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Master in Finance

Master's Thesis

Bankia: Its Valuation Using Different Methodologies

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Index

List of Figures

List of Abbreviations

BFA: Banco Financiero de Ahorro

CEO: Chief Operating Officer

CET1: Core Equity Tier 1

CNMV: Comisión Nacional del Mercado de Valores

EBIT: Earnings before interest and taxes

EBITDA: Earnings before interests, taxes, depreciation and amortization

ECB: European Central Bank

FROB: Fondo de Reestructuración Ordenada Bancaria

IMF: International Monetary Fund

IPO: Initial Public Offering

IPS: Institutional Protection Scheme

M&A: Mergers & Acquisitions

MoU: Memorandum of Understanding

NIM: Net Interest Margin

NPL: Non-performing loan

OPEX: Operating Expenditures

ROA: Return on assets

ROAA: Return on average assets

ROAE: Return on average assets

ROE: Return on equity

RWA: Risk-weighted assets

SAREB: Sociedad de Gestión de Activos procedentes de la Reestructuración Bancaria

Chapter 1. Introduction

The objective of this project is to assess the value of the stake the FROB holds in BFA–Bankia. Although the funds injected in the bank have already been accounted as of public deficit, there is still a question mark of whether the overall public investment will be recovered or not. In this project, the current situation of the entity, its theoretical value and the possibilities of recovering the full amount are analyzed. The conclusion is that should the bank be sold in 2017, the investment would not be fully recovered.

The main reason to analyze BFA–Bankia is the importance of this banking group from different points of view: Firstly, BFA–Bankia is the largest financial institution included in the Group 0 (publicly owned entities at the time of the Oliver Wyman test). Secondly, more than 50% of the overall public aid to the injured financial institutions went into BFA–Bankia. Thirdly, the turnaround of the institution achieved by the management team appointed in May 2012. And finally, the possible consolidator role Bankia may play in the expected new round of consolidation in Spain. In fact, FROB has already asked the European Authorities to allow Bankia to acquire BMN,

This document is divided in six chapters.

In chapter 1, we introduce the aim of the project.

In chapter 2, we explain the valuation methodologies used to value Bankia.

In chapter 3, we describe the evolution of the financial system in the 2007–2016 period, focusing on the regulatory changes, and the restructuring, recapitalization and consolidation processes.

In chapter 4, we analyzed the set–up of Bankia, since the initial seven savings banks IPS and the flotation of the so–called good bank to the current situation.

In chapter 5, we value Bankia using four different models. In chapter 6, we conclude.

Chapter 2. Valuation methodologies: Valuing a bank

Valuing a financial institution differs from valuing an industrial or commercial company due to its special characteristics:

1. Regulation: Financial companies operate under strict rules, which have been experiencing major changes since the 2008 crisis began. The regulatory uncertainty in which banks are operating nowadays implies a challenging scenario to design and implement business plans and, consequently, increases the difficulty of forecasting future capital needs and distributable cash flows.

2. Complexity of the financial statements. Although all European public companies, including banks, present their consolidated accounts using the IAS framework, the specific profit and loss account and balance sheet used for financial institutions differs markedly from a "traditional" statement. Recall that most of assets and liabilities are financial and, therefore, IAS 39 applies. This rule will be replaced by IFRS 9 from January 1st, 2018.

3. The difference between operating accounts and financial accounts, a basic concept when valuing and industrial company, is neither straightforward nor used when valuing a bank. A financial liability is both related to the operating business of a bank (intermediate between investors and savers by transforming risk and maturities) and the financial structure (ie. Loan–to–deposits targets). Consequently, it is highly difficult to split liabilities and financial costs between operating and financial accounts, and, therefore, a practical impossibility of estimating the enterprise value (EV) and the weighted average cost of capital (WACC).

4. Capital expenditures and working capital needs are difficult to define.

The consequence of these special features is that the usual operating discounted cash-flows model is not viable.

The models proposed to value a bank are as follows:

1. Dividend discount model: The distributable dividends will be equal to the result of applying on earnings a pay–out ratio that allows complying with the regulatory rules and reinvestment needs (defined as the equity needs to cover the growth of risk weighted assets (RWAs)). This cash flow stream to shareholders is discounted at the equity required rate of return (or cost of equity). The result will be the value of shareholders' funds (equity).

2. Relative valuation: Damodaran recommends using price-to-book and price-to-earnings. Evidently, the use of ratios including EV, EBITDA or EBIT is discouraged due to the reasons we have mentioned before.

3. Latest transactions' multiples: This methodology is mainly used in acquisition or consolidation processes.

4. ROE–P/BV regression model: From the dividend discount model, we can extract a relationship between these two magnitudes:

$$\frac{P}{BV} = \frac{ROE - g}{K_e - g}$$

where:

K_e is the cost of equity

ROE is the return on equity, and

g is the constant growth rate to perpetuity

Due to the fact that the market's implied K_e and g are not stable, and depend on macroeconomic variables and the risk appetite of the investors, we can skip from this problem by regressing the P/BV ratio and ROE of the banks quoted banks and deduct from the regression model which banks are overvalued and which ones are undervalued in relative terms.

Damodaran (2013) proposes earnings as a substitute of cash-flows for valuing financial institutions. However, we believe that this method is inaccurate because a bank is unable to finance the RWAs organic growth and maintain its solvency ratios while distributing 100% of its earnings.

In this project, all these methods are used to value Bankia in chapter 5.

Chapter 3. The restructuring process of the Spanish financial system

Since the financial crisis began, back in 2007, the Spanish financial system has undergone a major restructuring, recapitalization and consolidation process. The crisis began as a liquidity financial crisis in 2007, and moved into a solvency banking crisis once the real estate bubble burst in Spain. The American and European financial systems suffered earlier the damage from the sub–prime crisis and consequent economic and financial crisis. Therefore, most of them recapitalized their systems in the 2008–2010 period, while in Spain the factual process started in 2010 and we believe it has not finished yet.

3.1. Savings banks consolidation process.

The Spanish savings banks have been operating during the last 200 years but their existence seems to have come to an end. After a successful past, with steady gains in market share of loans and deposits and good profitability ratios, the financial crisis that began in 2007 has been an insurmountable obstacle.

The savings banks accelerated their expansion plans in the 80s, following the approval of the Royal Decree 1582/1988 that allowed them to open branches throughout all the national territory and outside their regions of origin. Thanks to this new regulation, the savings bank started to expand its network, which until 2008 increased up to 24,985 branches, representing an increase of +181% since 1981 and +105% since 1988. In 2010, their market share measured by number of braches was 52.8% versus the 32% and 36% of 1981 and 1988, respectively. On the other hand, the banks that were not savings banks followed a different and more erratic evolution. They reached the figure of 18,058 branches in 1992 and between that year and 2002 reduced their network in a 22.1%. Subsequently, between 2002 and 2008 their network grew a 10.7%.

Since 1988 until 2010 the productivity of the savings banks was really good. The credits per branch increased at an annual rate of 11.1% and the deposits at a 7.4%. Nevertheless, the productivity of the other banks in the same period was better due to their consolidation and restructuring processes, which also allowed them to improve their efficiency ratios. In terms of ROE, the average figure of the savings banks in the 1992-2007 period was 10.9%, overpassing the one of the other banks, which was 8.5%. The maximum ROE achieved by the savings banks was in 1998: 12.0%. However, since 2007 the performance of the savings banks in terms of earnings has been worse than that of the other banks. The reasons of that can be found in the unbalances of the savings banks arising from their past period of growth.

In the 2000-2007 period, the savings banks increased their total lending at an annual rate of 20.3%. In special, the real estate lending grew a 37.3%. Until 2000, the loans-to-deposits ratio was below 100% and in 2007 it reached its maximum of 144.7%, creating a dependency in wholesale funding that resulted a problem when the markets closed during the initial moments of the financial crisis. The funding gap of the savings banks increased substantially since 2000 until reaching 71 billion euros by the end of 2006. That gap created wholesale funding needs in the savings banks of 256.000 million euros in the 2000-2007 period and those needs were not easy to be fulfilled due to the fact that the savings banks did not have a special wholesale funding product appropriate for their legal status. This is what produced the liquidity problem of the savings banks.

There was also a solvency problem. The growth, produced during the real estate boom that took place after the burst of the technological bubble and that abruptly ended in 2007, led the savings banks to assume huge amounts of euros in foreclosed assets due to the already mentioned exposure to real estate loans once the party was over. Those foreclosed assets were set in the good times as collateral of debt granted to constructors/developers or in mortgages. Due to the increase of non-performing-loans, they had to be assumed by the financial entities. However, the problem for the entities was not only assuming the assets but their decreasing value. As the real estate markets were frozen, the value of the assets started to decrease, which produced two things:

1. A decrease of the loan-to-value ratios, which was problematic for the entities when assuming the collateral.
2. An impairment of the assets already in the balance sheet of the entities, which produced losses through P&L adjustments.

By 2011, the NPL ratio of the Spanish banking system was 17.8% and the value of the foreclosed assets of 90.000 million euros, with the savings banks suffering the worst part of the crisis.

All this whirlwind of financial problems ended up in solvency and liquidity deficits affecting almost all savings banks of the country in such a way that they needed to participate in the biggest consolidation process ever occurred in the Spanish banking industry.

The process of restructuring the Spanish savings banks can be divided into the following steps following the legal chronological development:

1. Royal Decree-Law 9/2009: Which was the foundation of the FROB.
2. Royal Decree-Law 6/2010 and Royal Decree-Law 11/2010: With them, the legal framework of the Institutional Protection Scheme was created (section 3.1.1.) and some minor improvements in the corporate government of the savings banks were introduced.
3. Royal Decree-Law 2/2011: It increased the solvency requirements of the financial system.
4. Royal Decree-Law 2/2012 and Law 8/2012: They were enacted with the aim of purging the real estate exposure of the credit entities. There were required extra capital and provisions to cover the most risky assets and real estate exposures. It had an impact on capital and provisions of around 82,000 million euros.
5. Memorandum of Understanding (July 20, 2012) and Oliver Wyman Stress Test: They were the realization of the 100,000 million euros of aid provided by the European partners of Spain to bail-out its financial sector.
6. Law 9/2012 and Royal Decree 1559/2012: They introduced several crisis scenarios in case of intervention –early action, restructuring and resolution–, established the instruments in case of restructuring or liquidating an entity and other things that will be analyzed in the following sections. They also were the foundation of the SAREB.
7. Law 26/2013: With this law the government enacted the reform of the savings banks system. The activity of these institutions was limited and the banking

foundations were created. Almost all savings banks were transformed into private banks.

During the following sections, the Institutional Protection Scheme, the Memorandum of Understanding, the Oliver Wyman Stress Test, the SAREB and the legal changes in the savings banks will be analyzed.

In the section 3.2, the FROB and the changes in the Spanish framework for State aid will be analyzed, which will include an analysis of some of the legal changes mentioned above.

3.1.1. Institutional Protection Scheme (IPS).

The Institutional Protection Scheme *(Sistema Institucional de Protección* or SIP, in Spanish) was the first answer for the recapitalizing the Spanish savings banks, after the excesses of the growing period before 2007. Its definition is included in the Directive 2006/48/CE of June 14th, 2006, on the access to the activity of the credit entities.

The IPSs were known as cold merger procedures because they were created as a system that allows to obtain the results of a merger but through a different legal mechanism that enables certain advantages, as keeping some degree of independence among the different entities conforming the IPS and reducing their internal risks.

An Institutional Protection Scheme is based on three pillars:

1. The transfer from all participants to the central entity of the capacity to establish and execute the business strategies, risks and internal control tools.
2. Mutual agreements of liquidity and solvency between the participants as well as sharing the results in a level that must exceed the 40%.
3. Stability. A participant has to be a member of the SIP during at least 10 years. If a participant wants to exit the IPS, it must warn about its intentions two years before and cannot break the agreement unless the Bank of Spain approves it after analyzing the viability of the fragmentation process.

From a legal point of view, an IPS is not a complete merger but looking at the economical side each participant has lost its individuality and is not independent anymore. Nevertheless, because it is not a complete merger, all the participants must ensure that they are perfectly coordinated to achieve the objectives that they all have set for the SIP.

The IPSs that were created in Spain since 2010 are:

1. Banco Financiero de Ahorros, S.A. (BFA). It operated under the trademark Bankia and, as it is studied in the section 4, it resulted from the union of seven savings banks.
2. Banca Cívica, S.A. It is the result of the union of Caja Navarra, Cajasol, CajaCanarias and Caja de Burgos.
3. Banco Mare Nostrum, S.A. It was created by Caja Murcia, Caixa Penedès, Caja Granada and Sa Nostra.
4. Banco Grupo Cajatres, S.A. It is the union of Caja Inmaculada de Aragón, Caja Círculo de Burgos and Caja de Badajoz.
5. Effibank, S.A. It is known as Liberbank and is the union of Cajastur, Caja Extremadura and Caja Cantabria.
6. Kutxa Bank, S.A. It is the union of Bilbao Bizkaia Kutxa, Kutxa Gipuzcoa y San Sebastián and Caja Vital.
7. Banco Base, S.A. It was a SIP to be created by the union of Caja Mediterráneo (CAM), Caja Extremadura, Caja Cantabria and Cajastur. However, the integration into the SIP was rejected by the General Meetings of Caja Extremadura, Caja Cantabria and Cajastur after knowing the bad situation of the CAM. The three last entities created Effibank –Liberbank– as mentioned earlier.

Many of the savings banks used the IPS procedure as a way of protecting themselves against the crisis and the problems that it was creating in the quality of their assets and solvency but it was not enough. Many of the IPSs had to receive financial assistance from the FROB.

3.1.2. Memorandum of Understating of July 20th, 2012, and Stress Test of Oliver Wyman.

The Memorandum of Understanding of July 20th, 2012, is a document signed by Spain and the European Union on the financial assistance given to Spain for bailing-out its financial sector. It was signed months after the FROB intervened Bankia (Chapter 4), once the Spanish government realized it did not have enough economic resources for a complete bail-out of its banking system.

In its first pages, the document summarizes the recent economic and financial developments in the country, as the worsening of the situation of the banking sector, the economic imbalances and other features that had driven to that situation.

According to the document, the key objective of the financial assistance was "restoring and strengthening the soundness of the Spanish banks". To do so, the memorandum established three actions as part of that general objective:

1. "Identification of individual banks capital needs through a comprehensive asset quality review of the banking sector and a bank-by-bank stress test, based on that asset quality review".
2. "Recapitalization, restructuring and/or resolution of weak banks (…)".
3. "Segregation of assets in those banks receiving public support in their recapitalization effort and the transfer of the impaired assets to an external asset management company".

One of the most important parts of the road map established by the Memorandum was conducting a bank-by-bank stress test to be directed by an external consultant. This stress test had to be done on 14 banking groups, which represented the 90% of the Spanish banking system and had to be completed by the second half of September 2012.

On the basis of the results of the test, the banks had be categorized in groups according to a predefined scale, as follows:

1. Group 0: Entities that did not require more capital to fulfill with the capital requirements and no further action was required.

2. Group 1: Entities already controlled by the FROB, which were: BFA/Bankia, Catalunya Caixa, NCG Banco and Banco de Valencia.
3. Group 2: Entities with capital shortfalls that were unable to met privately and needed State aid to do so.
4. Group 3: Entities that did not fulfill with the capital requirements but had credible recapitalization plans and were able to meet them without State aid.

The stress test was conducted by the consulting company Oliver Wyman. According to the Bank of Spain's press release of September 28, 2012, the results were the following:

1. Seven banking groups, representing more than 62% of the loan portfolio of the system, did not need any recapitalization and were meeting the capital requirements (Group 0).
2. For the rest of the banking groups, extra capital needs were found. In total, the requirements were of 59,300 million euros. Nevertheless, that amount was equal to 53,745 million considering the ongoing M&A processes and the fiscal effects.

The base scenario supposed a requirement of 9% capital ratio and an accumulated decrease of the real GDP until 2014 of -1.7%. The adverse scenario, which assumed a 6% capital ratio requirement and an accumulated decrease of the real GDP until 2014 of -6.4%, was the main guideline of the capital needs. Its probability of occurrence was estimated as lower than 1%.

The following table, published in the same press release, contains the capital needs of the fourteen banking groups analyzed:

Figure 1: Spanish financial system: Stress test results

After-Tax Capital Needs (€ Mn)		
	Base Scenario	**Adverse Scenario**
Grupo Santander	+19,181	+25,297
BBVA	+10,945	+11,183
Caixabank + Cívica	+9,421	+5,720
Kutxabank	+3,132	+2,188
Sabadel + CAM	+3,321	+915
Bankinter	+393	+399
Unicaja + CAISS	+1,300	+128
Ibercaja + Caja3 + Liberbank	+492	-2,108
BMN	-368	-2,208
Popular	+677	-3,223
Banco de Valencia	-1,846	-3,462
NCG Banco	-3,966	-7,176
Catalunya bank	-6,488	-10,825
Bankia-BFA	-13,230	-24,743
Total (only capital needs)	**-25,898**	**-53,745**

Source: Bank of Spain

The results of the test were:

1. Group 0: Santander, BBVA, Caixabank, Kutxabank, Banco Sabadell, Bankinter and Unicaja-CEISS.
2. Group 1: BFA/Bankia, NCG Banco, Catalunya Banc and Banco de Valencia. This group was already defined in the Memorandum of Understanding and the banks were already working in their restructuring plans.
3. Group 2 or 3: Banco Popular, BMN and the resulting group of the merger of Ibercaja, Liberbank and Caja 3. Those groups had to present their recapitalization plans in October and depending on the result, they were going to be aided by the State or not.

An important comment must be added referring to the expectations that the Bank of Spain had on a merger of Ibercaja, Liberbank and Caja 3. Caja 3 was finally acquired by Ibercaja Banco in 2014 –the entity resulting from transferring the activities of Ibercaja to a credit institution and transforming itself into a foundation as Law 26/2013 establised, section 3.1.4 talks about that–. However, Liberbank took another path.

Ibercaja, after the results of the stress test of Oliver Wyman, realized that the capital requirements under an adverse scenario of Liberbank were too high (€ 1,198 Mn vs. €226 Mn of Ibercaja) and rejected the merger agreement. Then, Liberbank had to find a new restructuring plan and decided to go public and launched and IPO in 2013.

3.1.3. SAREB.

The Memorandum of Understanding established that those banks receiving public support should segregate their impaired assets into an external asset management company, in special real estate development and foreclosed assets. That company had to manage those assets "with the goal of realizing their long-term value".

The Law 9/2012 of November 14, 2012, on banking restructuring processes and resolution, also applied all of these requirements. In its Chapter VI established that the asset management company shall be an anonymous society regulated by the dispositions of that law and the specific regulation to be developed. That regulation was the Royal Decree 1559/2012 of November 15, 2012, through which the legal regime of asset management companies was provided.

The Law 9/2012 also established the procedure through which the FROB could transmit assets from aided entities to the asset management company. It was established that consent from the bank originally owning the assets was not needed. Also, some specific restrictions referring to the activities of the asset management companies were set. The legislators wanted the company to be focused on its activity and only on that.

The Royal Decree 1559/2012 further develops this regulation and establishes the foundation of the SAREB in its Chapter IV. That entity, whose name means "Entity for the Management of the Assets Proceeding from the Banking Restructuring Process", shall be established by the FROB and its bylaws state a life for the institution no longer than 15 years.

The shareholders of the SAREB could be:

1. The FROB.
2. Credit entities.
3. Insurance entities.
4. Investment services entities.
5. Collective investment societies (investing in movable or real estate assets).
6. Collective investment institutions and investment funds, as well as their management societies.
7. Securitization funds management entities.
8. Hedge funds and societies.
9. Mutual guarantee societies.
10. Foreign companies executing the activities described in the other points as well as other companies as listed real estate investment entities.

The Royal Decree also established some articles describing how the SAREB should operate.

In December 2014, the SAREB had a portfolio of 44,263 million euros in financial and real estate assets. Its EBITDA of that year was positive, 1,103 million euros, although its net profit was negative, -62 million euros due to the large financial expenses supported. That is because of its financing structure. At the end of 2014, its liabilities were structured as follows:

1. 350 million euros of capital.
2. 3,600 million euros of subordinated debt.
3. 45,000 million euros of senior debt.

According to the last available annual report (2014) of the SAREB, the main shareholders are:

1. FROB, 45.01%.
2. Banco Santander, S.A., 17.28%.
3. Caixabank, S.A., 12.44%.
4. Banco Sabadell, S.A., 6.93%.
5. Banco Popular Español, S.A., 5.97%.

There are other shareholders with a stake lower than 5%, as BMN, CEISS, Liberbank and Caja3.

Then, in conclusion, the SAREB is a highly leveraged company, though amortizing debt quickly, key in the Spanish banking restructuring process. In despite of some voices claiming it will never be profitable, its argument against that is presenting itself as well positioned to achieve its profitability goal of 15% during its life.

3.1.4. Savings Banks: Legal Changes.

The regime driving the functioning of the savings banks was not good for the economy and several institutions and personalities advised a reform. In the annual report of 1999, of the International Monetary Fund, there was a recommendation about privatizing this type of entities. Warnings were also given by Professor Jaime Terceiro (1995) in its article "Información Comercial Española". Also, some ideas about a reform of its legislation were given in the report about savings bank of Jack Revell, published in 1980.

After several years of crisis and observing the consequences of the bad management of the savings banks, a new law was finally enacted for modifying its functioning. The Law 26/2013 of December 27, 2013, on savings banks and banking foundations, introduced several norms modifying the functioning of the savings banks.

One of the main changes was the definition of the activities to be exercised by the savings banks. The law specified that the savings banks shall be focused on collecting deposits and providing retail banking services. Also, it said that they must only operate in one autonomous region and in case of surpassing that limit, in a maximum of ten provinces bordering each other.

Nevertheless, it is not the only limit established by the new law. In order to address the problem of savings banks growing too much and having a non-desirable systemic size, a solution was conceived. According to that, now once a savings bank has a total consolidated assets larger than 10,000 million euros or a deposits market share larger than a 35% in the territories where operates, it must transfer its banking activity to a credit institution and obtain shares in exchange. Also, it must transform itself in a banking foundation.

A banking foundation was defined in the same law as any foundation that has a participation in a credit institution of at least a 10% of the capital or the political rights, or that which allows it to designate or remove a board member. The main objectives of the foundation has to be the management of its stake in the credit institution and of the activities related to the development of the society that were being carried out by the disappearing savings bank.

Other important measures included in the law was the partial elimination in the management of the savings banks of the political power, which sees a decrease in its participation in the General Meetings from 40% to 25%, replaced by an increase of the depositors' participation in those meetings. Other measures about guaranteeing the independence of the governing bodies were also established.

As a result of this law, only two savings banks could keep operating without being transformed into a foundation: Colonya, Caixa Pollença and Caixa Ontinyent. Other savings banks, as La Caixa (Caja de Ahorros y Pensiones de Barcelona) were transformed into a foundation as the law established and the banking business transferred to a private bank (Caixabank, S.A.).

3.2. The Fund for Orderly Bank Restructuring (FROB) and the Restructuring and Resolution of Banking Institutions.

The *Fondo de Reestructuración Ordenada Bancaria* (FROB) is one of the main entities participating in the banking restructuring process of Spain. It was created by the Royal Decree-Law 9/2009 of June 26, 2009, on banking restructuring processes and equity strengthening of credit institutions. According to the first article of that law, the main mission of the FROB is to manage the banking restructuring processes and help to strengthen the solvency of credit institutions.

With the approval of the same law, the banking restructuring processes of Spain started to be updated to the current situation of the financial system. However, nobody could expect the tremendous transformation of the banking system that occurred during the following years. Because of that, several laws were issued updating both, the banking restructuring processes and the FROB.

In this section, three laws will be analyzed:

1. Royal Decree-Law 9/2009 of June 26, 2009, on banking restructuring processes and equity strengthening of credit institutions.
2. Law 9/2012 of November 14, 2012, on banking restructuring processes and resolution.
3. Law 11/2015 of June 18, 2015, on recuperation and resolution of credit and investment services entities.

Understanding these laws is important to know the functioning of the FROB during the financial crisis and in the future.

3.2.1. Royal Decree-Law 9/2009

This Royal Decree was approved in order to address the increasing exposure to toxic assets that the Spanish banking system was suffering. It was necessary a strategy for solving the problems of the system, including an orderly restructuring process. This law was the first answer for that need.

a. The creation of the FROB.

The Royal Decree-Law 9/2009 was the foundation of the Fund for Orderly Bank Restructuring. Following its statements, 9,000 million euros were allocated for creating the FROB. A part of it, 6,750 million euros had to be contributed by the State and the rest, 2,250 million euros, by the Deposit Guarantee Fund. The FROB was also authorized to obtain funding from the wholesale markets up to a quantity equal to three times its equity. Nevertheless, that limit could be surpassed up to a limit of 10 times its equity under the authorization of the Ministry of Economy and Finance.

In its article 3, the law established that the FROB had to be managed by a Governing Committee composed of nine members. All of them had to be appointed by the Ministry of Economy and Finance but

1. four of them had to be proposed by the Bank of Spain,
2. two had to represent the Ministry of Economy and Finance (one from the Secretary of State for Finance and Budget and the other from the Secretary of State of Economy);
3. and three on behalf of the Deposit Guarantee Fund.

A representative of the General Comptroller of the State Administration appointed by the Ministry of Economy and Finance, at the proposal of the General Auditor, could also attend to the meetings of the Committee. However, it could not have vote in them.

One of the members proposed by the Bank of Spain had to be its Deputy Governor, who had the function of President of the Committee.

b. First Framework for Restructuring Processes.

As explained, the Royal Decree-Law 9/2009 contains a first part by which the FROB is created. In the second part it deals with the restructuring processes of credit entities.

It established two ways of restructuring an entity, private or public.

1. Private:

The Decree established that when an entity or a consolidated group of entities had finds weaknesses in its financial and economic situation that may jeopardize its viability and demands a restructuring plan, the entity or consolidated group had to inform the Bank of Spain. At the same time, the entity or consolidated group had to present an action plan to solve the situation whether by strengthening the solvency and equity of the entity, by merger or absorption with other entity or by transferring part or all its businesses to other entity. The plan could not take longer than three months except by express authorization of the Bank of Spain.

Both, the Deposit Guarantee Fund and the FROB, could help the entity offering financing and other measures to ensure the action plan is completed. Simultaneously, the Bank of Spain had to ensure that the entity does not present deficiencies in its internal functioning and take disciplinary and control measures necessary to solve any problem if found.

As an alternative, the Bank of Spain could also oblige an entity or consolidated group to enter into a restructuring process if any problem affecting its solvency was found. In that case, the Bank of Spain had to communicate the problem to the entity and give it ten natural days for presenting an action plan.

2. Public:

The Decree also established the procedures for a public restructuring process of the entity by intervention of the FROB. It could happen in case one of the following conditions took place:

1. If the entity did not present the action plan in the timing established by the Law or did not find a viable solution that ensured its solvency.
2. If the Bank of Spain estimated that the action plan was not viable, the entity did not accept the modifications given by the Bank or required the intervention of the FROB in such a way that the Fund cannot accept it.
3. If the entity did not fulfill the approved action plan and is jeopardizing its objectives.
4. In case of supervening circumstances that, according to the Bank of Spain, make impossible to achieve the objectives of the action plan.

Once any of those conditions happened, the Bank of Spain had to set the FROB as temporal administrator of the entity and the FROB had to prepare an action plan that could include, among other things, financial support and management measures to ensure the future solvency of the entity. M&A operations were also possible in the restructuring processes.

Also, it was stated that if the FROB acquired stakes in a Savings Bank, it was able to exercise political rights in the General Meeting, equal to the size of the stake over its total equity. This was an exceptional measure because the Savings Banks' General Meetings were governed by the depositors, public administrations and workers of the entity in different percentages of power. It meant that the FROB would be obtaining shares and political rights of an entity that was not structured in a way like the Law was establishing. However, as the preamble of the Law defended, it was an exceptional right that was going to exist only while the FROB was the owner of that stake.

When the FROB acquired stakes in credit entities, they had to be valued at fair price. Different instruments could be considered, ranging from common stock to preferential shares, among others. In case of preferential shares, they had to be converted into common equity or bought back by the entity in a time frame smaller or equal to five years.

3.2.2. Law 9/2012.

The Law 9/2012 of November 14, 2012, on banking restructuring processes and resolution, was established after Spain signed the Memorandum of Understanding with the European Union, by which a credit line of 100,000 million euros was granted to Spain to restructure its banking system.

In its first part, it defined the principles that had to be followed during a restructuring or resolution process, as protecting the depositors. Also, in its article 4, the Law established how the share and debt holders would support the losses of a process –subordination process–.

Also, among other things, it modified the structure of the FROB for avoiding conflicts of interest by eliminating the representation that the credit institutions had through the Deposit Guarantee Fund.

Referring to asset management entities, this Law established the possibility of creating an entity in charge of managing the assets proceeding from the banking restructuring process –concreted through the SAREB–.

Related to the restructuring processes per se, the Law differentiated three parts: Early Action, Restructuring and Resolution. It did not do the public vs. private differentiation anymore.

a. Early Action.

It is similar to the private restructuring process established by the Royal Decree-Law 9/2009. Some changes were introduced and the articles defined more in depth what has to be included in the action plan presented by the entity. Nevertheless, the process is the same.

In this case, it was considered that the entity subject to this procedure could return to a normal situation by its own means and that not public funds was needed except for those established in the Law. Those established in the law were considered as exceptional recapitalization measures, defined in the article 9 f) and directed through convertible instruments to be subscribed by the FROB. They had to have a maturity of less or equal to two years and be bought back or amortized at the end of that period. However, this use of public funds was only possible if the FROB accepted it and if there were objective indicators that demonstrated the entity was able to return the financing in that time frame of two years.

Any other recapitalization process could only be given to the entity by a restructuring or resolution process.

The contents of the action plan were defined as:

1. Specific objectives related to the entity's efficiency, profitability, leverage and liquidity.
2. Compromises related to its solvency.
3. Compromises related to the improvement of its efficiency, corporate government, etc.
4. In the exceptional case of requiring public financing, the terms of it had to be within the constraints defined before.

According to this law, the Bank of Spain was also able to intervene the governing bodies of the entity, modifying its composition or replacing them completely during yearly terms.

b. Restructuring.

According to this law, an entity has to be restructured when it needs public funds to guarantee its viability or when its resolution could severely affect the stability of the financial system, so it is better to restructure it in order to minimize the use of public resources.

The first part of the defined restructuring process is also similar to the private restructuring process established in the Law 9/2009 in terms of the administrative steps followed. The first step deals with the notification by the entity to the Bank of Spain and the FROB of the need of a restructuring process. After it, the entity had to prepare an action plan in 15 days to be executed in no more than three months, unless otherwise authorized by the FROB. Also, the Bank of Spain could ask a specific entity for an action plan in the same time frameworks if it finds that an entity is in problems.

The content of the action plan is the same of the ones of an Early Action Process but including the way in which the restructuring instruments will be applied and used. These instruments were: public financing –letter D of this head– or transmission of assets and liabilities to an assets management entity.

Also, the action plan had to include an analysis of how the public financing will be repaid or the prejudicial effects on the financial system that its resolution would produce.

The Bank of Spain was given with powers to intervene the administration of the entity and in case the restructuring process did not work, would have to proceed with a resolution process.

c. Resolution.

According to this law, an entity should have to enter in a resolution process when it is not viable or it is foreseeable that it will not be viable in the future and because of reasons of public interest or financial stability that makes necessary to avoid its bankruptcy liquidation.

Also, the entity had to enter in a resolution process if it does not present a restructuring action plan, the plan is not accepted by the Bank of Spain or it is not fulfilled.

The statements of the law explain the conditions that measure if an entity is viable or not, which are related with its solvency situation.

Once the resolution process has started, the Bank of Spain must establish the FROB as the administrator of the entity, unless under extraordinary circumstances it is not necessary. Since that moment, the FROB should elaborate a resolution plan for the entity which had to include, among other things, the economic valuation of the entity, the public funding to be provided to the entity and the execution time frame. It had to be approved by the Bank of Spain.

The Law established different instruments that can be used separately or simultaneously during a resolution process:

1. Sale of the business.
2. Transmission of the assets or liabilities to a bridge bank.
3. Transmission of the assets or liabilities to an asset management entity.
4. Public financing support to the acquirers of the business, bridge bank or assets management entity when necessary.

The sale of the businesses of the entity had to be done through a transparent competitive process having as its main aim to maximize the price of the sale. The FROB had to represent the shareholders of the entity during the whole process although without need of obtaining their approval to any procedure. The shareholders of the entity, once the process is finished, had to receive an amount equal to the sale price minus the expenses incurred by the FROB and including the costs of the instruments used for the public financing of the entity. The law provided that this process did not have to be fully completed as is established if there were reasons, as financial stability, to avoid one of the steps.

The formula of using a bridge bank is also permitted by this law, as said before. A bridge bank is a credit entity participated by the FROB whose activities swallow those of the entity under resolution. The bridge bank must be managed with the aim of selling it or its assets or liabilities. The bridge bank had to finish its activities a year after the FROB is not having a stake in its equity anymore or, in any case, six years after its creation.

d. Use of Public Funds in a Restructuring or Resolution Process.

According to the law, the funds for the process had to be provided as common stock or convertible instruments. In case of the entity under restructuring or resolution is a savings bank, it must transmit its business to a common bank before receiving the funds.

After five years, the FROB could request the conversion of the convertible instruments into common equity if they still have not been bought back or amortized. This time frame could be extended two years more if the entity is not able to fulfill the action plan by doing so.

3.2.3. Law 11/2015.

The Law 11/2015 of June 18th, 2015, on recuperation and resolution of credit and investment services entities, is the last important law related to the FROB and banking restructuring processes.

The origin of the Law was to establish in the Spanish legal system the correct mechanisms to implement the Single Resolution Mechanism and some other European directives related with issues as the deposits guarantee system. The objective by the legislator was to continue the Law 9/2012 by complementing it with the new matters arisen in the European law.

This law is applicable not only to credit institutions but also to investment services entities. It established that the National Securities Market Commission –Comisión Nacional del Mercado de Valores, CNMV– is responsible for the supervision of investment services entities and the Bank of Spain for credit entities.

It also differentiated between the function of resolution in two parts:

1. Preventive Resolution Phase: The responsible supervisors are the Bank of Spain and the CNMV, depending on the type of entity. It deals with the elaboration of the resolution plans to be applied in the second phase by the FROB.
2. Executive Resolution Phase: The FROB is responsible of this part. The instruments of resolution consist of:
   a. The transmission of the entity or part of it to a private entity to protect its essential services.
   b. The creation of a bridge entity to which the savable part of the entity under resolution is transferred.
   c. The creation of an asset management entity to which the bad assets are transferred.

Apart of those methods of resolution, there is also introduced the bail-in procedure. Under this system, the shareholders and all lenders will bear the costs of the recapitalization of the entity assuming the losses, not only the subordinated debt. Of course, the law respects the subordinating ranking when deciding which capital and liabilities will be used for recapitalizing the entity, starting by the common equity and finishing by the most protected debt. The only exceptions are the deposits guaranteed by the Deposits Guaranteed Fund, guaranteed bonds and other similar liabilities as the ones contracted with employees of the entity.

The law also establishes the creation of a National Resolution Fund, to be merged with the European Resolution Fund in January 1st, 2016.

Among other things, the law also modifies the composition of the FROB increasing the number of members of its Governing Committee to 11. Now, they are

1. A President, acting as its maximum representative during a five-years non-renewable term.
2. Four members designated by the Bank of Spain, one of them its Deputy Governor.
3. Three representatives from the Ministry of Economy and Competitiveness, designated by the Minister.
4. The Vice-President of the CNMV.
5. Two representatives from the Ministry of Finance and Public Administrations, designated by the Minister.

Also, attending to the meeting with voice but no vote, there will be a representative appointed by the General Comptroller of the State and another by the General Attorney of the Director-State of the State Legal Service.

Referring to the financing of the FROB, the law established several sources:

1. The National Resolution Fund, which will be managed by the FROB.
2. Loans from other member states of the European Union.
3. Wholesale funding and those methods that have been also defined in the other laws.

3.3. Current situation of the Spanish banking sector.

After the 2010-2014, consolidation process, the Spanish banking sector was composed as follows:

1. **Banco Santander**: The group did not acquire any Spanish institution in this period but the full merger of Banesto in 2013.
2. **BBVA**: Banco Bilbao Vizcaya Argentaria actively participated in the consolidation process and bought two institutions:
    a. **Unnim Banc**: FROB acquired it in the second half of 2011, once the group could not comply with the RDL 2/2011, after being transformed into a bank. Previously, it was known as Unnim, which was the result of

a merger between Caixa Sabadell, Caixa Terrasa and Caixa Manlleu in 2010. Unnim Banc was acquired by BBVA in the first quarter of 2012.

b. **Catalunya Banc CX:** It was intervened by the FROB in the second half of 2011 and acquired by BBVA in the second quarter of 2014. Originally, it was Catalunya Caixa, which was transformed into a bank in the first half of 2011, just before the FROB intervention. Catalunya Caixa was the result of a merger between Caixa Catalunya, Caixa Tarragona and Caixa Manresa in 2010.

3. **Caixabank**: As explained before, Caixabank is the resulting bank after the original savings bank was transformed into a bank in 2011. It was also active in the consolidating process by acquiring the following entities:
    a. Caixa Girona: It was integrated in Caixabank when it was still a savings bank, in 2010.
    b. Banca Cívica: Integrated in Caixabank in 2012. It was a SIP of several savings banks: Caja Sol, Caja Guadalajara, Caja Navarra, Caja Burgos and Caja Canarias.
    c. Banco de Valencia: It was a private bank intervened by the FROB in the second half of 2011. Its administrators were ceased and the FROB took the complete control of the entity until it was sold to Caixabank for one euro in the last quarter of 2012. The bank needed a bail-out of 4,500 million euros.
4. **Bankia**: It was a SIP created in 2010 by seven savings banks: Caja Madrid, Bancaja, Caja de Ávila, Caja de Segovia, Caja La Rioja, Caixa Laietana and Caja Insular de Canarias. In 2012 the capital was intervened by the FROB. In section 4 it will be studied more in depth the details of this bank because its valuation is one of the purposes of this project.
5. **Banco Sabadell**: It bought the following banks:
    a. Banco Guipuzcoano: Bought in 2010 and merged.
    b. Banco CAM: Bought in 2011. CAM was a savings bank that, as explained before, could not participate in the creation of a SIP with Cajastur, Caja Extremadura and Caja Cantabria. In 2011 the savings bank was transformed into the private bank, Banco CAM, and immediately intervened by the FROB. Its administrators were ceased and the bank was sold to Banco Sabadell.

c. Banco Gallego: It was a bank forming part of NCG Group and intervened by the FROB in 2013. It was sold to Banco Sabadell.

6. **Banco Popular**: The only important acquisition made by this private bank was the purchase of Banco Pastor in 2012. Banco Pastor is still operating under Popular's management and is a private bank present, mainly, in Galicia.

7. **Unicaja Banco**: It is a private bank resulting from the transformation of the original savings bank, Unicaja, into a bank in 2011. Unicaja Banco completed the following acquisitions:

   a. Caja Jaen: A savings bank acquired in 2010 by Unicaja.

   b. Banco CEISS: Private bank acquired in 2014. It was the resulting entity of transforming the savings bank Caja España de Inversiones into a common bank in 2011. Previously, in 2010, Caja España de Inversiones was created by the merger of Caja Duero and Caja España.

8. **Ibercaja Banco**: Private bank created in the last quarter of 2011 when the savings bank Ibercaja was transformed into a bank. Its only important acquisition was made in 2013, when it purchased Banco Grupo Caja 3. Caja 3 was created in 2010 through a SIP by Caja de Ahorros Inmculada, Caja Círculo Católico de Burgos and Caja Badajoz. In the last quarter of that year, it was transformed into a bank.

9. **Kutxabank**: It is a private bank created in 2011 through a SIP of BBK and two other savings banks, Kutxa and Caja Vital. BBK was a savings bank that in 2010 acquired Cajasur, another savings bank intervened by the FROB that year and sold in a competitive process that was won by BBK.

10. **Bankinter**: Spanish private bank that did not do any important operation in the consolidation process. It was one of the Spanish banks with lowest exposure to real estate assets.

11. **Abanca**: Private bank born in 2013 when Banco Etchevarria bought NCG Banco, which had been intervened by the FROB in 2011 just after being transformed into a private bank. Previously, it was a savings bank called Novacaixagalicia, which was created by the integration of Caixa Galicia and Caixa Nova, two savings banks operating mainly in Galicia.

12. **BMN**: Banco Mare Nostrum was created in the last quarter of 2010 when it was transformed into a private bank. Before it was a SIP created in the same year by Caja Murcia, Caixa Penedés, Caja Granada and Sa Nostra. It was intervened by

the FROB in the first quarter of 2013 and according to the agreements signed by Spain and the European Union, the bank must be listed in the financial markets before 2017. Part of the business, mainly the one coming from Caixa Penedés, was acquired by Banco Sabadell in 2013.

13. **Liberbank**: Private bank created in 2011 by a SIP of Caja Cantabria, Caja Extremadura and Cajastur. Cajastur was also a SIP, created in 2009 when Cajastur acquired Caja Castilla-La Mancha. The latter was a savings bank intervened by the FROB in 2009.
14. **G.C. Cajamar**: It operates as a bank that was created by a SIP of 26 credit cooperatives in a process that started in 2009.

Of course, there are more entities in Spain but their size is not comparable with that of the entities mentioned before. Also, despite of participating or originating some operations as part of the consolidation process, they were not as significant as the ones presented in this section.

After this consolidation process and the enactment of the Law 26/2013 took place, there are only two savings banks still operating in Spain: Caixa Ontinyent and Calonya Caixa Pollença. The number of employees working in the financial banking sector has decreased from around 280,000 in 2012 to 210,000 by the end of 2014, a decrease larger than a 25%.

The number of branches decreased from around 45,000 at the end of 2008 to 30,000 by the end of 2015. More than a 30% decrease and still decreasing.

There are expectations that the consolidation process will be continued during the next years. Nevertheless, 2015 was quiet and the only major operation was the announcement of the completion of the acquisition of Catalunya Banc by BBVA. However, Spanish banks are still active referring to M&A although the current operations are being conducted abroad. In the first half of 2015, Banco Sabadell bought the British bank TSB and currently Caixabank is trying to acquire the Portuguese bank BPI. Other bank, BBVA, has increased its stake in a Turkish Bank called Garanti.

The reason behind this process of growing inorganically abroad is that Spanish banks are not confident about relying on a single country again. The exposure to a single country does not permit to take advantage of the diversification that being in several countries allows and they have learnt that by force. It is not a coincidence that in general, the only banking groups that resisted well the crisis were those present in other countries, as BBVA and Banco Santander. Bankinter is an exception, that bank resisted well because its exposure to the Spanish real estate sector was low.

Then, three conclusions can be taken:

1. Operating only in one country is dangerous because it does not permit to take advantage of the diversification effects.
2. Banks must manage carefully their portfolio mix to avoid high exposures to specific sectors.
3. The funding mix is also important. The savings banks started to rely too much on wholesale funding and it demonstrated to be an error when the markets closed at the initial moments of the global financial crisis.

Chapter 4. Bankia

In this chapter, we describe the history of Bankia, from the foundation of BFA to current situation, after the strategic plan 2012–2015 has been accomplish and the market is expecting a new strategic plan. We also raise the question of the future for the stake hold by the FROB, owner of 100% of BFA, the largest shareholder of Bankia (65%).

4.1. BFA: The IPS of 7 Savings Banks.

The increasingly difficult situation of the Spanish financial system led to major consolidation round in mid–2010, the deadline to ask for the FROB aid in the form of preferred shares (FROB I). The model of consolidation chosen was the so–called "cold mergers", the Institutional Protection Scheme (IPS or SIP according to the Spanish acronym), which did not require a total integration of the entities but the pooling of interest and the mutual support for liquidity and solvency purposes.

In June 14th, 2010, seven savings banks signed an integration protocol to create an IPS. The participating interest of each savings bank was as follows:

Figure 2. IPS: Savings Banks' participating interests

	Stake (%)
Caja Madrid	52.06
Bancaja	37.70
Caja Insular de Canarias	2.45
Caja de Ávila	2.33
Caixa d'Estalvis Laietana	2.11
Caja Segovia	2.01
Caja Rioja	1.34
Total	**100.0**

Source: BFA

In June 29th, 2010, the FROB approved the subscription of 4,465 million euros in convertible preferred shares, after the Bank of Spain's approval of the integration plan. Recall that according to the Royal Decree-Law 9/2009 such public investments were allowed to support restructuring processes. The injection was used to cover 100% of the €16bn expected loss of the lending portfolio, which, according to their calculation, amounted to €4.2bn net of taxes. Consequently, the solvency ratios remain basically stable.

Figure 3. IPS: Capital ratios

		Post-transaction	
(%)	**Pre-transaction**	**Without conversion**	**With conversión**
Core Tier 1	6.8	5.3	7.3
Tier 1	8.5	9.3	9.3
Total capital	11.3	12.0	12.0

Source: BFA

Both the Board of Directors and the General Assemblies of the savings banks approved the integration contract in July and September, respectively. In December 3rd, 2010, Banco Financiero y de Ahorros (BFA) was founded. The social headquarters were established in Valencia and the operating headquarters in Madrid, the places where Bancaja and Caja Madrid, respectively, were based. Mr. Rodrigo Rato, chairman of Caja Madrid became also BFA's chairman while Mr. José Luis Olivas, chairman of Bancaja, was appointed as vice–chairman in BFA.

4.2. Bankia: The "good bank" becomes public.

On January 1st, 2011, BFA began its operations. According to its initial financial statements, the group had a core capital ratio of 7.1%, a total capital ratio of 11.94%, NPLs ratio stood at 6.3% while coverage ratio was 61.3%, filling all regulatory requirements.

In February 2011, the government approved the Royal Decree–Law 2/2011 modifying the capital requirements. According to the new regulation, financial entities had to meet an 8% or 10% principal capital ratio (principal capital defined as core capital plus public aid) depending on their reliance on capital markets and whether they had or not third investors holding more than 20% of voting rights.

On March 10th, 2011, Bank of Spain released the capital situation of the Spanish entities according to the new regulation. 12 entities did not comply with requirements, summing up €15bn deficit. BFA's deficit amounted to €5.8bn or 2.9% of RWAs. The

Board of Directors announced its intention to go public, therefore reducing its capital needs to €1.8bn.

BFA's management team discarded the idea of listing BFA because its high exposure to real estate assets. They decided to transfer all "good" assets to a new entity, Bankia. This institution would receive overall banking business while BFA would retain the real estate assets, most of the industrial portfolio (ie. Iberdrola and Mapfre) and the most expensive liabilities, ie. the convertible preferred shares subscribed by the FROB.

The aim was simple: creating a new institution that could avoid the reluctance that international investors had to invest on Spanish banks because of the fears about their asset quality related to their exposure to real estate assets. Bankia was created transferring the assets and liabilities to an already existing bank named Altae Banco, S.A. whose owner was Caja Madrid. BFA acquired the banking license and renamed the company to Bankia, S.A. on May 17th, 2011.

On July 20th, 2011, the bank went public. Bankia issued 824mn of new shares that represented 55% of the voting rights in Bankia while BFA maintained a 45% stake. The issuing price was €3.75 per share, below the minimum price set at the beginning of the public offering process. Total proceeds amounted to €3.1bn. Bankia's core capital ratio rose to 9.9%, from 8.0% pre-IPO as of June, 2011. BFA's core capital ratio increased to 9.2% from 7.6%. With this capital injection, BFA and Bankia fulfilled Spanish new capital requirements.

In addition, the European Banking Authority (EBA) published the stress test results and BFA-Bankia surpassed the 5% threshold in the adverse scenario: the core capital Tier 1 was 5.4% once included the proceeds mentioned above.

4.3. FROB intervention.

In February 2012, the government approved the Royal-Decree Law 2/2012 rising the provision requirements for real estate assets. The vicious cycle, banking crisis-sovereign crisis, together with the economic imbalances of the Spanish economy, were negatively impacted public financing: country risk premium was above 300bp and its rising trend seemed to continue. Implementing this measure was an attempt to restore the confidence of the financial markets and, therefore, revert the negative trend of the country risk premium. The overall impact of the measures included in the RDL 2/2012 was estimated at €50bn (including the specific provisions, the generic provisions and the capital add-on). BFA needed to provision a total gross amount of €3.4bn (€2.4bn net of taxes) and to maintain a capital buffer of €2.8bn. Recall that the lending exposure of BFA was c. €40bn and gross foreclosures amounted to €14.0bn (€7.7bn net).

On February 10th, 2012, Bankia released a pretty weak set of results, although they announced the early provision of €1.1bn related to the aforementioned RDL. Net group profit was just €305mn. Revenue generation was poor (Bankia's pro-forma net interest revenue and fee income declined 15% and 13% respectively), asset quality deteriorated sharply and capital generation was minimal (only 20bp in the second half of 2011). Specifically, non-performing loans rose 29.4%, NPL ratio soared to 7.63% (from 5.52% in December 2010 pro-forma) and coverage ratio sunk to 45.2% from 62.9% one year before. BFA's figures were even weaker: core capital ratio was a mere 8.2% by December, 2011. Including the impact of the new regulation, BFA needed €3.0bn of additional capital to meet the 8% target by December, 2012. Bankia did comply with the minimum 8% ratio: the principal capital ratio including the RDL impact was 8.58%

In addition, the International Monetary Fund issued the conclusion report from its mission in April 25th, 2012. The IMF highlighted the unprecedented crisis of the Spanish banking sector due to its exposure to real estate assets and the burst of the preceding bubble. Financial markets were still suspicious about the solvency of the overall Spanish financial system and, specifically, the focus was on BFA-Bankia because it was the weakest one within the systemic institutions. Its large size (c. €300bn in total assets) could imply a massive rescue package, as was confirmed latter on. The share price was falling free: on April, 30th, the price was just €2.593 implying a 30.85% decline from the IPO's price (€3.75).

On top of that, Deloitte, BFA's and Bankia's auditor, refused to sign the auditors' report and, therefore, deny the approval of the financial statements released in February, whose main highlights we have commented before.

On May 4th, 2012, BFA and Bankia placed the 2012 financial statements at the CNMV, without the auditor's report and with more than one month's delay according to the CNMV's requirements.

On May 7th, Mr. Rodrigo Rato, the chairman of BFA and Bankia, resigned and proposed Mr. José Ignacio Goirigolzarri as new chairman for the group.

On May 9th, BFA asks for the total conversion of the €4,465mn in convertible preferred shares that FROB subscribed in 2010. Bank of Spain recognizes that one of the additional requirements they made to the restructuring and recapitalization plan the group presented in March was the reinforcement of corporate governance and the appointment of the new chairman would foster the professionalization of BFA's management and the restructuring plan.

On May 13th, BFA recognizes €4,813mn (€4,722mn for Bankia) as the gross impact of the RDL 18/2012. On May 15th, the 1Q12 results are released, including a warning related to the 2011 statements. On May 16th, Bankia announces its new organization structure.

On May 25th, BFA announces a capital increase at BFA of €19bn that would be subscribed by the Spanish state and a €12bn capital increase in Bankia, with preference subscription rights, totally underwritten by BFA.

On May 28th, the Board of Directors reformulates the 2011 financial statements. BFA lost €3,318mn while Bankia lost €2.979mn.

On June 27th, BFA announces both the new Board of Directors and the conversion of FROB's preferred shares.. The economic value of BFA was set at €–13,635mn and FROB acquires 100% of economic and voting rights of BFA.

On July 24th, Spain and the European authorities signed the Memorandum of Understanding, and BFA/Bankia and Banco Valencia are classified as Group 1 entities.

On September 12th, the FROB injected €4.5bn in BFA in treasury bills in advance of the total aid to be given after the Oliver Wyman's stress test.

On September 29th, Oliver Wyman published the results of the stress test. Bankia had capital needs of €12,230mn in the base scenario and €24,742mn in the adverse scenario.

On November 28th, the European Commission approved the restructuring and recapitalization plan proposed by BFA-Bankia.

On December 27th, €22bn of assets were transferred to Sareb. Out of them, €2.8bn came from BFA and €19.5bn from Bankia. SAREB paid the acquisition with Sareb bonds that were guaranteed by the Spanish State. In 2013, there were some adjustments to these amounts.

On December 28th, the European Commission approved the State Aid, including all condition in the so–called Term Sheet. The €24bn capital needs were covered with three measures: (a) injection of public capital (€17,959mn); (b) a capital increase through a subordinated liabilities exercise (€ 6,669mn) and (c) the reduction in capital consumption due to the transfer of real estate assets to the Sareb (€191mn).

Bankia itself issue €10.7bn in contingent convertible bonds that were subscribed, and lately converted into shares in 2013, by BFA.

In total, according to the Bank of Spain, BFA received a total State Aid of 22,424 million euros while Bankia received 15,638 million euros through intragroup operations with BFA. After implementing the recapitalization plan, BFA increased its stake in Bankia to 68.39%.

4.4. Strategic plan 2012-2015: Goals achieved.

The Term Sheet established the compromises that BFA-Bankia had to implement in order to receive the State Aid. The measures included the following:

1. The branch network had to be reduced by 39%.
2. The employees had to be reduced by 29%.
3. The group had to accumulate an excess of capital of 5,400 million euros.

4. Divestment of non-profitable and non-core assets and stakes. Bankia expected to sell around 50,000 million euros in real estate assets, loan portfolios and stakes in other companies. It included the sale of its bank in Florida.

According of the 2015 annual report, Bankia finished achieved all targets set in its 2012-2015 strategic plan. Main figures of 2015 financial statements are:

1. CET1 ratio (fully-loaded): 12.26%.
2. NPL ratio: 10.8%.
3. 2015 net income:: 1.040 million euros.
4. Cash dividends: 201 million euros in 2015 and 302 million euros in 2016.

Since 2012, BFA has given back its banking license and changed its name to BFA Tenedora de Acciones, S.A.U. In 2014, BFA sold a 7.5% stake of Bankia for a total consideration of 1,304 million euros.

Currently, FROB controls indirectly a 64.47% stake in Bankia, after BFA-Bankia decided to return the money from the IPO to those retail investors that asked for it.

4.5. What will FROB do with its indirect stake in Bankia?

According to the agreements included in the Memorandum of Understanding and the Term Sheet, the FROB has to sell Bankia by 2017. The divestment process started by selling a 7.5% stake in 2014 but its currently interrupted due to the low valuation of Bankia’s shares in the financial markets. Probably, the agreements would be modified for the FROB to have more time to sell the stake in a more benign financial markets scenario. In addition, FROB has already asked for permission to sell its 65% in BMN to Bankia, and merge the two entites.

In order to estimate to the total net amount invested by the Spanish State in Bankia, the following data must be taken into account:

1. The public funds transferred into Bankia were 15,638 million euros of a total consideration of 22,424 million euros injected in BFA.

2. BFA sold a 7.5% of Bankia for an amount of 1,304 million euros.
3. In 2015, Bankia distributed a dividend of 201.55 million euros, of which 128 million euros went into BFA.
4. In 2016, Bankia distributed 302 million euros in dividends, of which 194 million euros corresponded to BFA.

All included, we estimate that the net amount invested in Bankia is 14,012 million euros, after deducting €322mn in dividends and €304mn from the stake's sale. The total net amount invested in BFA is €20,798mn.

Consequently, the FROB's aim would be selling the c. 65% stake in for €14.0bn. This figure implies a total market capitalization for Bankia of €21.5bn or some €1.9 per share. When the FROB sold the 7.5% stake of Bankia by 1,304 million euros, it was valuing Bankia at c. €17.4bn. Should the FROB want to recover the full amount invested in the group, and bearing in mind that BFA net value excluding the stake in Bankia is c. €0, the implied market cap would be €30bn and the price per share €2.7.

Chapter 5. Valuation of Bankia

To address the possibilities for the FROB to recover its investment in Bankia, the valuation of the bank has to be estimated to figure out a price for a possible transaction.

Bankia's valuation has been estimated using the methodologies exposed in chapter 2:

1. Dividend discount model.
2. Comparable trading peers' multiples.
3. Comparable transactions' multiples.
4. Regression model.

5.1. Dividend discount model.

In the chapter 2, the differences between valuing a bank and valuing and industrial company were explained. Banks have several accounting and regulation rules that need to be considered before stating their value.

The most important regulation to be taken into account is Basel III. This regulation establishes different solvency and liquidity requirements that banks have to comply with. Consequently, one should include these constraints when building up the valuation model.

The dividend discount model applied to banks has two important characteristics:

1. Cash and cash equivalents need to be forecasted in the future according to a hypothesis that reflects liquidity requirements. In our model, we will estimate it using a percentage of deposits that has to be maintained as cash and equivalents at the end of each year. If in year t, 10% of deposits are maintained as cash and cash equivalents, the most plausible hypotheses it that in year t+1, the ratio will be similar.

2. Solvency ratios are estimated calculating (a) the net income that the bank will generate in the considered period, (b) the balance sheet for the forthcoming periods and (c) the future evolution of risk weighted assets (RWAs). The latter is probably the most difficult one due to the complex models applied by banks and regulators to calculate them. Once we estimate them, we deduct from net income the amount that has to be retained to finance the growth in RWAs and, therefore, maintain the target Core Equity Tier 1 ratio (CET 1). The rest of the net income can be distributed as dividends. The dividend stream will be discounted at the cost of equity and its present value will be the equity value of Bankia.

Recall that a certain period of time has to be assumed in order to estimate (a) the annual financial statements, (b) the terminal value. For growing companies, ie. technological companies, a longer period of time is necessary in order to stabilize the financials of the company before computing the terminal value. In other cases, when dealing with stable companies, three to five periods are commonly used. Bankia can be considered a stable company now and, consequently, projections to 2020 will be used (five years). The terminal value will be computed using the Gordon Growth Model.

5.1.1. Financial statements' forecasts.

The first step in the valuation process is to make forecasts of the financial statements, both the balance sheet and the profit and loss account. The starting point will be the financial statements of the 2012-2015 period (2011 accounts are considered not to be representative of Bankia). Based on them, some assumptions will be made. At the time of writing this report, Bankia has just published the 1Q2016 results. We will consider them for the projection of 2016.

The financials statements of 2012, 2013, 2014 and 2015 are included in Annex 1. When analyzing them, some insights can be taken for the projections:

1. Year 2012 suffered from a really high cost of risk. Impairments of financial assets were c. €19bn and represented a 14% of loans, a high figure considering the historical average cost of risk of the Spanish institutions, just 50bp. In the following years, the cost of risk steady declines to c. 0.5% in 2015, the figure will be considered for the projections.

2. In 2012, the NPL ratio (NPLs over gross loans) is c. 15%, higher than the average of the sector. This ratio has declined to 11.6% in 2015 due to all the restructuring measures implemented and a more benign economic scenario. We expect net entries to NPLs, which were negative in 2015, to stay below trend due to recoveries and, therefore, a downwards trend on the NPL ratio.
3. Due to the high provisions of 2012, the coverage ratio of NPLs that year is around 61%. This coverage ratio is maintained around 60% all the years and is a good ratio when comparing it with the competitors. This will be considered for the projections and the ratio will be maintained.
4. Interest revenue is decreasing due to lower interest rates and a smaller loan portfolio.
5. Interest costs are also decreasing, due to lower interest rates and less financial liabilities. Deposits' figures, which are cheaper than other financial liabilities, are flat in the period. More importantly, the CASA rate, which measures the percentage of sight deposits over total deposits, increases from 33% to 42%. This change has a positive impact in the net interest margin of Bankia because sight deposits are cheaper than term deposits.
6. Fees to total income are fairly stable all years. In 2013 they are slightly higher but not reflecting a relevant increase.
7. CET 1 phased in increased to 12.26% as of December 2015. This figure exceeds the capital requirements by around 300 basis points.
8. Recurrent ROE surpassed the 10% threshold in 2015 (excluding extraordinary provisions for Bankia's IPO).

As an overall opinion it can be said that the today's Bankia is in a perfect state and its current management has transformed a really problematic entity into a profitable business with good expectations. Unless a major event occurs, the bank is expected to be profitable during the following years if current management policies and practices are maintained and interest rates do not keep decreasing anymore.

It can be observed that the financials of annex 1 are grouped in a way that will facilitate the projections. It is useful to group the financials' accounts into a set of lines more simple to project. Simplification in extreme is not good for projecting but some is needed if the financials are complex. Nevertheless, the aim with this projection is not a binding offer but an approximation to a possible offer, then some flexibility when simplifying can be applied.

The outcome of this simplifying process can be observed in the annex 4, where a simpler balance sheet and profit and loss account are included. This annex includes the results of the projections made according to the drivers and assumptions of annexes 2 and 3, which are explained in the following section.

5.1.2. Drivers and projections.

Once the financial statements are simplified into several easy-to-project lines, the next step is to choose the drivers for projecting them.

A driver must be a ratio or indicator that is based on the account that is projected and something on which that account has some degree of dependency. For example, you can project the milk a farmer can get from his farm based on the number of cows it has. In that case, the ratio to be used is “liters of milk per year divided by number of cows”. Once a tendency is identified in that ratio, it can be supposed that the tendency is going to be maintained during the following years.

In the annex 2 and 3 are included spreadsheets with the drivers that have been used to project the P&L and balance sheet of Bankia. In the annex 2, the first thing that can be observed is the average Euribor 12 months from 2012 to 2020E. That data, extracted from Bloomberg, is used to project the interest margin of Bankia’s P&L in the annex 3.

Following the average Euribor 12M’s line, the projections start with the balance sheet of Bankia:

1. Cash & equivalents: This line is projected based on the cash & equivalents to total deposits ratio. As explained before, it helps to address the issue of liquidity regulation. The year 2015 finished with a 9% ratio, which will be maintained for the rest of the projected years because if the cash decreases there may be some liquidity issues.

2. Legacy financial assets: It contains many assets that are not loans but are also part of the activity of the bank. Since it is complicated to project this line because it depends on many factors, it is supposed that will grow at the same path than gross loans, which fairly represent the business' growth of Bankia.
3. Foreclosed Assets: This line includes all those assets that had to be assumed by Bankia when executing defaulted loans and other assets. All banks have projections about how many of them will be sold each year. We have considered that Bankia will sell a 10% of its foreclosed assets every year. It is a very conservative figure when reading the latest financial releases of many Spanish banks. Nevertheless, assuming a higher rate is risky because in 2015 Bankia only reduced its foreclosed assets by an 8%. Of course, this data is based on net quantities and maybe, in order to be more precise, an in-depth analysis based on gross amounts and impairments is better for projections. The only issue here is that we are trying to be simple and since we have considered that the level of provisions and impairments of the entity is good, dealing with net amounts is not bad for this type of exercise.
4. Investments: The stakes held by Bankia in other entities and businesses have decreased a lot due to the disinvestment process in which the bank has been involved. Now, that the strategic plan has been completed, we have considered that the trend will return back to growth. That growth will be equal to "g" in 2020. In the following sections an explanation of the assumed "g" of 2% will be given.
5. Other assets: This line includes a set of accounts that are considered unimportant or not very important for Bankia's business. Their size are supposed to be related with Bankia's business and they will grow at the same path than gross loans and maintain the size with respect to them that they had at the end of 2015.
6. Loans – gross loans: They are projected on the basis of their yearly growth. In 2015 that growth was still negative and it is expected to continue in the following years until returning to a growth of "g".
7. Legacy financial liabilities: They are the financial liabilities existing in the balance sheet at the end of 2015. They are supposed to disappear along the following years at a rate of 10%, which is considered to be conservative. The legacy financial liabilities are substituted by something called "funding plug", which can be observed in the annex 4. It represents the extra-funding necessary to close the

balance sheet, that is, the financial needs of Bankia. As said, this is very conservative.

8. Other liabilities: This line is similar to the line of other assets. It is projected based on how much of total assets they represent because they are related with them and the size of the business.
9. Deposits: They are projected based on the proportion of gross loans-to-deposits ratio and the figure of 2015 is considered to be constant during the following years. The risk profile of the bank can be supposed to be good today after several years of restructuring process. It is true that there is some margin to increase the loans-to-deposits ratio but it is not conservative. The share of sight vs. term deposits is maintained as of 2015.
10. Minorities: They are projected as the percentage of total assets that they represent. Since the figure is not important because it represents a really low quantity in terms of the other figures, minorities are supposed to be constant in the following years.

After the balance sheet's projections, the annex 2 continues with the P&L:

1. Net fees & commissions: They are projected based on its size with respect to the gross loans and deposits of the year. It is a good ratio because commissions are related with the size of the business and loans and deposits are representing that. The figure of 2015 is kept constant for the projected years because it is considered that since 2013 and 2014 were similar, a 0.4% ratio is stable.
2. Gains on financial assets: They are projected based on their value with respect to financial assets. It is a good measure because the gains on financial assets are originated through those assets. However, for the projected years, a cap of ½ is applied in the ratio of 2015. It is done because the markets are not offering the profitability that were offering before and the interest rates of the Spanish bonds are really low. Also, because the bonds bought by the banks during the past years have been already used to sustain their P&L through the gains on financial assets' line and the ability of this account to keep giving big results in the following years is not the same than before. In addition to that, it is more conservative to suppose a low gain on financial assets.

3. Other income/expenses: This line is projected based on net loans because it is considered to be related with the operating business of Bankia. The figure of 2015 is maintained in the following years because it is between the one of 2013 and 2014, which gives more reliability.
4. Share of profit/loss of companies accounted for using the equity method: This line is projected based on its size with respect to stakes in other companies, which is logical because profit/loss on stakes depends on the value of those stakes. The figure of 2015 is maintained in the future years because there is not relevant data supporting a different assumption.
5. Tax guaranteed: It is a new line to be added in the projected years that represents the 1.5% fee that banks are obliged to pay on outstanding guaranteed DTAs.
6. Other gains/losses (extraordinary): This line is considered to be equal to 0 because no extraordinary events can be forecasted. Also, because in case there is an unexpected contingency because any type of legal or similar issue, it is supposed to be covered in the sale & purchase agreement.
7. Operating expenses or Opex: Many people project the OPEX directly based on the efficiency ratio –opex over gross margin. This is not completely correct because the operating expenses also depend on the size of the business that is being operated, that is, the value of the total assets. In this model we have used a mix of both methods. First, we have calculated the "Opex / Total Average Assets ratio" and supposed that in the following years the ratio will be equal to the one of 2015, which is conservative since the ratio was lower in 2013 and 2014. After doing this, we have introduced a corrective measure in 2017, 2018, 2019 and 2020 which tries to show the expected decrease in operating expenses that the Spanish banking industry will have to apply during the following years.
8. Other impairments: Other impairments, as the ones of the foreclosed assets, are supposed to be already correctly assessed by Bankia. We have supposed that impairments will be zero or near zero in the following years.
9. Provisions: They will be zero in the following years because they are supposed to be adjusted in the sale & purchase agreement.
10. Minorities: Since the minorities of the equity were supposed to be constant as of 2015, something similar should happen with the P&L. A ratio of minorities over net profit is calculated and the figure of 2015 is supposed to be constant in the following years.

11. Tax rate: A tax rate of 25% is assumed. This is in line with the recent tax reductions and similar to the effective tax rate of 2014 and 2015.

Once the main body of the P&L has been projected, the annex 2 continues with some specific issues, the loan-loss reserves and the cost of risk:

1. Loan-loss reserves: They are projected based on the coverage of gross loans. The figure of 2015 is considered to be correct because the NPL ratio is decreasing and, as said before, after implementing the strategic plan the bank is now in a good position in terms of risk management. The figure of 2015 is supposed to be maintained in the projected years.
2. Cost of risk: It is a ratio equal to credit impairments of the P&L over gross loans of the balance sheet. It is useful to analyze the level of loan provisions in the P&L. As it can be observed, the cost of risk has been decreasing over the years. The figure of 2015 will be maintained in the forecasted years because of the reasons explained for the loan-loss reserves and the fact that a 0.5% cost of risk seems good when looking at the competitors.

Finally, the annex 2 finishes projecting the risk-weighted assets (RWA) and CET1. The RWA are projected based on the RWAs' density ratio, which is equal to RWAs over total assets. The figure of 2015 is considered for the forecasted years because there cannot be supposed any change in the business model of Bankia and as said before, after implementing the business plan, it is accepted that the risk position of Bankia is healthy.

A more in-depth analysis of the RWAs must be performed. However, it is not possible to access to the confidential models of Bankia and analyzing such information in the time frame we have for performing this project. Forecasting RWAs based on the RWAs' density ratio is typical in non-binding offers and it should not be an issue for this project.

Referring to the CET1 fully-loaded, Bankia had a 12.3% ratio at the end of 2015. It is a good figure but we consider that in the following years the target should be 11%. Many banks' managers are using the 11% benchmark as a target because a higher ratio is not necessary according to regulation, although it is desirable if you want to be highly covered against any type of risk.

Since we are trying to assess the value of Bankia, we should do that supposing that resources are used in the most efficient way. In our opinion, an 11% CET1 ratio allows such efficiency while maintaining certain margin with respect to the CET1 requirements. Of course, a lower ratio leaves free many capital resources that can be used to generate more business or distribute an extraordinary dividend. In the following sections that is considered when calculating the final equity value of Bankia.

Lastly, there is only one last line to project: net interest margin. In the annex 3 it is done through the following process:

1. The interest earning assets and interest bearing liabilities are summarized in an ordered and clean way.
2. Interest income is divided over total average interest earning assets to calculate their yearly yield. After that, the average Euribor 12M is subtracted from the yield to get the spread that the bank is having with respect to it. That spread, the one of 2015, is projected for the following years.
3. The same process is applied to the interest expenses.
4. The result of points 2 and 3 gives the net interest margin.

The outcome of all these projections can be observed in the annex 4, which is the basis for the valuation of Bankia in the section C.

NPLs are not projected because it is not necessary for such valuation and it may add unnecessary complexity.

5.1.3. Valuation.

The valuation spreadsheet is included in the annex 5. This annex contains what is probably one of the most important parts of the valuation model. Its first part, which is called “Capital base & distributable dividend”, calculates the capital that is left for being distributed as dividend or used to generate more business after fulfilling with the capital requirements.

The line referred to “Total Risk Weighted Assets” calculates the total RWAs of Bankia based on the driver described in the previous section. The next two lines, called “CET1 base” and “CET1 ratio” calculate the capital needed to be retained for having a Core Equity Tier 1 of 11%.

The next group of lines calculate the capital left after fulfilling with the capital requirements. For instance, at the end of 2015 the capital base of Bankia was 9,968 million euros, which corresponded to a CET1 ratio of 12.3%. At the end of 2016, in order to achieve the desirable ratio of 11%, the capital needed is 8,754 million euros. It means that part of the 9,968 million euros of the already existing capital base are unnecessary and it also means that there is no need of retaining the 604 million euros of net income from the year. Both quantities, which add 1,816 million euros, can be distributed as dividends or used to generate more business.

In the following years the trend changes and in 2018 part of the net income is used to increase the capital base. As RWAs increase, a larger capital base is needed for sustaining a CET1 ratio of 11%.

In the next set of lines, called “Valuation”, the proper valuation of the free capital to distribute or use to generate more business is performed. This capital is discounted using the cost of capital because it is the same as equity and is contributed by the shareholders of Bankia. In this case we are using a cost of capital of 9.61% and a terminal growth rate of 2%. In the next section is explained how the cost of equity and the growth rate have been determined.

The outcome given through this method gives an equity value of 8,004 million euros.

There could be a reduction of the equity value of Bankia because of its IPO. Recently, the bank has promised to return their money to all minority shareholders that had participated in its IPO and has registered provisions for recognizing the loss. However, some institutional shareholders that were not claiming their investment yet are starting to think about claiming their money back too. If the judges decide to favor those institutional shareholders, the value of Bankia will be lower because more invested money needs to be returned to shareholders.

The last part of this valuation process assesses the value per share of Bankia. The accounts of 2015 declared that there were a total of 11,517,328,544 shares. Of them, 39,867,346 were owned by Bankia at the closing of the year. It means that the outstanding shares at that moment were 11,477,461,198. Based on that, dividing the value of Bankia by the number of shares gives a value per share of 0.697€. The current share price in the Madrid Stock Exchange is 0.647€ per share –closing price at July 1st, 2016. It means that right now Bankia is undervalued according to this analysis.

5.1.4. Cost of equity and growth rate: Sensitivity analysis.

Determining the cost of equity and growth rate is key for calculating Bankia's value. Any change in those parameters means a change in the value of the entity.

In this case, we have calculated the cost of equity using the Capital Asset Pricing Method by comparing the share price performance with the one of the Madrid Stock Market General Index in a period of time that range from June 1st 2013 to June 8th 2016. This analysis gave us a beta coefficient of 1.214. We have decided to use that period for the beta calculation –2-year beta– because before that date the stock of Bankia was strongly influenced by the restructuring and intervention process.

After that, we had to determine the risk-free rate of return and the return of the market:

1. The market is the Madrid Stock Exchange General Index. At June 8th, 2016 its closing value was 889.7. This index was created in 1985 and its closing value at December 31st 1985 was 100. It means that the yearly return of the Madrid Stock Exchange has been equal to 7.93%.
2. The risk-free rate of return chosen was the German 10Y bond, which in June 8th 2016, was trading at 0.051% according to the generic indicator of Bloomberg.

With this data, the market premium is equal to 7.88% and multiplying that by the beta gives a value of 9.56%. Adding the risk-free rate of return to it results in a cost of equity of 9.6147%.

For the growth rate we have analyzed the historical GDP growth of Spain. We have considered that a 2% growth rate is good for this analysis because:

1. Bankia is an already established enterprise.
2. It operates in Spain and the country long-term GDP growth forecasts are similar to the ones of any other European developed country.
3. The growth rate cannot be larger than the Spanish maximum potential GDP growth because otherwise Bankia would end up being larger than the economy in which is operating and that is impossible.
4. At the end of the annex 5 is a sensitivity analysis of both variables, the cost of equity and the growth rate.

5.2. Comparable Trading Peers' Multiples.

Eight Spanish banks, including Bankia, are public:

1. Bankia
2. BBVA.
3. Banco Santander.
4. Banco Popular.
5. Bankinter.
6. Banco Sabadell.
7. Liberbank.
8. Caixabank.

The multiples used are price-to-earnings (P/E) and price-to-book (P/BV).

The valuation of Bankia according to all these multiples in the years 2016, 2017 and 2018 is as follows:

Figure 4. Bankia: comparable multiples' valuation

	P/E (x)			P/BV (x)		
	2016e	2017e	2018e	2016e	2017e	2018e
Bankia	9.9	9.3	9.0	0.7	0.7	0.7
BBVA	10.2	8.6	7.7	0.8	0.8	0.8
Santander	10.0	9.1	8.0	0.7	0.7	0.7
Popular	--	7.9	6.6	-	-	-
Bankinter	14.5	13.4	12.4	-	-	-
Liberbank	8.7	7.4	6.4	-	.	.
Sabadell	10.1	9.4	7.9	0.7	0.7	0.7
Caixabank	11.3	8.5	7.6	0.6	0.6	0.6
Average	**10.8**	**9.2**	**8.1**	**0.70**	**0.70**	**0.70**
Maximum	**14.5**	**13.4**	**12.4**	**0.8**	**0.8**	**0.8**
Minimum	**8.7**	**7.4**	**6.4**	**0.6**	**0.6**	**0.6**
Theoretical price	**6,529**	**5,615**	**5,094**	**8,040**	**7,986**	**8,008**
Maximum	**8,774**	**8,201**	**7,790**	**9,452**	**9,388**	**9,415**
Minimum	**5,232**	**4,505**	**4,044**	**6,683**	**6,639**	**6,657**

Source: Bloomberg and own estimates

5.3. Comparable transactions' multiples.

There have been many banking transactions in Spain in the last years. However, most of them are not comparable with a divestment of Bankia's shares. Firstly, non-quoted institutions were included in most of the deals. Secondly, most of the acquired institutions were troubled ones or recently recapitalized, and many deals included asset protection schemes.

To value Bankia, we have selected the following transactions:

Figure 5. Bankia: comparable transactions' valuation

Date	Target	Bidder	Price (M€)	P/B	P/E
09/01/2015	Banco Santander (7% stake)	George Soros	500	1.3	12.9
10/10/2011	Banco Pastor	Banco Popular	1,349	0.8	16.8
28/02/2014	Bankia (7.5% stake)	BFA-FROB	1,304	1.5	42.7

Source: Author's elaboration based on Mergermarket

The most interesting of them is the one of February 28th, 2014. It was the first divestment of Bankia carried out by the FROB, as explained before. It resulted in an equity value of the 100% of Bankia of approximately 17,350 million euros. The price-to-earnings of that transaction is really high and it will not be used for this analysis. However, it is a relevant transaction and its price-to-book value is used for this valuation.

The results of the analysis were the following:

Figure 6. Bankia: comparable transactions' results (€Mn)

	P/E	P/B
Average	15,351	14,331
Median	15,351	15,417
Maximum	17,377	18,088
Minimum	13,325	9,487

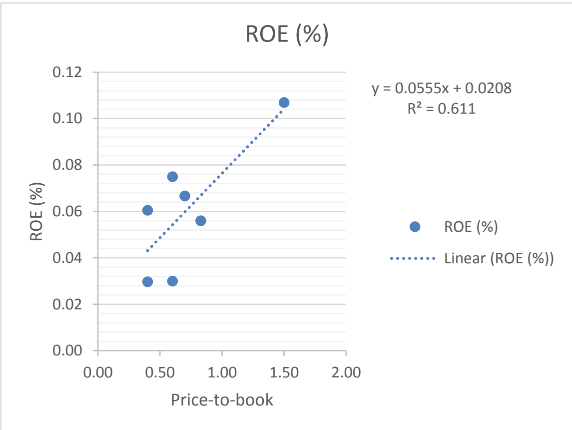
Source: Author's elaboration

The same results can be consulted in the annex 7. Most of the data about the transaction was extracted at May 31st 2016 from Mergermarket.com, an important database for this type of information.

5.4. Regression model.

According to Damodaran (2013), we have regressed the price-to-book versus their ROE of seven Spanish banks. The resulting graph and equation are the following:

Figure 7. Bankia: regression model



Source: Author's elaboration based on Bloomberg and Financial Statements

The outcome of this analysis is a Bankia's price to book value of 1.10 and an equity value of 13,077 million euros. The Bankia's return on equity used was equal to

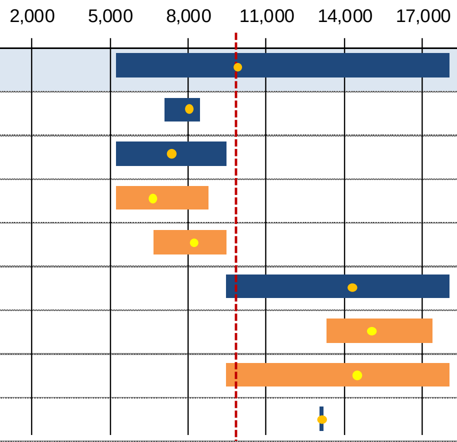
8.2%, which is the result of dividing the 1Q 2016 LTM net attributable profit over the shareholders’ equity at that moment.

It is not surprising to find that there is a positive correlation between the ROE of each entity and their price-to-book value. A higher ROE means a higher capitalization in the financial markets, which corresponds to a higher ratio.

5.5. Final valuation.

The following football field reflects the different equity values of each methodology used for this project:

Figure 8. Bankia: valuation summary



EUR Mn	Equity value Base EUR Mn	High EUR Mn	Low EUR Mn	P/BV	PE LTM
Summary - Average	**9,847**	**18,088**	**5,232**	**0.8x**	**9.5x**
DDM	**8,004**	**8,457**	**7,081**	**0.7x**	**7.7x**
Trading Peers	**7,285**	**9,452**	**5,232**	**0.6x**	**7.1x**
Trading Peers' PE	6,529	8,774	5,232	0.6x	6.3x
Trading Peers' PB	8,040	9,452	6,683	0.7x	7.8x
Peers' transactions	**14,253**	**18,088**	**9,487**	**1.2x**	**13.8x**
Transaction Peers' PE	15,351	17,377	13,325	1.3x	14.9x
Transaction Peers' PB	14,331	18,088	9,487	1.2x	13.9x
Regression Analysis	**13,077**	**n.a.**	**n.a.**	**1.1x**	**12.7x**

Source: Bloomberg and Author’s elaboration

The price-to-book value and price-to-earnings shown refer to the base value divided by the book value and last-twelve-months’ earnings of the 1st quarter, 2016.

The final value of Bankia is 9,603 million euros considering all the different approaches. However, the fair value of Bankia’s equity according to the Dividend Discount Model is 8,004 million euros. Some margin can be given to the cost of equity and growth rate. In that case, the value would be fluctuating between 7,081 and 8,457 million euros.

Chapter 6. Conclusions.

Bankia is in a good position when looking at its Spanish peers. However, its current value is not large enough to recover the money invested by the FROB.

In this project, the net investment of the FROB was determined as:

1. 14,012 million euros in Bankia.
2. 20,798 million euros in the BFA.
3. The indirect stake of the FROB in Bankia is equal to approximately 64.47% of total equity.

According to the Dividend Discount Model, the current value of the FROB's stake is 5,160 million euros. If all the valuation methods are taken together, the value of the FROB stake fluctuates between 11,661 million euros and 3,373 million euros. The previous FROB divestment (7.5% of Bankia was sold on February 28th 2014) was executed at an equivalent value for the 64.47% stake of 11,209 million euros.

Several things have to be remarked:

1. The Dividend Discount Model gives us the fair value of an entity but the other methods are always comparing the analyzed entity with other peers and transactions. Those transactions are good for comparison and to know what would happen in case of a transaction but not to know our entity's fair value, though some insights can be taken.
2. The current financial markets are not as they were in 2014, when the 7.5% stake was sold. Now, they are under higher volatility and are riskier. It means that valuations are lower and a transaction could be undervalued in respect to the value calculated in the Dividend Discount Model. Risk premiums are high due to political uncertainty and doubts on global growth forecasts.

From all of this, two conclusions can be drawn:

1. Right now, it is not possible for the FROB to recover the full amount invested in Bankia through the financial markets. The market capitalization of the bank has to increase a 165.4% in order to be able to recover the 14,012 million euros invested in Bankia.
2. The current Dividend Discount Model valuation does not justify a value large enough to recover the amount invested by the FROB unless a significantly lower required rate of return is accepted. Given the current uncertainty environment, the risks jeopardizing the banking business –*fintechs*, low interest rates, macroeconomic instability– and the problems that arise from divesting a stake of that size in terms of finding a large valuation, it is probably impossible to recover the investment of the FROB today.

In consequence, our main conclusion is that, under current market conditions, it is probably impossible for the FROB to sell its stake in Bankia and recover the investment made when the bail-out was done. If an operation is attempted, the tax-payers will lose money and the promise given by the Government about not public money lost in the bail-outs will be a lie.

The only solution we find is to keep the stake in Bankia as a public long-term investment. Bankia is a bank with a good and healthy business and over the time, the Spanish State can recover its investment through dividends and once the value of the bank increases when its business grows, it can be sold at a higher price. This strategy has risks but if current management policies are maintained and the environment in which the bank operates does not worsen, it will be probably successful. Nevertheless, this is a long-term solution and the State will not recover its investment by 2017.

There are other solutions for Bankia but they are more aggressive. For instance, it could be merged with other intervened banks to make it more attractive. However, it may affect the current risk profile of Bankia. Another solution can be selling Bankia to a Spanish bank that can take advantage of the synergies arising from the transaction and, in consequence, pay a higher price than an industrial investor. Nevertheless, the price has to increase in such amount that it is really difficult to find a solution like that one.

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Annex 1. Bankia: Financial statements

Balance sheet

In Eur Mn	Dec-12	Dec-13	Dec-14	Dec-15
Cash & equivalents	12,558	12,668	13,894	9,422
Cash and deposits in central banks	4,570	3,449	2,927	2,979
Deposits in credit entities	7,988	9,219	10,967	6,443
o.w. Trading portfolio	0	0	0	0
o.w. Loans and receivables	7,988	9,219	10,967	6,443
Financial assets	71,464	69,475	63,159	55,678
Trading portfolio	387	207	158	126
o.w. Loans and advances to customers	40	3	0	0
o.w. Debt securities	324	166	84	54
o.w. Equity instruments	23	39	74	72
Other financial assets at fair value through profit or loss	16	0	0	0
o.w. Debt securities	0	0	0	0
o.w. Equity instruments	16	0	0	0
Available-for-sale financial assets	39,686	40,704	34,772	31,089
o.w. Debt securities	39,686	40,704	34,772	31,089
o.w. Equity instruments	0	0	0	0
Debt securities (l&r)	2,215	1,584	1,569	762
Held-to-maturity investments	29,159	26,980	26,661	23,701
Changes in the fair value of hedged items in portfolio hedges of interest ra	0	0	0	0
Net Loans	134,137	119,116	112,691	110,570
Gross performing loans	126,894	110,827	106,085	105,735
Desglose por modalidad y situación del crédito	126,894	110,827	106,085	105,735
Commercial loans	2,762	2,591	2,370	3,775
Secured loans	86,401	79,877	75,530	71,324
Repos	10	26	27	1,096
Other term loans	33,240	25,065	25,421	25,407
Overdrafts & others	2,827	2,690	2,269	2,091
Other financial assets	1,654	577	469	2,043
Gross NPLs	18,803	18,995	15,696	12,252
(+) Accrued interest & others	46	(6)	(13)	(9)
(-) Loan loss reserves	(11,607)	(10,700)	(9,077)	(7,407)
Public Administrations	0	0	0	0
Other private sectors	(11,607)	(10,700)	(9,077)	(7,407)
Derivatives	41,560	26,296	23,987	16,149
o.w. Trading	35,385	22,037	18,448	12,076
o.w. Deferred	6,174	4,260	5,539	4,073
Investments	300	150	298	285
o.w. Associates	0	0	298	285
o.w. Jointly-controlled entities	300	150	0	0
Activos fiscales	9,018	8,758	8,548	8,356
o.w. Current	109	130	196	274
o.w. Deferred	8,909	8,629	8,352	8,082
Intangible	69	81	197	203
o.w. Goodwill	0	0	102	98
o.w. Other intangible assets	69	81	94	105
Other assets	13,204	15,026	10,875	6,305
o.w. Non current assets held for sale	9,506	12,000	7,563	2,962
o.w. Tangible assets	1,850	1,926	1,862	2,058
o.w. Reinsurance assets	1	1	0	0
o.w. Insurance contracts linked to pensions	406	202	384	359
o.w. Other assets	1,440	896	1,066	927
Total Assets	**282,310**	**251,569**	**233,649**	**206,970**

Deposits	108,324	100,841	104,664	103,465
Public administrations	*6,804*	*4,302*	*6,294*	*6,777*
Other private sectors: Residents	98,086	93,950	95,387	93,819
o.w. Current accounts	*12,040*	*11,541*	*13,276*	*16,500*
o.w. Savings accounts	*23,687*	*23,646*	*24,178*	*26,490*
o.w. Time deposits	*62,358*	*58,762*	*57,934*	*50,829*
o.w. Covered bonds	*10,558*	*9,316*	*7,861*	*6,584*
Other private sectors: Non residents	1,339	1,156	1,227	1,395
o.w. Other accounts	*1,339*	*1,156*	*1,227*	*1,395*
Valuation adjustments	*2,095*	*1,434*	*1,756*	*1,474*
Financial liabilities	135,398	107,298	88,476	72,825
Repos	2,580	7,702	2,143	5,237
o.w. Public administratoins	*0*	*0*	*0*	*0*
o.w. Other private sectors: Residents (Repos & other accounts)	*1,537*	*6,225*	*868*	*3,637*
o.w. Other private sectors: Non residents	*1,042*	*1,477*	*1,275*	*1,600*
Customer deposits (trading portfolio)	*0*	*0*	*0*	*0*
Deposits from central banks	*51,955*	*43,406*	*36,500*	*19,474*
Deposits from credit institutions	26,081	26,218	23,965	23,228
o.w. Trading portfolio	*0*	*0*	*0*	*0*
o.w. Financial liabilities at amortised cost	*26,081*	*26,218*	*23,965*	*23,228*
Marketable securities	*37,335*	*28,139*	*23,350*	*22,881*
Subordinated liabilities	*15,641*	*0*	*1,043*	*1,046*
Short positions (trading portfolio)	*0*	*107*	*58*	*14*
Other financial liabilities	*1,808*	*1,727*	*1,417*	*945*
Derivatives	36,445	22,008	20,556	13,372
o.w. Trading	*33,655*	*20,111*	*18,066*	*12,394*
o.w. Deferred	*2,790*	*1,897*	*2,490*	*978*
Liabilities under insurance contracts	*262*	*238*	*0*	*0*
Provisions	*2,869*	*1,706*	*1,706*	*2,898*
Tax liabilties	1,059	1,177	1,179	881
o.w. Current	*43*	*26*	*21*	*0*
o.w. Deferred	*1,017*	*1,152*	*1,159*	*881*
Other liabilities	*4,007*	*6,940*	*4,535*	*833*
Total liabilities	**288,366**	**240,209**	**221,115**	**194,274**
Equity	(6,008)	11,399	12,547	12,630
Own funds	(5,204)	10,657	11,331	11,934
Valuation adjustments	*(804)*	*742*	*1,216*	*696*
Minorities	(48)	(40)	(13)	66
Total liabilities and equity	**282,310**	**251,569**	**233,649**	**206,970**

P&L

In Eur Mn	Dec-12	Dec-13	Dec-14	Dec-15
Interest income	7,501	5,377	4,687	3,677
Interest Expenses	(4,412)	(2,952)	(1,760)	(937)
Net Interest Income	**3,089**	**2,425**	**2,927**	**2,740**
Net fees and commissions	992	935	948	938
Gains on financial assets and others	393	473	263	349
o.w. Return on equity instruments	*38*	*9*	*5*	*6*
o.w. Share of profit/(loss) of companies accounted using the equ	*(32)*	*29*	*32*	*32*
o.w. Gains on financial assets	348	415	218	281
o.w. Exchange differences (net)	*39*	*20*	*8*	*30*
Other net operating income	(464)	(351)	(129)	(220)
Other operating income	376	144	226	77
Other operating expenses	(840)	(495)	(355)	(297)
Gross margin	**4,010**	**3,482**	**4,009**	**3,806**
Operating Expenses	(3,075)	(1,923)	(1,748)	(1,630)
Personnel	*(1,353)*	*(1,117)*	*(987)*	*(971)*
SG&A	*(664)*	*(613)*	*(599)*	*(541)*
D&A	(276)	(175)	(156)	(147)
o.w. Depreciation	(184)	(118)	(99)	(95)
o.w. Amortization	*(92)*	*(58)*	*(57)*	*(52)*
Other impariments (Impairmet of other assets)	*(782)*	*(18)*	*(6)*	*28*
Total margin	**935**	**1,559**	**2,260**	**2,176**
Provisions	*(1,832)*	*(180)*	*(208)*	*(152)*
Impairments for Financial Assets	(18,932)	(1,249)	(950)	(583)
Profit before taxes and extraordinaries	**(19,829)**	**130**	**1,102**	**1,441**
Badwill	*0*	*0*	*0*	*0*
Gains/(losses) on disposal of assets not classified as non-current a:	*18*	*31*	*(7)*	*37*
Gains/(losses) on disposal of assets hel for sale not classified as di:	*(2,379)*	*(30)*	*(183)*	*(26)*
Profit before taxes (PBT)	**(22,189)**	**131**	**912**	**1,452**
Taxes	*2,997*	*157*	*(226)*	*(391)*
Profit from continuing operations	**(19,193)**	**288**	**686**	**1,061**
Profit/(loss) from discntinued operations (net)	*()*	*117*	*85*	*0*
Net Profit	**(19,193)**	**405**	**771**	**1,061**
o.w. owed to the Company	*(19,056)*	*408*	*747*	*1,040*
o.w. owed to minorities	*(136)*	*(3)*	*24*	*21*

ROA (%)	-6.8%	0.1%	0.3%	0.5%
ROE (%)	316.9%	2.5%	5.5%	8.4%

Annex 2. Drivers

Macro

- Market data

Interest Rates	Driver	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Average Euribor 12M	%	1.2%	0.54%	0.49%	0.18%	-0.06%	0.05%	0.15%	0.32%	0.56%

Balance sheet

- Assets

Non-loan accounts

Item	Driver	Dec-12	Dec-13	Dec-14	Proforma Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Cash & equivalents	*% deposits*	12%	13%	13%	*9%*	*9%*	*9%*	*9%*	*9%*	*9%*
Legacy financial assets	*% growth of gross loans*		-10.9%	-6.2%	*-3.1%*	*-1.8%*	*-0.6%*	*0.7%*	*2.0%*	*2.0%*
Foreclosed Assets	*% growth*		13%	9%	*-8%*	*-10%*	*-10%*	*-10%*	*-10%*	*-10%*
Investments	*% growth*		-50.0%	98.6%	-4.3%	*-2.7%*	*-1.2%*	*0.4%*	*2.0%*	*2.0%*
Other assets	*% gross loans*	36%	30%	27%	17%	*17%*	*17%*	*17%*	*17%*	*17%*

Loans

Item	Driver	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Gross Loans	*% growth*		-10.9%	-6.2%	*-3.1%*	*-1.8%*	*-0.6%*	*0.7%*	*2.0%*	*2.0%*

Liabilities

Non-deposits accounts

Item	Driver	Dec-12	Dec-13	Dec-14	Proforma Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Legacy financial liabilities	*% growth*		-23%	-1%	*-35%*	*-10%*	*-10%*	*-10%*	*-10%*	*-10%*
Other liabilities	*% assets*	16%	13%	12%	*9%*	*9%*	*9%*	*9%*	*9%*	*9%*

Deposit base

Deposits	Driver	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Total	***Gross Loans to Deposits***	134.5%	128.7%	116.3%	*114%*	*114%*	*114%*	*114%*	*114%*	*114%*

% s./ Total Depos POP	Driver	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Current & savings accounts	*% Depos*	33%	35%	36%	*42%*	*42%*	*42%*	*42%*	*42%*	*42%*
Time deposits	*% Depos*	67%	65%	64%	*58%*	*58%*	*58%*	*58%*	*58%*	*58%*

Equity

Minorities	Dirver	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Minorities	*% assets*	-0.02%	-0.02%	-0.01%	*0.03%*	*0.03%*	*0.03%*	*0.03%*	*0.03%*	*0.03%*

P&L

Other revenues

Item	Dirver	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Net fees & commissions	*% average gross loans & deposits*		0.4%	0.4%	*0.4%*	*0.4%*	*0.4%*	*0.4%*	*0.4%*	*0.4%*
Gains on financial assets	*% Av. Securities*		0.6%	0.3%	*0.5%*	*0.2%*	*0.2%*	*0.2%*	*0.2%*	*0.2%*
Other income/expenses	*% av. Loans*		(0.25%)	(0.10%)	*(0.17%)*	*(0.17%)*	*(0.17%)*	*(0.17%)*	*(0.17%)*	*(0.17%)*
Share of profit/loss of companies accounted for using the equity method	*% average investments*		(10.8%)	19.6%	*10.8%*	*10.8%*	*10.8%*	*10.8%*	*10.8%*	*10.8%*
Tax guarantee	*1.50%*		-	-	-	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*
Other gains/losses (extraordinary)	*In EUR Mn*	(2,361)	119	(105)	11	-	-	-	-	-

Other expenses

Item	Dirver	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Opex	*% Average assets*		(0.7%)	(0.7%)	(0.8%)	*(0.75%)*	*(0.743%)*	*(0.7%)*	*(0.7%)*	*(0.7%)*
Corrective Measure	*% Efficiency ratio*	-	-	-	-	-	*0.01%*	*0.01%*	*0.01%*	*0.01%*
Opex (check)	*% Efficiency ratio*	57.2%	54.7%	43.5%	43.6%	*52.5%*	*51.7%*	*50.8%*	*49.9%*	*48.9%*
Other impariments	*in EUR Mn*	(782)	(18)	(6)	28	-	-	-	-	-
Provisions	*in EUR Mn*	(63)	(60)	170	-	-	-	-	-	-
Minorities	*% Net profit*	0.7%	(0.7%)	3.1%	1.9%	*1.9%*	*1.9%*	*1.9%*	*1.9%*	*1.9%*

Taxes

Item	Dirver	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Effective tax rate	*% PBT*	(14%)	63%	(23%)	*(27%)*	*(25%)*	*(25%)*	*(25%)*	*(25%)*	*(25%)*
Tax Due	*In EUR Mn*	2,997	157	(226)	(391)	*(205)*	*(207)*	*(213)*	*(223)*	*(235)*
Guaranteed DTA	*In EUR Mn*	-	-	5,522	5,486	*5,281*	*5,073*	*4,860*	*4,637*	*4,403*
Non-guranteed DTA		-	-	3,026	2,870	*2,583*	*2,325*	*2,092*	*1,883*	*1,695*

Credity quality

Coverage

% coverage	Dirver	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Gross loans coverage	*% Gross Loans*	8.0%	8.2%	7.5%	*6.3%*	*6.3%*	*6.3%*	*6.3%*	*6.3%*	*6.3%*

Other cost of risk

% cost of risk	Dirver	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Other	*% gross loans*	(13.0%)	(1.0%)	(0.8%)	*(0.5%)*	*(0.5%)*	*(0.5%)*	*(0.5%)*	*(0.5%)*	*(0.5%)*

RWA & capital base assumptions

RWA

%	Dirver	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Total RWA	*% of assets*		39.1%	37.9%	39.3%	39.3%	39.3%	39.3%	39.3%	39.3%

CET1 base

%	Dirver	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
% target ratio	*%*		9%	10.6%	*12.3%*	*11.0%*	*11.0%*	*11.0%*	*11.0%*	*11.0%*

Annex 3. Net interest income

Interest Earning Assets

- **Interest earning assets**

In EUR Mn	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Gross Loans	145,744	129,816	121,769	117,977	115,812	115,167	115,999	118,319	120,685
Financial Assets	71,464	69,475	63,159	55,678	54,657	54,352	54,745	55,839	56,956
Total interest earning assets	**217,208**	**199,290**	**184,928**	**173,656**	**170,469**	**169,520**	**170,743**	**174,158**	**177,641**

- **Cash**

In EUR Mn	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Cash & equivalents	12,558	12,668	13,894	9,422	9,249	9,198	9,264	9,450	9,639
Cash PLUG	-	-	-	-	-	-	-	-	-
Total other interest earning assets	**12,558**	**12,668**	**13,894**	**9,422**	**9,249**	**9,198**	**9,264**	**9,450**	**9,639**

Interest Bearing Liabilities

- **Customer deposit base**

In EUR Mn	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Sight	35,728	35,187	37,454	42,990	42,201	41,966	42,269	43,114	43,977
Time deposits	72,597	65,654	67,210	60,475	59,365	59,034	59,460	60,650	61,863
Total	**108,324**	**100,841**	**104,664**	**103,465**	**101,566**	**101,000**	**101,729**	**103,764**	**105,839**

- **Other interest bearing liabilities**

In EUR Mn	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Legacy financial liabilities	135,398	107,298	88,476	72,825	65,542	58,988	53,089	47,780	43,002
Funding PLUG	-	-	-	-	7,425	13,003	18,812	24,917	30,541
Total	**135,398**	**107,298**	**88,476**	**72,825**	**72,968**	**71,991**	**71,901**	**72,697**	**73,543**

Interest Income

Average balance - Interest Earning Assets

In EUR Mn	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Loans		137,780	125,792	119,873	116,895	115,490	115,583	117,159	119,502
Securities		70,469	66,317	59,419	55,168	54,505	54,548	55,292	56,398
Total average IEA		**208,249**	**192,109**	**179,292**	**172,062**	**169,994**	**170,131**	**172,451**	**175,900**

Interest Income

In EUR Mn	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Interest Income	**7,501**	**5,377**	**4,687**	**3,677**	**2,595**	**2,743**	**2,909**	**3,248**	**3,731**

Interest Income (%)

In %	*Dirver*	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Interest Income (%)	*v. Balance IEA*		2.6%	2.4%	2.1%	*1.5%*	*1.6%*	*1.7%*	*1.9%*	*2.1%*
Euribor 12M Spread	Spread		1.4%	1.9%	1.6%	*1.6%*	*1.6%*	*1.6%*	*1.6%*	*1.6%*

Interest Expenses

Average balance - Interest Bearing Liabilities

In EUR Mn	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Deposits		104,583	102,752	104,064	102,515	101,283	101,365	102,747	104,802
Financial liabilities		121,348	97,887	80,650	72,896	72,480	71,946	72,299	73,120
Total average IBL		**225,931**	**200,639**	**184,714**	**175,412**	**173,763**	**173,311**	**175,046**	**177,922**

Interest Expeses

In EUR Mn	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Interest Expenses	**(4,412)**	**(2,952)**	**(1,760)**	**(937)**	**(479)**	**(658)**	**(823)**	**(1,135)**	**(1,577)**

Interest Expenses (%)

In %	*Dirver*	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Interest Expenses (%)	*v. Balance IBL*		(1.3%)	(0.9%)	(0.5%)	*(0.3%)*	*(0.4%)*	*(0.5%)*	*(0.6%)*	*(0.9%)*
Euribor 12M Spread	Spread		-0.8%	-0.4%	-0.3%	*(0.3%)*	*(0.3%)*	*(0.3%)*	*(0.3%)*	*(0.3%)*

NIM

NIM (%)

In %	*Dirver*	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
NIM (%)	*v. Balance IBL*		1.3%	1.6%	1.5%	*1.2%*	*1.2%*	*1.2%*	*1.2%*	*1.2%*
Euribor 12M Spread	Spread		0.7%	1.1%	1.4%	*1.3%*	*1.2%*	*1.1%*	*0.9%*	*0.7%*

Annex 4. Forecasts and KPIs

Balance sheet

In EUR Mn	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Cash & Equivalents	12,558	12,668	13,894	9,422	9,249	9,198	9,264	9,450	9,639
Financial assets - Securities	71,464	69,475	63,159	55,678	54,657	54,352	54,745	55,839	56,956
Legacy financial assets	71,464	69,475	63,159	55,678	54,657	54,352	54,745	55,839	56,956
Cash PLUG	-	-	-	-	-	-	-	-	-
Net loans	134,137	119,116	112,691	110,570	108,541	107,936	108,715	110,890	113,107
Gross Loans	145,744	129,816	121,769	117,977	115,812	115,167	115,999	118,319	120,685
(-) Loan loss reserves	(11,607)	(10,700)	(9,077)	(7,407)	(7,271)	(7,231)	(7,283)	(7,429)	(7,577)
Tax Assets	9,018	8,758	8,548	8,356	7,864	7,398	6,952	6,520	6,097
o.w. Guaranteed	-	-	5,522	5,486	5,281	5,073	4,860	4,637	4,403
o.w. Non-Guaranteed	-	-	3,026	2,870	2,583	2,325	2,092	1,883	1,695
Foreclosed Assets	2,228	2,520	2,740	2,513	2,261	2,035	1,832	1,649	1,484
Investments	300	150	298	285	277	274	275	281	286
Other assets	52,605	38,883	32,318	20,145	19,775	19,665	19,807	20,203	20,607
Total assets	**282,310**	**251,569**	**233,649**	**206,970**	**202,625**	**200,860**	**201,591**	**204,832**	**208,177**
Customer Deposits	108,324	100,841	104,664	103,465	101,566	101,000	101,729	103,764	105,839
Sight	35,728	35,187	37,454	42,990	42,201	41,966	42,269	43,114	43,977
Term	72,597	65,654	67,210	60,475	59,365	59,034	59,460	60,650	61,863
Funds borrowed (incl. Funding Plug)	135,398	107,298	88,476	72,825	72,968	71,991	71,901	72,697	73,543
Legacy financial liabilities	135,398	107,298	88,476	72,825	65,542	58,988	53,089	47,780	43,002
Funding PLUG	-	-	-	-	7,425	13,003	18,812	24,917	30,541
Other liabilities	44,643	32,070	27,976	17,984	16,609	16,462	16,523	16,792	17,070
Total liabilities	**288,366**	**240,209**	**221,115**	**194,274**	**191,142**	**189,454**	**190,153**	**193,253**	**196,453**

Shareholder's equity	(6,008)	11,399	12,547	12,630	11,417	11,341	11,373	11,513	11,657
Minorities	(48)	(40)	(13)	66	65	64	65	66	67
Total equity	**(6,056)**	**11,360**	**12,533**	**12,696**	**11,482**	**11,406**	**11,437**	**11,579**	**11,724**
Total equity & liabilities	**282,310**	**251,569**	**233,649**	**206,970**	**202,625**	**200,860**	**201,591**	**204,832**	**208,177**
Check	-	-	-	-	-	-	-	-	-

Balance PLUG	**-**	**-**	**-**	**-**	**7,425**	**13,003**	**18,812**	**24,917**	**30,541**
Cash PLUG	-	-	-	-	-	-	-	-	-
Funding PLUG	-	-	-	-	7,425	13,003	18,812	24,917	30,541

P&L

In EUR Mn	Dec-12	Dec-13	Dec-14	*Actual* Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Interest Income	7,501	5,377	4,687	3,677	2,595	2,743	2,909	3,248	3,731
Interest Expense	(4,412)	(2,952)	(1,760)	(937)	(479)	(658)	(823)	(1,135)	(1,577)
Net Interest Income	**3,089**	**2,425**	**2,927**	**2,740**	**2,116**	**2,085**	**2,086**	**2,113**	**2,154**
Tax fee	-	-	-	-	(79)	(76)	(73)	(70)	(66)
Net fees and commissions	992	935	948	938	919	908	908	921	939
Share of profit/loss of companies accounted for using t	(32)	29	32	32	30	30	30	30	31
Gains on financial assets	348	415	218	281	131	129	129	131	133
Other net operating income	(387)	(323)	(116)	(185)	(181)	(179)	(179)	(182)	(185)
Gross margin	**4,010**	**3,482**	**4,009**	**3,806**	**2,934**	**2,896**	**2,901**	**2,943**	**3,007**
Operating Expenses	(2,293)	(1,905)	(1,742)	(1,658)	(1,541)	(1,498)	(1,474)	(1,468)	(1,471)
Personnel expenses	(1,353)	(1,117)	(987)	(971)	n.a.	n.a.	n.a.	n.a.	n.a.
SG&A	(664)	(613)	(599)	(541)	n.a.	n.a.	n.a.	n.a.	n.a.
D&A	(276)	(175)	(156)	(147)	n.a.	n.a.	n.a.	n.a.	n.a.
Other Impairments	(782)	(18)	(6)	28	-	-	-	-	-
Dotaciones a provisiones	(1,832)	(180)	(208)	(152)	-	-	-	-	-
Total margin	**(897)**	**1,379**	**2,052**	**2,024**	**1,393**	**1,398**	**1,427**	**1,475**	**1,535**

Loan loss provisions	(18,932)	(1,249)	(950)	(583)	(572)	(569)	(573)	(584)	(596)
Profit before taxes and extraordinaries	**(19,829)**	**130**	**1,102**	**1,441**	**821**	**829**	**854**	**891**	**939**
Extraordinary items	(2,361)	119	(105)	11	-	-	-	-	-
Profit before taxes (PBT)	**(22,189)**	**248**	**997**	**1,452**	**821**	**829**	**854**	**891**	**939**
Taxes	2,997	157	(226)	(391)	(205)	(207)	(213)	(223)	(235)
Minorities	(136)	(3)	24	21	12	12	12	13	14
Attributable Net Profit	**(19,056)**	**408**	**747**	**1,040**	**604**	**610**	**628**	**655**	**691**
% growth		*-102%*	*83%*	*39%*	*-42%*	*1%*	*3%*	*4%*	*5%*
Check	-	-	-	-					

KPIs

Key ratios	**Dec-12**	**Dec-13**	**Dec-14**	**Dec-15**	**Dec-16**	**Dec-17**	**Dec-18**	**Dec-19**	**Dec-20**
Balance sheet									
Loans-to-assets (%)	48%	47%	48%	53%	54%	54%	54%	54%	54%
Loans-to-deposits (%)	124%	118%	108%	107%	107%	107%	107%	107%	107%
CASA rate (%)	33%	35%	36%	42%	42%	42%	42%	42%	42%
Deposits-to-total funding	44%	48%	54%	59%	58%	58%	59%	59%	59%
LLR-to-total gross loans (%)	8.0%	8.2%	7.5%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%
x Leverage	-46.6x	22.1x	18.6x	16.3x	17.6x	17.6x	17.6x	17.7x	17.8x

P&L									
NIM (% s/ATA)	1.1%	0.9%	1.2%	1.2%	1.0%	1.0%	1.0%	1.0%	1.0%
Fees-to-total income (%)	25%	27%	24%	25%	31%	31%	31%	31%	31%
Fees-to-ATA (%)	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%	0.5%
Gains on financial assets-to-financial assets (%)	0.5%	0.6%	0.3%	0.5%	0.2%	0.2%	0.2%	0.2%	0.2%
Opex-to-ATA (%)	0.8%	0.7%	0.7%	0.8%	0.8%	0.7%	0.7%	0.7%	0.7%
Efficiency ratio (%)	57%	55%	43%	44%	53%	52%	51%	50%	49%
Cost of risk (% Performing Loans)	14.1%	1.0%	0.8%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
ROAA (%)	(6.8%)	0.2%	0.3%	0.5%	0.3%	0.3%	0.3%	0.3%	0.3%
ROAE (%)	(314.7%)	15.4%	6.3%	8.2%	5.0%	5.3%	5.5%	5.7%	5.9%
CoR: Provisions / avg. Net Loans	14.1%	1.0%	0.8%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%

Annex 5. Valuation: Dividend discount model

Capital base & distributable dividend

In EUR Mn	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Total Risk Weighted Assets	n.a.	98,420	88,565	81,303	79,596	78,903	79,190	80,463	81,777
CET1 base	n.a.	8,464	9,388	9,968	8,756	8,679	8,711	8,851	8,996
CET1 ratio	n.a.	8.6%	10.6%	12.3%	11.0%	11.0%	11.0%	11.0%	11.0%
Shareholders equity									

Capital left to distribute dividend or generate new business

In EUR Mn	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Initial capital balance					9,968	8,756	8,679	8,711	8,851
(+) Net income					604	610	628	655	691
(-) Dividend / (capital increase)					1,816	686	596	515	546
(=)Ending capital balance				**9,968**	**8,756**	**8,679**	**8,711**	**8,851**	**8,996**

Key ratios	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Dividend payout					300.7%	112.5%	95.0%	78.6%	79.1%

Valuation

Valuation assumptions

Valuation date:	31/12/2015
Cost of equity:	9.61%
Terminal growth rate:	2.0%

Dividend flows

In EUR Mn	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20
Dividend				-	1,816	686	596	515	546
Terminal value									7,313
Total capital flows				-	1,816	686	596	515	7,859
Discount factor					*0.9*	*0.8*	*0.8*	*0.7*	*0.6*
Year				*0*	*1*	*2*	*3*	*4*	*5*

Valuation	In EUR Mn
PV of dividends	3,382
PV of Terminal Value	4,621
Final Valuation	**8,004**

Share Value

(+) Total number of shares	11,517,328,544
(-) Treasury shares	39,867,346
(=) Total Outstanding shares	**11,477,461,198**

Share value	**0.697 €**

Sensitivity Analysis

		Ke					
		8%	9%	10%	11%	12%	13%
g	1.0%	8855	7904	7161	6565	6074	5664
	1.5%	9296	8226	7405	6754	6225	5785
	2.0%	9810	8594	**7679**	6964	6390	5918
	2.5%	10418	9019	7990	7199	6573	6063
	3.0%	11148	9515	8345	7464	6775	6222

Annex 6. Valuation: Comparable trading peers

In EUR Mn

	P/E (x)			P/BV (x)		
	2016e	2017e	2018e	2016e	2017e	2018e
Bankia	9.9	9.3	9.0	0.7	0.7	0.7
BBVA	10.2	8.6	7.7	0.8	0.8	0.8
Santander	10.0	9.1	8.0	0.7	0.7	0.7
Popular	--	7.9	6.6	-	-	-
Bankinter	14.5	13.4	12.4	-	-	-
Liberbank	8.7	7.4	6.4	-	.	.
Sabadell	10.1	9.4	7.9	0.7	0.7	0.7
Caixabank	11.3	8.5	7.6	0.6	0.6	0.6
Average	**10.8**	**9.2**	**8.1**	**0.70**	**0.70**	**0.70**
Maximum	**14.5**	**13.4**	**12.4**	**0.8**	**0.8**	**0.8**
Minimum	**8.7**	**7.4**	**6.4**	**0.6**	**0.6**	**0.6**
Theoretical price	**6,529**	**5,615**	**5,094**	**8,040**	**7,986**	**8,008**
Maximum	**8,774**	**8,201**	**7,790**	**9,452**	**9,388**	**9,415**
Minimum	**5,232**	**4,505**	**4,044**	**6,683**	**6,639**	**6,657**

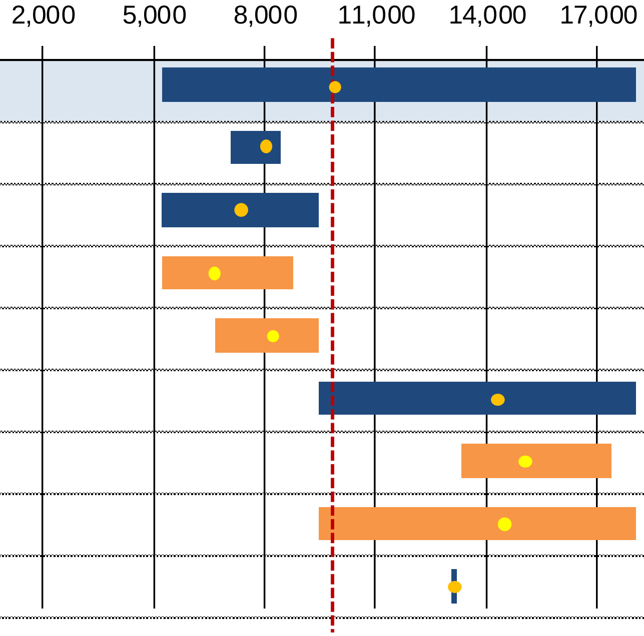
Annex 7: Valuation: Transactions

Date	Target	Bidder	Price (M€)	P/B	P/E
09/01/2015	Banco Santander (7% stake)	George Soros	500	1.3	12.9
10/10/2011	Banco Pastor	Banco Popular	1,349	0.8	16.8
28/02/2014	Bankia (7.5% stake)	BFA-FROB	1,304	1.5	42.7

Annex 8: Football field

In EUR Mn

Football field



EUR Mn	Equity value Base EUR Mn	High EUR Mn	Low EUR Mn	P/BV	PE LTM
Summary - Average	**9,847**	**18,088**	**5,232**	**0.8x**	**9.5x**
DDM	**8,004**	**8,457**	**7,081**	**0.7x**	**7.7x**
Trading Peers	**7,285**	**9,452**	**5,232**	**0.6x**	**7.1x**
Trading Peers' PE	6,529	8,774	5,232	0.6x	6.3x
Trading Peers' PB	8,040	9,452	6,683	0.7x	7.8x
Peers' transactions	**14,253**	**18,088**	**9,487**	**1.2x**	**13.8x**
Transaction Peers' PE	15,351	17,377	13,325	1.3x	14.9x
Transaction Peers' PB	14,331	18,088	9,487	1.2x	13.9x
Regression Analysis	**13,077**	**n.a.**	**n.a.**	**1.1x**	**12.7x**