Box 1), due to which deficits were insufficiently pushed below the 3% limit in times of prosperity. As a result, austerity measures proved necessary in many countries shortly after the crisis broke out, thereby aggravating the economic downturn.

The EMU's structure also contributed to a process in which, once interest rates started rising, the process reinforced itself such that a crisis and a deep recession proved unavoidable. As capital flows suddenly reversed, banks and governments faced funding problems and capital market rates in some cases rose excessively (De Haan et al., 2014).

Two factors reinforced this process. Firstly, the EMU's national governments and financial sectors proved to be closely interconnected. European banks hold large volumes in bonds issued by their own national governments, which makes them sensitive to the fortunes of those governments. Conversely, the financial soundness of those governments is closely related to that of the financial sector, given that many European countries have a banking sector that is relatively sizeable, and hence costly to bail out. This interaction caused significant mutual reinforcement of the problems in both sectors (Bekooij et al., 2016).

Secondly, governments in the EMU proved sensitive to mutual contagion and self-reinforcing liquidity crises (De Grauwe, 2011), in which downward adjustments of market expectations of a government's repayment capacity can undermine that very same repayment capacity through higher interest rates. One of the reasons for this was the absence of the central bank's role as the government's lender-of-last-resort. The redenomination risk also had an impact, which is the perceived risk of a country leaving the euro area and converting its sovereign debt into its own, depreciated currency (De Santis, 2015 and Kriwoluzky et al., 2015).

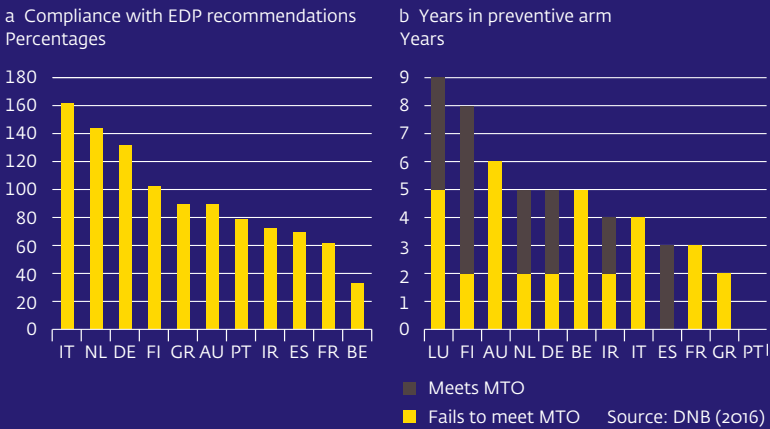
## Box 1 Compliance with the Stability and Growth Pact (SGP)

Under the SGP's corrective arm, Member States face an excessive deficit procedure (EDP) when their budget deficit exceeds 3% of GDP, or when public debt is too high. At the recommendation of the European Commission, the European Council issues recommendations to countries as part of their EDP about the extent and pace of measures required to bring the deficit below 3% of GDP.

Under an EDP, Member States are required to implement austerity measures that should improve their structural budget balance, i.e. the budget balance adjusted for cyclical and non-recurrent developments. Chart 4a shows the required improvements to the structural balance of the twelve original EMU countries, compared to the actual improvements realised in the years under an EDP. A percentage of 100 therefore means a country has on average fully met the recommendations of the European Council, while a percentage above 100 means that the structural budget balance improvement even surpassed European Council recommendations.

Two notable observations can be made here. Firstly, a substantial proportion of Member States comply with the recommendations. Although no causal relationship has been established – it is conceivable that Member States would also have introduced austerity measures even without these recommendations – this does suggest that the EDP measures have at least some effect. The differences between Member States are also notable. Italy, the Netherlands, Germany and Finland in retrospect managed to more than fully meet the recommendations, while France and Belgium in particular did not perform as well.

## Chart 4 Compliance with the Stability and Growth Pact,



Note: Chart 4a compares the EDP recommendations for the twelve EMU countries with the structural balance improvements actually achieved. Chart 4b shows the number of years during which they fell under the SGP's preventive arm, split between the years in which they did and did not meet their MTO. Luxembourg is absent from Chart 4a because it has never been subject to an EDP recommendation. Charts for Greece are to 2013.

Even when Member States do not exceed the 3% and 60% thresholds, their budgets still have to meet certain other requirements established by the EDP's preventive arm. A key requirement is that the structural balance is at least equal to the medium-term budgetary objective (MTO) or, since 2005, moves towards that objective by at least 0.5% of GDP per annum. The MTO is roughly equivalent to a balanced budget.

Compliance with preventive arm requirements is marginal. Six of the twelve original euro area countries have never even met their MTOs (see Chart 4b). There is virtually no compliance with the requirements for adjusting the structural balance towards the MTO.

The EDP's corrective and preventive arms are inextricably linked. Deficient compliance with the preventive arm raises the likelihood of countries coming under the corrective arm in times of economic difficulty. As such, the need for procyclical austerity measures – for which the SGP is often criticised – partly results from weak compliance with the preventive arm's requirements.

Several emergency measures were taken during the crisis to prevent disorderly government bankruptcies and put a halt to speculation on the euro area's break-up. For example, the European Stability Mechanism (ESM) was set up, which acts as an emergency fund for governments, and the ECB took a number of unconventional measures. While this halted the immediate crisis, it has not prevented many EMU countries from having to undergo a process of painful adjustments, whose high social and economic cost is still reflected in a lagging GDP per capita and high levels of unemployment. For this reason, new imbalances must be prevented, which is why the euro area was considered in need of a fundamental overhaul. The steps made in this process are described in the next section.



### 3 The EMU has been significantly strengthened

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In recent years, European policymakers have strengthened the EMU in several areas and addressed fundamental flaws in a variety of ways (see Table 1 and De Haan et al., 2015). Firstly, European budgetary rules were reformed to prevent unsustainable public finances, with a key improvement making it harder for the Council of Ministers to block sanctions proposed by the European Commission in the event of non-compliance. A qualified majority is now needed. Also, all member states have incorporated the SGP's budgetary rules into their national legislation or constitution, and compliance is monitored by national budget authorities that issue independent advice. In the Netherlands, the Council of State (Raad van State) assesses compliance, with the Netherlands Bureau for Economic Policy Analysis (CPB) providing independently-produced estimates of the economic and budgetary situation.

Secondly, the introduction of the macroeconomic imbalance procedure (MIP) brought economic imbalances into sharper focus. Under the procedure, the European Commission assesses the risks of imbalances in the EU Member States on an annual basis, using a scoreboard with threshold values for such aspects as a country's current account balance, price-competitive position and growth in house prices and lending. Countries that manifestly exceed a threshold will be subjected to the Commission's further assessment to establish whether the imbalance is excessive. If it is, the Council of Ministers will issue country-specific policy recommendations aimed at mitigating the imbalance. The Council may impose a penalty if a country fails to implement a recommendation.

Besides the MIP, many Member States have introduced macroprudential policy frameworks. This, for instance, enables national supervisory authorities to impose higher capital requirements on banks if there is a risk of housing market bubbles, applying a countercyclical capital buffer. Such

24 macroprudential policies are coordinated on the European Systemic Risk Board (ESRB).

Thirdly, the banking union loosened the close ties between banks and governments, as a result of which problems in a country's banking sector will less likely cause that country's public finances to derail. The Single Supervisory Mechanism ensures that the ECB, in tandem with national supervisory authorities, carries out microprudential banking supervision at the European level, which should prevent major discrepancies between rules and quality of supervision. In 2015 the ECB held its asset quality review

**Table 1 Addressing the currency union's fundamental flaws**

<b>EMU flaw</b>	<b>Action taken</b>
Deficient safeguards for sound public finances.	Coordination: stricter SGP, greater influence of European Commission, introduction of fiscal compact
Disregard for macroeconomic imbalances	Coordination: MIP, ESRB, macro-prudential policy frameworks
Interdependency between national governments and banking sectors	Banking union: joint supervision, joint resolution, bail-in
Sensitivity to contagion and self-reinforcing crises caused by common currency	Financial safety nets: ESM (governments), OMT (ECB), resolution fund (banks) in due course

(AQR) to subject balance sheets of European banks to thorough scrutiny. In addition, a single resolution mechanism should improve resolution of banks in distress. To prevent taxpayers from having to foot the bill, specific creditors will bear some of the cost in a bail-in procedure. Moreover, part of the cost of winding down a bank will be paid from a European resolution fund financed by banks.

Lastly, various financial safety nets have been created that should prevent and mitigate financial turbulence, capital flight and contagion in the event of future crises. The European Stability Mechanism (ESM) allows governments of EMU countries to offer each other temporary financial support in times of financial distress. In addition, the ECB can use its programme of outright monetary transactions (OMT) to act as a lender-of-last-resort for European governments under specific circumstances (Gilbert and Freriks, 2017). During the crisis, the ECB also made additional liquidity available to European banks, for example using its very long-term refinancing operations (VLTROs).

### More can still be done

Not all of these measures have thus far proved their worth, and a lot will depend on their practical implementation. However, recent experience suggests that major financial turbulence in the EMU has already become much less likely. For instance, the euro area's financial markets remained fairly stable following the UK's Brexit referendum and the Italian constitutional reform referendum.

That said, further strengthening of the EMU can bring significant additional benefits. Economic and political resilience can be improved for both individual countries and the EMU as a whole (OECD, 2016; European Commission, 2016b). Economic resilience first of all implies that countries increase their buffers to reduce the likelihood of major negative shocks and crises. It also

26 means that member states should have sufficient adjustment capacity, allowing them to recover quickly from adverse shocks if these should still occur. Economic resilience will also help improve political resilience. After all, if the EMU is less likely to run into trouble, this will help prevent disagreements and mistrust between countries. Moreover, political decision-making in times of crises may improve, reducing the likelihood of suboptimal outcomes due to differing political views. For example, difficult negotiations in the summer of 2015 about the provision of new loans to Greece led to debates about an EMU exit, triggering substantial capital flight.

Many measures are conceivable that may increase the EMU's economic and political resilience. In particular, there is significant room for improvement in the three areas discussed below.

### The balance between liability and control should be improved

First of all, the EMU would benefit if the balance between liability and control were improved (see Box 2). With financial safety nets in place, joint European accountability for distressed member states has increased. Public risk sharing means that other EMU countries will step in using taxpayer money whenever a country gets into difficulties. This increases the risk of moral hazard. If a member state knows it will be bailed out, it will be less keen to pursue policies aimed at preventing problems. This is why European control over member states' policies has also been increased, but the effectiveness of that reinforced framework of control is still doubtful. Countries are regularly granted extensions to achieve their budgetary targets under the SGP, and the implementation of policy recommendations under the MIP and other areas of the European Semester leaves much to be desired (Gros and Alcidi, 2015). The rate of implementation of recommendations has even declined since the MIP process started in 2011

(Darvas and Leandro, 2015). Of the recommendations made in 2015, countries only implemented 4% in full or substantially, whereas 52% were not or scarcely implemented.

Accordingly, the EMU will benefit from improved compliance and enforcement of the rules, as it would help bring down current budgetary and macroeconomic imbalances and prevent new ones from appearing. Individual countries will be less likely to face costly crises, while there will be less chance of the EMU as a whole facing negative spillovers and renewed dependence on public risk sharing through the European emergency funds. This will prevent the creation of a transfer union, with transfers becoming permanent or being made mostly in the same direction. Public risk sharing itself could also be better organised. For example, it is key that ad hoc decision-making, e.g. about the use of the ESM or the restructuring of government debts, does not result in suboptimal decisions due to conflicting interests. Much can be improved by ensuring that decisions are made on the basis of clear rules and principles agreed upfront (Corsetti et al., 2016).

### Risks should be shared more by private parties

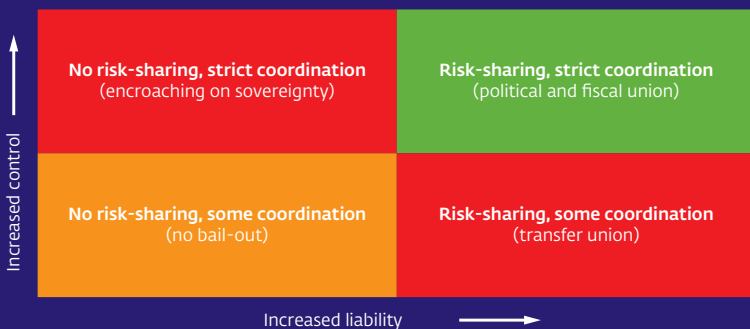
Secondly, the EMU would benefit if risks were increasingly shared between private parties in various member states. If a shock occurs locally, its impact will be smaller if local residents receive returns on assets they have invested in other countries. In another type of private risk sharing, foreign shareholders share in a company's profits and losses. Private risk sharing also occurs when foreign banks grant loans to private individuals or companies, as they bear the losses if a loan cannot be repaid. Increased cross-border private risk sharing throughout the EMU will mitigate a local shock's impact, given that it partly affect parties in other countries. It will also significantly relieve the pressure on European taxpayers. After all, risks must be borne by those who assumed it, which is why governments will be less keen to step in with public funds.

## Box 2 Improved balance between liability and control

The division of responsibilities between member states and the federal level is often a moot point in the EU and in many federal nations. A leading principle is that there should be a proper balance between liability and control. He who pays the piper calls the tune, which implies that whoever pays the price for something will want to have a say. Moral hazard looms if is not the case. The subsidiarity principle also calls for this balance, allocating discretions to the federal level if one state's policy has a major impact on the other states (Spolaore, 2013).

Maintaining a proper balance between liability and control is also important in the EMU. Skewing the balance between the two can cause economic and political problems (see Figure 1). If "Europe" maintains a

Figure 1 Liability vs. control



Note: red = combination that is politically and economically unstable; green = combination that is politically stable at relatively low economic costs; orange = combination that is politically stable at relatively high economic costs

great deal of control while not being liable, member states will perceive this as undemocratic, encroaching on their sovereignty. Conversely, if the EMU is liable but can exercise no control, member states will not make every effort to pursue sound policies and prevent problems. It could make the EMU unattractive for member states that manage to stay out of trouble, but keep having to step in for other member states.

The EMU's initial set-up seemed to balance liability and control. The European Council had only limited control over member states' policies, and budgetary rules were the most binding in nature (Van Riel and Bos, 2014). The no-bailout clause ensured that member states could not be held liable for government debts in other member states; risks were not shared among sovereigns. During the sovereign debt crisis, however, this set-up turned out to be unsustainable. Sticking to the no-bailout clause proved too costly, as financial markets overreacted and major spillovers between countries occurred anyway.

Reinforcement of the EMU has changed the balance between liability and control. Joint accountability has increased owing to various types of public risk sharing, including the ESM. Joint control has increased, too, with strengthened European rules. However, compliance with those rules still leaves much to be desired, as a result of which there is no longer a proper balance between liability and control.

30 There is much room for improvement in this respect in the euro area. Even though financial integration has strongly increased since the EMU was launched, this type of private risk sharing is still underdeveloped, and smaller than in many federal nations (Bijlsma and Hessel, 2016). In the United States, private risk sharing even mitigates a substantially larger portion of the asymmetric shocks than the federal budget (Asdrubali et al., 1996). Studies for Germany (Hepp and Von Hagen, 2013) and Canada (Balli et al., 2012) have found similar effects. The European Commission (2016a) has stated that 70% of the shocks are mitigated by private risk sharing in the United States, as against a mere 24% in the euro area.

### Structural differences should be reduced

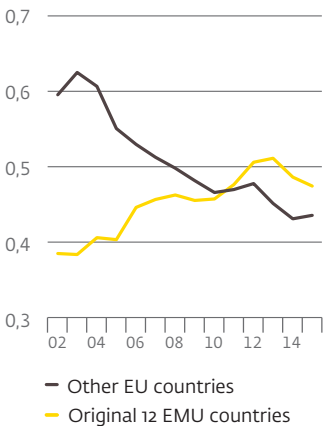
Thirdly, the EMU's functioning would be strongly enhanced if countries that fall behind were to improve their competitiveness, thereby narrowing structural differences between countries. EMU countries still differ greatly in terms of competitiveness in a wider sense, as measured for example by the World Economic Forum's *global competitiveness index*. Competitiveness in a wider sense encompasses many aspects, including flexibility of labour and product markets, quality of public administration, structure of the financial sector, quality of education and efficiency of the legal system. Since 1999, the differences in terms of competitiveness between the 12 original EMU countries have actually widened (see Chart 5), although a slight turnaround can be seen in recent years owing to reforms implemented in many countries.

Increased competitiveness makes it easier for a country to function in the currency union, driving its growth potential, resilience to shocks and flexibility (European Commission, 2016b). In turn, this reinforces the alternative adjustment mechanisms which countries in a monetary union need to compensate for the loss of nominal exchange rates. It will also cause

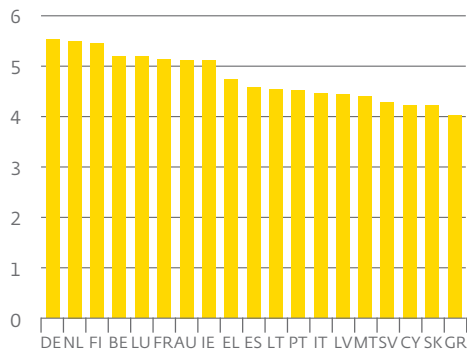


## Chart 5 Differences between EMU countries

a Development over time  
WEF index standard deviation



b Figures for 2015  
WEF index value



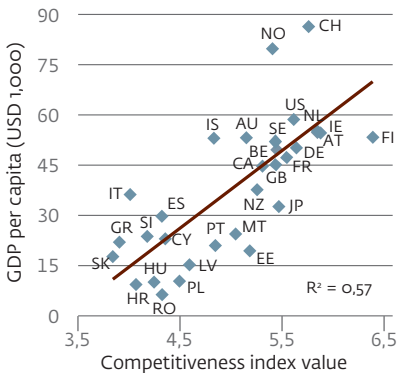
Note: The charts show the development of the standard deviation and the score levels of countries in the World Economic Forum's Global Competitiveness Index. The calculation of this score was occasionally refined, due to which figures from earlier years are not fully comparable.

the ECB's monetary policy to better suit the needs of individual member states. Increased competitiveness also helps countries adapt to other shifts affecting western economies, such as technological developments and increasing financial and trade flows caused by globalisation.

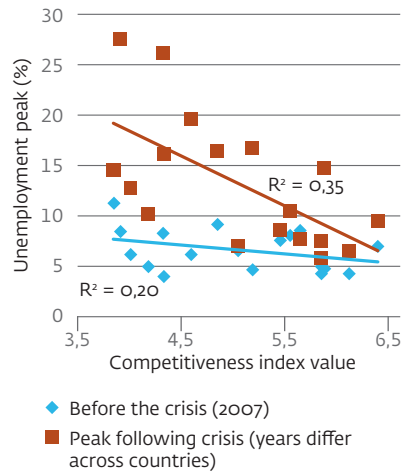
As such, competitiveness in a wider sense strongly contributes to economic resilience. The OECD (2016) shows that sound institutions (one of the aspects of competitiveness in a wider sense) result not only in higher economic growth, but also a reduced likelihood of crises and deep

## Chart 6 The benefits of competitiveness

a Correlation with prosperity



b Correlation with unemployment



Source: WEF and Ameco.

Notes: The graph on the left shows a positive correlation between competitiveness and prosperity: countries with increased competitiveness register a higher GDP per capita. The graph on the right shows a negative correlation between competitiveness and unemployment: countries with increased competitiveness register lower unemployment rates. Moreover, this negative correlation increased during the crisis (red line) compared with before the crisis (blue line). Accordingly, unemployment rose less steeply during the crisis in countries with increased competitiveness.

recessions. Charts 6a and 6b seem to confirm that increased competitiveness helps in achieving higher productivity and prosperity levels (see Chart 6a) and absorbing shocks. For instance, unemployment rose less steeply after the crisis in countries with higher competitiveness (see Chart 6b).

## 4 Several small steps make a big improvement

Views differ as to how the EMU should be strengthened. Some argue in favour of far-reaching European integration towards a political union (Juncker et al, 2015, Villeroy de Galhau, 2016), advocating further transfer of powers to the European level to enforce sound policies. The proponents of further integration typically also call for more solidarity between governments, for example by setting up a budgetary stabilisation fund. Subject to specific conditions, the benefit of further integration is that the EMU will be able to function better, viewed from an economic perspective, as shocks can be better absorbed. However, significant further integration is currently highly controversial in many countries. Given these circumstances, the question arises whether further integration will actually bring any benefits. For example, as long as countries are unwilling to yield any sovereignty to the European level, new European rules are likely to remain insufficiently effective, and countries will continue to diverge too widely in economic terms. Under these circumstances, additional risk sharing would further skew the balance between liability and control and possibly result in permanent one-way transfers.

Others see less integration and a return to the no-bailout clause in the Maastricht Treaty as the solution (Mody, 2013; Sandbu, 2015). Countries that get into trouble will no longer be rescued, but will face a restructuring of their government debt. This should reduce shared accountability and strengthen market discipline. European control over national policies could even be scaled back. Such a major reversal of European integration is, however, equally controversial, and a full return to no bailout could entail high costs (Vihriälä and Weder di Mauro, 2014; Bofinger, 2016). As such, it is by no means certain whether market discipline effectively engenders sound policies, under which countries prevent problems and the EMU functions better. Before the EMU was launched, high interest rates in southern Europe did not automatically result in monetary and budgetary discipline. Moreover,

34 financial markets are sometimes overly optimistic or pessimistic,<sup>3</sup> which makes countries vulnerable to liquidity crises, contagion and capital flight (De Haan et al., 2015).

Accordingly, both a sharp increase and a major reversal in European integration are difficult to achieve at the moment. However, a smart combination of small steps is more likely to succeed. Strengthening the EMU's current set-up in this way will already result in a big improvement. Crises will occur less frequently in the future and, what is more, at a lower economic and political cost.

### European rules should be made simpler and stricter

Compliance with and enforcement of current SGP and MIP rules must be improved, as this will accelerate the removal of current imbalances and contribute to the prevention of new imbalances. It ensures that individual countries are less likely to face a crisis, and the EMU as a whole will benefit from a reduced likelihood of negative spillovers and politically-sensitive reliance on public risk sharing.

European rule-making will always require compromises, particularly where not all member states share the same objectives. First and foremost, rules should prevent imbalances but they also serve other purposes (see Box 3). For instance, rules must offer sufficient flexibility to cope with unexpected events and crises, and they should take account of subsidiarity, the sovereignty of member states and democratic legitimacy. In practice, not all of these objectives and preconditions can always be reconciled, making choices inevitable. Greater effectiveness compared with the present situation at any rate requires strengthening in two respects.

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3 It will be even more difficult for markets to price in risks upfront as long as it remains unclear whether or not the no-bailout clause will be restored.

Firstly, the rules must be simplified. Following successive amendments to take account of circumstances prevailing at the time, the present regulatory framework has become exceedingly complex (Juncker et al, 2015; Eyraud et al., 2017). Having less complex rules will strengthen compliance and facilitate communications with the public at large (Buiters, 2003). Furthermore, it may reduce the perception by individual countries and their citizens of “Brussels meddling in our affairs”.

Therefore, current rules should focus more closely on preventing the most harmful imbalances with negative spillovers. This requires, first and foremost, that rules do not have many varying, and sometimes inconsistent, objectives. For example, the current budgetary rules set criteria for the actual balance, the structural balance, government debt and real expenditure growth, whereas a long-term expenditure standard would suffice in addition to the 3% deficit threshold. Real expenditure growth should not exceed the long-term growth potential and must remain below it in countries with high government debt (Claeys et al., 2016). This should prevent a situation in which a government boosts spending excessively in good times, and thereby limits the risks of procyclical austerity measures in more difficult times. The structural balance criterion could be scrapped, as it has proved highly volatile and prone to error, particularly in times of crisis, because estimates of potential growth and, hence, of the cyclical position of the economy, are unreliable during such periods. Under the MIP, the scoreboard which the Commission uses to detect imbalances could be reduced to four indicators, i.e. for price competitiveness, the current account balance, lending and house prices. This ensures that the MIP focuses more clearly on the most damaging imbalances. It is important, however, that both major upward and downward deviations are addressed. For example, a large current account surplus, such as that currently seen in the Netherlands, may also point to an imbalance, caused for instance by lagging wage growth.

### Box 3 EMU governance: balancing objectives

Policymakers in many countries adhere to self-imposed restrictions when pursuing their policies. Such restrictions have a disciplinary effect, thereby contributing to better outcomes. Rules and arrangements are even more important in the EMU than in individual countries, because budgetary and macroeconomic imbalances in one country may affect other countries in the currency union. This makes rules the primary tool for monitoring the balance between liability and control (see Box 2). The rules that are most relevant to the functioning of the EMU are the budgetary rules of the SGP and the economic rules of the MIP. However, their design has always sparked debate, one reason being that the policymakers involved must weigh various objectives and interests.

**Effectiveness versus flexibility** Budgetary rules are most effective if they are simple (Buiters, 2003). Simplicity makes it easier to explain rules, monitor compliance and build support (Eyraud et al., 2017). However, simple rules can be inflexible, particularly when unexpected shocks occur. For example, countries that saw their public finances deteriorate sharply following the crisis perceived the 3% threshold under the SGP as a constraint. Creating exceptions or discretions makes rules more flexible, but also complicates the regulatory framework and its enforcement.

**Effectiveness versus democratic legitimacy** Restricting politicians' freedom to make policy can be justified if it results in better outcomes. For instance, rules tend to be more effective if they are enforced not by politicians but by independent experts (Inman, 1996). In such a scenario, they can be more flexible, given that experts have fewer incentives to

abuse their freedom of policymaking. However, drastic restrictions will meet with objections in terms of democratic legitimacy.

**Effectiveness versus sovereignty** Rules imposed at the central level will potentially be more effective, as policymakers operating at the central level will be more likely to address spillovers and enforce the rules than individual member states (Eyraud et al., 2017). However, centralisation will require member states to yield a certain degree of sovereignty, which may erode support if the rules do not sufficiently match national preferences and circumstances (Eichengreen and Wyplosz, 2016).

It would also help if the number of exceptions were limited and clear criteria were set for any discretions. Under the SGP, it is not always clear how the Commission assesses whether a country has taken 'effective action' towards reducing its deficit. Similarly, under the MIP, it is unclear on what basis the Commission decides that an imbalance is excessive.

Secondly, enforcement of the rules could be strengthened by creating networks of independent authorities. Enforcing the rules has repeatedly proved difficult because sovereign states find it difficult to accept external control. Partly for this reason, making national politicians operating in the Council of Ministers responsible for enforcement resulted to be ineffective. At the same time, it is as yet unrealistic to have a European finance minister calling countries to order (Villeroy de Galhau, 2016). Such strong centralisation of powers will meet with objections from the member states. Furthermore, previous experiences with a European Commissioner who operated more along political lines, left much to be desired (Eyraud et al., 2017). There are two benefits of involving networks of independent authorities in enforcement. The first and perhaps most

38 important benefit is that involving the member states contributes to better information provision and builds support at the national level (Wyplosz, 2015). Secondly, independent enforcement helps cope with the tendency to postpone measures.

This could be achieved by gradually expanding existing networks and increasing their powers. Independent budgetary authorities already exist at the national level, and a budgetary council has been created at the European level. In the area of competitiveness, Juncker et al. (2015) propose setting up national competitiveness councils. In the field of macroprudential policy, national macroprudential authorities already coordinate their efforts in the European Systemic Risk Board. These networks will have a European centre in addition to national representatives, such as in the Eurosystem (Sapir and Wolff, 2015). Initially, they will fulfil an advisory role and should play a bigger part in the national and European public debate (Afman and Deroose, 2016). Their powers could be expanded at a later stage, but they should render sufficient account, for example to their national parliaments and the European Parliament.

### Streamline public risk sharing and foster private risk sharing

In the unfortunate event that a new crisis erupts, Europe could also ensure that it causes less financial damage and that losses will be borne by the private parties that assumed the related risks more than is currently the case. This would reduce the accountability of governments and ease the burden on taxpayers, which in turn would lower the likelihood of political differences of opinion and mutual mistrust.

The first step will be to facilitate resolution of unsustainable government debts in a crisis. This could be done by introducing a mechanism for writing



down government debts before a country relies on the ESM or the ECB's OMT programme. Such a restructuring mechanism will limit the amount of public funds required and ensures that private bond holders also share in the risks (Sandbu, 2015). As such, it implies a partial return to the no-bailout clause in the Maastricht Treaty, thereby improving the balance between liability and control. It will also strengthen market discipline, particularly if it is clear in advance how decisions about restructuring will be taken. For the no-bailout clause to be reinforced in a credible way, it is key that both member states and financial markets are convinced it will be adhered to.

This is why the restructuring mechanism should be based as far as possible on rules agreed upfront, to prevent debates from becoming too political and parties postponing write-downs for too long (Buchheit et al., 2013; Corsetti et al., 2016). Before extending an emergency loan from the ESM, the sustainability of a country's debts must be assessed on the basis of objective and pre-agreed criteria. If the debts are sustainable, the country's government has a liquidity problem, and an ESM programme, with the OMT acting as a safety net, should then suffice. If their sustainability is doubtful, the country's government is facing a solvency problem, and the debts should be restructured along pre-agreed rules. This could take the form of automatic maturity extensions or the write-down of outstanding bonds.

A second set of measures should mitigate the harmful interaction between banks and governments to reduce the effectiveness of this interaction, which significantly exacerbated the financial turbulence during the crisis (Bekooij et al., 2016). This will limit any financial damage from crises. Governments and central banks will less likely need to step in, and any pass-through effects on economic growth will be more short-lived. Moreover, loosening the ties between banks and governments will also make restructuring of government debts less difficult to accomplish. First and

40 foremost, this requires the further completion of the banking union, which could be reinforced by means of a European deposit guarantee scheme. This will offer account holders increased protection, making them less likely to withdraw their funds if a bank gets into difficulties. A common backup structure for the single resolution fund would also be helpful. These types of risk sharing require that additional measures are taken to limit risks inherent in banking balance sheets, and some of these are already under way. For example, tightened minimum requirements will ensure that banks can absorb losses using own funds (capital requirements) or borrowed funds that can be written down. But more needs to be done. The rules for government bonds on bank balance sheets must be tightened to reduce the sensitivity of bank balance sheets to any problems their own national governments may suffer. While government bonds are currently treated as risk-free investments, they have proved not to be risk-free in all cases. Banks should maintain more capital for such bonds (risk weights) and be forbidden to invest excessively in the bonds of a single government (concentration limits).

Lastly, a series of measures should contribute to the development of more robust financial integration. They should ensure that private parties bear more risks so that shocks can be better absorbed (Bijlsma and Hessel, 2016). Importantly, cross-border capital flows should have a smaller proportion of – relatively volatile – debt instruments and a larger share of equity. In Europe, integration of the national equity and capital markets lags far behind the United States. Cross-border shareholdings, which represent the most direct type of private risk sharing, are relatively low, and foreign direct investments have not risen much either. Steps are being taken, through the European capital market union, to improve this. Equally importantly, tax incentives that make debt financing relatively attractive must be scaled back to foster cross-border shareholdings.

Much can be improved in the area of cross-border lending as well. This lending currently depends heavily on banks, which tend not to grant many loans in times of crisis due to balance sheet problems (Langfield and Pagano, 2016). Accordingly, alternative funding channels, such as securitisation, covered bonds and corporate bonds, should be fostered. In addition, shocks will be more easily absorbed if banks are less dependent on their national economies (Hofmann and Sørensen, 2015). This is why integration in the banking market should not so much be achieved through cross-border funding (wholesale funding), but rather by ensuring that banks effectively launch banking operations in other countries, e.g. granting loans and raising funds. Finally, harmonisation of insolvency laws and increased incentives for creditors to write off non-performing loans (NPLs) sooner are desirable. If a bank has a high proportion of NPLs in its balance sheet, its funding costs are higher, while profitability is lower, as is its capacity to lend and make productive investments possible (European Central Bank, 2016 and European Commission, 2017).

# 5 Further integration in the more distant future and subject to conditions

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Further economic integration can improve the EMU's functioning and bolster the resilience of the European economy in the more distant future. This section sets out several measures that will reinforce the growth potential of the euro area's member states and enable them to adjust more rapidly to shocks. While these measures bring additional economic benefits, they only appear feasible and desirable in the longer run and subject to specific conditions, given that many of them directly affect national sovereignty or imply more far-reaching risk sharing between member states, neither of which currently enjoy broad support. If this should change in due course, it is still crucial that measures must be implemented only if the balance between liability and control is closely monitored. After all, a skewed balance could discourage countries from making every effort to avoid problems (see also Box 2).

## European fiscal stimulus in exceptional circumstances

Arrangements in the euro area are such that it is primarily the ECB's monetary policy that should absorb economic shocks affecting the euro area as a whole. National budgets serve to deal with asymmetric shocks. Such arrangements work well as long as member states manage to avoid major imbalances and create sufficient budgetary headroom by complying with the SGP. No agreements are then needed about the euro area's aggregated budgetary policy. This changes if, as was the case in the aftermath of the crisis, some of the member states face a lasting adjustment burden, leaving little budgetary policy scope. A fiscal stimulus for the EMU as a whole may bring relief, but this is difficult to achieve through national budgets, as not all countries will have sufficient budgetary headroom, and countries unwilling to participate cannot be easily forced (Claeys et al., 2016). This means that it will be more effective for a central stimulus to be provided at the European level, for example by allowing the European Commission or the newly created European budgetary council to borrow funds for public investments

(Bénassy-Quéré et al., 2016). Such a stimulus could be focused primarily on countries with high unemployment rates in order to narrow the differences between member states.

However, a budgetary stabilisation fund that permanently redistributes funds between countries on the basis of an economic indicator such as the output gap or unemployment is not necessarily desirable. As long as there continue to be large structural discrepancies within the EMU, such a fund will be difficult to achieve in a way that makes it effective and does not result in permanent one-way redistribution. To the extent they were relevant, asymmetric fluctuations in the euro area were much more protracted than the usual economic cycles. Accordingly, a stabilisation fund that targets such asymmetric fluctuations is likely to result in long-term or indeed permanent redistribution between countries (Gilbert and Hessel, 2014).

Such a stabilisation fund might be desirable only after the rules have proved their effectiveness and structural discrepancies have significantly narrowed.

### Eurobonds: only in the long term

Eurobonds are centrally issued, jointly guaranteed bonds for funding the euro countries' public debt. They have various benefits in theory (see Claessens et al., 2012). They could put an end to financial fragmentation in the euro area which causes lending rates to vary among countries. In addition, they could expand the universe of safe haven assets and help loosen the ties between banks and national governments. Lastly, they will make it easier to implement monetary policies, notably unconventional policy measures. The flip side is that eurobonds could also lead to moral hazard. Because of the mutual guarantees and the lack of market discipline, euro bonds reduce incentives for reforms and healthy national fiscal policies. Therefore, eurobonds could be desirable only following demonstrable

44 compliance with the European budgetary rules and the MIP, and at lower government debts than those currently prevailing (Gilbert et al., 2013). Likewise, less far-reaching proposals aimed at bundling government paper would seem feasible and desirable only in the longer run (see Box 4).

### Structural convergence should be encouraged

The EMU would function significantly better if structural differences were reduced, allowing countries' growth potential and resilience to shocks to increase (OECD, 2016). For instance, liberalisation of product markets would already bring major improvements. Fournier et al. (2015) argue that reducing discrepancies in product market regulation could boost trade flows by 10%. With many southern European countries having reformed their labour markets, product market reforms have become more urgent, as they prevent labour market reforms from resulting in lower wages and higher profits, thereby causing a shift from labour income to capital income. Measures are needed mostly in the services sector and in regulated professions, such as lawyers and architects. More comprehensive implementation of the Services Directive alone could boost the European GDP by 1.5% (Monteagudo, 2012).

Similarly, much more could be done to stimulate innovation (Veugelers, 2016). It should be made easier for entrepreneurs to start a business, for small firms to expand, and for unproductive companies to be wound up and to employ factors of production elsewhere. Finally, the quality of institutions can be improved in many countries, including the efficiency of the legal system in terms of settling disputes, protecting ownership rights and bankruptcy resolution. The OECD reckons that GDP could rise between 4% and 7% if countries were to adopt best practices (see for example OECD, 2014).

## Box 4 The proposal to introduce European Safe Bonds (ESBies)

Whereas fully-fledged eurobonds could be a realistic option in the more distant future, a related proposal has received much attention lately. It suggested that individual member states keep issuing their own government bonds, which are then purchased, bundled, split up in tranches and sold onward as Sovereign Bond Backed Securities or “ESBies” (see Brunnermeier et al., 2016 and European Commission, 2017). If one of the countries is unable to service its bonds, these are written down and private bondholders bear the losses. This would first apply to the “junior tranche”, which in the plan’s basic variant (Brunnermeier et al., 2016) comprises 30% of the portfolio. The 70% senior tranche has senior credit status, meaning it is safer. Various other variants suggest propose to introduce three tranches, but the principle remains unchanged.

ESBies are intrinsically different from eurobonds, as they do not involve any public guarantees. Nevertheless, some of the benefits associated with eurobonds may be achieved with ESBies. The key benefit is that expected losses suffered on a bundle of bonds will be smaller than those on some individual bonds. This means that capital flight is less likely to occur once a country faces a crisis, so that markets remain more stable. In addition, if banks were to replace the bonds issued by their own governments with ESBies, the interdependence between banks and governments would be reduced. Potentially, ESBies could reduce the support needed for banks and governments.

However, many questions remain that will complicate their large-scale introduction for the time being. For example, there is a risk of political

interference, which would make the step to real eurobonds that do feature public risk sharing too small. For example, governments may tend to compensate investors for losses if political resistance should arise.

Similarly, the sheer size of a market for ESBies may complicate accurate pricing of risks and reduce market discipline. After all, countries will always be assured of a certain demand for their bonds. This may lead to moral hazard, as budgetary policies could be relaxed or government debts written down in larger amounts. Also, it is unclear how creating ESBies will affect the market liquidity of the remaining bonds, as market volatilities may well end up affecting those other bonds.

Lastly, the financial crisis has shown that this type of products can be highly complex and non-transparent. For example, there is no way to predict what will happen if EMU countries get into difficulties and are in danger of not being able to repay their debts. Likewise, it is unclear which investors will find the junior tranches interesting, and which parties will ultimately bear the risks involved in them. In a more general sense, ESBies are not an alternative to the best method available for factoring in risks associated with government debt, which are risk weightings and concentration limits in banks' government bond portfolios.



Most of the benefits of strengthening the supply side of an economy – higher growth potential and increased resilience to shocks – accrue to the country that implements such reforms. This means strengthening the supply side is usually sensible from an economic perspective, irrespective of whether a country is a member of the EMU. However, in a currency union, it is even more important, as no exchange rate can be used as an adjustment mechanism, and every member state benefits from the improved resilience of other member states.

Implementing the reforms needed to strengthen the supply side of the economy is, first and foremost, the responsibility of national governments. Even so, if there is the political will, some progress can be achieved at the European level. Product market liberalisation may be encouraged by strengthening the single market, in the services sector for example. In addition, Europe could develop refined measures and indicators, such as in the area of labour market and product market flexibility, innovative strength and quality of institutions (Banerji et al., 2015). Such indicators could facilitate comparison between countries, enabling countries to learn from each other, which may encourage reforms. In due course, such measures could be made more binding, for example by encouraging countries to achieve specific threshold values, failing which penalties are imposed. Alternatively, rewards can be promised to member states that achieve specific standards. Steps taken to increase public risk sharing could be linked to minimum standards for structural policies (Juncker et al., 2015). For instance, a country that meets specified structural convergence criteria could be rewarded with access to eurobonds or a budgetary stabilisation fund.

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