

UNIVERSIDADE CATÓLICA PORTUGUESA

The Bail-In Enforcement

The application of the resolution tool to Banco Espírito Santo

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by

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Resumo

No início de 2016, a Comissão Europeia impôs, na Zona Euro, o mecanismo do *bail-in* como procedimento padrão para recuperar e resolver os bancos que foram enfraquecidos pela crise financeira. Esta nova medida pretende substituir a prática do *bailout* que tem sido apontada como causa da atual crise da dívida soberana da Zona Euro.

Com este trabalho pretende-se analisar esta nova legislação e, retrospetivamente, aplicá-la ao Banco Espírito Santo (BES), um banco português que foi resolvido a 4 de Agosto de 2014 através de uma medida de separação de ativos. Este exercício tem como objetivo compreender em que consiste o mecanismo do *bail-in*, de que modo é feita a sua aplicação e, no caso específico do BES analisar quais seriam as diferenças relativamente à resolução que efetivamente ocorreu.

Os resultados encontrados sugerem que a aplicação do mecanismo do bail-in ao BES ter-se-ia traduzido, no pior dos casos, numa poupança de cerca de 60% para o Estado português. Para além disso, apurou-se que era suficiente que os credores do BES suportassem perdas na ordem dos 28% para que não fosse necessária qualquer intervenção ao banco.

Palavras-chave (max 5): Bail-in; regulação bancária; Zona Euro; Directiva para recuperação e resolução bancária; Banco Espírito Santo (BES).

Abstract

In the beginning of 2016, the European Commission imposed, in the Eurozone,

the bail-in mechanism as a standard procedure to recover and resolve banks

which have been weakened by the financial crisis. This new measure intends to

replace the bailout practice that has been refered to be associated with the current

Eurozone sovereign debt crisis.

The purpose of this paper is to study this new banking legislation and,

retrospectively, apply it to Banco Espírito Santo (BES), a Portuguese bank which

was resolved on 4 August 2014 through an asset separation tool. This exercise

endeavours to understand what the bail-in mechanism is, how it is performed

and, in the particular case of BES to analyse how it would have been different

from the resolution that effectively occurred.

The results suggest that the application of the bail-in mechanism to BES would

have granted, in the worst case scenario, savings for the Portuguese State of about

60%. In addition, it was observed that it would have been sufficient that the

investors of the entity had sustained losses of 28%, in order for the bank not to

need any intervention.

Keywords: Bail-in; Bank Regulation; Eurozone; Directive for Bank Recovery

and Resolution; Banco Espírito Santo (BES).

vii

Summary

Agradecimentos	iii
Resumo	v
Abstract	vii
Summary	ix
Index of Figures	xi
Index of Tables	xiii
Introduction	15
Chapter 1. The financial system	19
Chapter 2. The financial crisis of 2007/08 and its spill-overs	21
Chapter 3. The European reform	25
3.1. The State Aid and the Eurozone debt crisis of 2010/11	25
3.2. The need for a Banking Union and the Single Rulebook	27
3.2.1. Single Supervisory Mechanism (SSM)	
3.2.2. Single Resolution Mechanism (SRM)	
Chapter 4. The bail-in resolution tool	
4.1. The legal framework	
4.2. The benefits and disadvantages	
Chapter 5. The bail-in of Banco Espírito Santo	
5.1. What happened to BES?	
5.2. The bail-in exercise	
5.2.1. Loss absorption (LA)	
5.2.2. Recapitalization from senior debtors	
5.2.3. Comments on the results	63
Conclusions	65
References	
Index of Figures	69
Index of Tables	72

Index of Figures

Figure 1: Capital ratios69
Figure 2: CRD/R capital requirements; The European Commission. (2013d).
Capital Requirements - CRD IV/CRR - Frequently Asked Questions. Retrieved
from http://europa.eu/rapid/press-release_MEMO-13-690_en.htm70
Figure 3: GES' simplified structure; Saraiva, P. M. (2015). Comissão
Parlamentar de Inquérito à Gestão do BES e do GES. Retrieved and translated
from
https://www.parlamento.pt/Actividade Parlamentar/Paginas/Detalhe Iniciativa.a
spx?BID=3864571

Index of Tables

Table 1: The Bail-In sequence 59
Table 2: The Bail-In effects on the external aid
Table 3: BES' direct exposure to GES
Table 4: Main non-recurring effects in BES' income statements, during the first
semester of 201475
Table 5: Comparison between reported income statements from the first
semester of 2014 and 2013 with the income statements of the first semester of 2014
without the extraordinaryeffects76
Table 6: Capital requirements of BES in 30/06/2014 and 31/12/201377
Table 7: Bail-in effects in the balance sheet of BES
Table 8: Bail-in effects in the capital requirements of BES 79

Introduction

The Great Recession, which evolved from a North American Real Estate crisis in 2007, caused the weakening of numerous banks and exposed several regulatory failures in the financial system worldwide. This unexpected situation required urgent measures to stabilize the whole economic structure and one of them was the bailout of banks.

Governments of several countries – the United States, the United Kingdom, Ireland, Greece, Portugal, and more - chose to bailout their distressed financial institutions because they feared that the failure of one bank could cause the bankruptcy of more – risk of contagion. So, bearing in mind the devastating results that a failure of just one bank could cause to the entire financial system, and thus to the economy and society, governments aided these institutions by guaranteeing their liabilities¹, providing impaired asset relief², restructuring aid loans³ and even by recapitalizing these entities⁴, so that they could restore their viability.

However, this bailout process is associate with two main problems. First, the process involves the use of taxpayers' money to repair damages made by banks' poor investments and risky behaviour. This intensifies the idea that financial institutions are too big to fail leading to moral hazard - managers of banks will

¹ Governments commit themselves to pay a failing institution's debt in case it fails.

² Governments take measures to liberate banks from non-performing assets that, by the principle of prudence, had to be impaired.

³ Extension of the maturity of a loan, usually causing a decrease in the value of the instalments, so that the debtor is able to pay without defaulting.

⁴ Injection of public funds to increase the capital of the bank and thus its solvency.

continue with their irresponsible behaviour of excessive risk taking because the burden of their mistakes is allocated to someone else and they do not internalize the true value of risk. Therefore, bailing out a bank does not instil discipline in the institutions, making them likely to fail again in the future.

The second problem is that by financing their recovery, the State itself is absorbing the banks' debt and increasing its own, which can lead to a sovereign debt crisis, like the one currently being experienced in some European countries.

To address the moral hazard issue and reduce the public cost of bank failures, the European Commission (EC) implemented the Bank Recovery and Resolution Directive (BRRD) that, among other measures to create a comprehensive recovery and resolution regime, it abolishes the bailout option and enforces the bail-in mechanism as a standard procedure to deal with ailing banks across the Eurozone.

To bail-in a bank means to recapitalize it through the write-down⁵ of liabilities and/or their conversion to equity, allowing the institution to continue as a going concern⁶ and avoiding the disruption of the financial system that would be caused by stopping or interrupting its critical services (The European Commission, 2014c). In other words, the bail-in tool enshrined in this new directive aims to transfer the costs of recovering a bank from taxpayers to creditors and shareholders of the institutions, making bank investors and managers liable for their actions and consequently more disciplined.

However, even though this appears to be a fair solution which will only affect these institutions' investors, the fact is that it will influence the entire society. As this resolution increases the risks ⁷ for investors, so does the premium they require for their funds, meaning that the banks' financing costs will rise. If credit

⁵ The understanding that a debt is partially uncollectible and therefore that amount has be considered as a loss. To write-off a debt means to consider the entire debt as uncollectible and thus a loss.

 $^{^6}$ "A going concern is a business that functions without the intention or threat of liquidation for the foreseeable future, usually regarded as at least within 12 months." (The European Commission, 2012)

⁷ Probability of loss and/or variability of returns (Gup, 2011, p. 26).

institutions intend to keep the spread on their interest rates⁸, this implies that the financing costs for the final consumer will also increase.

So, besides having the benefit of discipline the banking sector, the bail-in resolution tool has the downside of increasing interest rates which may consequently decrease consumption and investment in the real economy, slowing down economic growth.

For this is currently an important matter, the purpose of this paper is to describe the new legislation and perform a practical example to better explain how it works. Therefore, this thesis is divided in two parts, one that describes the theory behind the bail-in mechanism and the other that applies it.

In order to make this exercise more realistic, the practical component will be performed, retrospectively, in Banco Espírito Santo, a Portuguese bank which was resolved on 4 August 2014 through an asset separation resolution tool. This way, besides the application of the bail-in mechanism, it is possible to obtain some insights about the differences between this new resolution framework and the resolution that effectively occurred.

A similar work was developed by (Conlon & Cotter, 2014), in which the authors applied retrospectively the bail-in tool in European banks which failed during the global crisis, analysing the proportion of the liabilities that would have been written down to cover for losses. Their empirical findings suggested that equity holders and subordinated bond holders would have suffered the greatest losses while senior debt holders would have loss significantly less. There were no evidences that unsecured depositors would have experience losses.

Some other papers related to the subject include (Zhou et al., 2012), where the authors study the effectiveness and usefulness of the bail-in resolution tool as a way to restore the viability of distressed institutions, discuss potential risks and

⁸ Banks profit from this spread which represents the difference between the interest rates provided to their clients and the interest rate at which they obtained funding.

propose solutions to mitigate them. In (The European Commission, 2012), authors assess the quantitative impact of this tool in the annual EU GDP, having concluded that the expected annual net effect will be positive and amount to 0,34%-0,62% of the EU GDP.

This paper contributes to the debate by analysing a specific case of a highly polemical resolution where individual investors loss their lifetime savings.

The bail-in exercise on BES, for academic purposes, is going to be based on the institution's financial report from the first semester of 20149. So it would be as if the institution was resolved on 1 July 2014.

Using the disclosed consolidated financial statements of the company, the bailin will be applied as if the purpose were to restore the entity's ability to comply with the conditions to continue to carry out its activities (EU Regulation, 2014, Article 27).

This work is structured as follows. Chapter 1 briefly introduces the financial system, why it is needed and how it works. Chapter 2 describes the last decade's financial events, namely the financial crisis of 2007, started in the USA and its spill overs. Chapter 3 analyses the consequences of the financial crisis in Europe to ease the understanding of the regulatory measures set by the European Commission to end the current crisis and to prevent future ones. Chapter 4 focuses specifically in describing the legal framework of the bail-in resolution tool and stating its benefits and disadvantages. Finally, Chapter 5 concerns to Banco Espírito Santo, why and how it was resolved and how the resolution through the bail-in tool would have been implemented.

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⁹ This is the last available data on the credit institution.

Chapter 1. The financial system

It is the financial system's function to assure a smooth allocation of capital between its participants, through a borrowing-lending process that allows the supply of capital to equal its demand, at a given interest rate¹⁰. This means that borrowers in need of capital will be able to obtain funds from those willing to lend.

To ease the interactions between these agents is the main purpose of financial institutions¹¹. In other words, they act as intermediaries, creating a bridge between those who have surplus of money (savers) and those who have money shortage (borrowers).

Not all the transfers from borrowers to lenders are made through a financial intermediary, however, these institutions are highly specialized and thus reduce the risks and searching costs¹² for individuals. In this sense, financial institutions are an essential pillar in society as they support payment systems, enable individuals to save and invest for their future and then channel those savings to support the economy, by lending the funds to consumption and investment purposes (The European Commission, 2014a).

Regarding the balance sheet of these institutions, the assets' side is mostly composed by clients' liabilities – debt and equity securities issued by companies and consumers such as stocks, bonds, loans, leases, mortgages -, and the

¹⁰ Price paid for the use of credit (Gup, 2011, p. 34)

¹¹ There are numerous institutions that act like financial intermediaries, such as commercial banks, finance companies, hedge funds, pension funds, private equity funds, stockbrokers and dealers (Gup, 2011, p. 23).

¹² Searching costs represent the resources spent in the search of the wanted product or service. When a consumer uses a specialized intermediary instead of trying to find a direct provider, he is saving money, time and more resources.

institutions' liabilities by the claims that clients and investors hold against them – checking accounts, savings deposits and banks' own debt.

These institutions create value mostly by investing low risk and high liquidity¹³ assets received from their clients - checking accounts and savings deposits - into securities with higher risk and lower liquidity, since higher risks provide higher potential returns (Gup, 2011, pp. 23-24, 30).

Due to the nature of their business – a very interconnected system that makes profit out of lending short-term against long-term assets -, banks can face liquidity shortage (Gup, 2011, pp. 24). This means that, in theory, they have the ability to comply with their short-term commitments yet not all at once as they are unable to turn their long-term assets into cash quickly. For this reason they operate on the basis of public trust and it only takes the loss of confidence in one bank to generate financial instability.

In a simplified manner, if people started doubting of one bank, they would withdraw their funds from the institution causing its failure. Consequently, due to interconnectedness of the financial system, other banks would also start experiencing losses, caused by the write-down of their credits towards the failed institution. In turn, depositors of these banks, sensing their difficulties, will also withdraw their funds leading to their failure.

And the cycle will keep on repeating, with damaging effects not only to the financial sector but also to the real economy. This is why it is so important to have a transparent banking sector in which the society can trust.

20

 $^{^{13}}$ The level of celerity and ease with which an asset or instrument can be traded in the market, at a stable price.

Chapter 2. The financial crisis of 2007/08 and its spill-overs

From 1970 to 2007, the USA's population had grown from 205 million to 302 million thus increasing demand for housing. In order to support the lodging of its citizens, the U.S. Congress approved measures to facilitate housing acquisition, such as interest rate caps. Low interest rates associated with generous commercial banks made it easy for anyone to obtain a mortgage regardless of their ability to repay – subprime mortgages¹⁴ (Gup, 2011, pp. 3-5).

Banks were lending large amounts of money for two main reasons. First, they were being heavily financed by foreign investors and governments – mostly Japan and China. And second because they were using an instrument called Mortgage-Backed Security¹⁵ (MBS) that allowed them to negotiate a loan with a client and then sell that asset to another financial institution willing to buy.

The creation of securities like the MBS changed the entire banking system business model: initially, banks would generate-and-hold their loans, but the precrisis trend was to originate-and-distribute them (Gup, 2011, p. 40).

The widespread of MBS incentivized risky behaviour on commercial banks because, since they did not need to hold on to the loan, they did not have any incentives to verify the debtors' rating. So banks would provide loans to low rated

¹⁴ High-risk mortgages loans given to individuals with low credit ratings, and/or high loan-to-value ratios and/or debt-to-income ratios above 50 percent (Gup, 2011, p. 7).

¹⁵ The sale of mortgage loans in the secondary market

borrowers and then sell those mortgages in the secondary market, disposing of the risk and still get a positive cash flow.

The buyers of the MBS, uncertain about the solidity of the loans¹⁶, would then purchase Credit Default Swaps (CDS)¹⁷ as a way to insure the assets. The CDS market rose "from about \$6.4 trillion in December 2004 to about \$57.9 trillion in December 2007" (Gup, 2011, p. 9).

The financing given to housing purchase also boosted the Real Estate bubble, but when the adjustable interest rates of many subprime mortgage loans rose, the borrowers lost the ability to comply with their commitments and defaulted.

As clients defaulted, banks proceeded to foreclosure¹⁸ the assets used to secure the debt in order to recover some of the invested money. However, the price of the residences, which had inflated with the demand, fell sharply as banks unsuccessfully tried to sell them back.

This Real Estate Crisis in the USA rapidly became a worldwide banking problem. The MBS had been sold all across the world¹⁹, so when the American Real Estate bubble burst, banks worldwide started experiencing massive asset impairments that could not be offset because they were too leveraged²⁰.

All of a sudden, international credit institutions were left with large amounts of non-performing loans that had to be considered as losses, insurance companies were also facing losses covering reimbursements to CDS purchasers, public authorities had to inject huge funds into these financial institutions to stabilize the

 $^{^{16}}$ There was a considerable asymmetry of information between mortgages creators and MBS purchasers.

¹⁷ A form of insurance or hedge for MBS - if the borrower defaults, the holder of the debt is paid by the insurer (Gup, 2011, p. 24)

¹⁸ When clients default banks have several ways to try to recover some of their investments: they can prosecute the debtor to force the payment, try to restructure the loan in a way that allows him to pay, foreclosure the collateral (sell it in the market) or sell the loan at discount to other financial institution.

¹⁹ The international banking markets were too integrated which increased the systemic risk - risk that exist when an entire sector is vulnerable to certain types of shocks – and the risk of contagion - the possibility that the consequences of a shock in an institution/country could spread to others.

²⁰ A company gets leverage once it uses debt to acquire assets. When an institution has significantly more debt than equity is considered to be highly leveraged and, in case the assets underperform, the company will fail without a capital buffer to sustain the loss.

economy as society lost confidence in the solvency and liquidity of the financial system (Gup, 2011, p. 26).

So, what started as an American Real Estate Crisis grew to a banking crisis that quickly spread into other market segments and countries (Ackermann, 2008), becoming a global financial crisis transmitted to the real economy and resulting in a massive contraction of liquidity and credit availability (Gup, 2011, p. 26).

Chapter 3. The European reform

3.1. The State Aid and the Eurozone debt crisis of 2010/11

In Europe, between October 2008 and December 2012, Member States provided approximately 592 billion € (4.6% of EU 2012 GDP) of capital support to the banking sector, as an attempt to contain the crisis (The European Commission, 2013a).

This unprecedented level of state support, although necessary to quickly stabilize the sector and prevent contagion, led to a sovereign debt crisis in Europe causing deep economic damages, such as high unemployment and income and wealth loss.

Moreover, the increase in the public expenditure began a vicious circle between banks and the State. As credit institutions were suffering considerable asset impairments and dilapidation of their balance sheets, States, confronted with the possible insolvency of important banks in the economy, decided to bail them out. By financing their recovery using taxpayers' funds, States deteriorated public accounts. This caused an increase in governments' default risk leading to a downgrade in their credit ratings and a consequent raise in their refinancing costs. In turn, banks that were exposed to their sovereign's bonds²¹ faced losses in those assets²² (Gennaioli, Martin, & Rossi, 2014).

²¹ Usually, banks hold government bonds because these are considered very liquid assets, allowing them to perform day-to-day activities and to have a buffer of safe assets (Gennaioli, Martin, & Rossi, 2014).

²² An increase in the risk of an asset causes a decrease in its price. This is considered the discount given to the investor, to incentivize him to take the risk.

Thus, when a bank is exposed to its own sovereign, any State aid to the financial sector will have negative repercussions to both parties.

In addition to this negative circle, public support to banks also shifts tax payers' contributions away from essential public goods, increases moral hazard in the banking industry and causes distortions in the economy, such as competition biases²³.

Hence, one of the first reforms in the EU after the beginning of the Crisis was to minimize and establish harmonized limits to the State support to credit institutions across Member States. These new restrictions were issued in a Banking Communication from the EC and took effect on 1 August 2013 (The European Commission, 2013b).

This Communication specified that all the aid has to be approved by the Commission and for that to occur the distressed credit institution must present a plausible restructuring plan that ensures its long-term viability and that complies with the burden-sharing requirements.

These burden-sharing requirements were created so that aided institutions and their investors bear some responsibility for their failure with their own resources and by paying an adequate remuneration to public authorities whenever they intervene. The burden sharing hierarchy is subsequently described in subchapter 3.2. and in chapter 4.

The EC also states that it is important that credit institutions, whether they are sound or facing difficulties, adopt measures to minimize the state support that may include the replacement of the board and of the executive, the imposition of stricter remuneration policies to executives, the reduction of disbursements and the increase of fund retention especially when the institution is already ailing (e.g.

26

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 $^{^{23}}$ Banks that are given financial aid have competitive advantages compared with their industry's peers.

dividend retention and avoidance of repurchase of capital instruments) (The European Commission, 2013b).

3.2. The need for a Banking Union and the Single Rulebook²⁴

The crisis unveiled numerous breaches in the financial markets' legislation and supervision. It also showed lack of responsibility, integrity and transparency in the financial sector that led to "the evaporation of trust in the market and related liquidity squeezes, weak bank balance sheets, high private and public debt levels, low interest rates, the recession and weak economic growth prospects" (The European Commission, 2014a).

Even more, during the crisis, the European Union underwent through the fragmentation of its internal financial market as different cross-border legislation for bank recovery and resolution caused uncertainty and undermined investment and cooperation between institutions from different countries. Individual Member States applied uncoordinated measures to resolve their own financial issues, causing investors to flight to safety (Conlon & Cotter, 2014, 2015). This damaged the single currency and the single market for free movement of capitals and led to a deficiency of liquidity in the market (EU Regulation, 2014).

As a result, to reform the sector became a priority for European banking authorities in order to provide stability to the economy, stimulate growth and to prevent future crises. Yet, these reforms needed to be made at a Eurozone level in order to assure consistency across Member States and to guarantee the functioning of the internal market.

²⁴ This subchapter is based on the European Commission MEMO/14/294 - Banking Union: restoring financial stability in the European Commission, 2014c)

Therefore the European Commission created the Banking Union (BU) - an institutional and legal framework for financial services, mandatory for all Euro Area Member States and open for all the EU Members -, to complete the economic and monetary union.

This Banking Union aims to restore the public's confidence in the financial system by making it sounder and more transparent, with greater capital quality and quantity, more protection for depositors and enhanced supervision. It is also expected that these measures will break the negative relation between banks' failure and the worsening of governments' fiscal positions by putting the failure's onus on private investors and reducing the moral hazard.

"The Single Rulebook is the foundation of the Banking Union", because it represents the common framework "covering regulatory and prudential rules for credit institutions, financial conglomerates and investment firms" to harmonize the European financial system, making it more transparent and integrated (The European Commission, 2014a). These are the most basic rules that each bank must comply with in order for the BU to work.

This rulebook establishes three main pillars, each one safeguarding its respective legislation:

- → The Single Supervisory Mechanism (SSM) addresses crisis prevention through an improved supervisory system with higher capital requirements and enhanced depositors' protection. This mechanism is responsible for the enforcement of the Capital Requirements Directive and Regulation (CRD IV and CRR) and the Deposits Guarantee Schemes (DGS);
- → The Single Resolution Mechanism (SRM) focuses on early intervention whenever institutions underperform, but they also manage failures if recovery procedures are unsuccessful. This mechanism sustains the Bank Recovery and Resolution Directive (BRRD);

→ European Deposit Insurance Scheme (EDIS): the third pillar was proposed on 24 November 2015 and has not yet entered in force, however its purpose is to replace the national deposits guarantee scheme (DGS) as a way of further weakening the link between banks and their national sovereigns (The European Commission, 2015). EDIS will be explained in conjunction with the DGS.

3.2.1. Single Supervisory Mechanism (SSM)²⁵

The crisis revealed deficiencies in supervision at a global scale and since strengthening regulations without control is worthless, on November 2014, the Single Supervisory Mechanism, the first pillar of the Banking Union, was implemented.

The idea behind this mechanism is to create a specialized, independent and supranational supervisor that assesses and enforces the compliance of the BU rules, in all of its credit institution. This control will ensure that banks become more solid and less prone to shocks, preventing future crisis and strengthening the trust in the financial system.

This oversight responsibility was assigned to the European Central Bank (ECB) that is now in charge of the direct supervision of the BU's significant credit institutions²⁶, while the remaining banks will continue to be supervised by their national competent authorities (NCAs), even though in close coordination with the ECB that at any moment may request to directly supervise less significant institutions.

Nevertheless, even in significant credit institutions, supervisory tasks are divided between the ECB and the NCAs according to their relative importance. In

 $^{^{25}}$ This section is based on the European Commission MEMO/13/780 - Legislative package for banking supervision in the European Commission, 2013c)

²⁶ Banks holding more than €30 billion on assets or – unless the value of its assets is below € 5 billion - that constitute more than 20% of their home country's GDP, or it is one of the three most important institutions in a Member State. Currently, there are 123 institutions under the direct supervision of the ECB, which represents almost 82% of the BU credit institutions' assets.

fact, some supervisory tasks will remain an exclusive responsibility of the national supervisors, like consumers protection, the supervision of payments services and daily verifications.

This integration between the ECB and NCAs not only avoids duplication of work but it also allows the exploitation of the best of both institutions: the ECB's highly qualified and specialized human resources and the NCAs' knowledge of the jurisdiction, cultural and organizational characteristics and better understanding of the internal banking sector.

The SSM harmonizes the levels of minimum supervision across the BU, yet the supervision of each bank is proportional to its systemic importance, complexity and risks. It is the supervisors' function – whether it is the ECB or the NCA - to perform stress tests to institutions assessing their capability of enduring difficult periods, to verify the compliance with the capital requirements, to analyse their systemic risk and the strength of their governance.

Lastly, it is important to mention that considering the possible conflicts of interests that could arise within the ECB from concentrating monetary policy and supervision duties - as they both influence the interest rate-, the two responsibilities were separated and made autonomous. The ECB is also independent from any national government, any NCA or market participant, and it only answers to the European Parliament (EP) and to the European Council. This enables a consistent and unbiased supervision and enforcement of the rules, ensuring the soundness of institutions across the BU.

3.2.1.1. Capital Requirements Directives and Regulation (CRD IV and CRR)²⁷

The CRD IV and CRR aim to prevent the failure of banks and investment firms across the BU by making them more resilient.

Because of the very nature of the banking activity, credit institutions are predisposed to be leveraged which is not considered a problem provided that institutions insure credit sustainability. However the financial crisis revealed that banks did not managed their credits in a sustainable way, since they kept on increasing their assets without holding sufficient capital – in quantity and in quality – capable of absorbing losses. This revealed insufficient preventive regulation, supervision and transparency of the sector at a global scale.

To prevent future crisis, it is vital that institutions understand the risks they are incurring, anticipate possible stress periods and retain enough capital to survive them. So the CRD IV and the CRR were created to harmonise "the quality and the level of the (credit institutions') capital base, the availability of the capital base, liquidity management and the effectiveness of their internal and corporate governance" in the BU (The European Commission, 2013d).

However, it is important that these regulations are imposed not only in the BU but in banks around the world in order to reduce competitive disadvantages and prevent regulatory arbitrage that may cause countries with less requirements to be more risk taking. This is the reason why the CRD IV and the CRR are based on the Basel III, from the Basel Committee on Banking Supervision (BCBS) ²⁸, a "comprehensive reform package... (that) aims to improve risk management and

 $^{^{27}}$ This section is based on the European Commission MEMO/13/690 - Capital Requirements - CRD IV/CRR - Frequently Asked Questions (The European Commission, 2013d).

²⁸ "The Basel Committee on Banking Supervision provides a forum for regular cooperation on banking supervisory matters. Its objective is to enhance understanding of key supervisory issues and improve the quality of banking supervision worldwide. The Committee's members come from Argentina, Australia, Belgium, Brazil, Canada, China, European Union, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States" (Bank for International Settlements, 2016)

governance as well as strengthen banks' transparency and disclosures", across all of its international members (Basel Committee on Banking Supervision, 2010).

This new set of rules is divided into a directive and a regulation. They differ from one another since the regulation has immediate effects in all Member States, while the directive still has to be transposed to the national law and may be subject to changes. Hence, the regulation avoids legal inconsistencies within the Single Market, increasing transparency and removing legal uncertainty.

The CRD IV and CRR have two pillars. Pillar 1 quantifies the ratios of own funds an institution must retain according to its risk profile. Pillar 2 establishes that institutions themselves must assess their own capital needs. That assessment must be reviewed by regulators that can discretionally demand additional capital requirements if they consider necessary. Basel III also features Pillar 3 that involves a disclosure framework that institutions must fulfil to increase transparency in the sector. The main goal of the latter pillar is to allow investors to properly price these institutions in the market.

Pillar 1 (capital, liquidity and leverage requirements) is contemplated in the CRR due to importance of harmonizing the required levels. On the other hand, Pillar 2 (supervision, capital buffers, corporate governance and sanctions) is contemplated on CRD because of its discretionary nature "the links with national administrative laws are particularly important" in these matters (The European Commission, 2013d).

It is important to mention that Pillar 1 eliminates any discretions from Member States, to level the banking ground in the EU. However, under Pillar 2, Member States can increase the requirements in justifiable cases to cover for other risks, but can never decrease the requirements set in the first pillar.

Institutions are also allowed to hold additional amount of capital, as they wish.

PILLAR 1

- Capital requirements

Regulatory capital is the amount of capital an institution is required to hold compared to the amount of assets, to cover for unexpected losses. In the CRR, this is called "own funds requirement" and is expressed as a percentage of risk weighted assets²⁹. In this sense, capital ratio can increase either by increasing the capital through recapitalization or by reducing at least one of the components of the RWAs – either the value of the assets or their perceived risk (see figure 1).

The requirements for this regulatory capital are very restrictive and only capital that is permanently available to absorb losses is qualified (The European Commission, 2013d). Therefore assets like goodwill, deferred tax assets, defined benefit pension fund assets and own shares must not be considered as regulatory capital since their value may be subject to changes during stressed circumstances.

Both the CRR and Basel III share the same definition and requirements of capital as to internationally harmonize rules.

There are three different layers of capital defined in the CRR/Basel III. Their constitution and ratios are comprised as follows³⁰ (see figure 2):

- → Tier 1 Capital must be at least 6% of risk-weighted assets at all times.
 - ▶ Common Equity Tier 1 this tier is constituted by eligible capital, share premium, eligible reserves and positive retained earnings. To these elements is deducted the Goodwill, intangible assets, deferred taxes, minority interests, provisions and negative earnings. The CET1 capital must be at least 4.5% of risk-weighted assets at all times.
 - Additional Equity Tier 1 this tier mainly includes eligible instruments issued by the institution that were not included in the CET 1 capital,

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²⁹ The value of the perceived risk of an asset.

³⁰ This work did not extensively described each tier composition as that was not its main purpose. To better comprehend the constitution of each tier read (Basel Committee on Banking Supervision, 2010).

such as preferred shares and hybrid instruments accounted for as equity. The Additional Tier 1 capital must be at least 1.5% of risk-weighted assets at all times.

→ Tier 2 Capital – this tier mostly includes eligible subordinated debt and it must be at least 2% of risk-weighted assets at all times.

Thus Total Capital (Tier 1 Capital plus Tier 2 Capital) must be at least 8.0% of risk-weighted assets at all times (Basel Committee on Banking Supervision, 2010).

As a rapid increase in capital requirements would affect the amount of loans and investments channelled from banks to the economy, conditioning economic growth, the conformity with these new rules will be phased-out from 1 January 2014 until 2022. This extended transition period will allow credit institutions to gradually comply in an organic way (The European Commission, 2013d).

Liquidity requirements

As formerly mentioned, due to the nature of their business, banks face liquidity shortage. However, to own assets that may be easily converted into cash without any material loss (Whittlesey, 1945) is important to ensure banks' stability.

Thus, the regulatory framework introduces two new liquidity ratios that function as a quantitative standard measure for liquidity buffers: the Liquidity Coverage Requirement (LCR) and the Net Stable Funding Requirement (NSFR).

The LCR aims at improving the short-term (over a thirty day period) resilience of the liquidity risk profile of financial institutions, while the NSFR purpose is to ensure that an institution has an acceptable amount of stable funding to support the institutions assets and activities over the medium term (over a one year period).

Because these are new requirements, authorities set an observation period to properly calibrate the target values of the ratios as to maximize their effectiveness and minimize negative consequences that they can cause to the real economy. These negative impacts to the economy occur via decrease of loans and investments provided as banks try to gather enough liquidity.

Leverage requirements³¹

The required leverage ratio corresponds to the proportion of Tier 1 capital a bank owns over a measure of non-risk weighted items. If this ratio is considerably low it means that the institution has been financing its assets through debt and thus is highly leveraged.

By setting a minimum Tier 1 leverage ratio, authorities wish to limit the degree to which a bank is leveraging its capital base. Therefore, this measure aims at reducing excessive leverage to finance credits and also to level capital with the riskiness of the institutions' assets.

However, like the liquidity requirements, the leverage ratio is a new regulatory tool in the EU that, due to lack of information about its effectiveness and the consequences to the economy, was established under the Pillar 2, for discretionary use of authorities and institutions, while more information is being gathered.

PILLAR 2

Capital buffers

The CRR establishes five mandatory capital buffers that must be constituted after the basic requirements are assured:

→ Capital conservation buffer

Institutions must retain, in the form of CET1 capital 2.5% of the total of their exposures as a capital buffer. This buffer also contemplates increasing capital distribution constraints (dividend and bonus payments) as banks experience losses and fall behind the 7% minimum CET1 capital requirements. This strategy requires

 $^{^{31}}$ This section is based on the European Commission MEMO/14/580 - Leverage Ratio Delegated Act: Frequently Asked Questions (The European Commission, 2014f).

institutions to hold more quality capital and, during periods of stress, prevents them from worsening their balance sheets by distributing capital.

→ Countercyclical buffer

Buffers tend to be countercyclical – when the cycle is good banks should put aside capital so that when there is an economic downturn those savings can be drained.

This buffer is specifically designed to take into account the macroeconomic factors with the purpose of stabilizing credit supply. This means that when the cycle is virtuous, credit institutions must constitute this buffer thus restraining the availability of credit and preventing it from becoming too cheap and creating a bubble. Inversely, when the cycle turns, banks are allowed to use the buffer whether it is to absorb losses or to continue lending to the real economy.

The exact buffer rate will be calculated by NCAs based on a credit-to-GDP indicator. A Member State can require this buffer to be up to 2.5% of RWA, proportionately to the credit growth and the build-up of its risks.

This buffer, like the capital conservation buffer, contemplates increasing capital distribution constraints if institutions are unable to fulfil the requirements.

→ Global systemic institution buffer

This buffer started taking effect in 1 January 2016 and it is mandatory to banks appointed by the responsible authorities as of global systemic importance. The goal of this buffer is to decrease moral hazard from these institutions that may consider themselves "too big to fail". The criteria to be considered systemically important includes size, cross border activities and interconnectedness - institutions that fulfil these standards are required to hold between 1% and 3.5% CET1 of RWAs. The Financial Stability Board's provisional list of 28 G-SIFIs (global systemically important financial institutions) includes 14 EU institutions.

→ Other systemically important institutions buffer

This is an optional surcharge –up to 2% of RWAs - which NCAs may demand to important domestic institutions. This buffer started taking effect in 1 January 2016 and must be fulfilled by CET1 capital.

→ Systemic risk buffer

This is an optional buffer of CET1 Member States may introduce to some or to all national financial institutions to cover structural or systemic risks. Buffer rates until 3% can be freely implemented, however for rates between 3% and 5 % Member States must notify the Commission, the EBA, and the ESRB and above the 5% threshold Member States need the approval of the Commission.

- Corporate Governance

The directive aims "at increasing the effectiveness of risk oversight by Boards" (The European Commission, 2013d) by incentivizing diversity in its constitution thus avoiding "group thinking", improve risk management and supervision.

First, institutions should have diversity in the board - different opinions and backgrounds to avoid group thinking, achieve higher risk oversight. Secondly, remuneration of professional risk takers³² should be designed as to diminish the incentives to excessive risk taking. The CRD structured some requirements like more than half of the variable remuneration should be given in equity-linked or other non-cash instruments and that the variable component of the total remuneration cannot exceed 100% of the fixed component and also a substantial portion of the variable remuneration component - at least 40% to 60% - should be deferred from three to five years.

In addition, institutions are obliged to disclose their remuneration policy and practices for professional risk takers.

 $^{^{32}}$ Staff whose professional activity has a material impact in the institution's risk profile, like senior managers, risk takers or staff engaged in control functions.

- Ratings

Capital requirements are calculated based on a percentage of the risk-weighted assets, however it is important to understand how the risk is perceived. A rating is attributed to the banks' assets according to their perceived risk. This ranking can be assigned by a specialized institution (credit rating agencies - CRA's) or by the bank itself.

The problem of using CRA's ratings is that banks do not fully understand the risks of a certain asset, which can cause them to be more risk taking. Also, banks' dependency of these agencies is not desirable because CRA's can make mistakes, as it happened in the market of securities in 2007.

Therefore, the Commission found benefits in the reduction of the dependence on these external credit ratings, and is now requiring financial institutions to also assess their own assets instead of fully outsource that judgement. It is understandable that this procedure demands many resources so the new legislation only requires internal credit assessment when possible and especially in portfolios that are more exposed to risk. In case the internal assessment is more negative than the CARs', institutions are forced to hold additional capital.

3.2.1.2. Directive on Deposit Guarantee Schemes (DGS)³³

The Directive on Deposit Guarantee Schemes (DGS) was first issued in 1994, even though the level of deposit coverage has increased to a uniform amount of 100.000€, in 2010. This directive ensures that every Member State has a national DGS with the main objective of guaranteeing depositors' protection as a way of preventing "bank runs", possible contagion to other financial institutions and general distrust in the system.

³³ This section is based on the European Commission MEMO/14/296 - Deposit Guarantee Schemes – Frequently Asked Questions (The European Commission, 2014d) and on the European Commission MEMO/15/6153 - A European Deposit Insurance Scheme (EDIS) – Frequently Asked Questions (The European Commission, 2015).

In case a bank fails, each DGS safeguards 100.000 € of the aggregated accounts of a depositor, per bank. All individuals and enterprises are covered by the DGS, but not financial institutions and national authorities. Deposits in other currencies are also covered.

On 24 November 2015, as a way of further weakening the link between banks and their national sovereigns and to increase trust in the system regardless of the bank's location within the Union, the EC proposed the creation of the BU's third pillar, the European Deposit Insurance Scheme (EDIS) (The European Commission, 2015).

According to the Commission's legislative proposal, the objective is to replace the national Deposits Guarantee Schemes, which can be vulnerable to local shocks, by a European level fund that is able to provide a uniform degree of insurance coverage.

The EDIS will be managed by the Single Resolution and Deposits Insurance Board³⁴ and the European Deposit Insurance Fund (EDIF) will be established in three phases. During the first three years of the fund, if a bank fails, the national DGS has to first exhaust all its funds before the EDIS can provide any support. In the second phase, which lasts four years, the national scheme does not have to be exhausted before it is able to access the EDIS, which will progressively support the resolution with larger shares of capital. After those seven years, the EDIS will fully insure deposits and would cover all liquidity needs and losses in the event of a payout or resolution procedure.

The EDIF will be financed beforehand by the European banking sector, with the target of 0.8% of the covered deposits in the EU (approximately \leqslant 43 billion), that should be fully collected by 2024. However, in case of disbursements from the fund

³⁴ "In the Commission's proposal, this role would be played by the existing Single Resolution Board (SRB), with an appropriately modified governance structure for its new DGS tasks. The Board would administer the Single Resolution Fund (SRF) and the European Deposit Insurance Fund together, thereby creating synergies when combining responsibilities for resolution and deposit insurance." (The European Commission, 2015)

before that target is met, banks may be required to make extraordinary contributions or there may have to be an extension of the gathering period for four more years. These extensions will be carefully computed due to pro-cyclicality and deterioration of banks' situation.

Each bank will contribute directly to the fund in proportion to its risk exposure, as banks that accept more risk are more likely to fail and thus to activate the fund.

The fund detained by the EDIS is not allowed to be used in the recovery process, as it is still unknown whether the institution will endure, and, in case it fails, the EDIS would still have to repay depositors. However they can be applied in the resolution procedures since the EDIS and the Single Resolution Mechanism share one common goal: to ensure the vital functions of the institution, such as payment systems and deposit availability. Yet, the Deposit Insurance Fund can only be used to resolve a bank when the costs of filling the money gap are less than paying out all the ensured deposits.

3.2.2. Single Resolution Mechanism (SRM)³⁵

While the idea behind the SSM is to prevent bank failure, the SRM, as the second pillar of the BU, is triggered when banks are already facing difficulties.

This mechanism represents the central institution responsible for applying the Bank Recover and Resolution Directive (BRRD), the legal framework in force whenever a bank needs to be recovered or has already past the point when recovery is possible and resolution is the solution that maximizes society's welfare. Hence, the SRM assures a uniform recovery and resolution procedure that facilitates both processes, minimizing costs for taxpayers and to the real economy.

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 $^{^{35}}$ This section is based on the European Commission MEMO/14/295 - A Single Resolution Mechanism for the Banking Union – Frequently Asked Questions (The European Commission, 2014f)

The mechanism relies on a fund – Single Resolution Fund (SRF) - administrated by a board – Single Resolution Board (SRB). Both elements are financed through two different contribution channels by banks in the Banking Union (European Commission, 2014f).

The SRM started being applied in 1 January 2015. However the bail-in resolution tool, explained in Chapter 4, only began applying to all outstanding and newly issue debt in 1 January 2016 (The European Commission, 2014f).

3.2.2.1. The Single Resolution Fund (SRF)

The SRF will be gathered through the contribution of all banks in the BU, and to guarantee that these contributions do not have a negative impact on banks' lending capacity to the real economy, they are being collected gradually, over a period of 8 years, from 1 January 2016 until 2024.

Similarly to the EDIF, the planned target of the fund is about 1% of the covered deposits of the Union, which, should amount approximately to €55 billion (The European Commission, 2014e). Thus, every year, the collective contributions should be around €6.8 billion (12.5% of the target level), but the fee is not equal between banks of the Union. Instead, the payments made by banks are proportional to the risk profile of the institution (The European Commission, 2014f).

Nonetheless, these conditions may change as the banking industry evolves – if the value of the secured deposits grows so will the target value of the fund and thus of the contributions. Also, the fees for the fund may be extended for four more years, to a twelve years total, if eventual disbursements needed exceed half of the target size of the fund (The European Commission, 2014e). Furthermore, the managers of the fund reserve the right to demand additional financing, whether from the market or from the very banking industry.

The SRB can allow the use of funds from the SRF but simply to cover up to 5% of the losses and only after bank's shareholders and creditors have lost at least 8% of their liabilities. And if, in case of an extraordinary event, these funds are not enough to cover the resolution, banks may resort to public support limited by the applicable rules on EU State aid (EU Regulation, 2014, Article 27, paragraph 7) (The European Commission, 2014e).

Besides, the resolution fund cannot be used to recapitalise the failing institution, "the main use of the resolution funds will be limited to, for example, providing loans to a bridge institution, purchasing specific assets of an institution under resolution, guarantee certain assets or liabilities of the institution under resolution, or in exceptional circumstances – as mentioned above - contributing to loss absorption by replacing creditors who would have been bailed in" (The European Commission, 2014e).

3.2.2.2. Bank Recovery and Resolution Directive (BRRD)³⁶

The first principle of the BRRD is prevention and preparation - banks and authorities across the BU must be prepared for a possible crisis by having the means to quickly address early stage problems. To that end, all banks are required to prepare a recovery and resolution plan to deal with difficult times.

The second principle of the directive consist in early intervention (recovery) of the institution and, in case that fails, its resolution.

Early intervention – the process of recovery

When an institution demonstrates the first signs of difficulties, such as a capital shortfall, a recovery and restructuring plan must be created and executed to guarantee the stability of the financial system. To implement the plan, a temporary administrator could be nominated to assist or replace the management executive.

³⁶ This section is based on the European Commission MEMO/14/297 - EU Bank Recovery and Resolution Directive (BRRD): Frequently Asked Questions (The European Commission, 2014e)

The initial recovery actions aim to recapitalize the institution, increase cash availability and decrease risk exposure. These actions may include "rights issues, a voluntary conversion of subordinated debt instruments into equity on the basis of a risk-related incentive, liability management exercises³⁷ which should in principle be 100% capital generating, sales of capital-generating assets and portfolios, securitisation of portfolios in order to generate capital from non-core activities, or an earnings retention" (The European Commission, 2014e).

The mentioned measures all come from the company itself or from the private sector. Recovery must first be financed by these means before any recapitalization can come from the write-down of shareholders, subordinated creditors or, as a last resort to cover the residual capital shortfall, from the public sector. Early interventions never require the contribution of senior debtholders, such as depositors.

Resolution of the institution

As previously mentioned, the BRRD offers a standardized path to deal with failing banks.

In principle, fulfilling its role as supervisor, the ECB will be the first to detect a failing bank and to decide to resolve it. The Central Bank will immediately report the situation to the SRB that will decide the best course of action and prepare the resolution process. National authorities will also be involved in the decision and implementation process because they have a better understanding of the national jurisdiction and of the internal banking sector dynamics.

The resolution process is initiated when it is the authorities' belief that despite the institution's attempts to recover in an admissible timeframe they have proven

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³⁷ Activities that allow the institution to better adjust its level of debt, granting that the amount of assets remains above the amount of liabilities. These activities include deleveraging, debt restructuring – extensions on the debt terms and renegotiations of the interest rates-, bond redemptions or buybacks, debt equity swaps, and so on.

to be insufficient and the company is still failing (EU Regulation, 2014, Article 18). Therefore, actions to diminish the negative consequences of a bank failure must be taken.

Yet, the resolution of a bank is a tool that must be used as a last resort because of the distortions it will cause in the economy. Authorities facing this decision have to choose the perfect moment to intervene because they do not want to interfere so soon as to create panic and so late that the resolution will not be efficient.

Whereas in a solvency procedure of a regular company the main goal is to minimize the creditors' losses, which can take years to solve, in a bank's resolution process, due to the very essence of its industry, the goal is to have a rushed process which minimizes contagion, instability and losses for society. Therefore, this mechanism is designed to allow decisions to be taken quickly and efficiently, so that in 32 hours, usually over the weekend, the process is concluded, reducing the distortions to the economy.

The ideal resolution of a bank is the one that safeguards vital banking operations (such as payment systems), protects depositors, client assets and public funds, at the same time it minimizes financial instability and destruction of value. Resolution authorities must take into consideration the purposes of the resolution, the balance sheet of the institution, its value, importance and the time available for the procedure as to choose the tool that better fits the situation (EU Regulation, 2014, Articles 14 and 22).

There are four resolution tools (EU Regulation, 2014, Article 22). The first and the one that causes less distortion to the financial stability, is to sell all or any part of the bank to a purchaser from the private sector that is not a bridge institution – sale of business tool-, regardless of the shareholders consent (EU Regulation, 2014, Article 24). Although preferable, this situation is only feasible if there are interested buyers. An example of this strategy is the acquisition of the failing NetBank by the ING Group, in 2007.

The second option is the bridge bank institution tool that consists in creating a bridge bank that absorbs all the essential functions of the bank while the institution is either liquidated or sold. The bridge bank is then eventually sold to the private sector (EU Regulation, 2014, Article 25). This strategy is usually preferred by the shareholders and debtholders because it allows a normal prolonged solvency process without affecting the general public.

Thirdly, the asset separation tool consist in to transfer assets, rights and/or liabilities of an institution under resolution or a bridge institution to one or more asset management vehicles. Usually, this procedure involves dividing the failing institution into two separated ones —, the "good" and the "bad" bank. The "good" bank would hold all of the clean assets while the other would retain all the toxic ones (EU Regulation, 2014, Article 26). This was the resolution applied in the Portuguese Banco Espírito Santo, which was split into the "good" bank - Novo Banco -, and the "bad" one which holds the initial name³⁸.

Finally, the fourth tool is the bail-in of creditors which started being enforced in 1 January 2016 and it is going to be described in the next chapter.

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³⁸ "Where the resolution tools have been used to transfer the systemically important services or viable business of an entity to a sound entity such as a private sector purchaser or bridge entity, the residual part of the entity should be liquidated" (EU Regulation, 2014, Paragraph 66).

Chapter 4. The bail-in resolution tool

4.1. The legal framework

"An effective resolution regime should minimise the costs of the resolution of a failing entity borne by the taxpayers" (EU Regulation, 2014, Paragraph 73), through the allocation of those costs to the institutions' investors. Bail-in is the mechanism used for the exercise of the write-down and conversion of liabilities of an institution under resolution (EU Regulation, 2014, Article 3, Paragraph 33). Therefore, losses are allocated to investors through the application of the bail-in tool.

This tool is applicable in any resolution procedure, either the objective is to resolve the failing entity as a going concern, or to transfer systemically important services to a bridge entity or even to divide the institution under the asset separation tool framework. Therefore, the writing down and conversion of relevant capital instruments can be made on a stand-alone basis³⁹ or together with any of the remaining resolution tools (EU Regulation, 2014, Paragraph 74, Article 21 and 27).

It is important to distinguish this resolution tool from contingent capital. Even though they appear similar, the latter is a security investors can purchase that is immediately converted into equity when the bank reaches a certain trigger⁴⁰. While

³⁹ However, this tool can only be applied on a stand-alone basis if there are strong reasons to believe that its application, combined with other measures such as business reorganization, restores the entity to financial soundness and long-term viability. Any of the remaining resolution tools shall apply, as appropriate, when these conditions are not met. (EU Regulation, 2014, Article 27, paragraph 2)

⁴⁰ Usually the trigger is a standardized dangerously low level of capital base.

the bail-in consists in a mandatory conversion of the credit institution's liabilities in an amount equal to its losses, applied by the resolution authorities when the institution is falling (Conlon & Cotter, 2014)

When the bail-in procedure applies, the write-down or conversion must follow a certain order (EU Regulation, 2014, Paragraph 77, Article 17 and 21). Creditors of the institution under resolution bear losses after the shareholders in accordance with the reverse order of priority of their claims: first any contractual contingent capital instruments, then subordinated debt, and finally unsecured senior debt. Also creditors of the same class are treated in an equitable manner.

The write-down or conversion will not apply to insured deposits, liabilities backed by assets or collateral, liabilities such as salaries, pensions or taxes or short-term inter-bank lending. And, in case there is a need to write-down or convert uninsured depositors (deposits above the coverage level of 100.000€), depositors preference will be applied for deposits held by natural persons and small and medium enterprises (SME).

Despite all, the resolution process obeys to the "no creditor worse off" principle which postulates that no creditor "should be worse off under resolution than it would have been had the bank been wound up under applicable insolvency law proceedings" (European Commission, 2014e). Besides, individuals and enterprises that perceive the written-down of their assets as an illegal decision may, through legal proceedings, require compensation for damages.

4.2. The benefits and disadvantages

Besides the advantages already mentioned as reasons why the EC has decided to enforce the bail-in tool, like to end the negative cycle between banks and their sovereigns and to dissolve the moral hazard of companies that believe that they are "too big to fail", there are more benefits.

The bail-in tool incentivizes investors' supervision of the bank's activities since now they are directly affected by the entity's behaviour. So, it is expected that these institutions become more disciplined and more moderated when taking risks and increasing their leverage, making them more resilient, increasing the financial stability which in turn will result in a positive impact for society.

However, this tool also has disadvantages that cannot be overlooked. As investors perceive that it is now riskier to finance credit institutions it is expected that banks' cost of funding will increase by 4.7-15 basis points while non-financial firms' cost of capital should increase by 3.29-10.5 bp (The European Commission, 2012).

Yet, even though individuals and SME should expect an increase in their funding costs which tends to lead to the reduction of investment, consumption and so of the economic growth (Zhou, J., 2012)., the European Commission states that this should be seen as a sign of the effectiveness of the reforms that will lead to a safer, more transparent and stable financial system (The European Commission, 2014a).

Another inconvenience of the tool is that all the mentioned reforms may lead to an increase in regulatory arbitrage - finding legal ways to get around restrictions imposed by laws (Gup, 2011, pp 44). In this way, credit institutions may be preparing themselves to restructure their balance sheets as to prevent their liabilities from being eligible to be subjected to the bail-in tool, reducing the effectiveness of this measure.

So credit institutions may shift from contracting senior debt, which is now more expensive, to hire short-term and secured borrowing at a lower funding cost, thus reducing the amount of liabilities eligible for write-down or conversion in the bail-in process, which may cause the bail-in to be insufficient to restore the institution back to being profitable (Zhou, J., 2012).

For this reason, the EC is already working on the implementation of the minimum requirements for own funds and eligible liabilities (MREL), expressed as a percentage of the total liabilities and own funds of the entity, as a way to ensure that the bail-in tool will be effective. (The European Commission, 2015).

Another problem with great expression is that this tool is not capable of offsetting the contagion risk that arises from one struggling institution. In other words, when the bail-in tool is applied in one bank, the write-down of its liabilities will cause losses to other financial institutions that are debtholders of the failed one. This suggest that the bail-in of one institution may end up shifting risk to other parts of the financial sector. Thus, authorities must be aware of the potential effects on the balance sheets of other banks when applying the bail-in resolution (Zhou, J., 2012)..

The final issue with this tool is the ambiguity of the conditions that trigger the resolution. Although the SRM discloses some qualitative guidance regarding when institutions should be resolved it lacks explicit quantitative measures. This situation causes uncertainty to investors, which may require higher funding costs to cover the risk, and allows discretion for regulators, leading to legal inconsistencies.

This matter could be solved with the creation of a trigger linked to the entity's balance sheet ratios, like those applied in contingent capital. This would increase transparency and predictability in the procedure and avoid the risk of only applying the resolution when the institution is already insolvent (Zhou, J., 2012).

Chapter 5. The bail-in of Banco Espírito Santo

5.1. What happened to BES?41

With more than 145 years Banco Espírito Santo (BES) had over 2 million clients and ten thousand employees across Portugal and twenty other countries. It was the third largest bank in Portugal with a considerable market share and especial focus on the institutional financial sector⁴².

The institution's shares were traded at NYSE Euronext Lisbon and its supervisor was Banco de Portugal. The products and services it provided included deposittaking, lending to the private sector, management of investment funds, brokerage services, investment banking services and the selling of life and non-life insurances. Besides that, it conducted investments of short, medium and long term in the financial and foreign exchange markets as a way to take advantage of price fluctuations or to have a return on the available financial resources.

BES was part of a group, GBES (Grupo Banco Espírito Santo), which in turn is held by a much bigger group, GES (Grupo Espiríto Santo). While the holding GBES is only constituted by financial institutions, GES also sustains companies in

 $^{^{41}}$ This section is based on (Banco Espírito Santo, S.A., 2014) and (Saraiva, 2015). 42 Regarding to credit to SME BES had a 19% market share in Portugal.

diversified businesses - health, tourism, Real Estate, energy, construction, mining and others.

The links inside GES are complex and highly intricate (see figure 3), with companies located in different countries and subject to different legislations thus hindering supervision and allowing financial reporting discretion. The excessive exposure of BES to its group was the main cause of its failure (see Table 3).

On 30 July 2014, BES presented the first semester's financial statements where it disclosed losses of 3.577 Mil \in . This was an unexpected situation since on 10 July the bank informed its stakeholders that it estimated losses on the order of 1.500 Mil \in , that would be completely offset by its 2.100 Mil \in capital buffer and still allowing it to fulfil the capital requirements⁴³.

However the capital buffer was not sufficient to compensate the actual losses that arose from specific and non-recurring events that occurred during the semester as a result from the exposure of BES to its Group, GES. These exceptional events included the accounting of impairments⁴⁴ and provisions⁴⁵ in the amount of 4.253,5 Mil \in : 2.131 Mil \in were constituted as credit provisions, 186 Mil \in were considered as impairments due to losses in share titles, 94 Mil \in due to losses in Real Estate, 25 Mil \in as losses in supplementary capital and 1.818 Mil \in as losses in other assets and contingencies. If these events had not occurred the net income of the institution would have been negative by 255.4 Mil \in , which only represents a decrease of 7% (17.49 Mil \in) comparing to the 2013's net income (see Table 4 and 5).

⁴³ The results of BES reflected acts of harmful management and violations of levels set by BdP for exposure to its own group. After its failure the Portuguese Parliament opened a formal investigation to the executive of BES and GES. This inquiry was performed by Comissão Parlamentar de Inquérito, a committee composed by parliament deputies, who tried to uncover the real and accurate facts in an objective and non-partisan form. However, the purpose of this paper is not to find whether this case was or not a case of criminal management but rather to empirically apply the bail-in resolution tool.

⁴⁴ According to the financial report of the bank, an impairment is created when there is an objective evidence of an event that has a negative impact on its recoverable amount and that amount can be reasonably estimated.

⁴⁵ According to the financial report of the bank, provisions are created when the Group has a legal liability, likely to be executed and which the amount is able to be reasonably estimated.

Besides that, GBES was highly exposed to its group's non-financial companies (the entities of GES not integrated on GBES) because of granted loans, guarantees⁴6 and debt underwriting provided by GBES to GES. The problem was that these non-financial companies of GES were extremely weakened which forced the constitution of a 2 M€ provision to safeguard the exposure in case of default.

The elevated deficit caused BES' Common Equity Tier I to decrease to 5.1% (see Table 6), thus falling behind the capital requirements requested by the Portuguese Central Bank (BdP) by 1.9 p.p.. Consequently, the day after the disclosure of BES' results, the ECB informed BdP and BES that the bank was going to be suspended as a counterpart of the Eurosystem, starting on 1 august 2014, due to lack of solvency. This would have had as an immediate result the suspension of the bank's access to the Eurosystem's liquidity and the mandatory return of a credit granted by the Eurosystem to the institution, in the amount of 10.000 M€. In practical terms this meant that, due to lack of solvency, the bank would have had to suspend its activities and enter a liquidation process causing huge systemic risks and financial instability.

Despite that, the Portuguese Central Bank was able to postpone the suspension until 4 August under the condition of resolving the bank during the weekend, in time for the markets' opening on Monday. Facing the possibility of one of the largest banks in Portugal being liquidated, BdP had no other choice but to resolve BES.

The resolution measures considered by BdP were, by order, private recapitalization, public recapitalization, nationalization, the application of one of the resolution tools and finally liquidation⁴⁷.

 47 It is important to underline that this resolution measure occurred in 2014 whereas the bail-in enforcement began in January 2016.

⁴⁶ According to the financial report of the bank, financial guarantees are contracts that compel its issuer to compensate the other part for losses incurred due to non-compliance of the contractual terms of debt instruments.

The first plan, to recapitalize BES with private capital, was not feasible because when the difficult situation of BES was disclosed, the bank was unable to find private investors willing to either recapitalize it or acquire it.

The second and third options, injection of public funds or nationalization of the bank, required the intervention of the State. However, since the Crisis Communication in 2013, any use of public funds to aid a financial institution in distress is subject to the EC's approval and can only be applied in institutions that can prove long term viability and providing that the principle of burden sharing is satisfied.

Thus, these two possible resolutions where not feasible as the EC's approval could not be obtained in the timeframe provided by the ECB for the resolution of BES, preventing the State from financing the bank. Besides, to provide financial aid was never the Government's will for there were righter alternatives that would better safeguard the taxpayers given that the State had already assumed elevated costs in previous bank resolutions.

The fifth option, liquidation, was going to occur either way with the suspension of BES as a counterpart of the Eurosystem. This would have had implied that the bank would have had to immediately interrupt its services and activities so that, through legal proceedings, all of the entity's assets would have been sold in order to satisfy its creditors. Usually these legal proceedings are long, highly costly and cause value destruction. Besides, the Deposits Guarantee Fund would have had to be activated to safeguard depositors' money, which would have had increased the costs borne by other financial institutions. This would have spread fear and uncertainty across the Portuguese banking sector, damaging the real economy.

The fourth option included the use of one of the resolution tools covered in Chapter 3 – sale of business, bridge bank institution and the asset separation tool. In fact, BdP applied the asset separation tool which according to Carlos Costa, Governor of BdP, in a hearing to the CPI, was not a destructive measure, but rather

a way to preserve the financial stability, for that is the primary duty of BdP. The Governor also stated that the adopted solution was the only capable of fixing the situation in the short period of time given by the Eurosystem and at the same time protect depositors, taxpayers and the financial system.

This resolution was one of the firsts of its kind in the European Union and it involved the creation of a new financial institution, Novo Banco, which would absorb BES' non-toxic assets and liabilities that were not bounded to GES, allowing the uninterrupted activity of its services and diminishing inconveniences for its customers. In the meantime, BES would enter a judicial liquidation process, remaining unable to carry out any banking activity, while all of its assets and liabilities, not transferred to Novo Banco, are executed.

However, this resolution measure required both the intervention of the State and of the Resolution Fund because during the establishment of Novo Banco, BdP identified a capital shortage of 4.900 Mil €. This deficiency would have to be covered by the Portuguese Resolution Fund, gathered by the national banking system, in its role of financial sponsor of the resolution measures of credit institutions. Yet the Fund had been opened in 2012 and it did not own the means to do so.

Therefore, the Resolution Fund had to request two loans, one from the Portuguese government of 3.900 Mil €⁴⁸ and another from a syndicate of eight banks in the amount of 700 Mil € - the remaining 300 Mil € would be set by the Fund.

In this sense, the Resolution Fund is the only capital owner of this new institution, even though the purpose is to restructure the shareholders' base with private investors and thus reimburse the Fund and consequently its lenders.

 $^{^{48}}$ Loan bearing interests to be amortized over maximum of two years.

5.2. The bail-in exercise

The purpose of this exercise is to understand in practical terms how the bail-in is applied and which are the main differences between its application and the resolution procedure that was actually carried out.

All the data used in this exercise was retrieved from Bankscope⁴⁹ and from the institution's financial report of the first semester of 2014 (Banco Espírito Santo, S.A., 2014). The data collected follows the IFRS accounting regulations and represents the consolidated statements of the entity thus reflecting assets, liabilities and income statements of itself and of its subsidiaries⁵⁰. The values are expressed in millions of euros, except when stated otherwise.

Since there is no quantitative bail-in trigger defined yet by the competent authorities, for the purpose of this analysis and with the data available, it is going to be used the entity's last balance sheet available from the first semester of 2014.

The methodology will be the subsequent:

- This exercised was designed so that the debt write down would absorb all losses (Loss Absorption) and the conversion into equity would recapitalize the entity, allowing it to continue as a going concern (Recapitalization);
- The write-down or conversion was not applied to secured liabilities, liabilities backed by assets or collateral, liabilities such as salaries, pensions or taxes or short-term inter-bank lending;
- The eligible liabilities for bail-in in the exercise are subordinated debt and the senior debt;

of these institutions.

 $^{^{49}\,\}underline{\text{https://bankscope.bvdinfo.com/version-201629/home.serv?product=scope2006}}$ ⁵⁰ Entities controlled by the institution, meaning that is the Group is exposed to modifications in the reported income

- The write-down or conversion followed a sequential bail-in model instead of a pro-rata one⁵¹;
 - The assets were considered stable and so were the risk-weighted assets;
- The write-down and conversion was applied in accordance to the following (DG Internal Market, 2011):

\rightarrow Loss absorption (by order):

a)⁵² the principal amount of Additional Tier 1 instruments that are liabilities and Tier 2 instruments are written-down;

b)⁵³ if the write-down in point (a) is less than the required amount, the principal amount of subordinated debt that is not Additional Tier 1 or Tier 2 capital is reduced to the extent required;

c)⁵⁴ if the total reduction of liabilities in points (a) and (b) is less than the required amount, the principal amount of senior debt is reduced to the extent required;

d)⁵⁵ if the total reduction of liabilities in points (a), (b) and (c) is less than the required amount, the Resolution Fund should cover the remaining.

→ Recapitalization:

e)⁵⁶ Since the resolution fund cannot be used for recapitalization purposes of a failing institution, all the recapitalization burden will be allocated to the debtholders.

⁵² The write-down of Additional Tier 1 liabilities and Tier 2 instruments in the exercise implied the write-off of all subordinated debt eligible for Tier II capital. The amount of the write-off is deducted from the subordinated creditors account and credited in the earnings account.

⁵¹ The sequential bail-in implies that the same rank of investors is completely written-down before the next rank can experience losses. The pro-rata bail-in model implies that losses are proportionally allocated to all the ranks eligible for bail-in.

⁵³ The write-down of the principal amount of subordinated debt in the exercise implied the write-off of all subordinated debt non-eligible for Tier II capital. The amount of the write-off is deducted from the subordinated creditors account and credited in the earnings account.

⁵⁴ The write-down of the principal amount of senior debt in the exercise implied a write-down of senior debt according to the assumption (H1, H2, H3). The amount of the write-down is deducted from the senior creditors account and credited in the earnings account.

⁵⁵ The use of resources from the Resolution Fund to cover the remaining losses is accounted as a debit in the institution's deposit account and credited in the earnings account.

⁵⁶ The conversion of senior debt to other instruments is deducted from the senior creditors account and credited in the respective account (pref. shares and hybrid capital accounted for as Equity and subordinated debt).

The exercise was performed three times following three different assumptions (Table 1):

- H1 the bank's investors (subordinated debtholders and senior debtholders) would have had to sustain all the losses and recapitalization expenses;
- H2 the bank's investors would have had to sustain all recapitalization expenses and the write-down of 8% of their assets, while the Resolution Fund would have assumed the remaining losses;
- H3 the bank's investors would have had to sustain all recapitalization expenses and half of the losses, while the Resolution Fund assumes the other half.

THE BAIL-IN SEQUENCE			in Mil EUR
	H1	H2	нз
Loss Absorption (LA)			_
Net Loss	-3 577,33	-3 577,33	-3 577,33
Sub. Debt eligible for Tier II capital	795,00 a)	795,00 a)	795,00 a)
Sub. Debt not eligible for Tier II capital	182,65 b)	182,65 b)	182,65 b)
Senior Debt	2 599,68 c)	18,63 c)	811,02 c)
Resolution Fund	-	2 581,05 d)	1 788,66 d)
Recapitalization from senior debtors			
Conversion to Equity	1 163,79 e)	1 163,79 e)	1 163,79 e)
Conversion to Pref. Shares	899,96 e')	899,96 e')	899,96 e')
Conversion to Sub. Debt	1 199,94 e")	1 199,94 e")	1 199,94 e")
Overall			
Subordinated debtors loss	977,65 (100%)	977,65 (100%)	977,65 (100%)
Senior debtors loss	2 599,68 (23%)	18,63 (0,2%)	811,02 (7%)
Total loss from debtholders	3 577,33 (29%)	996,28 (8%)	1 788,67 (14%)
Senior debtors conversion	2 263,73 (28%)	2 263,73 (28%)	2 263,73 (28%)
To equity	1 163,79 (10%)	1 163,79 (10%)	1 163,79 (10%)
To Pref. Shares	899,96 (8%)	899,96 (8%)	899,96 (8%)
To sub. debt	1 199,94 (10%)	1 199,94 (10%)	1 199,94 (10%)
Expenses for the Resolution Fund			
Resolution Fund support	-	2 581,05 d)	1 788,66 d)
Coverage the net loss	-	72%	50%

Table 1: The Bail-In sequence

5.2.1. Loss absorption (LA)

During the first semester of 2014, BES incurred in losses in the amount of 3.577 Mil €. The three hypothesis demonstrate possible solutions, following the procedures previously mentioned, for the write-down of liabilities as to absorb this loss.

In H1, the bank's investors would have been forced to cover the entire loss. To this end, they would have needed to write-down 29% of their assets to cover for the entire loss. Subordinated debtors would have been completely written-off, whereas senior debt holders would have been written-down by 23%.

In H2, investors would have been required to write-down only 8% of their assets which represents 28% of the total loss - subordinated debtors would have been completely written-off, whereas senior debt holders would have been written-down by 0.2%. The remaining 72% of the losses would have been allocated to the Resolution Fund.

In fact, under the current framework of the SRM, the SRF is only able cover up to 5% of the losses after the write-down of 8% of the eligible liabilities. However, the exercise was prepared like this to allow a straightforward comparison with the resolution that in fact occurred.

As previously mentioned, the resolution of BES required a recapitalization of 4.900 Mil €, in NB, by the Portuguese Resolution Fund. If the original resolution would have demanded the write-down of 8% of investors' assets, the fund would have had to inject in BES only 53% of what it actually did.

But to perform a more accurate analysis on the costs incurred by taxpayers it is important to examine the financing sources of the fund.

BAIL-IN EFFECTS ON THE EXTERNAL A	in Mil EUR		
	Novo Banco	H2	Н3
External Aid			
Total Aid	4 900,00	2 581,05 d)	1 788,66 d)
Resolution Fund support	300,00	300,00	300,00
Loan from the bank syndicate	700,00	700,00	700,00
Loan from the Portuguese Government	3 900,00	1 581,05	788,66
Financing coverage	100%	72%	50%

Table 2: The Bail-In effects on the external aid

As to achieve the 4.900 Mil \in needed, the fund exhausted all of its funds (300 Mil \in), requested a loan from a syndicate of eight national banks (700 Mil \in) and another from the Portuguese Government (3.900 Mil \in).

Assuming that the government was the final source of funding, it is possible to conclude that the Resolution Fund and the bank syndicate would have had the same costs in H2 as they had in the original resolution. However the State would only have had to lend 41% of the funds it actually lent.

In H3, both investors and the RF would have been liable for an equal amount of losses. Here, investors would have been written-down by 14% of their assets - subordinated debtors would have been completely written-off, whereas senior debt holders would have been written-down by 7% -, while the fund would have covered the rest of the losses.

Again, under the current framework of the SRM, the SRF would only cover up to 5% of the losses. However it is possible to conclude that had this been the resolution process chosen investors would have sustained half of the losses and the Resolution Fund would have only financed 37% of what it actually did.

Analysing the segmentation of creditors of the fund, it is possible to conclude that the Resolution Fund and the bank syndicate would have had the same costs, but the State would only have had to lend 20% of the funds it actually lent.

5.2.2. Recapitalization from senior debtors

The recapitalization process is common to all the approaches since debtholders, under the new regulatory framework of bail-in resolution, are the only ones who can recapitalize a failing institution (see Table 7 and 8).

The conversion of debt into equity cannot be considered as a loss for debtholders since the purpose of that conversion is to restore the entity's viability. In principle, debtholders that convert into equity their assets will only face a change in their ranking within the institution.

During the first semester of 2014, BES' Common Equity Tier I ratio (see Table 4 and 5) fell behind the capital requirements requested by the Portuguese Central Bank (BdP) by 1.9 p.p.. The Tier I and Tier II ratios were also lower than the current EC's requirements of respectively 1.5% and 2%. Considering the risk-weighted assets as constant, it is possible to compute the amount of additional preferred shares and subordinated debt needed for the bank to meet the basic capital requirements set by the supervisors.

In total, senior debtholders would have needed to convert into equity instruments 28% of their assets to recapitalize the bank. If this recapitalization would have been performed in June 2014, in conjunction with the absorption of the loss, the institution would have fulfilled the capital requirements set by the supervisors and probably would not have been suspended as a counterpart of the Eurosystem, event that triggered its resolution.

5.2.3. Comments on the results

Assuming that this bail-in exercise would have led to the institution's long-term viability, any of the hypothesis (H1, H2 and H3) would have meant significant less costs to taxpayers than the original solution⁵⁷. Even in the worst case scenario in which the Fund would have had to bear 72% of the losses (H2), the State would only had to finance 40% of the costs that it actually did.

Besides, even if the debtholders would have had to cover all the losses, they would only have to sustain 28% of losses in their assets. Which can be considered a fair price to pay as to assure the financial stability and the viability of the institution. Besides, in ailing firms from other sectors, investors bear all the costs of their recovery, so it is only reasonable that banks' investors support some of the costs of their financial institutions' recovery.

⁵⁷ Even though the Portuguese Government aid was a loan, the fact is that the interest rates paid by the Resolution Fund do not constitute an earning for taxpayers as the Fund is a public institution (Alves, Peixoto, Simões, & Moitinho, 2015). In other words, the State lent itself money.

Conclusions

After the last decade's financial events, the European Commission has introduced several measures to improve supervision and regulation, on a European level, in the banking sector. Among those measures, was the enforcement of the bail-in tool whenever a financial institution is resolved.

The purpose of this paper was to describe this new regulation and to demonstrate how it could be applied in a real case – BES. Besides, its implementation to this bank allowed a comparison with the resolution that was in fact applied.

The exercise consisted in the write-down and conversion of eligible liabilities so that the institution could be restored to viability. There were three possibilities considered, the first was to allocate all the burden of the resolution process to the institution's investors, the second was to apply the framework currently in force that states that the Resolution Fund can bear some costs of the resolution after investors have sustained 8% of losses in their assets. Finally, the third hypothesis was that the costs of loss absorption would be divided equally between the investors and the Resolution Fund.

The results of this exercise suggest that the application of the bail-in to BES would have granted, in the worst case scenario, savings for the Portuguese State of about 60%. In addition, it was observed that it would have been sufficient that the investors of the entity had sustained losses of 28%, in order for the bank not to need an intervention.

Of course that there are some limitations to these findings. First, this is an academic exercise unable to predict whether the institution could be restored back to viability, even if the bail-in was applied. Besides, to complete the resolution process the management of BES would have had to be replaced and a restructuring and business reorganisation plan would have had to be executed.

Another setback was the general information provided by BES and Bankscope that lacked detailed financial classification of items in the balance sheet. Without this discrimination, the bail-in had to be roughly applied without taking in consideration aspects like the maturities of certain liabilities or the amount of written-off debt that belonged to other Portuguese banks to allow the quantification of the contagion.

Overall, the bail-in tool is a beneficial measure that is going to relieve Member States and their taxpayers from the burden of aiding ailing financial institutions, and also to increase discipline in the sector.

A very interesting further investigation on this topic would be to study the changes that are occurring in European banks' balance sheets as a result of the reforms in the sector and its influence in the real economy.

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Index of Figures

 $RWA = Asset \times Perceived Risk$

$$CET \; 1 \; capital \; ratio = \frac{CET1 \; capital}{RWA}$$

$$Tier~1~capital~ratio = \frac{Tier~1~capital}{RWA}$$

$$Additional\ Tier\ 1\ capital\ ratio = \frac{Additional\ Tier\ 1\ capital}{RWA}$$

$$Tier\ 2\ capital\ ratio = \frac{Tier\ 2\ capital}{RWA}$$

$$Total\ capital\ ratio = \frac{\textit{CET}\ 1\ capital + Tier\ 1\ capital + Additional\ Tier\ 1\ capital + Tier\ 2\ capital}{\textit{RWA}}$$

Figure 1: Capital ratios

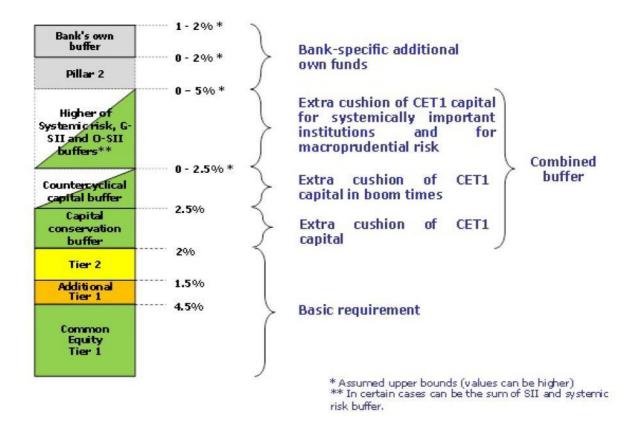


Figure 2: CRD/R capital requirements; The European Commission. (2013d). Capital Requirements - CRD IV/CRR - Frequently Asked Questions. Retrieved from http://europa.eu/rapid/press-release_MEMO-13-690_en.htm

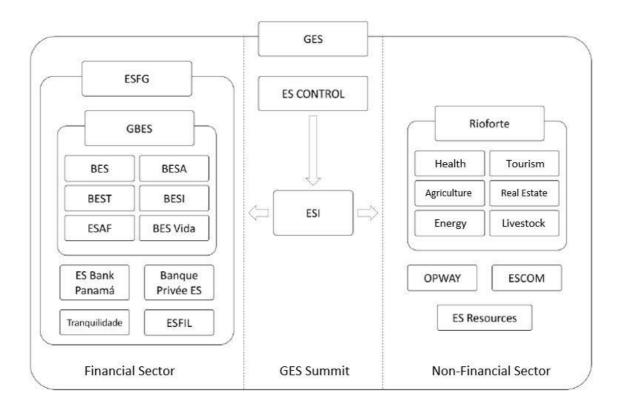


Figure 3: GES' simplified structure; Saraiva, P. M. (2015). Comissão Parlamentar de Inquérito à Gestão do BES e do GES. Retrieved and translated from https://www.parlamento.pt/ActividadeParlamentar/Paginas/DetalheIniciativa.aspx?BID=38645

Index of Tables

DIRECT EXPOSURE TO GES						in Mil EUF
	30/06/2014 Total					
	Credit	Shares and assets	Garantees	Total	31/03/2014	31/12/2013
Rio Forte	164,10	0.00	1.00	165,10	0.00	0.00
ES Saúde	27,90	0,00	2,90	30,80	17,80	84,40
ES Irmãos	3.80	0,00	0,00	3,80	0,00	0,00
Herdade da Comporta	0.00	5,30	4,90	10,20	10.10	10,00
Atlantic Meals	18,80	0.00	0,00	18,80	0,00	0,00
Others	4,70	28,40	9,00	42,10	41,70	7,30
Rio Forte e Subsidiárias	219,30	33,70	17,80		69,60	101.70
ES Financial Group	30,50	16,10	0,00	46,60	27,10	27,20
ES Financial Portugal	0,00	41,20	0,00	41,20	43,20	37,60
ES Financiere	470,40	11,60	0,10	482,10	110,80	29,00
Banque Privee ES	15,80	0,10	0,40	16,30	23,60	23,60
ES Bank Panamá	342,20	0,10	0,00	342,30	210,60	183,00
ES Bankers Dubai	0,20	0,40	0,00	0,60	0,00	0,00
ESFG International	0,00	1,00	0,00	1,00	0,90	0,90
ESFG e Subsidiárias	859,10	70,50	0,50	930,10	416,20	301,30
OPWAY	14,70	2,00	37,70	54,40	57,70	58,30
Construcciones Sarrion	14,80	0,00	0,00	14,80	23,50	23,50
ESCOM	297,00	0,00	0,00	297,00	237,90	213,60
Others	0,60	0,00	6,60	7,20	2,40	2,80
Several	327,10	2,00	44,30	373,40	321,50	298,20
TOTAL minus the Insurance business	1 405,50	106,20	62,60	1 574,30	807,30	701,20
Companhia Seguros Tranquilidade	0.40	0,60	11,20	12,20	12,00	22,40
Tranquilidade -Vida Compaihia Seguros	0.00	212,90	0,00	212,90	191,00	277,50
Esumedica Seguros	0,80	0,00	0,00	0,80	0,80	0,90
Europ Assistance	0,00	0.00	0,00	0,00	0,00	0,0
Seguros Logo	0,00	0,30	0,00	0,30	0,00	0,30
Tranquilidade e Subsidiarias	1,20	213.80	11,20	226,20	203,80	301,10

Table 3: BES' direct exposure to GES

Non-recurring Events

					•			
	Reported results	Exposure to GES	Bonds' issue	Exposure to BESA	Credit Risk	Impairments in PT	Others *	Results liquid of non-recurring
Financial Income	287,00	GES		-247,20		ши		534,20
+ Services	332,90			-247,20				332,90
	•			247.20				867,10
= Commercial Banking Income	619,90		404.00	-247,20	75.40		22.42	
+ Income from other operations	-356,00	-9,60	-491,00	247.22	-75,40		-20,40	240,40
= Total Income	263,80	-9,60	-491,00	-247,20	-75,40		-20,40	1 107,40
- Operating Expenses	594,80							594,80
(Comparable Operating Expenses)	566,20							566,20
Salaries	310,10							310,10
Other Expenses	227,90							227,90
Depreciations and Amortizations	56,80							56,80
= Gross Profit	-331,00	-9,60	-491,00	-247,20	-75,40	-	-20,40	512,60
- Provisions	4 253,40	2 062,30	757,80	3,70	383,60	106,10	75,20	864,80
Credit provisions	2 130,60	1 164,20	0,00	-65,70	383,60	0,00		648,60
Title provisions	185,80	14,90	0,00	0,00		106,10		64,90
Provisions on other assets and contingencies	1 937,00	883,20	757,80	69,40			75,20	151,40
Real Estate	94,20						5,00	89,20
Supplementary and ancillary capital contributions	24,80							24,80
Other assets and contingencies	1 818,00	883,20	757,80	69,40	-		70,20	37,40
= EBT	-4 584,50	-2 071,90	-1 248,80	-250,90	459,00	-106,10	-95,60	-352,20
- Taxes	-859,90	-339,00	-368,40	73,80	-111,00		-22,00	-93,30
- Contributions to the banking sector	16,40							16,40
= Net Income	-3 741,00	-1 732,90	-880,40	-324,70	-348,00	-106,10	-73,60	-275,30
- Non-controlling interests	-163,70			-143,80				-19,90
= Net income attributable to common shareholders	-3 577,30	-1 732.90	-880.40	-180.90	348.00	-106.10	73.60	-255,40

^{*} Includes an impairment from Aman Bank (10,2 ME) and another from Real Estate Funds (85,4 ME)

Table 4: Main non-recurring effects in BES' income statements, during the first semester of 2014

INCOME STATEMENTS in Mil EUR

	First Semester 2014		First Semester 2013	
	Reported Withou	t Extraord. Effects	Titst Semester 2015	
Financial Result	287,00	534,20	470,40	
+ Services	332,90	332,90	343,10	
= Commercial Banking Result	619,90	867,10	813,50	
+ Financial Operations Result	-356,00	240,30	168,90	
= Banking Result	263,80	1 107,40	982,40	
- Operative Costs	594,80	594,80	563,00	
= EBITDA	-331,00	512,60	419,40	
- Liquid Provisions	4 253,50	864,80	747,30	
To credits	2 130,60	648,60	553,10	
To shares	185,80	64,80	52,80	
To other assets and contingencies	1 937,10	151,40	141,40	
= EBT	-4 584,50	-352,20	-327,90	
- Taxes	-859,90	-93,30	-103,00	
- Contributions to the banking sector	16,40	16,40	13,00	
= Earnings	-3 741,00	-275,30	-237,90	
- Non-controlling interests	-163,70	-19,90	-0,50	
= Net Income	-3 577,30	-255,40	-237,40	

Table 5: Comparison between reported income statements from the first semester of 2014 and 2013 with the income statements of the first semester of 2014 without the extraordinaryeffects.

CAPITAL REQUIREMENTS			in Mil EUR
		BIS III	BIS II
		30/06/2014	31/12/2013
Eligible Own Funds			
+ Capital, share premium and own shares		7 120,00	6 101,00
+ Reserves and Retained Earnings		-2 762,00	777,00
+ Non-controlling interests		449,00	667,00
+ Intangible assets		-26,00	-139,00
+ Goodwill		-80,00	-405,00
+ Provisions		-992,00	-924,00
+ Others		-673,00	7,00
= Common Equity Tier I / Core Tier I	(A1)	3 036,00	6 084,00
+ Pref. Shares and Hybrid Capital accounted for as Equity		151,00	192,00
+ Others		-151,00	-317,00
= Additional Tier I	(A2)	0,00	-125,00
Subordinated debt		795,00	1 022,00
+ Others		72,00	-157,00
= Tier II	(A3)	867,00	865,00
Deductions		-	-84,00
Total Eligible Own Funds	(A4)	3 903,00	6 740,00
Risk-Weighted Assets	(B)	59 997,00	57 332,00
Ratios			
Common Equity Tier I	(A1/B)	5,1%	10,6%
Additional Tier I Ratio	(A2/B)	0,0%	-
Tier II Ratio	(A3/B)	1,4%	1,5%
Capital Adequancy Ratio	(A4/B)	6,5%	11,8%

Table 6: Capital requirements of BES in 30/06/2014 and 31/12/2013

BAIL-IN EFFECTS IN THE BALANCE SHEET				in Mil EU
	30/06/2014	H1	H2	нз
EQUITY				
Capital	6 084,70	6 084,70	6 084,70	6 084,70
Share Premium	1 049,60	1 049,60	1 049,60	1 049,60
Other Equity Instruments	28,94	28,94	28,94	28,94
Own Shares	-0,80	-0,80	-0,80	-0,80
Pref. Shares and Hybrid Capital accounted for as Equity	159,34	1 059,30 e)	1 059,30 e)	1 059,30 e)
Reserves and Retained Earnings	-11,69	-11,69	-11,69	-11,69
Earnings	-3 577,33	0,00 (LA)	0,00 (LA)	0,00 (LA)
Non-controlling interests	511,14	511,14	511,14	511,14
Total Equity	4 243,91	8 721,19	8 721,19	8 721,19
LIABILITIES				
Resources from Central Banks	8 613,74	8 613,74	8 613,74	8 613,74
Resources from othes credit institutions	5 802,21	5 802,21	5 802,21	5 802,21
Available for sale liabilities	1 688,87	1 688,87	1 688,87	1 688,87
Deposits from customers	36 685,24	36 685,24	36 685,24	36 685,24
Senior Debt	11 475,82	6 776,24 c)	9 357,29 c)	8 564,90 c)
Derivatives	126,76	126,76	126,76	126,76
Investment contracts	5 260,83	5 260,83	5 260,83	5 260,83
Provisions	3 357,10	3 357,10	3 357,10	3 357,10
Taxes liabilities	210,37	210,37	210,37	210,37
Subordinated debt	977,65	1 199,94 e')	1 199,94 e')	1 199,94 e')
Others	1 773,80	1 773,80	1 773,80	1 773,80
Total Liabilities	75 972,38	71 495,09	74 076,14	73 283,75
Total Equity and Liabilities	80 216,28	80 216,28	82 797,33	82 004,94
Total Assets	80 216,28	80 216,28	82 797,33 e)/d)	82 004,94 e)/d)

Table 7: Bail-in effects in the balance sheet of BES

BAIL-IN EFFECTS IN THE CAPITAL REQUIREMENTS			in Mil EUR
		30.06.2014	H1, H2, H3
Eligible Own Funds			
+ Capital, share premium and own shares		7 120,00	7 120,00 e)
+ Reserves and Retained Earnings		-2 762,00	-11,69 (LA
+ Non-controlling interests		449,00	449,00
+ Intangible assets		-26,00	-26,00
+ Goodwill		-80,00	-80,00
+ Provisions		-992,00	-992,00
+ Others		-673,00	-673,00
= Common Equity Tier I / Core Tier I	(A1)	3 036,00	5 786,31
+ Pref. Shares and Hybrid Capital accounted for as Equity		151,00	1 050,96 e')
+ Others		-151,00	-151,00
= Additional Tier I	(A2)	0,00	899,96
Subordinated debt		795,00	1 199,94 e")
+ Others		72,00	0,00
= Tier II	(A3)	867,00	1 199,94
Total Eligible Own Funds	(A4)	3 903,00	7 886,21
Risk-Weighted Assets	(B)	59 997,00	59 997,00
Ratios			
Common Equity Tier I	(A1/B)	5,10%	10% 1
Additional Tier I Ratio	(A2/B)	0,00%	1,5% ²
Tier II Ratio	(A3/B)	1,45%	2% 2
Capital Adequancy Ratio	(A4/B)	6,50%	13%

 $^{^{1}}$ - the minimum required by BdP is 7% 2 - minimum required by EC (CRD/R)

 Table 8: Bail-in effects in the capital requirements of BES