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THE EUROPEAN BANKING UNION

A Critical Assessment

Angelo Baglioni



Palgrave Macmillan Studies in Banking and
Financial Institutions

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The European Banking Union

A Critical Assessment

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Palgrave Macmillan Studies in Banking and Financial Institutions
ISBN 978-1-137-56313-2 ISBN 978-1-137-56314-9 (eBook)
DOI 10.1057/978-1-137-56314-9

Library of Congress Control Number: 2016936404

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To Anna and Laura

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LIST OF ABBREVIATIONS

ABS	Asset-backed securities
AQR	Asset quality review
BIS	Bank of International Settlements
BRRD	Bank Recovery and Resolution Directive
CDS	Credit default swap
CET1	Common equity tier 1
CRD	Capital requirement directive
CRR	Capital requirement regulation
DGS	Deposit guarantee scheme
DRI	Direct refinancing instrument
EBA	European Banking Authority
ECB	European Central Bank
EDGS	European deposit guarantee scheme
EFSF	European Financial Stability Facility
EIOPA	European Insurance and Occupational Pensions Authority
ESM	European Stability Mechanism
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
EU	European Union
FDIC	Federal Deposit Insurance Corporation
GDP	Gross domestic product
G-SIIs	Global systemically important institutions
JST	Joint Supervisory Team
LCR	Liquidity coverage ratio
LSI	Less significant institution
LTRO (T-)	Long-term refinancing operations (targeted-)
MREL	Minimum requirement for own funds and eligible liabilities

NCA	National Competent Authority
NRA	National Resolution Authority
NSFR	Net stable funding ratio
O-SIIs	Other systemically important institutions
QE	Quantitative easing
RWAs	Risk-weighted assets
SIIs	Systemically important institutions
SRB	Single Resolution Board
SREP	Supervisory review and examination process
SRF	Single resolution fund
SRM	Single resolution mechanism
SSM	Single supervisory mechanism

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Introduction

1.1 THE EUROPEAN BANKING UNION: A WORK IN PROGRESS

When the historical decision leading to the banking union was taken at the European Council in June 2012, the declared reason was to “ensure that the supervision of banks in all EU member states is equally effective in reducing the probability of bank failures.”¹ One year later, while stressing that the completion of the banking union had become a priority among the policy objectives of European policymakers, the Council stated that “it is imperative to break the vicious circle between banks and sovereigns.”² At the origin of these statements, there are the large amounts of money spent by several European governments to bail out those banks involved in the financial crisis that started in 2007. In addition, the sovereign debt crisis, hitting the high-debt European countries since 2010, has shown that the exposure to the domestic public debt is an important source of instability for the banking sector. Therefore, it has become clear that the transfer of financial risks can go not only from banks to governments, but also the other way around, creating a two-way link between banks and sovereigns. Even more importantly, this link mainly works at the *national*

¹This statement is taken from “Towards a Genuine Economic and Monetary Union,” a report by the President of the European Council, June 2012. This report was presented at the June 2012 European Council.

²Conclusions of the June 2013 European Council.

level: on one side, governments provide financial support to their domestic banks; on the other side, the exposures of banks to the sovereign borrowers have generally a strong home bias.

The original project of a European banking union has three pillars:

- Single Supervisory Mechanism (SSM)
- Single Resolution Mechanism (SRM)
- Single European Deposit Guarantee Scheme (EDGS)

The first pillar transfers the responsibility of banking supervision from the national authorities to the European Central Bank (ECB); this is fully operational since November 2014. The second pillar includes a new set of rules governing the resolution of troubled banks (laid down in the Bank Recovery and Resolution Directive [BRRD]), and a new authority endowed with resolution powers (Single Resolution Board [SRB]), which is endowed with some financial resources pooled together across the euro area countries (Single Resolution Fund [SRF]). The new rules and the new resolution authority are in place as of January 2016; however, the SRF is going to be gradually built up through a transition period that will end in 2024. The third pillar is actually missing, since the Directive on deposit insurance approved in 2014 is still a harmonization device, and it does not introduce any common guarantee scheme across the euro area countries.

The emerging picture from the current state of play is a banking union that is still halfway. The transfer of prudential supervision to the ECB has been done, and a new set of rules to manage the banking crises have been introduced. To the contrary, the pooling of resources to support the resolution of stressed banks is still under way, and it will be very limited even at the end of the transition period, given the small size of the SRF and the lack of a common fiscal backstop behind it (apart from a limited role played by the European Stability Mechanism [ESM]). In addition, no common pool of money to repay the depositors of failed banks has been created so far.

The fact that the banking union is currently a project far from being completed derives from the political stance, prevailing in several European countries, which is adverse to any kind of cross-country risk-sharing arrangements. Thus the steps taken so far, in the implementation of the project, are those that should be able to reduce the probability of banking crises and limit their fiscal cost. The first goal has been assigned to the

ECB, which is expected to preserve the financial stability by implementing a uniform and high level of supervision in the euro area. The second goal has been pursued by introducing the “bail-in” principle into the EU legislation, which imposes that a relevant contribution to the resolution of a troubled bank comes from their shareholders and creditors, thus reducing the use of taxpayers’ money. To the contrary, those steps that imply a pooling of financial means, within the euro area, to tackle the banking crises are only at an initial stage.

The consequence of this state of play is that the two-way link between banks and sovereigns is bound to be in place for the foreseeable future. On one side, the costs deriving from a banking crisis will still fall within the national borders to a large extent: they will be paid by the stakeholders of a distressed bank and by the domestic government, providing the fiscal backstop (albeit within the limits of the state aid rules). On the other side, banks will presumably continue to hold large amounts of securities issued by their domestic governments.

1.2 WHY THIS BOOK?

This book has two objectives. First, it provides the reader a description of the European banking union. The introduction of the banking union into the European landscape has required the adoption of many and complex regulatory innovations, which I will try to describe in a simple and sufficiently accurate way at the same time. Of course, summarizing several legal texts, amounting to many hundreds of pages, in a rather short volume requires sacrificing many details. However, my main purpose is to provide an overview of the architecture of the banking union, together with the essential elements of the new regulatory framework. My focus is on the economic and organizational impact of the banking union; to the contrary, I do not have the skill to discuss the legal issues related to it (the interested reader will be referred to the relevant legal texts and literature).

The second objective is to provide a critical assessment of the state of play of the banking union. On the one hand, some official sources (e.g. ECB, EU Commission, EU Parliament) provide material where the essential information related to the banking union can be found. However, they always take an acritical and extremely positive view on the matter: they stress on all the achievements that have been made, without considering any of the drawbacks of the new institutional framework. On the other hand, some contributions by independent (mainly academic) scholars

provide some criticisms, but they are generally focused on specific issues and they are rather technical. I will try to fill this gap, trying to assess the positive results obtained so far as well as the main open issues related to the banking union.

In a nutshell, I acknowledge that the banking union is a major achievement within the process of European integration. Actually, it is the only relevant step forward in recent years, particularly in the aftermath of the financial crisis. In other areas, like the transition to a federal budget, the introduction of Eurobonds, and the strengthening of the European political institutions, the process of integration is lagging behind. However, we should not overlook the fact that the banking union is an incomplete project, for the reasons outlined above; moreover, several critical issues emerge when we carefully examine the way in which the project is being implemented. Just to mention a few of them: (1) the responsibility of the macro-prudential supervision has been left to the national authorities, which is not satisfactory given the cross-border dimension of systemic risk, (2) the stress test carried out by the ECB in 2014 has focused on the ratio between equity and risk-weighted assets (RWAs), while also leverage should be considered, (3) the application of the bail-in rule to the retail bank customers raises problems of transparency and instability, (4) the governance of the SRM seems too complex and prone to political interference.

1.3 PLAN OF THE WORK

I will start by examining the reasons behind the introduction of the European banking union. The second chapter will document the fiscal cost of the recent financial crisis, which has been the main driver inducing the policymakers to assign the ECB the task of implementing tough and uniform standards of supervision in the euro area. The above-mentioned two-way link between banks and sovereigns will emerge by looking at the market price of risk for the two sectors.

I will then describe the new architecture of banking supervision, going into the organizational details of the SSM (Chap. 3). Some controversial issues will be discussed, like the separation between prudential supervision and monetary policy, the balance of powers between the ECB and the national authorities, the discretionary approach based on the Supervisory Review and Evaluation Process (SREP), and the lack of a single authority responsible for the macro-prudential supervision.

The first important action taken by the ECB, as banking supervisor, has been the Comprehensive Assessment of 2014, where the 130 largest banks in the euro area have been examined through an Asset Quality Review (AQR) and a Stress Test. The main features of this exercise will be described in Chap. 4. The methodology used by the ECB has raised several criticisms; some of these controversies will be addressed here.

Then I will move to the second pillar of the banking union, namely the SRM (Chap. 5). Actually, I will first outline the main regulatory innovations introduced by the BRRD, affecting all the EU countries. I will then analyze the organization and funding sources of the SRM, concerning the euro area countries. Some crucial issues will be discussed here, like the bail-in principle, the governance of the SRM, and the role that should be played by the ESM as a fiscal backstop.

Finally, I will consider the missing pillar: a European Deposit Guarantee Scheme (EDGS). Actually, some progress has been recently made in the area of deposit insurance, thanks to the Directive approved in 2014. The main innovation is the requirement that the national guarantee schemes should be funded *ex ante* by collecting risk-based insurance premiums. However, that Directive is still aimed at harmonizing the national deposit guarantee schemes, rather than pointing to some integration among them. Looking forward, I will argue that the best way to proceed is not by creating a new European institution, responsible for deposit insurance, but rather by expanding the scope of the SRM, thus going toward an integrated resolution and deposit insurance agency (like the Federal Deposit Insurance Corporation [FDIC] in the USA).

Three Reasons for the European Banking Union

INTRODUCTION

Why did Europe decide to proceed toward the banking union? Three main reasons can be identified as follows:

- Reduce the fiscal cost of bank bailouts
- Break the two-way link between the financial risks in the bank and sovereign sectors
- Achieve a higher level of supervisory convergence

Some European governments have spent large amounts of money to bail out those banks involved in the financial crisis that started in 2007, thus putting the cost of stabilizing the financial sector on the shoulders of taxpayers. The sovereign debt crisis, hitting the high-debt European countries since 2010, made evident that the banking sector in some countries is vulnerable, due to its exposure to the domestic public debt. So the transfer of financial risks goes not only from banks to governments, but also the other way around, creating a vicious circle between banks and sovereigns. These arguments have been acknowledged by the policymakers, in particular in the meetings of the European Council in June 2012 and June 2013.

The expected cost faced by governments, related to the potential instability of the financial sector, can be reduced in two ways: first, by reducing the probability that some banks become financially distressed and

eventually insolvent, and second, by limiting the resources committed to the bailout of those institutions that are already in trouble. The first goal can be pursued by increasing the standard of prudential supervision: the transfer of supervisory powers from the national authorities to the ECB is aimed at achieving a high level of supervision in all the eurozone countries. The second goal requires a revision of the crisis management practices and bank resolution procedures. The competent authorities should be endowed with early intervention powers so that loan losses are readily recognized and recapitalization actions are taken. They should also have the legal tools enabling them to impose a significant share of the bailout costs to the private stakeholders (shareholders and some classes of creditors): this is the “bail-in” principle introduced in the EU legislation by the BRRD. Another essential element of the picture should be a European deposit insurance scheme: an effective deposit guarantee is crucial to support the confidence of depositors and avoid panic, which can result in bank distress. However, as we shall see, this third “pillar” of the banking union is still missing. The view that the quality of institutions, like supervisors, resolution authorities, and deposit guarantee schemes, can contribute to lower the fiscal cost of financial crises is supported by a number of empirical studies.¹

The transfer of prudential supervision to the ECB should not only ensure that high standards of supervision are implemented, but also limit the cross-country competitive distortions by minimizing the national biases in supervisory practices. In other words, the supervisory convergence in the euro area should in principle be enhanced.

On political grounds, it is interesting to note that the conclusions of the June 2013 European Council include the following statement: “in the transition towards the SSM (Single Supervisory Mechanism), a balance sheet assessment will be conducted, comprising an asset quality review (AQR) and subsequently a stress test. In this context, Member states taking part in the SSM will make all appropriate arrangements, including the establishment of national backstops, ahead of the completion of this exercise.” This statement reveals that some governments were worried that the introduction of the banking union might imply some mutualization of financial risks among participating countries, and they made it clear that this outcome has to be avoided. To this aim, they decided that a prerequisite for the implementation of the SSM was the analysis of bank

¹ See IMF (2015).

assets together with a stress test, which eventually were carried out by the ECB in 2014 under the name of “comprehensive assessment.” Even more significantly, each government was required to prepare national backstops to absorb any capital deficiency possibly emerging from such assessment. Again, this shows the willingness to avoid any cross-country subsidization. This policy has important implications, namely the fact that the banking union remains an incomplete project with several steps still to be taken.

In this chapter, I am going to analyze in some details the reasons for the banking union. I will start by documenting the cost of bank bailouts. Then I will move to the two-way link between the financial stability of the bank and of the public sectors. Finally, I will address the issues related to a uniform supervisory standard and to a common framework for the resolution of bank crises. The concluding section provides a brief summary of the issues addressed in this chapter.

2.1 REDUCE THE FISCAL COST OF BANKING CRISES

The first goal of the banking union is to reduce the burden of banking crises for the taxpayers. We may identify two channels through which banking crises can impact the public sector balance sheet. (1) A direct channel, including all measures that governments put in place to support distressed banks in order to avoid their liquidation and/or to limit the costs faced by bank stakeholders, particularly depositors and bondholders. (2) An indirect channel, including all the other ways through which a banking crises can negatively affect the primary balance and the interest expenses of the public sector. This second channel is due to the negative effect of a banking crisis on the economic cycle, through a sharp reduction of the supply of credit and a fall of assets values, which can lead to—or amplify—an economic downturn. The downturn of the economic activity activates the automatic fiscal stabilizers, like increased unemployment benefits and reduced tax revenues, which worsen the primary balance. In addition, the explicit and implicit public sector guarantees to support the banking sector can make the government pay a higher cost of borrowing, thus increasing the interest expenses.

While the first channel can be observed with a good degree of precision, the second channel is very difficult to measure, since it includes some variables which are affected by several factors, among which the banking crises is only one, albeit sometimes the most relevant. A crude way to assess the proportion between the direct and indirect fiscal impact

of a banking crisis is to take the ratio between the outlays due to support the distressed banks and the overall increase of public debt following a financial crisis. This is the process followed by the International Monetary Fund (IMF) and by the ECB, both leading to an estimate of around one-fifth. IMF (2015) analyzes a large international sample of banking crises (from 1970 to 2011), showing that the direct fiscal costs are around 4–5 % of GDP and the total public debt/GDP ratio increases by 20–25 percentage points in the aftermath of a crisis. ECB (2015) focuses on the recent 2008–2014 crisis in the euro area, showing that the direct support measures account for less than 5 % of GDP, while the debt/GDP ratio increased by 27 percentage points on average in that period. Both studies stress that these average numbers overshadow large cross-country differences. This crude measure leads presumably to an overestimation of the indirect costs of financial crises, since the increase of the debt/GDP ratio may be also due to factors other than the banking crises. However, it shows that the direct costs, on which the public attention is often focused, are only a part of the story.

Despite this limitation, it is useful to look at the direct fiscal cost of the recent financial crisis in Europe, not only because it is the only channel directly observable, but also because it provides the main political driver toward the banking union: the basic motivation of the European governments to proceed toward the banking union derives from the cost directly paid, and more easily perceived, by their taxpayers. Actually, some governments have committed a large amount of money to rescue the domestic financial sector, starting from the most acute phase of the financial crisis, namely in the aftermath of the Lehman Brothers collapse in 2008. Table 2.1 reports a breakdown of the intervention measures taken by the EU governments.

Many banks turned out to be undercapitalized during the financial crisis. Governments have reacted by approving both recapitalization schemes for the banking sector as a whole, and ad hoc measures for individual troubled institutions. Another kind of intervention goes under the name of “impaired assets relief,” where the government either provides an insurance against assets devaluation or it directly buys some troubled assets of the bank. Taken together, capital injections and asset reliefs have absorbed the bulk of the resources spent by the EU governments to support banks: the overall amount spent over the period 2008–2013 is 636 billion euros, equivalent to almost 5 % of a year’s GDP. Table 2.1 shows large differences across countries. In absolute terms, Germany and

Table 2.1 EU governments' support to the banking sector

	<i>Total 2008–2013 recapitalization and asset relief</i>		<i>Guarantees (2009—peak year)</i>	
	<i>In € billion</i>	<i>As a % of 2013 GDP</i>	<i>In € billion</i>	<i>As a % of 2009 GDP</i>
Belgium	45.14	11.8	46.78	13.87
Bulgaria	0.00	0.0	0	0
Czech Republic	0.00	0.0	0	0
Denmark	11.09	4.5	6.45	2.89
Germany	144.15	5.3	135.03	5.61
Estonia	0.00	0.0	0	0
Ireland	65.38	39.9	284.25	173.81
Greece	40.85	22.4	1.50	0.63
Spain	94.76	9.3	36.13	3.44
France	26.25	1.3	92.73	4.86
Croatia	0.00	0.0	0	0
Italy	7.95	0.5	0	0
Cyprus	1.80	10.9	0.56	3.29
Latvia	0.95	2.9	0.54	2.91
Lithuania	0.23	0.7	0	0
Luxembourg	2.60	5.7	1.65	4.36
Hungary	0.21	0.2	0	0
Malta	0.00	0.0	0	0
Netherlands	28.02	4.6	36.00	6.31
Austria	11.60	3.7	15.45	5.58
Poland	0.00	0.0	0	0
Portugal	10.95	6.6	5.24	3.12
Romania	0.00	0.0	0	0
Slovenia	3.15	8.9	1.00	2.87
Slovakia	0.00	0.0	0	0
Finland	0.00	0.0	0.06	0.03
Sweden	0.78	0.2	14.26	4.87
UK	140.54	7.4	158.22	10.10
Total EU	636.40	4.9	835.84	7.08

Source: State Aid Scoreboard (2014) of the EU Commission—DG Competition

the UK have put the largest amounts of money on the table: more than 140 billion euros each. As a ratio to GDP, Ireland is the country which comes first by a large extent, having spent some 40 % of GDP, followed by Greece, Belgium, Spain, and Cyprus.

An additional way of supporting banks has been provided by guarantee schemes. Governments have relied extensively on this tool, particularly

in 2008 and 2009, as it is the most cost-effective way for restoring the confidence of investors. Banks' liabilities are backed by the guarantee provided by the state; at the same time the government budget is not hit by an immediate outlay. Table 2.1 shows the amount of taxpayers' money committed through guarantees, with reference to the peak year 2009; since then, such amount has remarkably declined through time. Ireland is again the country which comes first by a large extent (174 % of GDP), followed by Belgium and the UK. However, the EU Commission reports that since 2008 only 3.13 billion euros of the total guarantees on liabilities have been called (*State Aid Scoreboard 2014*). Therefore, we may say that the huge amount of money committed through guarantees by the EU governments has been actually converted into cash outlays only by a negligible extent.

When we deal with state aids to banks, it is important to consider also the revenues received by governments, which can offset the related outlays. In case of capital injections, those revenues may derive from the sale of the equity stakes taken by the government in some banks. In case of asset reliefs, the government may recover some money by selling the assets previously purchased. As Table 2.2 shows, 15 % of the sums spent for such kinds of interventions have been recovered: 109 billion euros over 731. It must be acknowledged that this number probably underestimates the recovery rate of those support measures, since the process of assets sale and privatization of state-owned equity stakes is still under way. In the case of guarantees, some fees are generally applied by governments for the insurance service they provide. It is worth stressing that the fees collected by the EU governments for this service have exceeded by a large extent

Table 2.2 Total aid amounts paid and received by EU governments (2008–2013)

	<i>Government outlays</i>		<i>Revenues/fees</i>	
	<i>In € billion</i>	<i>As a % of 2013 GDP</i>	<i>In € billion</i>	<i>As a % of 2013 GDP</i>
Recapitalisation	448.16	3.4		
Asset Relief	213.26	1.6	109.64	0.8
Other Liquidity Measures	70.15	0.54		
Guarantees	3.13	0.02	38.16	0.3

Source: State Aid Scoreboard (2014) of the EU Commission—DG Competition

the cash outlays related to the few cases when the guarantees have been called: 38-billion-euro fees have more than offset 3-billion-euro outlays.

Summing up, the above evidence suggests that the cost of bank bailouts for taxpayers, as a consequence of the financial crisis that started in 2007, has been significant. As a ratio to the 1-year GDP, the cash outlays due to capital injections and asset reliefs are about 5 %, which is not a very large number but it is only an average, and we have seen that in some countries the burden has been much larger than that. In addition, the guarantees provided by governments have not produced large cash outlays so far, but they represent a potential liability that should not be understated.² We have also to consider that the stream of resources already devoted to bank bailouts can be interpreted by market participants as an implicit guarantee of further interventions, if needed. This sort of implicit guarantee puts a burden on public finances which is difficult to measure, but it is nonetheless relevant. This is probably the main reason why the sovereign default risk and the insolvency risk of the banking sector are so interlinked, at least in financial markets' perception, as we are going to document in the following section. Finally, we must remember that the outlays, due to the direct public support to distressed banks, provide only a partial measure of the overall fiscal impact of the financial crisis, as we have argued before.

2.2 BREAK THE TWO-WAY LINK BETWEEN BANK AND SOVEREIGN RISKS

The interplay between the financial risk of national governments and that of their domestic banking systems has dramatically increased during the financial crisis. As we have seen at the beginning of this chapter, policymakers declared that one the main goal of the banking union was “to break the vicious circle between banks and sovereigns.” In this section, I will document the existence of that vicious circle, showing how substantial cross-country differences emerge: while in some countries the spillover of credit risk has gone mainly from banks to governments, in other countries the opposite has happened.

In the view of financial markets' participants, the destinies of the government and of the banking sectors are strictly linked together. This view clearly emerges from the evidence reported in Fig. 2.1, showing the credit

²Under this regard, ECB (2015) stresses the role of asset management vehicles, which have been created to relieve the balance sheets of some banks from their impaired assets. These vehicles sometimes enjoy public guarantees or even public ownership.

default swap (CDS) spreads for the two sectors in Europe, for the last 7 years.³ Those spreads are the quoted prices of the CDS: in simple words, these are insurance contracts, where the buyer pays a premium (“spread” in the jargon of financial markets) to cover the risk of insolvency of an obligor. If a default event occurs, for example, if a bond issuer is not able to repay some interest or principal payments, then the buyer of a CDS is entitled to get a refund from the issuer of the CDS. Then, looking at CDS spreads is the more direct way of measuring the credit risk of an obligor perceived by financial markets participants.

Figure 2.1 points to a high degree of correlation between the credit risk of banks and that of governments. The impression given by the time patterns of the two series is confirmed by computing the correlation coefficient between them, which turns out to be equal to 0.82. The Lehman Brothers collapse in September 2008 made the risk of the financial sector to increase dramatically. This risk was to a large extent transferred to the public sector through the capital injections and the guarantees provided by governments (which have been documented in the previous section). The other spike in the graph appears in 2011–2012, when the sovereign debt crisis hit several countries in Europe, namely the so-called PIIGS: Portugal, Ireland, Italy, Greece, and Spain. During this period, we may say that the transfer of risk went the other way around: from governments to banks. The exposure of banks to the sovereign risk is large in general: banks hold government securities since these are normally seen as risk-free assets, and they are treated as such by the regulation on capital (“Basel III” capital requirements). Moreover, bank portfolios of government securities typically show a “home bias”: the bulk of the securities held by a bank are issued by the government of the country where the bank is located. Table 2.3 documents this home bias for the PIIGS and for the two largest countries in the euro area: in all of them, with the exception of Ireland, banks hold an amount of debt issued by the domestic government much larger than that issued by the other euro area governments altogether.

By looking at Fig. 2.1, one might think that the degree of correlation between the insolvency risk of banks and that of governments has always been quite high. Actually, this is not true, as it can be seen by looking at Fig. 2.2 which provides a sort of zoom on 2008. Despite the fact that

³The time series shown in Figs. 2.1 and 2.2 are indexes, providing synthetic information on the CDS spreads of the sovereigns and of a sample of large European banks (with a five-year maturity). The data source is Datastream.

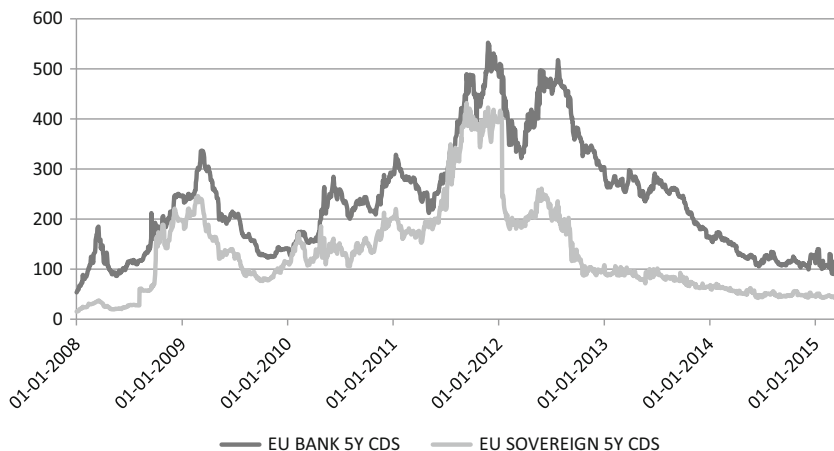


Fig. 2.1 EU CDS spreads: Banks and Sovereigns (2008–2015)

Table 2.3 Government securities held by national bank sectors (as of February 2015—in billions of euros)

	<i>Issued by domestic government</i>	<i>Issued by other euro area governments</i>
France	201	102
Germany	255	118
Italy	439	24
Spain	268	34
Portugal	30	7
Greece	14	0.2
Ireland	20	51

Source: ECB, *MFI balance sheets (online)*

the financial crisis started in August 2007, the sovereign CDS spreads did not react so much to the turmoil taking place in the money markets and in the banking sector until September 2008.⁴ Until then, governments continued to be perceived as almost risk-free, independently of the problems faced by banks. The fact that September 2008 is a turning point

⁴The jump of the sovereign CDS index, taking place at the beginning of August 2008, is due to technical reasons related to the computation of the index.

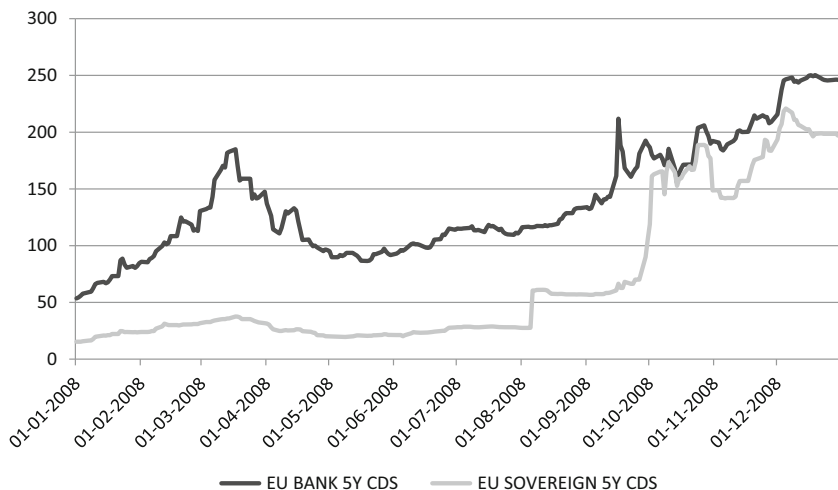


Fig. 2.2 EU CDS spreads: focus on 2008

is confirmed by computing the correlation coefficients between the two CDS spread series in the two subsamples: before and after such a date. They turn out to be equal to 0.55 and 0.79 respectively, so there is a remarkable increase after September 2008.

It is also interesting to note that the bailout of the US financial institution Bear Stearns in March 2008 had only a marginal impact on the sovereign CDS market in Europe; apparently, that bailout did not create the expectation of similar bailouts on the other side of Atlantic ocean. To the contrary, the bankruptcy of Lehman Brothers did create the expectation that the potential burden for the European governments, related to possible bank bailouts, had remarkably increased. This apparent paradox can be easily explained by the so-called too-big-to-fail doctrine: the turmoil in the financial sector and in the real economy, following the Lehman Brothers crash, was so harmful that nobody could believe that any government would let a large intermediary go bust. And this is exactly what the banking theory says: the costs of letting a large financial institution fail are paramount, due to the related systemic impact on the economy. This is also the reason originating a new framework for dealing with bank resolutions, incorporated in the BRRD (as we shall see in Chap. 5).

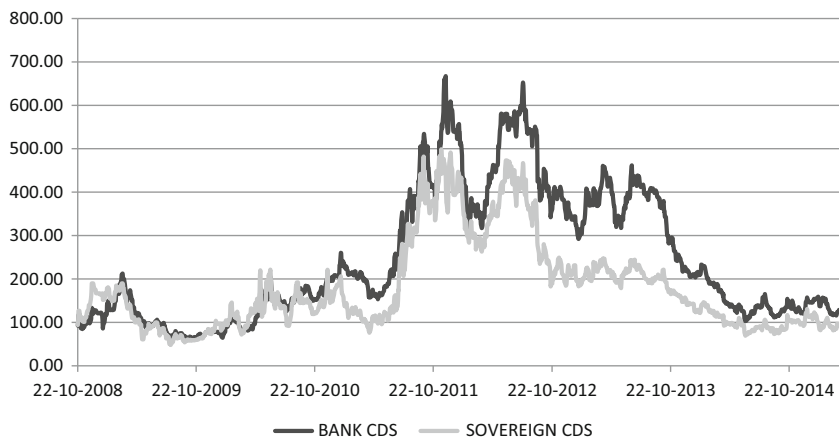


Fig. 2.3 Bank and Sovereign CDS spreads: Italy

The above evidence points to a high degree of correlation between the credit risks of the banking and government sectors, in particular, since September 2008. Of course, an analysis relying only on correlation is not able to explain the direction of causality: whether it is from banks to governments or the other way around. To such purpose, one must rely on more sophisticated statistical methods and/or to some historical information relative to each country. Let me provide here a few points on some European countries, just to show the remarkable cross-country differences that can be seen, and then cite some references about more detailed studies available in the literature. Figures 2.3, 2.4, 2.5, and 2.6 show the 5-year CDS spreads for four countries for the sovereign sector and for the banking sector. The latter index has been computed by averaging the CDS spreads of the largest banks in each country.⁵

In Italy, the high degree of correlation between the bank and sovereign risks, documented in Fig. 2.3, has to be attributed to the large exposure of banks to the public sector, together with the well-known high level and

⁵The banks included are the following. *Italy*: Intesa Sanpaolo, Unicredit, UBI, MPS. *Ireland*: Allied Irish Bank, Bank of Ireland. *Germany*: Deutsche Bank, Commerzbank, Hypo, LBBW, Bayern LB, DZ Bank, Nord LB, Postbank, West LB, HSH Nordbank. *Greece*: National Bank of Greece, EFG Eurobank, Alpha Bank, Piraeus Bank. The time span of each graph depends on data availability. The data source is Datastream.

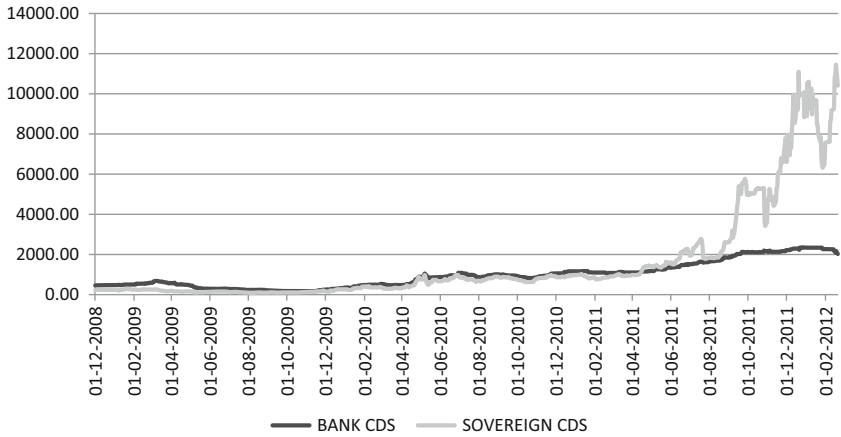


Fig. 2.4 Bank and Sovereign CDS spreads: Greece

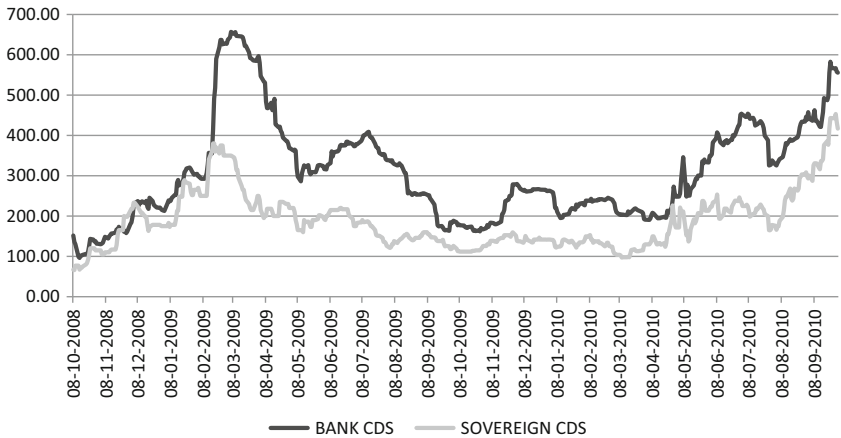


Fig. 2.5 Bank and Sovereign CDS spreads: Ireland

increasing pattern of the Italian public debt (well above 100 % as a ratio to GDP for the whole period under consideration here), which casts serious doubts on its long-term sustainability. On one side, the portfolio of Italian government securities held by Italian banks is huge (see Table 2.3): more

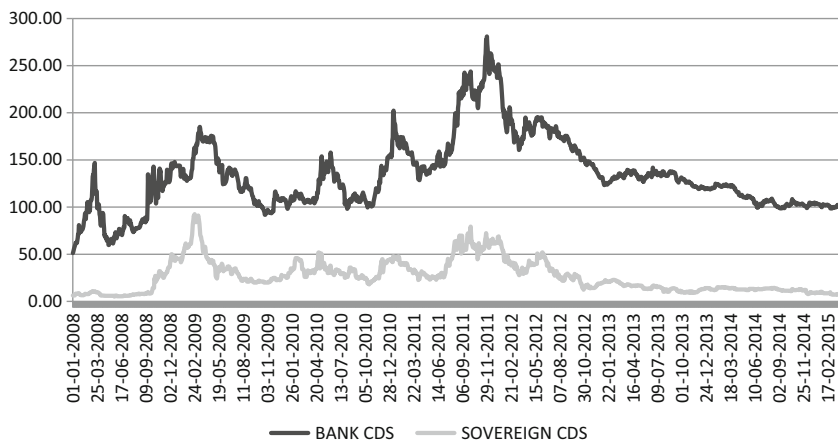


Fig. 2.6 Bank and Sovereign CDS spreads: Germany

than 400 billion euros, which amounts to around 10 % of the total assets of the banking sector of this country. On the other side, the amount of money spent or committed by the Italian government for supporting the banking sector during the financial crisis has been negligible, both in absolute terms and as a ratio to GDP, compared to what happened in other European countries (see Table 2.1). Therefore, we may safely conclude that in Italy the insolvency risk has been transferred from the government to the banking sector, and not vice versa.

A case somewhat similar to Italy is that of Greece, shown in Fig. 2.4. In that country, the new government disclosed, at the end of 2010, that the public sector balance sheet was in a much more troubled condition than what had been declared by the previous government, making the confidence of investors in the sustainability of the Greek public debt drop sharply. The sovereign risk soared to unprecedented levels, while that of banks increased by a much smaller extent. So the source of the problem can be identified in the government sector, although Greek banks did receive a considerable amount of public support in the form of capital injections. In a sense, there is a sort of two-way link between the credit risks of the government and on the banking sectors in Greece. By the way, the same conclusion can be reached for Spain (that I do not analyze in detail).

A quite different picture emerges for Ireland (see Fig. 2.5). In this country, the explosion of the banking crisis in 2008–2009, documented

by the spike of the bank CDS spreads, forced the government to commit a huge amount of resources in support of domestic banks (see Table 2.1). Those interventions made the otherwise sound Irish public finances go into deep troubles, leading to an official request for an assistance program by the European partners, through the European Financial Stability Facility (EFSF). On the other side, the Irish banking sector is the only one, in an international comparison, which does not show a home bias as far as its portfolio of government securities is concerned (see Table 2.3). So we can conclude that in Ireland the public sector took up the credit risk accumulated within the banking sector, and not vice versa.

Finally, Germany (see Fig. 2.6) is again a case where we may say that the transfer of risk went from the banking sector to government. As we have seen before (see Table 2.1), the German government is the one that in absolute terms spent the largest amount of money, among the European countries, in capital injections, and it committed an amount of resources in guarantees second only to Ireland. Of course, such amounts are not so large, in the international comparison, if measured as a ratio to GDP, but they are still quite significant. On the other side, the sustainability of the German public debt has never been an issue for financial markets, so it has not been a source of stress for the creditworthiness of German banks.

There is a growing body of literature addressing the transmission of risk from the financial sector of the economy to the government and vice versa. Some studies have addressed the direct impact of the bailout programs on the credit risk of financial institutions and of governments. BIS (2009) shows that, on the one hand, rescue packages have come together with a fall in bank CDS spreads, so they have been able to reduce the default probability of banks perceived by market participants. On the other hand, they have increased the market price of sovereign risk. Similarly, Ejsing and Lemke (2009) show that, following the announcement of rescue packages in the fall of 2008, a marked increase of sovereign CDS spreads has come along with the reduction of bank CDS spreads. While those studies point to the transfer of risk from banks to government, BIS (2011) focuses on the opposite transmission channel: from the sovereign risk to that of financial institutions, showing how the sovereign debt crisis affects the funding costs paid by banks.

Other studies have focused on the implicit guarantee, created by the expectation of further bailout measures. They develop the idea that the implicit guarantee of bailout should be taken into account in the balance sheet of the public sector. Gray et al. (2006), and Gapen et al. (2005),

apply the contingent claim analysis: the bailout guarantee is modeled as a put option enabling a bank to sell its own assets to the government, which pays a strike price equal to the value of the bank liabilities backed by the guarantee. Baglioni and Cherubini (2013a) estimate the expected liability of the European governments due to the financial risk present in the national banking systems; by using the information content of the CDS spreads, they provide a measure of the actuarial cost of the bailout guarantees implicitly given by the governments to their domestic banks.

Finally, some studies address the issues related to the measurement of systemic risk within the financial system and between the two sectors: banks and government. Segoviano and Goodhart (2009) define a Banking Stability Index (BSI), reflecting the expected number of banks becoming distressed given that at least one bank in the system has become distressed. They find, by using a large set of banks for several countries, that cross dependencies have risen sharply over the financial crisis, and that there is a relevant link between bank problems and sovereign distress. Baglioni and Cherubini (2013b) analyze the sovereign debt crisis in Europe, and they provide an assessment of the relative strength of the idiosyncratic and common components of default risk, for both the financial and the public sectors, trying to identify the transfer of credit risk from the balance sheets of banks to that of the state and vice versa.

2.3 ACHIEVE A UNIFORM SUPERVISORY STANDARD

A crucial issue in the field of prudential supervision is the uniformity of rules and their implementation standards. In Europe, this issue is strictly related to the completion of the Single Market, which should enable all member countries to enjoy the free circulation of goods and services and, in particular, financial services. Any cross-country discrepancies in the way in which prudential rules are formulated or applied imply a distortion of the competitive game among financial institutions, thus altering the well-functioning state of the internal market. For example, if a country applies lower capital requirements than other countries do, and its banks are allowed to offer services in other member countries, they enjoy a competitive advantage relative to banks located in other EU countries. But the standardization of supervisory rules and practices has also another rationale. The network of financial links is such that if one country should implement a loose standard of supervision, this can have negative externalities on financial intermediaries located in other countries, since a local

financial shock can generate contagion in different geographical regions. Therefore, reaching a “level playing field” is desirable not only for reasons related to competition, but also in order to avoid shocks that might have spillover effects.

As it is well known, the prudential rules in the banking sector have reached a high degree of harmonization, since they are based on a package of regulations at the EU level. In particular, capital requirements, which play a central role in the regulatory framework of the financial sector, have common legal bases at the EU level, namely, the Capital Requirement Regulation (CRR) and the Capital Requirements Directive IV (CRD IV) which have translated the international “Basel III” Agreement into the European legislation. They apply as of 1 January 2014, although some of their provisions will be completely phased in by 2019. Despite this common legal basis, the application of capital requirements is not uniform across the European countries. Discrepancies arise because such rules are very complex and leave some flexibility to individual financial institutions and to their national supervisors. Just to make an example, large banks can design their own internal models for computing their RWAs, which are the denominator of the capital-to-asset ratio, that must meet the minimum level set by the Basel III rules. Moreover, such models have to be validated by the national supervisory authorities, who enjoy a significant degree of discretion in this respect (before the introduction of the SSM, of course).

The SSM should enable participating countries to share not only a common set of rules, but also a uniform method for applying such rules. Those institutions which qualify as “significant” are directly supervised by the ECB. The “less significant” banks are still supervised by their national authorities, but follow the guidelines set by the ECB. In principle, this transfer of responsibility from the national to the supranational level should allow the eurozone to reach a high level of supervisory convergence, eliminating any national bias in the supervisory process. However, as we shall see in the next chapter, the role of the national authorities remains quite relevant within the SSM, so the danger of some national biases has been considerably reduced but not completely removed.

The SSM has been designed for the countries belonging to the euro area, although it is open to other European countries as well. At the EU level, the task of achieving a uniform supervisory standard has been attributed to the European Banking Authority (EBA) since 2011. This

London-based international institution has the duty of collecting information about the supervisory practices in member countries and of setting technical standards for the application of prudential rules, in particular those on capital. In doing so, the EBA contributes to the definition of the so-called “European Single Rulebook,” that is, the set of common supervisory rules and practices that should be shared by all EU countries. In addition, the EBA acts as a mediator among the national authorities, as far as the supervision of cross-country banking groups is concerned. The mandate of the EBA has, of course, an interplay with that of the ECB: the latter has to apply the technical standards set by the former, at least as far as the significant banks are concerned.

The picture emerging from the institutional framework just described is a two-tier system. At the EU level, the convergence of supervisory practices, that is, of the day-to-day application of the common banking regulation, is mandated to the EBA, which is more a consultative body than an authority: its technical standards need to be incorporated into regulations issued by the EU Commission (which are directly applicable in member countries), and its guidelines are not legally binding. The application of the EBA regulations and guidelines is delegated to the national authorities. In the euro area countries, to the contrary, the delegation of supervision to a single authority (the ECB) should allow a higher level of convergence in supervisory practices.

The EBA itself acknowledges, in the report issued in April 2015, that several issues related to supervisory convergence are still open (see EBA 2015a): “Despite the existence of common rules, divergent supervisory practices and outcomes pose a potential risk to the effective oversight of cross-border groups and the development of a level playing field in financial services” (page 3 of the report). In other words, the divergence of supervisory practices is not only a problem for the competitive distortions it can generate, but also for the work carried out by the Colleges of Supervisors. The latter are composed of members from the national authorities of those countries where an international financial institution is located, and they have to reach an agreement about the application of prudential rules to such an institution, possibly with the mediation of the EBA. Of course, it is difficult to reach an agreement when the cross-country differences in supervisory practices are significant.⁶

⁶ See EBA (2015b) for a review of the activity of the Colleges of Supervisors.

The EBA Report has a detailed analysis of those areas where the more important cross-country divergences emerge (the report refers to 2014, before the SSM became fully operational). The area of capital requirements is by far the most problematic. All authorities apply the so-called “Pillar 1+” logic, where the total capital requirement is the sum of two components: the minimum regulatory requirement (Pillar 1) and an additional requirement (Pillar 2) to cover those sources of risk not covered by Pillar 1. However, several differences emerge as far as Pillar 2 is concerned. For example, some authorities adopt a risk-by-risk quantification of the additional required capital, while others quantify the additional capital for a financial institution as a whole, without identifying an additional requirement for each risk. Some authorities express prudential requirements as a ratio to RWA so the required capital varies with the RWAs; others employ instead a nominal requirement, which is more stable over time. The quality of capital is heterogeneous to some extent: in some countries only eligible own funds are allowed (Pillar 1 items), while in others additional instruments are allowed in some circumstances, for example, expected profits. Moreover, in implementing the review process where the overall risk profile of a financial institution is evaluated (the so-called Supervisory Review Evaluation Process [SREP]), the definition of risk categories is not homogeneous across countries; for example, some authorities include the sovereign and counterparty risks into the credit risk category, while others do not.

Another area where the traditional national practices differ considerably is that related to nonperforming loans and forbearance.⁷ The definition of bad loans is not homogeneous; therefore, it is difficult to collect reliable data and make international comparisons about the quality of bank assets. More importantly, this heterogeneity creates cross-country distortions in the computation of capital ratios, since it impacts on the measurement of incurred losses and of risk weights. The use of forbearance transactions may imply some delay in the recognition of loan losses and mask asset quality deterioration; again, these practices can lead to distortions in cross-country comparisons and to divergences in bank oversight. This is the reason why the EBA has issued a set of technical standards related to nonperforming loans and forbearance.⁸ In particular, a loan should be classified as nonperforming when it is past due more than 90 days or the

⁷ See EBA (2014).

⁸ They have been released in 2013, but they have been effective as of September 30, 2014.

borrower is unlikely to pay. This homogeneous definition should lead to more convergence in the assessment of bank asset quality by the national authorities in the EU. This is actually the definition applied by the ECB in making its 2014 AQR over the significant banks of the euro area (which will be addressed in Chap. 4).

Finally, the need to converge toward uniform and satisfactory levels of supervision is not only related to the implementation of prudential rules, aimed at reducing *ex ante* the probability of a liquidity or insolvency event, but also to the *ex post* management of a bank crisis. This issue has been addressed by the Directive on bank resolution procedures (BRRD). Before such important piece of the EU legislation became fully effective (1 January 2016), the resolution of bank crises was left to the national bankruptcy procedures, which could differ considerably across member countries. It is true that some controls, relative to the compliance of the bailout interventions made by the European governments with the EU legislation on state aids, have been done by the EU Commission (DG Competition). However, given the exceptional circumstances created by the financial crisis, the Commission has authorized governments to commit huge amounts of money in support of their domestic banks (see the numbers reported in Sect. 2.1), thus accepting potential distortions to the European Single Market with the aim of restoring financial stability. The entry into force of the BRRD should limit such distortions, by defining a common regulatory framework for government intervention in the resolution of financial institutions.

The BRRD should also respond to the need of having a predefined set of rules to manage banking crises, in order to avoid improvisation and possibly confusion. Financial crises often arise very quickly, and they require fast and effective action by the authorities in order to restore market confidence. In absence of predefined tools for crisis management, such reaction becomes very difficult.

The crisis taking place in Cyprus in 2013 provides a clear illustration of this issue. The banks located in Cyprus had reached a size equivalent to nearly eight times the GDP of that country, also by taking large amounts of deposits from abroad (in particular from Russia and Greece); this dimension of the banking system points to a lack of sound oversight by the local authorities. Moreover, Cyprus banks had accumulated large exposures with the Greek government, and they were hit by the haircut of Greek bonds taking place in March 2012 (the so-called Private Sector Involvement [PSI]). In March 2013 it became clear that the Cyprus

banks were bound to collapse under the pressure of losses and of vanishing market confidence. Given the size of the domestic banking system, the local government could not bail out those banks. The threat of a default of the Cyprus government and possibly of a traumatic exit of the country from the euro area forced the European institutions (ECB, Commission, and Eurogroup) together with IMF to engage in bargaining to provide financial assistance to the country. In the night between 15 and 16 March, the Eurogroup and the Cyprus government reached an agreement where *all* depositors were involved in the restructuring process of the large banks of the country, suffering heavy losses. This deal was at odds with the EU legislation on deposit insurance, protecting deposits up to a 100,000-euro threshold; moreover, it created panic among depositors in Cyprus, queuing at their banks to withdraw their deposits, thus making even worse the liquidity crisis incurred by local banks. The deal was eventually rejected by the Cyprus Parliament, and it was replaced 10 days later by another deal, where the largest bank in the country (the state-owned Cyprus Popular Bank) was closed down and its small deposits (those under 100,000 euros) were transferred to the other large bank of the country (Bank of Cyprus); large depositors and bondholders of both banks were inflicted with heavy losses, but small depositors remained unaffected. These conditions were imposed on the country as part of a 10-billion-euro rescue plan funded by the European institutions and by the IMF. This deal was actually the first case of a significant “bail-in” of bank creditors as part of a resolution process. What matters here is that it was reached through a confused and improvised process, taking decisions that were breaching the EU legislation and which were reversed a few days later. This experience points to the need of predefined rules to manage banking crises, and as we said the BRRD goes in that direction.

CONCLUDING REMARKS

One of the reasons inducing the European governments to move toward the banking union derives from the significant amount of public money spent to support the financial sector during the crisis that started in 2007. This money has been either spent through capital injections and asset relief measures or committed through the provision of public guarantees. These kinds of measures have generated in financial market participants the expectation of an implicit additional guarantee of public support to

the banking sector. However, any generalization should be taken with caution in this area, since the actual cost of the public support to troubled banks differs considerably across the European countries: while some of them have committed a huge amount of public money, others have spent much less. It must also be remembered that these direct costs are only part of the story: most of the fiscal cost of banking crises seems to be due to their indirect impact on the government balance sheet, since they amplify economic downturns and can lead to a higher interest burden.

The actual and expected public support to the banking sector explains why the default risks of the two sectors—measured by their CDS spreads—appear to be highly correlated, starting by September 2008. The crash of Lehman Brothers has been a turning point: after that dramatic event, the expectation of bank bailouts has been reinforced, due to the systemic consequences of that bankruptcy (thus confirming the “too-big-to-fail” doctrine). While at that time the transfer of risk went from the financial to the public sector, the direction was mainly reversed a few years later (in 2011–2012), when the explosion of the sovereign debt crisis made the credit risk go from the balance sheets of some governments to those of their domestic banks. The home bias, affecting bank portfolios of government securities, played a key role. Again, important cross-country differences emerge from the analysis.

The two-way link between the risks incurred by the financial and the public sectors, and the related cost of bank bailouts for taxpayers, are not the only reasons behind the banking union. Another important goal is the supervisory convergence. The prudential regulation of banks relies on a common set of rules designed at the EU level. However, their application can differ across countries, since some discretion is left to the national supervisory authorities and to the supervised institutions. At the EU level, the task of achieving a convergence in supervisory practices has been assigned to the EBA, which issues technical standards and guidelines. For the euro area countries, the supervisory convergence has been strengthened by transferring the responsibility of banking supervision to the ECB, despite the relevant role still played by the national authorities within the SSM.

Finally, the issue of converge among the European countries is also related to the management of banking crises. The BRRD has been introduced with the purpose of harmonizing the ways in which such crises are handled, also by endowing the authorities with new legal tools (like the “bail-in”). While the new Directive applies to all the EU member coun-

tries, a stronger level of integration has been implemented in the euro area through the SRM. A new European agency (Single Resolution Board [SRB]) has been created, which is responsible for managing the resolution of troubled banks, also by using a common pool of resources (Single Resolution Fund [SRF]). Unfortunately, the governance of the SRM and its limited financial endowment raise some concerns about its effectiveness (that will be addressed in Chap. 5). In addition, the third pillar of the banking union, namely the single deposit insurance at the euro area level, is still missing. These limitations can be traced back to the decision of the European governments, taken at the outset of the banking union project that any kind of cross-country mutualization of risk should be kept to a minimum.⁹ This fundamental flaw in the design of the banking union casts some doubts about its effectiveness in reaching one of its main goals, namely to break the vicious circle between banks and sovereigns; to the contrary, the link between banking and sovereign risks is likely to remain confined within the national borders to a large extent.

REFERENCES

- Baglioni, A., and U. Cherubini. 2013a. Marking-to-market government guarantees to financial systems: Theory and evidence for Europe. *Journal of International Money and Finance* 32: 990–1007.
- Baglioni, A., and U. Cherubini. 2013b. Within and between systemic country risk. Theory and evidence from the sovereign crisis in Europe. *Journal of Economic Dynamics and Control* 37: 1581–1597.
- BIS. 2009. *An assessment of financial sector rescue programmes*. BIS Papers 48.
- BIS. 2011. *The impact of sovereign credit risk on bank funding conditions*. CGFS Papers 43.
- EBA. 2014. *Implementing technical standards on supervisory reporting on forbearance and non-performing exposures*, London.
- EBA. 2015a. *Report on convergence of supervisory practices*, London.
- EBA. 2015b. *Accomplishment of the EBA Colleges Action Plan for 2014 and establishment of the EBA Colleges Action Plan for 2015*, London.
- ECB. 2015. The fiscal impact of financial sector support during the crisis. *ECB Economic Bulletin*, Issue 6/2015.

⁹See the conclusions of the June 2013 EU Council, reported at the beginning of this chapter.

- Ejsing, J., and W. Lemke. 2009. *The Janus-headed salvation: Sovereign and bank credit risk premia during 2008-09*. Paper presented at the EEA annual conference, Glasgow, 2010.
- Gapen, M., D. Gray, C.H. Lim, and Y. Xiao. 2005. *Measuring and analysing sovereign risk with contingent claims*. IMF WP/05/155.
- Gray, D., R. Merton, and Z. Bodie. 2006. *A new framework for analysing and managing macro-financial risks of an economy*. NBER WP 12637.
- IMF. 2015. *From banking to sovereign stress: Implications for public debt*, March.
- Segoviano, M., and C. Goodhart. 2009. *Banking stability measures*. IMF Working Paper WP/09/4.

The Single Supervisory Mechanism

INTRODUCTION

On 4 November 2014 the responsibility for the prudential supervision over the credit institutions of the euro area countries has been taken over by ECB. This historical transfer of sovereignty was decided by the EU governments in their summit of June 28–29, 2012, and it has been implemented in an unusually short time, relative to the standard pace of evolution of the European institutions. After that EU Council meet, a little more than a year later, the Council Regulation implementing that political decision was issued.¹ This was a “fast track” response to the pressure of the events taking place during the financial crisis and, in particular, to the need of restoring financial stability and reducing the burden of bank bailouts, as we have seen in the previous chapter. On technical grounds, the possibility of transferring the banking supervision to the ECB without engaging in a difficult and time-consuming revision of the EU Treaty derives from Art. 127(6) of the Treaty, which enables the Council to confer on the ECB specific tasks related to the prudential supervision of credit institutions. The Regulation issued by the Council in October 2013 has become known as the “SSM Regulation,” since it establishes the SSM, including the ECB and the National Competent

¹Council Regulation 1024/2013 of 15 October 2013.

Authorities (NCAs).² While the SSM Regulation provides the legal basis of the SSM, the detailed organization of the SSM and the practical arrangements related to the cooperation between the ECB and the NCAs have been defined by the ECB in its “SSM Framework Regulation,” issued in April 2014.³

The countries participating in the SSM are currently those belonging to the euro area.⁴ However, other EU countries may decide to join the SSM, under the “close cooperation” framework.⁵ If an EU member state makes a request for participating in the SSM, it has to provide the ECB all the necessary information to conduct a comprehensive assessment of the banks located in that country, and it has to make all the legal arrangements necessary for the acts taken by the ECB being enforced in that country, in particular by the local NCA. The ECB can accept or reject such a request, depending on the satisfaction of the criteria set out in the SSM Regulation. As of end of 2014, no formal request has been received.

In this chapter, I will first introduce the basic elements of the organization of the SSM, focusing on the separation between banking supervision and monetary policy, the governing bodies and the decision process within the ECB, and the distinction between significant and less significant institutions. Sections 3.2 and 3.3 will expand on the supervision of significant and less significant banks respectively; particular attention will be given to the role played by the Joint Supervisory Teams (JST) and to the balance of power between the ECB and the NCAs. Section 3.4 provides a brief description of the supervisory approach based on the Supervisory Review and Evaluation Process (SREP), which the ECB has adopted in line with the European regulation. Finally, Sect. 3.5 discusses the problems deriving from the attribution of the macro-prudential supervision to the national authorities, with the ECB being responsible for the micro-prudential supervision. The concluding section summarizes the main points made in this chapter.

² Art. 2(9) of the SSM Regulation.

³ Regulation ECB/2014/17 of 16 April 2014.

⁴ As of 2015, they are as follows: Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovenia, Slovakia, and Spain.

⁵ See Art. 7 of the SSM Regulation and the decision of the ECB of 31 January 2014 (ECB/2014/5), defining the procedures governing the close cooperation between the ECB and the NCAs of those countries whose currency is not the euro.

3.1 THE ARCHITECTURE OF THE SINGLE SUPERVISORY MECHANISM

3.1.1 *The Governance of the SSM*

The decisions of the ECB, related to the prudential supervision over the banking system, are taken by the Supervisory Board, which is composed of six representatives of the ECB (including the Chair and Vice-Chair)⁶ and by a representative for each National Competent Authority (NCA). This composition parallels that of the Governing Council, taking the decisions related to monetary policy, which is composed of the members of the Executive Board and of the representatives of the national central banks. The internal organization of the ECB, including the introduction of the Supervisory Board, has been designed to satisfy the separation principle, as requested by Art. 25 of the SSM Regulation: the tasks of monetary policy and supervision should be carried out separately within the ECB, avoiding any interference between them.

However, the attribution of tasks within the ECB has to comply with the legal requirement that the ultimate responsibility of any act taken by the ECB is retained by the Governing Council (Art. 129 of the EU Treaty). Therefore, a nonobjection procedure has been designed. The Supervisory Board takes draft decisions, which can in principle be objected by the Governing Council, within a strict deadline (10 days). After that deadline has expired without objections, the decision is adopted.⁷ In case of objection, the Supervisory Board will submit a new draft decision. In such a case, a NCA may request the intervention of the Mediation Panel, which should resolve different views expressed by the NCAs, as far as an objection is concerned.⁸

Similarly to monetary policy, in carrying out the prudential supervision of banks, the ECB must comply with two complementary principles: independence and accountability.⁹ On the one hand, the members

⁶Strictly speaking, the representatives of the ECB, appointed by the Governing Council, are four. The Chair and Vice-Chair are appointed by the EU Council, after the approval of the European Parliament. However, they are proposed by the ECB; moreover, the Vice-Chair must be chosen among the members of the Executive Board of the ECB. See Art. 26 of the SSM Regulation.

⁷See the decision ECB/2014/1, amending the *Rules of procedure of the ECB*.

⁸The Mediation Panel is composed by national representatives, chosen among the members of the Governing Council and of the Supervisory Board.

⁹Art. 19–21 of the SSM Regulation.

of the Supervisory Board should act independently and not take instructions from any government member; another independence guarantee is that the office of Chair is not renewable. On the other hand, the ECB is accountable to the European Parliament and to the Council: it has to submit an annual report on its supervisory activity, and the Chair may be heard by the Eurogroup and by the European Parliament. It is worth noting that the ECB is accountable also to national parliaments, as far as prudential supervision is concerned: they can address observations and questions to the ECB, and require that members of the Supervisory Board participate in exchange of views. This role of the national parliaments is a clear evidence of the resistance to a complete transfer of sovereignty to the European institutions.

The separation principle involves not only the top-level decision-making bodies, but also the staff level. Four new directorates general (DG MS) have been set up, dealing with micro-prudential supervision. In particular, DG MS I and DG MS II deal with the direct supervision of significant banks (DG MS I with the 30 most significant institutions and DG MS II with the other 90 significant groups), DG MS III is responsible for the oversight of less significant banks, and DG MS IV for horizontal and specialized services (e.g. authorizations, sanctions, methodology and standards, and crisis management).

The exchange of information within the ECB is regulated by a decision taken by the ECB itself, related to the implementation of the separation principle.¹⁰ According to it, anonymized data related to financial reporting and own funds of supervised banks can be shared on a confidential basis, as well as aggregated information. The access to individual bank supervisory data is restricted and must be approved by the Executive Board.

As I will argue in the next sub-section, the legal principle of separation between monetary policy and banking supervision does not rely on solid economic arguments. There are good reasons to believe that a rigid separation between the two tasks might have more negative implications than advantages. However, it must be acknowledged that the separation actually implemented in the internal organization of the ECB is not so rigid as it might seem at first sight. Consider that the final word on supervisory decisions is retained by the Governing Council, which is responsible for monetary policy as well, through the nonobjection procedure described above. In addition, the Governing Council appoints the ECB's

¹⁰Decision ECB/2014/39.

representatives in the Supervisory Board. Finally, some flow of information between the two bodies of the ECB is allowed (although within the above-mentioned limits), so some data related to the financial health of banks can be used for monetary policy purposes. Hopefully, this type of information should contribute to the monetary analysis, which is a crucial part of the ECB's strategy (together with the economic analysis).

Finally, any supervisory decision taken by the ECB can be revised, if a party (natural or legal person) that is affected by that decision requires the ECB to do so. In case of request, the Administrative Board of Review submits a nonbinding opinion to the Supervisory Board, which in turn can decide whether to submit an amended decision to the Governing Council or not.¹¹

3.1.2 *A Discussion of the Separation Principle*¹²

The separation principle between monetary policy and prudential supervision is a controversial issue. The underlying idea is that the two tasks should be kept separate, in order to avoid any conflict of interest between them. A typical example made to support this view is the following. An increase of the level of interest rates, which is necessary as a monetary policy decision, might hurt some financial intermediaries which operate a maturity transformation: they are exposed to the risk that the interest rates on their liabilities adjust more quickly than those on their assets, thus reducing their profits and potentially their financial stability. In such a case, a central banker, who is responsible for both monetary policy and prudential supervision, might be induced to delay the decision on interest rates, by taking into account the potential negative side effects on the stability of the banking system. In order to avoid this kind of interference, the two tasks should be assigned to two different authorities. Alternatively, if they are both assigned to the central bank, its internal organization should include some "Chinese walls," so that the two responsibilities are assigned to different decision bodies, assisted by separated staff, within the central bank.

However, the validity of the separation principle should not be taken for granted. The above argument can be easily reversed, by considering

¹¹The Administrative Board of Review is composed by five independent members, appointed by the Governing Council.

¹²This sub-section is a sort of digression, which is not essential to understand the rest of the chapter. The uninterested reader may directly go to the next sub-section.

that when a trade-off exists between two objectives, it should be taken into account: so the two tasks, monetary policy and prudential supervision, need to be coordinated. We can make an example related to the imposition of capital requirements, which are the main tools of prudential regulation. Following an economic downturn, which typically leads to an increase of bad loans and losses for financial intermediaries, the supervisory authority may decide to impose higher loan loss provisions and more demanding capital requirements on banks, in order to preserve their stability. But this policy action has a clear drawback: it is pro-cyclical. Since raising new capital is costly and difficult in bad times, banks can react by selling some assets and reducing their loan supply, in order to restore a higher level of the capital-to-asset ratio. If this is the case, the prudential policy action can have the undesired side effect of contributing to a credit crunch, which in turn can amplify the negative side of the economic cycle, making longer and deeper the downturn. This is in contrast with the macroeconomic stabilization task of the central bank as a monetary policy authority. Responding to this need, the central bank can decide to lower the level of the policy interest rate, or to increase the size of its balance sheet through a quantitative easing policy, with the goal of increasing the funds available to firms and households and of reducing their cost. However, the positive impact of this monetary policy action might be jeopardized by the negative side effect of the prudential action. Hence the two actions need to be coordinated.

It must be stressed that the design of the capital requirements, relying on the RWA as a base for the computation of the capital-to-asset ratio, has a pro-cyclical component. During downturns, the risk weights assigned to some assets can rise, while the loan losses can reduce the regulatory capital. As a consequence, the capital ratios of banks generally decline, and they can react by curbing their credit supply. This effect can add to the leverage policy followed by financial intermediaries, which tend to increase their leverage during economic booms and deleverage during recessions.¹³ The risk of pro-cyclical side effects of the capital requirements has been acknowledged by the regulator. To address this issue, the Basel III framework includes a counter-cyclical capital buffer: the supervisory authorities can impose an additional requirement during booms, which can be disposed of during downturns.¹⁴

¹³The point that an active leverage policy leads financial intermediaries to amplify financial and economic cycles has been raised by Adrian and Shin (2010). See also Beccalli et al. (2015) for evidence on the USA and Baglioni et al. (2013) on Europe.

¹⁴See BIS (2010).

Given the pro-cyclical nature of capital requirements, it is essential that the supervisory authority does not add further elements of pro-cyclicality into the regulatory framework. The risk of doing so is concrete, and it is higher if the supervisory authority is separated from the central bank. Actually, this is what happened in 2011, when the European Banking Authority (EBA) imposed an additional capital requirement on some large European banks, with the declared purpose of introducing a temporary capital add-on to face the risks arising from the financial crisis and from the sovereign debt turmoil in particular. As a result, the capital requirement was increased during the negative side of the economic cycle, with the intention of cutting it back during the next positive side: this is clearly in contrast with the purpose of the counter-cyclical capital buffers introduced into the Basel framework. That policy action has been criticized by many commentators and market participants, because the likely reaction of banks was to reduce their assets and worsen the ongoing credit crunch. The risk of making this kind of policy mistakes is higher if the supervisory authority has a narrow focus on the stability of individual banks, without taking into account the side effects of its decisions on the economic cycle.

The issue of separation versus combination of monetary policy and banking supervision is an old one, and it has been widely debated in the economic literature. Goodhart and Schoenmaker (1995) review the debate around this issue, which was particularly active in the early 1990s, when the institutional design of the ECB was framed. They show that there is not a clear argument in favor of the separation between the two responsibilities. A trade-off between conflicting objectives, if any, should be internalized within the same institution to obtain an efficient management of the trade-off. They stress the point that the central bank is the lender of last resort for the banking system, despite the possible existence of other institutions delegated to the rescue policy. Since the central bank bears the risk of providing immediate liquidity to troubled banks, it should also have the power to supervise banks in order to limit the incurred credit risk and to have the necessary information. They also review the experience of 24 countries around the world, showing that about half of them have joint monetary and supervisory authorities, and the others show separation: this evidence suggests that there is no clear-cut argument for either model.

More recently, the debate about the separation issue has been revived by the project of introducing the banking union in Europe, in particular,

since the European Council decided in June 2012 to assign the responsibility for banking supervision to the ECB. The European Parliament commissioned a study in order to assess the pros and cons of the different solutions, and the outcome was definitely in favor of a joint responsibility for the two tasks and against the introduction of “Chinese walls” within the organization of the ECB.¹⁵ One reason mentioned to support such a view is that any tension between the two tasks, monetary policy and supervision, must be managed by a single agency, instead of leaving two separate agencies taking possibly contradictory decisions. The other main reason is related to information: the central bank, by doing its job of managing the payment system and providing liquidity to banks on a daily basis, is endowed with crucial information to assess any liquidity stress faced by a bank, which is usually the first step in any banking crisis. It is also true that the information collected through the supervisory activity (e.g. related to the capital strength of the banking system and to funding/lending conditions) is precious for the conduct of monetary policy, since it reveals important features of the monetary transmission through the bank lending channel. The only valid argument for separating the two tasks is related to diseconomies of scope, due to the concentration of a large range of activities within the same institution; actually, the complexity of the supervisory function, which has to do with many segments of the financial system (banking, asset management, and insurance), induced some countries to introduce a supervisor separated from the central bank, as documented by Masciandro and Quintyn (2009). The most relevant case was the UK, where the Financial Services Authority (FSA) was created in 1997.

Since the financial crisis has begun, however, the issue of the systemic stability of the banking system has become more and more important for monetary policy, whose final target is to avoid both deflation and inflation. In this environment, it is crucial for the central bank to have detailed information about the health of the banking system, as Beck and Gros (2012) stress. They also update the information provided in Goodhart and Schoemaker (1995), and show that in the majority of the European countries (15 out of 27) the supervisory authority is the central bank. Actually, after the FSA has been reintegrated with the Bank of England, the number of European countries where the central bank is endowed with supervisory powers has increased to 16, and it includes all major countries.¹⁶

¹⁵ See European Parliament (2012).

¹⁶ Of course, we refer here to the situation before the introduction of the SSM.

3.1.3 *Significant versus Less Significant Banks*

The SSM Regulation (Art. 4) confers to the ECB the tasks related to the prudential supervision of *all* the credit institutions located in the member countries of the SSM. The main tasks are the following.

- To ensure compliance with the prudential regulation, such as own funds requirements, liquidity standards, leverage limits, large exposures limits, and reporting and disclosure of information.
- To ensure compliance with the regulation related to governance, risk management, internal control processes, remuneration policies, and capital adequacy assessment processes (including internal ratings based models).
- To carry out stress tests.
- To authorize an institution to exercise the credit activity, and to withdraw such authorization.

However, the actual transfer from the national authorities to the ECB of the supervisory activity over 4700¹⁷ financial entities, located in 19 countries, is not a target that could reasonably be achieved in a short time for all of them. Therefore, the first step in the organization of the SSM has been the distinction between the “significant” and the “less significant” institutions. While the former are subject to the “direct supervision” of the ECB, the latter go under the so-called indirect supervision. What does that mean? As a first approximation, we can say that the ECB directly interacts with around 120 banking groups. The day-to-day oversight of the significant banks is actually delegated to the JSTs, made up of representatives from both the ECB and the NCAs. The NCAs remain responsible for the direct oversight of all the other institutions, although following the guidelines issued by the ECB; moreover, the ECB can decide at any time to take over the direct supervision of a less significant institution. It must be stressed that the banking groups directly supervised by the ECB account altogether for the largest share of the eurozone banking system: around 85 % in terms of assets. This number mirrors in the fees, which are levied by the ECB to cover its expenses to carry out its supervisory task: 89 % is paid by the significant banks and 11 % by the less significant banks.¹⁸

¹⁷This number is made up of approximately 1200 banks belonging to 120 significant banking groups and around 3500 less significant banks. See ECB (2014).

¹⁸These data are from 2014–2015. The annual total amount levied is around 300 million euros. The individual fees are computed on the basis of the importance and risk profile of each bank. See the ECB press release of 29 April 2015.

The above solution is consistent with the principle of “centralized control and decentralized operational framework.” The same principle has been adopted when the monetary sovereignty has been transferred to the ECB in 1999: while the decisions related to monetary policy are taken by the ECB, the national central banks are responsible for their implementation and for managing the operational interaction with banks that are the counterparties of the Eurosystem in monetary policy operations. However, the application of such principle to banking supervision is more problematic. In implementing monetary policy, the national central banks act as branches of the Eurosystem: banks keep their accounts with their national central banks and participate in monetary policy operations through them. This kind of activity implies a very little degree of discretion left to the national central banks (e.g. related to the type of eligible collateral). To the contrary, the supervisory function implies a significant level of discretion and of qualitative judgment, as well as the duty of collecting reliable information from the supervised entities. Therefore, the right balance between centralized control and decentralized implementation is more difficult to identify for supervision than for monetary policy. Actually this delicate matter has been raised by some participants in the consultation process, taking place after the draft SSM Framework Regulation has been issued, who have raised some concerns relative to the effectiveness of the framework proposed by the ECB.

Which is the definition of “significant” institution? A bank is significant if it satisfies at least one of the following criteria:¹⁹

1. Size	Its total assets exceed €30 billion
2. Economic importance	Its total assets exceed the 20 % of the GDP of its country and €5 billion
3. Cross-border activities	The ratio of its cross-border assets to its total assets, or the ratio of its cross-border liabilities to its total liabilities, is above 20 %, and the total value of its assets exceeds €5 billion ²⁰
4. Three largest banks	It is one of the three most significant banks in its country (based on total assets' value)
5. Public financial assistance	It has requested or received funds from the European Stability Mechanism (ESM) or the European Financial Stability Facility (EFSF) ²¹

¹⁹These criteria are applied to consolidated banking groups. See Part IV of the Framework Regulation.

²⁰A group is considered cross-border only if it has established subsidiaries in more than one member states other than the country where the parent undertaking is located. An asset or liability is cross-border if the counterparty is located in a member state other than the country where the group's parent company is located.

²¹In particular, the Framework Regulation (Art. 61) refers to the case where an ESM member applies for the *direct* recapitalization of a bank. I will expand on the Direct Recapitalization Instrument of the ESM in Chap. 5.

The rationale underlying those criteria is that large institutions, and those with a significant cross-border activity, have a systemic relevance: a crisis involving one of those banks could have negative spillovers on other banks, possibly located in different countries of the eurozone. In addition, those which receive financial aid from the European institutions should go under the European direct supervision as well. As expected, the list published by the ECB in September 2014 shows that the size is the dominant factor in the determination of significant banks. Actually, the criteria different from the size turn out to be relevant only in small countries. Among the 120 institutions initially selected as significant, the large majority have been included for their size (97) and for their economic importance (13), while only a few have been included for their cross-border activity (3) and for being one of the three most significant banks in the country (7).²² No bank has so far received any direct financial assistance by the ESM or the EFSF.²³

The above criteria, based on the size and on the cross-border activity, to determine whether a bank is significant, are simple to apply and they can be justified on this ground for operational purposes. However, we should not forget that the systemic relevance of a financial institution can be identified in other, more sophisticated, ways. For example, one methodology relies on market data to measure the price of insurance (CDS spreads) against systemic risk and the marginal contribution of each bank to the aggregate risk.²⁴ Another strand of literature focuses on the network of interbank links in the money market.²⁵ Another approach relies on the correlation of returns on the asset side of bank balance sheets.²⁶ Unfortunately, these more sophisticated approaches are still unable to provide simple criteria to be applied for regulatory purposes. It must be acknowledged that the Framework Regulation (Art. 57) introduces some criteria to assess the economic importance of a credit institution, other than those stated in point 2 above. Among them, there is the interconnectedness of a bank with the economy of the Union or of a member state. So the ECB may use

²² See ECB (2015). The list of significant banks is periodically reviewed by the ECB (at least annually), and it is available on its website. At present (September 2015), it includes 123 banking groups.

²³ The support given to the Spanish banks in 2012 was channeled through the public sector of that country: so it was an indirect financial assistance. The third program for Greece, agreed in August 2015, includes the potential use of the direct recapitalization facility by the ESM, to support the Greek banking sector (no detailed information is available, as of September 2015).

²⁴ See Huang et al. (2009, 2012), and Baglioni and Cherubini (2013a, b).

²⁵ See, for example, Aldasoro et al. (2015) and the literature reviewed there.

²⁶ See Acharya (2009).

a methodology more in line with some of the above-mentioned scientific literature, but this option has not been exercised so far.²⁷

3.2 THE SUPERVISION OF SIGNIFICANT BANKS

The SSM Regulation sets the rules to govern the distribution of responsibilities between the ECB and the NCAs, and the Framework Regulation provides further details. In this section, I will first describe and discuss the basic elements of this “division of labor.” However, as far as the significant banks are concerned, the actual balance of power between the ECB and the NCAs is also a practical matter, emerging through time from the concrete working of the JSTs. I will expand below on the organization and tasks of the JSTs.

3.2.1 *Ordinary Supervisory Activity*

The core of the supervisory activity is aimed at ensuring the compliance with the requirements set by the prudential regulation, related to several areas, such as own funds, liquidity, leverage, large exposures, governance, risk management, and reporting and public disclosure of information. To that purpose, the ECB is endowed with supervisory powers and can take several actions, including:²⁸

- Require a bank to hold own funds in excess of the requirements set out under Pillar I of the Basel framework, including the capital buffers (like the conservation and counter-cyclical buffers)
- Require a bank to use its net profits to strengthen its own funds
- Require a bank to limit the variable component of remunerations
- Restrict or even prohibit the distribution of dividends and interest payments to shareholders and holders of additional Tier 1 instruments
- Apply restrictions on maturity mismatches between assets and liabilities
- Require a bank to reinforce its arrangements and processes, related to the assessment of its own risk profile and capital adequacy
- Require a bank to present a plan to restore compliance with supervisory requirements

²⁷ See the list of significant banks, published on 31 May 2015 by the ECB, including the grounds for significance.

²⁸ Art. 16 of the SSM Regulation.

- Impose additional reporting and disclosure requirements
- Remove a member of the management body who does not fulfill the relevant requirements

The NCAs are deeply involved in the oversight of significant institutions. The Framework Regulation (Art. 90–91) assigns the NCAs the following relevant activities.

- Submit draft decisions to the ECB, either by its own initiative or upon request by the ECB.
- Assist the ECB in preparing and implementing supervisory acts, including the day-to-day assessment of the situation of a bank.
- Assist the ECB in the enforcement of decisions.

Moreover, significant banks have to report all the periodical information for supervisory purposes to their NCAs, which perform the data checks and transmit the information to the ECB; the latter can always require the supervised entities to report additional information.²⁹ However, significant banks should directly address to the ECB all their requests related to the supervisory tasks of the ECB.³⁰

The powers of the NCAs are balanced by the right of the ECB to provide instructions to the NCAs, and by the duty to cooperate and to exchange information between the NCAs and the ECB.³¹

3.2.2 *Authorization Procedures*

There are a number of supervisory procedures, which, despite the ultimate responsibility of the ECB, involve both the ECB and the NCAs, independently of the significance of the supervised banks: they are known as “common procedures.” They are related to the release of new banking licenses, to the authorization of the acquisition of qualifying holdings in other banks, and to the withdrawal of authorizations. The application for a new banking license must be made to the NCA of the member country. The NCA shall assess whether the applicant complies with the conditions laid down in the national law. If the outcome of that assessment is negative, the NCA rejects

²⁹ Art. 140–141 of the Framework Regulation.

³⁰ Art. 95 of the Framework Regulation.

³¹ Art. 20–22 of the Framework Regulation.

the application. If the outcome is positive, the NCA submits a draft decision to the ECB, proposing to grant the authorization. The ECB makes its own assessment based on the relevant Union law, and it can on this ground object the decision. The withdrawal of a banking license is decided by the ECB, either on its own initiative or upon request by the relevant NCA, submitting a draft decision to the ECB. In taking the withdrawal decision, the ECB shall consult the NCA and shall coordinate with the national resolution authority.³²

The notification of the intention to acquire a qualifying holding in a credit institution must be made to the NCA of the member state where such institution is located. The relevant NCA shall notify the ECB and it will submit a draft decision to it. The ECB will decide whether or not to oppose the acquisition.³³

Also the procedures regarding the suitability of the management board members are initiated by the NCAs and are finalized by the ECB. A significant bank must notify the NCA of any change in its management bodies; the NCA will notify the ECB, which will assess the suitability of managers.³⁴ These “fit and proper files” are actually the bulk of the authorization procedures handled by the ECB during the initial months of operation (between November 2014 and the beginning of 2015).³⁵

The second type of authorization procedure, by number of cases examined, is the so-called “passporting.” If a bank wants to establish a branch in another EU member state, it has to notify the NCA of the country where the bank has its head office. The NCA will inform the ECB. After 2 months, if no decision to the contrary is adopted by the ECB, the bank is authorized to establish the new branch. Similarly, if a bank wishes to exercise the freedom to provide financial services in another EU member state, it has to notify its home country NCA, which will inform the ECB.³⁶

3.2.3 *The Joint Supervisory Teams*

The JSTs play a key role in the supervision of significant institutions, both in the preparation of supervisory decisions and in their implementation. Each significant bank is assigned a JST, which is composed of staff

³² Art. 14 of the SSM Regulation and Art. 73–84 of the Framework Regulation.

³³ Art. 15 of the SSM Regulation and Art. 85–87 of the Framework Regulation.

³⁴ Art. 93–94 of the Framework Regulation.

³⁵ See ECB (2015), page 63.

³⁶ Art. 11–12 of the Framework Regulation.

members from the ECB and from the relevant NCA; it is coordinated by an ECB member (JST coordinator) and by one or more sub-coordinators from the NCA. It is responsible for the supervisory dialogue between the ECB and the supervised significant banks, by interacting with their staff and management bodies.³⁷

The JSTs were first involved in the comprehensive assessment taking place in 2014 (that will be addressed in the next chapter). In particular, they have been responsible for monitoring the follow-up actions to be taken by banks, taking into account the outcomes of the AQR and of the stress test. Such actions included, among other things, capital plans to be presented by those institutions for which a shortfall emerged from the comprehensive assessment. The outcomes of the comprehensive assessment and the results of the annual review conducted by the NCAs in 2014 have been the base for defining the SREP decisions to be implemented in 2015.

After 2014, which was a transition year, the JSTs remain responsible for the planning and implementation of the supervisory activity over significant banks. Their main tasks are the following:

- Perform the SREP and prepare the SREP Decision to be adopted by the ECB. In doing so, the JSTs have to analyze the financial statements and the supervisory reports of the supervised entities, meet their managers, and assess their risk models.³⁸
- Prepare an individual Supervisory Examination Programme (SEP), which identifies the main supervisory activities for the incoming year, including on-site inspections.
- Implement the SEP and any supervisory decision taken by the ECB.
- Ensure coordination with the on-site inspection teams and with the NCAs.

Within the Basel regulatory framework, a central role is played by the internal models, which banks can use to determine their minimal capital needs. These models have to be approved by the supervisors, who have to check their compliance with the legal requirements and with the EBA guidelines. The JSTs are involved in this activity for significant

³⁷ Art. 3–6 of the Framework Regulation. See ECB (2014, 2015) for information about the organization and specific tasks of the JSTs.

³⁸ I will expand on the SREP in the Sect. 3.4.

banks. Together with experts from the ECB Internal Models Division and from the NCAs, they prepare a proposal for a draft decision to be taken by the Supervisory Board, where the use of internal models can be authorized, possibly under some conditions, such as additional reporting requirements.

On-site inspections can be part of the supervisory activity planned and included in the SEP, or they can be ad hoc actions responding to some events and to the need to keep some specific sources of risk under control.³⁹ The purpose of an inspection is generally the assessment of the risk profile of a financial institution, of its governance and risk management procedures, of the quality of some balance sheet items, and of the compliance with the regulation. The teams who carry out the inspections are appointed by the ECB, in consultation with the NCAs. A member of the JST can be an inspector, but he cannot be the head of the team: this rule is intended to ensure that the work done during the inspection is independent from the day-to-day supervisory activity carried out by the JST. After receiving the report from the head of the team, the JST prepares the recommendations that will be sent to the supervised institution.

In case of a breach of the EU directives and regulations or of noncompliance with ECB decisions, the ECB can impose administrative pecuniary penalties to supervised institutions.⁴⁰ The investigation is carried out by the ECB Enforcement and Sanctions Division, with the assistance of the relevant JST, which has to establish the facts in the first place and to refer to the ECB Division.

Finally, the JSTs contribute to the formulation of the “fit and proper” decisions, which are the more relevant part of the authorization activity carried out by the ECB (as we have seen before). In case of a change in the composition of a management body (e.g. the Board of Directors), a bank has to inform the domestic NCA. The latter, in turn, informs the relevant JST and the ECB Authorization Division, and it provides assistance in evaluating the quality of the new members. Based on this preparatory work, the JST and the ECB Division submit a proposal for a draft decision to the Supervisory Board.

³⁹ Art. 12 of the SSM Regulation and Art. 143–146 of the Framework Regulation.

⁴⁰ Art. 18 of the SSM Regulation and Part X of the Framework Regulation.

3.2.4 *The Balance of Power Between ECB and NCAs*

Table 3.1 summarizes the distribution of tasks within the SSM, as far as significant banks are concerned. In principle, it seems that the balance between centralization and decentralization of supervisory activities favors the latter, with a deep involvement of NCAs in the supervision of significant banks (in addition to the direct oversight of less significant banks). While this approach can be justified in the early stage of the SSM, to exploit the expertise and proximity of the NCAs to the national banking systems, in a long-term perspective it might be desirable to convergence toward a more centralized setting, at least for a small number of large banks. Despite the legal duty to cooperate and to exchange information, the risk that some national biases will survive is still present, particularly in those countries where the local NCA is more captured by the domestic banking sector. Some commentators have raised doubts about the effectiveness of the framework adopted by the ECB, on legal grounds (see Troger 2014) and on practical matters like the collection of supervisory information and the composition of the JSTs (see AFME 2014).

Also the composition of the Supervisory Board and of the Mediation Panel (which has been described in Sect. 3.1.1) responds more to the need of allowing a representative for each national authority, rather than achieving a

Table 3.1 Distribution of tasks within the SSM: *significant* banks

	<i>NCA</i>	<i>ECB</i>
Compliance with regulation, e.g., own funds, liquidity, leverage	May submit draft decision Assist ECB in implementation and enforcement	May ask NCA draft decision Take final decision
Supervisory information	Collect information, check data and transmit to ECB	May require additional information
Common procedures: bank license, acquisition of qualifying holdings	Receive application and submit draft decision	Take final decision
Passporting: cross-border branches and provision of services	Receive notification and inform ECB	If no decision is taken within 2 months, authorization is given
Fit and proper files: composition of Board	Receive information and provide assistance to JST in preparing draft decision	Take final decision

European perspective. The same problem actually affects also the Governing Council, as far as monetary policy is concerned, where the number of national representatives largely exceeds that of the Executive Board members. To address this issue in the context of the enlargement of the euro area, the Governing Council has adopted a system of rotating voting rights in 2015. Some kind of adjustment will presumably be necessary also in the area of supervision, to ensure that a European approach prevails over national instances (at least as large cross-border banks are concerned), and also to streamline the activity of the Supervisory Board, which at present includes 25 people (19 national representatives and 6 ECB's representatives). Actually, a rotating system regulates the composition of the Steering Committee, which has a supporting role and it prepares the meetings of the Supervisory Board.⁴¹

In addition, the procedure where each decision has to be examined by the Supervisory Board (draft decision) and by the Governing Council (final decision through the nonobjection procedure) seems too complex, given the high number of actions to be taken: contrary to monetary policy, the supervisory activity involves a large number of decisions, taking into account detailed information on specific cases under scrutiny. Some adjustment seems worth taking under this regard, for example by delegating less relevant decisions to some lower level body within the ECB.

3.3 THE SUPERVISION OF LESS SIGNIFICANT BANKS

The large number (around 3500) of less significant institutions (LSIs) located in the euro area are directly supervised by the NCAs, with the ECB exercising the indirect supervision. The ECB retains the role of setting the standards and issuing the guidelines for the oversight of the LSIs, as well as monitoring the supervisory activity carried out by the NCAs. It must be stressed that implementing a high standard of supervision over the LSIs is important, because they can be a source of systemic risk, due to their interconnectedness and size. The organization of this two-tier system of supervision requires a high degree of cooperation between the NCAs and the ECB, with particular regard to the transmission of information from the former to the latter.

As far as the ordinary oversight activity is concerned, the NCAs are endowed with the supervisory powers and can take the actions that

⁴¹The members of the Steering Committee cannot be more than ten. See Art. 26 of the SSM Regulation and the *Rules of procedure of the Supervisory Board of the ECB* (Chapter II).

have been listed in Sect. 3.2.1.⁴² In carrying out this activity (which include the SREP, to be explained below) the NCAs organize meetings with the senior management of LSIs, perform risk analysis, and carry out inspections. They employ their own resources and can follow their decision rules. However, the ECB is responsible for the consistency of the supervisory activity across the countries participating in the SSM. The legal instruments to exercise such a responsibility include the issuance of guidelines, regulations, and general instructions to the NCAs.⁴³ Furthermore, a dedicated Division within the ECB (DG Micro-Prudential Supervision III) is responsible for the cooperation between the ECB itself and the NCAs, through specific country desks. As we said, a crucial element of the cooperation is the exchange of information. To this aim, the ECB regularly collects quantitative and qualitative information from the NCAs, following predetermined procedures, and it may ask specific additional information.

The NCAs are also responsible for handling the authorization procedures related to the suitability of board members (“fit and proper files”) and to the opening of branches and the provision of financial services in another member state (“passporting”). To the contrary, the responsibility for the above-mentioned “common procedures,” related to the granting and withdrawal of a bank license and to the acquisition of qualifying holdings, is shared between the ECB and the NCAs.

The framework developed by the ECB for the oversight of LSIs, which must be applied by the NCAs, follows the proportionality principle. This means that the intensity of supervision is not the same for all the less significant banks. Those that can have a more systemic impact, due to their size and interconnectedness, are assigned a higher priority. The list of high-priority LSIs initially defined by the SSM in 2014 includes 108 institutions. For those banks, the Framework Regulation (Art. 97–98) requires that the NCAs inform the ECB of “material procedures” and submit any draft decision related to those procedures to the ECB. The material procedures consist of:

- The removal of members of the management board and the appointment of special managers
- Those procedures having a significant impact on the credit institution

⁴²Art. 6(6) of the SSM Regulation.

⁴³Art. 6(5) of the SSM Regulation.

In such procedures, the ECB retains an advisory role: it shall express its own views and it can request an NCA to further assess specific aspects of the draft decision.

The ECB retains the power of taking up the direct supervision of a less significant bank at any time, in order to ensure the consistent application of the supervisory standards across the member countries of the SSM.⁴⁴ This might happen, for example, if the ECB's instructions have not been followed by an NCA. Hopefully, this provision should exercise a positive incentive effect, inducing the NCAs to adhere to the guidelines set by the ECB, thereby helping to achieve a greater supervisory convergence.⁴⁵ Other factors that may lead the ECB to take over the direct supervision of a less significant bank are: (1) if a bank is close to meeting one of the criteria used to establish the significance of a bank, (2) if a bank is highly interconnected with other banks, and (3) if a bank has requested or received indirect financial assistance from the ESM.⁴⁶

The NCAs must inform the ECB about the significant deterioration of the financial condition of a less significant bank. This kind of information is crucial to trigger the early management of a crisis situation or even a resolution procedure. The NCAs and the national resolution authorities are responsible for the crisis management of less significant banks. However, if the resolution relies on the resources of the Single Resolution Fund, then the procedure is handled by the Single Resolution Board.⁴⁷ The deterioration of the financial condition, or even the initiation of a crisis management procedure, does not necessarily imply that the ECB takes over the direct supervision. However, the direct financial assistance from the ESM is one of the conditions that determine a bank to be significant, and the indirect financial assistance may lead the ECB to take over the direct supervision of a less significant bank. Therefore, the NCAs must inform the ECB when the deterioration of the financial condition is such that it could presumably lead to address a request for direct or indirect assistance to the ESM.⁴⁸

⁴⁴ Art. 67 of the Framework Regulation.

⁴⁵ This view has been expressed by the Head of Supervision at Bank of Italy: see Barbagallo (2014).

⁴⁶ The ESM can directly support the recapitalization of a troubled bank or it can lend money to the national government, to be used to support the management of a banking crisis. The latter is called "indirect" financial assistance.

⁴⁷ See Chap. 5, which will address the Single Resolution Mechanism.

⁴⁸ Art. 62 and 96 of the Framework Regulation.

3.4 THE SREP APPROACH

In line with the Directive on capital requirements (CRD IV), the ECB follows a supervisory process centered on the SREP.⁴⁹ This is a periodic examination of the capital and liquidity situation of a bank, together with an evaluation of its internal governance and risk management practices. The outcome of this assessment is the SREP Decision, where the ECB can impose additional capital and liquidity requirements, as well as adjustments to the risk management policies.

The SREP is part of the Pillar II, which has been introduced into the regulatory framework by the Basel II Accord.⁵⁰ According to one of its principles: “Supervisors should review and evaluate banks’ internal capital adequacy assessments and strategies, as well as their ability to monitor and ensure their compliance with regulatory capital ratios. Supervisors should take appropriate supervisory action if they are not satisfied with the result of this process” (Principle 2). The CRD IV has taken up and detailed this principle. Further elements have been provided by the EBA in its guidelines on the SREP methodology, which are effective as of 1 January 2016.⁵¹ The latter are aimed at improving the consistency of the procedures implemented by the supervisors across the EU, starting from the significant degree of discretion left by the regulation to the national authorities in the application of the Pillar II principles. Further convergence should be reached within the euro area, thanks to the uniform procedures defined by the Supervisory Policies Division of the ECB.

According to the CRD IV and the EBA guidelines, the SREP framework is made up of four basic elements:

- Business model analysis
- Assessment of internal governance and control arrangements
- Analysis of capital adequacy
- Analysis of liquidity risk and liquid resources

For each of the above items, the supervisors should carry out (on a quarterly basis) an analysis based on a set of key indicators listed in the EBA guidelines. The outcome of the analysis is a score, ranging from

⁴⁹ Directive 2013/36/EU, Art. 97–101.

⁵⁰ See BIS (2006).

⁵¹ See EBA (2014).

1 (no risk) to 4 (high risk), which together with the accompanying considerations should provide the “supervisory view” on the risk profile of a bank and on its ability to manage its own risks. The scores assigned in each of the above areas are the basis for the overall SREP assessment, which has to be formulated annually and communicated to each bank. Again, this assessment is formulated by assigning a score ranging from 1 to 4, or even by assigning an F, which stands for “failing or likely to fail” (following the terminology of the BRRD, Art. 32).

The SREP analysis may lead the competent authorities to take supervisory actions in several areas, such as capital adequacy, liquidity, internal governance, and reporting and disclosure.⁵² They may also include the early intervention measures, as provided in the BRRD. In the extreme case of an F score, the supervisory authority should activate the interaction procedure with the resolution authority.⁵³

The ECB applies the SREP approach, following the above regulations and guidelines. Some details about the SREP methodology adopted by the ECB can be found in its Guide to banking supervision.⁵⁴ The latter identifies the following three main elements of the SREP to be implemented within the SSM.

- The risk assessment system (RAS), which evaluates banks’ risk levels and controls.
- A review of the Internal Capital Adequacy Assessment Process (ICAAP) and of the Internal Liquidity Adequacy Assessment Process (ILAAP) of each supervised bank.
- A quantification of the capital and liquidity needs of each institution needed to cover the risks resulting from the risk assessment.

The SREP is applied to both significant and less significant banks: the JSTs are responsible for its application to the former, while the NCAs are responsible for its application to the latter (under the guidelines set by the ECB). The proportionality principle implies that the frequency and

⁵²The list of available actions, provided by the CRD IV (Art. 104), is to a large extent the same as that provided by the SSM Regulation (Art. 16), that has been reported above (see Sect. 3.2).

⁵³The BRRD and the institutions responsible for the resolution of banks in the euro area will be illustrated in Chap. 5.

⁵⁴ECB (2014).

intensity of the supervisory examinations (within a year) are differentiated across banks, depending on their potential systemic impact. The overall assessment concluding the SREP leads annually to an SREP Decision, which for the significant banks has to be approved by the Supervisory Board of the ECB.

The supervisory approach relying on the SREP raises an important issue, namely the significant degree of discretion and uncertainty related to the supervisory measures that can be taken as a follow-up to the SREP assessment. In particular, the fact that Pillar I capital requirements (buffers included) are only a floor, to which additional institution-specific requirements can be added, implies that financial institutions are not given a uniquely defined threshold for their capital needs.⁵⁵ To the contrary, they face the chance that the authority raises the threshold to an extent that was not foreseen by the institutions' managers. To face such regulatory uncertainty, some banks might be induced to hold capital ratios in excess of the minimum required level, with possible negative side effects on the supply of bank credit.

Under this regard, it must be acknowledged that this approach goes back to the principle, introduced by the Pillar II of the Basel II Accord, stating that "Supervisors should expect banks to operate above the minimum regulatory capital ratios and should have the ability to require banks to hold capital in excess of the minimum" (Principle 3). However, the same document warns that "increased capital should not be viewed as the only option for addressing increased risks confronting the bank. Other means for addressing risk, such as strengthening risk management, applying internal limits, strengthening the level of provisions and reserves, and improving internal controls, must also be considered."⁵⁶ This statement, made by the Basel Committee on Banking Supervision, makes clear that the implementation of Pillar II should not rely only on additional capital requirements. The use of other tools, like opening a supervisory dialogue with the supervised entity aimed at improving its risk management policies, should hopefully reduce the need to resort to institution-specific capital add-ons.

Finally, each bank is informed on a confidential basis of the SREP Decision related to it. Of course, this confidentiality raises some concerns

⁵⁵ The ECB has explicitly stated that it considers the Pillar 1 capital requirements as a floor. See ECB (2014), page 25.

⁵⁶ See BIS (2006), page 204.

about transparency, despite the freedom left to banks to disclose some information included in the SREP Decision. The ECB should consider the option of directly disclosing the supervisory measures taken as a follow-up to the SREP, in order to avoid rumors and speculations by market participants. A more transparent approach has been followed by the ECB in the communication of the outcomes of the stress test performed in 2014.⁵⁷

3.5 MACRO-PRUDENTIAL SUPERVISION

The ECB is responsible for the micro-prudential supervision, while the macro-prudential supervision is to a large extent delegated to the national authorities. The fundamental difference between these two policies is related to their targets. The micro-prudential supervision aims at monitoring and preserving the stability of single financial institutions, ensuring their compliance with the relevant prudential regulation. The macro-prudential supervision should instead monitor the aggregate financial risks possibly arising in the economy, and pursue two basic tasks: (1) limit the pro-cyclical behavior of the financial sector (e.g. the increase of leverage during booms and the sudden deleveraging during downturns) and (2) limit the chance that the difficulties faced by some institutions spillover to other intermediaries and markets. Despite these different targets, the tools employed are essentially the same: capital requirements, liquidity ratios, leverage limits, and other more specific measures (like the Loan-to-Value and Loan-to-Income caps applied to mortgage loans).

More specifically, the Directive CRD IV (Art. 128–140) introduces a set of capital buffers: counter-cyclical buffer, systemic buffer, and a buffer for Systemically Important Institutions (either Global or Other, G-SII and O-SII respectively). They can be added to the minimum CET1 ratio, extended by the capital conservation buffer (which together amount to 7 % of the RWA, as of January 2019). The national authorities, designated for the macro-prudential supervision, are responsible for: (1) setting the counter-cyclical buffer rates (in a range between 0 and 2.5 % of RWA), (2) identifying the G-SIIs (which are applied a buffer ranging from 1 to 3.5 %) and the O-SII (which can be applied a buffer up to 2 %), and (3) deciding

⁵⁷The individual detailed outcomes of the stress test have been released by the ECB, despite some pitfalls emerging in its communication strategy. See the next chapter, devoted to the discussion of the 2014 Comprehensive Assessment.

which institutions (if any) should be applied a systemic risk buffer. Other tools, like the L-t-V and L-t-I caps, may be introduced by the national law.

The architecture of macro-prudential supervision in Europe includes two supranational bodies, namely the European Systemic Risk Board (ESRB) and the ECB, but with a limited role. The ESRB is responsible, at the EU level, for monitoring the systemic risks and for providing warnings and (nonbinding) recommendations to the national authorities, which bear the final responsibility to take action. Within the euro area, the national authorities have to notify the ECB before taking a macro-prudential action: in case of objection by the ECB, the national authority has to consider the ECB's reasons prior to proceeding with its decision. A symmetrical procedure applies to the case where the ECB wants to take a macro-prudential decision; however, the ECB can only take restrictive actions, by imposing higher requirements for capital buffers than those imposed by the national authorities.⁵⁸

This institutional design raises three issues: (I) the cross-country heterogeneity in the implementation of the macro-prudential policy; (II) the coordination between the macro-prudential authorities at different levels, namely, national and supranational; and (III) the potential conflicts between different policies, namely, macro-prudential, micro-prudential, and monetary policies. Let me briefly take up each of these issues in turn.

- (I) The systemic risk has a strong cross-country dimension: it is likely that the amplification of the financial and economic cycle, due to the pro-cyclicality of financial intermediation, and the propagation of liquidity and solvency shocks, have significant spillovers from one country to the others. It is unlikely that the national authorities take into due consideration these externalities. The ESRB itself, in the report on the macro-prudential policy implemented in the EU in 2014, has acknowledged that “national authorities do not analyze the potential cross-border effects of national macro-prudential measures in great detail.” The same report states that “wide differences exist across member States in the number and type of measures taken.”⁵⁹ This heterogeneity may be hardly justified by idiosyncratic macroeconomic shocks. To the contrary, it points to a lack of coordination among the

⁵⁸ Art. 5 of the SSM regulation.

⁵⁹ See ESRB (2015), pages 3 and 10 respectively.

national authorities. The emergence of significant cross-country differences in the use of macro-prudential tools can introduce a segmentation in the European regulatory framework, with the risk of jeopardizing the target of leveling the playing field.

- (II) The attribution of the macro-prudential supervision to the national authorities, which have to share their responsibility with two supranational authorities (ECB and ESRB), raises some obvious problem of coordination (particularly between the ECB and the NCAs under the above-mentioned Art. 5 of the SSM Regulation) and duplication of actions (particularly between the ECB and the ESRB, also because of a large overlap between their governing bodies).⁶⁰
- (III) The picture becomes even more complex if we consider that the micro-prudential supervision is shared between the ECB and the NCAs within the SSM (not to mention the EBA, EIOPA, and ESMA), and that the monetary policy is attributed to the ECB under a separation regime (that we discussed in Sect. 3.1). This fragmented framework raises the risk of conflicts between different policies. Consider first the macro- and micro-prudential policies, which use the same tools. In a negative side of the business cycle, the macro-prudential authority might want to take an expansionary action by lowering the counter-cyclical capital buffer; but this action might be offset by the micro-prudential authority, which for stability concerns might want to increase the individual capital ratios of several banks, making use of its discretionary power under Pillar II. Conflicting stances may arise also between the macro-prudential and monetary policies. Actually this is what happened in 2014, when the ECB introduced the Targeted Long Term Refinancing Operations (T-LTROs) and started the discussion leading to the introduction of the Quantitative Easing in early 2015: these nonstandard monetary policy tools have been introduced with aim of boosting the supply of credit to the economy and contrast the risk of

⁶⁰The composition of the General Board of the ESRB has a large overlap with that of the Governing Council of the ECB, since it includes its President and Vice-President, together with the Governors of the national central banks of the member states (plus the chairmen of the other European authorities, like EBA, EIOPA, and ESMA). See Angelini (2015) for an interesting discussion of the institutional framework of the macro-prudential supervision in Europe.

deflation. At the same time, the large majority of macro-prudential measures taken by member states were restrictive, with the explicit objective of “mitigation and prevention of excessive credit growth and leverage”.⁶¹ the contrast between the two policies is striking!

The bottom line is that the current situation, where the power of taking macro-prudential supervisory decisions is delegated to the national authorities, with the ESRB and the ECB playing a quite limited role, does not seem to be satisfactory. The whole institutional design should be streamlined and more centralized. As far as the eurozone countries are concerned, it seems reasonable that the responsibility of the macro-prudential supervision is attributed to the ECB. This is an issue that needs to be further analyzed and discussed by policymakers.

CONCLUDING REMARKS

The SSM is the fundamental building block of the European Banking Union, and it is the first one that has become fully operational. The second pillar of the banking union, the SRM, still needs to be completed and amended. The third pillar, the EDGS, does not even exist so far. By European standards, the SSM has been designed and implemented in quite a short time (a couple of years), under the pressure of the financial crisis and of the costs paid by several governments of the euro area to support their troubled banks. On political grounds, the transfer of sovereignty related to the oversight over the banking system was a prerequisite to proceed toward the other two pillars of the banking union.

The design of the SSM follows the principle of separation between banking supervision and monetary policy. The validity of this principle has been questioned by the economic literature, and the trend recently observed at the international level (before the introduction of the SSM) went toward a joint responsibility of the two tasks, in order to reach a better coordination and to exploit some information exchanges between them. However, it must be acknowledged that the separation principle has not been implemented rigidly in the internal organization of the ECB.

The distribution of tasks within the SSM relies on the distinction between significant and less significant banks. The ECB directly

⁶¹ See ESRB (2015), page 11.

oversights 123 significant banking groups, which together account for about 85 % of the eurozone banking system. The day-to-day oversight of the significant banks is actually delegated to the JSTs made up of representatives from both the ECB and the national authorities. The NCAs remain responsible for the direct supervision of all the other institutions, although following the guidelines set by the ECB; the latter can decide at any time to take over the direct supervision of a less significant institution.

Despite this “division of labor,” the NCAs are deeply involved in the supervision of significant banks: they submit draft decisions to the ECB related to supervisory actions and authorizations, they channel supervisory information to the ECB, and they provide members and assistance to the JSTs. This involvement is justified in the early stage of the SSM, to exploit the expertise and proximity of the NCAs to their domestic banks. In a long-term perspective, it seems desirable to proceed toward a more centralized control, at least for a small number of large cross-border banks.

The supervisory approach implemented in the SSM is centered on the SREP, in line with the Directive CRD-IV. This is a periodic examination of the capital and liquidity situation of each bank, together with an evaluation of its internal governance and risk management practices. The SREP is applied to both significant and less significant banks: the JSTs are responsible for its application to the former, while the NCAs are responsible for its application to the latter. As a follow-up to the SREP, a bank can be imposed additional capital and liquidity requirements, as well as adjustments to its risk management policies. This option, which derives from the Basel II framework (Pillar II), introduces a remarkable degree of discretion and uncertainty into the requirements that can be applied to individual banks.

Finally, it must be stressed that the ECB is responsible for the micro-prudential supervision, while the macro-prudential supervision is to a large extent delegated to the national authorities, with the ECB and the ESRB playing a limited role. This limitation raises some concerns, mainly related to the cross-country heterogeneity in the implementation of the macro-prudential policy, and to the potential conflicts between different policies: macro-prudential, micro-prudential, and monetary policies. Therefore, it seems reasonable that the responsibility of the macro-prudential supervision is attributed to the ECB.

REFERENCES

- Acharya, V. 2009. A theory of systemic risk and design of prudential bank regulation. *Journal of Financial Stability* 5: 224–255.
- Adrian, T., and H.D. Shin. 2010. Liquidity and leverage. *Journal Financial Intermediation* 19: 418–437.
- AFME. 2014. *ECB consultation on draft SSM framework regulation—AFME response*, Association for Financial Markets in Europe.
- Aldasoro, I., D. Delli Gatti, and E. Faia. 2015. *Bank networks: Contagion, systemic risk and prudential policy*. SAFE Working Paper No. 87, Goethe University.
- Angelini, P. 2015. *Le politiche macroprudenziali: una discussione dei principali temi*. Bank of Italy Occasional Papers, No. 271.
- Baglioni, A., and U. Cherubini. 2013a. Marking-to-market government guarantees to financial systems: Theory and evidence for Europe. *Journal of International Money and Finance* 32: 990–1007.
- Baglioni, A., and U. Cherubini. 2013b. Within and between systemic country risk. Theory and evidence from the sovereign crisis in Europe. *Journal of Economic Dynamics and Control* 37: 1581–1597.
- Baglioni, A., E. Beccalli, A. Boitani, and A. Monticini. 2013. Is the leverage of European banks pro-cyclical? *Empirical Economics* 45: 1251–1266.
- Barbagallo, C. 2014. *Il rapporto tra BCE e autorità nazionali nell'esercizio della vigilanza*. Speech given at the conference “Unione bancaria: istituti, poteri e impatti economici”, LUISS University, 26 February, Rome.
- Beccalli, E., A. Boitani, and S. Di Giuliantonio. 2015. Leverage pro-cyclicality and securitization in US banking. *Journal of Financial Intermediation* 24: 200–230.
- Beck, T., and D. Gros. 2012. *Monetary policy and banking supervision: Coordination instead of separation*. CEPS Policy Brief No. 286.
- BIS. 2006. *International convergence of capital measurement and capital standards*. Basel Committee on Banking Supervision, Bank for International Settlements, June.
- BIS. 2010. *Basel III: A global regulatory framework for more resilient banks and banking systems*. Basel Committee on Banking Supervision, Bank for International Settlements, December.
- EBA. 2014. *Guidelines on common procedures and methodologies for the supervisory review and evaluation process*, London, December.
- ECB. 2014. *Guide to banking supervision*, Frankfurt, November.
- ECB. 2015. *Annual report on supervisory activities—2014*, Frankfurt, March.
- ESRB. 2015. *A review of macro-prudential policy in the EU one year after the introduction of the CRD/CRR*, June.
- European Parliament. 2012. *Should monetary policy be separated from banking supervision?* DG Internal Policies, Brussels, December.

- Goodhart, C., and D. Schoenmaker. 1995. Should the functions of monetary policy and banking supervision be separated? *Oxford Economic Papers* 47(4): 539–560.
- Huang, X., H. Zhou, and H. Zhu. 2009. A framework for assessing the systemic risk of major financial institutions. *Journal of Banking and Finance* 33: 2036–2049.
- Huang, X., H. Zhou, and H. Zhu. 2012. Systemic risk contributions. *Journal of Financial Services Research* 42: 55–83.
- Masciandaro, D., and M. Quintyn. 2009. *Reforming financial supervision and the role of central banks: A review of global trends, causes and effects (1998–2008)*. CEPR Policy Insight No. 30.
- Troger, T. 2014. *The single supervisory mechanism—Panacea or Quack Banking Regulation?* SAFE Working Paper Series No. 27, Goethe University.

The Comprehensive Assessment

INTRODUCTION

The first action taken by the ECB, responsible for the banking supervision, has been the examination of the balance sheets of the more relevant banks in the euro area. Actually this action took place even before the ECB was endowed with the formal responsibility of supervision, which started on November 4, 2014. The examination of bank balance sheets, which goes under the name of “comprehensive assessment,” was carried out during 2014, and its results were communicated on October 26, 2014. This assessment was a sort of prerequisite for the SSM, required at the policy level by the European Council of June 2013, in order to minimize any possible cross-country sharing of bank losses emerging after the start of the banking union. The aim of the comprehensive assessment was to make any capital deficiency of significant banks to emerge and be managed at the national level, by making use of private funds and national public backstops, if necessary. This is not to say that the official objectives of the exercise, namely strengthen banks’ balance sheets, enhance transparency, and build confidence of bank stakeholders,¹ are not true. However, the political input to the process was to make clear that each country had to bear the costs of the losses accumulated by its own banking system during the financial and economic crisis of the last 7 years.

¹ See ECB (2014), page 2.

The sample of banks examined includes 130 banks, approximately² coinciding with the set of significant banks: those going under the direct oversight of the ECB. Such sample accounts for 82 % of the total assets of the banks located in the SSM area. The comprehensive assessment is made up of two parts: (1) AQR and (2) stress test. The AQR is an assessment of the quality of information released by banks for supervisory purposes, with the primary objective of identifying the needs to adjust the values of bank assets, and to modify the capital-to-asset ratio reported by each bank. This AQR-adjusted capital ratio provides the starting point for the stress test, examining the resilience of banks' solvency under two scenarios: baseline and adverse. The bottom line of the exercise is given by a number called "capital shortfall." In each stage of the comprehensive assessment, the capital ratio (computed as CET1/RWA) resulting from the assessment is confronted with a threshold level, equal to 8 % for the AQR and for the baseline scenario of the stress test and 5.5 % for the stress test adverse scenario. If the capital ratio resulting from the exercise is below the required threshold level, the difference between them is a capital shortfall. The final shortfall is the largest number among the three shortfalls emerging in each stage, if any.

The focus of the attention paid by market participants and commentators has been on the capital shortfalls, driven by the communication strategy of the ECB itself. However, the more interesting outcomes are probably the value adjustments produced by the AQR, as they bring to the surface the needs to correct the evaluation of bank assets by applying a uniform methodology across all participating countries. The outcomes of the stress test are crucially affected by the assumptions underlying each scenario, which are necessarily arbitrary to some extent and controversial, and this reduces the relevance of those outcomes.

The next section is devoted to the AQR, introducing its methodology and reporting its main results. The same is done for the stress test in Sect. 4.2. Section 4.3 reports the capital shortfalls resulting from the examination and the steps to be taken by some banks as a consequence. Finally, a critical view of the comprehensive assessment is given in Sect. 4.4.

² A few significant banks were not examined under the comprehensive assessment of 2014, while other banks covered by the comprehensive assessment were later classified as less significant (see ECB 2015 for details).

4.1 ASSET QUALITY REVIEW

The AQR has examined the balance sheets of participating banks at year-end 2013. Its methodology includes the following ten steps.³

- (I) **Review of accounting practices:** the bank policies and practices in valuing and classifying assets are examined, for example, by looking at the application of the fair value accounting principle and the classification of assets available for sale.
- (II) **Loan tape creation:** banks provide a database on individual credit positions, including information related to segment classification, status, credit performance.
- (III) **Sampling:** not all exposures, but a large sample is examined in detail, accounting for 57 % of the total RWA of the participating banks.
- (IV) **Credit file review:** NCAs verify that credit exposures have been correctly classified (e.g. as nonperforming loans) and that specific provisions, if needed, have been set at the appropriate level.
- (V) **Collateral and real estate valuation:** assessment of the correct valuation of collateral assets and on-balance sheet real estate properties.
- (VI) **Projection of findings:** the findings of the credit file review (stage IV) are projected to the whole portfolio of assets, by applying the results to homogeneous exposure pools.
- (VII) **Collective provisioning:** the provisions for small homogeneous exposures, which are typically made on a collective basis by using statistical models, are evaluated (the so-called challenger model is applied for this purpose).
- (VIII) **Level 3 assets:** for only those banks with a material exposure to level 3 assets,⁴ a revaluation of the most important securities is carried out, including derivatives.
- (IX) **AQR-adjusted CET1 ratio:** taking into account the outcomes of the preceding stages, the CET1/RWA ratio is computed for each participating bank; this provides the basis for the stress test.

³ See ECB (2014), Section 3.2.1.

⁴ Level 3 assets are those securities without an active market where a price can be observed; therefore they are priced by using internal statistical models. Their name derives from the fair value hierarchy, where Level 1 (2) assets are those for which a quoted price (or other market information) can be observed.

- (X) **Quality assurance:** the NCAs are responsible for checking the quality of the exercise at the national level, while the ECB is responsible for ensuring cross-country consistency of the comprehensive assessment.

The aggregate AQR outcome can be summarized by the total adjustment that has been made to the asset values of the participating banks: 47.5 billion euros, which are equivalent to 55 basis points as a ratio to their RWA. The actual impact on capital is 33.8 billion, due to the tax offsetting effects. This figure is quite significant. We also have to consider that it is an average number, and there is a wide variation across countries and across banks. As Fig. 4.1 shows, for seven countries the gross AQR adjustment has been larger (or equal) than 1 % of RWA and above 2 % for three of them. The reduction of the starting-point available capital, due to the AQR adjustments, has given a substantial contribution to the total capital shortfall resulting from the comprehensive assessment: 10.7 billion euros over a total shortfall of 24.6 billion.

One important source of adjustment has been the application of a common criterion for the definition of nonperforming loans in the credit

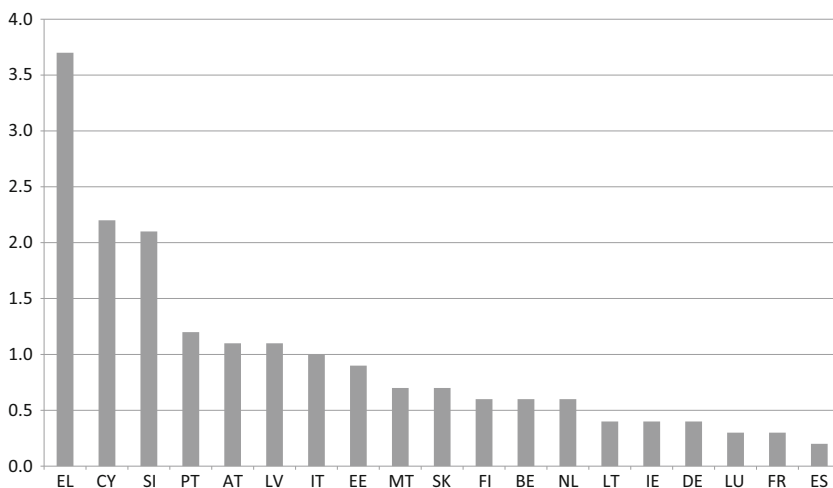


Fig. 4.1 AQR adjustments by country (% of RWA)

Source: ECB

Table 4.1 AQR adjustments by component

	<i>Billion euros</i>	<i>Ratio to RWA (b.p.)</i>
Credit file review: Individually assessed files	16.4	19
Credit file review: Projection of findings	10.3	12
Collective provisioning (challenger model)	16.2	19
Total credit file review	42.9	50
Level 3 assets and CVA ^a	4.6	5
Total	47.5	55

Source: ECB

^aCVA: credit valuation adjustments. These are adjustments to the accounting value of derivatives, to take into account the counterparty risk

file review (step IV), following the EBA guidelines:⁵ a loan is considered nonperforming if it is past due by more than 90 days or if the borrower is unlikely to pay due to a default state (independently of any past due amount). On average, the internal criteria previously applied by banks were less conservative, so the application of the EBA guidelines leads to an increase of the nonperforming exposure stock by 54.6 billion euros, equivalent to a 7.3 % increase. By adding to that the impact of the examination of individual credit files and the projections of results to the wider credit portfolios, we get the overall increase of the stock of nonperforming loans: 135.6 billion euros, equivalent to an 18.3 % increase. Again, large differences across countries emerge: the percentage increase of the stock of nonperforming loans ranges from 7 to 116 %.⁶

A breakdown of the AQR adjustments by component is provided in Table 4.1, from which a quite interesting evidence emerges. The credit file review accounts for more than 90 % of the adjustments made to bank asset values: 42.9 over 47.5 billion euros. Conversely, the examination of level 3 assets and derivatives accounts for less than 10 % of the AQR overall adjustments. This data might be taken as evidence that the comprehensive assessment has been focused primarily on the commercial banking

⁵The EBA guidelines on the definition of nonperforming loans were issued in October 2013 and became effective as of September 2014.

⁶See ECB (2014), page 67.

business, rather than paying attention to the trading of securities and derivatives. We will come back on this issue in Sect. 4.4.

4.2 STRESS TEST

The purpose of the stress test exercise was to test the resiliency of the banking sector, in particular of its solvency level, to an adverse change of macroeconomic conditions. Actually the balance sheets of the participating banks have been tested under two scenarios: baseline and adverse. The first is based on the winter forecasts released by the EU Commission in February 2014: this is assumed to be the more plausible scenario. The adverse scenario simulates a deterioration of the business cycle due to a financial shock, namely a sudden increase of the general level of interest rates.

The methodology of the stress test has been developed by the EBA, which is in charge of conducting this kind of exercise at the EU level, so including those EU countries which are outside the eurozone (the most relevant is the UK). In doing so, the EBA has acted in coordination with the ECB, the ESRB, and the national supervisory authorities.⁷

The time horizon of the stress test extends over 3 years: 2014–2015–2016. The starting point for the simulations is provided by the bank balance sheets at the end of 2013, which are supposed to remain constant, in terms of size and composition, for the whole period considered: this is why this stress test is called a “static balance sheet” exercise.

The definition of capital used is the Common Equity Tier 1 (CET1), which basically includes the common shares issued by a bank, its retained earnings, and its accumulated reserves. The bottom line of the exercise is to assess the impact of the adverse shocks simulated in the exercise on its regulatory capital of higher quality, measured as a ratio to its RWA: the CET1/RWA ratio. Of course, a satisfactory level of capital must be reached also in the baseline scenario, which is much more likely to materialize. To that purpose, two minimum threshold levels for the CET1/RWA ratio has been set: 8 % in the baseline scenario and 5.5 % in the adverse scenario.

The adverse scenario takes as a starting point a sharp increase of investors’ risk aversion, with sell-offs of long-term bonds and equities, leading to lower asset prices and higher yields, starting in the USA and spreading in other countries, including the eurozone. The negative macroeconomic impact of

⁷See EBA (2014).

Table 4.2 Stress test: macroeconomic patterns (euro area)

	<i>Baseline scenario</i>			<i>Adverse scenario</i>		
	2014	2015	2016	2014	2015	2016
Long-term yields	2.8	3.1	3.2	4.3	4.2	4.3
Real GDP growth (% change)	1.2	1.8	1.7	-0.7	-1.4	0.0
Residential real estate prices (% change)	-0.2	2.1	3.8	-8.0	-5.7	-1.5

Source: ESRB

this financial shock leads to a deterioration of credit quality, with negative effects on bank balance sheets. Another negative evolution of the adverse scenario is a renewed tension in the market for sovereign bonds, also affecting financial intermediaries.⁸ Table 4.2 reports some key variables of the two macroeconomic scenarios for the euro area, showing that the level of long-term interest rates is assumed to increase by more than one percentage point in the adverse scenario, relative to the baseline. The negative impact on the real GDP growth is quite severe: the cumulated effect of the different rates of change shown in the table implies a lower level of the euro area GDP by 6.6 % in 2016. Another indicator of the re-pricing of assets is the evolution of the real estate prices, which decline sharply in the adverse scenario, while they show on average a positive pattern in the baseline.

The stress test was focused mainly on credit and market risks, but it also covered other risks inherent to the banking business, like those related to funding conditions and securitization. In particular, credit risk covered all counterparties: firms, households, and sovereign obligors. The impact of the adverse macroeconomic patterns on the probability of default of those counterparties and on the estimated loss given default has been assessed. Market risk covered all positions exposed to possible adverse price changes, including sovereign securities. The effects of the simulated stressed market conditions on both trading portfolios and assets available for sale (priced at fair value) have been measured.

Funding conditions are sensible to the assumed evolution of interest rates and to shocks like widening of sovereign spreads. The possible impact of this source of risk on the interest income of participating banks has been taken into account. It is true that an increase of the interest rate level does not affect only the cost of funding, as it can be passed through

⁸ See ESRB (2014).

Table 4.3 Aggregate impact on capital under adverse scenario (AQR + stress test) (CET 1—billion euros)

AQR—adjustments (after tax)	33.8
Capital depletion under adverse scenario	181.7
Total capital depletion	215.5
Additional capital need due to RWA increase	47.2
Total capital impact	262.7

Source: ECB

to borrowers; but this is subject to some constraints, deriving primarily from the maturity transformation typically operated by banks. As far as securitization is concerned, the possible increase in risk weights, due to rating downgrades, has been considered, leading to higher RWAs.

The aggregate outcome of the comprehensive assessment is a huge depletion of capital for the sample of participating banks.⁹ As noted in the previous section, the asset value adjustments resulting from the AQR imply a negative impact on capital equal to 33.8 billion euros (net of tax offsetting effects). By adding to this number the reduction of capital in the adverse scenario of the stress test (181.7 billion), we have an overall capital depletion equal to 215.5 billion euros: this is equivalent to 22 % of the initial capital of participating banks. Moreover, the computed RWA of the sample banks have increased by 858.6 billion euros, as a combined effect of the AQR and of the stress test adverse scenario. Applying to this number the 5.5 % minimum required ratio between CET1 capital and RWAs, we get an additional need of regulatory capital equal to 47.2 billion euros. This leads to a total impact on aggregate capital amounting to 262.7 billion euros under the adverse scenario. For the median bank in the sample, that capital impact implies a decrease of the CET1 ratio by more than four percentage points in the final year of the simulation (2016): from 12.4 to 8.3 %. As noted for the AQR adjustments, there are great cross-country differences: the maximum capital reduction is 15 % for Slovenia, while the minimum is 2 % for Spain. These results are summarized in Table 4.3.

4.3 CAPITAL SHORTFALLS AND REMEDIAL ACTIONS

As we said in the Introduction, the magic number summarizing the results of the comprehensive assessment (including both AQR and stress test) is the capital shortfall, which can be obtained by confronting the CET1

⁹See ECB (2014), Section 5.1.

ratio resulting from the exercise and the minimum thresholds: 8 % for the AQR and stress test baseline scenario, and 5.5 % for the stress test adverse scenario. Based on the information at the end of 2013, the number of banks showing a shortfall was 25, and their aggregate shortfall was equal to 24.6 billion euros. This number is the sum of three components: (1) the impact of the stress test, under both the baseline and adverse scenarios (11.2 billion), (2) the additional impact of the AQR adjustments, which modify the starting point for the regulatory capital to be used in the stress test, together with the AQR stand-alone result measured against its own threshold (10.7 billion), and (3) the revision of the credit risk parameters (PD and LGD) used in the stress test, by taking into account the outcome of the AQR (2.7 billion).¹⁰

The geographical distribution of the shortfall is quite uneven. Among large countries, Italy emerges as the one with the highest share of capital deficiency in the euro area, with 9 banks showing a shortfall: its overall size is 9.7 billion euros. To the contrary, Germany, France, and Spain have only one bank each showing a shortfall (of very small amount). Among other countries, Greece and Cyprus exhibit quite negative outcomes, with three banks in each country showing some shortfalls: 8.7 billion is the overall shortfall for Greece (more than 4 % as a ratio to RWA) and 2.4 billion for Cyprus (more than 6 % of RWA).

As for the size distribution of the shortfall, it is interesting to note that the smallest banks in the sample (i.e. those with RWA up to 10 billion) have been affected by the highest shortfalls: as a group, 1.4 % as a ratio to their RWA. To the opposite, the globally systemic banks (G-SII) do not show any shortfall. In between, medium-size banks (RWA between 10 and 75 billion) show shortfalls around 0.7–0.9 % of their RWAs, while larger banks (RWA above 75 billion) show lower shortfalls (0.2 % of RWA).

The reported figure of 24.6 billion capital shortfall, released by the ECB in October 2014 when the results of the comprehensive assessment were communicated, is based on data at 31 December 2013, and it does not take into account the capital actions taken by banks during the first 9 months of 2014. As the ECB (2014) reports, during that period, 54 banks in the sample raised an overall amount of capital equal to 57.1 billion, mostly through the issuance of instruments eligible for inclusion in the primary capital (CET1). This has been partly offset by buyback deals for 16.6 billion, leading to a net capital increase of 40.5 billion. Of course, not all this amount went to reduce the capital shortfall, because it includes the capital actions taken by

¹⁰The third element is named “join-up” between AQR and stress test.

banks not showing any shortfall. The capital increases actually offsetting the shortfalls amount in aggregate to 15.1 billion, mostly related to actions taken by Italian and Greek banks (more than 6 billion in each country), and by Cyprus banks (2 billion). As a result, the aggregate shortfall is more than halved, declining to 9.5 billion euros, involving 13 banks.

All the 25 banks showing a capital shortfall (as of 31 December 2013) have been requested to submit a capital plan (within 2 weeks from the public disclosure of the results of the comprehensive assessment), listing the remedial actions planned in order to restore their capital position, possibly including the actions already taken during 2014. The deadline to meet for implementing such actions has been set to 6 months in case of a shortfall resulting from the AQR or from the stress test baseline scenario, and to 9 months in case of a shortfall resulting from the adverse scenario.

According to the political input given by the European Council (Heads of State) of June 2013 and by the Ecofin (Ministers of Finance) of November 2013, the remedial actions had to rely primarily on private resources, namely, retained earnings, reduced bonus payments, issuance of common shares, and asset sales. Only as a second option, in case of lack of private funds, a bank could resort to a recapitalization plan making use of resolution mechanisms and/or a public backstop at the national level, under the limitations set by the EU state aid rules.¹¹

The results of the comprehensive assessment, together with the remedial capital plans where applicable, have been heavily used by the JSTs to formulate the SREP decisions taken in 2014, to be implemented in 2015. As we saw in the preceding chapter, SREP decisions may include additional requirements, related to own funds, liquidity, and disclosure. Thus, the comprehensive assessment has complemented the supervisory activity carried out at the national level by the NCAs in 2014.

In addition to these additional prudential requirements, the comprehensive assessment had also an accounting impact. Banks have been requested to incorporate the findings of the AQR into their financial statements for 2014, in particular with regard to: (1) the reclassification of exposures from performing to nonperforming, (2) the adjustments to the level of loan loss provisions (both collective and on individual credit files), and (3) the credit valuation adjustment (CVA) models for derivative products. The JSTs have been given the task of monitoring the implementation

¹¹We will address these rules in the next chapter, dealing with the new European bank resolution regime.

of capital plans and the incorporation of the AQR results into the banks' financial accounts.

4.4 A CRITICAL VIEW

The comprehensive assessment implemented in 2014 by the ECB has provided valuable information about the balance sheets of the significant banks located in the euro area, thus contributing to the transparency of the accounting information released by banks. It has also provided a useful starting point for the supervisory activity of the ECB, which has started this activity by asking banks to take the necessary corrective actions to incorporate the outcomes of the comprehensive assessment into their plans for 2015. The severity of the stress test has been greater than in other similar exercises recently carried out at the EU level. For example, the stress test performed by the EBA in 2011 assumed a 4 % cumulated deviation of the real GDP between the adverse and the baseline scenarios, in the second year of the simulation; the ECB stress test of 2014 added a third year to the time span of the exercise, with a cumulated GDP deviation equal to 6.6 %.

However, several drawbacks have emerged in the debate about the ECB comprehensive assessment, mainly related to the methodology adopted by the ECB. In this paragraph, I try to give an illustration of such criticisms. In doing so, I do not address those criticisms focused on the scenarios assumed in the stress test, in the adverse scenario in particular. The reason is that such criticisms are often unfair, since they fail to consider that some arbitrary assumptions need necessarily to be taken in this kind of exercises. I will rather focus on the following issues:

- (a) Reliance on the CET1 ratio as the only measure of capital strength
- (b) Treatment of level 3 assets and derivatives in the AQR
- (c) Possibility of national biases/discretion
- (d) Micro-supervisory approach, neglecting systemic risk
- (e) Pitfalls in the communication of results

4.4.1 *CET1 Ratio versus Leverage*

The comprehensive assessment has relied on the ratio between CET1 regulatory capital and RWA to assess the capital strength of each participating bank against some thresholds, both in the AQR and in the stress test.

Table 4.4 CET1 versus leverage ratios (ECB stress test sample—% points)

	<i>CET1/RWA</i>	<i>Leverage (equity/assets)</i>	<i>RWA/Assets</i>
Netherlands	17.05	3.91	33.02
Belgium	15.85	3.79	25.71
Germany	14.40	4.43	24.92
Spain	11.40	6.72	44.98
France	11.22	4.45	26.67
Italy	10.49	6.45	48.02

In doing so, the ECB has adopted the Basel approach, overlooking that some concerns have been raised by several scholars about the likely distortions affecting such approach. Actually the Basel Committee on Banking Supervision (BCBS) has acknowledged the limits of the approach based on RWA, and it has introduced a leverage requirement into the regulation, based on the ratio between capital and *unweighted* total assets: this 3 % minimum limit will become effective in 2018.

Several studies support the use of leverage as a measure of bank solvency, to complement the CET1/RWA ratio in the supervisory practice, and in the stress tests in particular. It is possible to show that by using leverage the ECB would have reached quite different conclusions than those obtained in the stress test. For example, Steffen (2014), by analyzing the sample of those banks participating in the ECB stress test, shows that the two measures of solvency differ substantially, as Table 4.4 reports.¹² Banks located in the Netherlands and in Belgium rank first by using the CET1 ratio, while the opposite holds by looking at their leverage. To the opposite extreme, Italian banks as a group are the weakest by considering the CET1 ratio and appear to be the strongest, together with the Spanish banks, by looking at their leverage.

The reason why the two rankings differ so much has to be found in the third column, which reports the so-called risk intensity: the ratio between the RWAs and the unweighted total assets. This index measures the extent to which a given amount of total assets is translated into the denominator (RWA) relevant for the CET1 ratio used in the Basel framework. The risk intensity depends on the composition of the bank assets, together with the risk weights assigned by the Basel regulation to each type of assets. Of course, for any given level of equity and total assets, the higher the risk

¹²Tables 4.4 and 4.5 focus on a few countries to simplify the exposition. Data referred to all the euro area countries can be found in Steffen (2014).

Table 4.5 Shortfalls: CET1 versus leverage (ECB stress test sample—billion)

	<i>ECB shortfall (CET1 ratio)</i>	<i>Shortfall based on leverage (4 % threshold)</i>
Italy	9.7	1.97
Greece	8.7	0.0
Cyprus	2.4	0.0
Germany	0.2	14.82
France	0.1	21.17
Spain	0.0	9.64

intensity the lower the CET1 ratio shown by a bank.¹³ Under this regard, Italian and Spanish banks seem to be penalized by having a risk intensity almost double than that of German and French banks.

The difference between the two measures of solvency, CET1 ratio and leverage, translates into a striking discrepancy between the capital shortfalls computed by using either the former or the latter as a reference. Table 4.5 reports the data for some euro area countries: the first column reports the shortfall computed by the ECB, while the second reports the shortfall based on leverage and using a 4 % minimum threshold level.¹⁴ It turns out that those countries where the ECB has reported the largest shortfalls have a very low or even zero shortfall based on leverage, and vice versa. So, by using leverage instead of CET1 ratio, the ranking of countries by shortfall would be quite different to the one released by the ECB.¹⁵

Now, the question is why does the risk intensity differ so much across banks and across countries? Two answers can be given. One is that the Basel framework is very complex and it leaves banks and national regulators a significant degree of discretion, thus opening the way to possible manipulations of the risk weights to be applied in the computation of the RWAs. In particular, those banks adopting the Internal Ratings Based (IRB) approach are allowed to estimate by themselves some crucial parameters used to

¹³More formally: $CET1/RWA = Leverage/Risk\ Intensity$. Actually, this formula does not apply exactly to the numbers shown in Table 4.4, since the definition of capital differs between the first two columns.

¹⁴Data for the first column in Table 4.5 are taken from ECB (2014), and those for the second column from Steffen (2014).

¹⁵De Groen (2014) reaches the same conclusion, as he finds that by using a non-risk-adjusted capital ratio, several banks of northern Europe (Germany, the Netherlands, Belgium, and France) would not meet the 3 % threshold level under the adverse scenario. This outcome differs sharply from the one obtained by using the risk-adjusted ratio.

compute the risk weights to be assigned to their credit exposures, like the probability of default (PD) and the loss given default (LGD). It is true that the internal models have to be validated and approved by the national supervisory authorities, but this leaves open the possibility of some national biases. There is some empirical evidence supporting this view. For example, Mariathasan and Merrouche (2013) study the behavior of 115 banks from 21 OECD countries around the date when their IRB models have been approved by the competent authorities. Quite interestingly, they find that after the adoption of the internal model they report a lower level of riskiness, measured by their risk intensity; in this way they are able to increase their reported risk-adjusted capital ratio by 64 basis points on average. This behavior can be taken as an evidence of manipulation of the risk weights.¹⁶

The other answer relies in the different business models that better describe the financial intermediaries. We may identify two stylized models: commercial versus investment banks. The former is more focused on the traditional business of deposit-taking and loan-making to firms and households, so it is more exposed to credit risk. The latter is more focused on securities trading and asset management, so it is more exposed to market risk. Of course, there is a third model, universal bank, which is some kind of combination between the two. It can be shown that commercial banks are somewhat penalized in the computation of the RWAs. For the sample of 130 banks participating in the comprehensive assessment, I have regressed their risk intensity on the ratio between their credit risk exposure and their total risk exposure (RWA): this is an indicator of the share of the commercial business over the whole range of activities of a financial institution. Table 4.6 (Model 1) shows that this indicator is significantly correlated with the risk intensity: a higher focus on the commercial business seems to imply a higher risk intensity, leading in turn to a higher risk-adjusted capital requirement. Another interesting exercise is the regression of the risk intensity on the ratio between corporate loans and RWAs, and in particular on the ratio between loans to SMEs and RWAs (see Table 4.6—Model 2): both ratios have a highly significant correlation with the risk intensity. Again, it seems that a focus on the more traditional business of making

¹⁶The evidence provided by Cannata et al. (2012) points to the same conclusion. They find that the risk weights of a sample of 24 banking groups are significantly increasing in the share of assets for which the standard approach (SA) is used in the computation of risk weights. Contrary to the IRB approach, the SA relies on external ratings, so a bank is not allowed to provide its own risk parameters.

Table 4.6 Determinants of risk intensity. Dependent variable: RWA/total assets

	<i>Model 1</i>	<i>Model 2</i>
Constant	0.13	0.26***
Credit exposure/RWA	0.37***	
Corporates/RWA		0.29***
Retail (SME)/RWA		1.70***
	Adj. R-square: 0.07	Adj. R-square: 0.32

OLS. Cross section analysis with 130 banks participating in the ECB comprehensive assessment

Data (end 2013) from the ECB report on the comprehensive assessment (ECB website)

*** stands for 1 % significance level (heteroscedasticity robust standard errors)

loans to firms and to small/medium-size firms, in particular, can be penalizing in terms of capital requirements under the Basel regulatory framework.

The bottom line of the above discussion is that the focus of the comprehensive assessment on the CET1 ratio, as the only indicator of solvency, is questionable. Such a choice turns out to be penalizing for those banks more focused on the commercial banking business, and it suffers for the possible manipulation of the risk weights used to compute the RWAs. This approach overlooks the possibility that some financial intermediaries accumulate a high leverage, despite the fact that they are able to report a satisfactory CET1 ratio. Therefore, a better approach would be to complement the CET1 ratio with a simple leverage index, which is less prone to manipulations and distortions, and consequently to national biases.¹⁷

4.4.2 *Level 3 Assets and Derivatives*

The view that commercial banks have been given a more severe treatment than other financial intermediaries, more engaged in the trading activity, is reinforced by looking at the AQR adjustments that we have reported in Sect. 4.1. By looking again at Table 4.1, we notice that the value adjustments due to level 3 assets and CVA account for less than 10 % of the overall amount of the AQR adjustments. Moreover, a breakdown of the 4.6 billion adjustments, related to such items, shows that the bulk of them

¹⁷See Barucci et al. (2014) for a similar view.

are due to the valuation of counterparty risk (CVA: 3.1 billion), followed by the revaluation of nonderivative products (1.2), while the review of complex derivative pricing models resulted in adjustments for only 0.2 billion. Looking at these numbers, it is reasonable to have some doubts that the more sophisticated and often opaque line of business has been given a proper examination. The ECB itself acknowledges that the assessment of level 3 assets and derivatives did not include adverse scenarios, like the liquidity dry-up of particular asset classes or the changes of market conditions making some model assumptions obsolete.¹⁸ Unfortunately, such adverse developments are exactly those that caused severe losses and created liquidity stress for several intermediaries in the financial crisis that started in 2007: think for example at the dry-up of the markets for asset-backed securities (ABS) and commercial paper.

4.4.3 *National Biases*

The more severe treatment applied to financial institutions following more closely the commercial business model raises the issue of possible national biases in the comprehensive assessment. Of course, the implication is that those countries where such model is predominant within the domestic banking sector might have been penalized in an international comparison of the outcomes of the supervisory exercise. This issue is even more relevant if we consider that such outcomes have been used as inputs for supervisory decisions, namely the 2014 SREP decisions (to be implemented in 2015), often imposing additional capital requirements.

Two other sources of national biases can derive from the implementation of the comprehensive assessment and from the national discretions in applying transitional arrangements. The AQR has been executed by national NCA teams, composed of NCA staff and external auditors and advisers. The stress tests have been executed by the supervised banks. Of course, these actions have followed a common methodology, designed by the competent authorities, and have been monitored by a quality assurance made by the NCAs and the ECB. However, it remains true that the primary source of information has been the banks themselves and their local supervisory authorities.

Transitional arrangements are related to the gradual phase-in of the common definition of regulatory capital, following the EU regulation and directive (CRR/CRD IV). When fully loaded (by 2018) the new defini-

¹⁸ See ECB (2014), page 94.

tion of CET1 requires the full deduction of some items, like goodwill and other intangible assets, participations in other financial entities, and deferred tax assets. During the transitional period (2014–2017), the regulation sets some minimum percentage deductions (increasing through time) to be applied on those items. This leaves the national authorities the discretion of applying either such minimum thresholds or higher deduction levels. The impact of this discretion can be measured by comparing the CET1 ratio resulting from the application of the transitional arrangements (at a given date) with the CET1 ratio resulting from the fully loaded Basel III regulation. The ECB acknowledges that the overall impact of those transitional adjustments is quite relevant: 126.2 billion for the whole euro area. But even more importantly, their effects diverge significantly across countries: as a ratio to RWAs, their impact goes from more than 5 % in some countries to a negative number in others. Among the large countries, the one that has enjoyed the largest benefit is Germany, with an increase of the CET1 ratio of more than 2 %.¹⁹

4.4.4 *Micro-prudential Approach*

Another limitation of the comprehensive assessment derives from its micro-prudential approach. The analysis performed by the ECB, through both the AQR and the stress test, has been focused on the risk profile of each financial institution in isolation, without considering any possible spillover among them. Several sources of spillover should be considered, for example: the network of interbank exposures; the externality deriving from the fire sale of some specific type of assets by some intermediaries, with negative effects on the liquidity of that market segment and on the balance sheet of other intermediaries, particularly in the case of assets priced at fair value. These spillovers have played a crucial role in amplifying some initial shocks during the recent financial crisis. So they should possibly be incorporated into the adverse scenario of a stress test analysis of the banking sector. The failure of the comprehensive assessment to consider the systemic risk can be presumably traced back to the architecture of the SSM, which does not assign the responsibility for the macro-prudential supervision to the ECB. As we have seen in Chap. 3, such responsibility has been retained by the national authorities, with the ESRB playing mainly an advisory role. The lack of responsibility for the macro-prudential

¹⁹See ECB (2014), Section 8.2.1. The reported numbers refer to 1 January 2014.

supervision might explain why the ECB decided to overlook the systemic component of credit and liquidity risks. Whatever the reason, this limitation should hopefully be avoided in future stress test exercises.

4.4.5 *Pitfalls in Communication*

Finally, a remark is worth relative to the communication of the outcomes of the comprehensive assessment by the ECB. This might seem an issue of secondary importance. To the contrary, it deserves a careful consideration, since the release of information by the authorities sends important signals to market participants and it can affect the reputation of financial institutions. The communication of the results of the comprehensive assessment by the ECB stressed a couple of data: the overall capital shortfall of 25 billion euros, distributed across 25 banks participating in the supervisory exercise.²⁰ These data are based on the information as of year-end 2013. It does not take into account that in the first 9 months of 2014 several participating banks have raised new capital, able to reduce the aggregate shortfall to 9.5 billion, distributed across 13 banks. Other additional measures (like asset sales, removal of specific capital add-ons, and approval of internal risk models) have been implemented in the same period, leading to a further reduction of the actual shortfalls. Just to make an example, the ECB communicated that nine Italian banks showed some shortfalls, while by taking into account all the available information as of end-September 2014, the right number of Italian banks with a shortfall was two. Moreover, the ECB communication overlooked the fact that, when looking at the banking system at the aggregate level, the excess capital of some institutions should be considered together with the deficiencies of others. To conclude with the example of Italy, the total shortfall of two banks (3 billion) was more than offset by the excess capital of the other 13 Italian participating banks (25.5 billion in total). A more accurate and transparent communication should have included this kind of information with the adequate emphasis.

CONCLUDING REMARKS

The comprehensive assessment carried out in 2014 has been the first important action taken by the ECB, exercising its new power of banking supervision. It has provided valuable information about the balance sheets

²⁰ See the ECB press release of 26 October 2014, and the Executive Summary opening the Aggregate Report (ECB 2014).

of the large and medium-size banks located in the euro area, thus contributing to the transparency of their accounting information. The capital shortfalls, emerging from the AQR and from the stress test, have been the starting point for the supervisory activity over the significant banks: those with a shortfall have been asked to submit a capital plan, listing the remedial actions to restore their capital position. Such remedial actions had to rely primarily on private resources and to national public backstops as a last resort.

Several drawbacks have emerged, related to the methodology used in the comprehensive assessment. The main criticism derives from its focus on the CET1 ratio as the only indicator of bank solvency. Actually, the concerns, related to the CET1 ratio, have a more general relevance, since they point to some pitfalls in the Basel regulatory approach. The CET1 ratio turns out to be penalizing for those banking systems more focused on commercial banking, as opposed to investment banking. It suffers from the possible manipulation of the risk weights used to compute the RWA. This approach overlooks the possibility that some financial intermediaries accumulate a high leverage, despite the fact that they are able to report a satisfactory CET1 ratio. In the future, a way to improve the stress test methodology would be to complement the CET1 ratio with a simple leverage index, which is less prone to manipulations and national biases. The other main limitation of the comprehensive assessment derives from its micro-prudential approach. The analysis performed by the ECB has been focused on the risk profile of each bank in isolation, without considering any possible spillover among them. Looking ahead, the inclusion of systemic risk into the analysis of the adverse scenario may lead to a considerable improvement of the stress test methodology.

REFERENCES

- Barucci, E., R. Baviera, and C. Milani. 2014. *Is the comprehensive assessment really comprehensive?* Unpublished paper.
- Cannata, F., S. Casellina, and G. Guidi. 2012. *Inside the labyrinth of Basel risk-weighted assets: How not to get lost.* Bank of Italy Occasional Paper No. 132.
- De Groen, W.P. 2014. *Was the ECB's comprehensive assessment up to standard?* CEPS Policy Brief No. 325.
- EBA. 2014. *Main features of the 2014 EU-wide stress test*, London, January.
- ECB. 2014. *Aggregate report on the comprehensive assessment*, Frankfurt, October.
- ECB. 2015. *Annual report on supervisory activities—2014*, Frankfurt, March.
- ESRB. 2014. *EBA/SSM stress test: The macroeconomic adverse scenario*, April.

- Mariathanan, M., and O. Merrouche. 2013. *The manipulation of Basel risk-weights*. CEPR Discussion Paper No. 9494.
- Steffen, S. 2014. *Robustness, validity and significance of the ECB's asset quality review and stress test exercise*. Study requested by the European Parliament (ECON Committee).

The Single Resolution Mechanism

INTRODUCTION

The second pillar of the European Banking Union is the SRM. Strictly speaking, this term refers to the creation of a new European agency delegated to the management of banking crises, the Single Resolution Board (SRB), together with the establishment of a new fund, the Single Resolution Fund (SRF), where some resources to be used for crisis management are pooled among participating countries. The SRF is administered by the SRB. The countries involved in the SRM are the same participating in the SSM: those belonging to the euro area (and potentially those EU countries asking to enter the SSM).

In a broader sense, the term SRM refers also to a new set of rules governing the management of banking crisis, which have been introduced into the European legislation by the BRRD,¹ approved in April 2014 and becoming effective as of 1 January 2015. The BRRD applies to all the EU countries, following the usual procedure of implementation through the national legislation of each country. This directive aims at introducing new tools for crisis management, leading to a more uniform and possibly efficient way of dealing with banking crises in the European countries.

While the BRRD is a coordinating device, across all the EU countries, and it relies on national authorities to implement the new rules, the SRB and SRF are new European institutions, operating at a supranational level

¹ Directive 2014/59/EU.

within the euro area. Actually there is a large overlapping between them, since the Regulation² establishing the SRM builds upon the BRRD: in managing banking crises, the new SRB has to apply the rules introduced by the directive (many articles of the SRM Regulation seem to be “cut and pasted” from the BRRD).

The basic motivation behind the BRRD is the introduction of a sort of “third way” between the two extreme solutions that have traditionally been applied to banking crises: either a “bailout” or an insolvency procedure. On the one hand, the first solution is costly for taxpayers and it creates the wrong incentives for bankers (moral hazard effect). On the other hand, the second one can have a much negative impact on the stability of other intermediaries and of financial markets, with harmful consequences for the real economy as well (remember Lehman Brothers). Hence the need to introduce a special procedure to deal with the distress of a bank, enabling it to overcome such a situation and at the same time limiting the bill for taxpayers and the moral hazard effect. Of course, this third way is not without cost. Its main drawback derives from the “bail-in” principle, putting some relevant costs on the creditors of a stressed financial institution (in addition to its shareholders): such principle might increase the cost of funding and be a source of instability for the market of bank liabilities.

The other motivation behind the directive is to reach a cross-country convergence toward some predefined rules to manage banking crises. This is needed not only to level the playing field among European financial institutions, but also to endow the competent authorities with a set of tools to address crisis situations, which typically require fast decisions. However, it is well known that the same rules can be applied differently by different authorities, by exploiting the margins of discretion left. These margins are presumably quite relevant in the area of bank resolution, since the competent authority has to choose among different tools to deal with the situation. That is why the convergence in handling banking crises should be fostered by the introduction of a single agency, the SRB, which is entitled to apply the new rules. Under this regard, the SRM complements the SSM within the euro area.

A crucial target of the SRM is also the creation of a common safety net for banks located in the euro area. This role should be played by the SRF, overcoming the segmentation of financial risks at the national level, and in particular the link between the credit risk of governments and that of their domestic banks. Unfortunately, this goal has been achieved only to a limited

² Regulation No. 806/2014 of the European Parliament and of the Council, 15 July 2014 (hereafter “SRM Regulation”).

extent, due to the small size of the fund and to the absence of a common fiscal backstop for it. Actually the ESM could play the role of a common fiscal backstop, but its size and rules of operation limit its ability to do so.

The plan of the chapter is as follows. Section 5.1 introduces the Directive (BRRD) that has changed substantially the crisis management tools available to the European authorities, in particular by introducing the “bail-in” principle. Section 5.2 is devoted to the SRM: its organization, governance, and financial resources, including the role of the ESM as a common fiscal backstop for the SRM. The chapter will also examine the interplay between the SRM and the state aid rules applied by the EU Commission. The analysis made in this chapter suggests some lines of reform of the SRM, which are summarized in the final section.

5.1 THE BRRD: A NEW FRAMEWORK FOR CRISIS MANAGEMENT

5.1.1 *Why a New Regime for Managing Banking Crises?*

The BRRD applies to all the banks located in the 28 countries of the EU. The rationale behind this Directive is the need to find an alternative to the ordinary insolvency procedures, which typically make the competent authorities to face a difficult dilemma: either let a bank under stress go bankrupt or resort to a bailout. As we said in the Introduction, both these alternatives have severe drawbacks.

The bankruptcy of a large financial institution may have contagion effect on other intermediaries, both through the chain of interbank exposures and through expectations. A bank of systemic relevance has many contractual obligations with several counterparties, so its bankruptcy can cause significant losses to them and originate a high number of legal disputes. In the case of Lehman Brothers, litigations about pending contracts and the appropriation of assets through the bankruptcy procedure have lasted for several years. The network of payment systems adds another source of possible contagion: in the systems dedicated to the settlement of payments and of securities trades, a bank can accumulate huge obligations versus other banks, and its failure to meet such obligations in due time can have chain effects on the other participants in the system.³ In addition to these direct channels of contagion, expectations can introduce an indirect

³ See Baglioni (2006) for an analysis of these risks and of the related institutional arrangements to deal with them.

channel, which can be even more relevant. It is well known that the stability of banks relies on the trust that depositors have on their solvency and liquidity. The theory of banking has developed the concept of multiple equilibria: one where depositors believe in the ability of a bank to repay its liabilities, and the other one where such trust vanishes and they rush to withdraw their deposits. The latter situation (named “bank run”) can be originated by self-fulfilling expectations: the behavior of depositors is driven by their beliefs, which make the liquidity crisis happen. The collapse of an important financial institution can trigger a run on other banks, due to the possible losses they might suffer as a consequence.⁴

In order to avoid systemic consequences, the authorities can decide to bail out a bank. A bailout procedure transfers the financial risks and losses from the balance sheet of a stressed bank to that of the public sector, by extending guarantees, buying troubled assets or injecting new money into the bank’s capital. While enabling the stressed bank to survive, this strategy implies costs for the taxpayers and it may generate the expectation of further bailout interventions, which in turn may induce bank managers to take high risks, on the basis of the principle: “I take the profits, you take the losses.”

The “third way” introduced by the BRRD should enable the authorities to make a troubled institution to continue operating as a going concern, but as the same time to make its stakeholders (shareholders, creditors, managers) bear the costs of the bank restructuring. So, the disruption of contractual obligations is avoided, and the costs for taxpayers are minimized, as well as the moral hazard effect.

5.1.2 *Three Stages: Recovery, Early Intervention, and Resolution*

The BRRD makes a distinction between *recovery* and *resolution*. The first term refers to the actions taken by an institution to restore a sound financial position, following a deterioration of its financial situation, without receiving public financial support and without any intervention of the public authorities that override private contractual arrangements. To the contrary, a resolution is a procedure aimed at preserving the

⁴The literature on contagion in banking is huge, and most of it builds on the seminal model of bank runs introduced by Diamond and Dybvig (1983). See Allen and Gale (2009) for an overview of the issue.

continuity of a bank through the modifications of contractual arrangements that can be imposed by the resolution authority, like the conversion of debt into equity, the write-down of the value of some liabilities. In addition, the resolution procedure may rely on the financial support from the public sector. Table 5.1 provides a sketch of the three different instruments introduced by the BRRD, which can be ordered by an increasing role of the resolution authority: recovery, early intervention, and resolution.

The BRRD asks member states to appoint a resolution authority, which is a specific public body delegated to exercise the resolution powers and to apply the resolution tools (described below). Such authority should in principle be separated from the competent supervisory authority. When a single institution, for instance the central bank, performs both tasks, there should be an operational independence between the supervisory and the resolution functions, albeit with a duty of cooperation and information exchange.

Table 5.1 BRRD: available instruments

<i>Recovery</i>	<i>Early intervention</i>	<i>Resolution</i>
Recovery plans drawn up by banks		Resolution plans drawn up by resolution authority
Activated by bank management	Activated by supervisory authority	Activated by resolution authority
Conditions: triggers are met, related to	Conditions:	Conditions:
•Capital	•Deterioration of financial condition	•Bank failing or likely to fail
•Liquidity	•Irregularities	•No alternatives
•Profitability		•Public interest
•Asset quality		
•Market-based indicators		
•Macro-indicators		
Actions taken by bank management:	Authority asks bank management to implement recovery actions	Resolution tools:
•Reorganization		•Sale of business
•Asset sales		•Bridge institution
•Issue of new shares		•Asset separation
•Debt renegotiation		•Bail-in
	Additional measures:	
	•Removal of managers	
	•Appointment of temporary administrator	

5.1.3 *Recovery*

Banks are required by the BRRD (Art. 5) to prepare their recovery plans, where they identify in advance the tools to address a deterioration of their financial condition. Such tools must rely on private arrangements, like the issue of new shares or the voluntary conversion of some debt liabilities into equity. Recovery actions may also include the sale of assets and the reorganization of some lines of business. The recovery plans should identify those assets that are going to be used as collateral for applying to the financial assistance of the central bank, if needed. The recovery plans must include stressed scenarios, both at the macroeconomic level and with reference to the specific environment of the institutions drawing them, following the specific guidelines issued by the EBA.⁵ They should rely on some indicators, which identify key variables and thresholds able to trigger recovery actions.⁶ The EBA guidelines have detailed the list of triggers, which are related to capital, liquidity, profitability, and asset quality of an institution; they include market-based and macroeconomic indicators as well.⁷ The recovery plans, which can be prepared at group level, must be updated annually and submitted to the competent authority for review. The supervisory authority makes an assessment of the adequacy of the recovery plan, and it can ask a bank to modify its plan or even to take corrective actions, like reducing its risk profile or issuing new equity. It also provides the plan to the resolution authority, which can make recommendations.⁸

5.1.4 *Early Intervention*

The management of a bank can decide to implement some of the actions set up in the recovery plan, in particular when the threshold levels have been met for some relevant indicators, or even before that if it considers appropriate to take immediate action. If the management fails to do so, it can be asked by the supervisory authority to implement the actions designed in the recovery plan, through the so-called early intervention procedure. The purpose of this procedure is to force an institution to take some corrective actions, in case of a deteriorating financial condition, including a stressed liquidity situation, an increasing level of leverage, a

⁵ See EBA (2014).

⁶ Art. 9 of the BRRD.

⁷ See EBA (2015a).

⁸ Art. 6 of the BRRD.

high level of nonperforming loans, or a large concentration of exposures. The deterioration of the financial condition of a bank should be assessed on the basis of a set of triggers, which may include the institution's own funds requirement plus 1.5 percentage points.⁹ Those triggers have been detailed by the EBA, and they are closely related to the outcomes of the periodic supervisory review SREP (that we have addressed in Chap. 3).¹⁰ The corrective actions to be taken should aim at restoring a sound financial condition, so as to avoid the activation of a resolution procedure or of an insolvency. To this aim, the competent authority can take several actions, such as: require the bank management to carry out some of the actions set out in the recovery plan, including the renegotiation and restructuring of debt with some classes of creditors; require a change of the business strategy or of the operational structure of the institution; or require information in order to update the resolution plan (and provide such information to the resolution authority).

In case of a significant deterioration in the financial situation of an institution, or where there are serious infringements of law or administrative irregularities, the competent authorities may require the removal of some managers of the institution, to be replaced following the usual procedures and with the approval of the supervisory authority.¹¹ The competent authority may even appoint a temporary administrator, either to replace the top managers of the bank or to work with them. In such a case, the authority will specify the role, duties, and powers of the temporary administrator, which can be quite large and must be focused on restoring the sound and prudent management of the financial institution concerned (Art. 29).

5.1.5 *Resolution*

When the recovery actions and the early intervention of the supervisory authority are not able to restore a sound financial condition of an institution, a resolution procedure has to be considered. The resolution objectives are as follows: (1) to ensure the continuity of the critical functions of the bank, (2) to avoid contagion to other banks and financial markets, (3) to minimize the resort to public funds, and (4) to protect small

⁹Art. 27 of the BRRD.

¹⁰See EBA (2015b).

¹¹Art. 28 of the BRRD.

depositors.¹² As we said, these objectives try to combine the necessity to preserve (at least in part) the continuity of a stressed bank as a going concern, in order to avoid contagion, with the aim of reducing the cost for taxpayers to the minimum possible extent, which is generally quite large in ordinary bailouts.

Unlike the recovery actions, the resolution procedure relies on a strong role played by the resolution authority, which can impose relevant modifications of existing contracts. Accordingly, the resolution plans are drawn up by the resolution authority itself, rather than by the institutions concerned.¹³ They must provide a description of the resolution actions to be taken by the authority under adverse scenarios, including the insolvency of an institution due to either idiosyncratic reasons or system-wide shocks. The actions listed in the resolution plan should be based on the resolution tools that I will describe shortly. In drawing the plan, the resolution authority relies on the cooperation and the information provided by the concerned institutions.

A resolution procedure can be activated only if *all* of the following three conditions are satisfied.¹⁴

- (a) A bank is *failing or likely to fail*, as determined by the competent authority. This definition includes those circumstances where the assets of an institution are worth less than its liabilities or such an institution is unable to repay its debt obligations or the requirements for authorization are no longer met (for instance because heavy losses have depleted its own funds), and finally when the bank has received extraordinary public financial support. The latter case has presumably been included in order to deter early bailouts by national governments, finalized at avoiding the resolution procedure. There are, however, some exceptions: the most relevant is the recapitalization of a bank as a follow-up to the comprehensive assessment carried out by the ECB and the EBA.
- (b) There is no reasonable prospect that any alternative private sector or supervisory actions (including early intervention measures or the write-down or conversion of capital instruments) would prevent the failure of the concerned institution. This condition makes the resolution be a “procedure of *last resort*.”

¹²Art. 31 of the BRRD.

¹³Art. 10–14 of the BRRD.

¹⁴Art. 32 of the BRRD.

- (c) *Public interest.* A resolution procedure must be in the public interest, meaning that it must be necessary to achieve at least one of the resolution objectives listed above. In particular, by winding up the concerned institution under normal insolvency proceedings, it would not be possible to achieve those objectives to the same extent as by applying some resolution actions.

Altogether these conditions are quite restrictive, and they limit the use of resolution actions to those cases where there is no alternative way, either by a private initiative or by a supervisory intervention, to preserve a bank as a going concern and to achieve the other resolution objectives. The rationale behind these restrictions is clear: minimize the use of resolutions tools, which might imply the resort to public funds. This motivation becomes even stronger in the perspective of the SRM, where the use of the resolution procedure may imply some cross-border mutualization of the related financial burden, albeit quite limited (as we shall see in Sect. 5.2.3).

When the above conditions are met, the resolution authority can initiate a resolution procedure, where one or more of the following tools can be employed.¹⁵

- (a) *Sale of business.* The authority can impose the transfer of some shares issued by the bank under resolution, and of some assets or liabilities. This can be done without the consent of the shareholders and of the creditors of the bank. This tool should be typically used in order to preserve the continuity of some lines of business of the troubled bank, by transferring them to another viable bank, while other lines of business are liquidated.
- (b) *Bridge institution.* The purpose of preserving the continuity of some lines of business can also be pursued by establishing a new institution, called “bridge institution,” to which some shares, assets, or liabilities of the bank under resolution are transferred. In the banking jargon, the bridge bank is also called “good bank,” and actually the total value of its liabilities should not exceed that of the assets transferred to it. The new bank is created for the specific purpose of resolving a bank under stress. It should be owned (at least in part) by the public sector, and it must be controlled by the resolution authority. It should be a temporary institution: the bridge bank (or

¹⁵ Section 5 of the BRRD.

some assets and liabilities) should be sold to some private entities as soon as possible, normally within 2 years (with some possible extensions).

- (c) *Asset separation.* The resolution authority can establish a new institution that will operate under its control, and transfer to it some assets or liabilities of the bank under resolution, with the purpose of maximizing the value of those assets and sell them or wind them down. The asset management vehicle created for this purpose is what usually goes under the name of “bad bank.” The final goal of this tool is not to preserve the continuity of the transferred business, but to implement an orderly liquidation of it. This is the only resolution tool that must be used together with another tool, and the reason is that the bad bank can be seen as a complement to the sale of business or to the creation of a bridge bank: in general, these are the two sides of a resolution process, where the viable part of a stressed bank is separated from the loss-generating lines of business.
- (d) *Bail-in.* The resolution authority makes an assessment of the total amount of funds needed to restore a positive net asset value of the troubled bank and to make its CET1 ratio satisfy the regulatory requirement. These funds can be necessary to make the bank under resolution (or the bridge bank) viable, meaning that it satisfies the requirements for authorization and it enjoys market confidence. The aggregate amount of funds, so computed, determines the total loss that must be allocated among the stakeholders of the troubled bank, following the pecking order below.

- CET1 instruments are the first to be written down.
- If CET1 instruments are not sufficient to cover the total amount needed, additional Tier 1 instruments are written down, followed by Tier 2 instruments.
- If the above regulatory capital instruments are not sufficient, then also subordinated debt instruments are either written down or converted into equity, following the rankings used in insolvency procedures.
- If the above instruments are not sufficient, then other liabilities are hit, like senior bonds, corporate deposits, and deposits held by individuals and small-medium-sized enterprises (SMEs), in excess of the amount covered by the deposit guarantee schemes (100,000 euro).
- Finally, the relevant deposit guarantee scheme can be called to contribute, up to the amount that the covered deposits would have been written down under a normal insolvency.

As it can be seen from the above list, all bank liabilities can potentially bear some losses under the bail-in procedure, including bonds and deposits (respecting the priority of claims, of course). This is the new relevant part of the procedure, since it makes bank creditors bear some losses even if the bank is preserved as a going concern and without their consent. Before the BRRD, those stakeholders were called to bear losses only in case of liquidation of a bank, or on a voluntary basis under a restructuring negotiation. To the contrary, holders of equity capital were called to bear losses under bailout public interventions, even before the BRRD.

There are actually a number of liabilities which are exempted from the bail-in, including deposits up to the 100,000-euro threshold; interbank loans with a maturity up to 7 days; liabilities to payment and settlement systems with a maturity up to 7 days; accrued salaries (except for the variable components) and pension benefits; commercial debt to providers of services; tax and social security liabilities. Additional exemptions can be decided by the resolution authority, for example preserving deposits of individuals and SMEs from the bail-in, with the aim of avoiding contagion and financial instability. The burden related to these discretionary exemptions can be dealt with in two ways: either it is spread across the other claimholders involved in the bail-in, or it is covered by the national resolution fund (see below). However, the latter option is subject to two conditions: (1) the contribution of bank claimholders to the loss absorption and to the recapitalization is at least equal to 8 % of the total liabilities of the bank, including own funds; (2) the contribution of the resolution fund, in order to restore a positive net asset value of the bank and its regulatory CET1 ratio, does not exceed 5 % of total bank liabilities.¹⁶

The relevance of the above condition, imposing a minimum loss absorption to bank claimholders, should not be underestimated. Such rule has been incorporated into the framework of the state aid regulation (that we will address in Sect. 5.2.5). It is worth stressing here that any public support to a bank rescue, provided either by a resolution fund or by a government, can be allowed only if the costs of the bank resolution have been allocated to its shareholders and creditors, by applying the bail-in tool, for an amount at least equal to 8 % of the bank total liabilities. This new rule applies as of 1 January 2016, but it involves also those liabilities issued before that date. On one side, it contributes to minimize the cost of banks' bailouts for taxpayers, which is one of the objectives of the resolution procedure.

¹⁶Some exemptions to these limits are allowed under strict conditions. See Art. 44 of the BRRD.

On the other side, the bail-in rule raises some concerns. First, it may introduce some instability into the funding conditions of banks: the holders of senior debt and deposits (above the 100,000 threshold), being aware that they are no more protected in case of bank resolution, might react to rumors about the health of a bank by withdrawing their money. As it is well known, this type of behavior can be partly self-fulfilling, and it may substantially contribute to amplify the impact of an initial negative shock. Even in absence of an extreme event such a bank run, the bail-in rule may be costly, since some classes of bank creditors may react to the lower protection by asking a risk premium, to be added to the return they get on their bank claims. Finally, it puts on the banks and on the supervisory authorities the responsibility of providing to the bank clients, in particular retail bondholders and depositors, the information enabling them to be aware of the new regime, with regard to both new issues and financial contracts already in place. While the holders of equity and junior debt should already be aware that they hold risky assets, this is not necessarily true for senior bondholders and depositors. In particular, retail customers may find it difficult to have a clear assessment of the risks incurred: they might either underestimate them or, to the contrary, overreact. For all these reasons, the extension of the bail-in rule to retail bondholders and depositors seems to be questionable, and it deserves a careful examination of its effects.

An important principle, which applies irrespective of the resolution tool used, is the “no creditor worse off” (Art. 73). In practice, this means that no stakeholder (actually either shareholder or creditor) can receive a treatment implying larger losses than those he would bear under an ordinary insolvency procedure. This rule is relevant in two cases: (1) for the stakeholders hit by the bail-in and (2) for the holders of those bank claims that are not transferred, given that other bank liabilities are transferred to another institution or to a bridge bank.

5.1.6 *National Resolution Funds*

The BRRD requires all the EU countries to set up national resolution funds (“financing arrangements” in the terminology of the Directive, Title VII). These funds should be used by the resolution authorities for the following purposes:

- To guarantee the assets or the liabilities of the institution under resolution, or those of the bridge bank or bad bank

- To make loans to the institution under resolution, or to a bridge bank or bad bank
- To purchase assets of the institution under resolution
- To make contributions to the bridge bank or bad bank
- To make a contribution to the loss absorption, when the bail-in tool is applied and the resolution authority decides to exempt some classes of creditors (with the above-mentioned limitations)

National funds should be funded through both *ex ante* and *ex post* contributions from the supervised banks. *Ex ante* contributions are computed on the basis of the total liabilities of each bank, excluding own funds and deposits covered by the guarantee schemes. The latter exclusion has been introduced in order to avoid a double contribution on covered deposits, since banks already pay some fees to the deposit guarantee fund. So each bank contributes to the resolution fund in proportion to its size, although with some adjustments related to its risk profile. To this aim, several risk indicators must be considered: the risk exposure of the bank (including its trading activities, off-balance sheet exposures, and leverage); the stability of its funding sources and the amount of liquid assets; and the complexity of the financial institution and its systemic relevance.¹⁷ The directive sets a (minimum) target level for the aggregate amount of *ex ante* contributions: 1 % of the covered deposits by the end of 2024. Notice that covered deposits are subtracted from the basis used to compute the contributions, but they are taken as a reference for the target size of the resolution funds.

When *ex ante* contributions are not sufficient to cover the losses and expenses of the fund, banks may be asked additional *ex post* contributions, capped at three times the size of an annual *ex ante* contribution. If these *ex post* contributions are not readily available, a resolution fund may borrow money from third parties, like financial institutions. As a last resort, a national fund may request to borrow from other national funds, which must receive an authorization from their governments before deciding to make a loan.

¹⁷See Art. 103 of the BRRD. These indicators have been detailed by the EU Commission in its Delegated Regulation of 21 October 2014.

5.1.7 *A New Requirement for Banks: MREL*

In order to give credibility to the resolution process, the BRRD requires that banks satisfy a minimum threshold level for the following ratio:

$$\text{MREL} = (\text{own funds} + \text{eligible liabilities}) / (\text{own funds} + \text{total liabilities})$$

where MREL stands for “minimum requirement for own funds and eligible liabilities,” and the “eligible” (i.e. not exempted) liabilities are those which can be included in the bail-in process, in addition to the own funds.¹⁸ The rationale behind this requirement is that the overall size of the eligible liabilities is such that, by applying the bail-in tool, a bank can restore its CET1 ratio at the regulatory level. The MREL for each bank is set by the resolution authority, following the technical standards proposed by the EBA and adopted by the EU Commission.¹⁹ Thus the BRRD adds an additional requirement to the already rich set of regulatory thresholds that banks must meet. It is true that this new requirement is consistent with the international standards set by the Financial Stability Board, following the political input of the G20 (St. Petersburg summit). However, the FSB standard applies only to the globally systemic important banks (G-SIIs), while the MREL applies to all EU banks and it gives a relevant discretionary scope to the regulatory authorities.²⁰

5.2 THE SINGLE RESOLUTION MECHANISM

5.2.1 *The SRM Architecture: Single Resolution Board and National Resolution Authorities*

As discussed in the Introduction, the SRM Regulation builds upon the BRRD, and it goes much further as far as those banks located in the euro area are concerned. The Single Resolution Mechanism has been introduced to achieve a further supervisory convergence and integration among the euro area countries, by transferring the resolution powers to a single agency, the SRB, and by creating a SRF, which allows a cross-

¹⁸ In particular, the eligible liabilities relevant for inclusion in the numerator of MREL are those with a residual maturity of at least 1 year.

¹⁹ See EBA (2015c).

²⁰ See Bundesbank (2014), page 41.

country pooling of some resources to be used in resolving banks located in the euro area.

The SRM applies to all the banks going under the SSM: those located in the euro area countries and in those EU countries willing to enter the SSM. The organization of the SRM mirrors that of the SSM, as far as the division of responsibilities between the supranational authority and the national authorities is concerned. In the case of the SSM, there is a division of tasks between the ECB and the national competent authorities (NCAs), that we have illustrated in Chap. 3. In the case of the SRM, there is a similar division of responsibilities between the SRB and the national resolution authorities (NRAs).²¹

The SRB is responsible for drawing up the resolution plans and taking the resolution decisions (applying the tools introduced by the BRRD) related to the significant banks and to the other banks that the ECB has decided to take under its own direct supervision, as well as to other cross-border groups. The NRAs retain the same powers related to all the other banks, provided no use of the SRF is needed; if instead the resolution process requires the use of the SRF, then the resolution scheme is adopted by the SRB. The early intervention powers are instead retained by the ECB, as far as significant banks are concerned, and by the NCAs (within the SSM) for less significant banks.²² Finally, the SRB is responsible for setting the level of the MREL for significant banks, and the NRAs have the same responsibility for the less significant banks.

The cross-country convergence of the resolution practices should be reached through the application of a uniform set of rules, introduced by the BRRD and included in the SRM Regulation, which are binding for both the SRB and the NRAs. In addition, the NRAs have to inform the SRB of their actions and coordinate with it, and they have to submit the resolution plans to the SRB. The latter can issue a warning to an NRA if it considers that its actions do not comply with the SRM Regulation or with its own instructions. Finally, the SRB can decide to directly exercise the resolution powers with regard to any bank in the euro area, thus replacing the relevant NRA.

²¹ See Art. 7 of the SRM Regulation.

²² Art. 13 of the SRM Regulation. Actually, the European legal framework lacks a clear definition of “early intervention measures,” providing a distinction between them and the resolution powers, and the ordinary supervisory actions as well. See Brescia Morra (2014) for a discussion of this issue.

The implementation of all resolution decisions, both those taken by the NRAs and those taken by the SRB, is left to the NRAs, exercising the powers conferred to them by the BRRD (transposed into national legislations) and by the national law. However, if a NRA fails to comply with a decision of the SRB, the latter may directly order the institution under resolution to take those actions that are needed to implement the resolution procedure, like the transfer of assets or the conversion of debt instruments. In case of conflict with a previous decision adopted by an NRA, the decision of the SRB prevails.

5.2.2 *The SRM Governance and Decision-Making*

The governance and the decision-making rules of the SRM are rather complex. The body responsible for taking resolution decisions is the SRB, which can meet at two different levels: either the “executive session” or the “plenary session.”²³ The executive session is composed of the chair and other four full-time members, who in principle should act independently and in the interest of the whole EU; they are appointed by the EU Council for a 5-year term. In addition, the representatives of the member states where a bank operates participate in the meetings where the case of a specific bank is addressed. Finally, the representatives of the EU Commission and of the ECB participate as observers. The plenary session includes, in addition to the chair and the other four permanent members, the representatives of all the national resolution authorities. While normally the resolution decisions should be taken by the executive session, the plenary session may be requested by any member if a resolution action implies a use of the SRF larger than 5 billion euros. Notice that, once a draft resolution scheme has been submitted by the executive session, any member has only 3 h to request that such decision be examined by the plenary session; after this deadline the draft decision is deemed to be adopted. It is important that the plenary session normally decides by simple majority of its members (where each of them has one vote), and this method is available also to the executive session, in case it is unable to reach a consensus.

The three conditions that must be met for the SRB to be entitled to initiate a resolution procedure are those listed by the BRRD that we have reported in Sect. 5.1.5. Under this regard, the ECB has an important

²³ See Art. 49–55 of the SRM Regulation.

role, since it is the authority entitled to make the assessment of whether an institution should be considered “failing or likely to fail.” Actually the SRB can make this assessment as well, but in such a case it has to inform the ECB of its intention to undertake the assessment, and it can proceed only if the ECB does not itself carry out the assessment within 3 days.²⁴ The other two conditions are assessed by the SRB. However, the absence of other private sector alternatives must be assessed in close cooperation with the ECB, and the application of the public interest criterion is actually shared by the SRB with the EU Commission and the Council, since the following procedure applies.²⁵

Upon the adoption of a resolution scheme, the SRB must transmit it to the Commission, which has 24 h either to endorse the plan or to raise an objection. The latter case actually includes two sub-cases. First, the Commission can directly raise an objection relative to the discretionary aspects of the resolution scheme. Second, the Commission can propose the Council to request a modification or to object the scheme on the grounds that: (1) the Commission itself suggests a material change of the amount of the SRF to be used under the scheme, or (2) the scheme does not fulfill the public interest criterion. In the latter case, if the Council agrees with the objection raised by the Commission, the bank under stress will go under the ordinary insolvency procedure. In the other cases, a request for a modification of the resolution scheme, made either by the Commission or by the Council, must be addressed by the SRB within 8 h.

The described governance structure of the SRM is by evidence too complex. It involves several bodies: the SRB (with executive and possibly plenary sessions), the ECB, the EU Commission, and the EU Council. They should in principle take complex decisions and interact with each other under very strict time deadlines. It is true that this framework is partly due to some legal constraints. The EU legal framework does not allow a new agency (not even mentioned in the EU Treaty) to be endowed with discretionary powers.²⁶ Therefore the SRB has to share its own responsibilities with other EU authorities, like the ECB and the

²⁴Incidentally, the ECB is given a relevant role, as supervisory authority, also in the early intervention on a troubled bank. In order to coordinate the early intervention and resolution procedures, the ECB and the NCAs must inform the SRB of their actions (see Art. 13 of the SRM Regulation).

²⁵See Art. 18 of the SRM Regulation.

²⁶See Zavvos and Kaltsouni (2015) for a discussion of the legal issues related to the creation of the SRM.

Commission, since resolution actions typically involve quite discretionary decisions. However, it is also true that the involvement of the Council responds more to the governments' need of maintaining a political control over resolution actions, which might imply some cross-country use of financial resources through the SRF.

For such reasons, the governance of the SRM needs to be amended, possibly implying a change of the EU Treaty, with two main objectives. First, the decision process should be streamlined and made more efficient, by concentrating the resolution responsibilities upon the SRB, albeit in coordination with the ECB as supervisory authority. Second, limit the political interference with decisions which are technical in nature, like the prompt intervention to address a specific bank distress. The political control should be limited to the rules governing the resolution process and to the overall amount of resources to be pooled across the participating countries. In addition, the SRB should remain accountable for its actions to the political authority. Looking forward, the SRB should evolve toward an authority more similar to the Federal Deposit Insurance Corporation (FDIC) in the USA: this independent agency has been endowed by the Congress with autonomous powers of early intervention and resolution of distressed banks (by the Dodd-Frank Act), in addition to its deposit insurance and supervisory responsibilities.

5.2.3 *The Single Resolution Fund*

The second building block of the SRM, besides the SRB, is the SRF.²⁷ The SRM Regulation establishes the SRF, which is owned and administered by the SRB. The SRF should be used for the application of the resolution tools, in accordance with the provisions and the objectives introduced by the BRRD. Under this regard, the SRM Regulation makes the national resolution funds introduced by the BRRD obsolete, since they have been substituted by the SRF. However, the rules governing the target size, the contributions, and the purposes of the SRF replicate those introduced by the BRRD with reference to the national funds (see Sect. 5.1.6). The target size has been maintained at 1 % of covered deposits, which is equivalent to about 55 billion euros at the euro area level. The deadline for achieving that target has been anticipated from the end of 2024 to the 1 January of that year.

²⁷ See the SRM Regulation, Chap. 2.

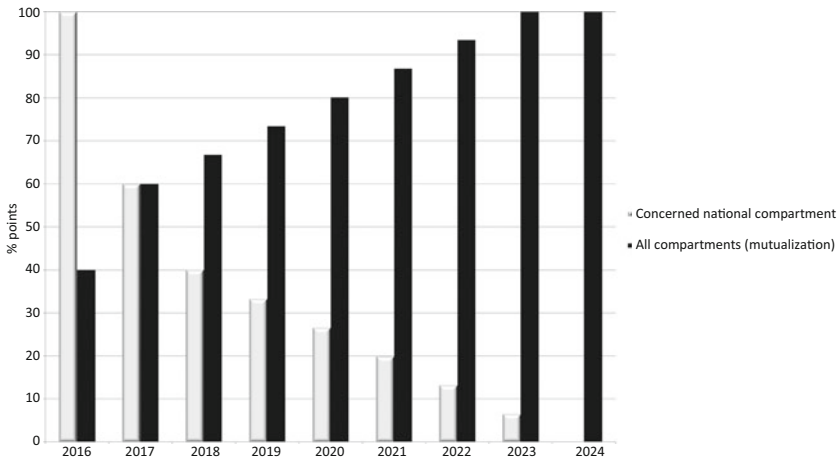


Fig. 5.1 SRF: gradual mutualization

The actual transfer of money from the member states to the SRF is regulated by the Intergovernmental Agreement (IGA) signed by all the EU countries (with the exceptions of the UK and Sweden) in May 2014, as a follow-up to the SRM Regulation. The IGA requires each member state to transfer to the SRF an amount equal to 12.5 % of the target level each year, starting from 2016, so as to reach that level in 8 years. The amounts transferred derive from the contributions raised at the national level from the banking institutions. They include both ex ante and possibly ex post contributions, following the principles set by the BRRD. In particular, ex ante contributions include two components: a flat one and a risk-adjusted one. The annual contribution of each bank is computed by the SRB, in close cooperation with the supervisory and resolution authorities and notified by the latter to their domestic banks.²⁸

The amounts transferred from the member states are allocated to the national compartments of the SRF, which are gradually merged during the 8-year transition period (2016–2023), by means of the following mechanism, which I will try to explain with the help of Fig. 5.1. Imagine that the SRB decides to employ a specific amount, taken from the SRF’s resources

²⁸See Art. 70–71 of the SRM Regulation and the Council Implementing Regulation of 19 December 2014.

to support the resolution of a bank. Such amount will be covered by following four steps.

1. The national compartment of the country where the bank is established (the “concerned” compartment) will be first used. The percentage of the concerned compartment to be used at this stage will decrease through time as shown in the figure (gray column).
2. If the money raised through step 1 does not cover the full amount needed, then all the national compartments will be used, in a percentage that will increase through time (black column). As it can be seen from the figure, by 2024 this mutualization of national compartments will be complete: step 1 will no longer apply, and all national compartments will be used in the first place.
3. If the money raised through steps 1 and 2 is not sufficient, the remaining resources of the concerned national compartment will be used.
4. If steps 1 through 3 are not sufficient, the national authorities will raise additional ex post contributions from their domestic banks and transfer them to the SRF. If ex post contributions are not immediately available, the SRB may contract borrowings or other forms of financial support for the SRF.

The above features of the SRF raise some concerns, related to its size and to the lack of a common fiscal backstop at the EU level. The size of the SRF is clearly very limited, even when it will eventually reach the target level. The limited size of the fund is somewhat balanced by its ability to raise ex post contributions. However, such contributions should actually be raised by the national authorities from all the supervised banks in each participating country and then transferred to the SRF, and this process could take some time. As a last resort, the SRF could receive loans or other kinds of support from other sources, including financial institutions and national governments, provided the borrowed funds are eventually recovered through contributions from the supervised banks.²⁹ It is worth noting that the SRM Regulation explicitly states that “under no circumstances shall the Union budget or the national budgets be held liable for expenses or losses of the Fund” (Art. 67(2)).

In case of financial distress of a large financial institution, or in the case of a systemic crisis affecting several intermediaries within a country,

²⁹ See Art. 73–74 of the SRM Regulation.

the SRF might fall short of resources. Under those circumstances, the ultimate responsibility for providing the resources, needed to resolve the banks under stress, will presumably still be attributed to the government of the country where such banks are located, provided its intervention is compatible with the state aid rules (see Sect. 5.2.5). If this is the case, the purpose of breaking the link between governments and the financial risk of their domestic banking sectors, which has been officially placed at the center of the European banking union project, seems to be seriously jeopardized. Notice that even the small amount of resources, coming from the bank contributions, are being gradually mutualized over a rather long period (8 years), albeit with a nonlinear schedule (in the first 2 years of the transition period the mutualization of contributions is faster than in the remaining years).

Therefore, the credibility of the SRF, as a stabilization mechanism, needs to be enhanced in two ways. First, by increasing its size. Second, and even more importantly, by allowing the fund to rely on a common fiscal backstop at the EU level. At present, the only kind of common fiscal backstop is the Direct Refinancing Instrument (DRI) of the ESM, which can be used to support the recapitalization of eurozone banks. However, this instrument has a very limited potential, for several reasons, including the eligibility criteria to be met to have access to the DRI, the governance of the ESM, the conditionality attached to a financial assistance program, and the size of the funds dedicated to this instrument. Let me expand on this issue in the next sub-section.

5.2.4 The European Stability Mechanism as a Fiscal Backstop

The ESM has been established by the governments of the euro area through the treaty signed in February 2012. It has a paid-in capital of 80 billion euros, coming from the contributions of participating member states (in proportion to their contribution keys in the capital of the ECB). The total capital subscribed by member states amounts to 700 billion, which includes, in addition to the paid-in shares, the callable shares: member governments can be asked to restore the initial level of paid-in capital through capital calls in order to cover losses, if any. Therefore, the ESM can issue bonds which are de facto backed by the guarantee of the member governments. Its total financial capacity is currently 500 billion euros. The general purpose of the ESM is the provision of financial assistance to the member states, in case they lose market access at reasonable conditions,

under strict conditionality: a Memorandum of Understanding (MoU) must be agreed between the requesting government on one side and the EU Commission, the ECB, and possibly the IMF, on the other side. The MoU typically requires the government to commit to a macroeconomic adjustment program aimed at restoring the viability of public finances and the access to financial markets.

The ESM can provide financial assistance to a member state with the aim, among other things, to support the banking sector of that country through a recapitalization and restructuring plan. However, the initial institutional set-up of the ESM implied that this kind of financial assistance was channeled through the balance sheet of the national governments. This happened with the assistance program for the Spanish banks of 2012: the ESM provided loans to the Spanish government, which used this money to support the restructuring of domestic banks. Of course, this way of handling the financial assistance to distressed banks did not solve the problem of breaking the link between national governments and their domestic banks.

For such reason, in 2013 the European governments decided to introduce the DRI into the range of intervention instruments available to the ESM.³⁰ By using the DRI, the ESM can directly support the resolution of a bank located in the euro area, through the acquisition of common equity shares issued by such bank. However, this can happen only if the following *eligibility criteria* are satisfied.

- (i) The institution under stress has a systemic relevance for the euro area as a whole or the requesting country. The use of the DRI is then indispensable to safeguard the financial stability of the euro area or of its member states.
- (ii) The institution under stress is unable to restore its regulatory capital ratios, by attracting sufficient capital from private sources or other means. In addition, the requesting member state is unable to provide financial assistance to that institution, without very adverse effects on its own fiscal sustainability.

The first condition implies that, in principle, only systemic institutions could be supported by the DRI. This raises the question of whether the DRI can be used also for assisting small and medium-size banks, which can

³⁰See Eurogroup (2013).

originate relevant financial troubles to some countries (as it happened in the case of the Spanish banks). The second condition makes the DRI an instrument of last resort that can be used only after all other means have been exploited: the private resources, following the bail-in rules of the BRRD, as well as the national public resources of the member country.³¹ This condition weakens substantially the ability of the DRI to break the link between the public finances and the banking sector at the national level. This drawback is even more severe by considering the burden-sharing scheme that must be followed in the use of the DRI, which is made up of two parts.

- (i) If the beneficiary institution has insufficient equity to reach the minimum CET1 ratio of 4.5 %, the requesting ESM member will be required to make a capital injection to reach this level before the ESM enters into the capital of the institution.
- (ii) If the institution already meets such capital ratio, the requesting ESM member will be required to make a capital contribution alongside the ESM, equivalent to 20 % of the total public contribution in the first 2 years of the financial assistance program, declining to 10 % afterwards.

This burden-sharing scheme is at odds with the second eligibility condition stated above, limiting the use of the DRI to the case where the financial support to some domestic banks by the national government would make the fiscal sustainability of the country at risk. This implies that the DRI is likely to be used in support of a country where the public sector's balance sheet is under stress. At the same time, the DRI is conditional on a substantial contribution by the government of that country. This is an evident contradiction.

Another source of concern is the governance of the ESM. A decision to provide financial assistance by using the DRI must be taken, by mutual agreement, by the ESM Board of Governors, which is composed of the finance ministers of the member countries.³² This feature of the

³¹ In particular, a precondition for the use of the DRI is a contribution to loss absorption, by the holders of capital instruments and eligible liabilities, equal to an amount not less than 8 % of total liabilities. Another condition is a contribution by the resolution fund (SRF), equal to 5 % of total liabilities. See ESM (2014), Art. 8.

³² See Eurogroup (2013) and Art. 5 of the Treaty establishing the ESM.

ESM governance is likely to make the decision-making process subject to a political bargaining among the governments of the member countries, where each member has a veto power over any decision. The role of politics becomes even stronger considering that the use of the DRI is linked to a conditionality (like any other financial assistance program), where the MoU does not only include institution-specific conditions, related to the financial restructuring of the bank under resolution and to its governance, but also other conditions, related more generally to the economic policies of the concerned member state.³³ The same considerations made above, with regard to the governance of the SRB, applies here, in particular the need to limit the political interference with technical decisions, that must be taken under strict deadlines, albeit under the guidelines and limits set by the governments, and with the appropriate accountability rules.

Finally, the overall size of the DRI is limited to 60 billion: this is the total amount of funds available for the purpose of supporting bank resolutions, although the ESM Board of Governors might review this limit. The 60-billion figure might seem a large one. However, it can be exhausted very rapidly. Consider that the size of the financial assistance plan, designed in 2012 to support the Spanish banking sector, was initially set at 100 billion, although the actual loan eventually made to the Spanish government was 41.3 billion. Consider also that the second financial assistance program for Greece (2012) included a 48.2 billion facility dedicated to the recapitalization of Greek banks (of which 37.2 billion have been used, as of July 2015). These two examples make clear that the present size of the DRI enables it to cover just one or two assistance programs.

With all these limitations, the ESM is presently the only source of financial support to the resolution of banks in the euro area, relying on a pool of contributions from the member states. It is a last resort tool, since it can be used after all the other available means have been exploited: private resources, the SRF, and the national public budget of the concerned country. Therefore it can be seen as a common fiscal backstop to the SRF. However, this role should be made stronger, along the following lines.

First, the concerns raised above should be addressed. The eligibility criteria should be made less restrictive, in particular by dropping the condition that the DRI can be used only in the extreme case where an

³³See Eurogroup (2013) and Art. 12 of the ESM Treaty. See Art. 4 of ESM (2014) for details about the procedure to be followed by the ESM to grant financial support through the DRI.

intervention by the national government would threaten the fiscal sustainability of the country. The ESM governance should be reviewed, with the aim of reducing the degree of political interference with the decisions to resort to the DRI and with the ways in which it is employed in specific programs. The amount of resources that can be employed through this facility should be enlarged.

Second, the SRF should be enabled to borrow money from the ESM. By adding this financial tool to the DRI, the ESM could really become the common fiscal backstop to the SRM. This line of reform, which has already emerged in the policy debate on this issue, has been recently endorsed by the second “Five Presidents’ Report,” suggesting that a credit line from the ESM to the SRF should be opened.³⁴

5.2.5 *The SRM and the State Aid Rules*

The resolution of a bank under the SRM may imply the use of the SRF and national public funds to provide some of the resources needed to restructure the stressed bank. Therefore, the application of the resolution tools by the SRB necessarily interacts with the state aid rules embodied in the EU legislation. In a nutshell, the purpose of such rules is to avoid distortions to competition within the internal market in the EU, which can potentially be implied by a public support to some banks. During the financial crisis, the EU Commission, which is responsible for competition policy matters relevant at the EU level, has authorized many government interventions in support of their domestic banking sectors (see Chap. 2). These public measures have been authorized to preserve financial stability, despite their potential distorting effects on competition between banks and across countries within the Single Market. The Commission has provided a framework to minimize such distortions, by issuing several Communications. Among them, the most relevant is the Communication issued on 30 July 2013.

In such Communication, the Commission has laid down a set of rules, effective since 1 August 2013, that limit the ability of governments to provide public support in the form of bank recapitalization and impaired assets measures, like asset purchases and guarantees. Such public interventions should typically follow an assessment by the supervisory authority, from

³⁴This Report has been signed by a Committee including the Presidents of the EU Commission (coordinator), EU Council, Eurogroup, ECB, and EU Parliament. See European Commission (2015).

which a capital shortfall emerges. In the context of the SSM, such an assessment is carried out by the ECB or by the relevant NCA, depending on the significance of the credit institution. The basic principle introduced by the Communication is that the state aid can be authorized only if the relevant member state is able to demonstrate that all the measures to limit such aid to the minimum possible level have been exploited. Those measures can be of two types: capital-raising and burden-sharing.

Capital-raising measures include:

- The issue of new shares
- The voluntary conversion of subordinated debt into equity
- Capital-generating sales of assets and securitization of portfolios
- Earnings retention

Burden-sharing measures include:

- Loss-absorption by equity-holders
- Contributions by hybrid capital holders (write-down or conversion into common equity)
- Contribution by subordinated debt holders (write-down or conversion into common equity)

In order to get the authorization to grant public support, a member state must submit a capital-raising plan and a restructuring plan to the Commission, where it shows that the two above set of instruments have been fully exploited to cover the capital shortfall. Only under this condition the residual shortfall can be covered by resorting to the state aid.

It is worth stressing that any aid provided by a resolution fund, including the SRF, is subject to the assessment just described.³⁵ This introduces a further element into the decision-making process governing the SRM, which is already quite complex (as we noted in Sect. 5.2.2). When a resolution action involves the granting of public support or the use of the SRF, the SRB cannot adopt and implement the resolution scheme until the Commission has adopted a positive decision concerning the compatibility of the scheme with the internal market. To this aim, the SRB shall notify

³⁵This requirement has been introduced by the Commission's Communication and confirmed by the SRM Regulation (Art. 19). The Commission must be notified of the intention to grant state aid also when an ESM member applies for the use of the DRI for bank recapitalization; see ESM (2014), Art. 4.

the Commission of the proposed use of the SRF, and this notification shall trigger a preliminary investigation by the Commission, assessing whether the use of the SRF would distort competition by favoring the beneficiary. If the Commission has serious doubts as to the compatibility of the proposed use of the SRF with the internal market, it shall open an in-depth investigation. At the end of the period of investigation, the Commission shall make its final assessment. A positive decision may include some conditions and commitments to be taken by the beneficiary, as well as obligations on the SRB or the national resolution authorities. Following a negative decision, the SRB has to propose a revised resolution scheme.

The bottom line is that the EU Commission has a twofold role in the process leading to the adoption of a resolution action. First, it can raise objections related to the discretionary aspects of the resolution scheme and it can call for the intervention of the EU Council (as we have seen in Sect. 5.2.2). Second, it retains the power of stopping or conditioning the resolution procedure on the grounds that it distorts competition. It is hard to believe that these powers are compatible with a fast and efficient decision-making process, where the Commission should give its feedback within 24 h after receiving the proposed resolution scheme from the SRB.³⁶ Notice that the use of the SRF as part of a resolution process is decided by a supranational authority, namely the SRB, and not by a member state. On this ground, the SRF use should not qualify as state aid.³⁷ A review of this issue should hopefully be part of a reform of the governance of the SRM in order to improve its efficiency.

The burden-sharing regime has been reinforced by the bail-in tool introduced by the BRRD. Actually the bail-in rules are significantly more severe than the burden-sharing measures, since they extend the range of liabilities that can be hit by the resolution procedure to senior bonds, corporate deposits, and even individual deposits (above the 100,000-euro threshold). The minimum 8 % portion of loss absorption, to be allocated to the bank claimholders by virtue of the BRRD, must be applied by the EU Commission when assessing the compatibility of any public support to a bank rescue with the EU state aid rules. Therefore, such support can be allowed only after a loss equivalent to 8 % (at least) of the bank's total liabilities has been allocated to its shareholders and creditors, as prescribed by the BRRD.³⁸

³⁶ Art. 18 of the SRM Regulation.

³⁷ See Zavvos and Kaltsouni (2015).

³⁸ See Recital 57 and Art. 37 of the BRRD.

The bail-in regime is more restrictive than the burden-sharing not only because it may hit a wider range of bank liabilities, but also because it can be applied even in absence of a public support. As we have seen in Sect . 5.1, the bail-in tool is an instrument that can be used by the resolution authority within a resolution procedure, which does not necessarily rely on the support provided by a resolution fund or by a government.

CONCLUDING REMARKS

The SRM, together with the BRRD, is a major step toward the completion of the European Banking Union. The BRRD has introduced new tools to address banking crises, providing an alternative to the two traditional extremes: either an insolvency or a bailout. The SRM has transferred the power to apply such tools to a new supranational agency, endowed with own resources contributed by the banking sectors of the participating countries. The SRM is an essential pillar of the banking union, and it complements the other existing pillar: the SSM.

However, the current version of the SRM is not fully satisfactory, and it needs to be amended or integrated along the following lines.

- Retail bank customers should be exempted from the application of the bail-in rule, since they might be unable to have a correct evaluation of the risks implied by the bail-in. This rule may generate instability and higher costs in the funding conditions of banks.
- The governance of the SRM should be improved. To make the decision-making process more efficient, the resolution powers should be concentrated upon the SRB, albeit in coordination with the ECB as supervisory authority. The current decision-making rules, involving the EU Commission and the Council, are too complex and leave room to an excessive political interference with technical decisions. The SRB should evolve toward the model of an independent agency, as like as the FDIC is in the USA.
- The size of the SRF should be increased, to enhance its credibility as a stabilization tool. Even more importantly, the SRF should rely on a common fiscal backstop at the EU level. To this aim, the SRF should be enabled to borrow money from the ESM.
- The ability of the ESM to directly support the recapitalization of distressed banks should be strengthened. The eligibility criteria for accessing to the DRI should be made less restrictive. The ESM

governance should be reviewed, with the aim of reducing the degree of political interference in specific bank resolution programs. The size of the resources allocated to the DRI should be possibly enlarged.

The application of the state aid rules and procedures to the financial assistance provided by the SRF and the ESM should be reviewed, in order to streamline the decision-making process. Under this regard, their status of supranational agencies should be acknowledged.

REFERENCES

- Allen, F., and D. Gale. 2009. *Understanding financial crises*. Oxford: Oxford University Press.
- Baglioni, A. 2006. The organization of interbank settlement systems: Current trends and implications for central banking. In *Institutional change in the payments system and monetary policy*, ed. S. Schmitz and G. Wood, 158–170. New York: Routledge.
- Brescia Morra, C. 2014. *From the single supervisory mechanism to the banking union*. LUISS Working Paper 2/2014, Rome.
- Bundesbank. 2014. *Monthly Report*, June.
- Diamond, D., and P. Dybvig. 1983. Bank runs, deposit insurance, and liquidity. *Journal of Political Economy* 91(3): 401–419.
- EBA. 2014. *Guidelines on the range of scenarios to be used in recovery plans*, London, July.
- EBA. 2015a. *Final report. Guidelines on the minimum list of qualitative and quantitative recovery plan indicators*, London, May.
- EBA. 2015b. *Final report. Guidelines on triggers for use of early intervention measures pursuant to Art. 27(4) of Directive 2014/59/EU*, London, May.
- EBA. 2015c. *Final draft regulatory technical standards on criteria for determining the minimum requirement for own funds and eligible liabilities under Directive 2014/59/EU*, London, July.
- ESM. 2014. *Guideline on financial assistance for the direct recapitalization of institutions*, Brussels, December.
- Eurogroup. 2013. *ESM direct bank recapitalization instrument: Main features of the operational framework and way forward*, Luxembourg, 20 June.
- European Commission. 2015. *Completing Europe's Economic and Monetary Union*, Brussels, June.
- Zavvos, G., and S. Kaltsouni. 2015. The single resolution mechanism in the European banking union: Legal foundation, governance structure and financing. In *Research handbook on crisis management in the banking sector*, ed. Matthias Haentjens and Bob Wessels. Cheltenham, UK: Edward Elgar.

The Missing Pillar: A European Deposit Insurance

INTRODUCTION

In the previous chapters, we have seen that the euro area countries have made substantial progresses toward the realization of the European banking union, although several issues remain to be addressed. The first two pillars of the banking union, namely the SSM and the SRM are in place. The SSM is fully operational, and the SRM is being implemented through the establishment of the SRB and the gradual devolution of national resources to the SRF.

To the contrary, the third pillar of the banking union, namely the EDGS, is still missing. The only achievement that has been recently made in this area is a further harmonization of the national rules and institutions responsible for the protection of depositors. The Directive approved in 2014 has considerably enhanced the regulatory convergence in this area, by introducing uniform principles to be applied across the EU member countries. Among them, the most important is the requirement that banks have to contribute *ex ante* to the funding of the deposit insurance (i.e. before actual repayments to depositors of distressed banks are made) by paying risk-related insurance premiums to the body administering the deposit insurance scheme.

However, the Directive is only a coordinating device among the national deposit protection schemes. The introduction of a single deposit insurance scheme in the euro area has been prevented by the political resistance to pool the necessary resources across the member countries. This delay is

quite disappointing, since the pooling of resources would enable the eurozone countries to be endowed with a more resilient, credible and fiscally neutral system of deposit protection.

The following section is devoted to illustrate and discuss the novelties introduced in the field of banking regulation by the Directive on DGSs approved in 2014. In Sect. 6.2, I will discuss the desirable evolution toward an EDGS, arguing that the best way to achieve this goal is by expanding the scope of the SRM, thus creating an integrated fund to be used for both tasks: resolution of distressed banks and repayment of depositors. The final section summarizes the main points made in this chapter.

6.1 THE DIRECTIVE OF 2014

The regulation of deposit insurance at the EU level goes back to 1994, when the first Directive on this matter required each member state to introduce a DGS.¹ The aim of this Directive was to achieve a minimum level of harmonization in the area of deposit insurance. In particular, a minimum coverage level (deposit balance covered by the insurance) of 20,000 ECU was introduced, together with a maximum payout period (time taken for repaying depositors) of 3 months. The financial crisis that started in 2007 induced several member states to increase the coverage level, to support the confidence of bank depositors. For example, Ireland adopted a full deposit guarantee in September 2008.² This regulatory competition among member states induced the European policymakers to amend the 1994 Directive. The Directive approved in 2009 provided for increasing the minimum coverage level to 50,000 euros (effective in June 2009), and for a uniform coverage level of 100,000 euros to be effective by the end of 2010.³ At the same time, the payout period was reduced to 20 working days.

The Directive approved in April 2014 (hereafter the “Directive”) aims at achieving a higher level of harmonization under several respects, namely, the funding tools of DGSs, the scope of their actions, the payout period, and the information provided to banks’ clients.⁴ The general purpose of the Directive is to level the playing field for banks operating in the EU (whether belonging to the euro area or not) and by doing so to

¹ See Directive 94/19/EC.

² See Deutsche Bank (2014) for information about the coverage levels and other institutional features of deposit protection schemes in Europe.

³ See Directive 2009/14/EC.

⁴ See Directive 2014/49/EU.

complete the internal market. The underlying principle is that the freedom of establishment and to provide financial services across the European countries should be enhanced by the presence of DGSs with uniform features, such as their financial strength, the level of depositor protection, and the transparency of the institutions managing the deposit insurance. The confidence of depositors should be evenly strengthened in the EU, thus reducing cross-country competitive distortions.

6.1.1 *Supervision*

The Directive (Art. 4) requires each bank in the EU to be a member of an officially recognized DGS in its home member state. The DGS can be administered either by a private institution or by a public body. The supervision over DGSs remains at the national level: each member state has to identify a “designated authority,” which is responsible either for the supervision of the private DGS or for the direct administration of the public DGS. Even when mentioning the authority responsible for the general banking supervision (the “competent authority”), the Directive refers to the *national* competent authority. So the area of deposit insurance is completely left outside the scope of the SSM. This limitation might introduce national biases in the oversight of DGSs. However, it has been corrected to some extent, by giving the European Banking Authority the duty of issuing guidelines on several matters, among which the most relevant are the criteria to compute the contributions of individual banks to their DGS (see Sect. 6.1.3 below). Such guidelines should hopefully ensure a uniform application of the principles set by the Directive.

6.1.2 *Coverage*

The Directive (Art. 5–6) confirms that the coverage level is 100,000 euros per depositor. So a depositor, holding an amount larger than 100,000 euros, cannot artificially increase the insurance coverage by splitting such amount into several accounts with the same bank. Some categories of bank liabilities are excluded from any repayment made by the DGS, among which:

- Deposits made by other banks and financial intermediaries, namely investment firms, mutual funds, pension funds, and insurance companies

- Deposits made by public entities
- Debt securities
- Own funds

The rationale behind the limits set to the coverage of the deposit insurance relies in the moral hazard issue, in addition to obvious considerations related to the burden of providing a full coverage and to the limited financial capacity of the DGSs. Let me briefly address this issue, by recalling the basic reasons behind the deposit insurance and its drawbacks.

The main purpose of the deposit insurance is to protect small depositors, possibly uninformed about the true financial strength of the bank where they deposit their savings. This protection is needed not only for equitable reasons, but also to preserve the stability of the banking system. The banking theory has explored this issue, showing that banks are subject to multiple equilibria driven by expectations: a bank run may occur because each depositor believes that other depositors will go and withdraw their money from a bank, and this expectation can trigger a coordination failure among depositors, where all of them run on the bank. In order to avoid this bad equilibrium, which might spill over to other banks through the chain of interbank exposures, it is necessary to endow the banking system of institutions, like the deposit insurance, supporting the confidence of depositors in the ability of banks to repay the value of their deposits.⁵

However, the introduction of deposit insurance can also have some negative implications, due to its interference with the pricing of bank liabilities. Since depositors perceive their bank deposits as safe, they can accept a rate of interest which does not reflect the risks incurred by the bank managers. The latter can then be induced to increase the level of risk, since the bank does not pay for it on its liabilities: this incentive distortion goes under the name of “moral hazard.” A way to limit this negative side effect of the deposit insurance is to set a limit to its coverage and to exclude some liabilities, like the deposits made by other financial institutions. The bank should pay a market price of risk on its uninsured liabilities, and this should limit the incentive to take on more risk. Of course, the other side of the coin is that such exclusions reduce the stabilization properties of

⁵ Another institution playing the same stabilization role is the central bank, which provides liquidity as the lender of last resort to illiquid banks. For a comprehensive review of the theoretical literature addressing the financial instability of banks and their prudential regulation, see Freixas and Rochet (2008).

the deposit insurance. Actually, the financial crisis that started in 2007 has shown that the major source of funding instability for banks comes from the interbank uninsured exposures, with the “dry-up” of liquidity in wholesale money markets and the runs on some banks by other financial intermediaries.⁶ The other mean to tackle the moral hazard issue is to make the price of the deposit insurance related to the risks undertaken by banks: this is the main innovation introduced by the Directive that we are going to address in the next sub-section.

6.1.3 *Funding*

We can identify three principles underlying the rules set by the Directive.

- (a) The cost of the repayments made by the DGSs should be borne by banks themselves. So the DGSs are a device to implement a reciprocal insurance across banks.
- (b) The contributions paid by banks to the DGSs should be based on their riskiness, in addition to their size.
- (c) All DGSs should be endowed with financial resources raised ex ante, through periodic contributions received before repayments to depositors are possibly made.

The first principle responds to the need of minimizing the burden of banking crises for taxpayers, and it is consistent with the overall design of the European banking union, and of the BRRD in particular. However, the larger impact of the Directive is presumably related to the other two principles, since several European countries do not have DGSs funded through ex ante risk-based contributions (as of 2015).⁷ Some DGSs rely on ex post contributions paid upon request: the body administering the DGS is entitled to ask banks to cover its expenses, due to the repayments actually made to the depositors of distressed banks. By imposing ex ante contributions, the Directive aims at improving the financial strength of the DGSs. The imposition of risk-based insurance premiums, computed with a harmonized methodology, responds to the need of making such

⁶Very interesting analyses of the instability of wholesale securities markets are provided by: Brunnermeier and Pedersen (2009), Adrian and Shin (2010), Duffie (2010).

⁷See European Commission (2010) for a survey, showing the heterogeneous features of the DGSs across the EU member states.

premiums actuarially fair: each bank should pay a price proportional to its own contribution to the expected liability of the DGS. Risk-related premiums should limit the above-mentioned moral hazard side effect of the deposit insurance. Under this regard, the advantage of risk-based premiums over flat premiums (based only on bank size) has been recognized by the economic literature a long time ago.⁸

The Directive (Art. 10) sets a target level for the overall size of ex ante funding (“available financial means”) that each DGS should be endowed with by 3 July 2024: 0.8 % of the amount of covered deposits. Those financial means include cash contributions paid annually by member banks as well as collateralized payment commitments; the latter are however capped at 30 % of the total financial means. If the available financial means of a DGS are insufficient to repay depositors, its members can be asked to pay ex post extraordinary contributions, which cannot exceed 0.5 % of their covered deposits per year. The Directive leaves the door open to additional financing from other sources (“alternative funding arrangements”). In particular, DGSs should be able to borrow at short term to meet their obligations. These funding arrangements are generally made between DGSs and their governments. There is also the possibility of lending between DGSs, on a voluntary basis; however, this is capped at 0.5 % of the deposits covered by the borrowing DGS (art. 12).

The target level for the financial means available to DGSs is quite low, and it is delayed until 10 years after the approval of the Directive. Therefore, a DGS might be unable to face the bankruptcy of a large institution or of several banks, in case of a systemic crisis. Such extreme events are likely to be faced by relying on the backstop provided by the national public budget. The public support should presumably come in the form of a government loan to a DGS, to be eventually repaid by collecting bank contributions. So the link between the risks undertaken by banks and the public sector is likely to survive, despite the claim that “the Directive should not result in the member states or their relevant authorities being made liable in respect of depositors” (recital 45).

It is true that, in the perspective introduced by the BRRD, the crisis of a large bank should be presumably handled by resolving such a bank, rather than by liquidating it and repaying depositors. However, the DGS may be called to contribute to the financing of the resolution process through the *bail-in* tool, up to the liability it would face under a normal insolvency

⁸ See Baglioni and Marotta (1993) for a review of this literature.

procedure. So the lack of adequate resources remains a relevant issue. In the end, what matters in a resolution process is the sum of the resources available to the resolution fund (SRF) and to the national DGS. When such resources are insufficient to deal with a bank crisis, the fiscal backstop must intervene in some way: either by lending money to the resolution fund or to the DGS, or by injecting new capital into the troubled bank, or by providing guarantees or asset relief measures. A way to address the paucity of resources is by pooling the financial means, employed for protecting depositors, across the member States (as I will argue in Sect. 6.2). The possibility of mutual lending on a voluntary basis between national DGSs seems to be too weak a step in that direction.

By way of derogation to the general rule, a member state may even authorize a target level lower than 0.8 % of covered deposits, although not lower than 0.5 %. Such option is subject to the approval by the EU Commission and it can be used under two conditions: (1) it is unlikely that the financial means available to the DGS are actually used to repay depositors; (2) the banking sector of the member state is highly concentrated, with a small number of large banks which, in case of stress, are more likely to be resolved rather than liquidated (Art. 10(6)). The two conditions are strictly linked, and they point to the case where the primary function of a DGS is to contribute to resolution procedures, rather than paying out depositors. This derogation option can be criticized, since it reduces the overall amount of resources readily available for supporting the resolution of troubled banks. Should some countries exploit this option, the above-mentioned problem of paucity of resources would be even worse. Of course, some competitive distortions would be introduced, since the financial capacity of the DGSs and the contributions paid by banks would differ across member states.

The Directive (Art. 13) sets the general principles to be applied in the computation of the risk-based contributions paid by banks to the DGSs. Each DGS can adopt its own computation method. However, such method must be approved by the supervisory authorities (national competent authority and designated authority) and it must follow the guidelines issued by the EBA. The latter provide a list of five risk categories and, for each of them, some core risk indicators. They are summarized in Table 6.1.⁹ Each core risk indicator is assigned by the EBA a minimum weight, and such weights sum up to 75 %. Another 25 % of risk weights

⁹Some risk indicators (CET1 ratio, leverage ratio, LCR and NSFR) are taken from the Basel III regulatory framework. For further details, see EBA (2015a).

Table 6.1 Risk categories and core risk indicators

<i>Risk category</i>	<i>Risk indicators</i>
Capital adequacy	Leverage ratio CET1 ratio
Liquidity	Liquidity Coverage Ratio (LCR) Net Stable Funding Ratio (NSFR)
Asset quality	Nonperforming loan ratio
Business model and management	Profitability (e.g. ROA) Balance sheet indicators (e.g. RWA/Total assets) Concentration of exposures
Potential losses for the DGS	Unsecured assets/Covered deposits

can be assigned by the DGSs, either by adding other risk indicators or by increasing the weights given to some core indicators. This rather complex mechanism seems to be designed with the purpose of achieving a satisfactory level of harmonization across countries, leaving at the same time some flexibility to deal with specific features of national banking sectors.

In addition to the annual contributions, banks are required to make payment commitments in favor of their DGS. These are commitments to pay contributions to the DGS upon request, should the annual contributions be insufficient to cover the expenses of the DGS. A bank has to fulfill its obligation at a very short notice, within 2 working days from the request made by the DGS administration. The guidelines issued by the EBA require that all banks sign two arrangements with their DGS: a Payment Commitment Arrangement and a Financial Collateral Arrangement. The first formalizes the commitment, the amount, and the rights of the DGS to claim the funds. The second ensures that the DGS access to funding is guaranteed by low-risk assets, to be promptly liquidated should a bank be unable to fulfill its obligations. The EBA guidelines provide criteria for the eligibility of assets as collateral, and prescribe that pledged securities are subject to marking-to-market and haircuts, following the standard practices.¹⁰

6.1.4 Scope of Intervention

The Directive (Art. 11) states that the primary function of a DGS is the repayment of depositors, who have lost the amount deposited in a bank going bust and being liquidated (within the limits reported in Sect. 6.1.2). In addition, the financial means of a DGS can be used in other two ways.

¹⁰See EBA (2015b) for details.

First, any DGS can be called to contribute to the financing of a bank resolution, following the rules introduced by the BRRD (described in the previous chapter). The DGS can be involved in the *bail-in*, although it is the last resort in the resolution procedure. The resolution authority determines the amount by which a DGS is liable, under the condition that it cannot be larger than the amount that the covered deposits would have been written down under a normal insolvency.

Second, a DGS can provide financial assistance to a distressed bank, in order to prevent its failure. This provision opens the way to a preventive role of the DGSs, provided it is played within a well-defined framework and it complies with the national law and with the state aid rules. Additional conditions are: (1) the cost of any preventive intervention should not exceed that of reimbursing depositors under the statutory rules of the DGS and (2) no resolution action has been taken by the resolution authority.

6.1.5 *Payout Time*

The Directive (Art. 8) aims at harmonizing and shortening the time of reimbursement of depositors hit by a bank failure. To this aim, it sets a limit of 7 working days after the relevant authority has determined the inability of the distressed bank to repay the deposits taken. Such limit will actually start to be effective from January 2024. During the transition period up to that date, longer repayments periods apply, following a decreasing schedule: 20, 15, and 10 working days.

6.1.6 *Transparency*

The stabilizing property of the deposit insurance can be strengthened by giving depositors the essential information related to the guarantee provided by the DGS. Depositors should be aware of the protection given to their deposits, together with its limits. To this aim, the Directive (Art. 16) requires banks to provide to potential depositors an information sheet with some essential information, namely: the DGS responsible for deposit insurance (together with contact information), the amount covered, the payout time, and what happens if a depositor holds more deposits or a joint deposit with another person. The same information sheet has to be provided to depositors at least annually, and a reference to it must be included in their statements of accounts.

6.1.7 *Cross-Border Cooperation*

A DGS has to cover the deposits collected by the branches set up by its member banks in other EU countries. In order to facilitate the reimbursement of depositors at foreign branches, the Directive (Art. 14) states that they should be repaid by the DGS in the host member state on behalf of the DGS in the home member state. To make this point clear, imagine that a Spanish bank has opened a branch in France. In case of failure, the depositors of the French branch will be repaid by the French DGS on behalf of the Spanish DGS. The latter shall provide the French DGS the necessary funding before the payouts to depositors are made.

The cooperation among DGSs, to implement the above repayment rule and the cross-country mutual lending (see Sect. 6.1.3), should rely on written agreements in place among the bodies administering the DGSs. Details related to this issue have been provided by the EBA in its draft guidelines, which specify the minimum content of those agreements. In addition, the guidelines include a framework for a multilateral cooperation agreement, which the DGSs should adhere to, in order to avoid the signing of many bilateral agreements between the DGSs within the EU.¹¹

6.2 THE WAY FORWARD

The Directive, discussed in the previous section, has introduced significant improvements in the design of deposit insurance schemes in the EU, among which the most relevant is the requirement that DGSs are funded through risk-based contributions paid *ex ante* by their member banks. However, its main purpose is to achieve a higher level of harmonization across the EU countries. It does not address the issues related to the pooling of resources among the European DGSs, apart from the provision that DGSs may engage in mutual lending on a voluntary basis and under strict limits. Therefore, the liability implied by the deposit guarantee is faced by the national banking sectors and by their governments as a last resort, providing an implicit fiscal backstop. The supervision over DGSs remains at the national level as well, albeit the coordinating role played by the EBA.

The next step, necessary to complete the architecture of the European banking union, is the integration of the national DGSs into a single deposit insurance framework in Europe, which can be labeled as EDGS. The scope

¹¹ Bilateral agreements remain an available option to DGSs, along with the multilateral framework. See EBA (2015c).

of the EDGS should presumably be limited to the boundaries of the SSM, which in practice coincide with those of the eurozone: the countries in this area are those engaged in a process of financial and economic integration (including the SSM and the SRM) which does not necessarily involve the other EU countries. The fundamental role of an EDGS would be that of pooling the resources collected through the contributions paid by banks to fund the deposit insurance. The pooling of contributions across countries would make the deposit insurance scheme more resilient to large shocks, like the failure of a large institution or a systemic event involving several intermediaries. A stronger insurance scheme is not only desirable per se, in order to make the deposit guarantee more credible, but also to minimize the likelihood that the cost of repaying the depositors of distressed banks is ultimately paid by taxpayers. In other words, an EDGS is more likely to be “fiscally neutral” than the national DGSs. As a consequence, the credibility of its guarantee would be less dependent from the solvency of the national governments.

There are two options to proceed toward the introduction of an EDGS. The first is to set up a new European institution, either a public body or a private one, where the latter might be a mutual interbank insurance fund. The second is to expand the scope of the SRM, by making the SRF a common pool of resources to be used either to provide financial support to the resolution of distressed banks or to repay depositors of banks under liquidation. The second option seems preferable for the following reason.

Despite the claim of the Directive that the primary role of a DGS is the repayment of depositors (Art. 11), this role has presumably become much less relevant than it used to be in the past, after the entry into force of the BRRD. The latter has introduced several means, which are aimed at protecting depositors not by directly repaying their claims but by preserving the continuity of a bank under stress: recovery actions, early intervention measures, and resolution tools (see Chap. 5). In the perspective introduced by the BRRD and with the SRM in place, the main function of the DGSs is presumably that of contributing to finance the resolution of troubled banks (through the *bail-in* procedure), rather than that of repaying their depositors.¹² The EDGS would make no exception under this regard. Therefore,

¹²The same Directive seems to acknowledge this point in art. 10(6), allowing a member state to reduce the target level for the financial means of a DGS, under the condition that those means are more likely to be used within a resolution procedure than for paying out depositors (see Sect. 6.1.3).

it seems reasonable to propose that the EDGS and the SRF should be merged into a single fund, due to the large overlapping between their functions. The SRB should be delegated to administer such an integrated fund, so avoiding the duplication of institutions. The contributions paid by banks to finance the SRF and the EDGS should be unified into a single system of fees, so avoiding the duplication of administrative costs. This view is supported by a number of studies, pointing to a single European deposit insurance and resolution framework.¹³ The BRRD itself is consistent with this view, allowing a member state to use the same institution for the administration of its national resolution fund and of its DGS (Art. 100(2)).

So far, the creation of an EDGS has been prevented by the political resistance to the introduction of risk-sharing mechanisms across the European countries. The same attitude of the euro area governments led to the creation of a SRF of limited size, to be reached after a lengthy transition period (as we have noticed in Chap. 5). It must be acknowledged that the “Five Presidents’ Report” has given a contribution to the policy debate, by supporting the view that an EDGS is needed to complete the European banking union. Given the difficulties of setting up an EDGS, the Report suggests the introduction of a European reinsurance system for the national DGSs, as an intermediate step toward a full-fledged EDGS.¹⁴ Whether the eurozone governments will be willing to take up the suggestion of the five Presidents remains an open issue. The option of introducing an EDGS by enlarging the scope of the SRM would presumably be politically more viable than the creation of a new institution, since it would rely on the pooling of resources through the SRF, which is already in place (despite its limitations).

Even when the euro area governments will decide to proceed toward the creation of an EDGS, at least two issues remain to be addressed. The first is the fiscal backstop. As for the SRF, the lack of a European-level fiscal backstop is a severe limitation, implying that the national public budgets remain the last resort to face large shocks. A possibility, to be taken into consideration, is to allow the EDGS borrow money from the ESM, which, *de facto*, is the only type of common fiscal backstop in the euro area. As we saw in the previous chapter, a similar solution has been already proposed in the policy debate for the SRF. Again, the merger of the EDGS into the SRF would simplify matters. The second issue is supervision. Should the

¹³See Colaert (2015), Gros and Schoenmaker (2014), Allen et al. (2011).

¹⁴See European Commission (2015). A two-tier system, relying on national DGSs and on a European reinsurance scheme, has been previously suggested by Pisani-Ferry et al. (2012).

EDGS be a private institution, like a mutual interbank insurance fund, then the responsibility of supervising its activities should presumably be assigned to the ECB, within the scope of the SSM.¹⁵

CONCLUDING REMARKS

The EDGS is the missing pillar of the banking union. The Directive approved in 2014 has introduced a higher level of harmonization across the EU member countries, but it is still a coordinating device among the national deposit insurance systems. It does not help to break the link between the risks undertaken by banks and the implicit guarantee provided by their home country governments.

The main issues addressed by the Directive are the following.

- The introduction of risk-based insurance premia, paid ex ante by banks.
- The coverage of the insurance schemes: up to 100,000 euros. Several types of deposits are not covered.
- DGSs are allowed to engage in preventive actions, and they can be called to contribute to the resolution of distressed banks.
- Banks are required to provide depositors some essential information, related to the insurance coverage of their deposits.
- The payout time should be gradually shortened to 7 working days.

Looking forward, the main challenge to be faced by the governments of the euro area, in order to complete the implementation of the projected banking union, is to start the transition toward a European deposit guarantee scheme (EDGS). Rather than setting up a new institution at the European level, the best way to proceed seems to be by expanding the responsibilities of the SRB, which should administer an integrated fund to be used for both tasks: either provide financial support to the resolution of a distressed bank or repay its depositors in case of liquidation. By taking this line of action, the SRB would evolve toward an institution like the FDIC in the USA. As I have argued in this chapter, there are good economic and organizational reasons for integrating the second and third pillars of the banking union: the SRM and the EDGS.

¹⁵ Unfortunately, the above-mentioned “Five Presidents’ Report” does not even mention those two issues, despite the support it provides to the view that an EDGS should be introduced as matter of priority into the agenda of the European policymakers.

However, the introduction of an EDGS requires the European decision-making bodies (EU Commission, Parliament, and governments) to overcome the political resistance to risk-sharing arrangements among the euro area countries. Another problem is the lack of a common fiscal backstop. Those issues would be easier to tackle by integrating the administration of the EDGS with that of the SRF.

REFERENCES

- Adrian, T., and H.D. Shin. 2010. Liquidity and leverage. *Journal Financial Intermediation* 19: 418–437.
- Allen, F., T. Beck, E. Carletti, P. Lane, D. Schoenmaker, and W. Wagner. 2011. *Cross-border banking in Europe: Implications for financial stability and macro-economic policies*. London: CEPR Report.
- Baglioni, A., and G. Marotta. 1993. Deposit insurance: Implications from financial intermediation theory. In *Financial markets' liberalisation and the role of banks*, ed. V. Conti and R. Hamoui. Cambridge, UK: Cambridge University Press.
- Brunnermeier, M., and L. Pedersen. 2009. Market liquidity and funding liquidity. *Review of Financial Studies* 22(6): 2201–2238.
- Colaert, V. 2015. Deposit guarantee schemes in Europe: Is the banking union in need of a third pillar? *European Company and Financial Law Review* 2015(2).
- Deutsche Bank. 2014. *Deposit guarantee reform in Europe: A systemic perspective*. Frankfurt: DB Research.
- Duffie, D. 2010. *How big banks fail and what to do about it*. Princeton, NJ: Princeton University Press.
- EBA. 2015a. *Guidelines on methods for calculating contributions to deposit guarantee schemes*, London, May.
- EBA. 2015b. *Guidelines on payment commitments under Directive 2014/49/EU on deposit guarantee schemes*, London, May.
- EBA. 2015c. *Draft guidelines on cooperation agreements between deposit guarantee schemes under Directive 2014/49/EU (Consultation Paper)*, London, July.
- European Commission. 2010. *JRC Report under Article 12 of Directive 94/19/EC as amended by Directive 2009/14/EC*. Joint Research Centre, Ispra, Italy.
- European Commission. 2015. *Completing Europe's Economic and Monetary Union*, Brussels, June.
- Freixas, X., and J.-C. Rochet. 2008. *Microeconomics of banking*. Cambridge, MA: MIT Press.
- Gros, D., and D. Schoenmaker. 2014. European deposit insurance and resolution in banking union. *Journal of Common Market Studies* 52(3): 529–546.
- Pisani-Ferry, J., A. Sapir, N. Véron, and G. Wolff. 2012. *What kind of European Banking Union?* Bruegel Policy Contribution, Issue 2012/12.

Summary and Conclusions

7.1 THE EUROPEAN BANKING UNION: MOTIVATIONS AND BUILDING BLOCKS

7.1.1 *The Reasons for Introducing the Banking Union*

The basic motivations, leading the European policymakers to introduce the banking union, are the following: (1) reduce the fiscal cost of bank bailouts, (2) break the two-way link between the financial risks in the bank and sovereign sectors, and (3) achieve a higher level of supervisory convergence.

The cost of bank bailouts for taxpayers, as a consequence of the financial crisis that started in 2007, has been significant. As a ratio to the 1-year GDP, the cash outlays due to capital injections and asset reliefs have been about 5 % on average; in some countries the burden has been much larger than that. In addition, the guarantees provided by governments have not produced large cash outlays, but they represent a potential liability. These kinds of measures have generated in financial market participants the expectation of an implicit additional guarantee of public support to the banking sector. It must also be remembered that these direct costs are only part of the story: most of the fiscal cost of banking crises is due to their indirect impact on the government balance sheet, since they amplify the economic downturns and can lead to a higher interest burden.

The two-way link between banks and sovereigns clearly emerges from market data. The default risks of the two sectors—measured by their CDS spreads—appear to be highly correlated, starting by September 2008. While in 2008–2010 the transfer of risk mainly went from the financial to the public sector, the direction was later reversed (in 2011–2012), when the explosion of the sovereign debt crisis made the credit risk go from the balance sheet of some governments to those of their domestic banks. Under this regard, some important cross-country differences emerge from the analysis.

Despite the common regulatory framework in the EU, the application of prudential rules can differ across countries, since some discretion is left to the national supervisory authorities and to the supervised institutions. At the EU level, the task of achieving a convergence in supervisory practices has been assigned to the EBA, which issues technical standards and guidelines. For the euro area countries, the supervisory convergence has been strengthened by transferring the responsibility of banking supervision to the ECB.

7.1.2 *Single Supervisory Mechanism*

The SSM is the fundamental building block of the European Banking Union, and it is the first one that has become fully operational. The design of the SSM follows the principle of separation between banking supervision and monetary policy. The distribution of tasks within the SSM relies on the distinction between significant and less significant banks. The ECB directly oversees 123 significant banking groups, which together account for about 85 % of the eurozone banking system. The day-to-day oversight of the significant banks is actually delegated to the JSTs, made up of representatives from both the ECB and the national authorities. The NCAs remain responsible for the direct supervision of all the other institutions, following the guidelines set by the ECB, and the latter can decide at any time to take over the direct supervision of a less significant institution.

The supervisory approach implemented in the SSM is centered on the SREP, in line with the Directive CRD-IV. This is a periodic examination of the capital and liquidity situation of each bank, together with an evaluation of its internal governance and risk management practices. The SREP is applied to both significant and less significant banks: the JSTs are responsible for its application to the former, while the NCAs are responsible for its application to the latter. As a follow-up to the SREP, a bank can be imposed

additional capital and liquidity requirements, as well as adjustments to its risk management policies. This option, which derives from the Basel II framework (Pillar II), introduces a remarkable degree of discretion and uncertainty into the requirements that can be applied to individual banks.

The first action taken by the ECB, as responsible for the banking supervision, has been the examination of the balance sheets of the most relevant banks in the euro area. Actually this action took place even before the ECB was endowed with the formal responsibility of supervision, which started on 4 November 2014. The examination of bank balance sheets, which goes under the name of “comprehensive assessment,” was carried out during 2014, and its results were communicated on 26 October 2014. The sample of banks examined includes 130 banks, accounting for 82 % of the total assets of the banks located in the SSM area. The comprehensive assessment was made up of two parts: (1) asset quality review (AQR) and (2) stress test. The capital shortfalls, emerging from the comprehensive assessment, have been the starting point for the supervisory activity over the significant banks: those with a shortfall have been asked to submit a capital plan, listing the remedial actions to restore their capital position.

7.1.3 *Single Resolution Mechanism*

The second pillar of the European Banking Union is the SRM. Strictly speaking, this term refers to the creation of a new European agency delegated to the management of banking crises, the SRB, together with the establishment of a new fund, the SRF, where some resources to be used for crisis management are pooled among the participating countries; the SRF is administered by the SRB. In a broader sense, the term SRM refers also to a new set of rules governing the management of banking crises, which have been introduced into the European legislation by the BRRD. While the BRRD applies to all the EU countries, the SRB and SRF are institutions operating within the euro area.

The basic motivation behind the BRRD is the introduction of a sort of “third way” between the two extreme solutions that have traditionally been applied to banking crises: either a “bailout” or an insolvency procedure. The special procedure introduced by the BRRD, namely the “resolution,” should be able to avoid the liquidation of a troubled bank and, at the same time, limit the bill for taxpayers and the moral hazard effect typically implied by bailout interventions. Of course, this third way is not without costs. Its main drawback derives from the “bail-in”

principle, putting some relevant costs on the creditors of a stressed financial institution (in addition to its shareholders): such principle can generate some transparency and instability problems.

A crucial target of the SRM is the creation of a common safety net for banks located in the euro area. This role should be played by the SRF, overcoming the segmentation of financial risks at the national level and, in particular, the link between the credit risk of governments and that of their domestic banks. Unfortunately, this goal has been achieved only to a limited extent, due to the small size of the fund and to the absence of a common fiscal backstop for it. Actually the European Stability Mechanism (ESM) could play the role of a common fiscal backstop, but its size and rules of operation limit its ability to do so.

7.1.4 European Deposit Insurance

The third pillar of the banking union, namely the European deposit insurance scheme, is still missing. The only achievement that has been recently made in this area is a further harmonization of the national rules. The Directive approved in 2014 has considerably enhanced the regulatory convergence, by introducing uniform principles to be applied across the EU member countries. Among them, the most important is the requirement that banks have to contribute *ex ante* to the funding of the deposit insurance schemes, by paying risk-related insurance premiums.

However, the Directive is only a coordinating device among the national deposit protection schemes. The introduction of a single deposit insurance scheme in the euro area has been prevented by the political resistance to pool the necessary resources across the member countries. This delay is quite disappointing, since the pooling of resources would enable the eurozone countries to be endowed with a more resilient, credible, and fiscally neutral system of deposit protection.

7.2 OPEN ISSUES

7.2.1 Macro-prudential Supervision

The ECB is responsible for the micro-prudential supervision, while the macro-prudential supervision is to a large extent delegated to the national authorities, with the European Systemic Risk Board playing a quite limited role. This limitation raises some concerns, mainly related to the cross-

country heterogeneity in the implementation of the macro-prudential policy, and to the potential conflicts between different policies: macro-prudential, micro-prudential, and monetary policies. Therefore, it seems reasonable that the responsibility of the macro-prudential supervision is attributed to the ECB.

7.2.2 *Comprehensive Assessment*

The AQR and the stress test carried out by the ECB in 2014 has provided valuable information about the balance sheets of the large and medium-size banks located in the euro area, thus contributing to the transparency of their accounting information. However, several drawbacks have emerged, related to the methodology used by the ECB. The main criticism derives from its focus on the CET1 ratio as the only indicator of bank solvency. Actually the concerns, related to the CET1 ratio, have a more general relevance, since they point to some pitfalls in the Basel regulatory approach. The CET1 ratio turns out to be penalizing for those banking systems more focused on commercial banking, as opposed to investment banking. It suffers from the possible manipulation of the risk weights used to compute the RWAs. This approach overlooks the possibility that some financial intermediaries accumulate a high leverage, despite the fact that they are able to report a satisfactory CET1 ratio. In the future, a way to improve the stress test methodology would be to complement the CET1 ratio with a simple leverage index, which is less prone to manipulations and national biases.

The other main limitation of the comprehensive assessment derives from its micro-prudential approach. The analysis performed by the ECB has been focused on the risk profile of each bank in isolation, without considering any possible spillover among them. Looking ahead, the inclusion of systemic risk into the analysis of the adverse scenario may lead to a considerable improvement of the stress test methodology.

7.2.3 *Resolution of Distressed Banks*

Several policy suggestions emerge in this area.

- Retail bank customers should be exempted from the application of the bail-in rule, since they might be unable to have a correct evaluation of the risks implied by the bail-in. This rule may generate instability and higher costs in the funding conditions of banks.

- The governance of the SRM, involving the EU Commission and the Council in addition to the SRB, is too complex and leaves room to an excessive political interference. To make the decision process more efficient, the resolution powers should be concentrated upon the SRB, acting as an independent agency.
- The size of the SRF should be increased, to enhance its credibility as a stabilization tool. Even more importantly, the SRF should rely on a common fiscal backstop at the EU level. To this aim, the SRF should be enabled to borrow money from the ESM.
- The ability of the ESM to directly support the recapitalization of distressed banks should be strengthened. The eligibility criteria for accessing to the Direct Recapitalization Instrument should be made less restrictive. The ESM governance should be reviewed, with the aim of reducing the degree of political interference in specific bank resolution programs. The size of the resources allocated to the DRI should be possibly enlarged.

7.2.4 *Deposit Insurance*

An important challenge to be faced by the governments of the euro area, in order to complete the banking union, is the introduction of a common EDGS. Rather than setting up a new institution at the European level, administering the EDGS, it seems preferable to expand the responsibilities of the SRB, which should administer an integrated fund to be used for both tasks: either provide financial support to the resolution of a distressed bank or repay its depositors in case of liquidation. The reason for proceeding this way is that, after the entry into force of the BRRD and SRM, the main function of a DGS is that of contributing to finance the resolution of troubled banks (through the *bail-in* procedure) rather than that of repaying their depositors. The solution suggested here would avoid the duplication of institutions with overlapping tasks: the SRB and the agency administering the EDGS. In particular, the duplication of administrative costs could be avoided, by introducing a unified system of fees to finance both the SRF and the EDGS. By taking this line of action, the SRB would evolve toward an institution like the FDIC in the USA.

The introduction of an EDGS requires the European decision-making bodies to overcome the political resistance to risk-sharing arrangements among the euro area countries. Another problem is the lack of a common fiscal backstop. As discussed in Chap. 6, both issues would be easier to tackle by integrating the administration of the EDGS with that of the SRF.

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