

## Chapter 3

# The Consequences of Crisis for the European Banking System

*Emilio Ontiveros*

### Introduction

From the outset, a crisis initiated outside of Europe revealed the enormous limitations of the European Monetary Union. The inability of European authorities and institutions to manage the crisis, at least as quickly and pragmatically as it was managed in the US financial system where it originated, exacerbated its effects.

The crisis in the eurozone was essentially of a banking nature. The trigger was the 'American contagion', the extent of the lack of confidence in banking assets. Especially affected were banks with substantial real estate assets. In the beginning, the crisis was not just a crisis of public finances. The initial conduits of contagion were the interbank markets. The initial manifestation was a 'credit crunch'. The bank wholesale funding markets were blocked, especially for those banks belonging to the periphery of the currency area. Lending to small and medium enterprises (SMEs), those more dependent on bank financing, dried up. Financial fragmentation was dominant in the eurozone, questioning one of the basic principles of any monetary union. The regions with the most banking-oriented financial systems would suffer the impact of a foreign crisis more severely than the epicentre.

The combination of these banking problems with subsequent tensions in government bond markets, especially in the weakest peripheral economies, fuelled a 'diabolical loop' with serious consequences, to the point of questioning the viability of the currency area, or at least the capacity of the smaller economies to stay in it. The solutions rested on extensive rescue packages that weakened the financial position of the treasuries involved, and a radical change in the ECB's monetary policy from the

### THE CONSEQUENCES OF CRISIS FOR THE EUROPEAN BANKING SYSTEM

summer of 2012. This did not prevent the crisis from spreading, with slowing economic growth in the monetary area, large increases in unemployment and widening inequality in income distribution.

The implementation of inadequate macroeconomic policies, especially those centred on severe and highly pro-cyclical fiscal austerity, did nothing but exacerbate actual economic deterioration and hamper financial restructuring. Interbank activity contracted, while defining the road to the Banking Union intensified pressures towards concentration inside the peripheral banking systems (Berges and Ontiveros 2014).

The result, nine years after the emergence of the crisis, is a European banking system that has not been able to reignite finance to SMEs, while some doubts still persist on the soundness and financial stability of some European banking systems.

Regarding SME finance, it is true that the horizon of 'Capital Market Union' by President Juncker tries to mitigate this overdependence on bank financing instruments and institutionally diversified financial systems in Europe, though it will not be easy to realize such a purpose in the short term. In terms of banking soundness, the eurozone will continue to be vulnerable to episodes of instability in some banking systems, prolonging the crisis convalescence. Recent developments at banks in some countries (Italy, Portugal or even Germany) are a reminder that such a convalescence is here, and will not be over soon.

### The financial system before the crisis

The severity of the financial crisis in the eurozone, as well as the vicious circle that developed in the sovereign debt markets, can be mostly attributed to the institutional structure of the financial system.

Traditional literature on banking systems distinguishes between financial systems highly biased towards the banking channel (*banking-oriented*) as a mechanism for financing the economy, compared to systems more biased towards directly channelling funds through capital markets (*market-oriented*). The eurozone financial system is a clear example of the banking-oriented model, in contrast to the US, as the paradigm of a market-oriented financial system. Total banking assets in the eurozone amount to three times GDP, while in the US the ratio is less than one. In the European currency area, banks provide more than 70 per cent of external financing to businesses, while capital markets supplied the remaining third. In the US, however, those proportions are reversed (Berges and Ontiveros 2014).

More indicators are not needed to illustrate the differential importance

of the size of banking systems in the eurozone and understand the significance that banking crises have for the real economy or simply the difficulties of this sector to perform the tasks of financial intermediation, essential in any economy.

Besides that, the overall European banking system was overleveraged (or undercapitalized), and the overall equity was unable to absorb the shock brought about by the 2007 crisis. It is striking to note that not only the periphery banks have a low capital or equity ratio (capital plus reserves). Prior to the sovereign debt crisis, the banks in the South and in the North of the eurozone had very similar equity ratios (as a percentage of assets). This fact has been illustrated in De Grauwe and Ji (2013) to show the incentive for banks to issue debt instead of equity, especially for banks from countries with low public debt and good credit rating. Indeed, when the sovereign debt crisis emerged and fragmentation appeared in the bond market, the difference in equity was against the banks from the North. In 2012, De Grauwe and Ji (2013) show that banks in the northern eurozone have capital ratios that are, on average, less than half of the capital ratios of banks in the eurozone's periphery. The reason: 'northern eurozone banks profit from the financial solidity of their governments and follow business strategies aimed at issuing to much subsidised debt' (p. 1). This reflects the 'too big to fail' syndrome, according to Admati and Hellwing (2013), the main proponents of higher capital ratios at banks. As De Grauwe and Ji (2013) expressed, 'Large banks profit from an implicit guarantee from their governments that will not allow these institutions to fail. As a result of this guarantee, banks can issue . . . cheap debt . . . to avoid issuing equity that does not profit from government guarantees' (p. 2).

The evolution of financial systems during the crisis has not been homogeneous. When measured as assets relative to GDP, the banking system contracted slightly between 2008 and 2014 in two of the larger economies, Germany and Spain, as is reflected in figure 3.1. It remained broadly unchanged in Italy, while it increased in France and the Netherlands. The size of the financial industry over the same period contracted in Austria, Belgium, Cyprus and Ireland, while it tended to increase slightly in Greece, mainly due to a contraction in GDP. Over the period 2008–14, the share of the banking industry tended to decline across most countries. Only in Spain, Portugal and Greece did it remain broadly unchanged or increase slightly over the period, while it remained broadly unchanged in the rest of the smaller economies (see figure 3.2).

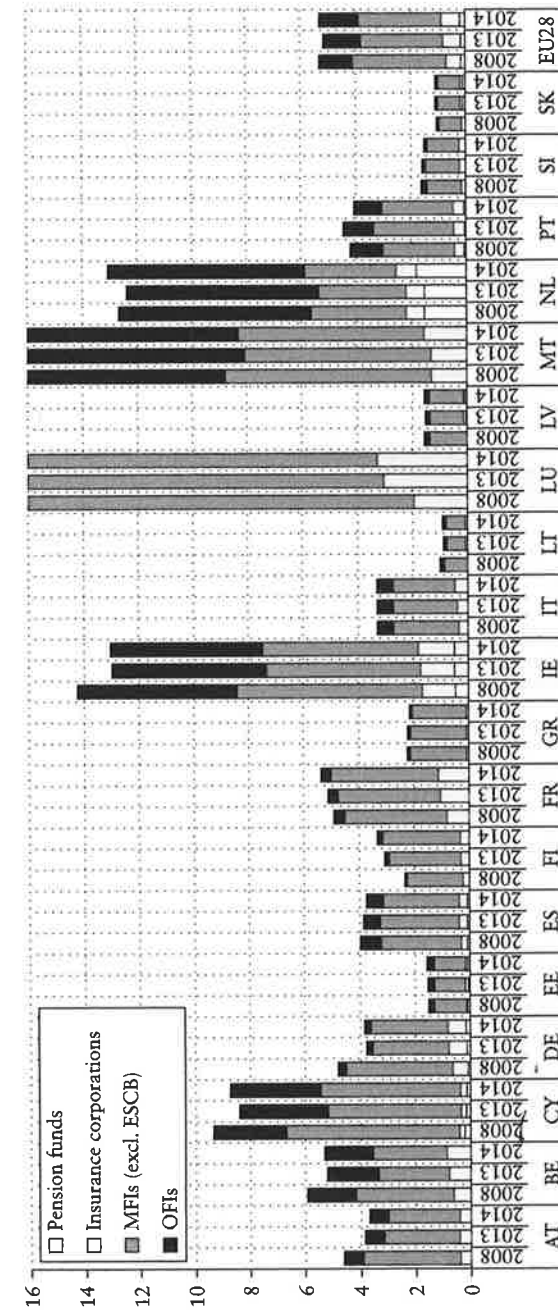


Figure 3.1: Size of the euro area financial sector, 2008, 2013 and 2014

Source: ECB, Report on financial structures, October 2015

### The context of the crisis

To understand the severity of the financial crisis in Europe, it is necessary to put it in the context of trends that developed in the previous decade. In the years preceding the crisis, the financial systems in the main developed economies had significantly grown in size and had become increasingly interconnected. The dynamic of financial innovation was very intensive, and the dominant assumption was that 'The Great Moderation' – the long period of macroeconomic stability in most advanced economies that began in the mid-1980s of the last century – would not end the adaptive orientation of monetary policies, translated into low interest rates and incentives for private debt. Banks also found sources of generation surplus by investing in long-term debt while relying on short-term finance, with the attendant problems of maturity transformation. There were significant financial incentives to innovation, as well as the creation of complex financial products. Financial integration progressed, not only within Europe but also with growing global projection. As a corollary to the above, risk-taking by banks, including systemic ones, sharply increased.

Supervisors were behind that dynamic, without enough control in many cases. It was largely the result of too much complacency about the ability of financial markets to stabilize without intervention. Even Alan Greenspan, the president of the Federal Reserve, admitted the desirability of self-regulation of financial operators. Now we have sufficient evidence about the inadequacies of regulations and policies to identify and calibrate the risks of such dynamics by the authorities in key financial systems. The supervisory institutions maintained a fundamentally domestic focus, while cross-border banking, integration and interdependence advanced.

Despite the fragmentation generated by the crisis, the interdependence between financial systems in the eurozone remains important, especially among the four big economies (Germany, France, Italy and Spain), reflecting largely the size of their banking systems. Some of the eurozone economies eventually became heavily dependent on external financing, defining a savings gap and consequently a deficit in the current account of the balance of payments. Much of that debt was inside the eurozone: in fact, the net financing position was balanced in the area as a whole.

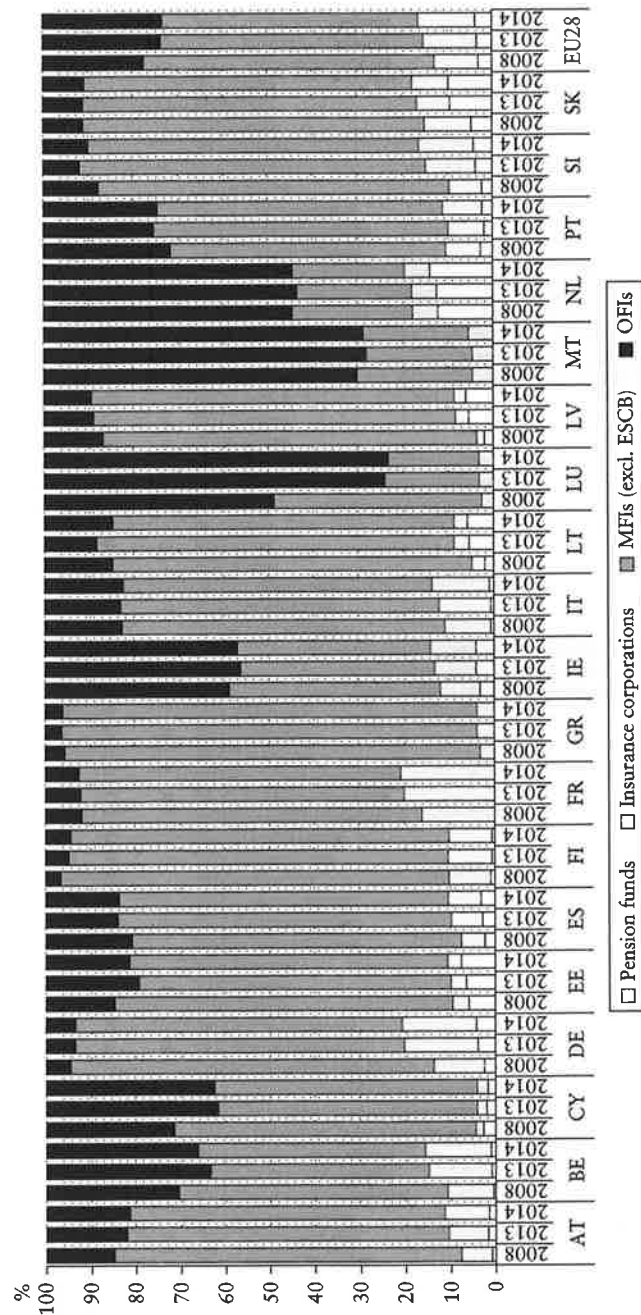


Figure 3.2: Composition of the euro area financial sector, 2008, 2013 and 2014

Source: ECB, Report on financial structures, October 2015

## The meaning of the crisis

### *Banks and sovereigns: a diabolic loop*

The emergence of the crisis also revealed the links between banking and risks of public debt, especially in the eurozone where the consequences for the real economy were more pronounced. For that reason, the impact of the recession was particularly adverse on public revenues and on public budgets deficits; in addition, many governments had to commit large amounts of public funds to support the banking system. In this context, the application of budgetary austerity measures deepened the recession; the loss of household wealth and unemployment were rising to unknown heights.

Until the summer of 2012, when the president of the ECB warned of his willingness to intervene in financial markets in order to reassure the integrity of the eurozone, interest rates on the public debt of Spain and Italy exceeded more than seven basis points than that of Germany – a situation not very much expressive of integration and, to a greater extent, of neglect about the attention to some public debt markets which, unlike what happened in the US or UK, assumed that European institutions were unwilling to defend the most vulnerable economies. The ECB had remained passive until that moment. The statement by Draghi – ‘I will do whatever it takes’ – to correct the financial markets, marked a turning point in the management of the crisis in the eurozone, at which point the ECB’s policies were close to those applied by the Federal Reserve and the Bank of England. They were actions no longer aimed at effectively managing the crisis, but to save the euro from collapse. Besides interest rate reductions, the ECB began to implement quantitative easing decisions, buying public and corporate debt.

### *Financial fragmentation*

A financial market is considered fully integrated when agents, regardless of their nationality or residence, have access to it on equal footing, a condition violated manifestly during the crisis. The ECB (2016) assumed a key role in strengthening financial integration. In their own words, ‘financial integration fosters a smooth and balanced transmission of monetary policy throughout the euro area. In addition, it is relevant for financial stability and is among the reasons behind the eurosystem’s task of promoting well-functioning payment systems’.<sup>1</sup>

<sup>1</sup> For further details of indicators and metrics about the financial integration of Europe, see Baele et al. (2004).

The global financial crisis was preceded by a long period of strong growth of cross-border financial transactions and high correlation in asset prices that could be considered expressive of an increase in the degree of financial integration. This took place in a context of underestimation of price and solvency risks as the proper extent of the crisis became apparent. Money markets, meanwhile, reached a high degree of integration thanks to the role played by the Trans-European Automated Real-time Gross Settlement Express Transfer System (TARGET). Also in the public debt market before the sovereign debt crisis, the bonds issued by different governments reached similar interest rates.

The financial fragmentation that developed in the eurozone, especially between 2007 and 2012, was the clearest symptom of crisis mismanagement, until the ECB decided to act. In 2012 the ECB warned that public debt markets were questioning the viability of the currency area and showed a willingness to act accordingly. The definition of the horizon of the Banking Union, in particular the allocation to the ECB’s monitoring mechanism, and the implementation of the OMT (Outright Monetary Transactions), avoided the worst outcomes that tempered the prices of Spanish and Italian bonds, and stock prices of banks. It was the implementation of this last policy that restored the financial stability in the area.

The crisis was a major setback in the dynamics of financial integration. Fragmentation was especially visible in the wholesale funding markets, where banks tried to raise finance from other financial institutions, and in the public debt market. A simultaneous process generalized the movement of ‘back to home’ in most financial institutions. The result was a new national compartmentalization of the financial activity of unknown dimensions long before the birth of the single currency; a result that seriously questioned integration in the monetary area.

As the ECB (2016) said, the re-integration trend that followed substantial financial fragmentation associated with the financial and sovereign debt crises between 2007 and 2011 took off when the European Banking Union and the European Central Bank’s OMT framework was announced in the summer of 2012. It continued when two important pillars of the banking union started to operate, the Single Supervisory Mechanism (SSM), which was assigned to the ECB in 2014, and the establishment of a Single Resolution Mechanism (SRM) in late 2015. Also, further measures from ECB monetary policy very much supported this trend. Figure 3.3 shows the overall development of euro area financial integration since the 1990s, as reflected in a price-based and quantity-based cross-market indicator of overall financial integration (called financial integration composites, or FINTECs).

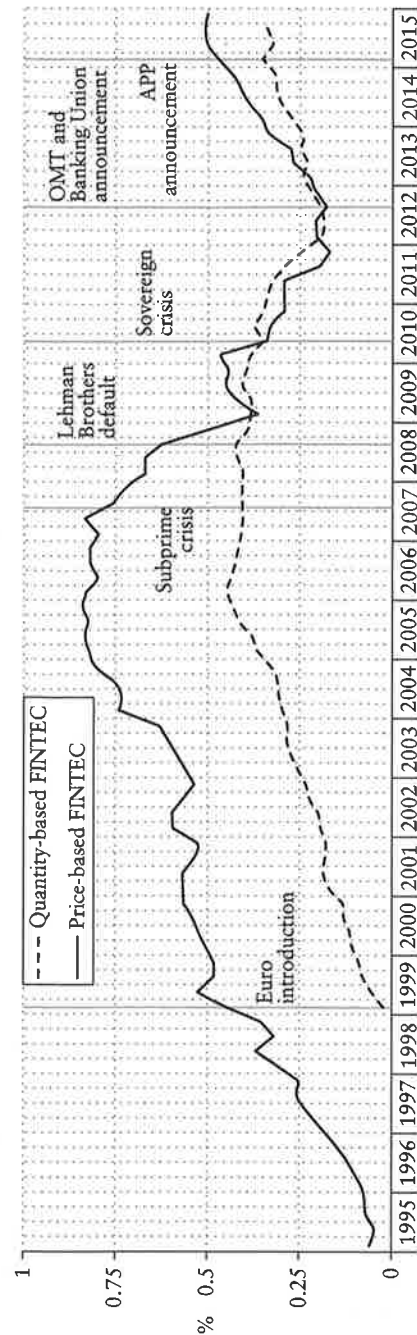


Figure 3.3: Price-based and quantity-based financial integration composites (FINTECs)

Source: ECB and ECB calculations.

## Reactions to the crisis

The crisis made a virtue of necessity and intensified the dynamics of integration in some areas. The most notable case was the acceleration of plans for the creation of the Banking Union. It has also acted as a leading factor to correct the excessive degree of banking in the continent and, consequently, the provision of a specific agenda for the creation of a Capital Markets Union (CMU).

### *Legacies of the crisis*

The legacy of the crisis, is, however, still visible in terms of structural deficiencies. Most importantly, the persistence of high non-performing loans (NPLs) underlines the need in several euro area countries to take further steps to tackle this problem in order to free up capital and boost bank credit expansion (ECB 2015). This helps to explain the cost-cutting efforts by euro area banks.

### *Virtue of necessity: the Banking Union*

The severe incidence of the crisis in some banking systems of the eurozone periphery accelerated plans to advance the realization of a more consistent financial architecture within the monetary union. It was in June 2012 when the main objective was defined: to break the link between sovereign debt and the banking system. The special virulence of the Spanish crisis was an important determinant of that decision, as was the role of the IMF who presented an integral view of the problems of the Spanish banking system. As Véron (2016) highlights, 'it was the first public authority to articulate a clear vision of the Banking Union as an essential policy response, building on its longstanding and pioneering support of banking policy integration in the European Union. EU institutions, including the ECB, did not generally have the skills, nor the experience and the mandate that would have enabled them to offset the national authorities' shortcomings. The IMF was thus in a position to make a major positive difference'.

From the foundations of a 'single rule book', the Banking Union defined a single monitoring and resolution mechanism of the banking crisis. The latter has been subject to the tensions that had been observed during the crisis, in particular the reluctance of the central economies, notably Germany. It is also the case with the third pillar, the European Deposit Insurance Scheme (EDIS), designed to mutualize resources in order to protect banking deposits in the eurozone.

The first pillar of the Banking Union is the Single Supervisory Mechanism (SSM), which transfers key supervisory tasks on banks in the euro area, and other participating Member States, to the ECB. In November 2014, bank supervision in the euro area was transferred from the national competent authorities (NCAs) to the SSM, comprising the ECB and the NCAs of the participating countries. The European Banking Authority (EBA) coordinated national supervisors and gave those powers to the ECB, while preserving its responsibility for the development of the 'single rule book'. Supervision in the Banking Union is performed under a dual scheme: directly by the ECB to the 'significant banks' (123 so far), and indirectly by the NCAs (under coordination with ECB) to the remaining banks (around 4,500).

The foundation of the Banking Union, although late, has been a breakthrough in the necessary strengthening of monetary union. Still, there are essential aspects pending fulfilment, such as a common fiscal backstop reinforcing the Single Resolution Fund, as well as a common EDIS. In the absence of such backstop, there is a risk that in a crisis, national authorities themselves would have to support banks established in their jurisdictions, leading to the re-emergence of the sovereign bank risk loop and financial fragmentation.

### *The Capital Market Union*

On 28 January 2015, the European Commission announced its project to create a Capital Markets Union (CMU) with a target horizon set at the end of 2019. European authorities are committed to achieving a basic objective of a sound economic policy: linking economic growth with channelling savings to productive uses. That should mean financial systems in which there are more financing and investment options, and better returns for investors and savers.

It is assumed that the best way to achieve this is the creation of a single capital market to enable further sharing of risks across borders, creating deeper and liquid markets and diversifying sources of financing of the economy. All of this should strengthen financial integration and enhance the growth and competitiveness in the medium term.

The CMU aims to create a single market for equity for all EU Member States (this is an important difference from the Banking Union in which only eurozone countries are participating, at least in the initial setting) by removing barriers to cross-border investment and lower costs of funding within the EU. The premise is that well-functioning capital markets will facilitate the mobilization of private financing, reducing the dependence on the banking sector.

For the purpose of serving a greater role in direct finance to companies, the European Commission and the ECB agree. Both are based on the diagnosis that the crisis has had a differential severity in the eurozone, and its management has been slower and more complex, precisely because of this lack of alternative channels to bank financing, from the bond markets, to the various forms of equity or various routes of asset securitization.

The contraction in bank credit was indeed the most explicit signal of the crisis in the eurozone. Its persistence and severity for several years after the crisis emerged, compared to the speed with which the US overcame it, can to a large extent be attributed to such a credit contraction. Business financial asphyxia, especially in SMEs, and prolonging low rates of economic growth and employment continue to contrast with the results observed in the US, the epicentre of the crisis.

A lower dependence of companies' finance on bank debt would help to better resist crisis episodes. But diversification of funding sources is also necessary for business development, to finance the birth of companies and the growth of those of smaller dimension. It is necessary for start-ups, with higher risks but also a greater chance of growth or productivity contribution, to find funding for their projects, even if this funding did not have banking origin. Likewise, a single capital market to remove any barriers to cross-border investment could result in lower financing costs for smaller companies.

Additionally, another basic aim of CMU is to facilitate financing to infrastructure projects that make up the other major objective of the Juncker Plan. To this end, the European Commission intends to ease some of the restrictions on investment in certain types of infrastructure in the regulation of insurance companies and pension funds.

Regulatory amendments are equally necessary to enable savers to have more options in mobilizing savings, specifically to increase the preference of individual investors for equity markets, also very low compared with the US. In fact, the proportion of individual investors in the EU among all shareholders is below half of what it was in the 1970s. The lack of confidence in those markets requires increasing transparency and harmonizes standards of accountability of listed companies.

Action may also be necessary in the taxation of the EU, harmonizing capital income or reducing disincentives associated with double taxation. Regulatory differences on insolvency proceedings are another area to homogenize. Last but not least, the development of capital markets requires macro prudential structures, both at the national and EU levels, that must be able to adequately react to episodes of instability in the capital markets.



In order to set up a clear and credible 'road map', the European Council defined to the Commission a series of short-term priorities among which are impulses to financing through venture capital funds, as well as supporting new modalities of 'crowd funding' and other alternative finance vehicles that can help support small and high growth businesses, all this while preserving the very necessary investor protection. In fact, the role of non-bank intermediaries is growing after the crisis, largely because of 'convalescence' and regulatory adaptation of commercial banks.

It will certainly take time before bank-based finance stops being dominant in Europe, especially for small businesses. However, that horizon of further development and integration of capital markets is a reference. It is obvious that the most favourable impact from major funding possibilities would take place in the less diversified financial systems. Now it would be beneficial if national authorities assume the intensification of issuer and investor education in the capital markets, the full knowledge of their rights and obligations.

### The resulting financial system

The economic and financial crisis in the eurozone has had important consequences. The horizon of 'secular stagnation' is no longer a hypothesis. The persistent underscoring of its inflation target has forced the ECB to maintain and even increase its expansionary monetary policy, with historically low interest rates that do not facilitate obtaining the profitability rates that commercial banks were used to. Along with this, regulatory pressures and a more demanding supervisory scrutiny add to the difficulties that banks face to extract value from a business that is also hurt by the low growth environment, as well as the persistence of large volumes of nonperforming assets.

Against this, the reactions of banking systems continue to advance towards concentration, the formation of institutions of higher than average size in order to generate sufficient economies of scale. Regardless of whether those decisions are sufficient, it is probably the case that the resulting banking map is not necessarily less prone to new crises, as systemic risk increases with concentration. Additionally, higher levels of concentration increase the market power of the new large banks, reducing the bargaining power of families and SMEs.

### Long convalescence

Eight years later, the whole eurozone banking system is far from normalizing its activity. Health remains weak in some national banking systems. The main legacy of the crisis in terms of non-performing loans (NPLs) remains important in virtually all countries. In the overall eurozone banking system there are more than €900 billion of NPLs, of which €360 billion are held by Italian banks.

The medium-term future does not favour stability in the banking sector, as is reflected in the equity markets with falls to levels well below the book value of many banks. Bank stocks have not recovered the huge losses they suffered during the crisis. The consequences of economic policies in the eurozone and the very low growth accompanied by deflationary fears play a very important role in explaining this. Low interest rates do not favour the traditional bank profitability, nor does the relatively low rate of financing activity in a context of very low growth and high unemployment in the eurozone, threatening banks not only in the periphery, as was the case in 2012, but also in some core economies.

The reaction to the expansionary monetary policy of the ECB presents many banks with a difficult problem: intermediation margins have narrowed significantly and the cost structure is difficult to decrease at a similar pace. That helps to explain the very adverse reaction of the German banking employers' association, which attacked the ECB's decisions, accusing the institution, as the German finance minister has declared, of 'confiscating' the savings of Germans.

In fact, the problem of the banks is that their total costs represent an important part of its revenue – close to 75% – a ratio that reveals the need to accommodate the cost structure in a business model where operating income is about half of what it used to be before the crisis.

German banks are those most penalized by the application of negative interest rates at the marginal deposit facility. The entirety of German banking represents more than one third of the excess deposits at the ECB, representing a cost of €780 million a year. That penalty for the maintenance of idle resources is a symptom of the contradictions that the German economy (and its authorities) is facing. The excess savings, systematic surplus in the current account, the reluctance to increase public investment, constitute a downward pressure on interest rates, and also present a problem for the normalization of economic activity in the eurozone. If the German authorities assumed the need for increased public investment, especially in infrastructure, it would help alleviate the problem of lack of profitable destinations and to facilitate the eurozone

exit from the current impasse. While austerity continues to prevail, the vulnerability of such banking-oriented and inefficient financial systems will continue to present problems that are no longer only local.

### Banking concentration

The financial crisis that erupted in 2008 has put additional pressure on banks to deleverage and consolidate, particularly in those countries that were more severely affected by the financial crisis. The number of credit institutions has been declining at a steady pace for the euro area and for the EU as a whole. This trend raises questions about the efficiency and the degree of financial inclusion, as well as doubts about the risk of incurring the problem of 'too big to fail', to avoid the taxpayers funding the costs of banking crises.

On a non-consolidated basis, the overall number of credit institutions in the euro area declined to 5,614 at the end of 2014 from 6,054 at the end of 2013. From a longer perspective, the net decrease over the period from 2008 to 2014 is 1,160 credit institutions (-17.1 per cent). The country that experienced the largest drop was France (-167), though strong declines were also recorded in Spain (-61), Cyprus (-44), Germany (-40) and Finland (-35). Taking a medium-term perspective, since the onset of the crisis, Greece, Cyprus and Spain have recorded the largest relative decrease, due to the restructuring and consolidation of the banking industries in the context of the crisis.

With data from ECB (2015), market concentration, as measured by the share of the total assets held by the five largest credit institutions or by the Herfindahl index, has broadly continued on an upward path at both the euro area and at EU level. This increase in market concentration primarily reflects the decline in the number of credit institutions, as is reflected in figures 3.4 and 3.5.

### Requirements for a stable financial system: adequate regulation and supervision

There is an absolute consensus about the financial nature of the crisis which began eight years ago: Europe is still convalescing. Avoiding similar episodes in the future requires taking the necessary actions to neutralize the destabilizing potential of the financial system. This requires at least two types of action, one analytical and another aimed at strengthening institutions and regulations within the EU.

### THE CONSEQUENCES OF CRISIS FOR THE EUROPEAN BANKING SYSTEM

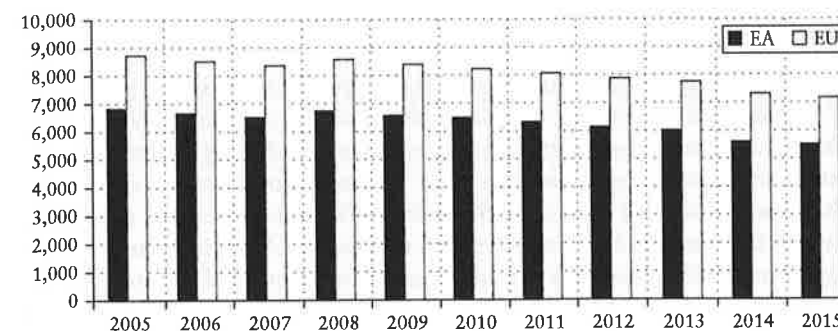


Figure 3.4: Number of credit institutions

Source: ECB MFI statistics

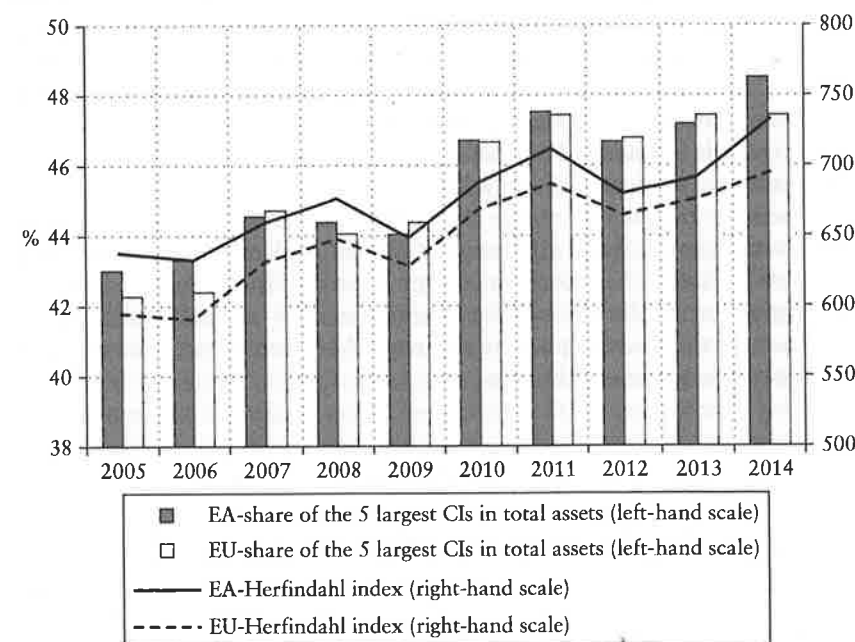


Figure 3.5: Market concentration

Source: EU Structural Financial Indicators.

Before the crisis, most standard macroeconomic models did not incorporate credit or banking instability. This made such models inappropriate for the analysis of financial crises and macroprudential policies. Many groups in the economics profession are now addressing this significant



shortcoming, and relearning the lessons from Hyman Minsky, and clearly conclude that financial markets must be subject to close regulation and to a more effective supervision than revealed during the crisis.

Reality has sufficiently demonstrated that the deregulatory trends or those based on self-regulation are pernicious in a highly integrated environment. A strict regulation on bank capital requirements, sufficient so that shareholders of banks are those who take major losses in the resolution of the crisis and not taxpayers, is necessary. Clear rules on risk management, on the necessary liquidity and transparency of all proceedings, must also be part of these regulatory requirements. No less important is that these regulations must be homogeneous internationally, especially in those financial systems with a high degree of global interconnection.

Initiatives to create a Banking Union and a Capital Markets Union, as recently defined, are necessary but require extensive specification to complete all its parts. Completing the Banking Union requires a European Deposit Insurance Scheme and a broader and faster extension of risk mutualization inside the monetary union: in the end, a common European Treasury. The Capital Markets Union has to establish a transition towards a financial system less banking oriented, while ensuring inclusion and defence of financial services consumers.

Given the undeniable reality that Europe will suffer additional financial crisis, having more rigorously analysed and effectively supervised financial systems has become a top priority. However, the financial strengthening of the EU will be incomplete until a true fiscal union is in place, as the most important and credible exponent of economic and monetary integration in Europe.

## References

- Admati, A. and Hellwig, M. (2013) *The Banker's New Clothes: What's wrong with Banking and What to Do about It*. Princeton, NJ: Princeton University Press.
- Baile, L., Annalisa Ferrando, A., Hördahl, P., Krylova, E. and Monnet, C. (2004) Measuring financial integration in the euro area. ECB Occasional Paper No. 14. Frankfurt am Main: ECB.
- Berges, A. and Ontiveros, E. (2014) Austerity and financial instability. In Bilbao-Ubillos, J. (ed.) *The Economic Crisis and Governance in the European Union: A Critical Assessment*. London: Routledge.
- De Grauwe, P. and Ji, Y. (2013) Strong governments, weak banks. CEPS Policy Brief, no. 305, November.
- ECB (2015) *Report on Financial Structures*. October.
- ECB (2016) *Financial Integration in Europe*. April.
- Véron, N. (2016) The IMF's role in the euro-area crisis: financial sector aspects. *Bruegel*, Policy Contribution Issue no. 13.

CASTELLS *et al.*

EUROPE'S CRISES

# EUROPE'S CRISES

edited by

MANUEL  
CASTELLS *et al.*

