

Bail-in or bail-out: The case of Spain

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Abstract:

In this article we analyze the feasibility of a bail-in for Spain. After a detailed analysis of the origins of the Spanish banking crisis and the government's response in the form of a bail-out by taxpayers in 2012, we investigate whether a bail-in would have been feasible instead. The bail-in procedure recently announced by the Council of the European Union provides for a bail-in, although important liabilities are excluded. We criticize these exclusions and the discretionary power given to governments under the Council's plan because it could lead to the use of (foreign) taxpayers' money. However, following the path and rules set out by the Council we can show that a bail-in would have been feasible in the case of the Spanish banks. Finally, we set out the advantages of such a bail-in over a bail-out in the Spanish case.

1 Introduction

In June 2012 the Spanish government reached an agreement on a credit line of €100 billion from the Eurozone's bail-out fund, the European Financial Stability Fund (EFSF) (Quinn and Dunkley 2012). The credit line ended in December 2013 when the Spanish government opted against a renewal. From this credit line Spain had borrowed €41.3 billion to recapitalize its banks (Pérez 2013): a classical bail-out of failed banks with taxpayers' money. Specifically, the Spanish government received a loan from the EFSF backed by a guarantee from the Eurozone taxpayers. The decision to bail out the shareholders and creditors of the banks with taxpayers' money has not been free from criticism, especially in Germany. In Germany alone, 172 economics professors (a number that later increased to 281), led by Walter Krämer and Hans-Werner Sinn, signed a letter against the planned banking union and arguing in favor of a creditor bail-in (Plickert 2012). In June 2013 the Council of the European Union agreed on the procedure for a banking resolution including a bail-in by creditors. In this article we will ask whether a bail-in to recapitalize Spanish banks would have been feasible. We will proceed as follows. First, we will explain the root of the Spanish banking problem. Then, we will describe the Spanish bank bail-out, and set out the terms of the new European regulation. In

the line with these terms, we will assess the possibility of a bail-in, calculating the necessary ratios for converting creditors into shareholders. Finally, we will compare the consequences of the Spanish bank bail-out with the hypothetical bail-in.

2 The origins of the Spanish banking crisis

Following the introduction of the euro, the Spanish economy started on an expansionary path, not only because of the structural reforms implemented in the period from 1996 to 2000, but also because of the strong expansion of the money supply and bank credit leading to lower interest rates that were below the inflation rate.¹

Between 2001 and 2007 the money supply (M3) in Spain was growing at an average annual rate of close to 11% (see figure 1). Until 2008, M3 grew faster in Spain than in the rest of the EMU. In 2008, however, the beginning of the crisis inverted this difference: from the middle of 2009 onwards, M3 grew slower than in the rest of the EMU.

At the same time, the Spanish economy experienced important capital imports between 2003 and 2007. European banks, mainly German and French ones, increased their loans to the peripheral countries: Greece, Portugal, Ireland, Italy, and Spain. The European Central Bank left its main refinancing rate at 2% between 2004 and 2006, thereby dramatically reducing the costs of refinancing banks. The capital entered the different countries in different ways. For instance, in Greece the majority of the imported capital was directed toward the purchase of public debt, while in Spain the capital financed the credit expansion of the banks.

¹ The reduction of interest rates was not only caused by the monetary policy of the ECB but also by the introduction of the euro itself. Spanish interest rates also fell to due lower inflationary expectations and risk premia as the country joined the euro (Bagus 2012).

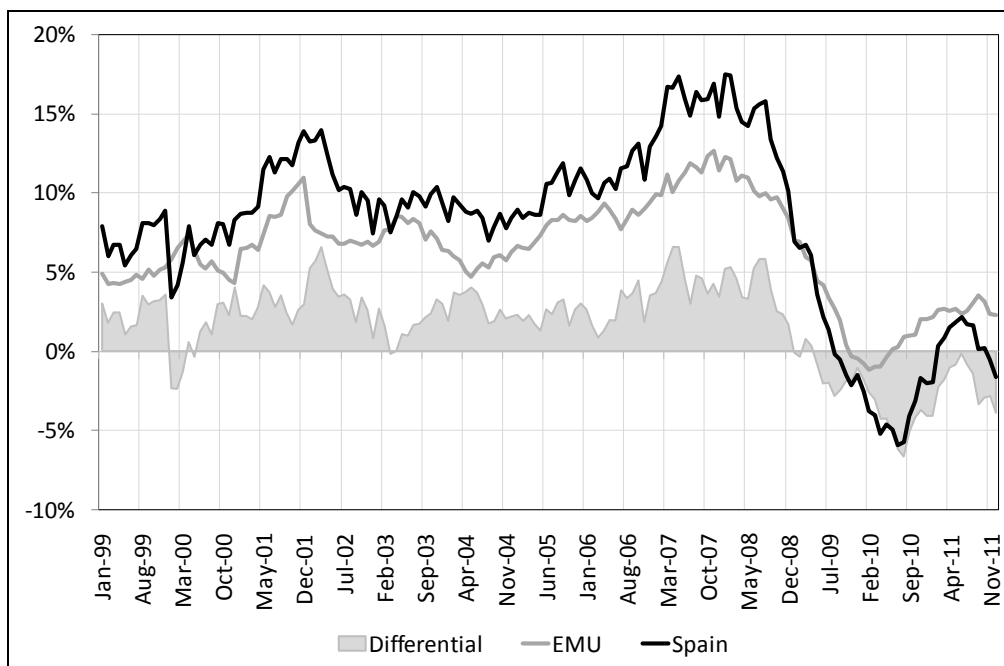


Figure 1. Annual growth rate of M3 (1999-2011). *Source:* Bank of Spain. Own calculations.

The Spanish current account deficit grew from 23,700 million euros in 2002 (3.2% of GDP) to 104,700 million in 2007 (9.9% of GDP) as result of the massive inflow of foreign capital, largely into the banking sector whose foreign liabilities increased from 312,000 million euros in 2002 to 872,000 million euros in 2007 according to the Bank of International Settlements.²

The injection of foreign funds allowed Spanish banks to maintain an explosive leverage as their total liabilities soared from 1.5 trillion in 2002 (a leverage ratio of 11.6), to 2.9 trillion in 2007 (a leverage ratio of 14.7), according to the Bank of Spain.³ As a consequence, Spanish banks granted an enormous number of long-term loans at historically low interest rates: the average mortgage rate fell to 3.1%, corporate loans of up to one million euros were reduced to 3.6% in some cases and consumer loans were as low as 3.9%.

The artificially low funding was fundamentally directed to the construction sector, even though it also affected other parts of the economy. Loans to the construction sector increased from 347 billion at the end of 2002 to 1,075 trillion at the end of 2007. Loans to the rest of the private economy (other domestic sectors) grew from 354 billion to 685 billion (see figure 2). The main borrowers beside the construction sector were households and companies whose

² www.bis.org

³ www.bde.es

total debts – including non-bank funding – increased from 377 billion euros in 2002 to 847 billion in 2007 in the case of households and from 496 billion euros to 1.21 trillion euros in the case of companies in the same period.

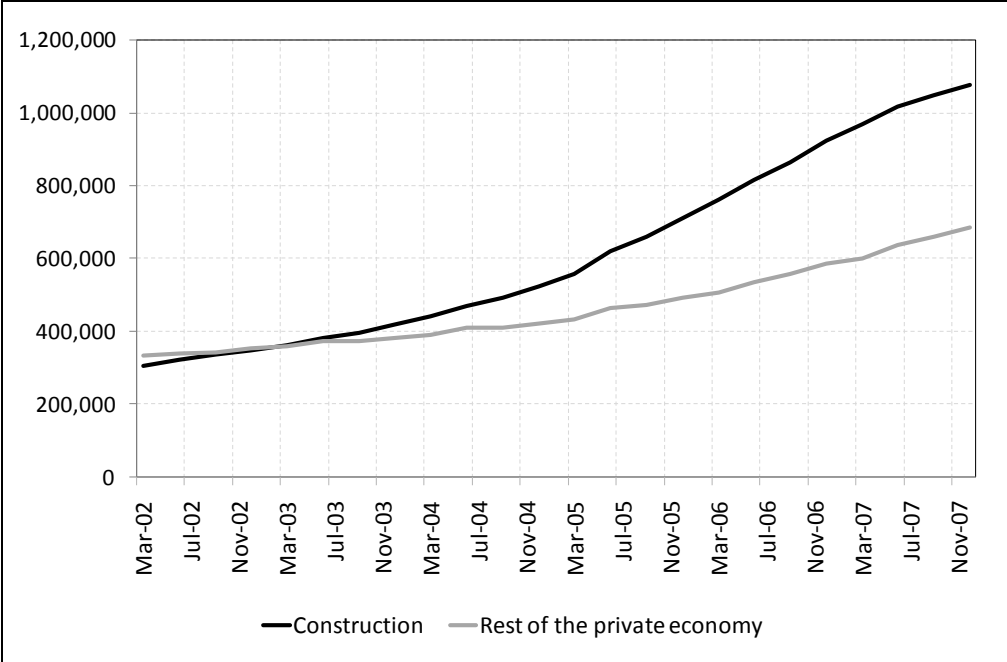


Figure 2. Loans to other domestic sectors. *Source:* Bank of Spain. Own calculations.

The loans to the construction sector can be distinguished from mortgage loans, loans to builders and loans to property developers. Mortgage loans increased from 235 billion euros in 2002 to 618 billion in 2007; loans to builders almost tripled from 57 billion to 153 billion; and loans to property developers soared from 55 billion to 303 billion. Essentially, the increase in mortgages due to the low interest rates caused an increase in housing demand which, in turn, induced property developers to borrow money at the low interest rates to buy land to initiate their housing projects. The buildings themselves were completed by builders who also financed an important part of their operations through bank credit.

The concentration of bank credit on the construction sector was portentous: at the end of 2007 more than 60% of private sector loans were in construction. The Spanish savings banks, the ‘Cajas’, even reached a 70% concentration on this sector. The increase in long-term loans generated a progressive accumulation of factors of production in the sectors that received most of the loans, most importantly the construction sector. According to the ‘Encuesta de Población Activa’ of the INE (Instituto Nacional de Estadística), employment in the

construction sector increased from almost two million in 2002 to 2.6 million in 2007.⁴ The total number of people in employment increased by 3.6 million in just five years, while labor costs increased by 22.5% which, according to Eurostat, was much faster than in Germany (7.6%), Italy (12.2%) or France (17.7%). Labor costs only rose faster in Greece and Ireland.

At the same time, at the end of 2007 construction, housing promotion and the financial sector represented 23% of GDP, i.e. almost one quarter of the total economic activity of the country. In fact, from 2003 onwards the construction of housing and other buildings constituted more than 70% of the gross capital formation, which was more than 30% of GDP during these years.

As a consequence of the investment in housing, the number of new buildings in 2006 was more than 860,000, according to the Ministerio de Fomento; this is higher than the number of buildings started in Germany and France together during that same year. Nevertheless, the dynamics of the bubble based on artificially cheap credit were so persistent that not even the vertiginous increase in supply was able to moderate the increase in house prices: prices increased by 78% from 2002 to 2007, according to the Sociedad de Tasación.⁵ Even more important than this is the fact that the great increase in housing prices was not accompanied by an equally great increase in rents; these only climbed by 23% in the same period, according to the INE. Analyzing the data, one realizes that the profitability of rents fell from 4.3% in 2002 to 3.1% in 2007, compared with an average profitability of 5.1% in the 20 years before (Rallo, Merino and Martín 2008.)

Lastly, one has to realize that the great increase in construction activities due to the availability of artificially cheap credit also decisively influenced the public administration revenues. The public revenues increased by 151 billion euros from 2002 to 2007, which is an increase of 54%. Along with the increased fiscal revenues, public spending soared as politicians eagerly spent the public revenues resulting from the construction boom. Public spending increased by 46% (130 billion euros) during the same period.

In 2007 the Spanish economy suffered from a productive structure excessively distorted towards construction in terms of investment and employment, highly indebted households, banks and companies, and a government that depended strongly on extraordinary fiscal

⁴ www.ine.es

⁵ www.sociedad-tasacion.es

revenues which in turn were based on a private sector that would continue to borrow to maintain its furious spending.

In 2007 events unfolded quickly. Due to a strong and growing demand for credit in the private sector and a central bank that was supplying this credit ever more reluctantly, interest rates had been rising since the beginning of 2006, reaching 5.38% at the end of 2007 in the case of mortgages, 5.97% in the case of corporate loans below one million euros and 9.53% in the case of consumer loans.

Employment began to fall at the end of 2007. In 2008 alone the Spanish economy lost 600,000 jobs, almost all of them in construction. The deceleration of construction activities caused a harsh decline in fiscal revenues, which in 2008 were 31,000 million euros less than in the year before.

The internal crisis in Spain was accelerated by external events. In 2007 the subprime crisis started to affect the US economy. In March 2008 Bear Stearns was rescued, and later that year Freddie Mac and Fannie Mae were nationalized and Lehman Brothers went bankrupt. The world financial system was on the verge of collapse. At the same time, international bottlenecks in the supply of commodities intensified as a consequence of the relative underinvestment in the discovery and exploitation of new commodities and energy sources. The surge in commodity prices reduced the profitability of the economy until credit, economic activity and spending collapsed at the end of 2008.⁶

The combination of profound internal distortions with a global financial crisis provoked a severe recession in Spain.⁷ As loans to the construction sector, over-indebted households and companies turned bad, the position of Spanish banks constantly deteriorated. At the same time the Spanish government deficit increased, due to a collapse in fiscal revenues and an increase in government spending. As banks started to absorb public debts they also became ever more dependent on the solvency of the government itself.

In 2012, the situation of the Spanish banking system was precarious. It was only kept afloat by lending from the ECB, which was employing unconventional measures like its *long term refinancing operations* (LTRO). Many banks had suffered losses that were still

⁶ For instance, the price of a barrel of West Texas oil increased from 53 dollars in January 2007 to 132 dollars in July 2008. The price of one ton of copper surged from 5,690 to 8,410 dollars, and the price of a bushel of wheat increased from 196 to 328 dollars.

⁷ The Spanish cycle very much resembles a classical Austrian business cycle that is caused by credit expansion leading to malinvestment. For an introduction to Austrian business cycle theory see Hayek (1929, 1935), Mises (1998), Hülsmann (1998), Huerta de Soto (2009) or Bagus (2010).

unrealized. These banks were ultimately backed by a government that was struggling with its own debt load as well. What could be done? In the following section we will compare the option chosen in June 2012 (when a European public bail-out for the Spanish banking system was announced) with a bail-in.

3 The Spanish bail-out

In November 2012, the Spanish government received the first funds to bail out the Spanish banks (Thompson 2012). Catalunya Banc received a recapitalization of €12 billion, Novagalicia got €9 billion, and Bankia's recapitalization amounted to €22.4 billion. Banco de Valencia got €5.5 billion and was sold to CaixaBank. Furthermore, CAM (Caja de Ahorros del Mediterráneo) was sold to Sabadell after receiving €5.2 billion (Penty and Ross-Thomas 2011). This means that the bail-out via capital injections amounted to roughly €54 billion.

Direct capital injections were, however, not the only aid these banks received. SAREB (Sociedad de Gestión de Activos Procedentes de la Reestructuración Bancaria), the Spanish 'bad' bank, bought toxic assets, at a discount of roughly 50% of their nominal value, from some of these banks. SAREB bought assets from Catalunya Banc for €6.6 billion, from Novagalicia for €5.7 billion, from Banco de Valencia for €2 billion and from Bankia for €22.2 billion, amounting to a total of more than €36 billion just from these main entities.

At this point, the government help did not stop. The Spanish government in some cases also partially guaranteed the assets of banks to support their acquisitions. When one bank took over another one, the government guaranteed part of the acquired assets against losses with the EPA program (Esquema de Protección de Activos). Banco de Valencia had €6 billion of guaranteed assets. CAM held €20.7 billion of guaranteed assets. All these programs to prop up the banking system against realized and unrealized losses were ultimately paid by Spanish taxpayers or, failing them, Eurozone taxpayers.

4 The European bail-in procedure

On 28 June 2013 the Council of the European Union (2013) announced procedures for future bank resolutions that come quite close to a standard bail-in. The intention was to create a mechanism to pre-empt banking crises and to resolve banks in an orderly way, minimizing the costs for taxpayers, i.e. minimizing bail-outs. In outline, national resolution authorities have the power to sell the assets of troubled banks, set up bad banks, and employ bail-in measures.

The bail-in measures allow resolution authorities to write down the claims of shareholders and to convert creditors' claims into equity. The imposition of losses follows the seniority of claims.

There are, however, several deviations from a standard bail-in procedure. First, deposits below €100,000 ('covered deposits') are guaranteed and are not converted into equity. Second, deposits from individuals and small and medium-sized corporations and the European Investment Bank have preference over claims from large corporations, giving room for considerable discretionary action. Third, secured liabilities such as covered bonds are excluded. This exclusion means that the ECB is protected from losses, because its refinancing operations to the banking system are secured. Fourth, liabilities to employees of the failing institution are also not converted into equity. Fifth, interbank liabilities of less than 7 days, commercial claims relating to the daily functioning of the institution and liabilities resulting from participations in payment systems are excluded as well. Furthermore, other liabilities can be excluded on a discretionary basis by the government.⁸

In addition to these bail-in measures, a resolution fund, funded by contributions from banks, is to be created. In the future, this fund may help to recapitalize banks and reduce the bail-in conversions. Much flexibility is still given to national governments, as only a minimum of 8% of the total liabilities must be imposed as a loss on shareholders and creditors. Thus, Sinn (2013a) has argued that the list of exceptions is so long that in many cases public money will be needed for a successful bank restructuring. As the resolution fund will not be in place until sometime in the future, the ESM (European Stabilization Mechanism) could possibly fill the gap, leading to an important inter-Europe redistribution of wealth. Sinn (2013a, p.1) especially criticizes the exemption of secured debt from the bail-in, because this exception shields the ECB from losses under its 'de facto regional fiscal policy'. Indeed, the ECB has refinanced banks in the periphery when they had lost access to private capital markets. These loans are 'secured' by rather dubious collateral, which could lead to important losses for the ECB if there is a bank resolution or sovereign default. Through the exclusion of secured debt from a bail-in in the Council's plan, any losses resulting from the ECB's quasi-fiscal policy are effectively transferred to the ESM or European taxpayers. The

⁸ This discretionary aspect raises doubt about whether moral hazard can be effectively restricted. Investors may just hope that their liabilities will be excluded from a bail-in. On the problem of ad hoc bail-in measures for the reduction of moral hazard, see Eichengreen and Rühl (2000). Furthermore, the discretionary aspect raises doubt about whether governments will act swiftly. Calomiris and Herring (2011) argue in favor of contingent capital requirements to prevent administrative reluctance to recognize losses.

incomplete bail-in procedure set down by the Council thereby amounts to a bail-out of the ECB. In addition, one can expect regulatory arbitrage (Sinn 2013b). Banks have an incentive to adjust their creditor structure towards liabilities that are excluded from the bail-in, i.e. to choose secured liabilities or interbank liabilities. As a consequence, the bulk of the costs of the resolution could fall on taxpayers and the ESM.

Another criticism of the plan is that it leaves governments in charge of bank resolutions. A bail-in organized by a government depends on ‘the exercise of administrative discretion’ (Jackson and Skeel 2012, p. 454). There may be a delay or inaction for political reasons. Moreover, the actions of governments in the past have often been biased in favor of the shareholders and creditors of banks, and this may be the case again as a result of the discretion offered by the Council. The question of bail-in and its details should be in the hands not of governments but, instead, of the parties involved. Shareholders and creditors should settle for a bail-in to prevent liquidation if this option seems more attractive to them both.⁹

Despite the criticism of the resolution procedure set out by the Council, we will now analyze whether a bail-in could have been applied in the case of Spain. We follow the procedure stipulated by the European Council and apply the exceptions, in order to see if a bail-in along these lines would have been feasible without public funds.

5 The alternative bail-in that could have been applied in Spain

In order to calculate the necessary debt-equity conversion ratios, we first calculate the necessary amount of capital. We assume that the necessary capital is equal to the capital injected by the government, plus 50% of the assets bought by SAREB, plus 50% of the assets insured by the EPA, with the aim of substituting all government help with a bail-in, in our counterfactual case. It must be noted that these calculations are rather conservative, since not all the assets sold to SAREB and guaranteed by the EPA will go into default, and since the losses derived from the defaulting assets will not amount to 100% as all of them are collateralized by real estate. Furthermore, SAREB bought its assets after a discount of roughly 50% had already been applied. We assume a further loss of 50%, which gives rise to a total loss of 75% in their toxic assets.¹⁰ Assuming these additional losses, we need more capital

⁹ Gersbach (2013) analyzes other ways to reduce government involvement in bank recapitalization, through private insurance. If negative events that would otherwise lead to a write-down of capital or insolvency occurred, private investors could recapitalize banks by pure insurance contracts or contingent debt contracts.

¹⁰ SAREB actually hoped to sell its assets with a modest profit, leading to an ROE of 15%.

than was injected by the government. The resulting capital needs are €15.4 billion for Catalunyaabanc, €11.9 billion for Novagalicia, €9.4 billion for Banco de Valencia, €15.6 billion for CAM and €33.5 billion for Bankia.¹¹

We start from the financial institutions' balance sheets at the end of 2011 (see table 1), when the Spanish government could have decided to impose a bail-in on the insolvent banks instead of relying on the European bail-out some months later. We first write down the equity of the old shareholders. Then we proceed to convert first junior debt and then senior debt into equity. We do not include covered bonds or asset-backed securities in the bail-in, as these are not only met by the issuer but are also backed by the corresponding assets. Furthermore, they are excluded under the Council's plan. Unfortunately, Spanish banks tended to have rather limited amounts of junior and senior debt. They tended to finance themselves through deposits and through covered bonds. Thus, the bail-in of junior and senior debts would not have been sufficient to recapitalize the banks in question. A bail-in without touching deposits gives us €9.1 billion in the case of Catalunyaabanc, €8.7 billion in the case of Novagalicia, €1.5 billion in the case of Banco de Valencia, €7.7 billion in the case of CAM and €19 billion in the case of Bankia.

In our hypothetical bail-in, we do not want to touch deposits of less than €100,000 as these are guaranteed by the government and excluded by the Council's plan. But only two of the banks mentioned differentiate in their publications between deposits of less than and deposits of more than €100,000. In the case of Bankia, 40% of total retail deposits were uncovered, i.e. were amounts above €100,000, and in the case of Banco de Valencia, 60% of total retail deposits were not guaranteed. In what follows we assume that the average of 50% is roughly valid for the rest of the banks where no detailed data is available.

We then take the capital that is needed, as calculated above, and subtract the sum we get through a bail-in of junior and senior debt. After that, we calculate the percentage of the deposits above €100,000 (assuming that these are 50% of the total) that are necessary to come up with the missing amount.

In the case of Catalunyaabanc, 24% of the deposits above €100,000 would be bailed in, in the case of Novagalicia 13% would be bailed in, in the case of Banco de Valencia 81%, in the case of CAM 32% and in the case of Bankia 20%. If we do not bail in the deposits of other

¹¹ In January 2014, the Spanish minister of economic affairs Luis de Guindos estimated the losses stemming from the bailout of CAM at €15 bn. (Europapress 2014). His estimation, thereby, coincides almost exactly with our assumptions.

credit institutions, the percentage of non-bank deposits needed to be bailed in rises to 29%, 14%, 130%, 40% and 28.5%.

We can therefore see that a bail-in would have been feasible without touching covered bonds, deposits of credit institutions or deposits below €100,000. Only Banco de Valencia is on the limit, if we apply our very conservative estimates of losses on the EPA and on the assets sold to SAREB. Taking all this into consideration, and excluding deposits of other credit institutions, a bail-in of only those deposits above €100,000 would have been insufficient for Banco de Valencia. We think that a liquidation of that bank would have been the most prudent decision. In the case of the other banks, a bail-in would have been feasible along the lines proposed by the Council. No public bail-out was necessary.

| | Total capital needed | Senior and junior uncovered debt | Retail deposits over €100,000 | Retail deposits over €100,000 plus financial institutions' deposits | % bail-in on retail deposits | % bail-in on total deposits |
|-------------------|----------------------|----------------------------------|-------------------------------|---|------------------------------|-----------------------------|
| Bankia | 33,501 | 18,986 | 50,916 | 71,133 | 28.5% | 20.4% |
| CAM | 15,630 | 7,715 | 19,690 | 24,800 | 40.2% | 31.9% |
| Catalunyabanc | 15,349 | 9,171 | 21,643 | 25,742 | 28.5% | 24% |
| Novagalicia | 11,905 | 8,708 | 22,104 | 25,465 | 14.5% | 12.6% |
| Banco de Valencia | 9,481 | 1,463 | 6,167 | 9,885 | 130% | 81.1% |

Table 1. Spanish financial institutions' balance sheets at the end of 2011. *Source:* Banks' financial statements. Own calculations.

6 Bail-out vs. bail-in

Would a bail-in have been a better option than the bail-out? We will now compare the two options, analyzing the specific consequences of the Spanish bail-out.

First, the Spanish bail-out, like the other European bail-outs of Greece, Ireland and Portugal, violated Article 103 of the Maastricht Treaty, which prohibits bail-outs of governments. In the Spanish case, funds were transferred to the Spanish government to be used for bank recapitalization. Without these bail-out funds, the Spanish government would have had problems to bail out the banks on its own. The bail-out has shaken confidence in the Treaty and the rule of law. A bail-in does not have these legal disadvantages. It simply does not violate the Maastricht Treaty.¹²

Second, from a normative perspective a bail-in is always preferable to a bail-out. In a bail-out, innocent taxpayers are forced to pay for the bad investment decisions of others. In a bail-in, the shareholders and creditors of the bank assume the losses. While the shareholders and creditors did not grant the bad loans themselves, they trusted their money to the managers of the bank for investment purposes in order to receive dividends, capital appreciation or interest. They have a legal relationship with the bank, in contrast to taxpayers as such. They have invested and risked their funds, and now have to assume the losses. While many creditors may regard the assumption of losses as unfair, as they may have been deceived about the risk of their investment, the possible alternative would be the liquidation of the bank and this is most likely to imply even bigger losses. In any case, it is very difficult to make a moral case for taxpayers (including those from other nations) being made to pay for the investment losses of a bank's shareholders and creditors, as occurs in a bail-out.

But let us look at the question of bail-outs versus bail-ins from an egalitarian, a utilitarian and a natural rights perspective. From the perspective of egalitarian ethics, such as that set out in Roemer (1996), it is hard to justify a bail-out. A bail-out benefits the richer members of the population at the cost of all taxpayers. A poor man who pays sales tax when buying food subsidizes, through a bank bail-out, the billionaire who is a shareholder or creditor of a bank.

Alternatively, one might try to justify a bank bail-out on classical utilitarian grounds following Jeremy Bentham [1838-43], (2001) or John Stuart Mill [1861], (1998), arguing that a collapse of the banking system would lead to severe welfare losses. In other words, even though the bail-out could entail a redistribution from the poor to the rich, it would benefit the utility of all because a collapse of the financial system would be prevented. While it is true

¹² As the Maastricht Treaty has been breached, market discipline on fiscal policy has been impaired. Milne (2011) suggests making market discipline effective by issuing 'limited liability' debt, i.e. debt with maximum debt service obligations as a proportion of GDP. For the effects of a corruption of traditional legal principles see, for instance, Huerta de Soto (2001, pp. 126–31).

that a bail-out can prevent the collapse of today's financial system, this is not an advantage of a bail-out over a bail-in, because a bail-in also prevents a collapse of the banking system.¹³

The natural rights approach defended, for instance, by Murray Rothbard (2001), also suggests that a bail-in is superior to a bail-out. It is unjust to tax German or Italian people, taking their legally-acquired income and property under threat of violence, in order to bail out people who made risky decisions by investing in Spanish banks. Thus, the unjust redistribution of the European bail-out has been criticized by Sinn (2013a, 2013b) and Bagus (2013). The redistribution may foster conflict between nations. German taxpayers would probably not have approved a European bail-out of Spanish banks if they had been asked. At the same time, many Spaniards regard the conditions attached to the bail-out as unfair and harsh, and hold Germany responsible. In contrast, a bail-in does not lead to such an international redistribution or to such conflict. By bailing in creditors regardless of their nationality, German and Spanish creditors would have suffered losses together in relation to their investments in Spanish banks.

Third, bailing out shareholders and creditors for their bad investment decisions has been criticized for a long time for creating moral hazard (Roubini 2000). Knowing that taxpayers will bail out banks that are considered too big or too interconnected to fail, bankers will tend to invest in a riskier way. Profits are privatized and losses are socialized through a bail-out. Through their riskier investments, bankers may attract investors because of the higher yields. The financial system becomes more fragile through lower equity ratios and excessive maturity mismatching. More leverage and more maturity mismatching both tend to generate higher yields but are risky strategies (Alonso, Bagus and Rallo 2012). As the investments are riskier, it becomes more likely that a bail-out will eventually occur. In other words, the bail-out guarantee eventually causes a bail-out. In contrast, practicing bail-ins, for instance through contingent capital, reduces the incentive for excessive risk taking (Coffee 2010).¹⁴

Fourth, the Spanish bail-out increased the Spanish public deficit, which was around 10 percent of GDP in 2012. The bank clean-up contributed to debts amounting to 3.3 percent of GDP (Benoit and Sills 2013). Logically, the increase in public debt did not help to reduce doubt about Spain's finances. Yield on Spanish government debts remained high in spite of

¹³ It could be argued that a bail-in, in the case of the troubled Spanish banks, would have shaken confidence in the Spanish banking system as such. A precedent would have been set, and investors would have feared that the future would bring more bail-ins, as the era of bail-outs was over. The uncertainty could have triggered severe refinancing problems for the banks. Nevertheless, the ensuing problems could have been solved simply through further bail-ins, and the banking system would have been put on a sound basis.

¹⁴ For an introduction to contingent convertible capital see Avdjiev, Kartasheva and Bogdanova (2013).

the bail-out, as did the risk premium in relation to German Bunds. Only the announcement of further extraordinary measures by the ECB (Outright Monetary Transactions) helped later to reduce the pressure on Spanish government bonds.¹⁵ In the future, the higher government deficit means a higher tax burden for Spaniards. Some taxes, such as the sales tax, were increased. The increase in taxes helped to push the economy further into recession. Investments in a high tax, high deficit country became less and less attractive. One among several reasons for this development was the Spanish government's strategy of pursuing a bail-out of insolvent banks instead of a bail-in that does not negatively affect public finances.

Through the higher debt burden, important resources are missing in the real private economy that could have helped to foster genuine and sustainable growth. These resources are channeled through the government into insolvent banks. It would probably have been better if at least one of these banks, Banco de Valencia, had been liquidated. It is true that a bail-in also channels resources, those of the banks' creditors, into the banks in the form of equity. However, these funds have already been invested in the banking system. It is only the way they are invested that changes, as they are converted into equity. As Murray Rothbard (2000, p. 51) puts it: 'Bond holders (long-term creditors) are just different types of owners'. In a bail-in, creditors realize their losses as 'owners of the bank'. Moreover, while in the bail-out the Spanish taxpayers' resources were channeled into the banks, a bail-in also hits foreign creditors and shareholders and makes their funds available for a recapitalization. In a public bail-out there is a crowding out of private savings. With a bail-in, more funds remain in the country to foster growth, as foreign investors are made liable for their bad investments, in contrast to a bail-out where domestic private growth is punished through higher debts and taxes.

Fifth, a bail-out normally entails a regulation of decision making (Bagus, Rallo and Alonso 2012, p. 10). As the government becomes a major, if not the main, shareholder in the bank, it starts to influence the decisions of the management. Such decisions could include bonus or salary caps, or even the advice to grant loans that otherwise would not be given, in order to 'stimulate' the economy. These regulations make it more difficult to attract private capital for recapitalization, and endanger the financial position of the bank. In a bail-in, these political distortions of decisions do not occur. Instead, creditors become the new owners, trying to maximize the yield on their capital.

¹⁵ See ECB (2012).

Sixth, with a bail-out there always remains the problem of the exit strategy (Bagus, Rallo and Alonso 2012, pp. 11–12). A bail-out converts the government into a shareholder, often a main shareholder in a bank. The bank's decisions may be distorted politically, for instance to grant loans to industries connected to the government. Therefore, governments normally want to reduce their participations. But when and how should they exit these investments? If the government exits too early, the banking system is destabilized again. If it exits too late, decisions might have been distorted in favor of the government and in a way that is detrimental to sustainable growth. Another question is the price of the exit. If the shares are sold at a very low price, there may be windfall profits for investors. If the price is too high, there may be losses for investors. All these problems disappear with a bail-in, since private creditors become the new owners of the bank. They decide if and when they sell their shares and at what price.

Seventh, bail-outs foster regime uncertainty, a term coined by Robert Higgs (1997, 2010). 'Regime uncertainty' refers to a situation in which it is not clear how the economic system will look in the future. The problem of exit strategies and government participation contributes to regime uncertainty. It is not clear how the Spanish banking system will look in the future. Will it be semi-public or totally nationalized? When and how will it be privatized? The profitability of investments in the Spanish banking system depends importantly on future government actions. Long-term savings and investments in the banking system are, thereby, discouraged. It is especially unclear how the Spanish banking system would survive without government aid. The increase in Spanish government debt also caused by the bail-out has increased the long-term doubt about the sustainability of the banking system itself. Moreover, an important portion of this debt is held by Spanish banks. The bail-out, with its increase in debt, did not solve the European sovereign debt crisis. Spain is over-indebted privately and publicly. The bail-out did not reduce the overall Spanish debt load but, rather, increased it.

One may argue that the future of the euro as a currency has become even more uncertain. The 'currency regime uncertainty' has been increased, since at some point it may become very difficult to finance bail-outs without running into important political conflicts. As the future of the euro has not been improved through the bail-out, regime uncertainty is maintained. Domestic and foreign investments into Spain remain on hold or have even been reduced. On the contrary, a bail-in would not have increase public debt and would have reduced private banking debt, because bank debts would have been converted into equity. By reducing the problem of over-indebtedness, the uncertainty about the future of the euro and

the banking regime in Spain could have been slightly reduced. Long-term savings and investments could have been encouraged.

7 Conclusion

The problems of the Spanish banking sector are mainly a consequence of the extensive housing bubble experienced in Spain from 2002 to 2007. When the bubble collapsed, this did not only lead to the banks suffering severe losses, but economic activity also decreased and led to a sharp fall in government revenues. The Spanish government has accumulated debts close to 100 percent of GDP, but nevertheless it engaged in a bail-out of some Spanish banks backed with a ‘credit line’ from the ESM. As we have shown, such a bail-out was neither necessary nor desirable. The rescued banks could have put on an equally sound basis through a bail-in. A sort of exception is Banco de Valencia, which probably should have been liquidated altogether. A bail-in offers important advantages vis-à-vis a bail-out, as it is more ethical (in putting the losses on the shoulders of the investors not the taxpayers), it prevents moral hazard, it reduces conflicts, it does not constrain the public budget, it avoids regulatory and exit problems and it reduces regime uncertainty.

If the Spanish government had followed the route set out by the Council of the European Union in June 2013, it could have spared itself the bail-out. Since from now on bail-ins will be the norm, the decision to bail out the Spanish banks is hard to understand.

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