

### 1 Introduction

It was expected in the original design of EMU that the use of stability-oriented national economic policies and the disciplining capacity of the financial markets would ensure the continuity of the convergence process

However, neither national economic policies nor the financial markets played the stabilising role expected

The global crisis that began to break as from summer 2007 and which ultimately evolved into a sovereign debt and balance of payments crisis in much of the euro area has revealed the limitations of the institutional design and governance of EMU agreed at the time of its inception. Last year, this common European project was subjected to an unprecedented degree of tension and the European authorities responded by designing a roadmap for the far-reaching renewal of the institutional arrangements underpinning EMU and its governance.

At the time EMU was instituted, the Member State economies did not meet the requirements to form what is known in the literature as an optimal monetary area, but there was confidence that the very functioning of the union would ultimately generate the incentives to move in that direction. The economic governance of EMU was underpinned by the principle of subsidiarity, under which the ultimate responsibility for preventing and, where appropriate, correcting any domestic economic imbalance lay with the authorities of the country concerned. Fiscal policy and, generally, supply-side policies thus remained in the hands of each Member State, with coordination or monitoring mechanisms at area level proving rather limited. The design assumed that there would be continuity to the momentum that had enabled the economies of the founding members to meet entry requirements, paving the way for deeper and more satisfactory convergence. The proper management of the non-monetary economic policies of each Member State would thereby replace the interest rate and the exchange rate as the main tool of macroeconomic stabilisation.

This original framework, which ruled out the possibility of the bail-out of a Member State by the area as a whole (in keeping with the related clause in the Treaty), was also underpinned by confidence that the efficient functioning of financial markets would be capable of suitably calibrating the risks of instability of each national economy. Interaction between the institutional design and market actions would reward the policies most firmly geared to ensuring stability and growth, and would penalise behaviour incompatible with membership of a monetary union, providing for the early correction of imbalances that might emerge.

The creation of the monetary union fuelled expectations of higher potential growth across the area and, most particularly, in those economies starting from lower per capita income levels. In turn, the disappearance of exchange-rate risk and growing financial integration provided for the capital flows that would fund the move in that direction. Nonetheless, current-account imbalances and divergences in international investment positions among the member countries built up, rising to very high levels.

The scope and potential consequences of these dynamics were not correctly diagnosed. Far from persevering with the stabilising efforts that had allowed them to join the euro area from the outset, some national governments did not pursue the fiscal policies and structural reforms needed to curb the destabilising risks associated with very lax financing conditions. These were conducive first, to excessive dependence on external funding; further, to an allocation of resources that did not always prioritise their most efficient use; and finally, to growth expectations that could hardly be met without such policies.

All these developments unfolded against a global background of underpriced risk and of complex and relatively opaque financial innovations, in which international investors also

failed to play the moderating role expected of them and, in short, allowed funds to flow generously and without sufficient discrimination in terms of the risk inherent in the various investment projects. The absence of macroprudential financial regulatory and supervisory mechanisms further hampered the early detection of these excesses.

The outbreak of the crisis exposed the shortcomings of these institutional arrangements

The US subprime mortgage market crisis from mid-2007 and, above all, the bankruptcy of Lehman Brothers in September 2008 triggered a far-reaching process of financial risk re-pricing. The global recession accompanying the financial crisis significantly, though unevenly, affected the euro area economies and detracted from the asset quality of its banks. The public programmes of aid to the financial system, including nationalisations such as that of the Anglo Irish Bank in Ireland in early 2009, soon revealed that the tensions in banking systems would have considerable repercussions on the public finances of the countries concerned. These effects would compound those arising from the fiscal policy response to the crisis (by means both of the automatic fiscal stabilisers and of the discretionary spending measures which, in the early stages of the crisis, increased budget deficits).<sup>1</sup>

Growing asymmetry thus arose among the euro area economies. Private-sector over-indebtedness, banking system vulnerabilities, public finances sustainability problems, excessive dependence on external saving, losses in competitiveness and a poor growth outlook affected several of the Member States to differing degrees and tended, moreover, to fuel one another in a contagious feedback loop, generating destabilising spirals.<sup>2</sup> The firms, households, general government sectors and financial intermediaries of the countries with surplus saving were able to continue funding themselves under relatively advantageous conditions, better even than during the upturn, while those located in countries with high external deficits had to withstand a notable reduction in the supply of financial resources and high increases in their funding costs (see Chart 2.1).<sup>3</sup> The euro area was subjected to fragmentation incompatible with the integration proper to a monetary union, which inevitably posed credibility problems for the overall European project.

The crisis has necessitated specific measures to address the most extreme tensions, but it requires, above all, a far-reaching review of the institutional framework and the governance of the area

The euro area was lacking the wherewithal to face a situation such as that described. The design agreed in the Maastricht Treaty did not envisage mechanisms to implement a coordinated and joint response by the national authorities to the imbalances and nor did it include common crisis-management instruments to alleviate the consequences. In the short run, while such mechanisms and instruments have taken shape, the ECB has provided what has proven crucial support to ensure the irreversibility of the euro, giving the authorities entrusted with their development the time needed to design and apply the changes that the situation requires.

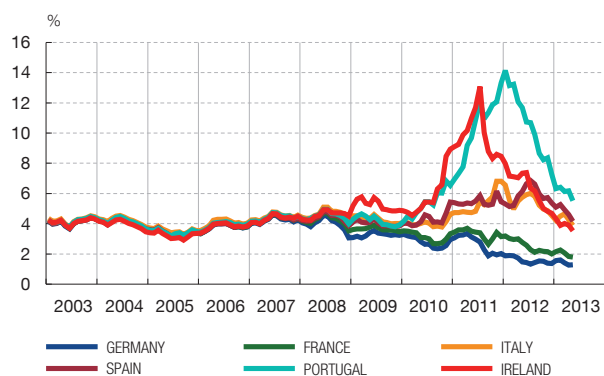
The crisis has evidenced the pressing need for resolute progress towards a euro area that is more complete than that designed in the late 1990s, and one that is equipped with new and better instruments for economic stabilisation and crisis-prevention and resolution. To tackle the cracks that have emerged, the new institutional design should reconsider the tools for fiscal control and coordination among the member countries, incorporating common financial system supervision mechanisms and sharing more closely the management of the main risks. Along with this, new instruments will be needed to promote convergence

<sup>1</sup> For a description of the events that have marked the euro area crisis, see P. Lane (2012), "The European Sovereign Debt Crisis", *Journal of Economic Perspectives*, vol. 25, no. 3, pp. 49-68.

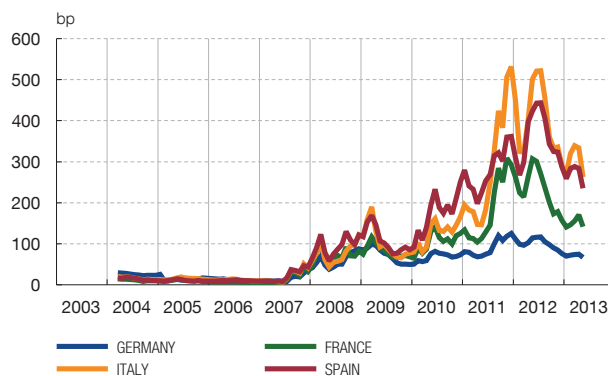
<sup>2</sup> See J.C. Shambaugh (2012), "The Euro's Three Crises", *Brookings Papers on Economic Activity*, spring.

<sup>3</sup> See M. Bruche and J. Suárez (2009), *The Macroeconomics of Money Market Freezes*, CEPR Discussion Paper no. 704.

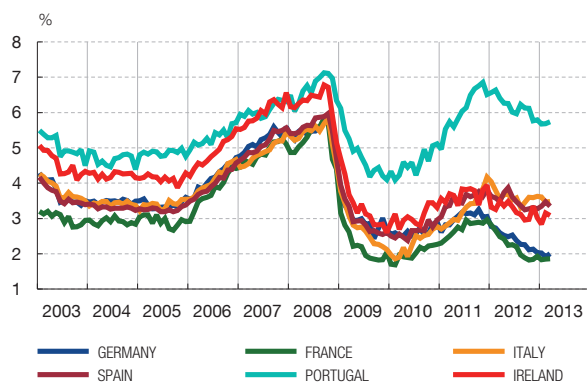
TREASURY FINANCING  
10-YEAR INTEREST RATE



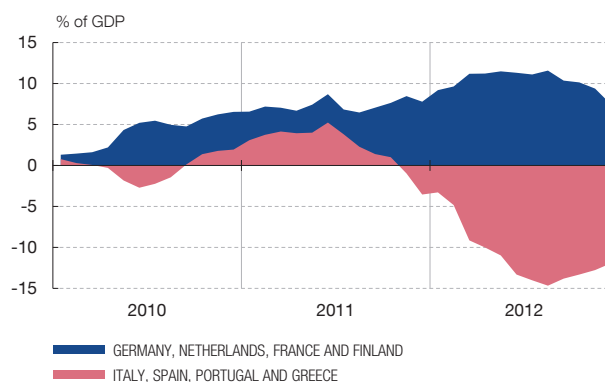
BANK 5-YEAR CDS PREMIUMS



INTEREST RATE ON CREDIT TO NON-FINANCIAL CORPORATIONS



CROSS-BORDER FINANCIAL FLOWS (a)  
(Cumulative flows from Dec 2009 to Dec 2012)



SOURCES: ECB and Datastream.

a Capital movements reflect the stock of portfolio investment and other investment of the Balance of Payments, excluding the Central Bank. A positive (negative) figure denotes capital inflows (outflows).

among the member countries, to prevent competitive mismatches and to properly mutualise the consequences of potential future shocks. Pivotal to all these reforms will be progress in transparency and democratic legitimacy to ensure the credibility of the new institutional framework and compliance with the agreements reached.

Considerable steps have already been taken along these lines, but the challenges ahead remain significant. This chapter reviews in detail the reasons why the global crisis has had such a differentiated and singular impact on the euro area; it discusses the main progress made in redesigning the euro; and it reviews the major challenges ahead for the area to restore the successful path of convergence that characterised its early years of existence.<sup>4</sup>

**2 The impact of the crisis on the euro area**

During the first eight years of the euro area, an increase in convergence across the member countries' per capita income was recorded, along with greater economic and financial flows within the area. Notwithstanding, the convergence attained was still incomplete and the situation in the member countries was still fairly uneven in terms of competitiveness,

<sup>4</sup> Conjunctural developments in macroeconomic imbalances in 2012 and monetary policy conduct that year are analysed in detail in chapter 4 of the Spanish version of the *Annual Report*.

debt levels and unemployment rates. This heterogeneity was amplified by the crisis<sup>5</sup> and ultimately became a key determinant of the serious tensions that arose and of the need to redesign the institutional framework and governance of the euro area.

## 2.1. THE SOURCE AND THE UNEVEN IMPACT OF THE CRISIS ON THE EURO AREA COUNTRIES

The crisis has taken the form of a series of financial tensions, competitive mismatches, growth constraints and problems with sovereign debt that have affected with particular virulence the countries most dependent on external funding or those with the most significant structural shortcomings, such as Greece, Ireland, Portugal, Spain and Italy. This asymmetrical impact can be explained in terms of three fundamental and closely interrelated factors: the imbalances built up during the expansion, the economic policies pursued both before and in response to the crisis, and the uneven pass-through of the shocks via the various domestic markets.

The euro area countries faced the financial crisis from very different positions...

Following the creation of EMU, some of the member countries enjoyed a forceful reduction in the cost of financing and increased their foreign debt to unprecedented levels. The funds were essentially from other member countries with current account surpluses and moderate economic growth rates. And, as befits financial systems in which banks are so strongly rooted and prevalent, as are those of the euro area, these flows were intermediated by credit institutions. The latter, in turn, also benefited from lax funding conditions on wholesale international markets, prompted by low interest rates, the widespread under-pricing of credit risk and ample facilities for the securitisation of loans extended (see Chart 2.2).

Capital flows from countries with excess saving towards those with a lower level of income and with scant resources are conducive, in principle, to economic convergence within the euro area. But for this to occur the funds must be channelled towards those activities with most potential for increasing the economy's productive capacity. In the euro area, however, a sizeable portion of financial investment was earmarked for real estate activities, which ultimately fuelled unsustainable increases in the prices of these assets. In parallel, the recipient countries reallocated resources from the tradeable to the non-tradeable goods sector, prompting the build-up of high current-account deficits (see Chart 2.2). The subsequent dependence on external financing placed these economies in a position that proved particularly vulnerable to changes in financial conditions.

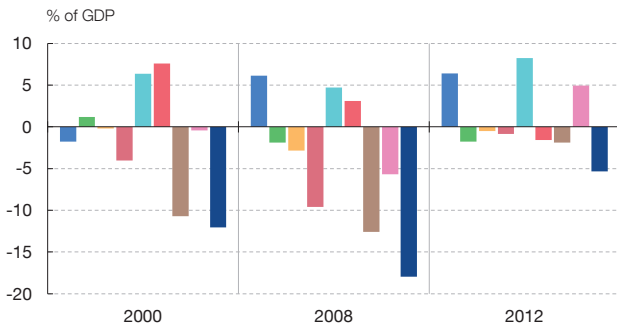
... partly because domestic economic policies did not contribute to preserving convergence within the euro area...

Following the nominal convergence phase to meet the EMU entry criteria, the differences in inflation rates across the member countries did not continue narrowing. With a common nominal interest rate, the countries with the highest inflation rates experienced lower real interest rates, which boosted consumption, investment and the demand for credit. The absence of structural reforms in these economies limited the responsiveness of supply to this boost in demand, thereby feeding back into the cross-country inflation differences. Nor was proper use made of fiscal policy to temper the strong expansion in demand. The generous financing conditions took the pressure off governments as regarded their spending policies, and the horizontal mechanisms for controlling public finances envisaged in the Stability and Growth Pact were inoperative.

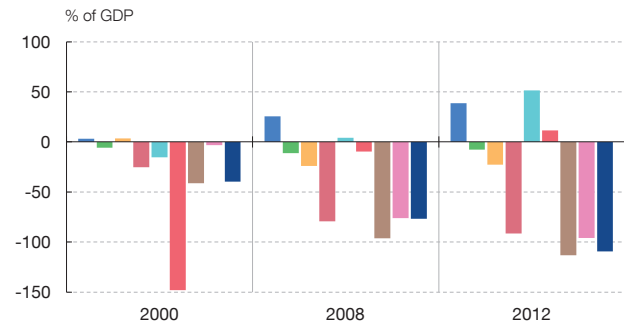
Despite the real exchange rate appreciation in the countries with the highest inflation rates, the effects on consumption and investment arising from the cuts to real interest rates and

<sup>5</sup> See A. Estrada, J. Galí and D. López-Salido (2013), *Patterns of Convergence and Divergence in the Euro Area*, working paper presented at the IMF Thirteenth J. Polak Annual Research Conference, November 2012.

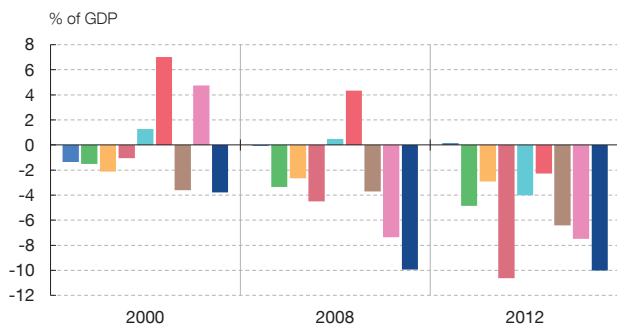
CURRENT ACCOUNT BALANCE



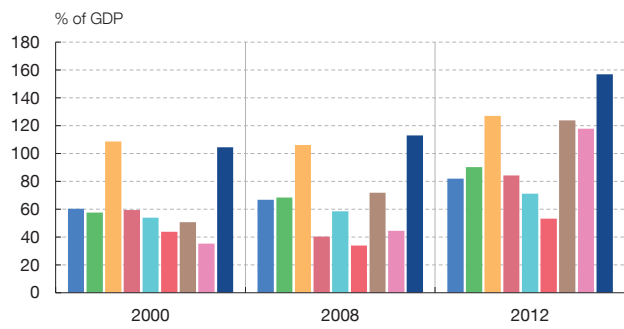
INTERNATIONAL FINANCIAL POSITION



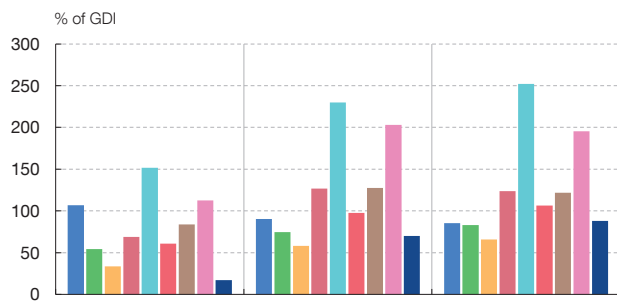
BUDGET BALANCE



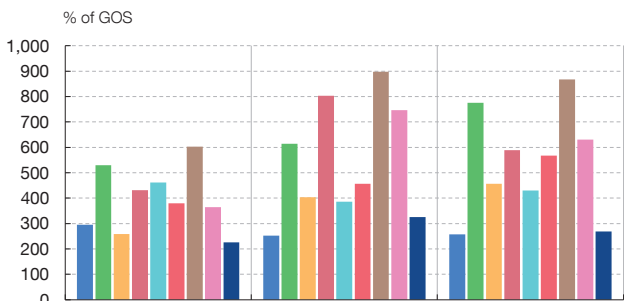
PUBLIC DEBT



HOUSEHOLD DEBT



NON-FINANCIAL CORPORATIONS' DEBT



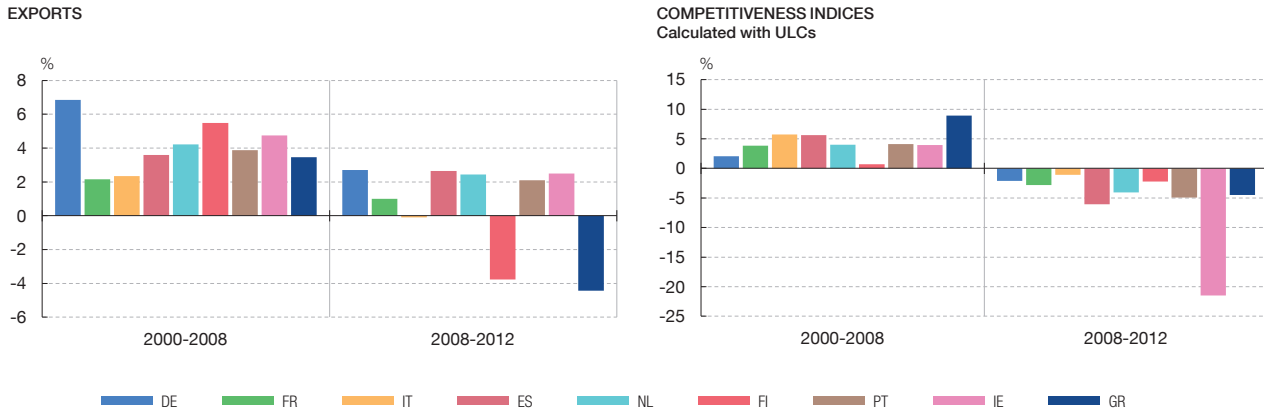
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SOURCES: EC and ECB.

from real estate inflation proved to be very expansionary; accordingly, swollen external deficits built up which were generously financed by the easy conditions then prevailing.

... and partly because the financial markets also failed to impose the discipline expected

The financial markets, given their known tendency to overreact, also contributed to fuelling and amplifying the imbalances. In the early years of EMU, they underestimated – like everybody else – default risk. In the particular case of the Member States' sovereign debt, and despite the no-bail-out clause, they did not distinguish between different issuers, meaning that the risk premia associated with these instruments practically disappeared. During the crisis, this same tendency to overreact worked in the opposite direction, raising risk premia



SOURCES: EC and ECB.

above what was attributable to the fundamentals of the economies concerned and seriously jeopardising the very functioning of the euro area.<sup>6</sup>

The uneven progress in introducing structural reforms also contributed to amplifying divergences

The mismatches in competitiveness across the euro area countries widened owing to the differences in how wages and productivity trended. These differences were, in part, closely related to the diversity in the institutional configuration of the labour and product markets, and in the time and manner in which these countries applied the structural reforms needed to add flexibility to their economic structures. At the onset of EMU, wage growth-restraining labour reforms and productivity-boosting product market reforms were introduced, to a greater extent, in the countries where demand-side pressures were less, and in particular in Germany, where the reduction in ULCs and the growth of exports were very high (see Chart 2.3). Conversely, in other member countries the reform momentum demanded by the EMU entry convergence requirements faltered and has only picked up, in part, following external pressures derived from the unfolding and the management of the sovereign debt crisis (see Box 2.1).

As a result, developments in the productive structures of the member countries were uneven...

As a result, member countries' productive structures diverged during the upturn and only the strong adjustment imposed by the crisis on certain sectors, such as real estate, has recently corrected – albeit only partially – this tendency. The disparity explains, at least in part, why the nature of the crisis has differed in each case and also why the dispersion of GDP growth rates across the euro area countries has been much more marked in the two recent recessions (2008 Q1-2009 Q2 and that which began in 2011 Q3) and in the muted recovery between both (2009 Q3-2011 Q2) than in the recessions and expansions recorded in previous periods.<sup>7</sup>

... as was too the course of private and public debt...

Debt levels within the euro area are also very different from one country to another. Household debt, which accounted in the area as a whole in 2007 for 95% of gross disposable income, increased to 100% at the end of last year. At the start of the crisis, these ratios stood at 126% in Portugal, 130% in Spain, 205% in Ireland and 222% in the Neth-

<sup>6</sup> See E. Alberola, L. Molina and Pedro del Río (2012), *Boom-bust cycles, imbalances, and discipline in Europe*. Documentos de Trabajo, no. 1220, Banco de España.

<sup>7</sup> Also compounding this was the uneven impact on current- and capital-account balances of the growth of the emerging countries, the integration of the Central and Eastern European countries, and the nominal appreciation of the euro. See R. Chen, G. M. Milesi-Ferreti and T. Tressel (2013), "External imbalances in the euro zone", *Economic Policy* (January), pp. 101-142.

One of the requirements for a monetary union to function properly is that price and wage setting in member countries should be flexible enough to accommodate asymmetrical shocks without them resulting in a high and lasting reduction in economic activity. During the transition process towards EMU, many of the countries aspiring to membership implemented product and factor market reforms to achieve this flexibility. Furthermore, there was the hope that euro area membership in itself would accelerate the reforms.

However, during the period 1999-2007 the intensity with which Member States addressed structural reforms was very mixed. This was partly attributable to the need for reforms being perceived with less urgency in times of economic growth. In fact, after EMU was launched, structural reforms were postponed in the majority

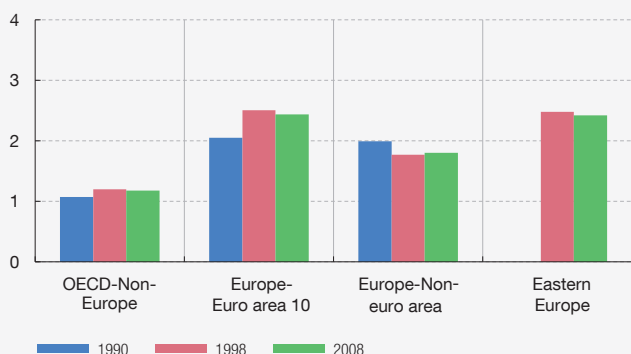
of countries where they were needed most and have only been taken up again recently under the pressure of events. This is what the findings available in the literature indicate which, although they do not provide definitive conclusions, they have not found favourable evidence of the idea that EMU has favoured the reform process, but rather the opposite.<sup>1</sup>

These papers usually employ indicators on competition and labour regulations compiled from a systematisation of the poten-

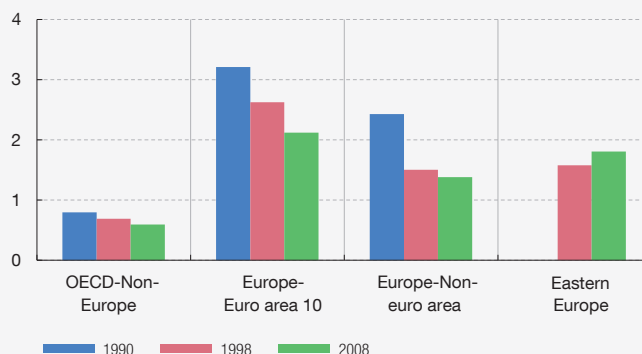
<sup>1</sup> For a description of how the labour market reform process has developed in Spain, see S. Bentolilla, J. J. Dolado and J. F. Jimeno (2012), "Reforming an insider-outsider labor market: the Spanish experience", *IZA Journal of European Labor Studies* 2012, 1:4 (December).

LABOUR REGULATION INDICATORS (a)

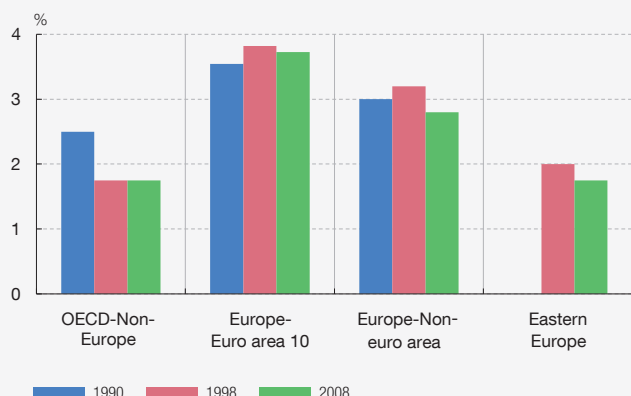
1 EMPLOYMENT PROTECTION (PERMANENT EMPLOYEES) (b)



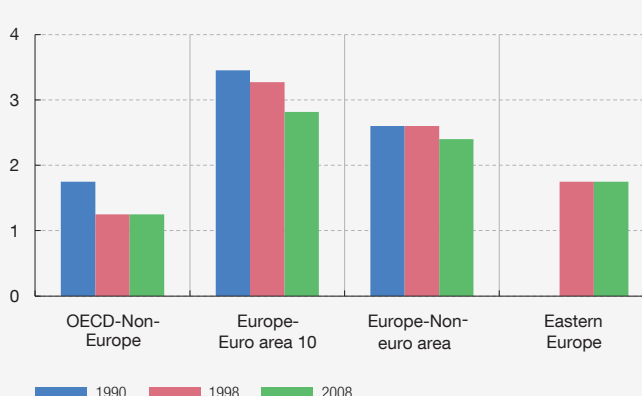
2 EMPLOYMENT PROTECTION (TEMPORARY EMPLOYEES) (b)



3 COLLECTIVE BARGAINING (ORGANISATION) (c)



4 COLLECTIVE BARGAINING (LEVEL) (c)



SOURCE: OECD Indicators of Employment Protection.

a The countries in each group are as follows:

OECD-Non-Europe: Australia, United States, Canada and Japan.

Europe-Euro area 10: Germany, Austria, Belgium, Spain, Finland, France, Greece, Netherlands, Ireland and Portugal.

Europe-Non-euro area: Denmark, Norway, United Kingdom, Sweden and Switzerland.

Eastern Europe: Slovakia, Hungary, Poland, Czech Republic and Turkey.

b Employment protection is the degree of rigidity (on a scale of 1 to 6, from least to most rigid) of employment protection legislation.

c Excluding Turkey.

tially most influential aspects in determining prices and wages.<sup>2</sup> Some of the most frequently used indicators are the OECD's indicators on employment protection legislation and product market regulation and the ICTWSS' indicators on trade union membership and collective bargaining from the *Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts*. Panels 1 and 2 show some of

2 Summarising the full complexity of competition and labour market regulations in quantitative indicators comparable across countries and over time is not without problems. Furthermore, in the case of regulations on competition the differences that may exist within each country as a result of the intervention of regional governments or federal states are not always included. Nevertheless, these indicators provide useful information on general trends and the main characteristics of national regulations on labour, goods and services markets.

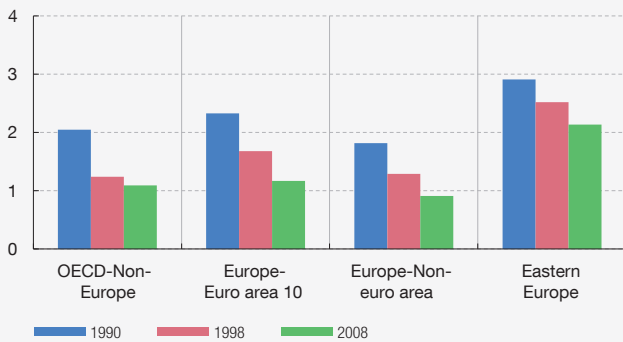
these indicators grouped for comparison purposes into four geographical areas.<sup>3</sup>

3 The collective bargaining indicators are defined as follows: Coordination: 5 = Centralised negotiations with the imposition of a nationwide agreement or wage guidelines established by the government. 4 = Mixture of sector and nation-wide negotiations in which central organisations reach agreements which are not necessarily applicable to all industries or in which certain trade unions and employer associations set guidelines for the economy as a whole. 3 = Sector bargaining with limited participation of national organisations with the possibility of negotiating at company-level. 2 = Mixture of sector and company-level negotiations with scant application of sectoral agreements. 1 = Fragmented negotiations, mainly at company level.

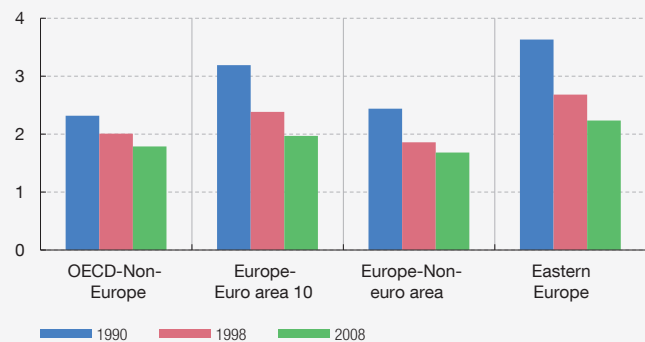
Level: 5 = National or central, with additional levels of sector and/or company. 3 = Sectoral. 2 = Sectoral, with additional level of company. 1 = Company.

PRODUCT MARKET REGULATION INDICATORS (a)

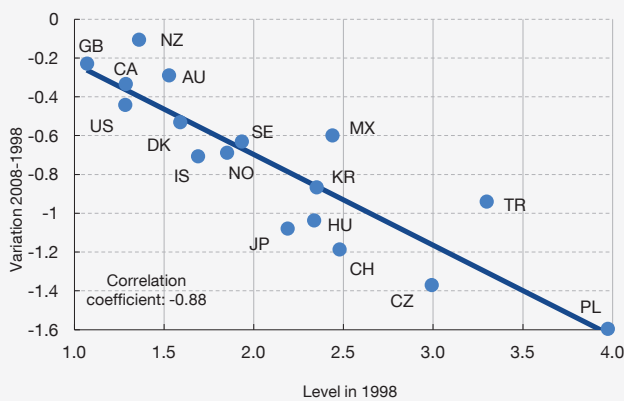
1 PRODUCT MARKET REGULATION (STATE/REGIONAL/LOCAL) (b)



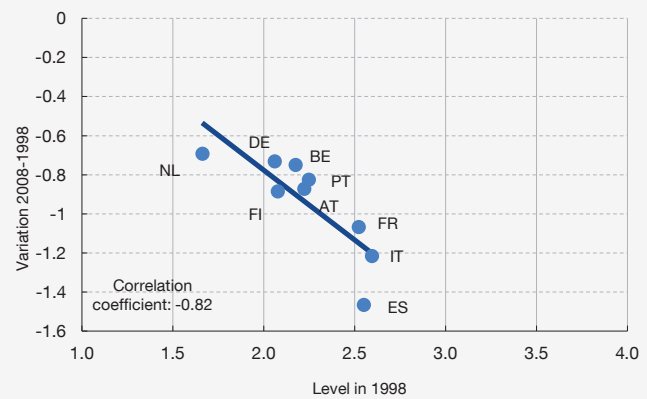
2 PRODUCT MARKET REGULATION (NATIONAL) (b)



3 CHANGES IN MARKET REGULATION OF NON-EURO AREA COUNTRIES (c)



4 CHANGES IN MARKET REGULATION OF EURO AREA COUNTRIES (c)



SOURCE: OECD, *Product Market Regulation Database*.

- a The countries in each group are as follows:  
 OECD-Non-Europe: Australia, United States, Canada and Japan.  
 Europe-Euro area 10: Germany, Austria, Belgium, Spain, Finland, France, Greece, Netherlands, Ireland and Portugal.  
 Europe-Non-euro area: Denmark, Norway, United Kingdom, Sweden and Switzerland.  
 Eastern Europe: Slovakia, Hungary, Poland, Czech Republic and Turkey.
- b Product market regulation is the degree of rigidity (on a scale of 0 to 6, from least to most rigid) of market protection legislation.
- c Value of the indicator between 0 and 6, 0 being the least restrictive.



From the simple observation of these indicators robust conclusions cannot be obtained about the impact on EMU of the reform intensity of its Member States, given that the changes in the indicators are not very different from those seen either in the same countries prior to the onset of EMU or in countries which do not belong to that group that started out from similar situations. Consequently, it is necessary to turn to more elaborate analyses (multiple regression) in order to identify the possible differential factors. Noteworthy among the initial papers dedicated to testing the assumption of whether or not EMU has favoured structural reforms is that of Duval and Elmeskov (2005), who consider labour and product market reforms and find in general that the occurrence of economic crises, the incidence of high unemployment and a healthy fiscal position tend to give rise to the introduction of reforms, whereas belonging to a monetary union, perhaps, decreases reforming activity. They also find that reforms in the product market favour the introduction of labour market reforms and vice versa. A later paper by Høj *et al.* (2006) confirms that the occurrence of major crises is associated with more and better reforms, although, as regards employment protection and employee benefits, these usually occur to a greater extent in growth periods. More recently, Bertola (2010)<sup>4</sup> has found that in euro area Member States, employment protection legislation has been relaxed more, there has been a

larger reduction in taxation of labour and a relative increase in the unemployment benefit replacement rate<sup>5</sup>. Finally, other narrative approaches concluded that the boom reduced incentives for introducing new reforms, which not only caused a decline in economic growth but it also prolonged the credit boom and delayed economic policy responses to the crisis<sup>6</sup>.

The indicators shown – available to 2008 – do not yet reflect the impact of recent reforms, but the information from other sources suggests that the structural reform process of euro area economies seems to have quickened during the crisis,<sup>7</sup> in particular in those countries which are more reliant on external financing and in certain specific areas such as collective bargaining and unemployment benefit systems and pension and employment protection systems. However, differences between Member States as regards the regulation of product and labour markets continue to be very pronounced.

4 See G. Bertola (2010), "Labour markets in EMU: What has changed and what needs to change", in M. Buti, S. Deroose, V. Gaspar and J. Nogueira Martins (Eds.), *The euro: the first decade*, Cambridge University Press, Cambridge, pp. 715-758, and G. Bertola and A. Lo Prete (2010), *Whence Policy? Government Policies, Finance and Economic Integration*, CEPR Working Paper No. 7820.

5 A common trend in euro area countries is the gradual replacement of employment protection (making external flexibility easier) by unemployment protection (higher replacement rate of unemployment benefits). In the goods and services markets, the reforming efforts centre on some specific sectors (such as network industries) and the removal of administrative barriers; conversely, hardly any far-reaching reforms of education systems, of innovation and of professional services have been seen.

6 See J. Fernández-Villaverde, L. Garicano and T. Santos (2013), *Political Credit Cycles: The Case of the Euro Zone*, NBER Working Paper No. 18899.

7 OECD (2013), *Going for growth*, Paris.

erlands. And since then they have held relatively constant in Portugal (122% in 2012), Spain (123%) and Ireland (205%), and increased in the Netherlands (249%). The micro-economic data available, drawn from the recently published Eurosystem Household Finance and Consumption Survey, likewise show high cross-country heterogeneity (see Chart 2.4).

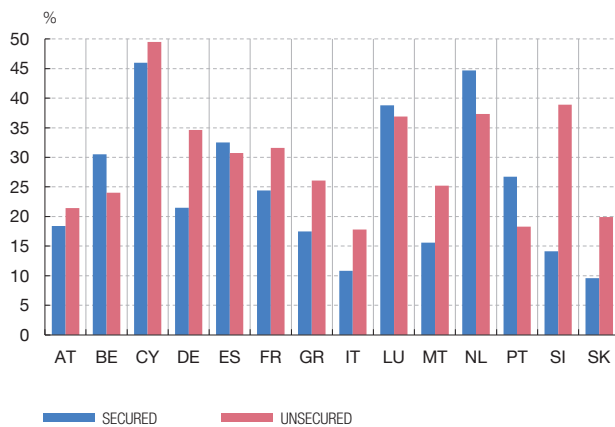
The increase in non-financial corporations' debt also arose with uneven intensity: while in 2007 companies' debt in the euro area on average was equivalent to 4.4 times their gross operating surplus, in some of the countries now subject to greater financial stress, that rate was notably higher (7.7 in Portugal, 4.9 in Ireland and 8 in Spain). At present, the euro area average for corporate debt is equivalent to 5.1 times the gross operating surplus (8.6 in Portugal, 6.8 in Ireland and 6 in Spain).

In terms of the public-sector rate of indebtedness, the increases during the crisis, arising both from the primary deficits built up and from the higher cost of debt financing and lower GDP growth, were particularly marked in the Southern European countries. The exceptions were Italy, whose point of departure was already a debt rate higher than 100%, and Ireland, where the biggest impact stemmed from the clean-up of the banking sector (see Chart 2.5).

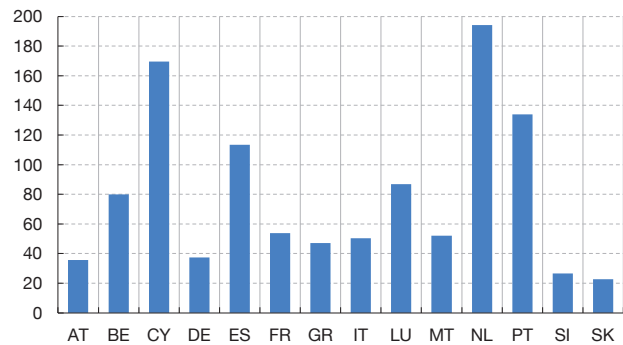
## HOUSEHOLD DEBT IN THE EURO AREA

CHART 2.4

PERCENTAGE OF INDEBTED HOUSEHOLDS



DEBT/INCOME RATIO FOR HOUSEHOLDS WITH MEDIAN DEBT

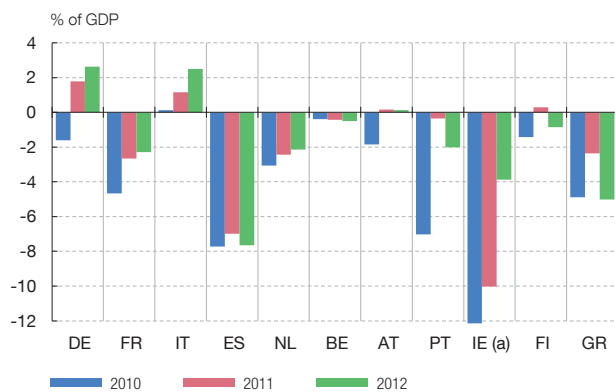


SOURCES: European Survey of Household Finances and Banco de España.

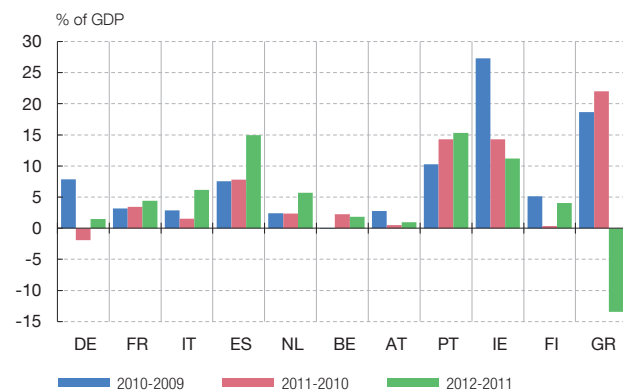
## PUBLIC FINANCES IN THE EURO AREA

CHART 2.5

EURO AREA PRIMARY BUDGET BALANCE



EURO AREA PUBLIC DEBT (CHANGE)



SOURCE: Eurostat.

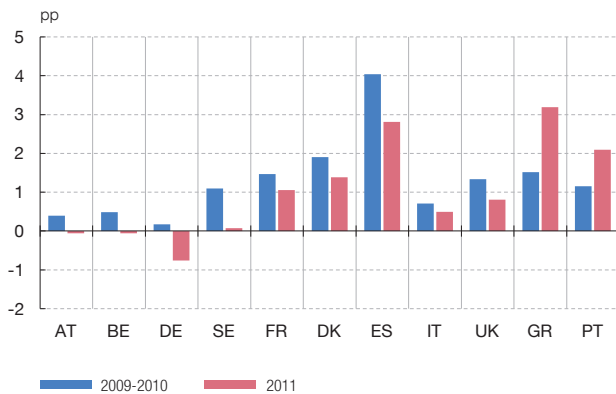
a Ireland's primary deficit in 2010 is 27.7%

... and, especially, the behaviour of labour markets

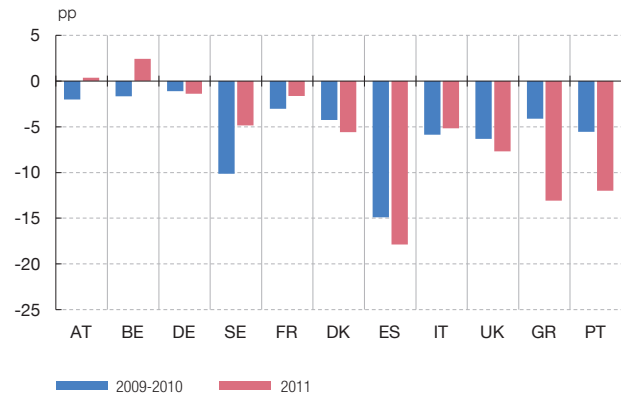
Sufficient price and wage flexibility, and high mobility of the factors of production are two of the characteristics proper to an optimal monetary area. During the expansion that followed the creation of EMU, few labour reforms were introduced that succeeded in improving the institutional configuration of the labour market in those countries that had historically shown greater price and wage rigidity and limited labour mobility (see Box 2.1). Consequently, the crisis has had a very uneven impact on unemployment, with an increase from 2007 to 2012 of 3.8 pp in the euro area as a whole, but of 16.8 pp in Spain, 16 pp in Greece and 10.2 pp in Ireland.

These changes are the result of very different labour market performances, which are much more clearly manifest when flows in job creation (labour flows from inactivity and unemployment to employment), job destruction (labour flows from employment to unemployment and inactivity) and labour market exits (flows from employment and unemployment to inactivity) are observed (see Chart 2.6).

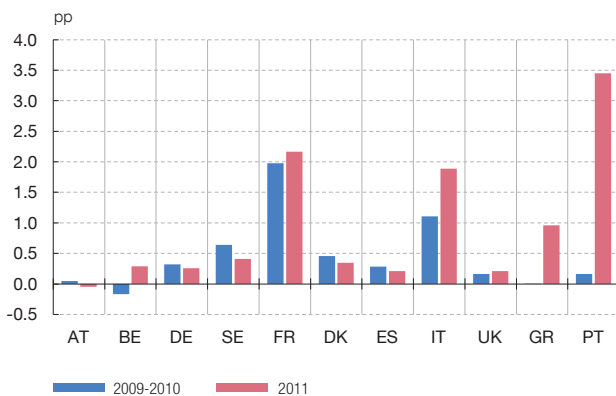
EMPLOYMENT-UNEMPLOYMENT



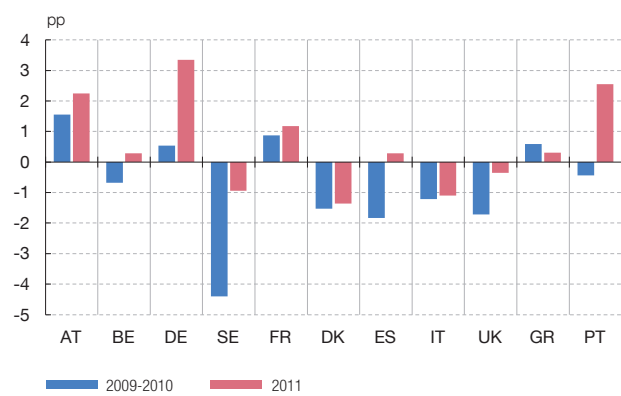
UNEMPLOYMENT-EMPLOYMENT



ACTIVITY-INACTIVITY



INACTIVITY-ACTIVITY



SOURCES: Labour Force Survey (Eurostat) and Banco de España.

2.2. THE LIMITATIONS OF EMU

The crisis has highlighted four basic areas in which the initial institutional design and governance of the euro area have proven insufficiently sound: i) the identification and correction of macroeconomic imbalances; ii) the implementation of the agreed fiscal discipline principles; iii) the consequences of growing financial integration, and iv) the non-existence of common crisis-resolution mechanisms.

The macroeconomic divergences between the euro countries may have serious consequences if not curbed in time

The main divergences in the euro area reflected, as explained, the build-up of macroeconomic imbalances that would need, sooner or later, to be corrected. The countries with higher growth in external debt were, indeed, those which posted lower growth in productivity. This is contrary to what characterises a natural process of economic convergence within a common monetary zone, where the higher future growth of productivity in the country with the lowest income warrants its indebtedness against the country with the highest income while such convergence is coming about.<sup>8</sup>

The Maastricht Treaty laid down oversight procedures and corrective mechanisms for excessive budget deficits and public debt, although they were relatively inoperative, as

<sup>8</sup> See F. Giavazzi and L. Spaventa (2011), "Why the current account may matter in a monetary union: lessons from the financial crisis in the euro area", in M. Beblavy, D. Cobham and L. Ódor (eds.), *The Euro Area and the Financial Crisis*, Cambridge University Press.

discussed below. But other potential macroeconomic imbalances (e.g. unemployment and the current-account balance) were scarcely catered for.

The fiscal disciplining mechanisms were not effective...

One of the potential vulnerabilities of EMU which was identified early on is that derived from the incentive to pursue overly lax fiscal policies if it is expected that the other member countries will come to the rescue in times of need. To correct this, the Treaty set caps on budget deficits and public debt through the Stability and Growth Pact, which also envisaged fining the countries that exceeded these ceilings. The Treaty likewise warned members that they should meet their debt obligations exclusively through their own resources.

However, during the 1999-2007 period, in a setting of growth and low funding costs, the fiscal imbalances of some of the euro area countries were masked by extraordinary revenue, which was used to lower taxes or to increase public spending. This did not give rise to any warning by international agencies, which did not identify the underlying imbalances and their risks for debt sustainability. In other countries which did not benefit from this type of revenue, such as Germany and France, but which did exceed the deficit ceilings set under the Stability and Growth Pact, the procedures established were not applied with due diligence. Ultimately, this diminished the capacity of the Pact to redress situations of risk.

... as a result of which the fiscal room for manoeuvre in the face of the crisis was very rapidly exhausted

The strong dependence on extraordinary revenue, the increase in public spending during the first phase of the crisis, the expenses arising from the clean-up of the financial sector and the marked rise in financing costs all induced a rapid increase in budget deficits (see Chart 2.2). Indeed, the most vulnerable economies saw how the fiscal instruments for economic stabilisation lost their power precisely when it was most needed; accordingly, the capacity to use a countercyclical fiscal policy was much diminished. Growing funding difficulties were exacerbated when the necessary fiscal consolidation measures began to produce negative effects on economic activity in the short run. This has given rise to heated debate on the magnitude of the “fiscal multipliers” and the room for potential gradualism in the reduction in public spending that is compatible with the least costly exit from the crisis (see Box 1.2). In any event, the funding difficulties that countries with severe fiscal problems are facing and uncertainty over the magnitude of these multipliers means more efficient forms of reducing public spending and increasing revenue must be found, amid the difficulties of a setting marked by low growth and the need for the deleveraging of both the public and private sectors.

In this setting, neither the consequences of growing financial integration nor how to tackle bank crises had been foreseen

In the initial design of EMU, the supervision and regulation (in some of its elements) of the financial system remained within the national realm, despite the expected increase in financial integration in the area. The consequences were dramatically highlighted by the crisis, as governments had to individually assume the cost of cleaning up financial institutions whose economic activity and repercussions went beyond national borders. This ultimately created a “diabolical link” which has magnified the relationship between sovereign and banking risks, especially in those countries with lower growth potential and a higher rate of indebtedness.<sup>9</sup>

The resolution mechanisms for banking and sovereign debt crises have only been launched *a posteriori*

As the financial difficulties heightened, Greece (owing to its public debt sustainability problems), Ireland (the fiscal consequences of its bank bailout) and Portugal (mainly its weak growth potential) had to request financial assistance from their partners. During 2012, Cyprus also formally requested a support programme and Spain agreed on a financial

<sup>9</sup> See A. Mody and D. Sandri (2012), “The euro zone crisis: how banks and sovereigns came to be joined at the hip”, *Economic Policy* (April), pp. 199-230.

aid package for the recapitalisation of part of its banking sector. The mechanisms to implement the financial aid, which is subject to strict conditionality tailored to each case, were primarily formalised ad hoc (Greece) and, later, through the European Financial Stability Fund. Finally, March 2011 saw the approval of the creation of the European Stability Mechanism (ESM). This is a permanent financial crisis-resolution mechanism for the euro countries which began to function last September and will be fully operational from July 2013.

The ECB has made up, in part, for these insufficiencies through the intensive use of its unconventional tools

The actions of the ECB have helped mitigate in part the consequences of the aforementioned institutional weaknesses, both through the use of conventional tools and, above all, through the implementation of a broad set of unconventional measures. The generous liquidity-provision policy by means of fixed-rate tenders with full allotment, broader eligibility criteria for the collateral for lending operations and the extension to three years of its long-term refinancing operations are significant examples here. The actions by the ECB have, at different times, allowed tensions to be alleviated and have bought the necessary time so that measures in other areas may bear fruit. The efficient design of the ECB's operations made the taking of these decisions easier.<sup>10</sup> The securities purchase programmes aimed at restoring the transmission mechanism and, most particularly, the announcement of the so-called "outright monetary transactions" also contributed substantially to lessening the risks of growing sovereign risk premia spirals associated with the increase in uncertainty over the irreversibility of the euro. In any event, it is clear from the description of the sources of this crisis that resolving the underlying problems cannot be done by the instruments available to the monetary authority, meaning that their role cannot stand in for an improvement in the governance and institutional design of EMU.

### 3 The way forward in resolving the shortcomings of the euro area

To tackle the problems at the root of the crisis affecting the euro area, the member countries must pursue decisive and convincing measures. Governments have to accept that, in a monetary union, domestic policies must be unequivocally geared to increasing the adjustment capacity of their economies, raising productivity and ensuring macroeconomic stability. That requires headway in the consolidation of public finances and undertaking reforms that raise the potential growth and competitiveness of the member economies and provide, at the same time, the necessary flexibility within a monetary union to make good the lack of certain traditional stabilisation instruments, such as the interest rate, the exchange rate and also fiscal discretionality.

But that is not enough. Also needed are resolute area-wide measures. The realisation that the initial design of the monetary union was not sufficiently sound has made reform a vital prerequisite for restoring credibility in the continuity of the project.

The reform of governance began with the strengthening of economic policy surveillance instruments

Initially, the reform of the euro area's institutional architecture focused on strengthening budgetary policy surveillance mechanisms, extending the oversight perimeter subsequently to the macroeconomic imbalances (see Table 2.1). The reform of micro and macroprudential policies was also launched, to redress the flaws that had allowed an excessive build-up of risk in most euro area banking systems.

The Stability and Growth Pact was revised, introducing the Fiscal Compact and the new Macroeconomic Imbalances Procedure...

A far-reaching review of the Stability and Growth Pact was conducted, laying down new spending and debt-reduction rules along with a more extensive and harsher set of sanctioning mechanisms. Further, the European Commission was empowered to intervene in the design phase of national budgets (the two-pack rules). To improve the national anchoring

<sup>10</sup> For a comparison of the responses by the Federal Reserve, the Bank of England and the ECB to the financial crisis, see M. Lenza, H. Pill and L. Reichlin (2010), *Monetary Policy in Exceptional Times*, ECB Working Paper, 1253.

First phase of the reform (six-pack)	Strengthening of the Stability and Growth Pact. In addition to the cap of 3% of GDP for the deficit and the commitment to converge by at least 0.5 pp of GDP (in structural terms) towards the medium-term objective, the following are introduced: ceilings on spending growth, a rule for debt reduction (1/20 per annum) and more extensive sanctions that could be applied at an earlier phase of the procedure; reverse voting rules are also introduced, whereby the Commission's recommendations are considered to be approved unless the Council voices its disagreement within a specified period.
Other elements of the reform (two-pack)	Creation of the Macroeconomic Imbalances Procedure, for the prevention and correction of macroeconomic imbalances. Drawing on a set of indicators (Alert Mechanism), it will be determined which countries have or risk having excessive imbalances. These countries would be subject to an "in-depth analysis", which will conclude with recommendations. If these recommendations are not reiteratedly met, the procedure might conclude with the imposition of sanctions. European Commission Regulation that grants it power to issue an opinion on national budgets before these are approved in Parliament and which recommends establishing independent national fiscal councils. European Commission Regulation that introduces the enhanced monitoring procedure for countries that have applied for financial assistance or that evidence instabilities which may jeopardise the area's financial stability.
Other inter-governmental mechanisms	Treaty on Stability, Convergence and Governance. Under the so-called "Fiscal Compact" it is obligatory to transpose to national law, preferably to the Constitution, the commitment to a balanced budget throughout the cycle and to introduce an automatic correction mechanism for potential slippage. Euro-Plus Pact (inter-governmental agreement whereunder countries undertake to set specific reform commitments to increase tax harmonisation, competitiveness and financial restructuring).

SOURCE: Banco de España.

of fiscal policies, the Treaty on Stability, Coordination and Governance was introduced, an inter-governmental pact known as the Fiscal Compact, which makes it obligatory to transpose into national law, preferably the Constitution, the commitment to maintain a balanced budget throughout the cycle. And to prevent other-than-fiscal macroeconomic imbalances from emerging, the Macroeconomic Imbalances Procedure was set in place and the Euro Plus Agreement was signed, whereunder euro area governments undertake to set in place competitiveness-enhancing wage and structural reform policies.

... and a new area monitoring systemic financial risks was opened up: macroprudential policy

At a relatively early stage, the governments also agreed on the reform of the financial supervision framework in the European Union, with the creation of sectoral supervisory authorities and, more prominently, of the European Systemic Risk Board (ESRB), the new body entrusted with macroprudential supervision. The main aim of the ESRB is to examine the financial system as a whole, ensuring that the growing interrelatedness and complexity of operations does not result in systemic risks. The ESRB recommended that all Member States establish national macroprudential authorities, in accordance with a series of core principles. The Banco de España has created a high-level working group, with the participation of the Treasury, to draw up specific proposals in this respect.

Permanent financial assistance mechanisms for countries with market-access difficulties were also established

The development of these new surveillance mechanisms for domestic economic policies helped overcome the reluctance of some countries to set in place financial assistance mechanisms for the countries experiencing difficulties in raising financing on the markets. The tensions in reaching an agreement on how to channel the financial assistance to Greece highlighted the need for a permanent instrument, with defined rules of conduct providing for diligent action so as to avoid contagion to other economies. But the fear that this instrument might weaken the incentives to pursue more disciplined policies meant that the starting point was a minimum-based initial approach, which had to be rectified as the successive waves of financial tensions highlighted the need for much more powerful firewalls that would be flexible

	Short term (next 18 months)	Medium term (18 months-5 years)	Long term (over 5 years)
Banking union	Single supervisory mechanism and single resolution mechanism		Full banking union in which, in keeping with initial proposals, there is scope for a common deposit guarantee fund
Fiscal union		Fiscal capacity to soften asymmetrical shocks. Debt Redemption Fund. Pooled short-term debt issues (eurobills). European Treasury.	Full fiscal union, with the creation of a European Budget and the introduction of eurobonds
Economic union	Full implementation of the European Semester, of the six-pack and rapid agreement on the two-pack. Creation of a convergence and competitiveness instrument (contractual reform commitments)	Greater coordination of employment and tax policies	Greater coordination of economic policies
Political union	Greater democratic legitimacy will be sought throughout the process, enhancing accountability to the European Parliament		

SOURCE: Banco de España.

enough to tackle the specific obstacles of each situation. Following the reform of the Treaty on the functioning of the EU, the ESM – a permanent institution designed to channel financial assistance to the euro area countries that require it, subject to strict conditionality – commenced operating on 27 September 2012. The ESM will be fully operational from summer this year.

But these instruments were not sufficiently powerful to short-circuit the spirals of instability to which the euro area continued to be vulnerable

The tensions experienced during 2012 reveal that strengthening the surveillance mechanisms was, while necessary, in itself insufficient. The challenges for the integrity of the euro area do not arise only from the inflexibility of labour and product markets, the dispersion of financial regulation and supervision and the absence of fiscal discipline. Events last summer highlighted the fact that, in an imperfect monetary union, the member countries are vulnerable to self-fulfilling prophecies which may ultimately convert an economy's liquidity problems into a confidence crisis that spreads rapidly to other countries in the area and which may jeopardise the very viability of the project.<sup>11</sup>

A move towards greater fiscal, economic and financial integration became necessary

The rise in 2012 of so-called “redenomination risk”, associated with the possibility of the single currency breaking apart, made a qualitative leap in the reform of governance necessary. In late June 2012, the Euro Area Heads of State and Government added a new dimension to the process and agreed to move towards a new Union envisaging the transfer within the area of a large share of credit institution-supervision and bank crisis-management responsibilities (banking union); a system of incentives to promote structural reforms and greater policy coordination (economic union); sufficient fiscal capacity to help withstand shocks more of a domestic nature and to prevent them from spreading to the other countries (fiscal union); and mechanisms ensuring the democratic legitimacy of the entire process (political union).

Despite the strong interdependence and synergies between these four pillars, the process will evolve in different phases (see Table 2.2), although there is still much uncertainty about

<sup>11</sup> P. de Grauwe (2011), *The governance of a fragile Eurozone*, University of Louvain and CEPS.

the scope of the proposals in several of these areas, particularly concerning the initiatives that entail a degree of mutualisation of risks. Even so, discussions have been set under way along with reflection about the architecture needed for the long-term stability of the euro area, and a roadmap has been laid down to move towards this new model.

In parallel, the absorption of the imbalances built up in the past must be tackled in the short term

While the design of this roadmap has allowed governments to reinforce their commitment to the continuity of the European project, it should not be forgotten that, in the short term, resolving the crisis also requires specific measures that help correct the imbalances that have led to it (legacy issues), alleviate adjustment costs and allow a growth path to be promptly resumed.

### 3.1 BANKING UNION

Financial integration in a monetary union requires greater co-responsibility in supervision and in bank resolution...

At the height of the crisis, the vulnerability that arises from the coexistence of a single monetary policy with financial systems in which the ultimate responsibility for the supervision and resolution of banks falls on national governments became evident. In the analytical literature, this phenomenon is called a “financial trilemma”, under which maintaining the autonomy of national financial policies in the presence of a supranationally integrated financial system will ultimately generate instabilities that may degenerate into serious banking crises.<sup>12</sup>

... in order to prevent systemic risks and the feedback loop between sovereign and banking risk

The capacity of national governments to ensure financial stability within a monetary union is limited by the possibility of a perverse feedback dynamic arising between banking and sovereign risk. The capacity of financial supervision exercised at the national level is also limited when it comes to tackling the systemic consequences proper to an integrated financial area and the coordination difficulties that arise in the case of banks with strong cross-border links, which may prolong the process and increase restructuring or resolution costs, as occurred with certain European groups.

In June 2012 it was agreed to move towards a banking union

The foregoing developments have forged a growing consensus about the need to progressively transfer essential aspects of banking policy to the supranational level.<sup>13</sup> To this end, the European governments agreed in June 2012 to move towards establishing a banking union, capable of rebuilding confidence in the soundness of the banking system, eliminating the fragmentation of markets and restoring the monetary policy transmission channels. Under the initial agreement reached, this union would be based on three essential pillars: a single supervisory mechanism, a management and resolution mechanism for banks in crisis and, finally, a common deposit guarantee fund.

Priority was granted in December to setting up a single supervisor, comprising the ECB and the national supervisors

In the face of the serious instability experienced in the summer of 2012 and the political difficulties of pushing through the other two pillars of the banking union owing to their potential fiscal implications, progress has been brisker in establishing the single supervisory mechanism (SSM), which will foreseeably come into force during 2014. The SSM will comprise the national supervisory authorities and the ECB, which will be entrusted with directly supervising the biggest banks and those that have received European financial support. To avoid the conflict that may arise between the ECB’s monetary policy decisions and supervisory actions, functional barriers will be set in place within the institution; more specifically, through the creation of a new supervision board, whose decisions shall be considered as adopted provided that the Governing Council lodges no objection. The national supervisory authorities will, in any event, continue to play a significant role in the SSM, enabling their better knowledge of local markets to be harnessed.

<sup>12</sup> D. Schoenmaker (2009), *The Trilemma of Financial Stability*, working paper 1340395, SSRN.

<sup>13</sup> See T. Beck (ed.) (2012), *Banking union for Europe: risks and challenges*, VoxEU Book, and J. Pisani-Ferry, A. Sapir, N. Verón and G.B. Wolff (2012), *What kind of European banking union?*, Bruegel Policy Contribution 2012/12.



The common management and resolution mechanism for banks in crisis will entail sharing sovereignty in exchange for a greater mutualisation of risks

Achieving a genuine banking union involves not only centralising responsibility for the prudential supervision of banks, but also setting in place an integrated restructuring and resolution mechanism for ailing banks, with sufficient fiscal capacity to isolate outbreaks of instability when prevention is not enough and banking crises arise.<sup>14</sup> Only with this supranational approach can problems be addressed with the necessary speed, preventing the difficulties that may arise in certain banks from distorting the public finances of the States where they are located and from projecting mistrust about the entire financial system.

The proposals based on a greater coordination among the national authorities responsible for resolution, even when they envisage pre-set rules for the distribution of costs in the case of cross-border banks, are not powerful enough to eliminate the link between banking risk and sovereign risk.<sup>15</sup> Mindful of this, a compromise was reached at the December 2012 Summit of euro area Heads of State and Government to move ahead in the design of a new instrument during 2013, on the basis of a proposal to be drawn up by the European Commission. Evidently, a mechanism of these characteristics involves pooling decisions with fiscal and political implications. But setting in place an incomplete banking union would have harmful effects for financial stability, as it would not only not eliminate the destabilising link between sovereign and banking risk, but it would also prompt strong institutional tensions between the supranational body that decides which banks may or may not be viable and the States that would have to individually tackle their restructuring or resolution.

To minimise the risk of weakening the incentives to maintain prudent bank practices in the new setting of greater risk mutualisation, a clear regulatory framework is necessary. This will guarantee that any euro area bank is resolved following uniform criteria, which ensure that shareholders and private investors share losses and under the premise that any support will be recouped or indeed pre-financed by the private financial sector itself.<sup>16</sup>

Setting in place an integrated deposit guarantee scheme will also be tackled later

The third pillar of the complete future banking union is the creation of a common deposit guarantee scheme, on which consensus has not yet been forged. Currently, various guarantee funds exist alongside one another in the euro area countries, and they are not perfectly harmonised, especially as regards how they are funded. The implicit support of the national Treasury should the accumulated funds prove insufficient in the event of systemic-like crises explains why this element is a significant link in the chain existing at present between sovereign risk and banking risk.

While the European directives under way will entail a greater harmonisation of these arrangements, the estimates available on the costs of bank crises highlight the limitations a national fund may display in checking processes involving losses in confidence that may result in a massive withdrawal of deposits.<sup>17</sup> Some proposals suggest establishing lending arrangements between the respective national firms, which would increase intervention power, although this might not be enough if the lack of confidence spread to a large number of countries. Another possibility is to create a supranational guarantee fund, which would exist alongside the current national funds and would only act when the fund of the country concerned had exhausted its resources.

14 See, for example, D. Gross and D. Schoenmaker (2012), *A European Deposit Insurance and Resolution Fund*, CEPS working paper no. 364.

15 C. Goodhart and D. Schoenmaker (2009), "Fiscal Burden Sharing in Cross-Border Banking Crises", *International Journal of Central Banking*.

16 J. Pisani-Ferry and M. Wolf (2012), *The fiscal implications of a banking union*, Bruegel Policy Contribution 2012/06.

17 L. Laeven and F. Valencia (2012), *Systemic Banking Database: an update*, working paper 12/163, International Monetary Fund.

### 3.2 ECONOMIC UNION

The proper functioning of the euro area requires countries to set in place measures to prevent imbalances emerging and to increase the effectiveness of the adjustment mechanisms

The future European Convergence and Competitiveness Mechanism introduces contractual reform commitments with financial incentives...

... to which the Community-designed and managed convergence instruments should be added...

... along with the full implementation of the Services Directive and tax harmonisation

### 3.3 FISCAL UNION

The need for a European budget arouses much controversy

The design of the Macroeconomic Imbalances Procedure responds to the need for early detection of imbalances that may jeopardise the stability of the euro area. Acknowledging that euro area members are not free from the risk of a balance of payments crisis<sup>18</sup> advises the adoption of more proactive mechanisms that prevent imbalances emerging and bolster the channels that allow for their adjustment. The Euro 2020 Strategy and its forerunner, the Lisbon Agenda, have not so far managed to drive the reform processes that would have allowed the current shocks to be tackled with greater flexibility.

The euro area Heads of State and Government agreed to create the so-called "European Convergence and Competitiveness Mechanism", whose main objective is to drive economic reforms through entering into contractual commitments with financial incentives. What is involved here, in any event, is a complex instrument that ultimately resides on a contract between international and national institutions.

Alternatively or additionally, programmes funded exclusively by Community bodies could be developed and offered to member countries under the principle that such instruments would be available provided any institutional constraints that might detract from their effectiveness were eliminated. The re-routing of structural funds might be permitted, along with new contributions by the member countries to that end. Initiatives could focus on improving the working of labour markets which, as has been manifest throughout the crisis, crucially determine each country's response in the face of a shock.

There is also a need for more resolute progress towards eliminating the barriers still hampering trade and the international provision of services, and towards greater tax harmonisation to prevent distortions to business competition.

As a complement to reinforcing national fiscal policy coordination and oversight instruments, extending the capacity of the European budget to act as a stabiliser would help soften the economic impact of asymmetrical shocks. However, extending the size and functions of the European budget is a heavily controversial subject.

Firstly, there is no consensus on the ability of potential supranational fiscal stabilisers to absorb the impact of specific asymmetrical shocks across the euro area countries. Although some empirical research points to the significance of this type of asymmetry as an explanatory factor of cyclical differences within the euro area<sup>19</sup>, it is not clear whether this instrument is suitable when divergences reflect differentiated responses to a common shock, as a consequence of national particularities whose origins lie, for example, in the poor functioning of the labour market.

Further, there is evidence that, in the United States and in other federal countries, it is financial channels which soften a large portion of asymmetrical shocks, while the cushioning role of fiscal transfers is less substantial, although significant.<sup>20</sup> But it is not clear that the experience of these federations can be extrapolated to the euro area. The crisis has

18 S. Merler and J. Pisani-Ferry (2001), *Sudden stops in the euro area*, Bruegel Policy Contribution 2012/06.

19 A. Belke and D. Gross (1999), "Asymmetric shocks and EMU. Is there a need for a Stability Fund?", *Intereconomics*, 1998.

20 P. Asdrubali, B. E. Sorensen and O. Yosha (1996), "Channels of interstate risk sharing: United States (1963-1990)", *The Quarterly Journal of Economics*, November, pp. 1081-1111. M. Hoffmann and B. E. Sorensen (2012), "Don't expect too much from EZ fiscal union – and complete the unfinished integration of European capital markets!", *VoxEE*, November.

shown that the euro area is highly vulnerable to losses of confidence that can ultimately lead to the redeployment of foreign capital and the fragmentation of financial markets which, far from dampening the shocks, may exacerbate them. Progress towards a banking union will help mitigate the risks of fragmentation; but even so, the distribution of financial assets in Europe shows a greater national bias than in other federal states, without there being any evidence quantifying the factors explaining this.

The European budget, in any event, would not extend the income redistribution functions envisaged under the current framework and it would be smaller than that of other federations

The size of the common European budget might, in any event, be smaller than that of other federations, since it would not perform income redistribution functions other than those currently envisaged under the framework of convergence-promoting policies, and it would confine itself to stabilising or structural reform-boosting functions (in the case of the competitiveness and convergence mechanism, for instance). Nonetheless, some more ambitious proposals call also for greater capacity to face severe recessions affecting the euro area as a whole and to preserve financial stability, albeit while constantly maintaining financial equilibrium over the cycle to prevent permanent income transfers (see Box 2.2).<sup>21</sup>

The distribution of funds might be linked to unemployment or to the output gap

To exercise this stabilising function, various options have been considered.<sup>22</sup> These include most notably establishing an unemployment insurance tranche funded by the European budget or by a system of payments linked to changes in the output gap. Financing could be through direct government contributions or with funds from specific taxes.

A fiscal union could be completed with the joint issuance of debt

A more advanced step in the fiscal union realm is the joint issuance of some type of pooled debt that helps mitigate the vulnerability of individual issues to losses of confidence such as those experienced during the crisis. In this respect, the possibility of the joint issuance of short-term debt instruments (Treasury bills), in a limited fashion and subject to strict conditionality<sup>23</sup>, has been envisaged. Over a longer term, the European Commission and Council have considered introducing eurobonds, although this initiative has met strong rejection in some countries owing to its potential risk of weakening the incentives to pursue disciplined fiscal policies. Accordingly, alternatives have been offered which seek to introduce additional disciplining elements [Delpla et al. (2010), Euronomics Group (2011)] that complement the framework of rules derived from the recent reform of governance.<sup>24</sup>

#### 3.4 THE NEED TO ABSORB THE IMBALANCES THAT HAVE BUILT UP

International cooperation is vital to address the resolution of legacy problems...

Along with further progress towards greater economic, fiscal and financial integration, a high degree of corporation is also needed in the short term to eliminate the accumulated imbalances and to design strategies that provide for the restoring of confidence and economic growth to smooth the transition towards the new euro area model.

... firstly, providing for fiscal consolidation in the countries with bigger public finances imbalances...

In the fiscal arena, progress in the consolidation of public finances is proving notable in most countries. But the difficulties in reducing debt to more moderate levels, against a background of high sovereign debt funding costs and of sluggish economic growth, are evident. In this respect, proposals have been tabled, such as that originally made by the German Council of Economic Experts for the creation of a debt repayment fund, which

21 G.B. Wolff (2012), *A budget for Europe's monetary union*, Bruegel Policy Contribution 2012/22.

22 J. Pisani-Ferry, E. Vihriala and G.B. Wolff (2013), *Options for a Euro Area fiscal capacity*, Bruegel Policy Contribution 2013/1.

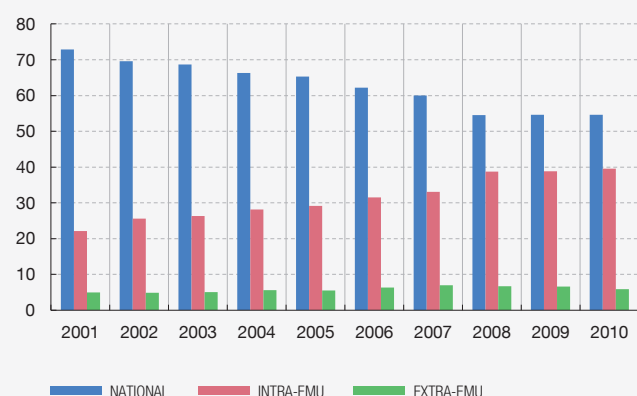
23 Based on an original idea by C. Hellwig and T. Philippon (2011), "Eurobills, not Eurobonds", *VoxEU*, who propose a limit of 10% of GDP for all countries.

24 See J. Delpla and J. von Weizsacker (2010), *The Blue Bond Proposal*, Bruegel Policy Brief 420, and Euronomics Group (2011), *European Safe Bonds(ESBies)*, *The Euronomic-group*.

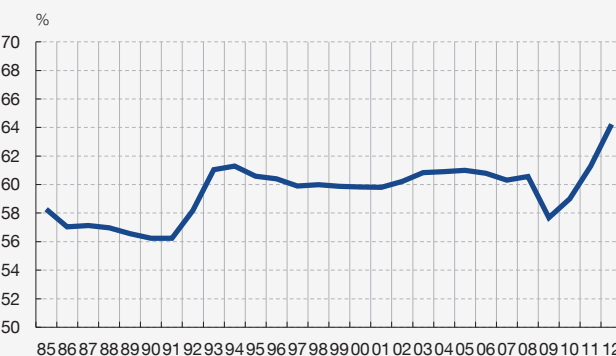
The literature on monetary unions indicates that the main channels for cushioning or sharing risk when a country in the union experiences an asymmetrical shock are migratory flows, fiscal transfers and financial markets. When a country (or region) is subject to a shock, the consequences can be reduced if part of its population emigrates to other regions. The shock can also be cushioned by

government intervention through fiscal transfers from the federal budget, as in the case of the United States (fiscal channel). Furthermore, the fall in GDP does not necessarily have to feed through in full to residents' income if capital ownership is diversified so that part of the productive capital of that economy is owned by non-residents while, at the same time, residents obtain income from

1 NATIONAL BIAS IN EQUITY ISSUES (a)



2 UNSHARED RISK (b)



3 RISK-SHARING MECHANISMS (c)

	EMU estimates			EC-8 (d)	United States (e)	Canada (f)	Germany (g)
	1970-2012	1999-2007	1999-2012	1966-1990	1963-1990	1961-2006	1995-2006
Capital markets	-0.03 (-1.76)	0.03 (0.29)	-0.09 (-0.97)	0.00 (1.00)	0.39 (3.00)	0.26 (7.15)	0.51 (6.80)
Depreciation	-0.10 (-6.23)	0.00 (-0.20)	-0.13 (-3.38)	-0.04 (-2)	-- --	-- --	-- --
Transfers	0.01 (0.38)	-0.11 (-1.43)	0.09 (1.01)	0.00 (2.00)	0.13 (1.00)	0.26 (6.63)	0.11 (1.58)
Credit channel	0.47 (7.84)	0.54 (2.46)	0.49 (4.23)	0.46 (6.00)	0.23 (6.00)	0.18 (9.78)	0.18 (3.13)
Unshared risk	0.64 (9.70)	0.54 (6.06)	0.63 (5.74)	0.57 (6.00)	0.25 (6.00)	0.30 (4.07)	0.21 (3.01)

SOURCES: ECB, Banco de España and other.

a Percentage held by residents in the country, in the euro area and outside the euro area.

b Estimated according to the methodology of Asdrubali *et al.* (1996).

c t-ratios in brackets. The system estimated is:

$$(1) \Delta \text{GDP}_t - \Delta \text{GNP}_t = V_{1t} + \beta_1 \Delta \text{GDP}_t + \epsilon_{1t}$$

$$(2) \Delta \text{GNP}_t - \Delta \text{NNP}_t = V_{2t} + \beta_2 \Delta \text{GDP}_t + \epsilon_{2t}$$

$$(3) \Delta \text{NNP}_t - \Delta \text{NNI}_t = V_{3t} + \beta_3 \Delta \text{GDP}_t + \epsilon_{3t}$$

$$(4) \Delta \text{NNI}_t - \Delta C_t = V_{4t} + \beta_4 \Delta \text{GDP}_t + \epsilon_{4t}$$

$$(5) \Delta C_t = V_{5t} + \beta_5 \Delta \text{GDP}_t + \epsilon_{5t}$$

where GDP is gross domestic product, GNP is gross national product, NNP is net national product, NNI is net national income and C is total consumption. All the variables are expressed in logarithms and the coefficients  $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$  approximate the shared risk through capital markets, depreciation, fiscal transfers and credit markets, respectively. The coefficient  $\beta_5$  measures the unshared risk.

d B. E. Sørensen and O. Yosha (1998), "International risk sharing and European monetary unification", *Journal of International Economics*, 45, pp. 211-238.

e P. Asdrubali, B. E. Sørensen and O. Yosha, "Channels of interstate risk sharing: United States (1963-1990)", *The Quarterly Journal of Economics*, 111 (4), pp. 1081-1111.

f S. Basher, F. Bali and L. Rosmy (2009), *Channels of risk sharing among Canadian provinces: 1961-2006*.

g R. Heppel and J. von Hagen (2010), *Interstate risk sharing in Germany, 1970-2006*. University of Connecticut Working Paper 13.

other countries (regions) that are not affected by the shock — in this literature this channel is usually called “capital markets”. Finally, the households and firms of that economy can moderate their consumption by turning to the credit market (credit channel).

Several empirical papers have attempted to quantify the extent of risk-sharing which each of these channels can provide based on the experience of previously existing federal unions. The methodology usually employed is that proposed by Asdrubali et al. (1996),<sup>1</sup> which endeavours to quantify to what degree the variance in a State’s gross domestic product is reflected in the variance in that State’s total consumption.<sup>2</sup>

As can be seen in the accompanying table, the evidence available for the United States and other federal States indicates that a large share of the shocks are cushioned by capital markets (around 40%). Credit markets also play an important role as a risk diversification channel (buffering around 20% of the shocks), whereas the impact of fiscal transfers tends to be more moderate, below 20%, but economically significant. Approximately 20-30% of the magnitude of the shocks is not shared or diversified in those States.

In the case of the euro area countries, Sørensen and Yosha (1998) show that the credit channel has been the only way to cushion shocks between EU countries, although some more recent papers<sup>3</sup> suggest an increase in the strength of risk-sharing through the capital markets channel. A possible contributing factor here is that financial integration has reduced the national bias of business ownership as seen in Panel 1, which presents the percentage of equities issued by euro area residents and acquired by

national residents, residents of other euro area countries and those of third countries.

However, the strength of this channel is still comparatively very low. The accompanying table shows various estimates made for all the euro area countries with data available from 1970 to 2012 (first column in the table), from the onset of EMU to 2012 (second column) and to the year before the outbreak of the crisis (third column). The findings show, firstly, that compared with other federal States the percentage of risk that is not shared or mutualised (last line of the table) is much higher in the euro area, and that is due both to the absence of fiscal transfers and the lower strength of risk sharing through capital markets in the euro area. The justification of the latter may lie, on one hand, in the persisting greater national bias of investments compared with other monetary unions and, on the other, in the existence of a more asymmetrical distribution of ownership since only a few countries concentrate most of the cross-border investments (within the euro area itself)<sup>4</sup>. Secondly, the credit channel is the only buffer within EMU, which confirms the previous evidence obtained by Sørensen and Yosha (1998). However, the strength of this channel seems to have waned during the crisis years. As seen in Panel 2 and in the accompanying table, the estimated regressions seem to indicate an increase of the amount of “unshared” risk during the crisis years.

Several authors underline how, in the case of the United States, the banking crises of certain States were handled and resolved more swiftly and with lower losses by a federal institution, the FDIC (Federal Deposit Insurance Corporation) without jeopardising the stability of the whole.<sup>5</sup> By contrast, in EMU the absence of a banking union with crisis management institutions that have sufficient fiscal backing left it exposed to the loss of confidence that ultimately fragmented financial markets with the result that they decreased their shock stabilising role.

In conclusion, EMU does not have the adjustment channels existing in other unions of federal States and its main channel, the credit one, may lose strength when there is a loss of confidence such as that experienced during the current crisis. The development of a full banking union with crisis management instruments that avoid the fragmentation of financial markets, is pivotal for the stability of the European project. Also, to supplement this, it would be appropriate to increase the strength of the fiscal channel which is currently non-existent, by designing a European budget for stabilising purposes.

1 P. Asdrubali, B. Sørensen and O. Yosha (1996), “Channels of interstate risk sharing: United States (1963-1990)”, *The Quarterly Journal of Economics*, November, pp. 1081-1111.

2 In order to quantify the stabilising effect of these channels a regression analysis is used between GDP and GNP (GDP less income from labour and net investment from the rest of the world), income available for consumption before and after taxes and total consumption, plus the depreciation of an economy’s assets in order to take into account the difference existing in national accounts between gross and net domestic product. Although this analysis does not permit consideration of the possible stabilising effect of migratory flows (beyond the effects which may arise from migrants’ remittances), in the specific case of EMU this channel was not relevant.

3 B. E. Sørensen and O. Yosha (1998), “International risk sharing and European monetary unification”, *Journal of International Economics*, 45, pp. 211-238. D. Giannone and L. Reichlin (2006), *Trends and cycles in the euro area*, ECB Working Paper 595. Y. Demyanyk, C. Østergaard and B. E. Sørensen (2008), *Risk sharing and portfolio allocation in EMU*, European Economy Policy Paper 334. For an analysis of the risk mutualisation mechanisms across Spanish regions, see E. Alberola and P. Asdrubali (1997), *How do countries smooth regional disturbances? Risk sharing in Spain: 1973-1993*, Documentos de Trabajo, No. 9724, Banco de España.

4 H. Zemanek (2010), *Asymmetric International risk sharing in the Euro Area*, Institute for Economic Policy, Germany.

5 D. Gross (2012), “Banking Union: If Ireland were Nevada”, VoxEU, and M. Hoffmann and B. E. Sørensen (2012), “Don’t expect too much from EZ fiscal union – and complete the unfinished integration of European capital markets!”, VoxEU.

merit in-depth analysis.<sup>25</sup> This specific proposal involves the creation of a fund (European Redemption Fund) of limited duration and amount, which during its early years of operation would progressively assume the debt maturities of each country that exceed 60% of GDP, refinancing them through pooled issues (which would bear notably lower interest rates than those most countries currently face). In exchange, strict conditionality would be demanded, in the form of specific commitment to fiscal consolidation and structural reform. In the following years, the fund would progressively redeem its debt issues, by means of the contributions previously made by each country.

... the direct recapitalisation of European banks...

The underlying problems in the banking system hampering the normalisation of financial conditions must also be addressed. The possibility that the ESM may directly recapitalise ailing banks, acting as a bridge towards the future management and resolution mechanism, would contribute to restoring confidence in the banking system, facilitating the return to funding markets that must be faced by countries that have received financial support.

... and, in short, eliminating any type of drag on growth...

It will in any event be necessary to apply growth-promoting policies that enable the high levels of unemployment built up during the crisis to be reabsorbed. Initiatives such as the Pact for Growth that have been pursued to date have proven clearly insufficient. The correction of competitive mismatches would also be made easier by measures that were to re-balance aggregate demand within the euro area, with bigger increases in domestic demand in those countries running current-account surpluses and a healthier international external position, and bigger increases in external demand in the others.

... in an environment based on transparency and accountability

Progress towards a more complete union will have to be made at what is a complicated time for the European project, with surveys revealing a growing lack of confidence among citizens. Accordingly, the process will have to be accompanied by transparency and the setting in place of accountability mechanisms at the appropriate level so as to allow citizens' confidence in the euro to be restored.

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<sup>25</sup> *The European Redemption Pact: An illustrative guide*, German Council of Economic Experts, and C. M. Schmidt and B. Weigert (2013), *Weathering the crisis and beyond: Perspectives for the euro area*, CEPR Working Paper 9414.