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REPORT ON THE SPANISH FINANCIAL SYSTEM

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# REPORT ON THE SPANISH FINANCIAL SYSTEM

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**Abstract:** The objective of this report is to provide a general overview of the process of transformation and development of the financial system in Spain that has taken place since the decade of the seventies in the past century. The report shows the main distinctive features of the financialisation process of the Spanish economy, its main determinant elements, and its economic impact, paying special attention to the current economic and financial crisis.

**Key words:** Spain, financial system, credit institutions, financial institutions, banking system, financial liberalization, regulation, supervision

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EXECUTIVE SUMMARY	7
PART I. THE SPANISH FINANCIAL SYSTEM BEFORE 1980	13
1. Historical and political economy background	13
1.1 The 1962 Parent Act	13
1.2 The 1977-1985 crisis	15
1.2.1 An industrial crisis and a banking crisis	15
1.2.2 Consequences of the crisis for financial regulation	17
1.3 The second financial crisis: the Banesto case	19
1.4 Joining the European Union	20
1.5 The years prior to the current financial crisis	21
1.6 Gestation of the crisis of 2007 onwards	23
1.7 The financial crisis	26
PART II. THE SPANISH FINANCIAL SYSTEM SINCE 1980	30
2. The growth of finance and its role in the decades of financialisation	30
2.1 The size of the assets and liabilities of the Spanish credit institutions sector	30
2.2 The size of the other financial institutions	45
2.3 The size of insurance corporations and pension funds	50
2.4. The size of the financial sector as a percentage of the Spanish economic activity	53
2.5 The stock market	58
2.6 Public and private debt	64
3. Spain's integration in international financial markets	70
3.1 Current account balance and net and gross financial flows	70

3.2 Spain's international investment position	83
4. The structure of the Spanish financial system by forms of organization	90
4.1 Financial institutions universe	90
4.2 Supervisory and regulatory agencies of the financial system	92
4.3 Financial institutions balance sheet structure	93
4.4 Financial institutions market structure	98
4.5 Credit institutions asset structure	102
4.6 Credit institutions liabilities structure	104
5.7 Selected indicators of credit institutions financial soundness	107
5. Profitability of the financial sector in Spain	111
5.1 Profitability of the financial sector: the role of the financial soundness indicators (FSI)	111
5.2 The evolution of the profitability of the financial sector in Spain.	113
5.2.1 Return on assets	113

(ROA)	
5.2.2 Return on equity	116
(ROE)	
5.2.3 Interest margin	117
5.2.4 Noninterest expenses to gross income and personnel expenses to noninterest expenses.	118
5.2.5 Trading income to total income	119
5.2.6 Spread between reference lending and deposit rates	120
5.3 Financial sector profitability vs. nonfinancial sector profitability in Spain.	121
5.3.1 Evolution of financial and nonfinancial sectors' profitability	121
5.3.2 Evolution of financial and nonfinancial sector's profitability gap	122
5.4. Conclusions	124
6. Nature and degree of competition between financial institutions	126
6.1 Evolution of the Spanish banking sector in recent years	127

6.2 Structural indicators of competition	130
6.2.1 Number of competitors	130
6.2.2 Market shares of banking institutions	136
6.2.3 Degree of concentration	143
6.3 Non-structural indicators of competition	150
7. Availability and sources of funds	153
7.1 Introduction	153
7.2 Funding sources during the period of economic expansion: 1997-2007	155
7.3 Sources of financing in the financial crisis: 2007-2012	162
7.4 Conclusions	164
8. Efficiency of the Spanish banking system	165
PART III. RELATION OF FINANCIAL TO NON-FINANCIAL SECTOR	178
9. Macroeconomic policy context	178
10. Source of funds for business investment	189
10.1 Introduction	189
10.2 Structure of Spanish corporate financing	190
10.3 Corporate indebtedness	194
10.4 Access to external financing	201
10.5 Structure and investor behaviour of Spanish business	209
11. Culture and norms	212
11.1 Introduction	212
11.2 Culture and norms: the case of Spain	213
11.2.1 Finance in everyday life	213

11.2.2 Investment	216
11.2.3 Financial inclusion and exclusion of households	218
11.3 Conclusions	220
12. Housing market	222
13. Inequality	229
13.1. Introduction	229
13.2 Inequality and financialisation: review of Spanish literature.	230
13.3 Analysis from Eurostat data	
13.3.1 Gini Coefficient	230
13.3.2 Income quintile share ratio	232
13.3.3 Income quintile share ratio by sex	233
13.3.4 Income quintile share ratio by age	234
13.4 Conclusions	
PART IV. RECENT DEVELOPMENTS AND CONCLUSIONS	236
14. Preliminary outline of crisis	236
15. CONCLUSION	244
ENDNOTES:	247
BIBLIOGRAPHY	254



## EXECUTIVE SUMMARY

Unlike other countries, in Spain the financial system is a system controlled by the banking sector. This control is not only reflected in the high weight of the credit institutions in the whole financial sector, but also in the fact that many of the non-credit financial institutions in Spain are owned by the credit institutions (i.e., private banks and the former savings banks). Due to this fact, the analysis of the Spanish financial system is mainly focused on the analysis of the credit institutions.

The liberalization process of the Spanish banking system started in the mid-seventies during a deep restructuring economic crisis that led, and that, in turn, was explained by, one of the deepest banking crisis of the last century in the advanced economies. This banking crisis, that in that occasion was concentrated in the sub-sectors of industrial and business banks and private banks, gave rise to a simultaneous process of liberalization and restructuring of the sector (reducing the number of banks through the acquisition of the taken-over banks by healthy banks, increasing the size of the remaining banks, internationalizing the biggest banks), that was in the origin of the financialisation process of the Spanish economy.

This restructuring process did not involve a higher penetration of the foreign banks in the Spanish financial system, since the taken-over entities were purchased by Spanish banks, in a deliberate strategy of keeping the Spanish financial system in the hands of Spanish credit institutions.

This financialisation process, that in the report is proxied by the evolution of the size of the financial sector in the Spanish economy, took place in a sustained but moderated way until the end of the decade of the nineties. Since then, the growth of the size of the assets of the credit institutions (measured as a percentage of the GDP) accelerates in a sudden way, fuelled by the funding given by the credit institutions to the Spanish non-financial corporations, and to a lower extent, by the growth in the mortgages given to the household sector. Thus, the size of the total assets of the Spanish credit institutions, which amounted to 111.4 percent GDP in

1970, reached 185.5 percent GDP in

2002.

Since then, a process of accelerated growth started in 2003, with the result that in 2011 the assets of the Spanish Credit institutions peaked at 316.8 percent GDP. The increase in the indebtedness of the non-financial private agents, both in the case of the households and in the non-financial corporations, came with a parallel increase in the indebtedness of the financial institutions, mainly with an increase of the external debt of the Spanish credit institutions, and a higher dependence of the international monetary and financial markets. In this sense, with the one exception of the early nineties, the size of the deposits held by the rest of the world in the Spanish banking system has always been well above the total funding by this system to the rest of the world. Moreover, since the late nineties this difference increased significantly, reaching figures above 10 percent of GDP, again proving the high dependence of Spain on external funding.

It is important to highlight that the financialisation process in Spain, measured by the size of the assets of the credit institutions, has come with the maintenance of the traditional structure of the banking business, with a predominance of the weight of the loans in the balance sheets of the credit institutions. Thus, loans given to the non-financial corporations and to the households rose from 64.8 percent of GDP in 1995 to 175.4 percent of GDP in 2010. Since the decade of the seventies, loans have always provided the main asset of the balance sheet of the Spanish credit institutions. Thus, the size of the loans in the balance sheet have been oscillating but with minor changes, with the result that their size has always remained in the range of 70 and 80 percent of the banking balance sheet.

The economic and financial crisis has resulted in a re-composition of the loans balance sheet of the Spanish credit institutions. Domestic private sectors have since the year 2008 deleveraged, reducing their exposure to the credit institutions. Thus, between 2008 and 2011 the absolute value of the loans given to the domestic credit system, to the domestic other resident sector and to the rest of the world has fallen

by -4.6 percent, -4.7 percent, and -7.6 percent, respectively. Only the loans to the domestic general government have risen by 69.5 percent. As a result of this evolution, the size of the loans as a percentage of GDP has fallen by -0.8 percentage points in the case of the domestic credit system, -5.8 percentage points for the other resident sector, and -1.5 percentage points for the rest of the world. Only, the loans to the domestic general government have increased by 3.5 percentage points.

Unlike what happened on the assets side, the structure of the liabilities of the credit institutions has changed significantly in the last decade. Total deposits in the decade of the nineties amounted to over 80 percent of total liabilities; however, since 2002 a declining trend has been observed, with the result that in 2011 they only amounted to 68 percent of total liabilities. The decline of the share of deposits was mainly offset with the rise in the size of securities other than shares, which grew from 5.9 percent to 12.8 percent of total liabilities from 2002 to 2011. This implies that the higher deposits were not able to fully fund the intense process of credit creation by the banking system in Spain, making credit institutions highly dependent on non-traditional sources of funding.

Like in the case of the loans, the current crisis has resulted in a fall in the size of the deposits held in the credit institutions. In absolute values, the amount of deposits in the credit institutions system has fallen between 2008 and 2011 by -0.9 percent. If we measure the size of the deposits as a percentage of GDP, these have fallen between 2009 and 2011 by 6.5 percentage points. As a whole, since 2008 the share of the deposits in the total liabilities of the credit institutions has fallen by 4.4 percentage points.

When we distinguish between the deposits held by domestic agents and by the rest of the world, we detect significant differences in the evolution of these deposits since the onset of the crisis. Thus, between 2008 and 2011, the absolute value of the

deposits of domestic agents has fallen - 0.4 percent. However, this fall is more intense in the case of the deposits of the rest of the world, which fell much further. These falls have meant that the share of these items in the liabilities side of the balance sheet of the credit institutions have decreased by 3.2 percentage points in the case of the deposits of the domestic agents, and by -1.2 percentage points in the case of the deposits of the rest of the world.

The financialisation process that has developed in the Spanish economy, that is the increase of the size of the financial assets and liabilities, has resulted in an intense growth of the financial balance sheet of the different agents of the economy, both of the financial assets and the liabilities.

Since the late nineties, the private sector, mainly financial and non-financial corporations, increased rapidly their borrowing. At the onset of the crisis, in the year 2007, the outstanding liabilities in the balance sheets of the financial institutions and the non-financial corporations amounted to, respectively, 410 and 381 percent of Spanish GDP. In the case of households, the size of their liabilities was much lower: 89 percent of the GDP. This data shows that the process of borrowing of the Spanish economy was not led and fuelled by the household sector, but by the financial and the non-financial corporations. In other words, it was not private consumption or the purchase of houses which drove the financialisation process in Spain but the increase in the investments financed by the recourse to external funding and the development of the financial sector.

The crisis has led to a process of deleveraging in the Spanish economy. The only exception to this process is the general government, whose liabilities increased 39 percentage points of the GDP between 2007 and 2011 (rising from 47.8 to 86.8 percent of the GDP). It is remarkable that the behaviour of the non-financial corporations, whose liabilities fell 65 percentage points of the GDP in this period

(from 381.2 percent to 316 percent of the GDP). In the case of the households, their liabilities kept growing until 2010, but in the year 2011 they fell 4.7 percentage points, placing their liabilities below the figure registered in 2007. In the case of the financial institutions, the liabilities of these institutions are falling since 2009, with the result that they have fallen 6.5 percentage points of GDP between 2009 and 2011.

The sub-sector of the savings banks played a relevant role in this process of expansion of the credit institutions. Since the late eighties, the savings banks adopted a business model similar to those of the private banks, spreading out along the whole economy, giving up their traditional local-regional territorial basis, and also giving up the traditional financial activity focused on the households and the small and medium enterprises.

The financial expansion process, joined to an excessive risk-taking in certain sectors and industries, mainly in the residential construction sector, resulting from an inaccurate supervision by the regulator (the Banco de España) of the risks adopted by the credit institutions, led to an excessive and unsustainable indebtedness both of the non-financial private agents and the credit institutions, which burst abruptly, with dramatic consequences for the sector and the whole economy, in 2008.

This process of financial expansion and over-borrowing of private agents that took place in the first decade of this century, was “fuelled” by a set of inter-related elements:

- The lack of an effective counter-cyclical economic (fiscal) policy that curbed the high economic growth
- The high demand of credit by non-financial private agents (reasons: high economic growth, high profitability rates, strong jobs creation, constitution of new households, population growth fuelled by migration inflows, tax cuts, rising dwelling prices...)

- The absence of an efficient practice of financial supervision by the Bank of Spain that avoided/curbed an excessive risk exposure
- The expansion and banking process of the sub-sector of saving and loans institutions: the institutions with the higher exposure to the risk of the real estate related loans and to the crisis of the non-financial companies

Unlike the banking crisis of the decade of the seventies in the past century, the saving banks are the financial entities more affected by the crisis, with the result that the bulk of the public interventions in the Spanish credit institutions have been concentrated in this kind of credit institutions.

## **PART I. THE SPANISH FINANCIAL SYSTEM BEFORE 1980**

### **1. Historical and political economy background**

The history of Spanish financial system is the result of a complex historical process fed by financial crises, regulatory changes emanating from economic doctrine and the experience gained from crises, guidelines for financial policy emanating from political authority, commitments to liberalizing the financial system and, of course, pressure from financial agents who sought to maintain their privileged positions. In this introduction, we present the main historical features of the development of the Spanish financial system since the second half of the 20th century, when the Spanish economy began an intense process of external opening and industrial development. The objective of the introduction is, furthermore, to show the subsequent crisis that affected the financial systems and the lessons obtained to improve the regulation of the system, mainly the regulation of the banking system.

#### **1.1 The 1962 Parent Act**

The 1962 Parent Act governing the Organisation of Credit and Banking constitutes the mandatory starting point for understanding the regulatory changes that took place after the end of the seventies, as the first major financial crisis that affected the sector can be traced back to regulations contained in this law.

To understand the banking model designed by this Act, one needs to bear in mind the financial times in which it was passed. By the end of the fifties, the economic model promoted by the dictatorship at the end of the Civil War had run its course. The Stabilization Plan was passed in 1959, the aim of which was to adjust the economy in order to adapt it to a new growth phase. An industrialization strategy got underway in the early sixties, based on the replacement of imports by implementing an economic

planning process that would last until the early seventies. Therefore, the aim – which was backed up by law – was none other than to accommodate the financial system within this new economic growth strategy by attempting to ensure that resources would be allocated to production activities identified by the government as strategies.

To achieve this objective, the law established a more interventionist regulatory framework, limiting the area open to banking competence via the market as follows: controls were established over the interest rates applicable to assets and liabilities; privileged financing circuits to certain industries were reinforced, increasing the relative weight of official banking and in turn increasing control over private banking and savings banks via the establishment of minimum investment ratios; and restrictive policies were maintained in order to prevent the entry of foreign banks.

The banking model was designed to provide long-term privileged financing aimed at production activities selected by public authority. To get an idea about the results attained, all that needs to be done is to point out the fact that the privileged financing circuits in the early seventies accounted for 35percent of total resources within the credit system, whereas by the end of the decade this ratio had risen to 45percent (Poveda, 1980).

A new feature of the law of 1962 was the setting-up of Industrial and Business Banking. With this new type of banking, the legislator tried to foster business promotion and long-term financing activities, by separating them from strictly commercial and payment-based activities. An attempt was made via this new banking model to break with what had become recognised as the banking status quo, i.e. the segmentation of the previously-existing credit market into commercial banking, savings banks and public credit institutions. This segmentation, combined with existing controls over interest rates, had given rise to suppression of credit



channels geared to productive investment, as most of the financing they provided was very short term<sup>1</sup>.

On the other hand, the law also attempted to revitalize the role of monetary policy via the introduction of cash, liquidity and guarantee ratios and also by setting up a supervisory structure for the financial system. The 1962 Parent Act nationalized the Banco de España, although the regulatory activity carried out by credit institutions was initially subject to different regulators. The Banco de España took over supervision of commercial bank activity, the Savings Bank Credit Institute would supervise the savings Banks, and the Medium and Long-Term Credit Institute would control official credit. The centralization process involved in all the supervisory activity at the Banco de España was not definitively completed until 1988. In 1971, it took charge of supervising the savings banks and credit cooperatives and, lastly, in 1988, it was assigned competences for controlling official credit institutions.

Regulation of the Spanish financial system at this time was not so different from what could be seen in other countries on the continent such as France and Italy (Pons, 2011). Nonetheless, the Spanish model *did* have distinguishing features that help to understand the key position retained by banking on the Spanish financial market. The most significant feature was the limited diversification of the Spanish financial system, accentuated by legislation that clearly discriminated against non-banking intermediaries (García Ruiz, 1999). This discrimination reinforced the role of banks as suppliers of capital.

The industrial crisis in the seventies therefore out of necessity had to also manifest itself in the form of a banking crisis – and with an intensity that had no precedent.

## 1.2 The 1977-1985 crisis

### 1.2.1 An industrial crisis and a banking crisis

The seventies in Spain began with some symptoms of crisis that would end up worsening with the two rises in oil prices during that decade. The symptoms we are referring to were a drop in productivity aggravated by major wage pressure. During a first phase, this crisis was managed via a reduction in interest rates and an increase in public expenditure. When the Moncloa Agreements were signed in 1977, there would be a radical change in macro-economic policies aimed at managing the crisis. These agreements entailed a stabilization plan geared to containing inflationary trends by acting on three fronts: monetary policy, fiscal policy and income policy.

The restrictive policies applied after 1977 on the one hand raised financing costs and, on the other, helped to control aggregate demand. Therefore, the industrial sector started to face problems with regard to both financing and demand, which triggered off a crisis that had already been latent since the beginning of the decade in the form of falls in profits rates owing to a drop in productivity and an increase in labour costs. This industrial crisis led the Spanish banking system into an unprecedented crisis due to the excessive concentration of risks that banks had taken on with the industrial sector over the previous decades.

56 banks in total were affected by this crisis along the period 1977-85, holding a 27percent share of deposits in private banking (Cuervo, 1988). These banks were intervened by the Bank of Spain and the Deposit Guarantee Funds, and after a restructuring and reorganization process they were sold to other banks. The crisis also affected the savings banks, albeit with less intensity, as their risks were not so concentrated in the industrial sector. This situation was markedly different from the current crisis, in which the last-mentioned credit institutions have been the worst-affected by their excessive concentration of risk in the property sector.

The banks most affected were the Industrial and Business Banks that had emerged with the 1962 Parent Act. Problems arose, like in all financial crises, owing to

differences between the timing of the regulator and the timing of the banking system in order to escape the controls being imposed on them. Undoubtedly, the process involving the setting-up of these new banks was most likely not subject to strict supervisory criteria, although “banking regulation at the time did not lack limitations on concentrations of risk and own risks (...), but many banks (old and new) found ways that were legal or otherwise to get around these limitations, to the extent that inspections gradually unearthed concentrations of risk and group risks” (Poveda, 2011, p.248).

### 1.2.2 Consequences of the crisis for financial regulation

The financial crisis firstly meant that procedures needed to be overseen in order to deal with the crises affecting financial institutions. The Deposit Guarantee Funds (FGD) were established in 1977 both for banking institutions and savings banks. These funds were fed by resources provided by financial institutions (an annual 1percent of their deposits) and by further ones from the Banco de España. The modus operandi of the rescue operations took the form of the typical *accordion operations*: firstly, the Fund purchased the institution in question at a symbolic price (in some cases, meaning one Spanish peseta); secondly, a restructuring programme was established and capital subscribed by the Fund was issued in order to adjust the new balance sheets and, lastly, the now-restructured institution was sold.

Parallel to the resolution of the crisis, a reform process got underway that aimed at changing the financial model inherited from the dictatorship. The purpose was to *uncouple* the banking sector from industry via a regulatory change that was geared to liberalizing the financial system as a whole.

Liberalization of the sector was implemented throughout a period that would come to an end in the late eighties. Some liberalizing measures, which affected the setting of interest rates, had already been adopted by the mid-seventies. The freedom to

open bank branches had also been approved in 1974. However, it would be after the arrival of the democratic system when liberalization of the sector would really receive a boost. Thus, the door opened to the *de-specialisation* of the savings banks in 1977, enabling them to carry out the same operations as other banks, removing de facto the differences previously existing in the kind of banking operations developed by banks and saving banks. The following were liberalized by Order issued by the Ministry of Finance on 17<sup>th</sup> January 1981: deposit rates, transactions between deposit and financial institutions, and active transaction rates. The increased use of variable-rate transactions was also now accepted. This liberalization process of rates was completed in 1987, when the maximum rates that had still been maintained for both asset and liability transactions were definitively suppressed. 1987 also saw the dismantling of minimum investment ratios that was completed in 1992. Foreign banks were permitted to enter in 1978, albeit with certain restrictions, and savings banks were permitted in 1988 to expand beyond their territory of origin.

Furthermore, the Law governing the Securities Market was enacted in 1988 with a view to expanding opportunities for financing those demanding capital. As has already been pointed out, this market had hardly developed over the previous decades. Nonetheless and as shall be referred to later, the Spanish banking system continues to hold a key position within the financial system, despite greater development of financial markets.

At the same time as the sector was being liberalized, regulation and supervision over financial institutions was also being adapted. As far as the banking sector and savings banks were concerned, the Banco de España published two circulars in 1978: one which affected commercial banking and the other the savings banks, the aim of which was to establish objective accounting standards so as to in turn establish provisions for credit risk. The Banco de España set out a procedure via these circulars to rate assets as doubtful, and therefore with an attached obligation

to make bad-debt provision according to the time that had elapsed since the transaction had defaulted. Thus, the subjective criterion that financial institutions had hitherto been using to make bad-debt provision for doubtful credit was removed. The key criterion has been maintained over time, although demands for provision and the temporary reference period of the default months were steadily modified as statistical information became available.

A new circular issued by the Banco de España in 1984, induced by growing Spanish banking activity in Latin America, also introduced the obligation to make bad-debt provision for the risk-country.

The second most important measure established during the period of supervision and control over financial institutions was introduced by Act 13/1985. With this law the supervisor established a weighted ratio according to the level of risk attached to the different assets and risks held by institutions as a key element of solvency regulation. This ratio was calculated based on the consolidated accounts of the banking group.

### **1.3 The second financial crisis: the Banesto case**

The liberalization of the financial sector which took place during the eighties gave rise to growing competition and, as a consequence, triggered off a reorganisation process of the banking sector in the eighties which led to a fall in the number of commercial and savings banks.

There were waves of mergers and takeovers of savings banks between 1989 and 1993 that reduced their total number from 76 to 51 institutions. This process was partly the result of the banking crisis at the end of seventies, although it was fundamentally associated with the creation of the autonomous regions and the

enactment of Royal Decree

1582/1989, which authorised the unrestricted territorial expansion of these financial institutions. As a result, the savings banks, which had been operating in a specific (local, provincial or regional) territory started an expansion process along the whole national territory.

Banking concentration processes got underway at the end of the eighties with the merger in 1989 of Banco Bilbao with Banco Vizcaya, giving rise to the BBV. This merger would be completed in 1999 with the incorporation of Argentaria, which had come into being as a result of the merger of public financial institutions, giving rise to the current BBVA. The merger of a further two major banks took place in 1991 – Banco Central and Banco Hispano Americano – to form the BCH. In the year 2000, Banco de Santander merged with the latter bank to create the current Banco Santander.

In the midst of all these mergers, the other major Spanish bank at the time – Banesto – attempted to maintain an independent strategy by rejecting the merger attempts that had initially been proposed by Banco Bilbao. However, its financial situation was a delicate one, and was aggravated by a high-risk banking strategy. This delicate situation worsened as a result of the economic decline in 1993, which resulted in bank default rates being raised considerably. At the end of that year, the Banco de España decided to take over its administration and restructure it via the Deposit Guarantee Fund. Once Banesto had been restructured, it was then taken over in 1994 by Banco Santander. Restructuring needs amounted to 1 percent of GDP in 1993, although the final losses to the Fund were considerably reduced owing to the good price obtained for its sale. “The 1977-1985 crisis had a major impact both on prudential and accounting regulations and on the mechanisms and procedures in place for dealing with deposit-taking institutions. The Banesto crisis had a different outcome – this was a tough reminder that no supervisory system can consider themselves free of accidents, however efficient they may be” (Poveda, 2011, p. 274).

## 1.4 Joining the European Union

The fact of Spain joining the European Union did not entail any serious adaptation problems for the Spanish financial system.

An immediate consequence of joining was a reinforcement of the already-existing tendency in Spain to treat all financial institutions in the same way and with the same regulations.

The drive to create a common banking market pursued by the Second Directive created the so-called *banking passport*: the banking license granted by a national authority is used to render banking services - with or without physical premises - in any other member state. The number of foreign banks in Spain increased with the introduction of the common banking market. However, their degree of penetration in the market was very limited. In the year 2009 the market shares of the credit institutions were the following ones: the share of the private banks was 54.7 percent, the share of the savings banks was 41.5 percent, and the share of credit co-operatives was 3.3 percent. In this year, the market share of the Spanish private banks was 44.5 percent, and the share of foreign private banks amounted 10.2 percent. In the case of the foreign private banks, the highest shares belong to European Union banks, which represent around 80 percent of the total share of foreign private banks in Spain.

## 1.5 The years prior to the current financial crisis

As we will develop later, at the beginning of the crisis, the Spanish economy was undergoing a financialisation process similar to that experienced by other countries in the Monetary Union, albeit with some distinctive features<sup>2</sup>. Firstly, it was somewhat less intense. In 2007, the weight of the financial sector in the economy

was somewhat less than the European average: financial brokerage represented 5.3 percent of Gross Value Added and accounted for nearly 2 percent of employment in Spain. These percentages in the EU were 5.6 percent and 2.9 percent respectively. Nonetheless, the total value of assets in the balance sheet for the financial system represented 413 percent of GDP.

The second characteristic feature was the key position maintained by the banking system despite the major development of the financial markets. Indeed, Spanish banking at the dawn of the new millennium evidenced considerable muscle. It had fully adapted to the liberalization process. Moreover, it had managed to gain control over the banking disintermediation noted in most developed countries. In 2007, monetary financial institutions as a whole controlled practically 80 percent of financial assets, while this ratio was somewhat above 60 percent in the rest of the Eurozone countries and below 20 percent in the USA (Vives, 2011). In this same year bank loans to the private (non-banking) sector represented 169 percent of GDP, while stock-market capitalization accounted for 117 percent. A good proportion of activity related to financial markets such as investment and pension funds were also (and continue to be) administered by the banking sector.

On the other hand, banking concentration processes together with the entry of Spain into the Economic and Monetary Union initiated quite an intense internationalization process for Spanish financial institutions. In 2005, banking reached the maximum internationalization ratio for its assets (21.9 percent) and its liabilities (29.5 percent). However, this process was concentrated within the two major Spanish banks (BBVA and Banco Santander), which owned 90 percent of all bank subsidiaries overseas.

During these years, the main new feature that had been incorporated into the supervisory framework for deposit-taking institutions was the so-called *dynamic provisions*. These provisions were introduced by the Banco de España in 1999, and redesigned five years later. The core idea on which these new regulations were



based was that provisions for credit risk had to cover both assets showing clear signs of decline and potential dangers. These reserves accumulated during the good years, i.e. with limited default in payments, to be freed in the bad years. This meant that a provision would have to be calculated in each accounting year by applying a vector of conventional ratios to credit *positions* and, since the 2004 reforms, a further vector of ratios to be applied to *increases* in these positions. The inclusion of this second vector may have had a bearing on anti-cyclical behaviour, thus helping to slow down the rate of credit growth.

## 1.6 Gestation of the crisis of 2007 onwards

The Spanish banking system crisis is related exclusively to the property bubble that started in Spain at the beginning of the last decade. Neither the banking system nor the other financial institutions held enough toxic assets in their balance sheets to deal with such a crisis. In fact the opposite was true – the presence of these assets was of very little significance.

Exposure on the part of banking and savings banks to the property sector (property construction and development in particular) represented 26 percent of total credit supplied to the private sector in 2007, with a 14 point increase in relation to 1997. According to financial institutions, exposure was greater on the part of savings banks (29 percent), than on banking (25 percent). On the other hand, credit for purchasing homes amounted to 21 percent of the balance sheet for financial institutions, and credit as a whole destined for property activities, construction and the purchase of homes represented nearly 60 percent of total credit in 2007. Savings bank exposure was greater than that of banks (69 percent as opposed to 53 percent). In the rest of the report, we will present in a more detailed and precise way these data that we are now present in an aggregated way.

The *credit demand* side of the property bubble was the result of the convergence of several bubbles. The first involved the lowering of interest rates driven by the ECB which in Spain ended up being transformed into a lowering of real rates owing to a price differential with the other countries in the Monetary Union, especially Germany. This decrease, however, was only a condition deemed necessary for the property bubble to be fed. The other variables were linked to a set of singular events that took place in Spain and ended up diverting the *cheap money* towards the property market.

Among these variables was the savings pattern of Spanish families, which had unique features in relation to other European countries. This pattern was characterized by a bias in favor of accumulating property assets. According to the Financial Survey on Families prepared by the Banco de España in 2009, 80 percent of the total value of family assets was property assets. The main home accounted for 54.8 percent of the total wealth of households, while other property assets (basically, the second home) accounted for the remaining 25.2 percent.

This savings pattern helped to feed the demand for property via two channels. Firstly, it did so via the demand for a first property, driven by the fact that the baby boom generation had entered the job market during the last years of pass century. In Spain, the demographic transition process came approximately ten years later than in other European countries. The arrival of an immigrant population also helped to feed this first channel. Secondly, it did so via the demand for a second home, which Spanish families used as a replacement for other long-term investments such as pension or investment funds.

Another variable which helped to feed the property bubble was the demand for housing designed for non-residents, essentially in Mediterranean coastal areas.

This growing demand for financing clashed with the Spanish banking model, which might be defined as a classical model, as well as with some decisions by the Banco de España that placed limits on securitization. Securitization in Spain maintained the risk on the financial institutions' balance sheet. Moreover, the originators continued developing the role of credit administrators and those responsible for their monitoring and supervision, owing to regulation of the mortgage market. Therefore, the result was that credit institutions used securitization as a financing mechanism and as collateral in order to approach the BCE, more than as an instrument for transferring risk. In short, the growing demand for credit, driven by the reasons stated above and together with the difficulties attached to securitizing credit and the lower growth rate of deposits, led the banking sector to gain resources on international capital markets. The bubble therefore could be maintained while banking was in a position to be financed on wholesale markets.

With the advent of the financial crisis in the USA, the property bubble in Spain started to show signs of exhaustion. The indebtedness rate of the Spanish family was curbing its growth. In the year 2007, the construction of new homes reversed their trend, resulting in a negative growth rate in comparison to the previous year, even though 634,000 new homes were built in that year. It started to become clear that the accumulated stock of properties was far greater than demand. The international financial crisis therefore had an impact on a market that was already saturated. Without this crisis, the most likely scenario is that the bubble would have also burst, albeit obviously with less devastating effects.

The international financial crisis speeded up the property sector crisis as the capital markets dried up. The impossible situation in which the Spanish banking system found itself in continuing to refinance credit on wholesale markets drastically restricted internal credit, which in turn led to a mutation of the crisis. This was now no longer just a financial crisis, but would also become an economic crisis. The

liquidity provided by the BCE was in principle maintained in the central bank itself in the form of reserves, and was subsequently used to purchase public debt. The debt crisis in countries bordering Europe started to threaten the banking system in Spain, which ultimately compelled the public sector to modify the policy hitherto pursued in order to restructure the banking system.

## 1.7 The financial crisis

Nonetheless, Spanish credit institutions as a whole entered the crisis in a strong position: high solvency ratios, a decent cushion of specific, dynamic provisions and certain profit levels which, although at a slower rate, continued to generate reserves (Vives, 2011). What really contributed towards making the situation of these institutions worse has been the prolonged economic recession since 2008. Although default rates have increased, except for credit supplied to the property developer, default ratios have still not reached the levels attained in the crisis of the early nineties. In 2012, the default rate for mortgage credit for purchasing a property is currently at 3.2 percent, whereas in 2004 this rate amounted to 4percent.

As can be clearly seen in other parts of this report, the crisis has fundamentally had an impact on one part of the banking system: the savings banks. These institutions were the ones that had accumulated the most risk during the years of the bubble in the property sector, essentially in the market segment referring to credit supplied to property developers and constructors. The private banks had also accumulated a considerable risk, although the internationalization process has enabled them to administer this risk in a less traumatic way, since their risks were more diversified than in the case of the savings banks.

From the standpoint of banking regulation, the financial crisis in Spain has some noteworthy features. Unlike what has occurred in the USA and has already been

pointed out, *originate-distribute* model was not developed here. Banking assumed all the securitization risk. Therefore, there were no opaque areas for banking supervisory work in this aspect. Nonetheless, the property bubble considerably raised property prices, which led financial institutions to carry out innovations in order to facilitate their purchase via mortgage credit that has helped to worsen the quality of credit and increase banking risk. Thus, for instance, the standard deadline for repayment, which was around fifteen years in the nineties, was extended to 25.5 years. This extension meant that monthly payments would be lower, but were allowed to increase as interest rates steadily rose. Moreover, this lengthening of the repayment deadline also increased the time during which the bank was exposed to risk of non-payment, although there is no evidence to suggest that banks adapted their risk management policy to these extensions of deadline. On the other hand, practices were noted involving the granting of mortgage credit that exceeded the limits imposed by law on the maximum amount of resources that could be provided with mortgage guarantee.

Although the Banco de España sent out warnings to the savings and commercial banks about some of these new risks, it is not clear as to whether it acted accordingly and, yet, they *did* have at their disposal regulation and supervisory rules that were suited to detecting the risk concentration that was taking place. There is more than enough proof available to show that the regulator was informed about the situation of risk that was emerging in the financial system. Therefore, mistakes were not made so much owing to an inability to detect the risk, although something could have been done about this, but rather, due to an abandonment of responsibilities on the part of regulators – especially the banking regulator for the savings banks. In the case of the savings banks, the presence of politicians in their governing bodies has always been very significant. This presence of politicians worked as a political barrier to the control aspirations of the regulator, i.e., the Banco de España. However, the regulator never showed a clear will to prevail over these political pressures.

It is difficult to find a clear answer to the question of why there was this lack of will on the part of the regulator to put a stop to the upward trend of banking risk in the property sector, although there are some ideas that can be put forward.

The savings banks are financial institutions with certain unique features in terms of their governing bodies. These institutions have traditionally maintained an investment policy that has been highly concentrated within the region in which they were founded. Their governing bodies, on the other hand, have always been controlled by the political class within the autonomous region to which they originally belonged. This combination resulted in a management of these institution characterized by inappropriate degree of professionalization and a certain exploitation on the part of local political power. The task of the regulator in such cases therefore had to be developed on a complex terrain characterized by an excessive prevalence of the *political* variable. The autonomy of the Banco de España, regulated by Act 13/1994, should have been used as a shield against such tension, but the truth of the matter is that this was not the case, or at least did not occur with sufficient intensity. The crisis had shown its true character, and compelled the legislator to take suitable measures. In 2010, some legislative changes were introduced that aimed at professionalizing their governing bodies by thus trying to break the link that joined these institutions to political power – at least on paper.

Mistakes made by the Bank of Spain in trying to contain the expansion of credit are not the only reasons for the increase of the property bubble, although they are major ones. The Government should have also taken steps to slow down the construction boom. One of the key points that helped to raise property prices and, therefore, raise the level of indebtedness, was speculation surrounding the price of land that led to the Land Act being passed in 1998. This law, combined with the financing difficulties being experienced by municipalities, enabled the latter to control the supply of

building land according to their

income

requirements, thus contributing towards an increase in such prices.

All this information was known in the years prior to the crisis. However, sufficient political will was not there to carry out the reforms needed or for the regulator to take the relevant decisions in order to slowdown the expansion of credit. The property bubble helped to create employment and increase tax collection. Successive governments did not wish to assume the political cost that changing this state of things might have represented.

## PART II. THE SPANISH FINANCIAL SYSTEM SINCE 1980

### 2. The growth of finance and its role in the decades of financialisation

#### 2.1 The size of the assets and liabilities of the Spanish credit institutions sector

According the Bank of Spain, the credit institutions sector comprises the following institutions:

- private banks,
- savings banks,
- credit co-operative banks,
- specialized lending institutions, and
- the Instituto de Credito Oficial<sup>3</sup> (ICO).

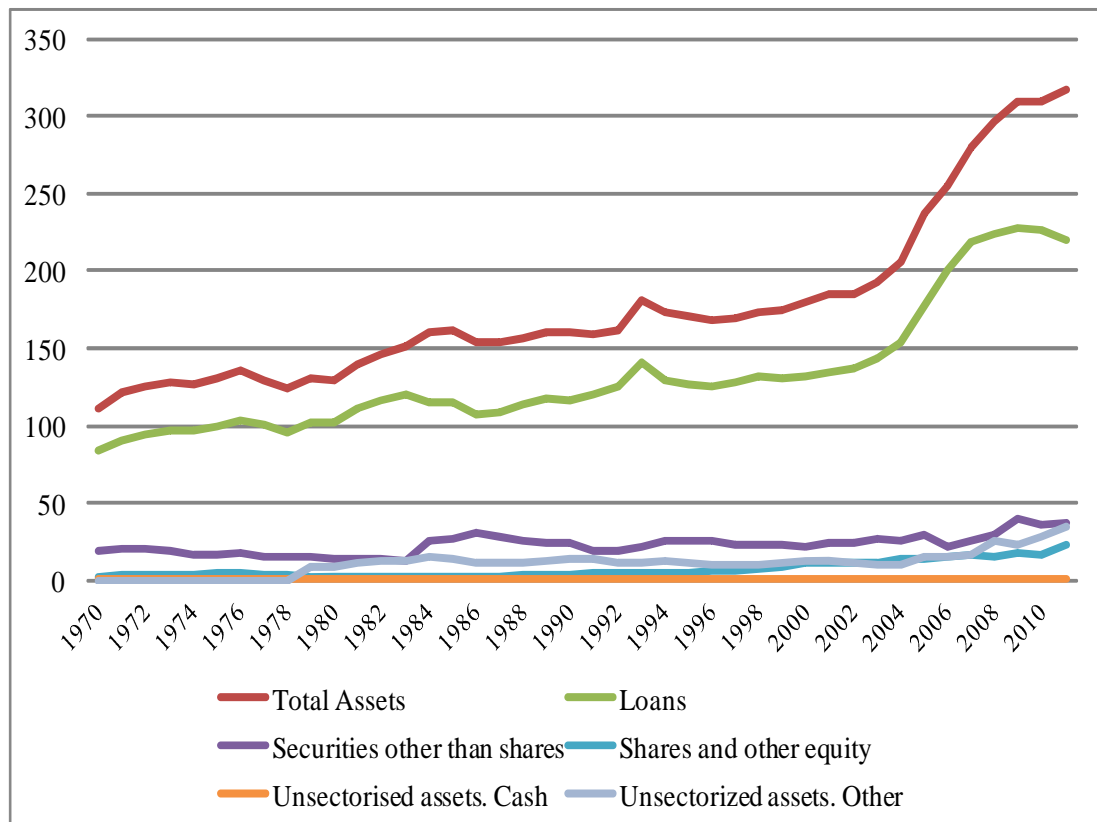
Since the beginning of the seventies, the size of the credit institutions in Spain shows a stable path of growth, increasing its size as a percentage of the Spanish GDP. Thus, the size of the total assets of the Spanish credit institutions that amounted to 111.4 percent GDP in 1970 reached 185.5 percent GDP in 2002. Since then, a process of accelerated growth started in 2003, with the result that in 2011 the assets of the Spanish Credit institutions peaked at 316.8 percent GDP. This financialisation process of the Spanish economy, identified with a deepening of finance in the economy, took place during a sustained and long-lasting phase of economic growth. In the period 1994-2008 the Spanish real GDP grew at an average rate of 2.1 percent. This growth accelerated in the decade of the 2000s, and, thus, in the period 2000-2008 the Spanish real GDP grew at an average rate of 3.7 percent.

This rate of growth, unparalleled in Spain since the seventies, shows that increase in the size of the financial sector, measured as its size in terms of the Spanish GDP, is not the result of a slowdown in the economic growth that led to a higher relative size



of the Spanish financial sector. On the contrary, the fast growth of the financial sector registered in the decade of the 2000s is the result of a structural break that led to a new path of development of the financial sector that resulted in the huge expansion of the sector.

Figure 1. Assets of credit institutions, 1970-2011 (percentage of GDP)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Monetary Financial Institutions, Balance sheet according to the euro area returns (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest6.html>)

It is important to notice that, as the figure 1 shows, the huge increase in the size of the assets of the credit institutions is mostly explained by the rise in the loans, that rose between 2002 and 2009 from 137.6 percent of GDP to 227.6 percent of GDP.

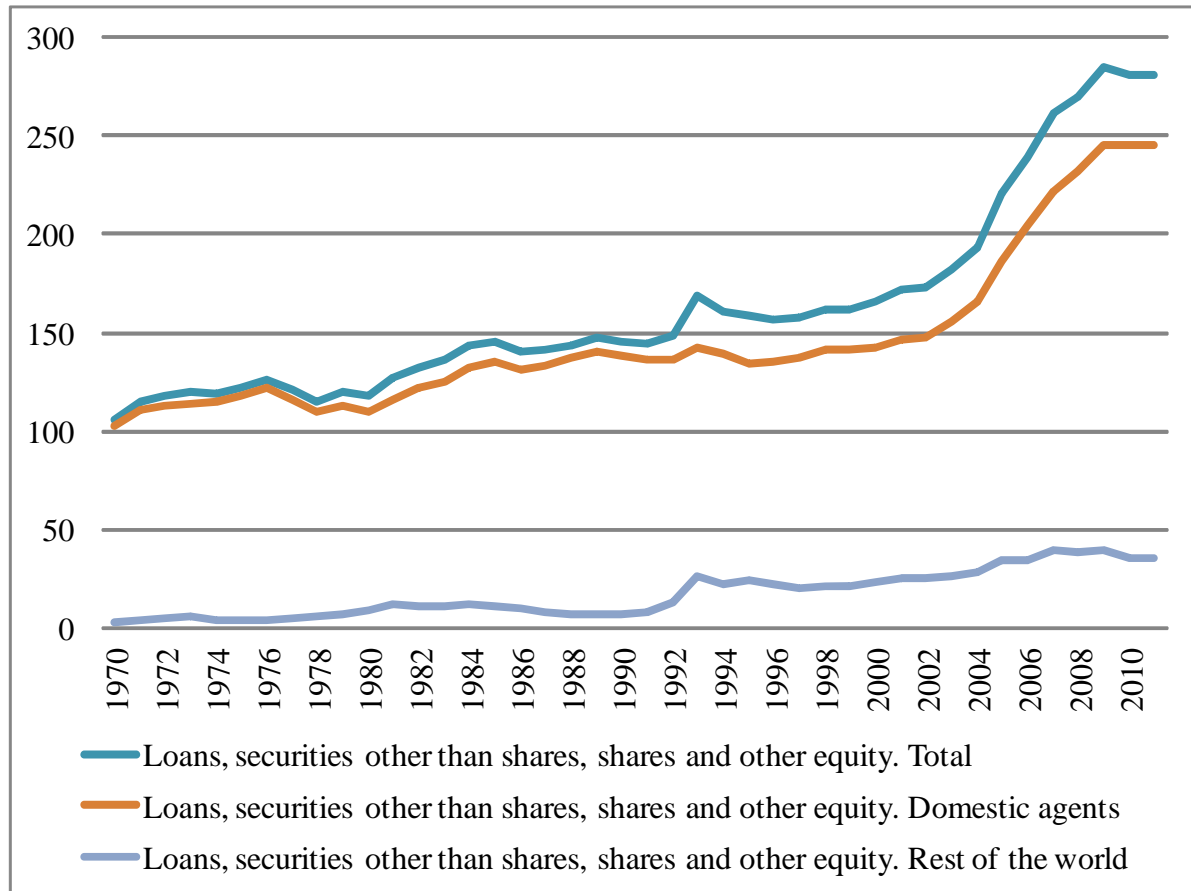
Since the crisis, the path of growth of the assets of the credit institutions has clearly slowed down. Between 2008 and 2011, the size of the total assets of these

institutions has only increased by 20.5 percentage points of the Spanish GDP. However, in this period the relative size of the loans and the unsectorised assets–cash has fallen: -4.7 and -0.1 percentage points of the GDP respectively. On the contrary, between 2008 and 2011, the weight of the rest of the assets has increased: 7.8 percentage points of the GDP the securities other than shares, 7.5 percentage points the shares and other equity, and 9.9 percentage points the unsectorized assets – other.

Moreover, this evolution hides the fact that between the years 2008 and 2011 the Spanish GDP fell in nominal terms by -1.3 percent. Thus, if we focus on the evolution of the absolute value of the assets of the Spanish credit institutions, the picture changes significantly. In this period, the value of the assets of the credit institutions has increased 5.5 percent. However, the absolute value of the loans and the unsectorised assets–cash has fallen: -3.4 percent and 16.9 percent, respectively. On the contrary, the value of the rest of the assets has increased: 24.5 percent the securities other than shares, 45.4 percent the shares and other equity, and, finally, 37 percent the unsectorized assets – other.

Domestic agents (public and private) have always been the main destination of the funding of the Spanish credit institutions. As figure 2 shows, until the beginning of the 1990s, the funding given by the Spanish credit institutions to the rest of the world was a minor part of the banking business (less than 10 percent of the total assets of the sector). At the beginning of the decade of the eighties, the funding given by the Spanish credit institutions to the rest of the world registered a fast growth, with the result that this funding peaked at 11.9 percentage of the Spanish GDP in 1993. This process of internationalization of the Spanish credit institutions is directly related to a first process of internationalization of the biggest Spanish banks especially in Latin America. This internationalization process failed for different reasons, and in the second half of the decade, the size of the assets in the rest of the world declining returning to their previous levels.

Figure 2. Destination of the assets of the Spanish credit institutions, 1970-2011 (percentage of GDP)

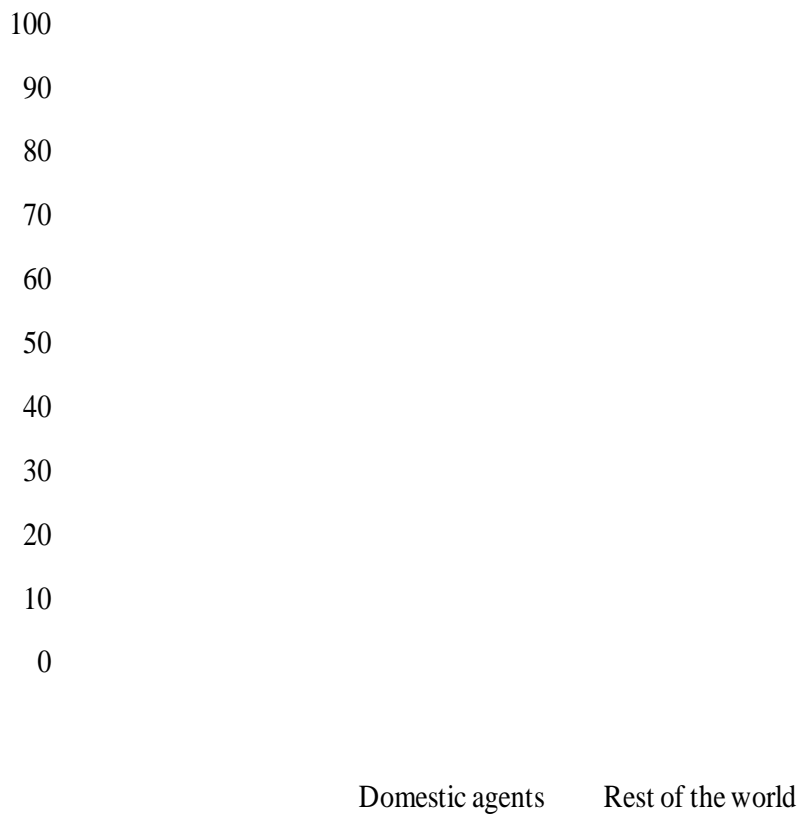


Source: Our calculations based on Bank of Spain, Boletín Estadístico, Monetary Financial Institutions, Balance sheet according to the euro area returns (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest6.html>)

However, in the decade of the nineties a second and more successful wave of internationalization of the Spanish companies, both financial and non-financial, started. This process started in 1992, and developed since then in a sustained way. This internationalization process developed, at first, in Latin America, mainly in the big countries of the region, like Argentina, Brazil, Mexico and Chile, moving later to the European Union countries and the USA<sup>4</sup>. In the year 2009, the size of the loans, securities other than shares and other equity to the rest of the world peaked at 39.6 percent of the total assets of the Spanish credit institutions.

However, the internationalization process of the Spanish banking business does not mean that the expansion process of the credit institutions has been fuelled by that internationalization. On the contrary, the Spanish economy has always been the main destination of the funding given by these institutions. Thus since 1993, the share of the assets in the rest of the world have always been under the peak of the 15.5 percent of the total assets in 2005, oscillating in the range of 12.5-15 percent of the total assets (see figure 3).

Figure 3. Destination of loans, securities other than shares, shares and equity, 1970-2011 (percentage of total)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Monetary Financial Institutions, Balance sheet according to the euro area returns (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest6.html>)

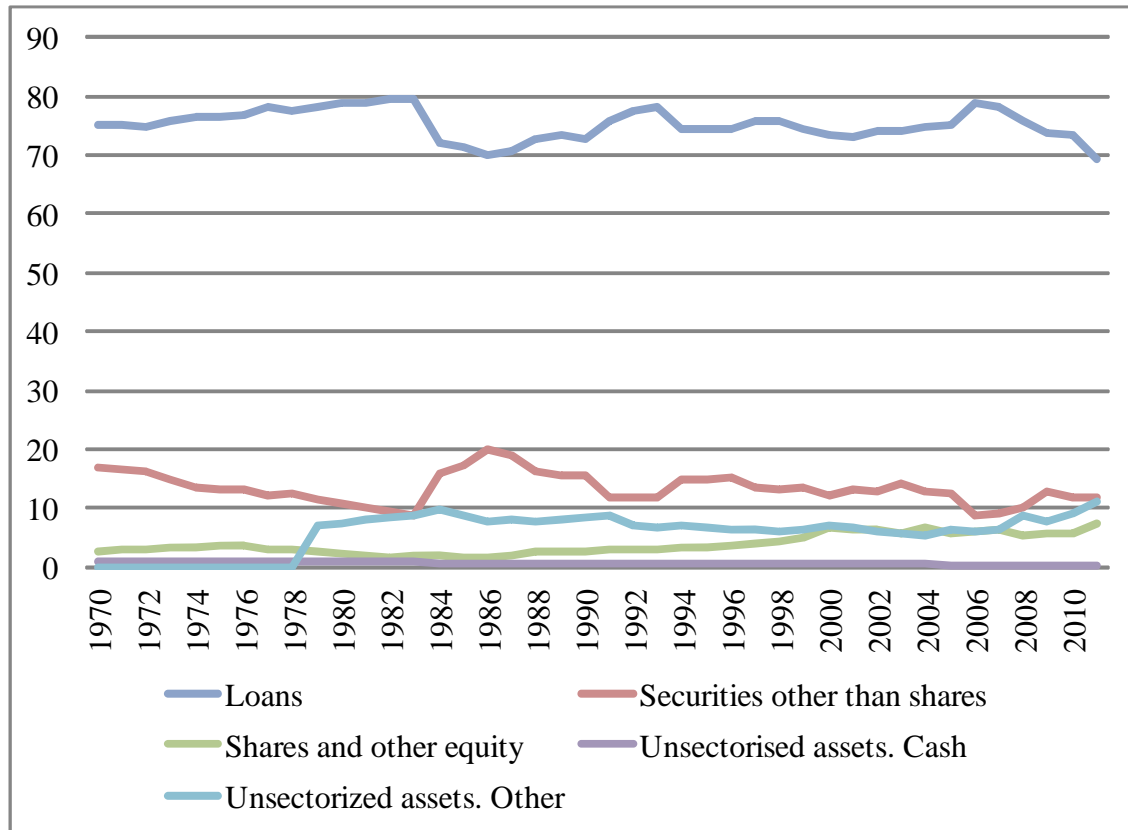
With the burst of the current crisis, the banking business has increased its concentration in the domestic market. Between 2008 and 2011 the share of domestic agents in the total volume of loans, securities other than shares and other equity to the domestic agents has increased by 4.3 percent, equivalent to 13.2 percentage points of the Spanish GDP, whilst the volume of loans, securities other than shares and other equity to the rest of the world has fallen by 7.9 percent, equivalent to 2.5 percentage points of the Spanish GDP. The result is that the share of these assets in terms of the total volume of loans, securities other than shares and other equity has fallen from 14.1 percent to 12.7 percent.

It is important to highlight that the financialisation process in Spain, measured by the size of the assets of the credit institutions, has come with the maintenance of the traditional structure of the banking business, with a predominance of the weight of the loans in the balance sheets of the credit institutions. As the figure 4 shows, since the decade of the seventies, loans have always provided the main asset of the balance sheet of the Spanish credit institutions. Thus, the size of the loans in the balance sheet have been oscillating but with minor changes, with the result that their size has remained in the range of 70 and 80 percent.

Figure 4. Composition of the assets

of credit

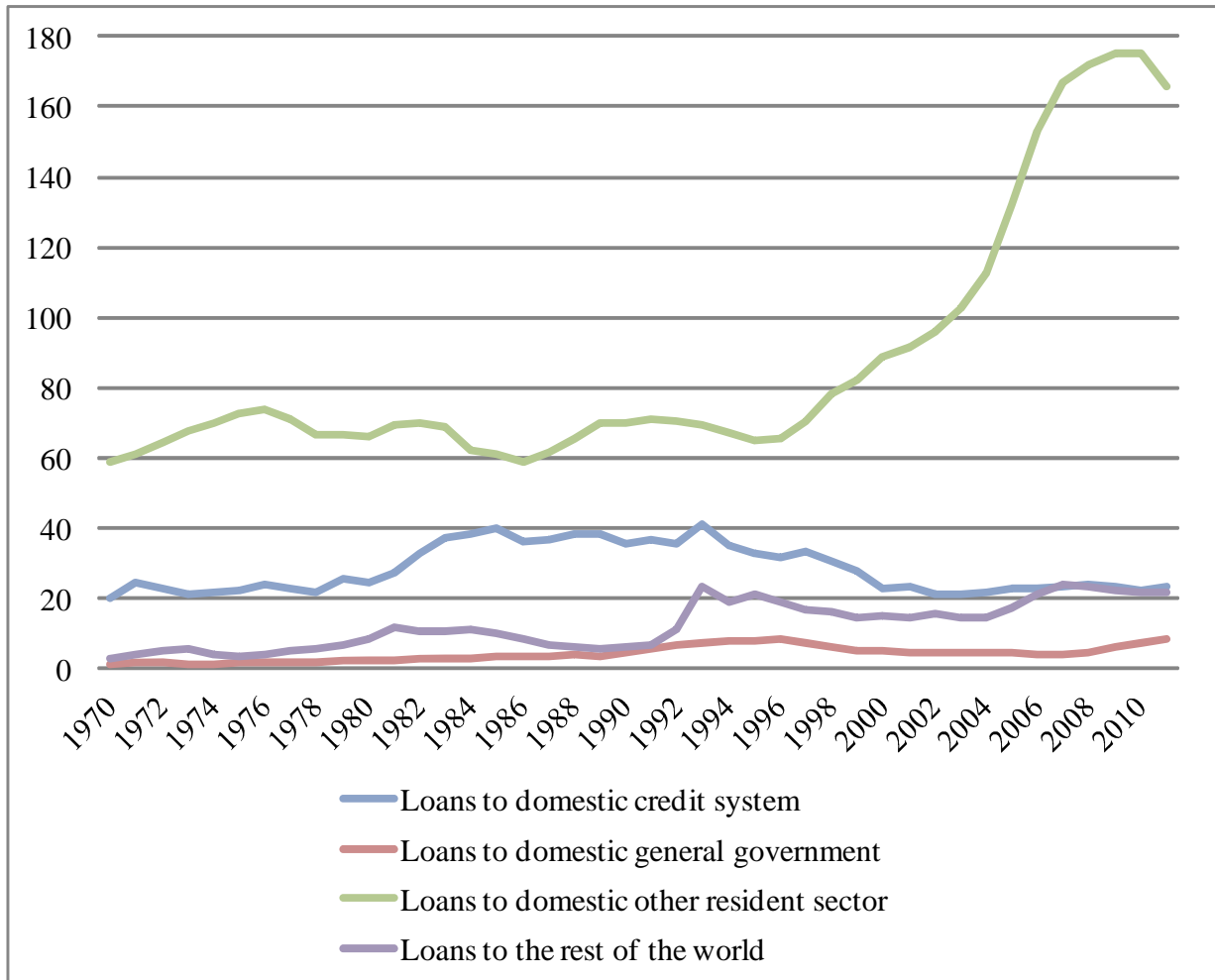
institutions, 1970-2011 (percentage of total assets)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Monetary Financial Institutions, Balance sheet according to the euro area returns (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest6.html>)

In opposition to the financialisation process developed in other economies, however, the size of the securitized assets has not played a key role in the development of the Spanish sector. Although the securities other than assets increased their absolute size in terms of the GDP from 30.5 percent GDP in 1986 to 39.6 percent GDP in 2009, the relative size measured as its percentage of the total assets of credit institutions fell from 19.9 percent in 1986 to 12.8 percent in 2009 (see figure 5).

Figure 5. Loans of the credit institutions, 1970-2011 (percentage GDP)

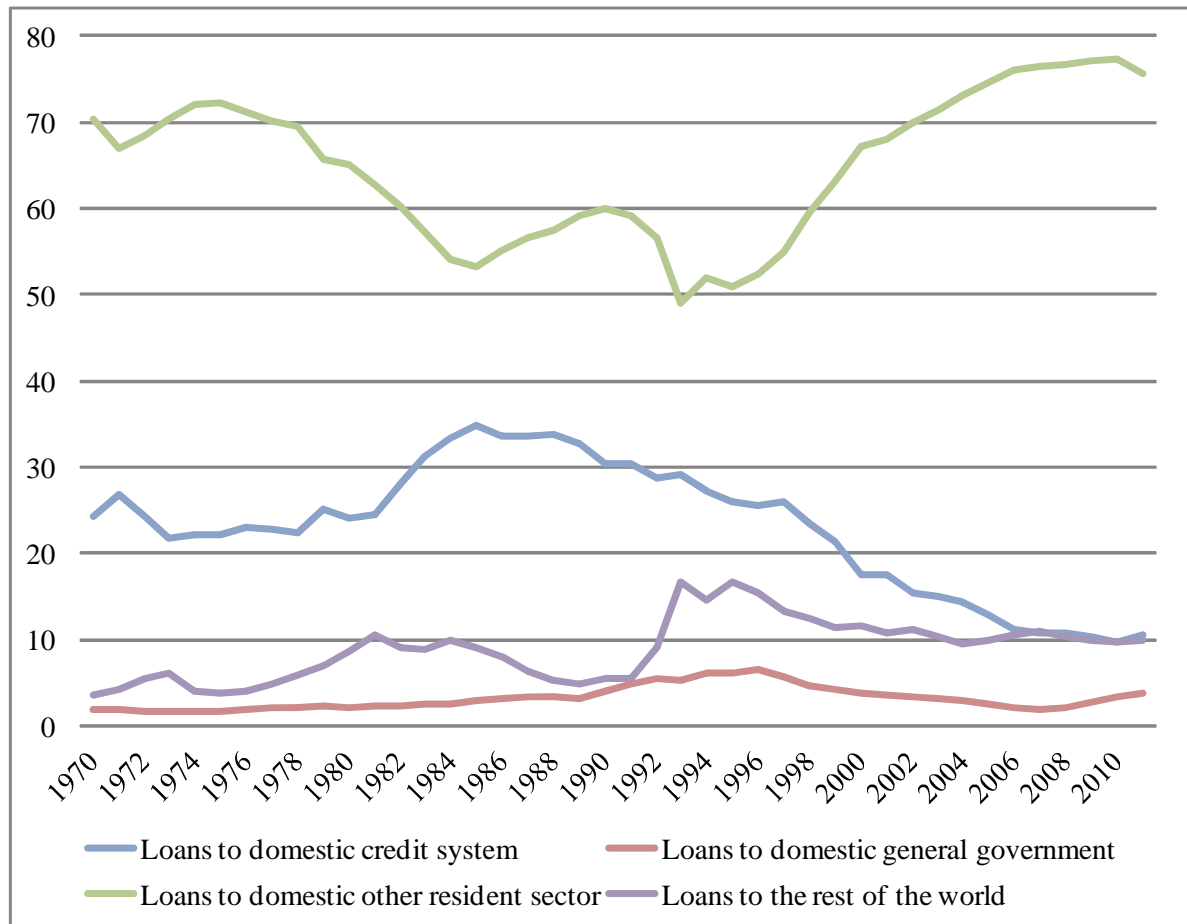


Source: Our calculations based on Bank of Spain, Boletín Estadístico, Monetary Financial Institutions, Balance sheet according to the euro area returns (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest6.html>)

As mentioned above, loans are the main component of the assets of the Spanish credit institutions, retaining a nearly unchanging structure of these assets in the last five decades. Nonetheless, the composition by destination of the loans registered a dramatic change since mid-nineties. As the figure 5 shows, the expansion of the loans, measured as a percentage of the Spanish GDP, is fuelled by the huge expansion of the loans given to the domestic other resident sector, i.e., non-financial companies and households. The loans given to these agents rose from 64.8 percent

of GDP in 1995 to 175.4 percent of GDP in 2010, thus leading to the current huge borrowing of these agents, something that will be addressed in other sections of this report.

Figure 6. Loans of the credit institutions, 1970-2011 (percentage of total loans)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Monetary Financial Institutions, Balance sheet according to the euro area returns (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest6.html>)

The key role played by non-financial domestic agents in the deepening of credit institutions is even clearer when we analyze the size of the loans given to the domestic other resident sector as a percentage of the total loans of the credit institutions. Since the seventies, the size of these loans registered a declining trend, from 70.3 percent registered in 1970 to 49 percent in 1993 (see figure 6). Since this

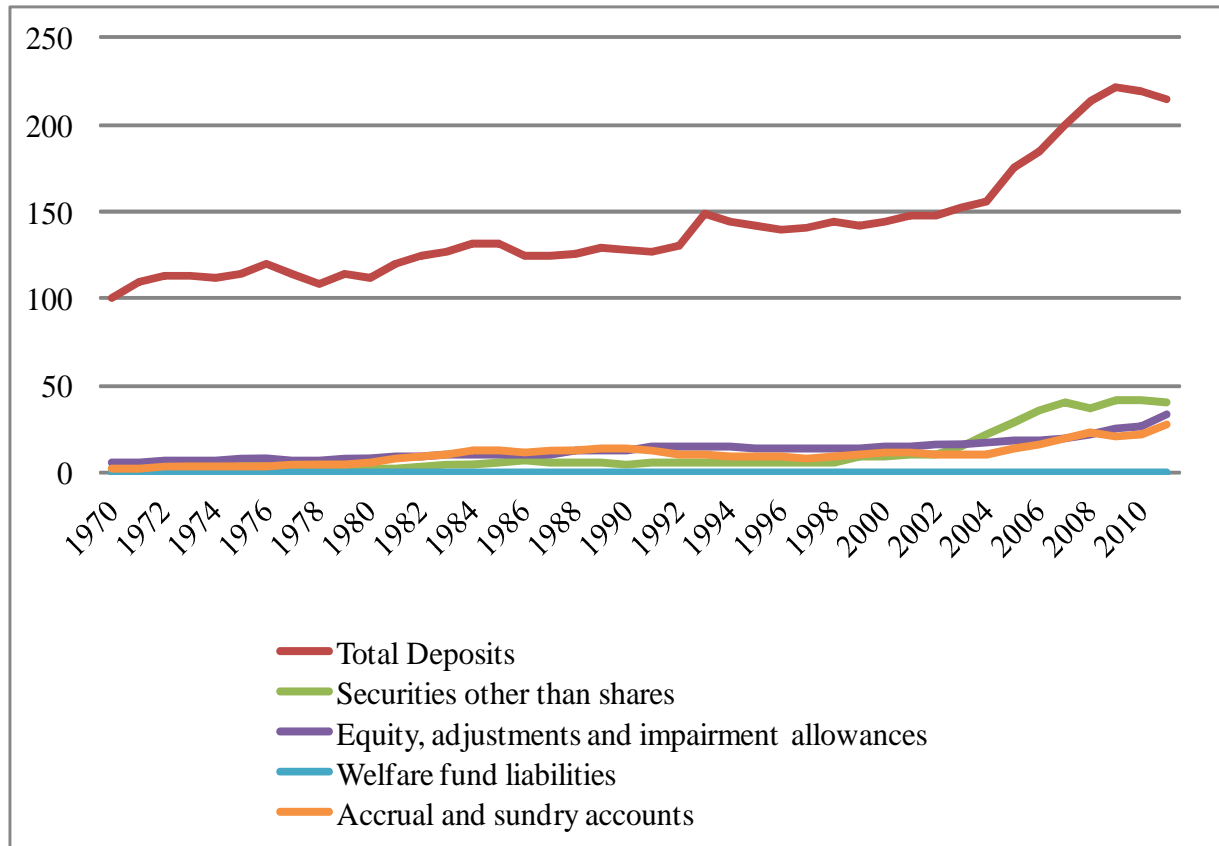


date, the weight of the loans given to the domestic non-credit institutions increased. In 2002, it has achieved the levels reached in 1970. However, the share rose after 2002, peaking at 77.3 percent of total assets in the year 2010.

The economic and financial crisis has resulted in a re-composition of the loans balance sheet of the Spanish credit institutions. Domestic private sectors have since the year 2008 deleveraged, reducing their exposure to the credit institutions. Thus, between 2008 and 2011 the absolute value of the loans given to the domestic credit system, to the domestic other resident sector and to the rest of the world has fallen by -4.6 percent, -4.7 percent, and -7.6 percent, respectively. Only the loans to the domestic general government have risen by 69.5 percent. As a result of this evolution, the size of the loans as a percentage of GDP has fallen by -0.8 percentage points in the case of the domestic credit system, -5.8 percentage points for the other resident sector, and -1.5 percentage points for the rest of the world. Only, the loans to the domestic general government have increased by 3.5 percentage points.

The rise in the size of the assets of the credit institutions has obviously come in parallel with a rise in the liabilities. The main component of the liabilities of the credit institutions is formed by the deposits and the securities other than shares. Both elements rose significantly in the period of expansion of the financial sector in Spain in the first decade of this century, with deposits peaking at 214 percent GDP in 2009, and securities other than shares peaking at 41 percent GDP in the same year (see figure 7).

Figure 7. Liabilities of the credit institutions (percentage of GDP)

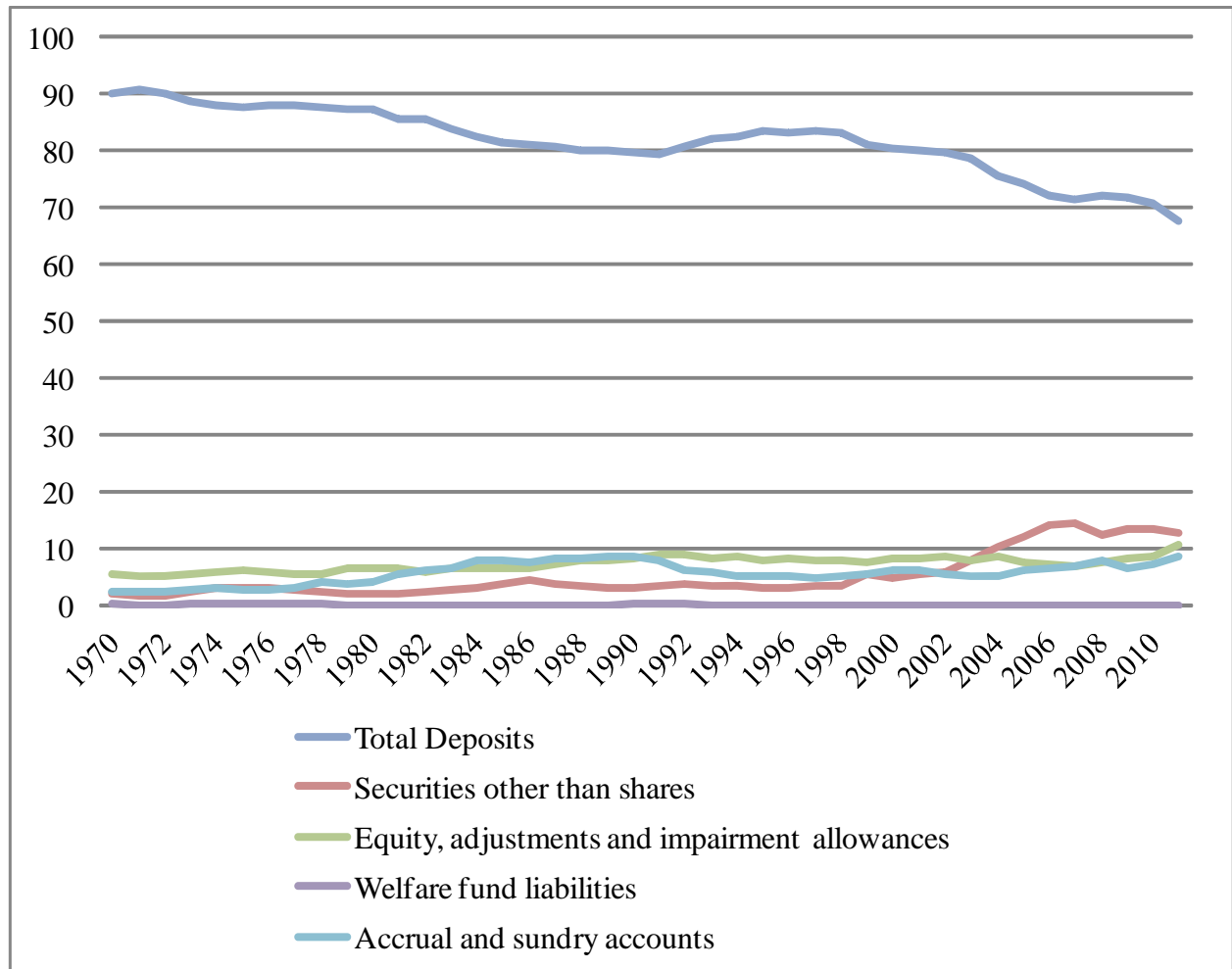


Source: Our calculations based on Bank of Spain, Boletín Estadístico, Monetary Financial Institutions, Balance sheet according to the euro area returns (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest6.html>)

It is important to notice that, in opposition to what happened on the assets side, the structure of the liabilities of the credit institutions has changed significantly in the last decade. As shown in the figure 8, total deposits that in the decade of the nineties amounted to over 80 percent of total liabilities; since 2002 a declining trend has been observed, with the result that in 2011 they only amounted to 68 percent of total liabilities. The decline of the share of deposits was mainly offset with the rise in the size of securities other than shares, which grew from 5.9 percent to 12.8 percent of total liabilities from 2002 to 2011. This implies that the higher deposits were not able

to fully fund the intense process of credit creation by the banking system in Spain, making credit institutions highly dependent on non-traditional sources of funding.

Figure 8. Composition of the liabilities of the credit institutions (percentage of total liabilities)

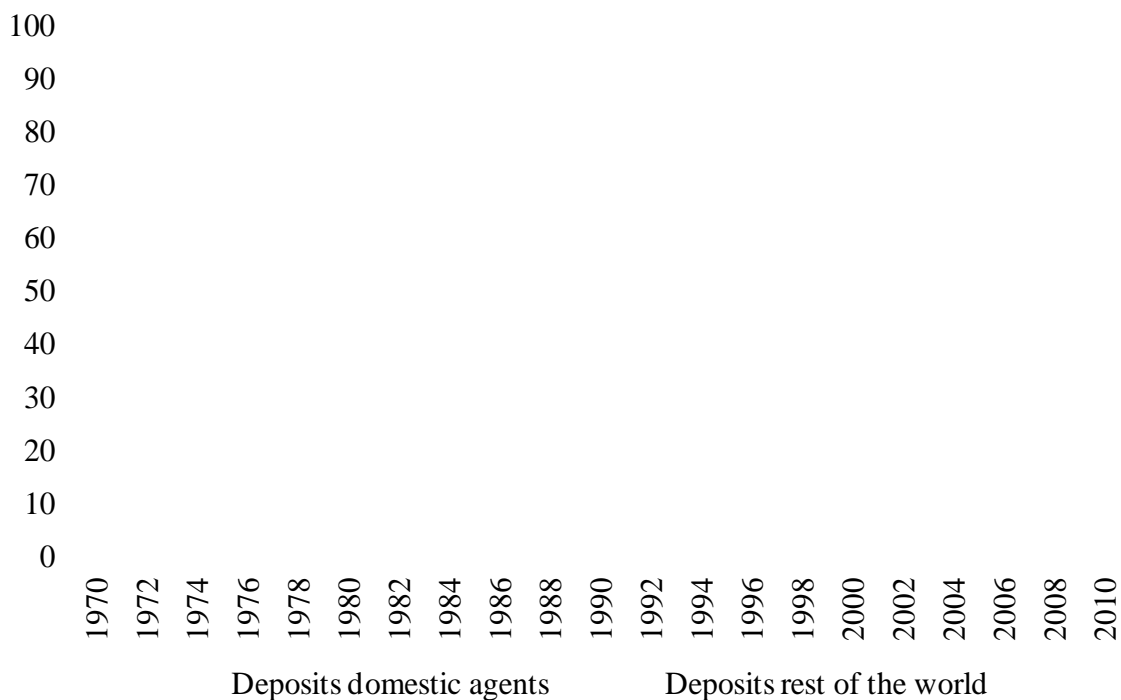


Source: Our calculations based on Bank of Spain, Boletín Estadístico, Monetary Financial Institutions, Balance sheet according to the euro area returns (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest6.html>)

As relevant as the fall in the size of total deposits, is the re-composition generated in the liabilities between the deposits held by domestic agents and by the rest of the world. The figures 9 and 10 show the evolution of the deposits held by domestic

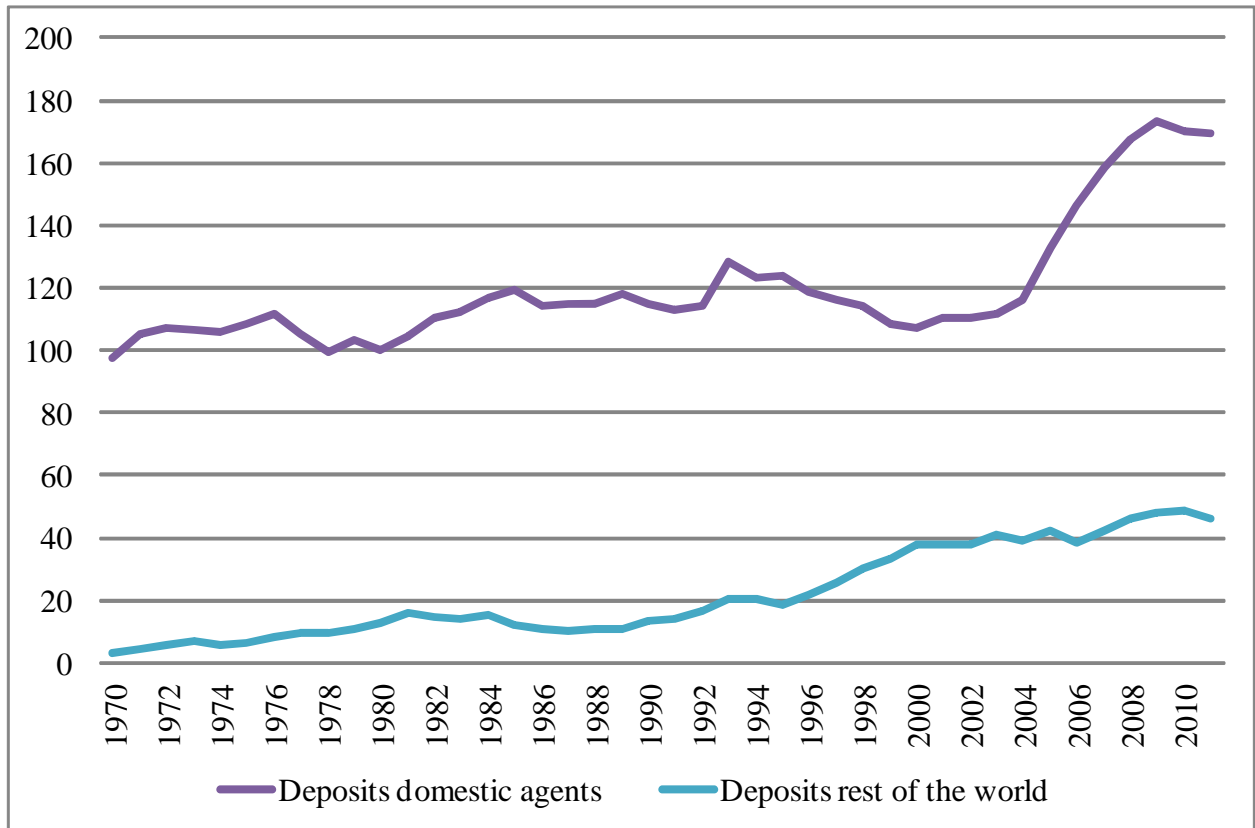
agents and by the rest of the world in the Spanish credit institutions. Though both deposits increase their size as a percentage of the GDP, there is a significant fall in the share of deposits held by domestic agents as a percentage of the total liabilities of the credit institutions. Thus, the deposits of the domestic agents only amounted to 53.4 percent of total liabilities of the credit institutions. On the contrary, the deposits of the rest of the world have a rising trend since the nineties, reaching 45.8 percent of GDP in 2011, having peaked at 48.6 percent in 2010. Thus, the deposits of the rest of the world amounted to 14.5 percent of the total liabilities of the Spanish credit institutions in 2010.

Figure 9. Deposits in the credit institutions (percentage of total liabilities)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Monetary Financial Institutions, Balance sheet according to the euro area returns (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest6.html>)

Figure 10. Deposits in the credit institutions (percentage of GDP)



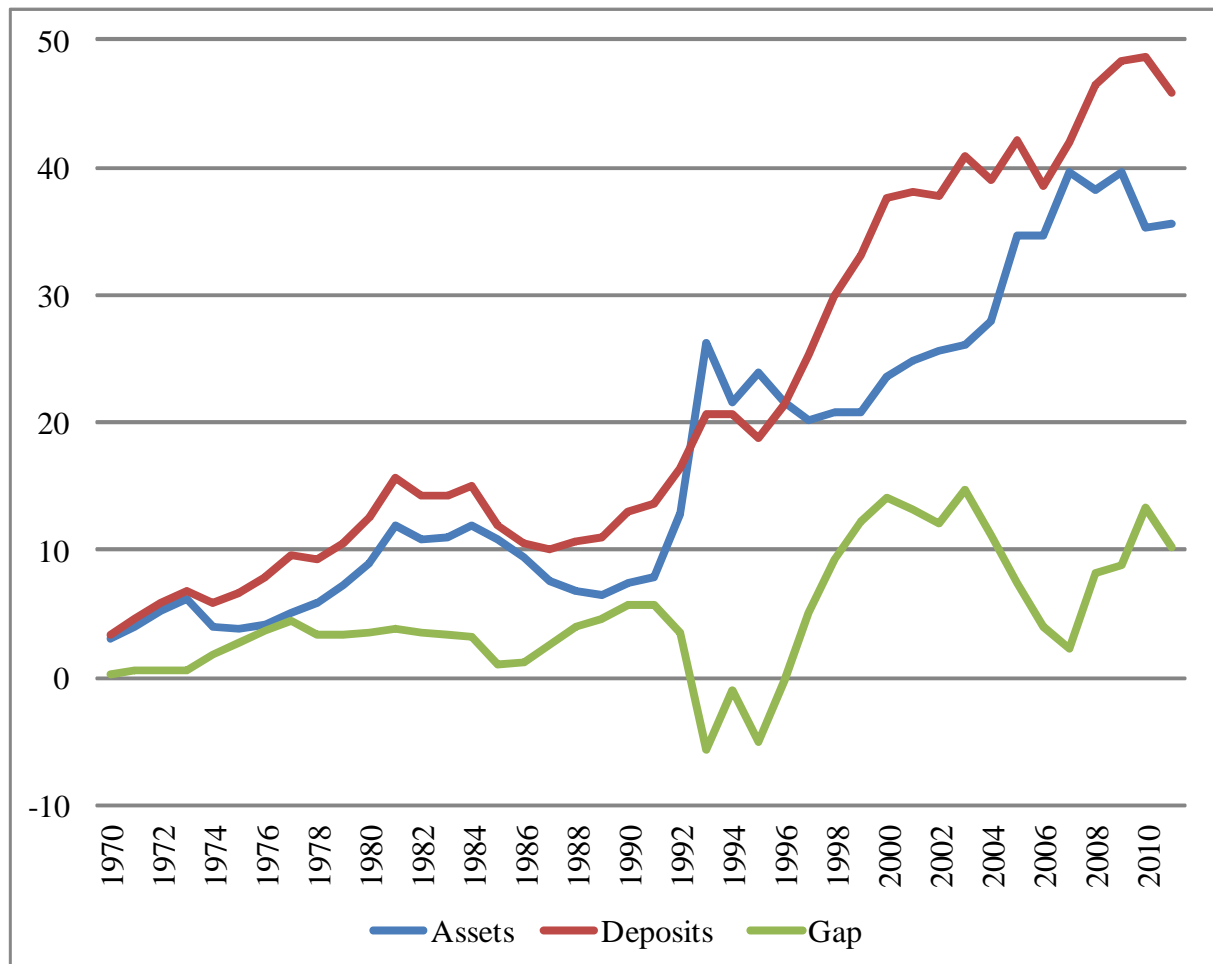
Source: Our calculations based on Bank of Spain, Boletín Estadístico, Monetary Financial Institutions, Balance sheet according to the euro area returns (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest6.html>)

Like in the case of the loans, the current crisis has resulted in a fall in the size of the deposits held in the credit institutions. In absolute values, the amount of deposits in the credit institutions system has fallen between 2008 and 2011 by -0.9 percent. If we measure the size of the deposits as a percentage of GDP, these have fallen between 2009 and 2011 by 6.5 percentage points. As a whole, since 2008 the share of the deposits in the total liabilities of the credit institutions has fallen by 4.4 percentage points

When we distinguish between the deposits held by domestic agents and by the rest of the world, we detect significant differences in the evolution of these deposits since

the onset of the crisis. Thus, between 2008 and 2011, the absolute value of the deposits of domestic agents has fallen -0.4 percent. However, this fall is more intense in the case of the deposits of the rest of the world, which fell much further. These falls have meant that the share of these items in the liabilities side of the balance sheet of the credit institutions have decreased by 3.2 percentage points in the case of the deposits of the domestic agents, and by -1.2 percentage points in the case of the deposits of the rest of the world.

Figure 11. Assets and deposits of the rest of the World in the Spanish credit institutions (percentage of Spanish GDP)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Monetary Financial Institutions, Balance sheet according to the euro area returns (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest6.html>)

The rising dependence of the Spanish credit institutions on funding of the rest of the world is easily detected in the figure 11. The figure shows the evolution, measured as a percentage of GDP, of the deposits held by the rest of the world, the evolution of the loans, securities other than shares, shares and other equity given to the rest of the world, and, finally, the difference between both series. In this sense, a gap with a positive sign means that the rest of the world is a net contributor to the Spanish credit institutions, thus funding the resources transferred by these institutions to the domestic agents.

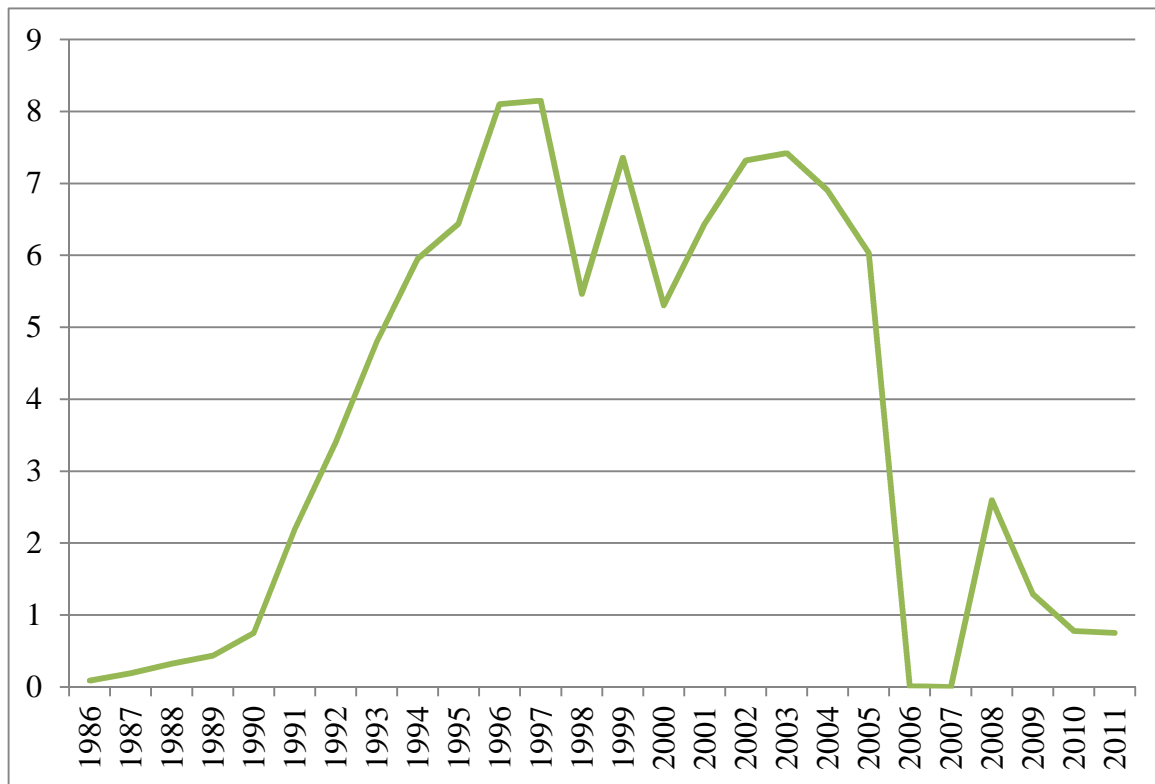
With the one exception of the early nineties, the size of the deposits held by the rest of the world in the Spanish banking system has always been well above the total funding by this system to the rest of the world. Moreover, since the late nineties this difference increased significantly, reaching figures above 10 percent of GDP, again proving the high dependence of Spain on external funding.

## 2.2 The size of the other financial institutions

Besides the credit institutions, the Spanish financial system is formed by other institutions. In the institutional grouping elaborated by the Bank of Spain used in the Euro area monetary analysis, the group “other monetary financial institutions” is formed by the credit institutions and the Money Market Funds (MMFs).

The size of the aggregated balance sheet of the Money market funds (MMFs) and the Electronic Money Institutions (ELMIs) is shown in the figure 12. As can be seen in the figure, the balance sheet of these institutions registered a period of fast growth in the nineties, peaking at 8.1 percent of GDP in the years 1996 and 1997. Since then, the absolute and the relative (as percentage of GDP) size of these institutions have followed a downward trend, with the result that in 2011 they only amounted to 0.75 percentage points of the GDP.

Figure 12. Aggregated balance sheet of Money Market Funds and Electronic Money Institutions (percentage of GDP)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Other Monetary Financial Institutions, Balance sheet according to the euro area returns (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest8.html>)

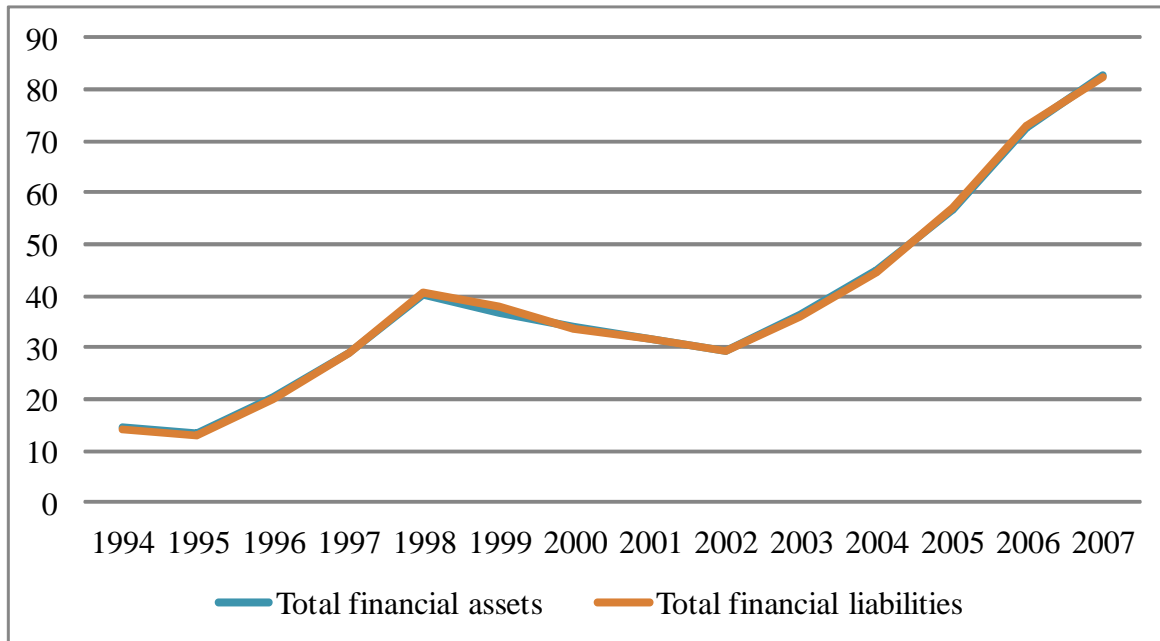
A second grouping is that of “Non-monetary financial institutions” formed by “other financial intermediaries” and “financial auxiliaries”. The size of the aggregated balance sheet of this sector, measured as the percentage of GDP, registered a fast growth during the nineties, when it moved from 14 percent in 1994 to 40.5 percent in 1998 (see figure 13). Since this year, its size declined until 2002 (29 percent of GDP). Since this year it started a second phase of accelerate expansion, peaking at 83 percent of the GDP in 2007<sup>5</sup>.



Figure 13. Aggregated balance sheet

of Non-

Monetary Financial Institutions (percentage of GDP)

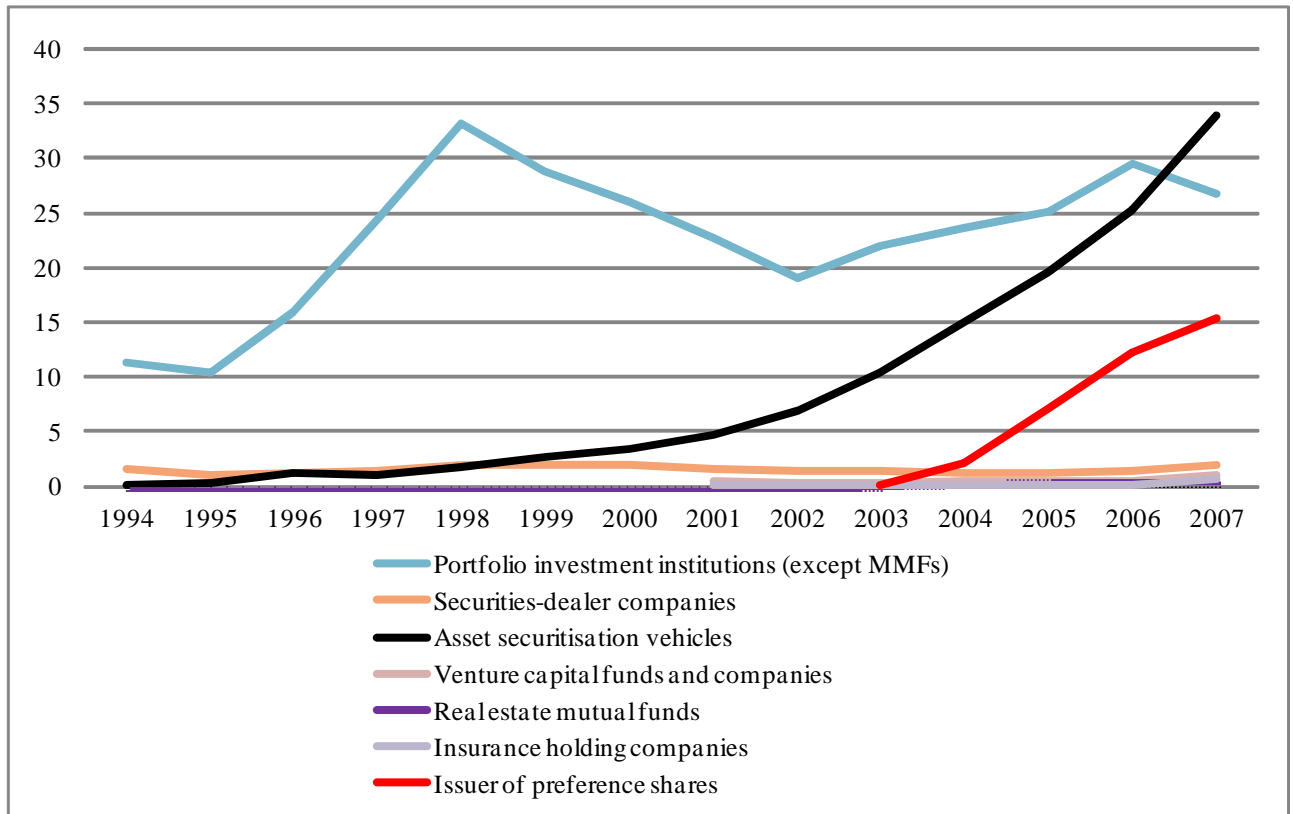


Source: Our calculations based on Bank of Spain, Boletín Estadístico, Non-monetary financial institutions, except insurance corporations and pension funds, Assets and liabilities. Valuation of financial assets and liabilities in accordance with the ESA 95 to the euro area returns (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest9.html>)

According to the Bank of Spain, the “other financial intermediaries” sector comprises the following institutions:

- portfolio investment institutions (except Money market funds): open-end investment companies, and mutual funds
- Real estate investment institutions: real estate investment companies, and real estate mutual funds
- Securities-dealer companies
- Asset securitisation vehicles
- Venture capital funds and companies
- Financial holding companies, and
- Issuers of preference shares and other negotiable securities

Figure 14. Balance sheets of Other Financial Intermediaries (percentage of GDP)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Non-monetary financial institutions, except insurance corporations and pension funds, Sub-sector other financial intermediaries, Official balance sheets, Total assets and liabilities by institutional groupings, (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest9.html>)

As can be easily seen in the figure 14, the other financial intermediaries are the main component of the non-monetary financial institutions. This sub-sector is clearly dominated by three kinds of institutions, representing 95 percent of this grouping: by order of relevance: asset securitisation vehicles, portfolio investment institutions and issuer of preference shares.

It is remarkable to notice that the portfolio investment institutions, that traditionally were the biggest institution in this sub-sector, registered in the late nineties a share lower than that registered one decade earlier. On the contrary the asset

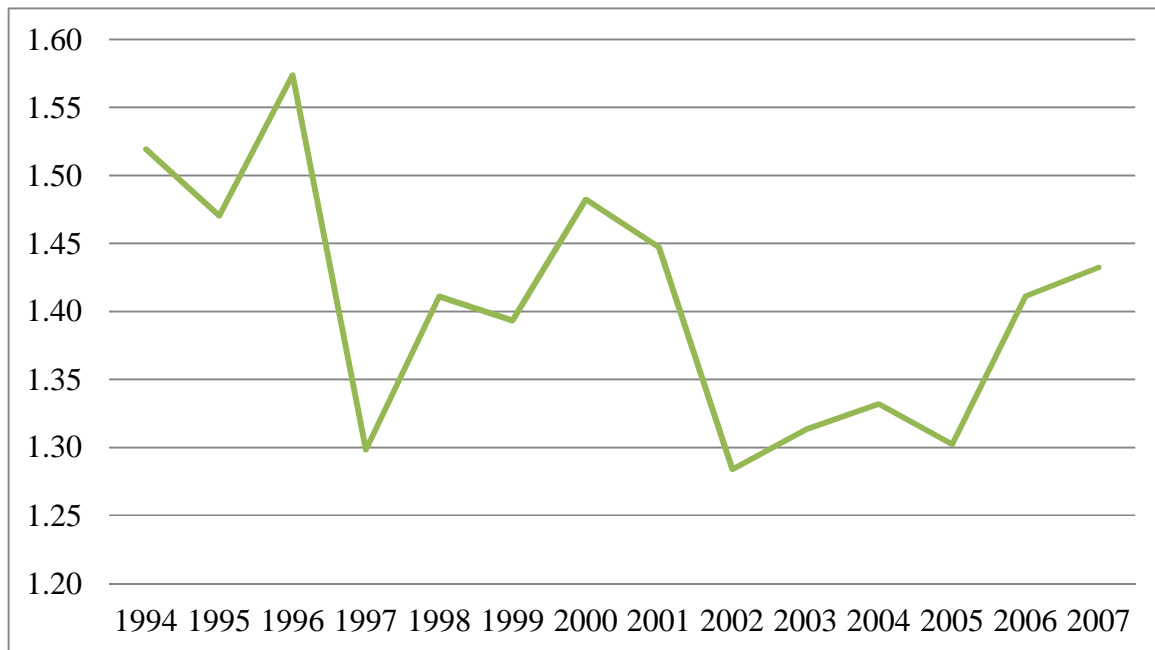
securitisation vehicles and the issuers of preference shares have registered an exponential growth in the first decade of the century, thus fuelling the huge process of financialization of the Spanish economy.

Financial auxiliaries are the last grouping included by the Bank of Spain in the sub-sector of non monetary financial institutions. This grouping is formed by the following institutions:

- Deposit guarantee funds of deposit institutions
- Portfolio management companies and the management companies of other financial and insurance institutions
- Official market governing bodies
- Securities agencies
- Rating agencies
- Appraisal companies
- Mortgage market regulations funds
- Guarantee companies
- Comisión liquidadora de entidades aseguradoras (until its inclusión in Comisión de Compensación de Seguros)
- Currency exchange bureaux
- Securities cleaning and settlement companies
- Holding companies that themselves carry out activities of financial auxiliaries

As figure 15 shows, this grouping has a minor importance in terms of the size of its balance sheet as a percentage of GDP, oscillating between 1.3-1.5 percent of GDP. Within this grouping, the main component is the Deposit guarantee funds of deposit institutions, that by themselves represent more than 40 percent of the whole grouping, followed at a distance by the Portfolio management companies and the management companies of other financial and insurance institutions

Figure 15. Total assets and liabilities balance sheet of Financial Auxiliaries (percentage of GDP)



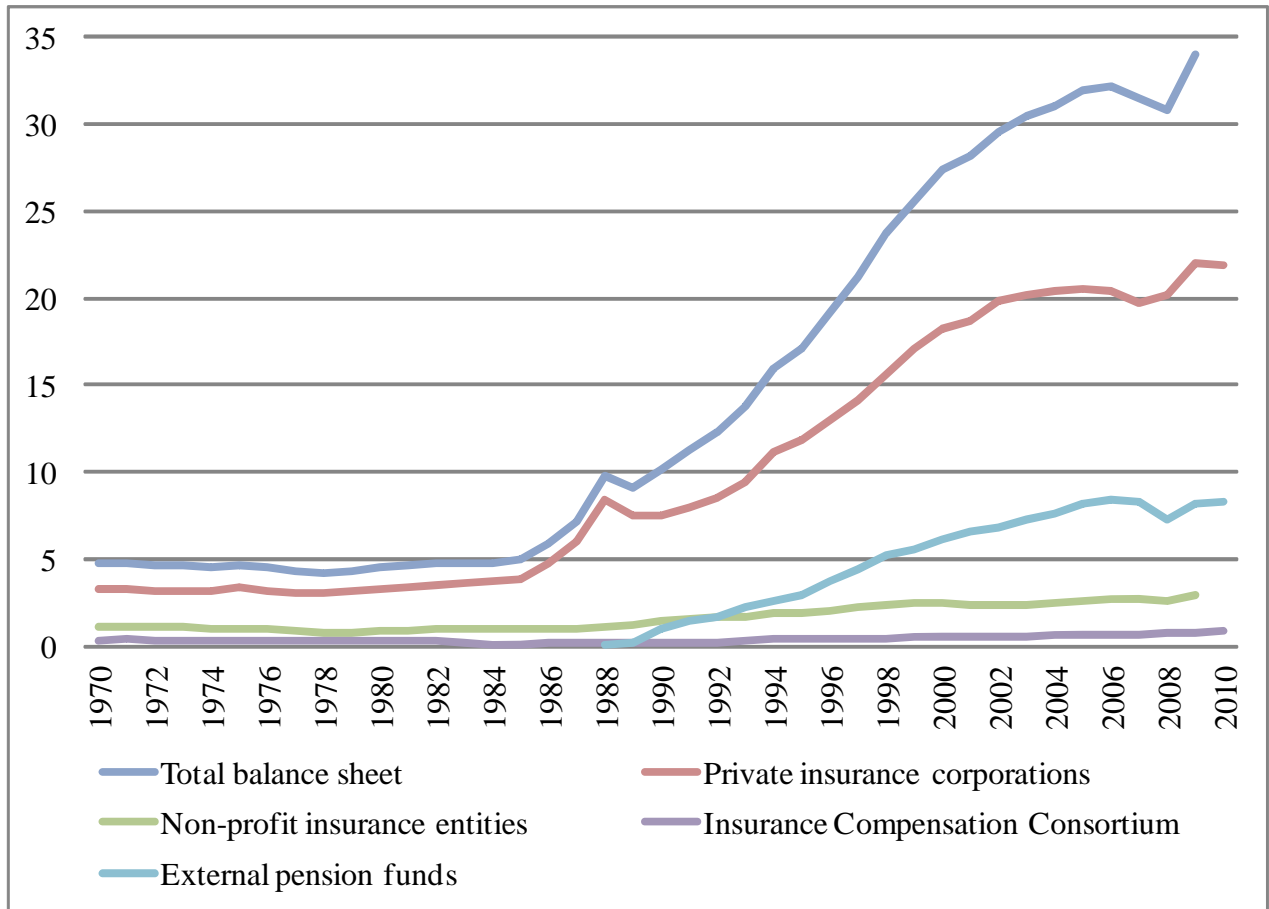
Source: Our calculations based on Bank of Spain, Boletín Estadístico, Non-monetary financial institutions, except insurance corporations and pension funds, Sub-sector financial auxiliaries, Official balance sheets, Total assets and liabilities by institutional groupings, (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest9.html>)

### 2.3 The size of insurance corporations and pension funds

Insurance Corporations and Pension Funds is the last grouping analysed. Following the institutional grouping of the Bank of Spain, this grouping is formed by the following institutions:

- Life and risk insurance corporations
- Non-profit insurance corporations
- Insurance Compensation Consortium, and
- (External) Pension funds

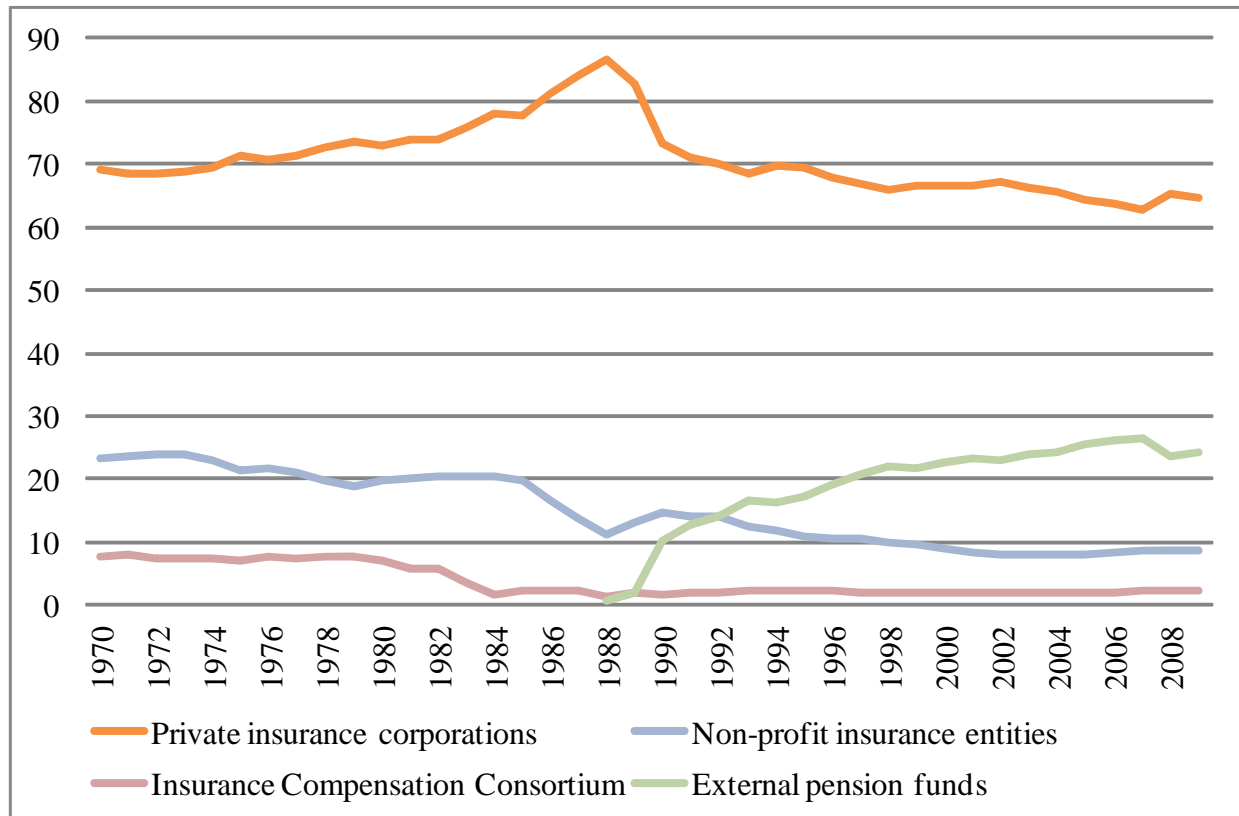
Figure 16. Balance sheet of Insurance Corporations and Pension Funds (percentage of GDP)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Insurance corporations and pension funds, Balance sheets and technical provisions detailed by agent making up the sector (available at the Bank of Spain’s website: <http://www.bde.es/webbde/en/estadis/infoest/bolest10.html>)

As can be seen in the figure 16, the total balance sheet of the sector amounted in 2009 (the last available year) to 34 percent of GDP. The sector has registered a sustained and stable path of growth since 1985, fuelled by the growth of its two main components: the private insurance companies and the external pension funds.

Figure 17. Composition by agents of the insurance corporations and pension funds sector (percentage of the total balance of the sector)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Insurance corporations and pension funds, Balance sheets and technical provisions detailed by agent making up the sector (available at the Bank of Spain’s website: <http://www.bde.es/webbde/en/estadis/infoest/bolest10.html>)

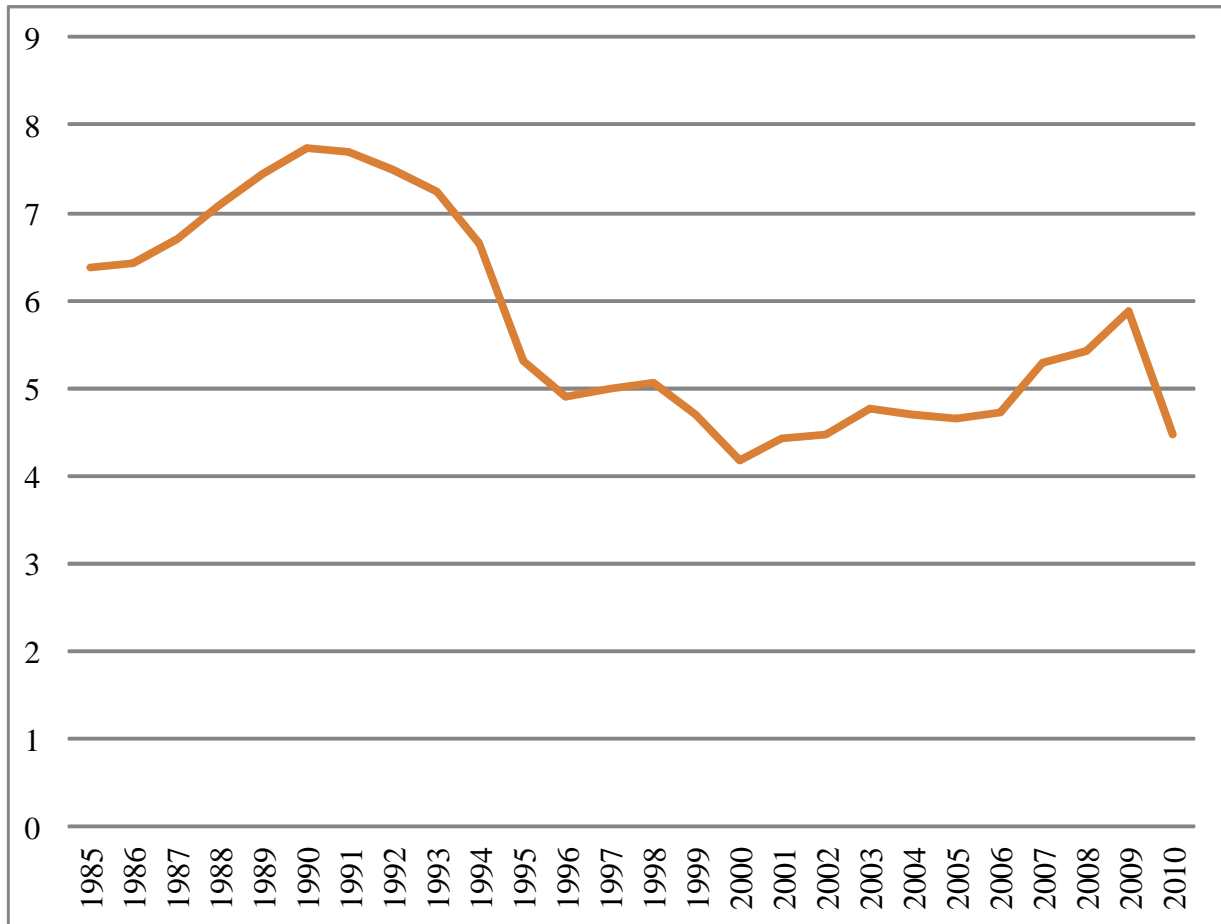
As the figure 17 shows, the private insurance corporations clearly dominated the sub-sector during the decades of the eighties and nineties. Actually, these corporations had a rising trend, and thus in 1988 amounted to 87 percent of the total sub-sector. The introduction by the Law 8/1987 of the external pension funds and the consequent development of these entities has resulted in a slow but sustained decline of the private insurance companies. Thus, these entities amounted to only 64.7 percent of the sub-sector, whilst the share of the external pension funds had increased to 24.2 percent of the sub-sector.

## 2.4. The size of the financial sector percentage of the Spanish economic activity

In the previous section, we have summarized the evolution of the size of the Spanish credit institution system, focusing our attention on the sizes of the assets and liabilities of these institutions. Next we will analyze the size of the financial sector in Spain paying attention to the contribution of the financial sector to the gross domestic product and to the total employment in the Spanish economy.

The above figure shows the share of the financial sector in gross valued added at market prices (measured at current prices). At first sight, it is clear that the size of the Spanish financial sector has had a declining trend since mid-eighties. Nonetheless, this conclusion may be wrong. The reason must be found in the methodological breaks that the series of the Spanish National Accounts, on which the figure is based, have suffered in the analyzed period<sup>6</sup>. In any case, the most recent data, the data starting in the year 2000, have the same methodological basis, and, consequently, we can study the behavior of the financial sector in Spain since the year 2000 without the fear of reaching wrong conclusions. Moreover, for the study of the financialisation process in Spain, this is the relevant period, since it is in this period when the huge increase in the activities of the financial (banking) sector happens, as we saw in the previous section.

Figure 18. Gross value added at market prices of Financial and insurance activities (percentage GDP at current prices)

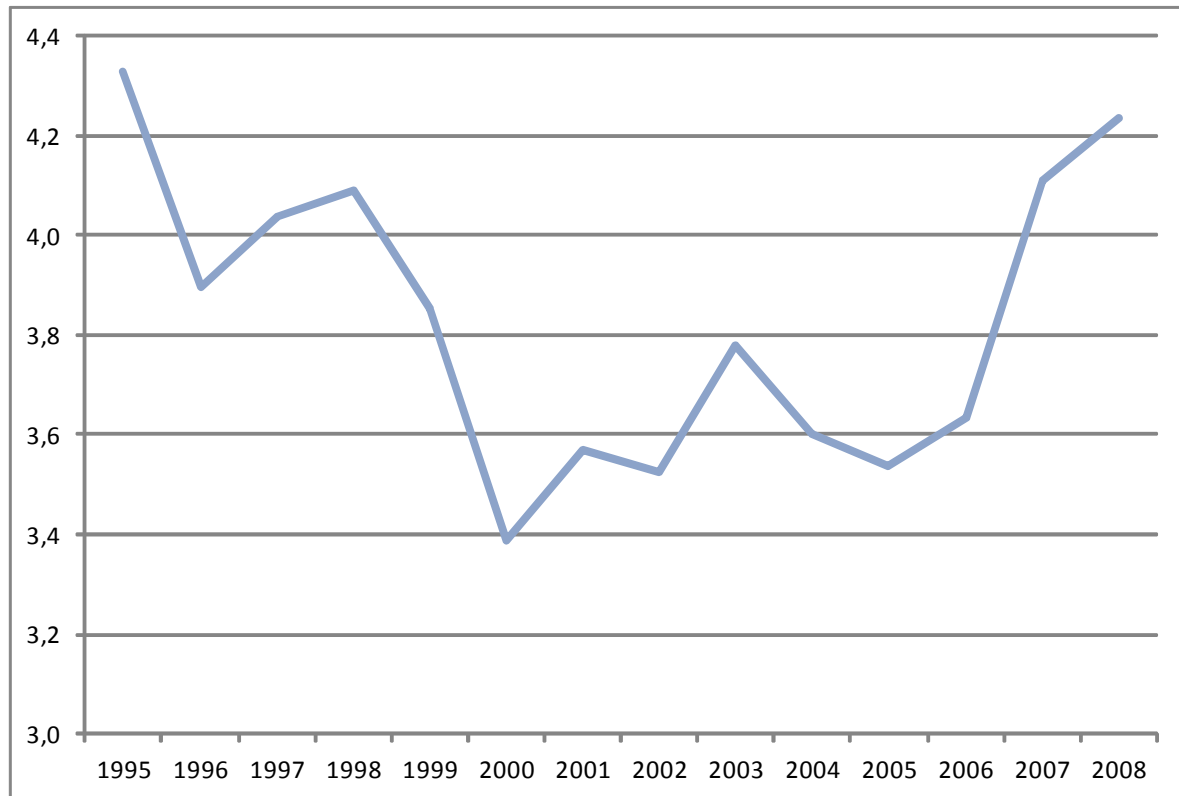


Source: Our calculations based on Instituto Nacional de Estadística (INE) - National Institute of Statistics, Spanish National Accounts (available at the INE's website: <http://www.ine.es/jaxi/menu.do;jsessionid=ADA436910C3ADBA7FFF9BE5B25FAC525.jaxi03?type=pcaxis&path=percent2Ft35percent2Fp008&file=inebase&L=1>)

As the figure 19 shows, from 2000 to 2009, the share of the financial sector as a percentage of the GDP increased by 41percent, rising from 4.17 percent of GDP to 5.88 percent of GDP. Despite, the remarkable increase, it is far from the increase registered in the size of the credit institutions systems, measured by the size of the assets and the liabilities as a percentage of the GDP, as we analyzed before. This means that the systemic impact of the financial sector on the Spanish economy must not be analyzed and measured by the increase in the size of the value added of this sector, but the amount of the resources intermediated and managed by the sector.



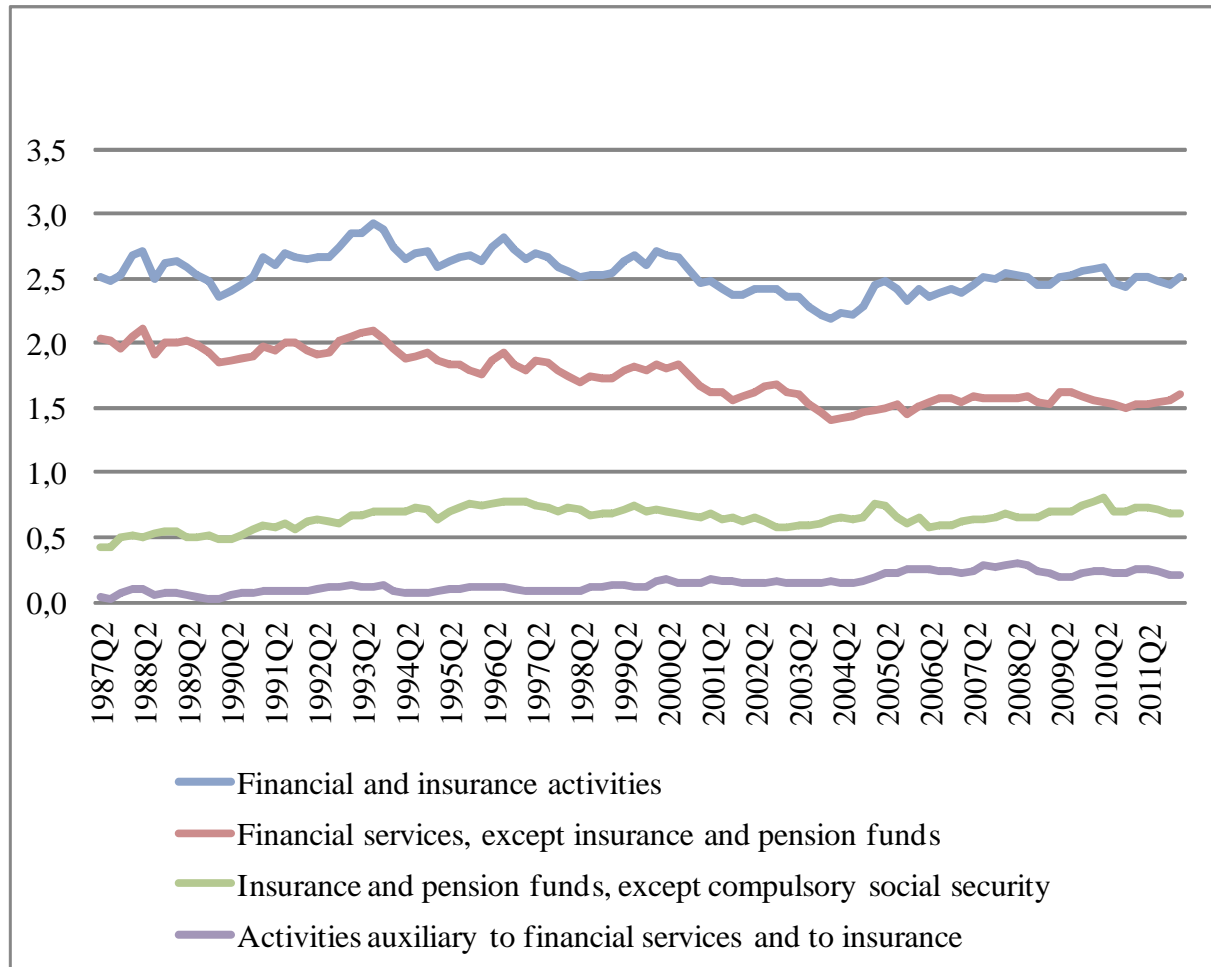
Figure 19. Gross values added at market prices of the Financial services, except insurance and pension funds (percentage GDP at current prices)



Source: Our calculations based on Instituto Nacional de Estadística (INE) - National Institute of Statistics, Spanish National Accounts (available at the INE's website: <http://www.ine.es/jaxi/menu.do;jsessionid=ADA436910C3ADBA7FFF9BE5B25FAC525.jaxi03?type=pcaxis&path=percent2Ft35percent2Fp008&file=inebase&L=1>)

The figure 19 shows the evolution of the share of the credit institutions sector in GDP. The figure shows that in the year 2008 (the last available year), the share of these institutions in GDP was similar to that registered in 1995. It is true that since 2000, that share shows a rising trend. However, this increase, equivalent to 0.8 percentage points of GDP, represents a lower growth than that registered in the size of the balance sheets of the Spanish credit institutions: thus, the gross value added accounted for by the credit institutions increased by 25 percent between 2000 and 2008, whilst the balance sheet of these institutions (measured by the size of the assets as a percentage of GDP) increased by 64.7 percent.

Figure 20. Employment in the financial sector (percentage of total employment)



Source: Our calculations based on Instituto Nacional de Estadística (INE) – National Institute of Statistics, Economically Active Population Survey, available at the INE’s website:

[http://www.ine.es/jaxi/menu.do;jsessionid=F1387B08670733E1D3E5B0D5218D7179.jaxi03?type=pcaxis&path=/t22/e308\\_mnu&file=inebase&L=1](http://www.ine.es/jaxi/menu.do;jsessionid=F1387B08670733E1D3E5B0D5218D7179.jaxi03?type=pcaxis&path=/t22/e308_mnu&file=inebase&L=1)

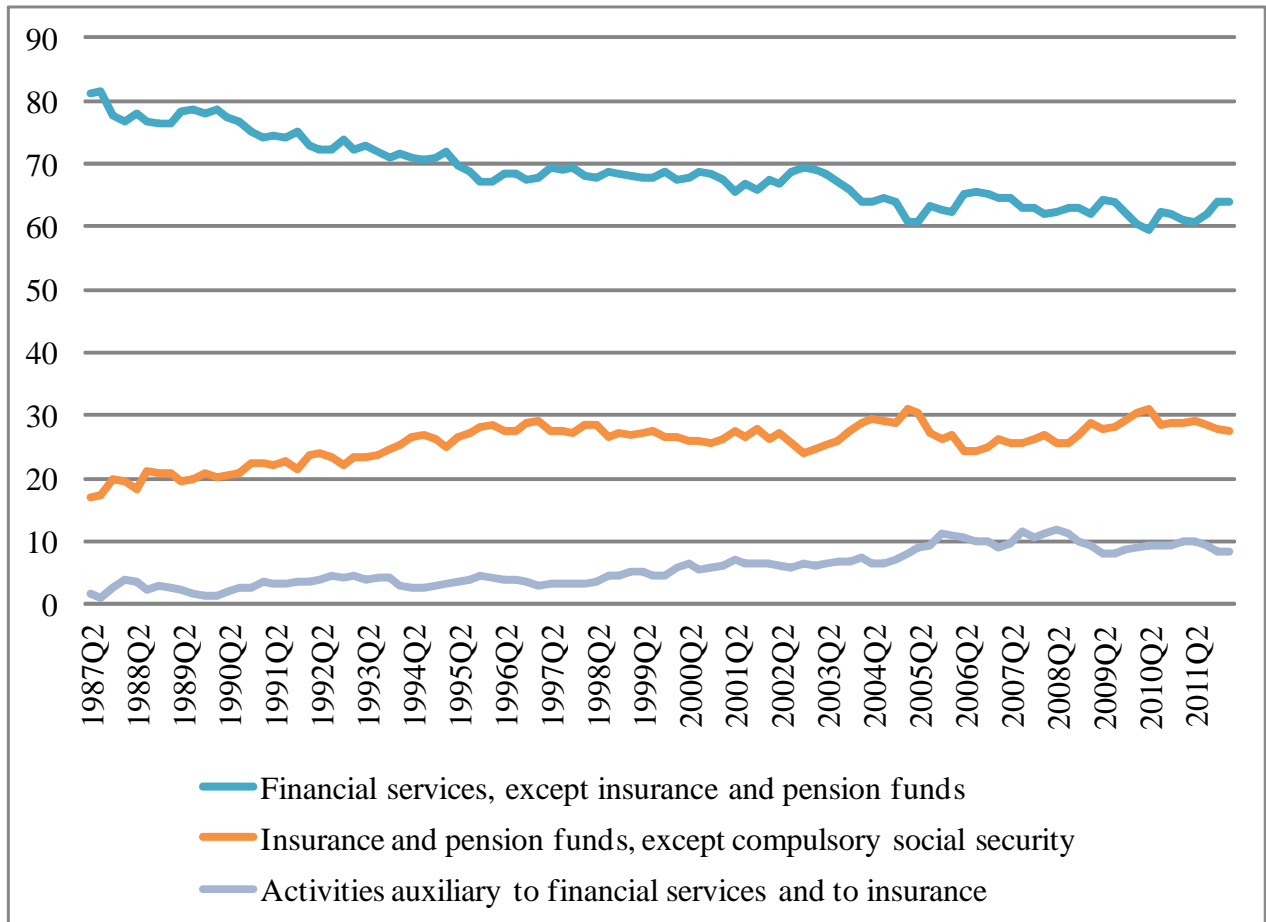
If we focus on the size of the financial sector in terms of its employment, as a whole, the financial sector has maintained a quite stable share of total Spanish employment (see figure 20). This share, in the last decade, has remained around the figure of 2.5 percent of total employment in Spain. In a more detailed analysis, it is clearly detected that there has been a re-composition among the different financial sub-sectors, with the banking sub-sector losing weight and the insurance and pension funds and the activities auxiliary to the financial services and the insurance gaining

relevance, although in both sub-

sector

their shares in the total employment remain below the figure of 1 percent.

Figure 21. Employment in the financial sectors (percentage of total employment in the financial sector)



Source: Our calculations based on Instituto Nacional de Estadística (INE) – National Institute of Statistics, Economically Active Population Survey, available at the INE’s website:

[http://www.ine.es/jaxi/menu.do;jsessionid=F1387B08670733E1D3E5B0D5218D7179.jaxi03?type=pcaxis&path=/t22/e308\\_mnu&file=inebase&L=1](http://www.ine.es/jaxi/menu.do;jsessionid=F1387B08670733E1D3E5B0D5218D7179.jaxi03?type=pcaxis&path=/t22/e308_mnu&file=inebase&L=1)

The re-composition process is clearer when we look at the share of the three financial sub-sectors in the total employment of the financial sector (see figure 21). Since the late eighties, the financial services sub-sector is losing weight (-17.2 percentage points between 1987Q2 and 2012Q1) in favour of employment in the insurance and pension funds (+10.4 percentage points) and the auxiliary activities

(+6.8 percentage points). This process has developed in two phases, the first one taking place until mid-nineties, and the last one happening in the last decade. Thus, in the period 1999Q4-2012Q1, that is, the period where the rapid increase in the financialisation process took place, the share of the employment in financial services fell 4.7 percentage points, with the shares of insurance and pension funds and activities auxiliary rising +0.8 and +3.9 percentage points, respectively.

However, this picture changes if we focus on the recent crisis period. Thus, since 2007Q4 until 2012 Q1, the share of employment in the financial sector has been virtually unchanged, with an insignificant increase of 0.03 percentage points, with the financial services and the insurance and pension funds gaining minor shares (0.04 and 0.03 percentage points, respectively) and the auxiliary activities losing weight (-0.05 percentage points). Consequently, the share of the latter sub-sector in the total employment of the financial sector has fallen in this period by 2.2 percentage points, whilst each other two sub-sector have gained by 1.1 percentage points.

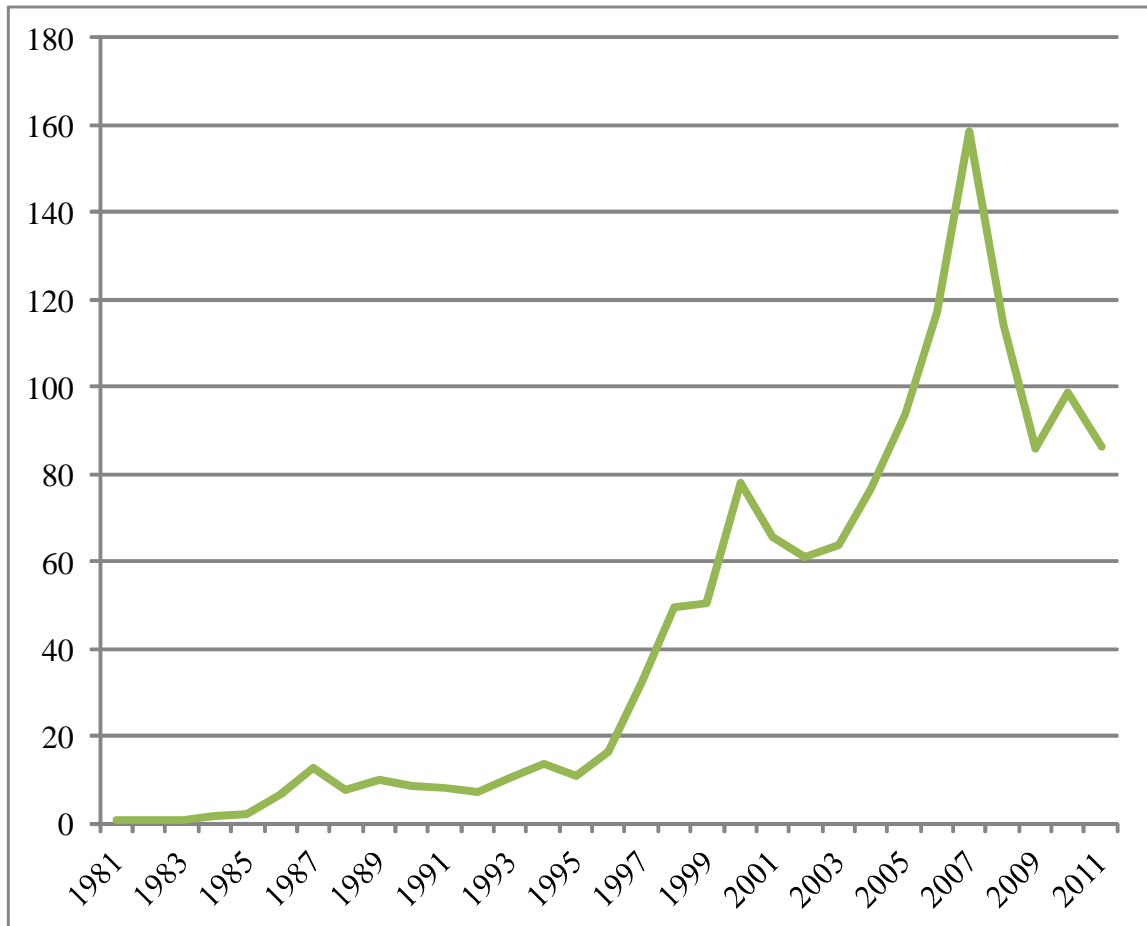
## 2.5 The stock market

Another relevant indicator to measure the degree of financialisation of the Spanish economy is the activity of the Spanish stock exchange market.

The figure 22 shows the evolution since the year 1981 of the annual turnover of shares traded in the stock exchange market. This turnover is measured not in absolute values but as a percentage of the Spanish gross domestic product. As can be seen, since 1996, when this turnover amounted to 16.3 percent of GDP, the turnover of shares grew exponentially until 2007 (with the only exception of the crisis of the years 2001 and 2002), when it peaked at 159 percent of the GDP. This growth is related to a number of factors, mainly the higher number of resident and non-resident corporations traded in the stock market, and the higher size of these

corporations. In both cases, the growth of the stock exchange is related to the privatization of formerly state-owned companies and the internationalization of Spanish corporations.

Figure 22. Turnover of shares traded in the Stock Exchange (percentage of GDP)



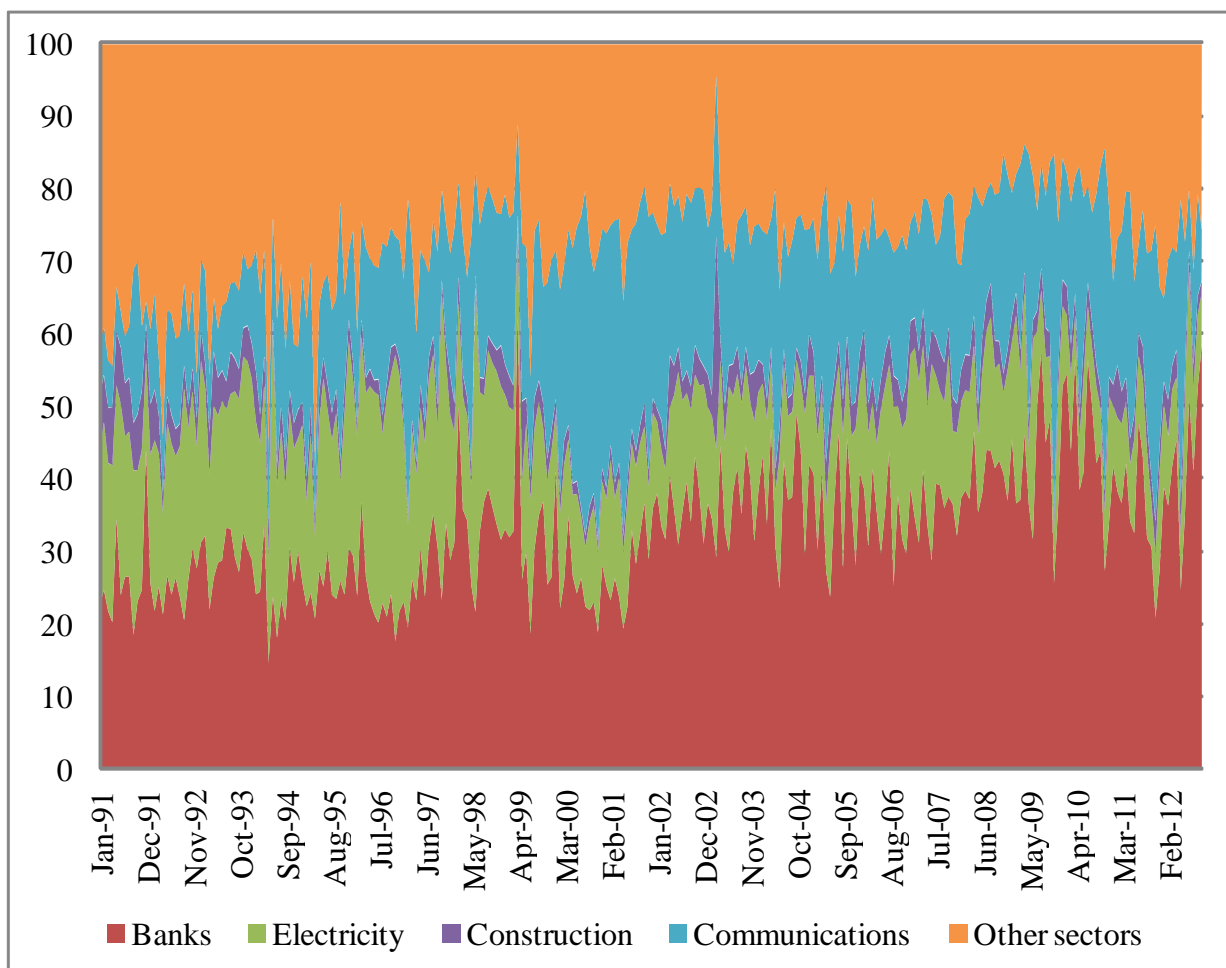
Source: Our calculations based on Bank of Spain, Boletín Estadístico, Domestic secondary markets for securities, Stock exchanges (available at the Bank of Spain’s website: <http://www.bde.es/webbde/en/estadis/infoest/bolest22.html>)

The relevance of these processes is clearly detected when we look at the distribution by sectors of the shares traded in the stock exchange interconnection system, which represents 99.9 percent of the shares traded in the stock exchanges(see figure 23). In January 1991, the grouping “other sectors” amounted to 41.5 percent of the turnover of shares in the stock exchange, followed at distance by banks (22.4 percent) and electricity (20.9 percent). However, in January 2008, banks represented

37.4 percent of the turnover, followed by other sectors (30.6 percent), communications (14.3 percent) and electricity (13.3 percent). This trend has remained during the crisis, and thus in the period January to October 2012, banks represented 42.5 percent of the turnover, followed by other sectors (26.9 percent), communications (16.2 percent), electricity (11 percent), and, finally, construction (3.3 percent).

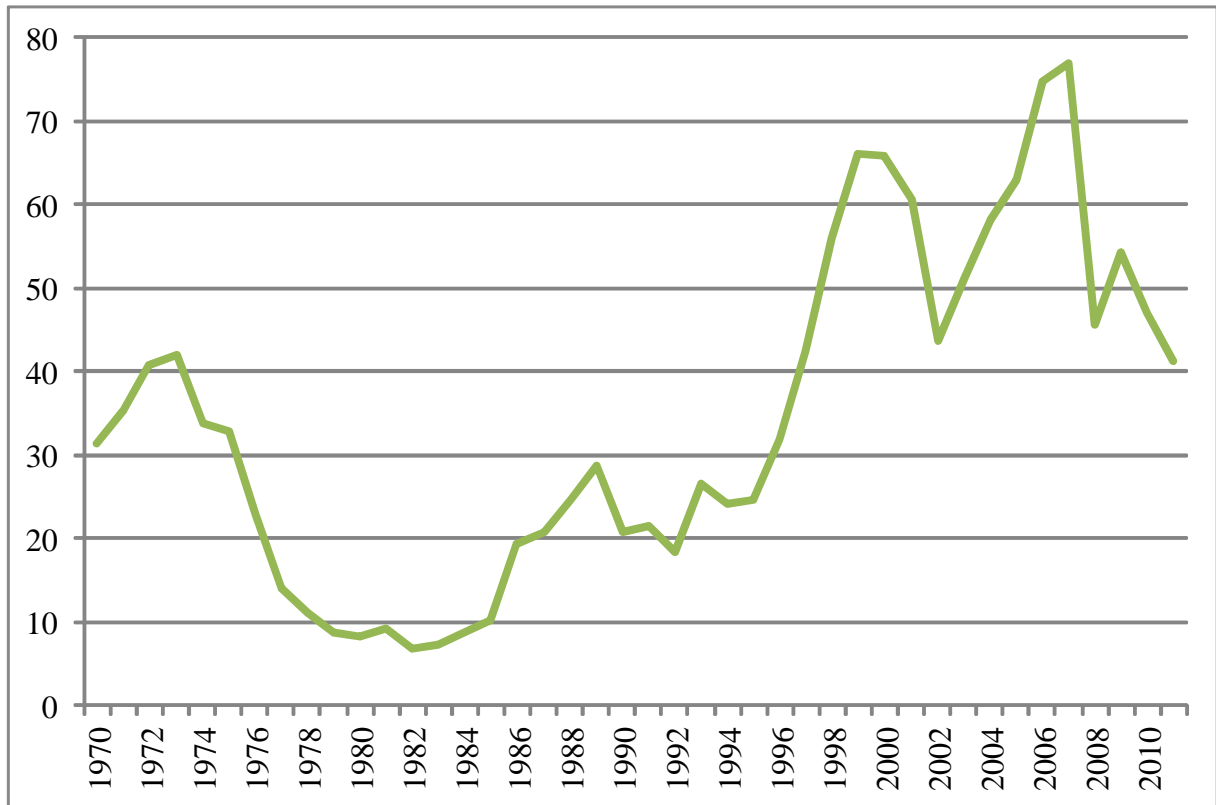
A complimentary way to analyze the relevance of the stock market is by analyzing the size of its capitalization. The figure 24 shows the evolution since 1970 of the Madrid stock exchange market capitalization as a percentage of the Spanish GDP<sup>7</sup>.

Figure 23. Distribution by sectors of turnover of shares (percent)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Domestic secondary markets for securities, Stock exchanges (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest22.html>)

Figure 24. Madrid Stock exchange market capitalization (percentage GDP)



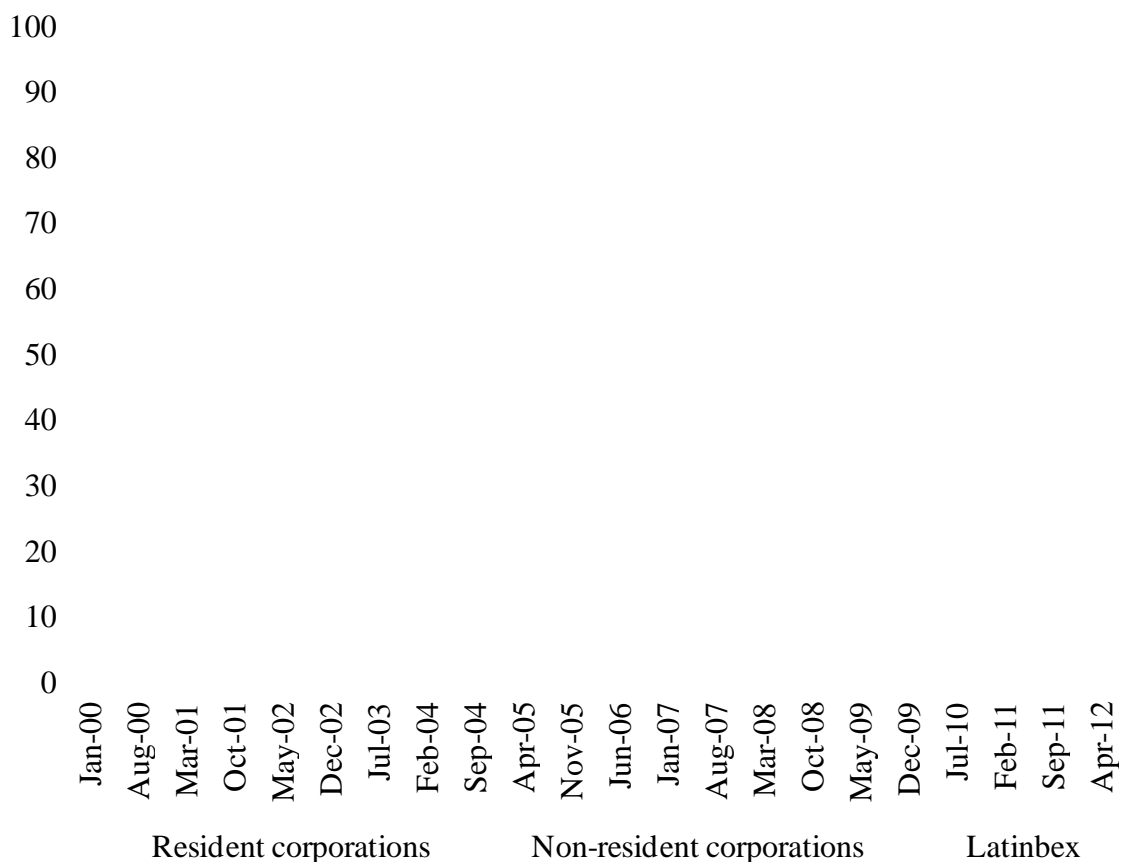
Source: Our calculations based on Bank of Spain, Boletín Estadístico, Domestic secondary markets for securities, Stock exchanges (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest22.html>)

From a long-term perspective, the figure informs about the big impacts of the crisis of the late seventies and early eighties, the crisis of early 2000s and the current one. The crisis of the seventies-eighties had a huge impact on stock exchange market capitalization: thus, the value of the capitalization registered in 1973 was only recovered in 1997. Since then, it started a process of fast growth, stopped by the crisis of the early 2000s. In 2007 this capitalization peaked at 77 percent of GDP. Since then, it registers a process of fast decline, with the result that in 2011 it amounted to 41.2 percent: below the figure of the year 1973.

Nonetheless, the above figures hide the fact that the capitalization of the Spanish stock exchange market includes not only Spanish domestic resident corporations,

but also non-resident corporations whose shares are traded in this exchange market. In this sense, it must be emphasized the importance of the market Latibex. This stock market, created in December 1999, is the only international market for Latin American securities. Currently, the shares of 29 Latin American corporations are traded in this market.

Figure 25. Distribution of exchange market capitalization between resident and non – resident corporations (percentage of total capitalization)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Domestic secondary markets for securities, Stock exchanges (available at the Bank of Spain’s website: <http://www.bde.es/webbde/en/estadis/infoest/bolest22.html>)

As the figure 25 shows, since its creation Latibex has gained relevance in a sustained way, with the result that nowadays the capitalization of the Latin American

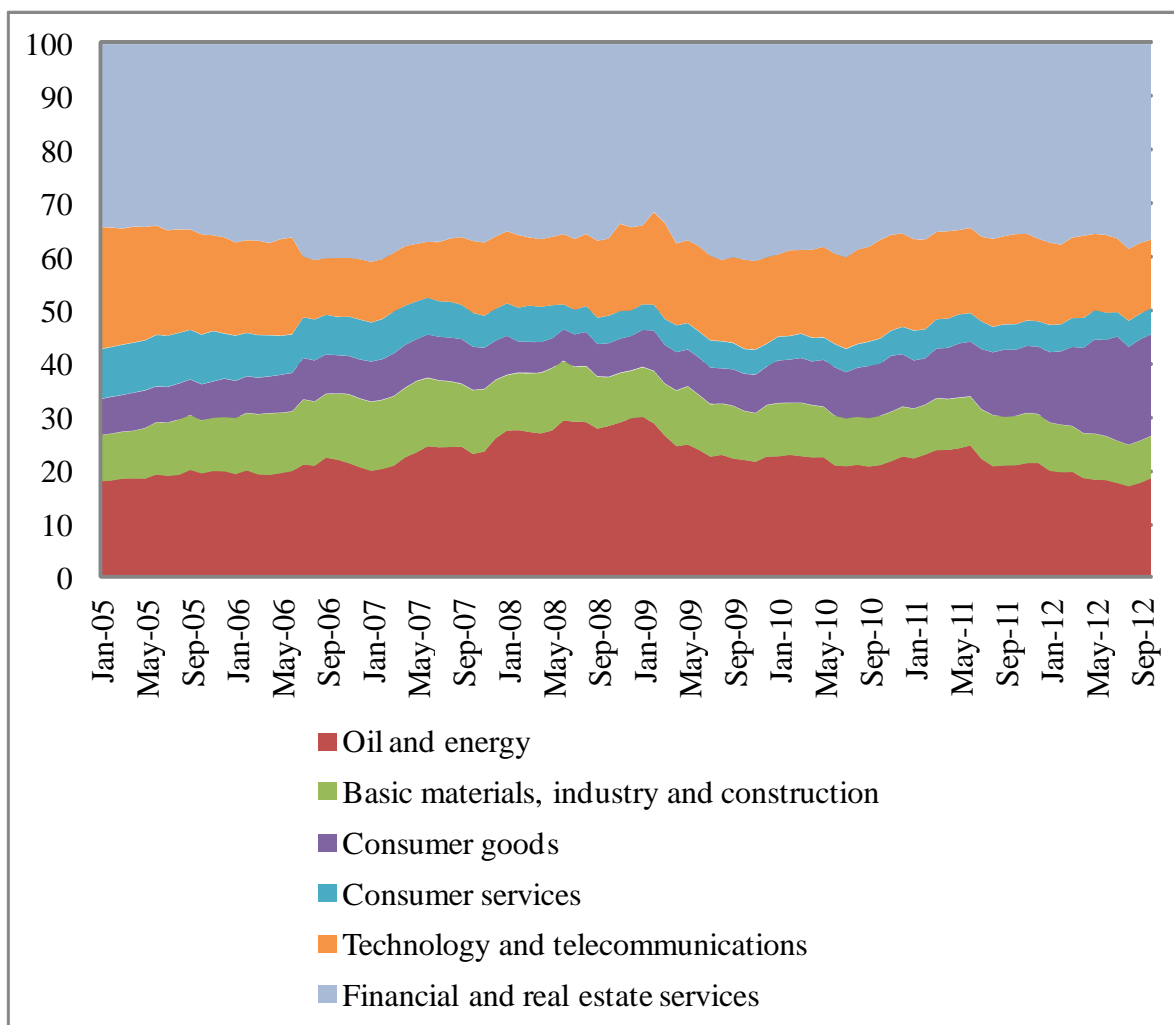


corporations traded in Latibex is equal to that of the Spanish resident corporations.

nearly

Once we exclude the capitalization of the non-resident corporations from the total capitalization of the stock exchange market, we can get a more correct picture of the relevance of the different resident sectors in the stock exchange

Figure 26. Capitalisation by sectors of resident corporations (percentage of total capitalizations on the Madrid Stock Exchange)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Domestic secondary markets for securities, Stock exchanges (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest22.html>)

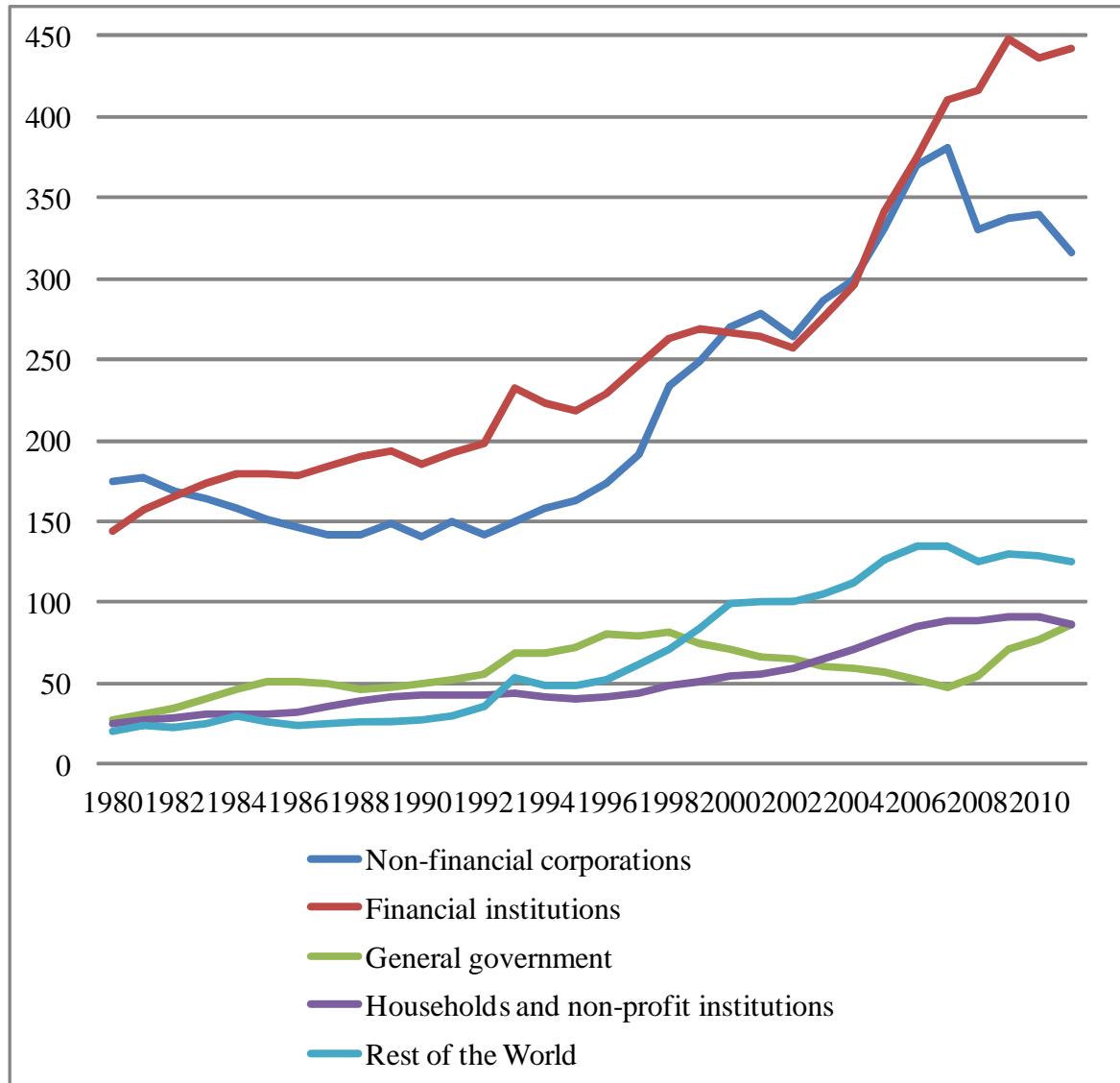
As shown in figure 26, more than one third of the total capitalization of resident corporations corresponds to the financial and real estate services, followed at distance by oil and energy and consumer goods, each of these with a share of 18 percent (data corresponding to October 2012). Thus, these three sectors amount 74 percent of the sectors. At some distance, they are followed by technology and communications (12 percent).

## 2.6 Public and private debt

The financialization process that has developed in the Spanish economy, that is the increase of the size of the financial assets and liabilities, has resulted in an intense growth of the financial balance sheet of the different agents of the economy, both of the financial assets and the liabilities.

The figure 28 shows the evolution by sector of the outstanding liabilities of the Spanish economy. The most remarkable outcome is the structural break detected in most of the series since the late nineties and the beginning of the decade of the 2000s, with the only exception being the general government.

Figure 27. Outstanding liabilities  
(percentage Spanish GDP)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Financial Accounts of the Spanish Economy, Financial Accounts (available at the Bank of Spain’s website: <http://www.bde.es/webbde/en/estadis/ccff/cfcap2.html>)

Since the late nineties, the private sector, mainly financial and non-financial corporations, increased rapidly their borrowing. At the onset of the crisis, in the year 2007, the outstanding liabilities in the balance sheets of the financial institutions and the non-financial corporations amounted to, respectively, 410 and 381 percent of Spanish GDP. In the case of households, the size of their liabilities was much lower:

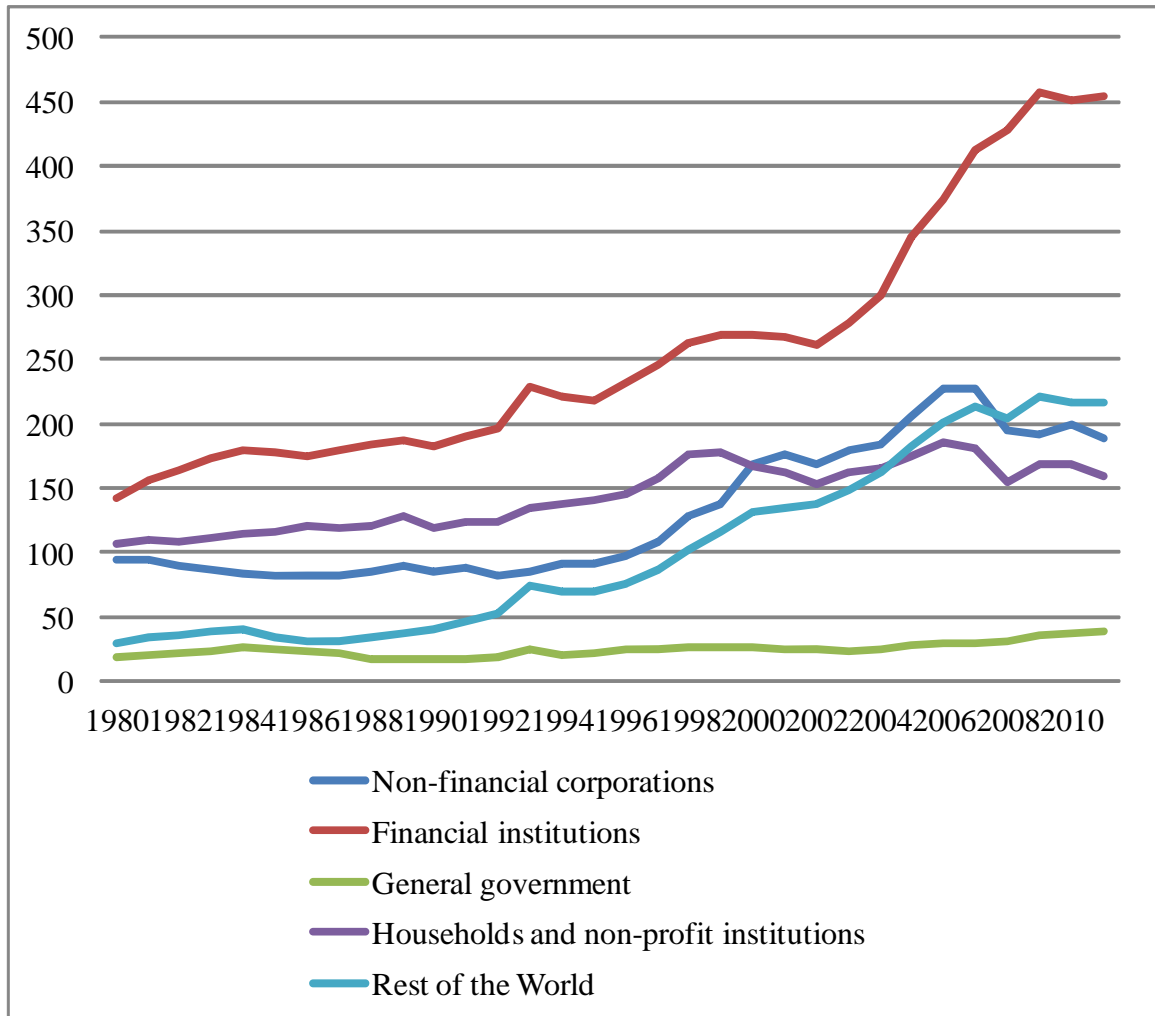
89 percent of the GDP. This data shows that the process of borrowing of the Spanish economy was not led and fuelled by the household sector, but by the financial and the non-financial corporations. In other words, it was not private consumption or the purchase of houses which drove the financialisation process in Spain but the increase in the investments financed by the recourse to external funding and the development of the financial sector.

As we analysed in previous sections, the crisis has led to a process of deleveraging in the Spanish economy. The only exception to this process is the general government, whose liabilities increased 39 percentage points of the GDP between 2007 and 2011 (rising from 47.8 to 86.8 percent of the GDP). It is remarkable that the behaviour of the non-financial corporations, whose liabilities fell 65 percentage points of the GDP in this period (from 381.2 percent to 316 percent of the GDP). In the case of the households, their liabilities kept growing until 2010, but in the year 2011 they fell 4.7 percentage points, placing their liabilities below the figure registered in 2007. In the case of the financial institutions, the liabilities of these institutions are falling since 2009, with the result that they have fallen 6.5 percentage points of GDP between 2009 and 2011.

It is important to emphasize that the fall in the (relative) size of the liabilities has taken place in a context of deep recession. Thus, between 2008 and 2011 the Spanish GDP has fallen by 1.3 percentage points. Consequently, the fall in the ratios of the GDP is not due to a higher economic activity, but to a substantial fall in the absolute values of the liabilities of the different agents.

Figure 28. Outstanding financial assets (percentage Spanish GDP)

assets



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Financial Accounts of the Spanish Economy, Financial Accounts (available at the Bank of Spain’s website: <http://www.bde.es/webbde/en/estadis/ccff/cfcap2.html>)

However, the financialisation process has also come with an increase in the size of the financial assets of these agents, as the figure 28 shows. Therefore, to know how the financialisation process has affected the balance sheet of the agents, besides increasing the size of these balance sheets, it is necessary to analyze the evolution of the net financial position of the agents, that is, the net financial assets of the agents, measured as the difference between the outstanding financial assets and the outstanding liabilities.

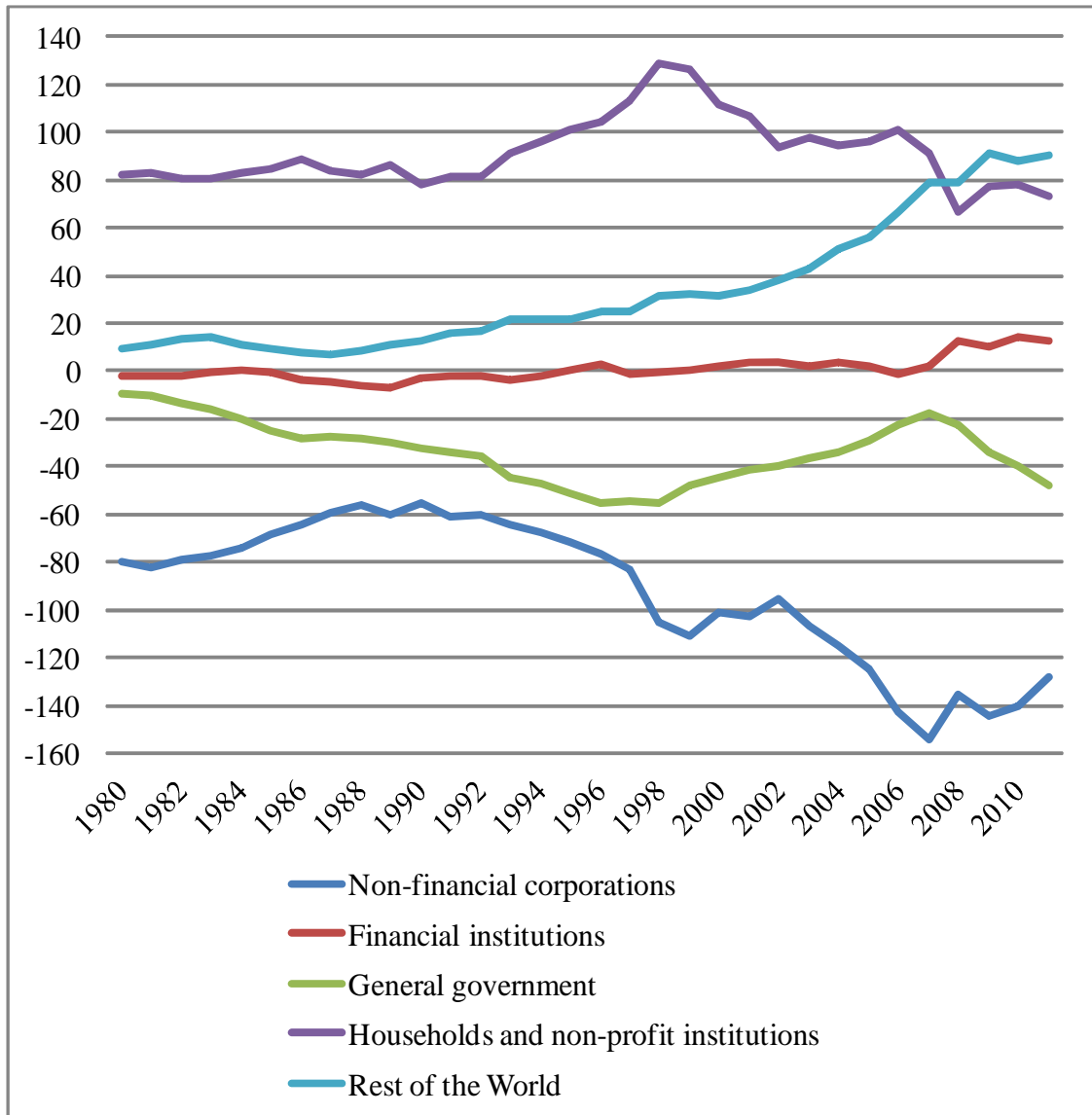
These variables give relevant information about how financialisation, proxied in this case by the higher borrowing of the agents and the whole economy, affects the economic position of the agents and their capacity to face the expenses, interest and amortization of the principal, resulting from the borrowing.

The figure 29 shows that the higher borrowing of the households and of the non-financial corporations has come with a worsening in their balance sheet. In the case of the households<sup>8</sup>, the value of the net financial assets fell since 1998 until 2008 in 62 percentage points of the GDP (from 128.8 percent to 66.7 percent of GDP). For the non-financial corporations, their net financial assets fell by 30 percentage points of GDP (from -105.2 to -135.2 percent GDP).

On the contrary, the net financial assets of the financial institutions increased 12.5 percentage points of the GDP (from -0.1 percent to 12.4 percent of the GDP). It is also very significant the improvement registered in the balance sheet of the general government, for which their net financial assets grow 32.6 percentage points of the GDP (from -55.2 to -22.6 percent GDP).

In sum, the worsening in the net financial assets of the non-financial corporations and the households during the process of financialisation was not offset with the improvement in the balance sheets of the general government and the financial institutions. The result was a deep deterioration of the balance sheet of the Spanish economy with the rest of the world. The net financial assets of the rest of the world with the Spanish economy, a measure of the net external borrowing of the Spanish economy, increased in 47 percentage points of the GDP, from 31.7 to 78.7 percent GDP, reflecting the enormous dependence of the Spanish economy of external funding.

Figure 29. Net financial assets (percentage Spanish GDP)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Financial Accounts of the Spanish Economy, Financial Accounts (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/ccff/cfcap2.html>)

### 3. Spain's integration in international financial markets

In the previous section, we have shown the influence of the external borrowing in the process of financialisation of the Spanish economy, focusing on the dependence of Spanish banking system on the foreign resources. Now, in this section, we will focus our attention of the more general process of integration of Spain in the international financial markets. With this aim, we will analyse the evolution of the main imbalances of the balance of payment, a reflection of the main imbalances of the Spanish real economy, and in the analysis of the different kind of capital inflows that allowed the funding of these (external and domestic) imbalances.

The analysis will be made in terms of flows and stocks. For the latter analysis we will analyse the evolution of the international investment position of the Spanish economy

Opposite to the previous section, our analysis will start in the decades of the nineties. The reason has to do with the source of data used in this section. All the data come from the Banco de España, and are available at the Boletín Estadístico of the Banco de España (see <http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>). Available data start in the year 1990, and therefore, our analysis is made for the period 1990-2012.

#### 3.1 Current account balance and net and gross financial flows

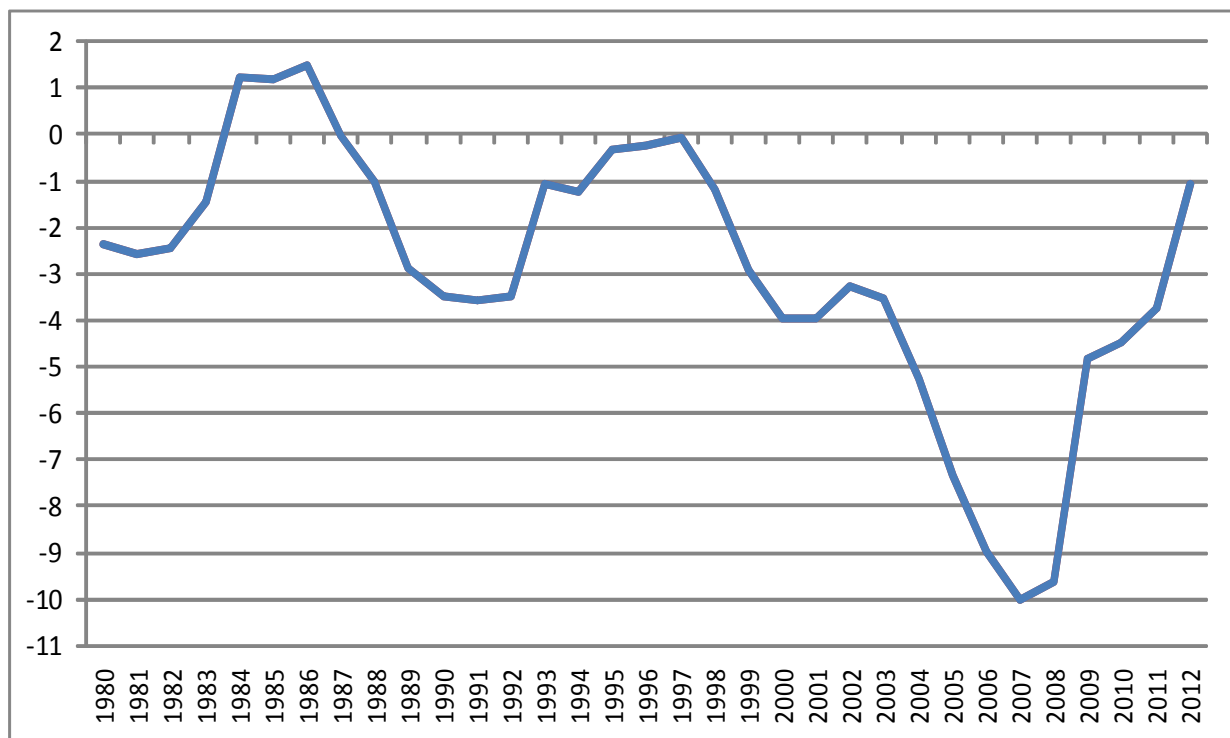
Figure 30 shows the evolution of the current account balance in Spain during the period 1980-2012, according to the data provided by the IMF in the World Economic Outlook Database, April 2013. These data shows the existence of two different periods. During the eighties until mid-nineties the current account balance follows a clear cyclical pattern, with fluctuations directly related to the business cycle. Thus,



during the expansions the current account balance worsened, and during recessions the current account balance reached a situation close to the equilibrium or, even, reached surpluses.

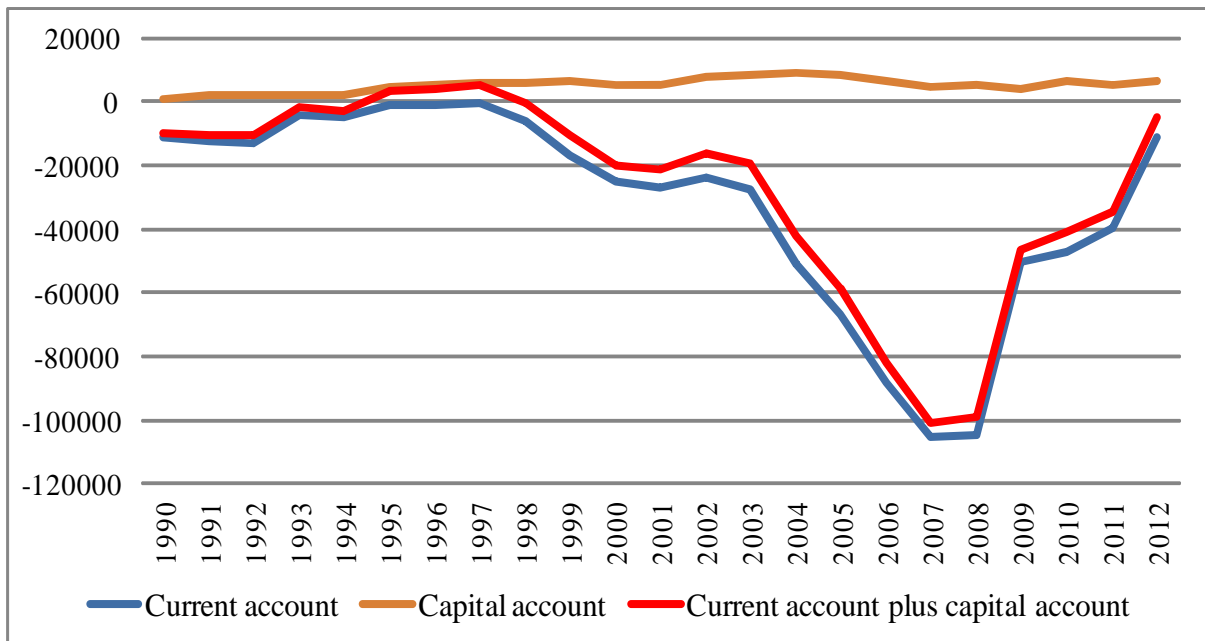
This pattern of behavior change in the decade of the nineties. Since then, the current account balance of Spain has been permanently in a deficit situation. The fluctuations of the economic activity have only contributed to accelerate or slowdown the current account balances, without being able to reach an equilibrium or surplus in the current account. As we seen in the previous section, the existence of this permanent and structural current account deficit is the main reason of the high external debt reached by the Spanish economy before the crisis.

Figure 30. Spanish current account balance, 1980-2012 (% GDP)



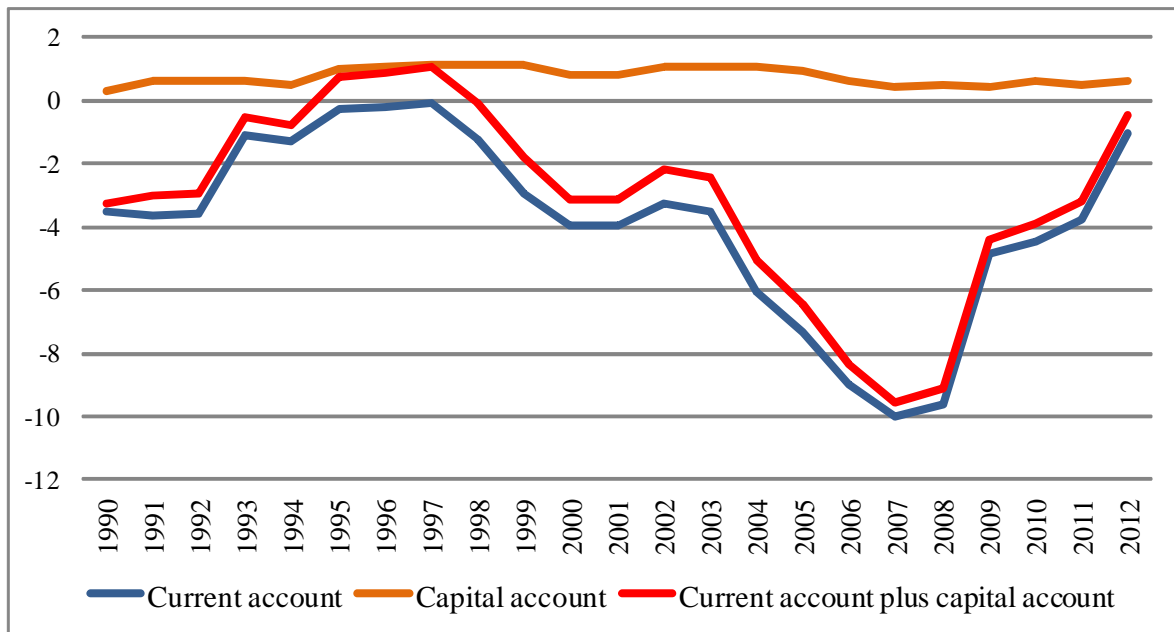
Source: International Monetary Fund, World Economic Outlook Database, April 2013

Figure 31. Spanish current and capital account balance, 1990-2012 (million euros)



Source: Banco de España, Boletín Estadístico of Banco de España (<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

Figure 32. Spanish current and capital account balance, 1990-2012 (percent GDP)

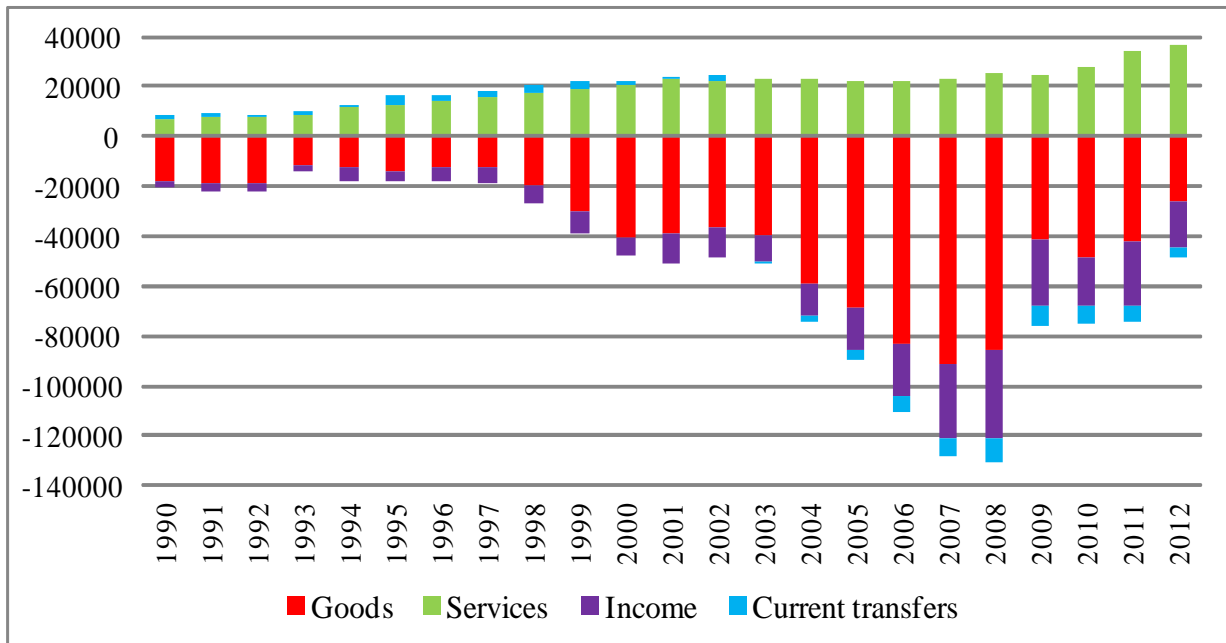


Source: Our calculations based on Banco de España, Boletín Estadístico of Banco de España (<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

Figures 31 and 32 show the developments since the year 1990 of the components of the current plus capital account balance measuring, respectively, these balances in nominal terms (million euros) and as a percentage of the GDP. It is clear that the changes registered in the current and capital account balance in Spain are explained by the changes and fluctuations in the current account balance. The current account balance has always registered deficits, with a high variability in the (absolute and

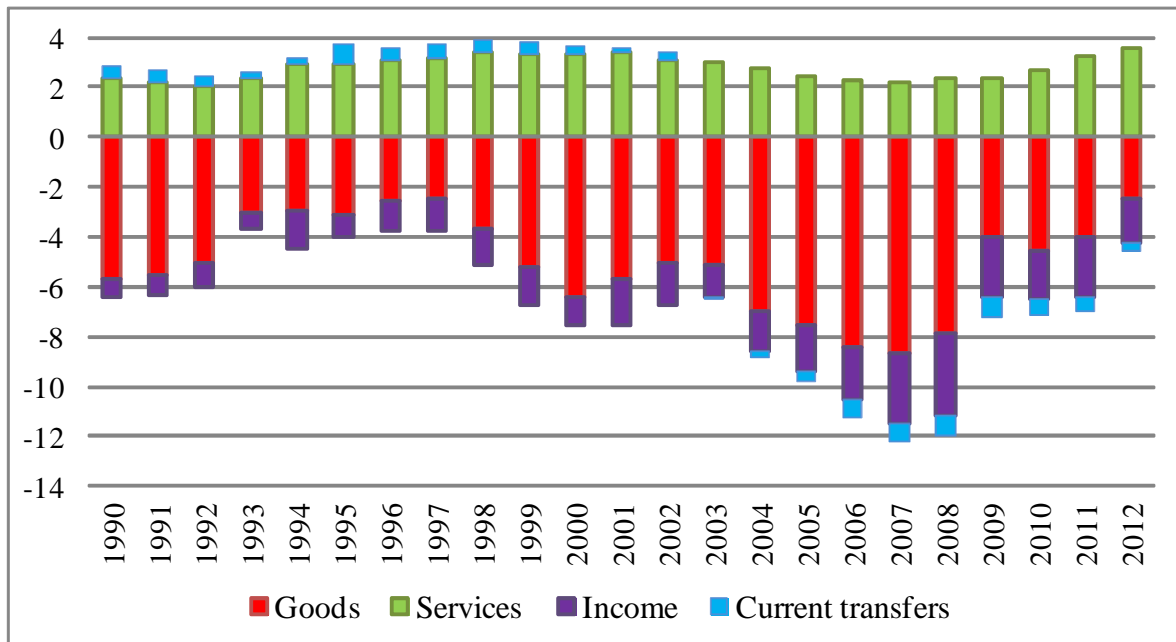
relative) size of this balance. On the contrary, the capital account has always been in a surplus situation, thanks mainly to the net capital transfers from the European Union. Moreover, the capital account surplus has been very stable, oscillating between 0.3 and 1.1 percent of the GDP.

Figure 33. Spanish current account balance, 1990-2012 (million euros)



Source: Banco de España, Boletín Estadístico of Banco de España  
(<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

Figure 34. Spanish current account balance, 1990-2012 (% GDP)



Source: Our calculations based on Banco de España, Boletín Estadístico of Banco de España (<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

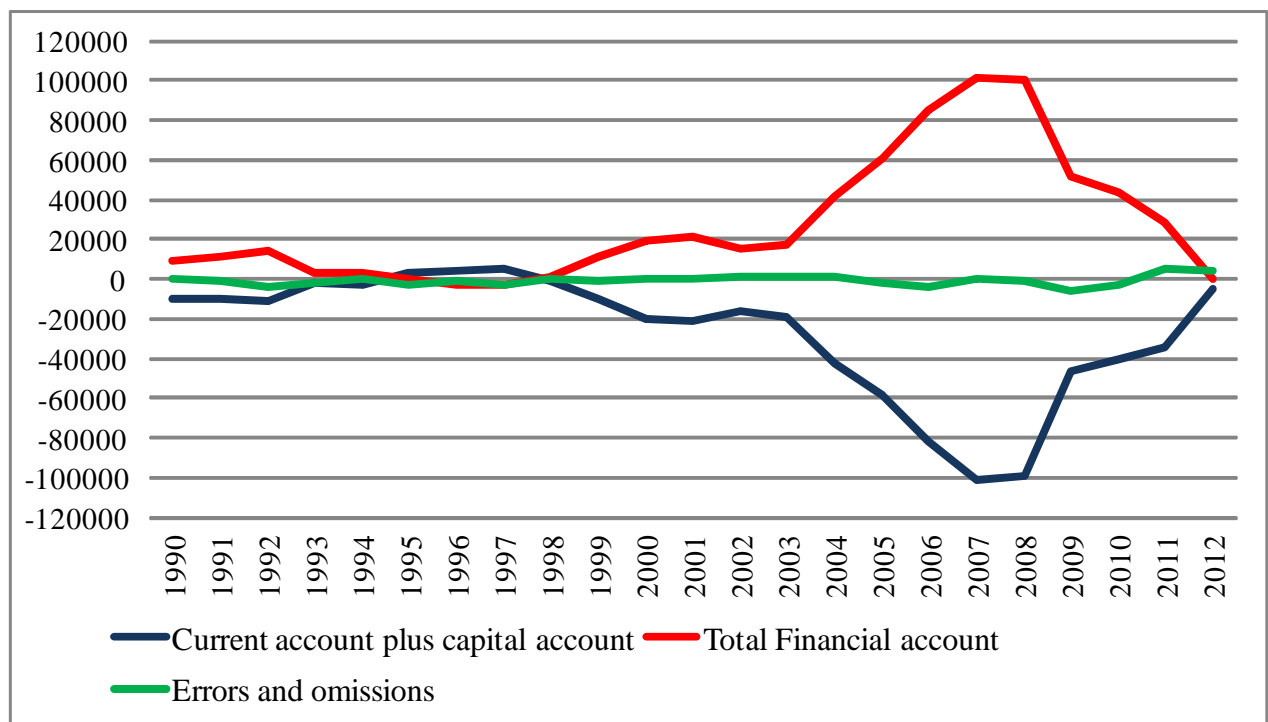
Figures 33 and 34 show the evolution of the components of the current account balance since the year 1990. These data help to explain the deterioration of the current account balance that took place since mid-nineties. As shown in the figures, the services account in Spain has always registered a significant surplus. However, this surplus has not been high enough to offset the permanent deficits registered in the goods and income balances and in the current transfers balance (in this case since 2003).

Actually, the deterioration in the current and capital account balance since the mid-nineties is explained by the worsening in the goods, income and current transfers. The rising deficits in these balances registered in the last decade can be explained by a set of elements that affected each sub-balance. In the case of the goods balance, its deterioration was due to the combination of two factors: the boom phase registered since the last nineties that led to a growth of imports, and the high inflation rates of the Spanish economy that led to an appreciation of the Spain's effective real exchange rate with the consequent loss of competitiveness. In the case of the current transfers balance, the rising size of remittances made by the foreign population living in Spain explains most of the deterioration of this balance. Finally, the higher deficit in the income balance is due to the higher external indebtedness of the Spanish economy.

The recent economic crisis has come with a significant improvement in the current account of balances. The current account deficit has fallen since 2007 in 8.9 percentage points of the GDP, amounting this deficit 1.1 percent GDP in 2012. Most of this improvement is due to the extraordinary improvement in the goods balance, whose deficit has fallen in 6.2 percent GDP, reaching 2.5 percent GDP in 2012, the lowest figure since 1990. This fall has also taken place in the rest of balances: 1.3 percent GDP in the services balance, 1.1 percent in the income balance, and 0.3 percent in the current transfers balance. The improvement in the goods services is, again, explained by the combination of two interrelated factors: on the one hand, the economic recession that has led to a fall in the imports, and the significant improvement in the external competitiveness, reflected in the fall in the real effective exchange rates of the Spanish economy, thanks to the intense wage moderation registered since 2010.

The current and capital account imbalances have their reflection in the financial account imbalances, as figures 35 and 36 show, and that explain the process of external borrowing of the Spanish economy.

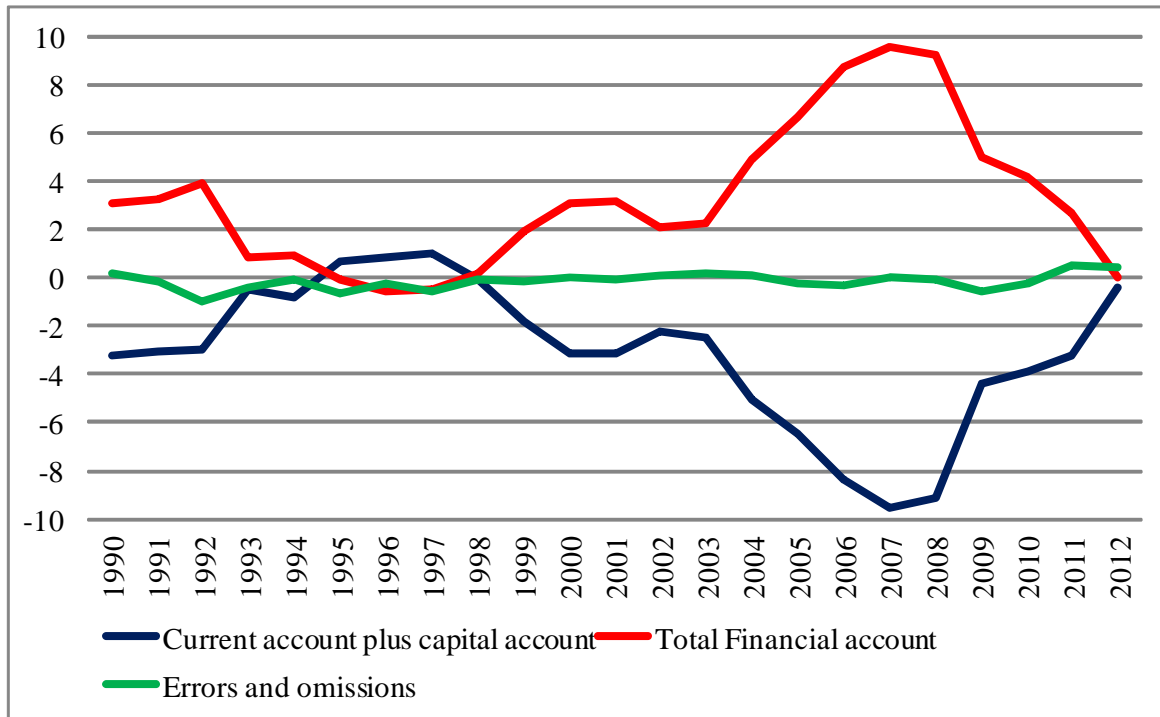
Figure 35. Spanish current account and financial balances, 1990-2012 (million euros)



Source: Banco de España, Boletín Estadístico of Banco de España  
(<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

Figure 36. Spanish current account financial balances, 1990-2012 (% GDP)

and



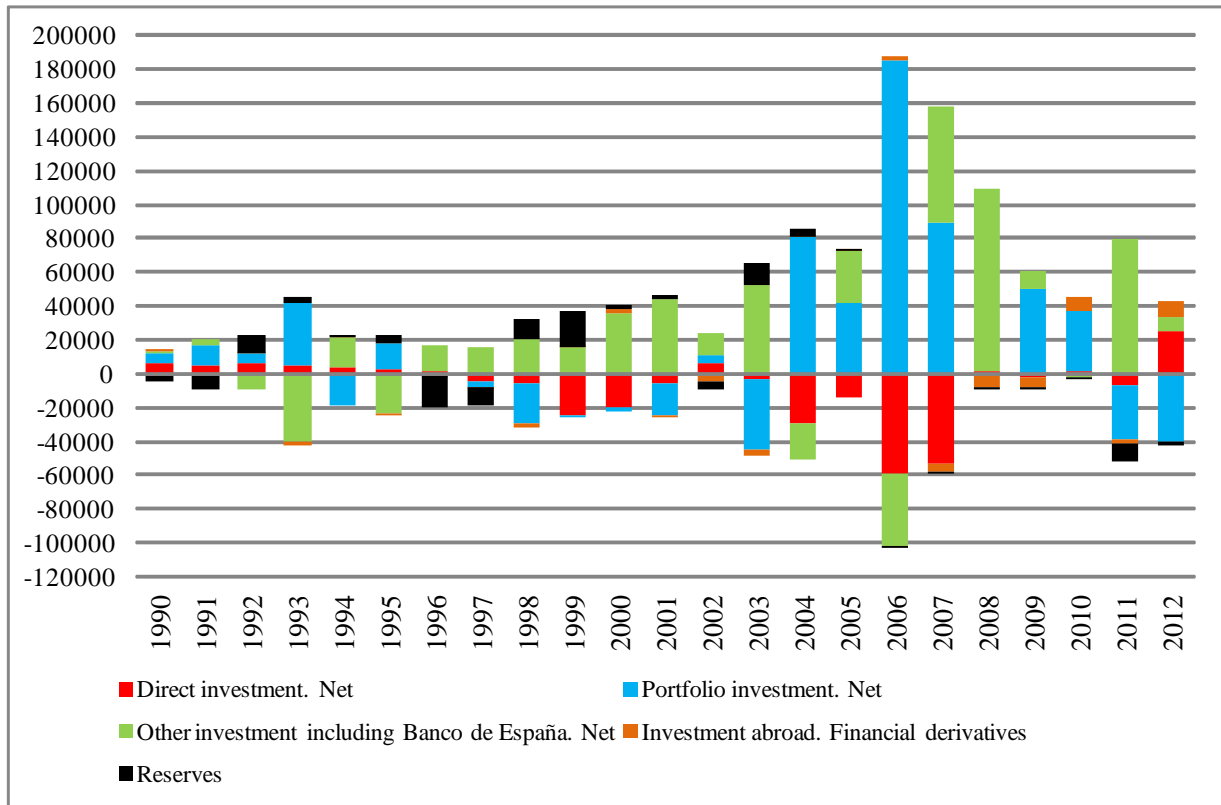
Source: Our calculations based on Banco de España, Boletín Estadístico of Banco de España (<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

Figures 37 and 38 show the evolution of the different components, in net terms, of the financial account, showing the way Spain has financed the current and capital account deficit. According to these data, it is clear that it is through the portfolio investments and the other investments, where these investments are dominated by bank transactions



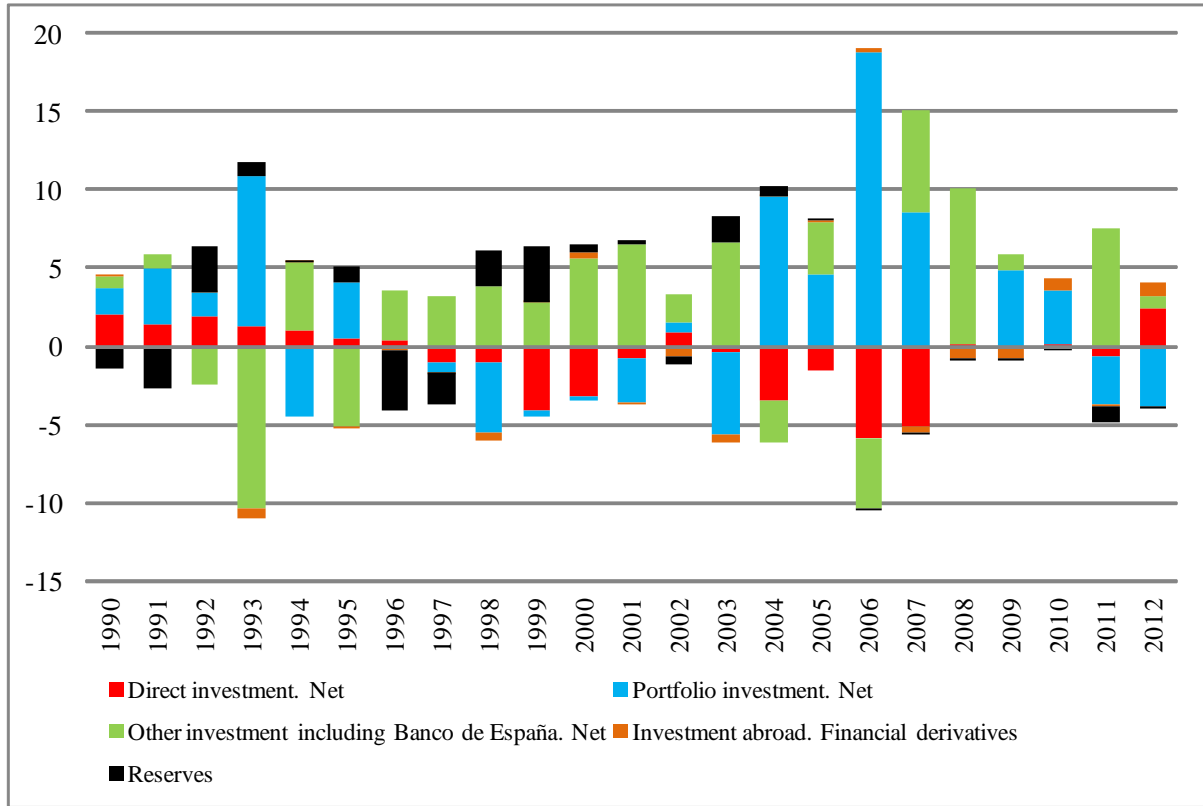
Figure 37. Spanish financial balance, 1990-2012 (million euros)

1990-



Source: Banco de España, Boletín Estadístico of Banco de España (<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

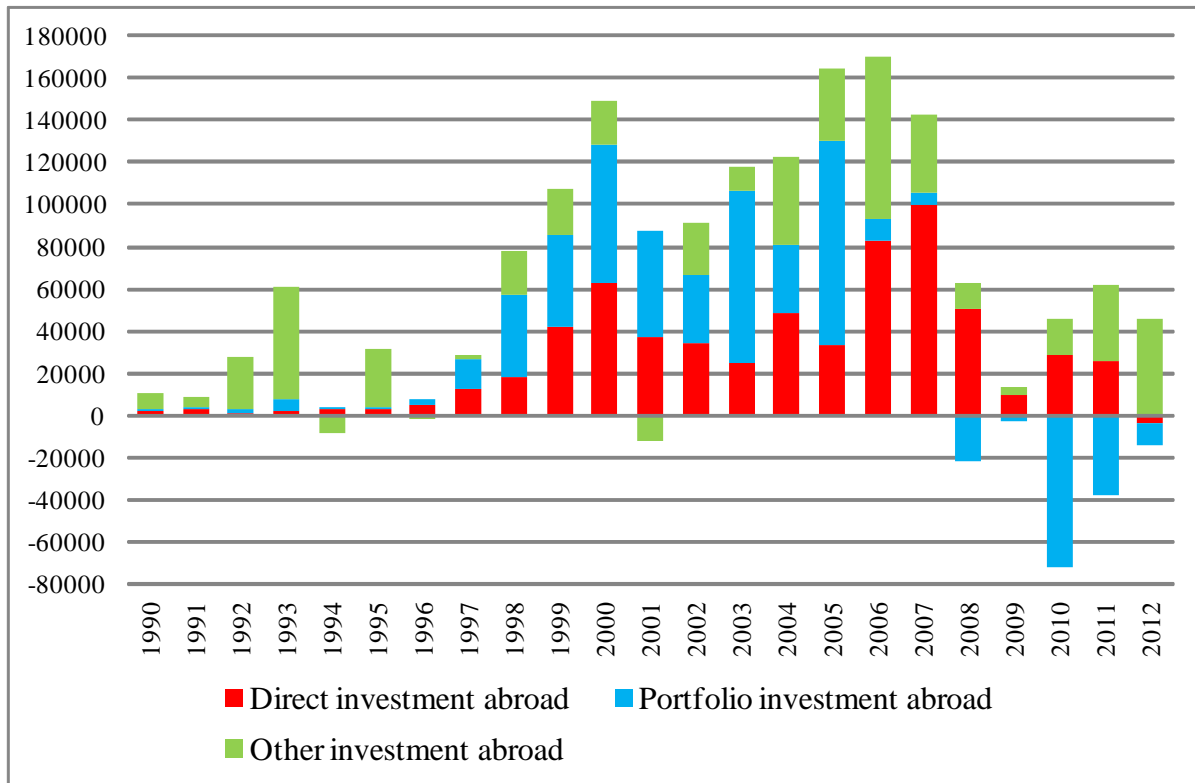
Figure 38. Spanish financial balance, 1990-2012 (% GDP)



Source: Our calculations based on Banco de España, Boletín Estadístico of Banco de España (<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

The picture provided by these previous figures by being measured in net terms shows an evolution of these balances that is explained by the evolution of the financial account balance, that is, by the Spanish external imbalance. To avoid this bias, in the following figures data are provided regarding the size of the gross capital flows for which we have available data provided by the Banco de España. The analysis of these data provide a better picture of the process of integration of the Spanish economy in the international financial markets.

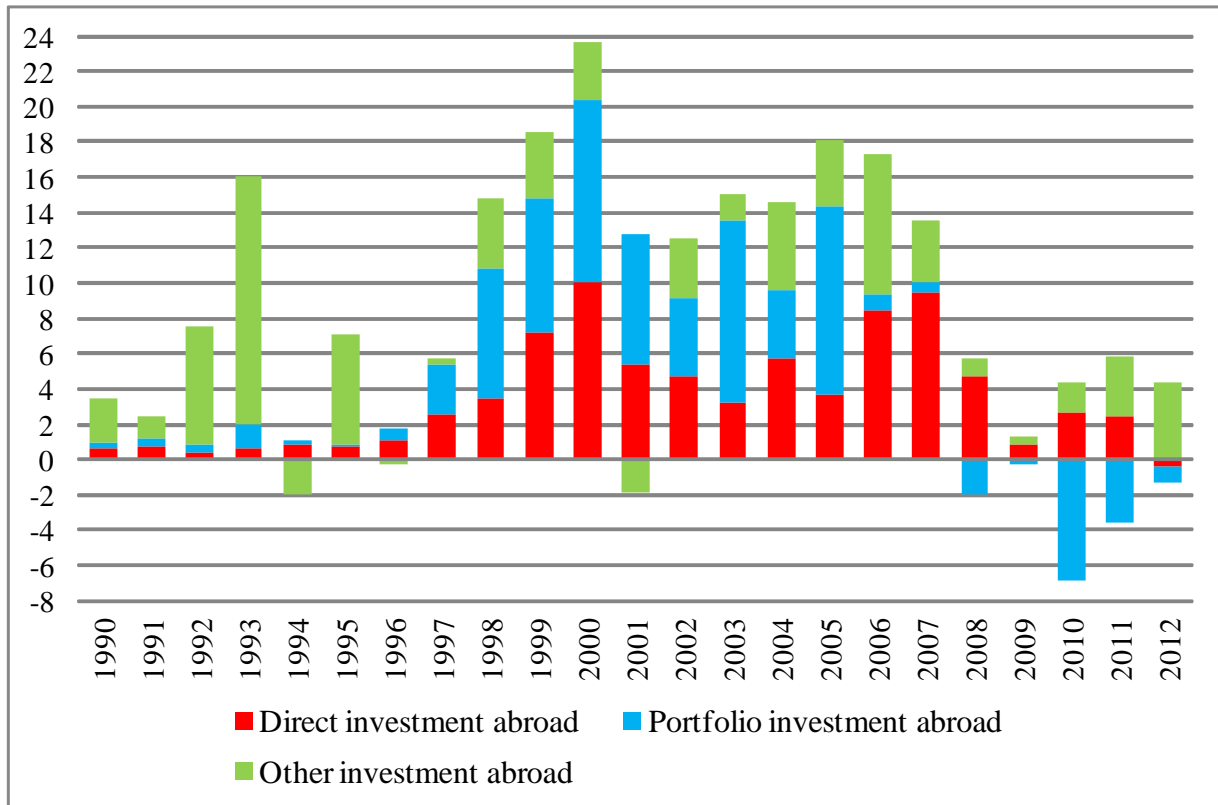
Figure 39. Gross financial flows abroad, 1990-2012 (million euros)



Source: Banco de España, Boletín Estadístico of Banco de España (<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

Figures 39 and 40 give information about the size of financial flows (direct investment plus portfolio investment and other investment) abroad, measured in nominal terms and as a percentage of the GDP. The figures show the existence of three different periods. The first period includes the years 1990-1997. This period is characterized, first, by a small size of the Spanish investment abroad and, second, by the dominance of the other investments. The second period comprises the years 1998-2007. During this period the absolute and the relative size of the Spanish capital outflows rose dramatically, until the year 2000. This growth was fuelled by the growth in the direct and the portfolio investments. The financial crisis of the year 2001 led to a significant decline in the size of the Spanish financial outflows, mainly in the case of other investments (that became negative) and the direct investments.

Figure 40. Gross financial flows abroad, 1990-2012 (% GDP)

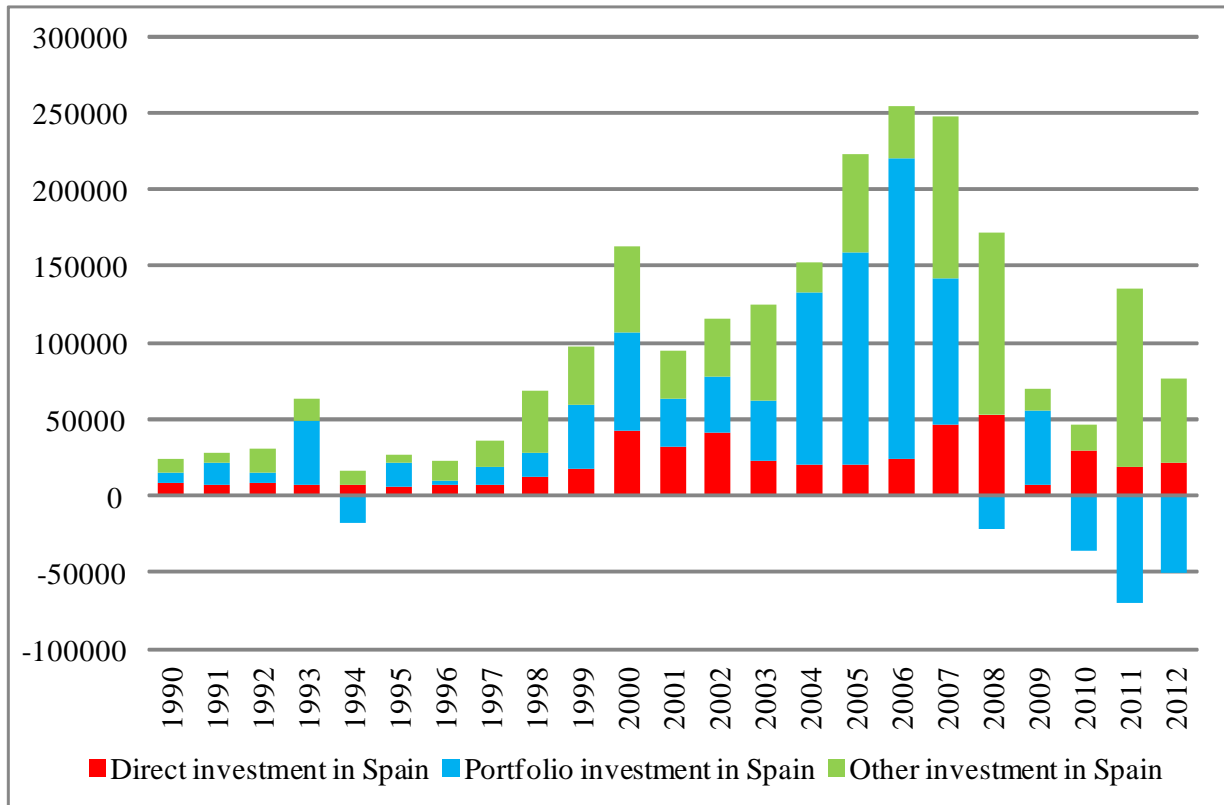


Source: Our calculations based on Banco de España, Boletín Estadístico of Banco de España (<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

However, since 2001, these outflows began to rise again, fuelled no by the portfolio investments.

The last period corresponds to the crisis period. This period is characterized by a fall in the size of financial outflows to levels similar to those registered in the decade of the nineties. Moreover, since 2007 the net portfolio investment outflows become negative, meaning a process of disinvestments of Spanish companies abroad

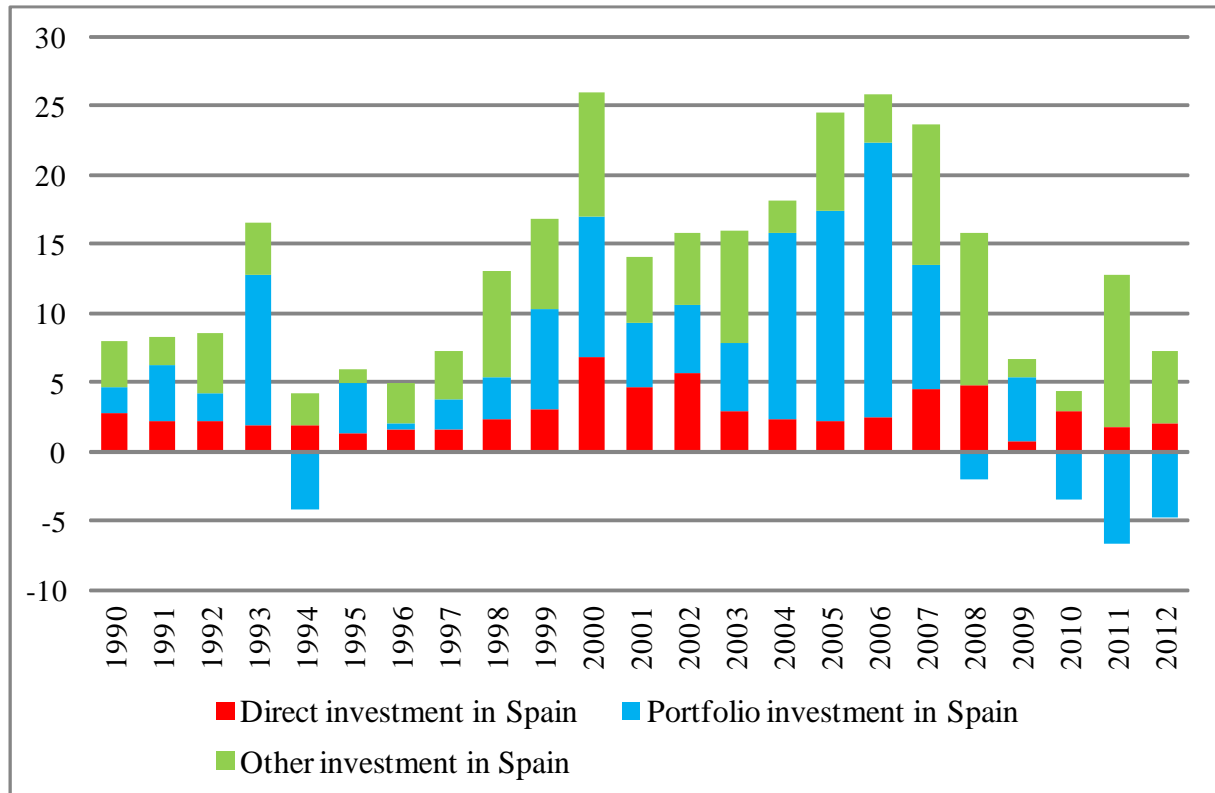
Figure 41. Gross financial flows in Spain, 1990-2012 (million euros)



Source: Banco de España, Boletín Estadístico of Banco de España  
(<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

The pattern of development of the financial inflows in Spain is very similar to that of the financial outflows, as can be seen in figures 41 and 42. Again three periods can be detected. A first period, between the years 1990 and 1997, is characterized by the small size of these inflows and the predominance of portfolio and other investments inflows. The second period takes place between 1998 and 2007. During these years, financial inflows rise rapidly fuelled by direct and portfolio investments. In the year 2008, the beginning of the third period, an abrupt fall in the size of financial inflows takes place, driven by the fall in the direct investments and in the portfolio inflows, which, like in the case of the portfolio outflows become negative.

Figure 42. Gross financial flows in Spain, 1990-2012 (% GDP)

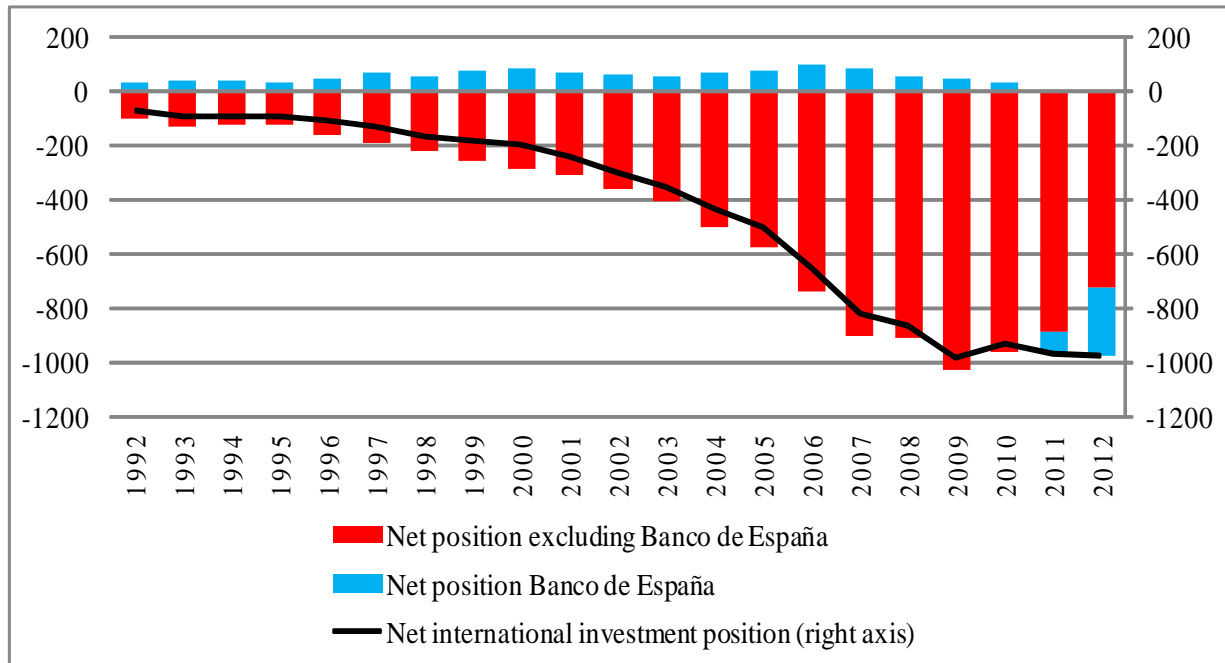


Source: Our calculations based on Banco de España, Boletín Estadístico of Banco de España (<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

### 3.2 Spain's international investment position

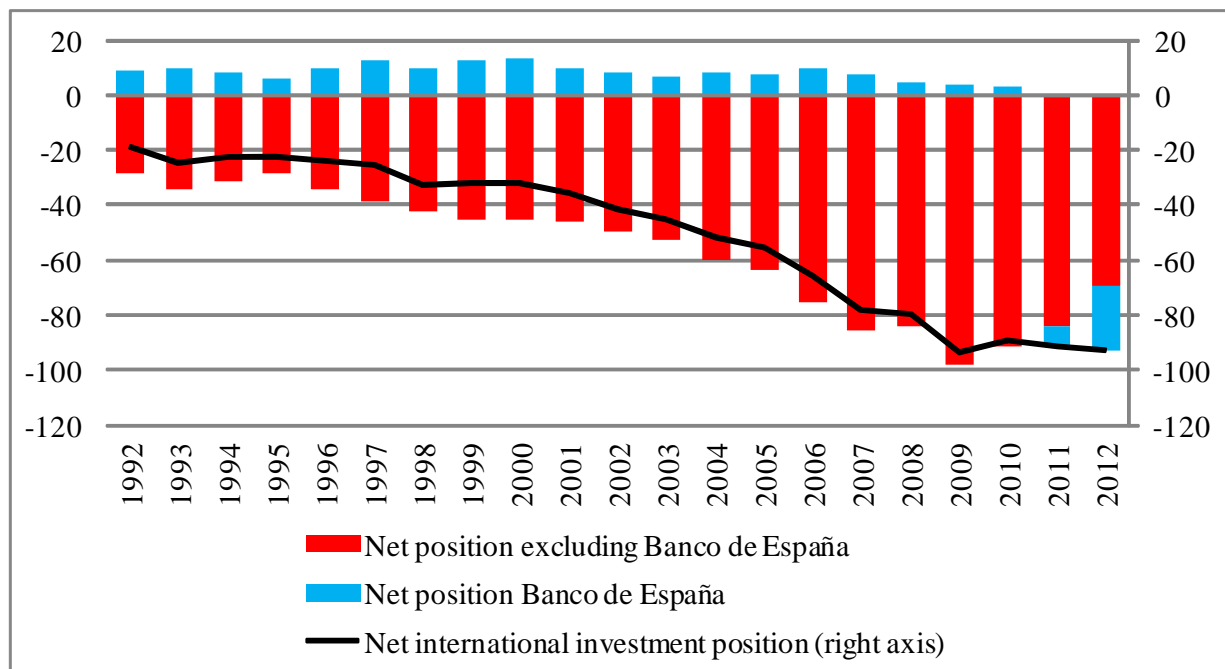
The analysis developed in the previous section has been focused on the evolution of the flows, and the corresponding balances, of the different international transactions, both current and financial transactions. Now, in this section we will focus on the analysis of the stocks of these transactions, using the data of the net international investment position of Spain. The source of these data is the Banco de España. The period analysed is the years 1992-2012 (the years for which the Banco de España provides information).

Figure 43. Net international investment position, 1992-2012 (billion euros)



Source: Banco de España, Boletín Estadístico of Banco de España (<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

Figure 44. Net international investment position, 1992-2012 (% GDP)



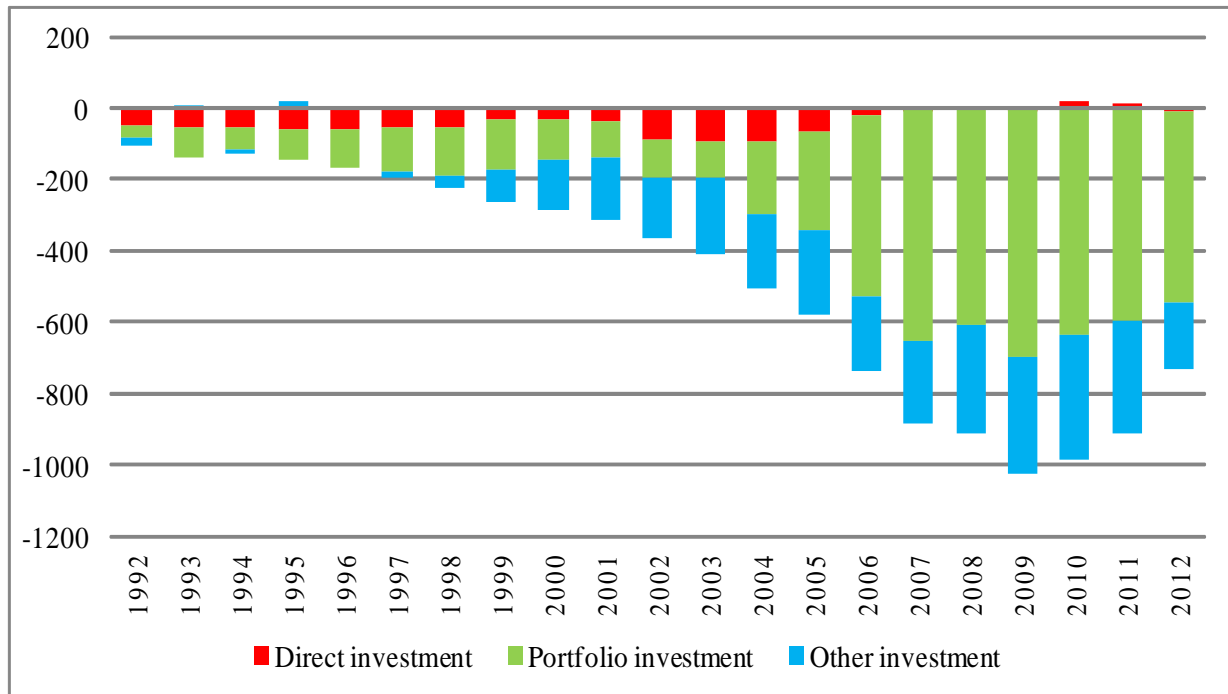
Source: Our calculations based on Banco de España, Boletín Estadístico of Banco de España (<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

The rise of the current account deficit, and the rising external borrowing of the Spanish economy led since mid-nineties to a sustained deterioration in the net international position of Spain (see figures 43 and 44). In the year 2009, the net international investment position reached -982 billion euros (93.7 percent GDP). Actually, if we exclude the net international investment position of the Banco de España, these negative figures were much higher (-1026 billion euros, -97.9 per cent GDP).

Since then, these figures have slightly corrected. In the year 2012 the net international investment position amounted -976 billion euros (92.9 per cent GDP). This small reduction of the external imbalance of the Spanish economy hides the fact that, as we will develop later, the net position of the Banco de España has suffered an abrupt deterioration, turning into a negative position). Excluding the Banco de España, the net position in 2012 was -726 billion euros, equivalent to 69 percent GDP), involving a fall in the negative position close to one third of the figures registered in 2009.

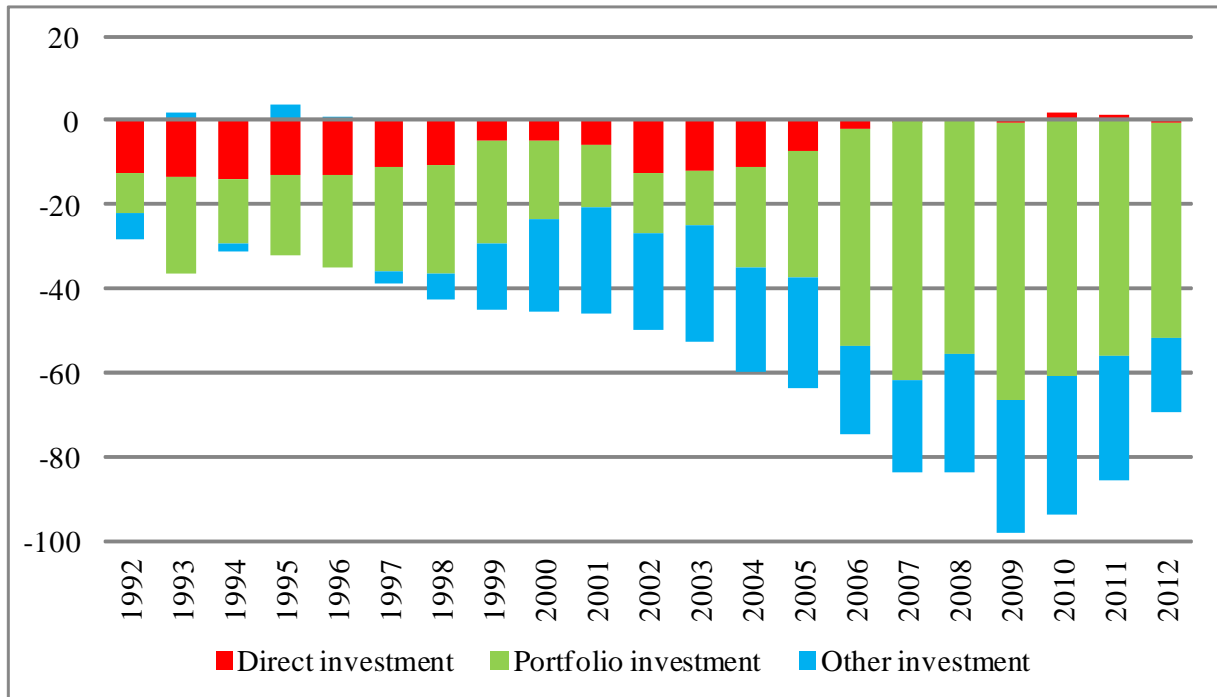


Figure 45. Components of the Net international investment position excluding Banco de España, 1992-2012 (billion euros)



Source: Banco de España, Boletín Estadístico of Banco de España  
(<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

Figure 46. Components of the Net international investment position excluding Banco de España, 1992-2012 (% GDP)



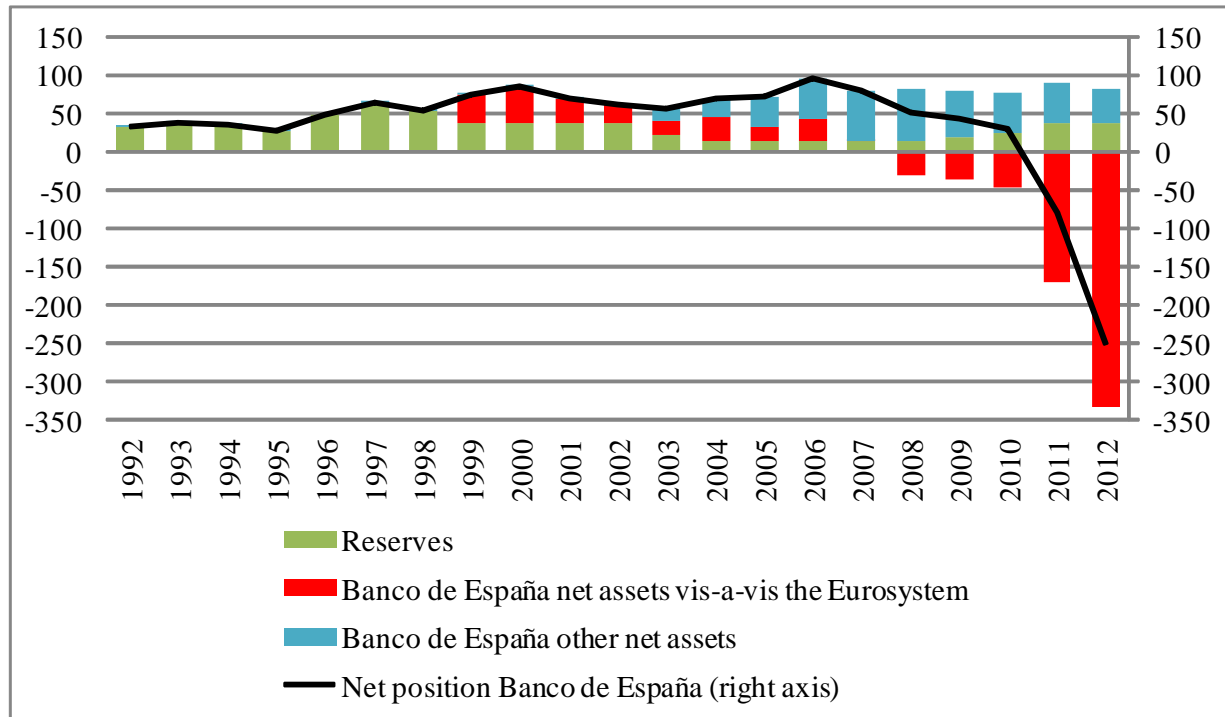
Source: Our calculations based on Banco de España, Boletín Estadístico of Banco de España (<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

Figures 47 and 48 show the behaviour of the different components of the Spain’s net international investment position excluding that of the Banco de España. Again, we detect the rising worsening of the net position of the portfolio and the other investments. On the contrary, since 2007 the net position of the direct investments is close to the equilibrium, and even in years like 2008, 2010 and 2011 the net position of the direct investments has been positive. This change of trend has been driven by the fast growth of the Spanish direct investments abroad. Thus, the stock of accumulated Spanish direct investments abroad has increased from 3.5 percent GDP in 1992 to 45.2 percent GDP in 2012.

Figure 47. Components of the Banco de España's

de

España's Net international investment position, 1992-2012 (billion euros)

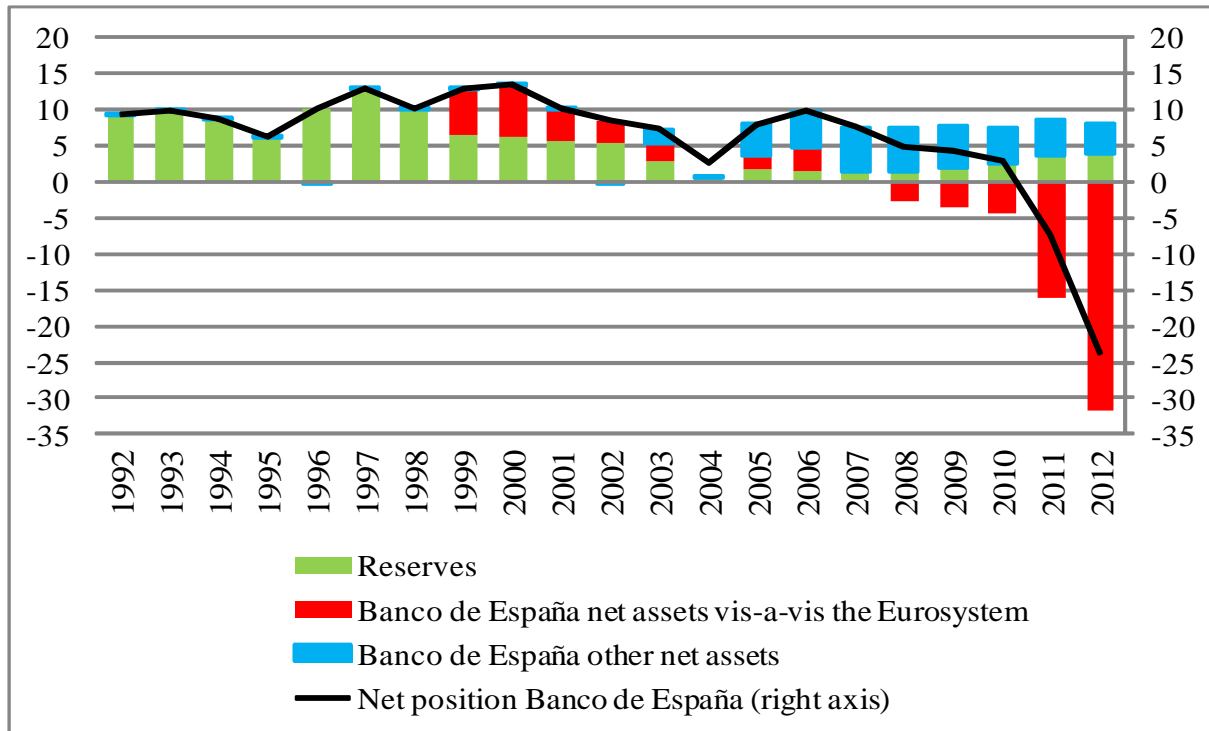


Source: Banco de España, Boletín Estadístico of Banco de España  
(<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

Figure 48. Components of the Banco de España

de

España's Net international investment position, 1992-2012 (% GDP)



Source: Our calculations based on Banco de España, Boletín Estadístico of Banco de España (<http://www.bde.es/webbde/en/estadis/infoest/bolest17.html>)

As mentioned earlier, a relevant feature of the recent evolution of the Spanish net international investment position is the abrupt deterioration of the net position of the Banco de España, which since 2008 has turned negative. This worsening is explained by the evolution of the net assets vis-à-vis the Eurosystem. Thus, in the year 2012 the net debits of the Banco de España with the Eurosystem amounted 333 billion euros, equivalent to 31.6 percent GDP. This increase in the net debits of the Banco de España are mainly due to the rise in the debits with the ECB.

## 4. The structure of the Spanish financial system by forms of organization

### 4.1 Financial institutions universe

Following the euro area monetary analysis scheme elaborated by the European Central Bank<sup>9</sup> (ECB), financial institutions may be grouped under three different headings: monetary financial institutions (the central Bank of Spain<sup>10</sup> and the rest of monetary financial institutions), non monetary financial institutions, and insurance corporations & pension funds.

According to the ECB' definitions:

- “Monetary financial institutions” (MFIs) are resident credit institutions as defined in Community law, and other resident financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credits and/or make investments in securities. Central banks as well as money market funds are also classified as MFIs, which formally consist of credit institutions, national central banks, money market funds, and other institutions
- “Credit institutions” are defined as any institution falling under the definition contained in the Banking Co-ordination Directive 2009/110/EC of 16 September 2009, whereby credit institution shall mean (a) an undertaking whose business is to receive deposits or other repayable funds from the public and to grant credits for its own account; or (b) an electronic money institution within the meaning of Directives 2005/60/EC and 2006/48/EC on the taking up, pursuit and prudential supervision of the business of electronic money institutions.

- “National central banks” include those of the EU Member States and the European Central Bank.
- “Money market funds” are defined as those collective investment undertakings of which the units are, in terms of liquidity, close substitutes for deposits and which primarily invest in money market instruments and/or in other transferable debt instruments with a residual maturity up to and including one year, and/or in bank deposits, and/or which pursue a rate of return that approaches the interest rates on money market instruments.
- “Other institutions” are other resident financial institutions which fulfill the MFI definition, irrespective of the nature of their business.
- “Investment funds” are collective investment undertakings that: i) invest in financial and non-financial assets, within the meaning of the European system of national and regional accounts in the Community (ESA 95), to the extent that the objective is to invest capital raised from the public; and ii) are set up under Community or national law
- “Financial vehicle corporations” are undertakings set up under national or Community law which primarily: to carry out securitisation transactions and which are insulated from the risk of bankruptcy or any other default of the originator; and which issue securities, securitisation fund units, other debt instruments and/or financial derivatives and/or legally or economically own assets underlying the issue of securities, securitisation fund units, other debt instruments and/or financial derivatives that are offered for sale to the public or sold on the basis of private placements.
- “Insurance corporations” comprise both insurance (life and non-life) and reinsurance types of business.
- Pension funds consist only of those pension funds that are institutional units separate from the units that create them. These are funds that have autonomy of decision-making and keep a complete set of accounts. Nonautonomous pension funds set up, for example, by credit institutions or non-financial corporations are not covered since they are not separate

institutional units (Social security schemes are not included in this definition of insurance corporations or pension funds)

In the case of Spain, the most important ones in terms of magnitude and far reaching operations are credit institutions, composed of private banks, former saving banks<sup>11</sup>, the Instituto Oficial de Crédito - Official Credit Institute (ICO), Credit Cooperatives banks and specialized lending institutions. Private banks and former saving banks perform all kinds of financial operations and in fact they may be considered as universal banks. ICO and Credit Cooperatives lending operations are circumscribed to specific purposes and are of marginal importance in comparison<sup>12</sup> to banks. Specialized lending institutions (Financial Establishments) perform even more limited operations as factoring or leasing and they cannot collect deposits from the public.

Apart from credit institutions there are a variety of non-monetary financial institutions (Non-MFI) like collective investment institutions, venture capital companies, portfolio management companies Finally, we can mention Insurance Corporations and Pensions Funds.

#### **4.2 Supervisory and regulatory agencies of the financial system**

The Banco de España (Bank of Spain), the Comisión Nacional del Mercado de Valores (CNMV) (National Commission of the Securities Market) and the General Directorate of Insurance and Pension Funds are responsible for the supervision of credit institutions, of non-MFI (except Insurance Corporations and Pension Funds) and of Insurance Corporations and Pension Funds respectively. Regional governments retained some regulatory power over former saving banks operating in their jurisdictions, but they are now not very relevant after the 2010 law that has privatized the savings banks.

Regarding the regulation and supervision of the banking sector by the Banco de España, the Law of Autonomy in 1994 granted its independence towards policy makers and credit institutions as well. The reputation of the bank of Spain as supervisor was not disputed and their supervisory agencies are highly experienced with thorough supervisory processes. However the recent banking crisis has revealed some important weaknesses (IMF Country Report, 2012 Spain: Financial Stability Assessment; No. 12/137). For instance inconsistencies in the division of responsibilities between the Ministry of Economy and the central bank regarding their sole and exclusive role in prudential oversight of financial institutions or the lack of effective power of the Banco de España to promulgate prudential rules and sanctioning. In this sense the Law of Autonomy clearly distinguishes the independence and regulatory capacity of the Banco de España from its supervisory role. Prudential regulation in Spain depends on the government and tends to follow the political cycle. The delays during the crisis to implement corrective actions and sanctions have led to concerns regarding the independence of the Banco de España towards government and industry interference.

The supervision of the insurance sector seems to be underdeveloped with a lack of resources that have led to a limited supervision as manifested in the reduced number of inspections and monitoring. Finally regarding the CNMV, their governance structure raises some concerns about its independence because of the participation of the government representative in the board, because certain key decisions are still the responsibility of the Ministry of Economy and last but not least because its budget is approved by the government.

#### **4.3 Financial Institutions balance sheet structure**

Below is an exhibit of the structure of the aggregated balance sheet of financial institutions as for 2008. As can be seen credit institutions and especially private



banks dominate the Spanish financial system: they represent two thirds of all financial assets under the management of financial institutions (66percent, 70 percent including all kinds of credit institutions). Non monetary financial intermediaries represent one quarter (26 percent). Insurance Corporations and Pension Funds have a share of 7.5 percent and another important share of total assets are managed by issuers of preference shares and other securities (9 percent).

Table 1. Structure of financial institutions (percentage of total financial assets of financial institutions)

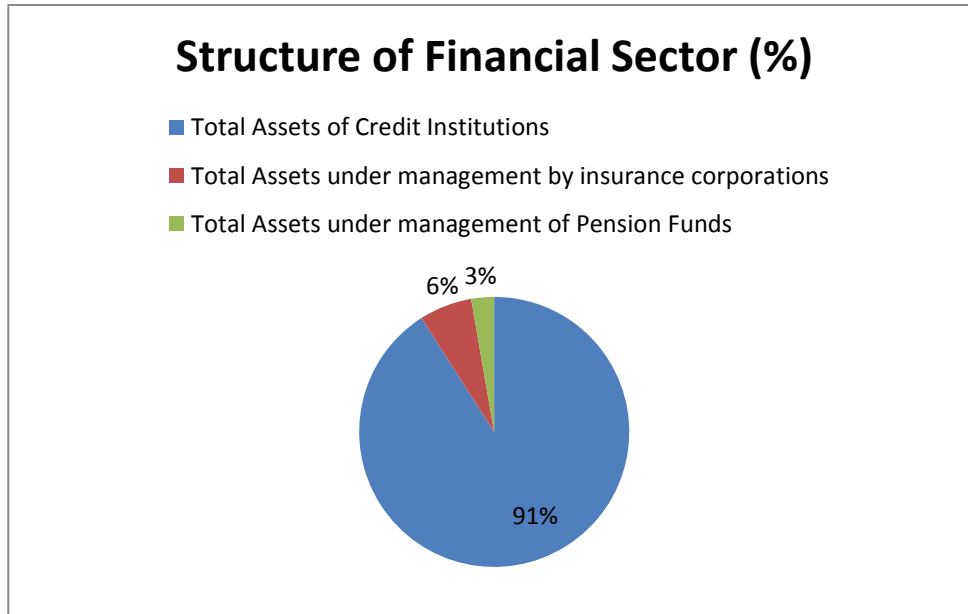
<b>Monetary Financial Institutions</b>		74,04			
	Bank of Spain		3,83	3,83	3,83
	Other Monetary Financial Institutions		70,21		
	<i>Credit Institutions</i>			69,53	
		Banks-Saving Banks and Cooperatives			66,68
		Specialised lending Institutions			1,48
		ICO			1,08
		<i>Money Market Funds</i>		0,68	0,68
<b>Non Monetary Financial Institutions</b>		25,95			
	Non Monetary Financial Institutions except of Insurance Corp. & Pensions Funds		18,45		
	<i>Other Financial Intermediaries</i>			18,06	
		Portfolio Investment institutions			4,3
		Real Estate institutions			0,02
		Securities-dealer Companies			0,37
		Issuers of Preference shares and other securities			3,99
		other			9,23
		<i>Financial Auxiliaries</i>	0,38	0,38	0,38
	<i>Insurance Corporations and Pension Funds</i>		7,51		
		<i>Life and risk insurance corporations</i>		4,81	4,81
		<i>Non-profit insurance institutions</i>		0,65	0,65
		<i>Reasurament Consortium</i>		0,17	0,17
		<i>Pension Funds</i>		2,1	2,1
<b>Financial Institutions</b>		100	100	100	100

Source: Bank of Spain and own calculations

Note: total aggregated balance sheet 2008 amounts 4,818 billion and 2008 GDP at current prices 1,088 billion.

Considering credit institutions, Insurance Corporations and Pension Funds total assets market share is almost entirely controlled by credit institutions (see figure 49).

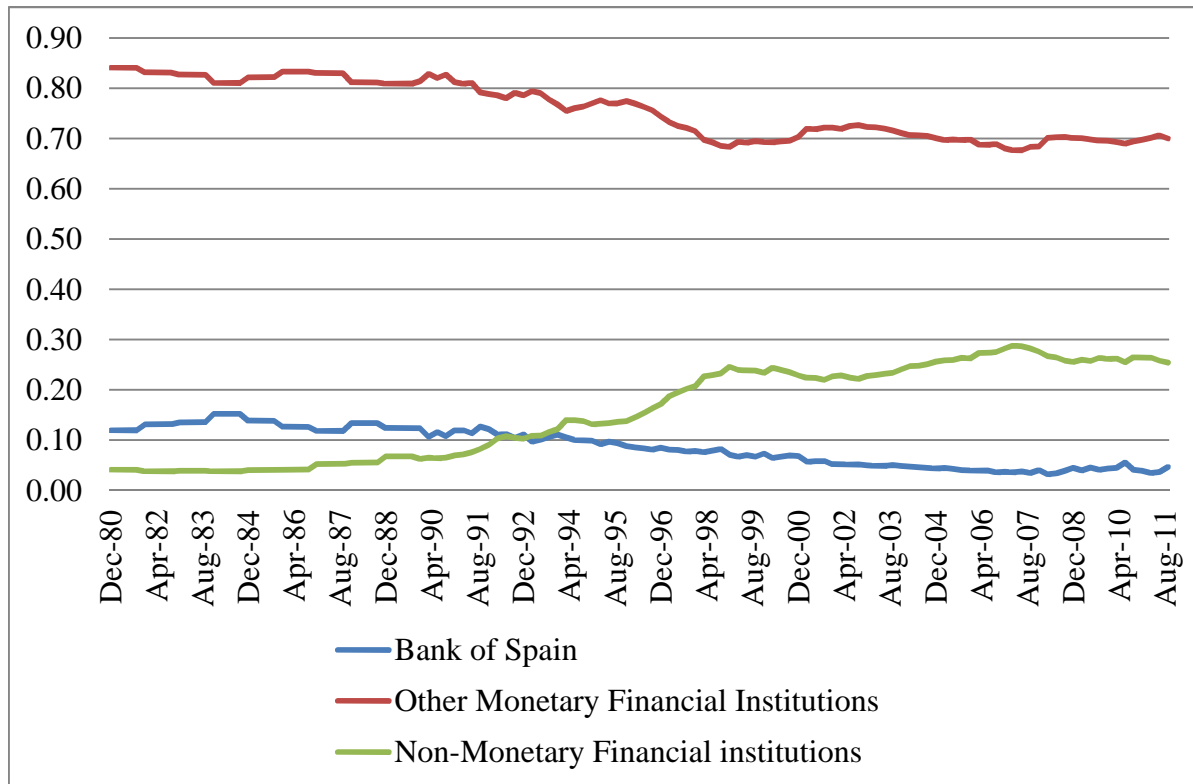
Figure 49. Structure of Financial Sector, 2008 (percentage of total assets)



Source: Bank of Spain and own calculations

As can be seen in the figure 50, the structure has not varied a lot since the end of the nineties and reveals the leading role of credit institutions in Spanish financial intermediation. However, since the decade of the eighties, the trend shows that non-monetary institutions share has increased considerably reducing the share of monetary institutions and specially that of the bank of Spain. The dynamism of non-monetary financial institutions has been stimulated by the necessity of funds by credit institutions to finance their credit growth. However the bulk of their business is concentrated in affiliates of credit institutions. On the other side, the diminishing trend of central bank's share makes clear its decreasing role within the financial system and in any case its lower capacity of intervention.

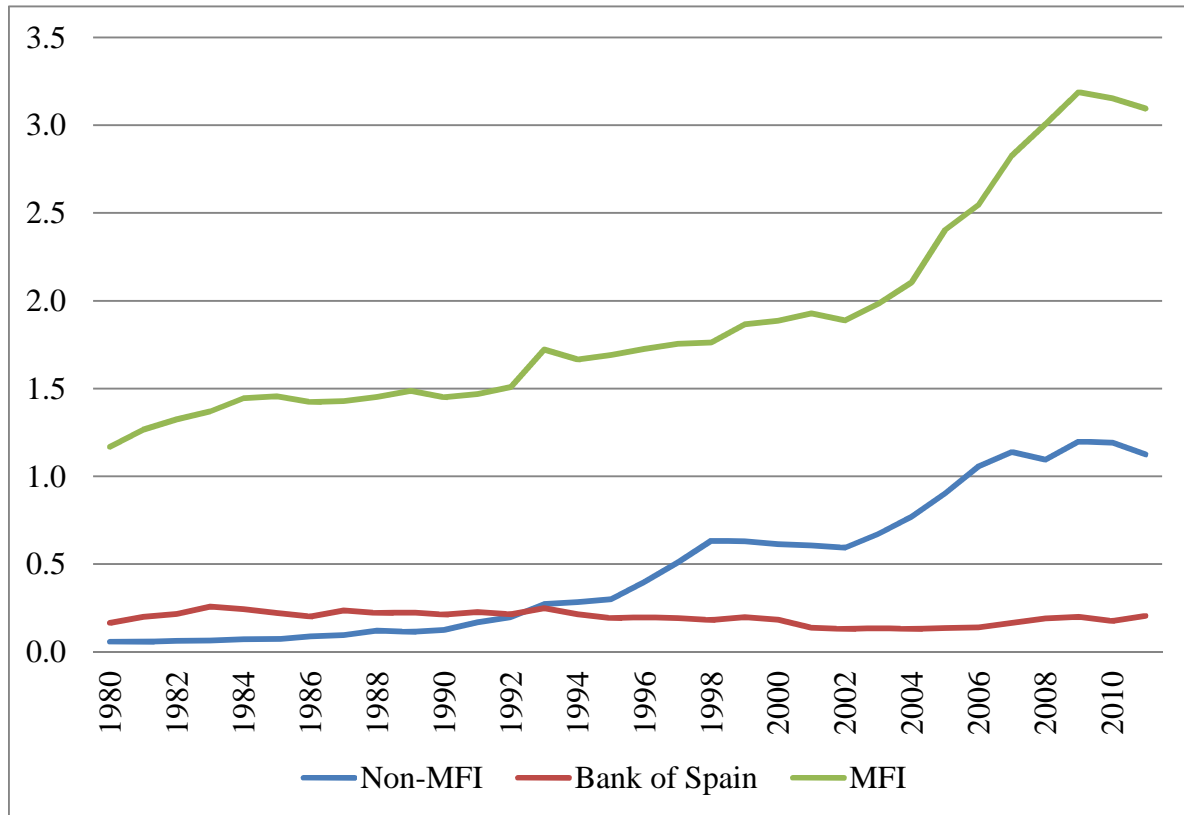
Figure 50. Structure of Financial Institutions aggregated balance sheet



Source: Bank of Spain

In terms of the GDP, the growth of all kind of financial institutions assets has been quite large, especially since the mid nineties coinciding with the economic boom (see figure 51). This shows a clear process of financialisation in the economy. Regarding MFI, it is quite clear that banks have grown large relative to the economy with their assets reaching the equivalent of more than three times GDP at the end of the period. This was especially the case after joining the EMU that enabled an unlimited source of wholesale funding for Spanish banks. In contrast, the growth of non-MFI has not kept pace with the domestic banking industry and with other EU countries. This segment represents a relatively small share of the financial sector.

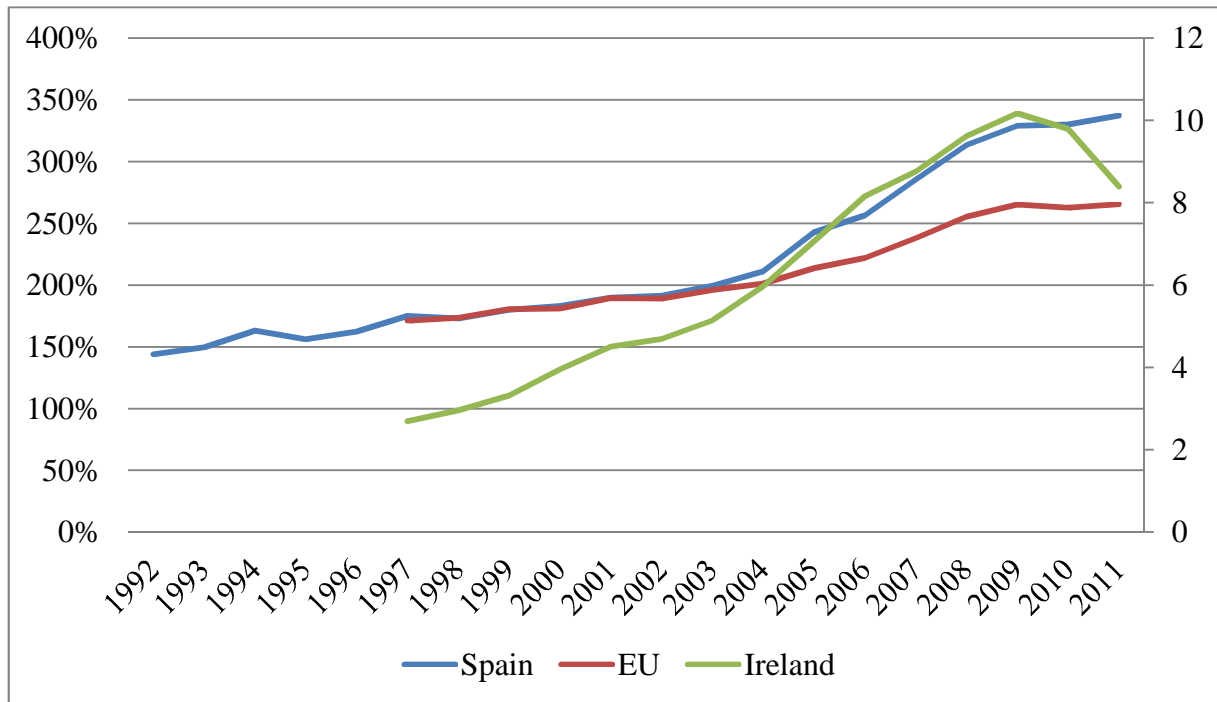
Figure 51. Financial Institutions Assets (ratio assets/GDP)



Source: Bank of Spain

As can be seen in the figure 52, this was a general process in the EU, but even more pronounced in the case of Spain (except Ireland).

Figure 52. Monetary Financial Institutions Assets/GDP ratio (Ireland right scale)



Source: European Central Bank

#### 4.4 Financial Institutions Market Structure

At the time of writing this report (December 2012) the financial sector is undergoing profound changes that, among other things, are fundamentally altering the landscape of Spanish banking system. The burst of the housing bubble exposed weaknesses in the banking sector and their balance sheets deteriorated strongly, especially those of the savings banks. This caused a full blown crisis in the banking sector unprecedented in its modern history that has forced ultimately the government to ask the EU for a rescue package of 100 billion euros to recapitalize the system<sup>13</sup> (amounting around 10 percent of the GDP).

So far, a major restructuring of the banking sector is now under way and rests fundamentally on a government law in July 2010 (RDL 11/2010) establishing a new legal framework for the recapitalization and governance of savings banks to transform them into private commercial banks<sup>14</sup>. This process has been aided with the financial support from the state-owned recapitalization vehicle “Fondo de Reestructuración Ordenada Bancaria” (FROB) which has still spent a relatively low amount of public funds (approximately 20 billion euros, 2 percent of GDP). Nowadays there are no savings banks pursuing financial activity left in Spain anymore and a significant reduction in the number of former savings banks has occurred through mergers among them and some acquisitions by commercial banks.

The banking sector was already concentrated before the crisis, but following mergers, acquisitions, and government interventions the ongoing restructuring has exacerbated this characteristic even more. To date the restructuring of the banking system in Spain has left the country with 14 large and medium-sized domestic banks<sup>15</sup>. These banks account for almost 90 percent of total system assets. There are 9 former savings banks and 5 commercial banks (see exhibit in Annex). This is a remarkable transformation from the pre-crisis situation of 45 savings banks and 7 commercial banks. The five largest banks accounting for more than 70 percent of total assets and all of them might be considered “too big to fail”.

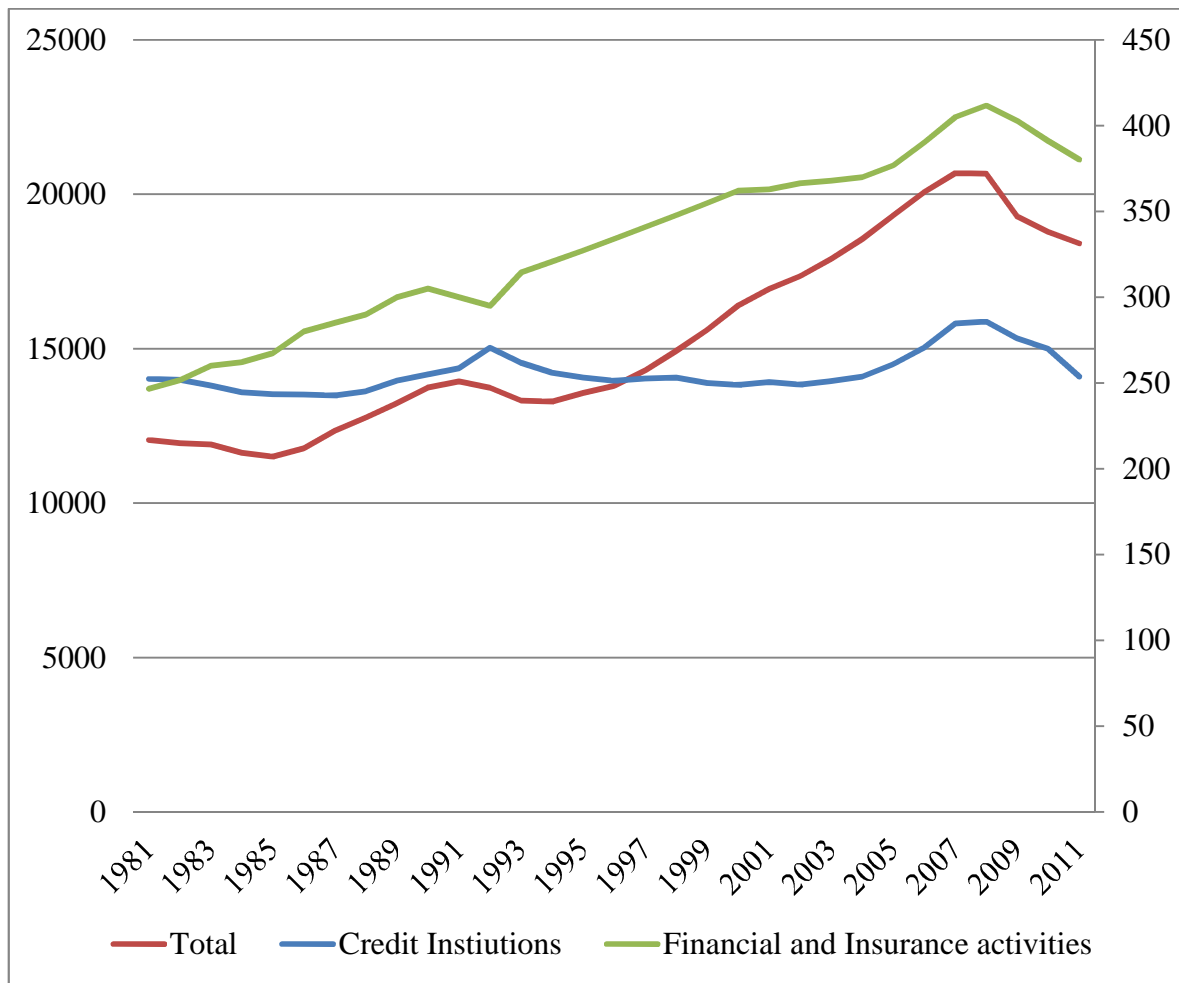
Beyond this 5 former savings banks have been intervened by the Government since 2009 and some of them will become state owned. So far, this is the case of the fourth largest bank (12 percent of system assets) that will received government capital support of 23.5 billion euros (around 2 percent of GDP) by end-July, becoming a majority state-owned bank.

The two largest banks market share in total assets is about 34percent and those of the two largest former savings bank 24 percent. However there is one fundamental

distinction between these four largest banks. The two banks (Banco Santander and BBVA)<sup>16</sup> operate not only at the national level but internationally as well being multinational banks, but the two former savings banks operate basically in their respective regions of Madrid and Catalonia that are the most populated.

Beside this characteristic, former savings banks have been traditionally focused in doing commercial banking only. But banks business may be considered clearly universal banking. In fact this has been always the case in Spain (as in other continental European countries) where the distinction between commercial and investment banking has been never operational. For example besides the typical commercial banking operations, banks are granted by law to assist any agent in raising capital, to assist companies involved in mergers and acquisitions, trading of derivatives...

Figure 53. Sectoral employment (1000)



Source: Banco de España

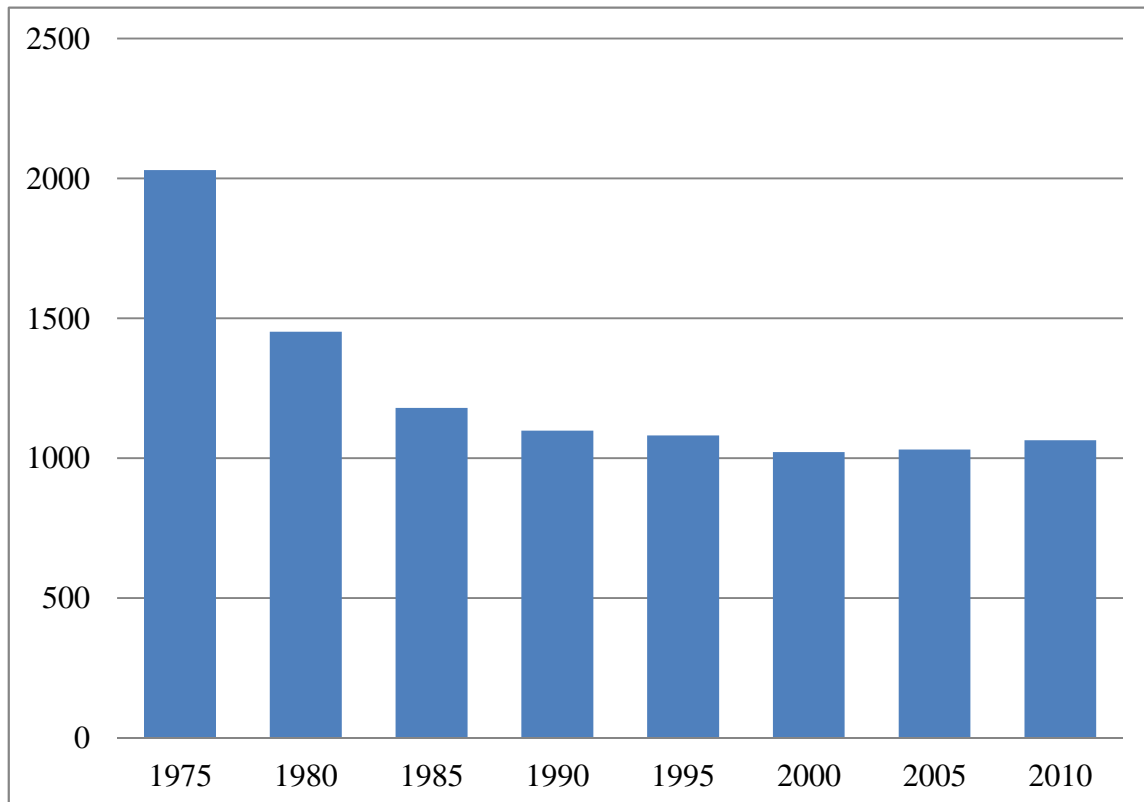
The dimension of the banking sector in Spain is easily captured in terms of the number of employees and the number of branches (see figure 53). Total employment in the banking sector has been about a quarter of million during the last years on average, which represents 1.percent of total employment. Growth in the financial sector has been on average percent annually, similar to that of total economy; however the number of employees in the financial sector, especially in the banking business, was already large in the eighties.

As far as the geographical presence is concerned, Spain is the country with the highest number of banking branches in European Union (see figure 54). The growth



was especially fast during the eighties and since this decade the presence of banking is extended all over Spain. This permits the banking system access to all segments of the populations and the ability to market all kinds of banking products easily<sup>17</sup>.

Figure 54. Ratio Population/Branches



Source: Banco de España

#### 4.5 Credit institutions asset structure:

The assets structure of credit institutions in terms of products can be seen in the graph below. Loans represent by far the largest item followed by securities in general (shares and other securities). The category of “other assets” corresponds mainly to capital and patrimony. The structure has not changed much, but a slight decrease in loans is observable since the nineties and an increase in shares as well.

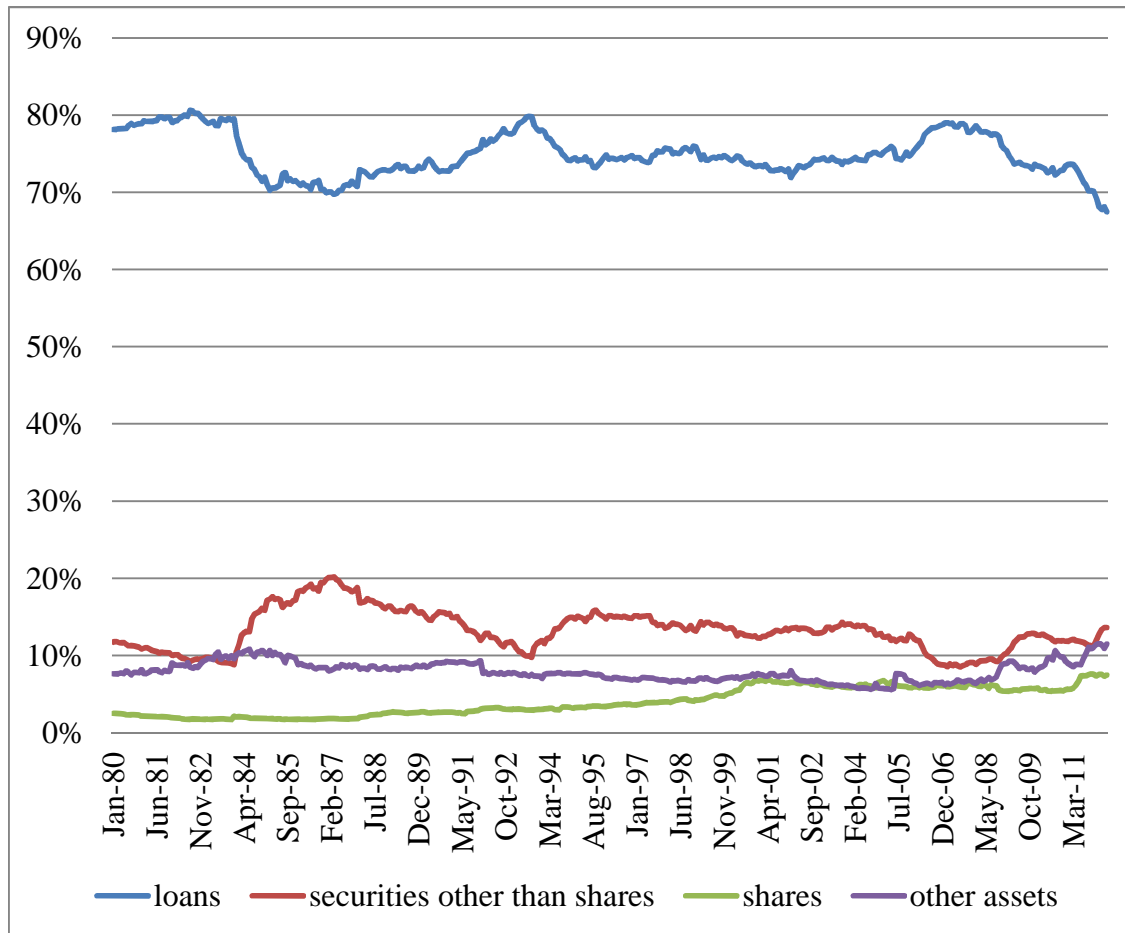


This project is funded by the European Union under  
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Figure 55. Credit Institutions Assets

Structure

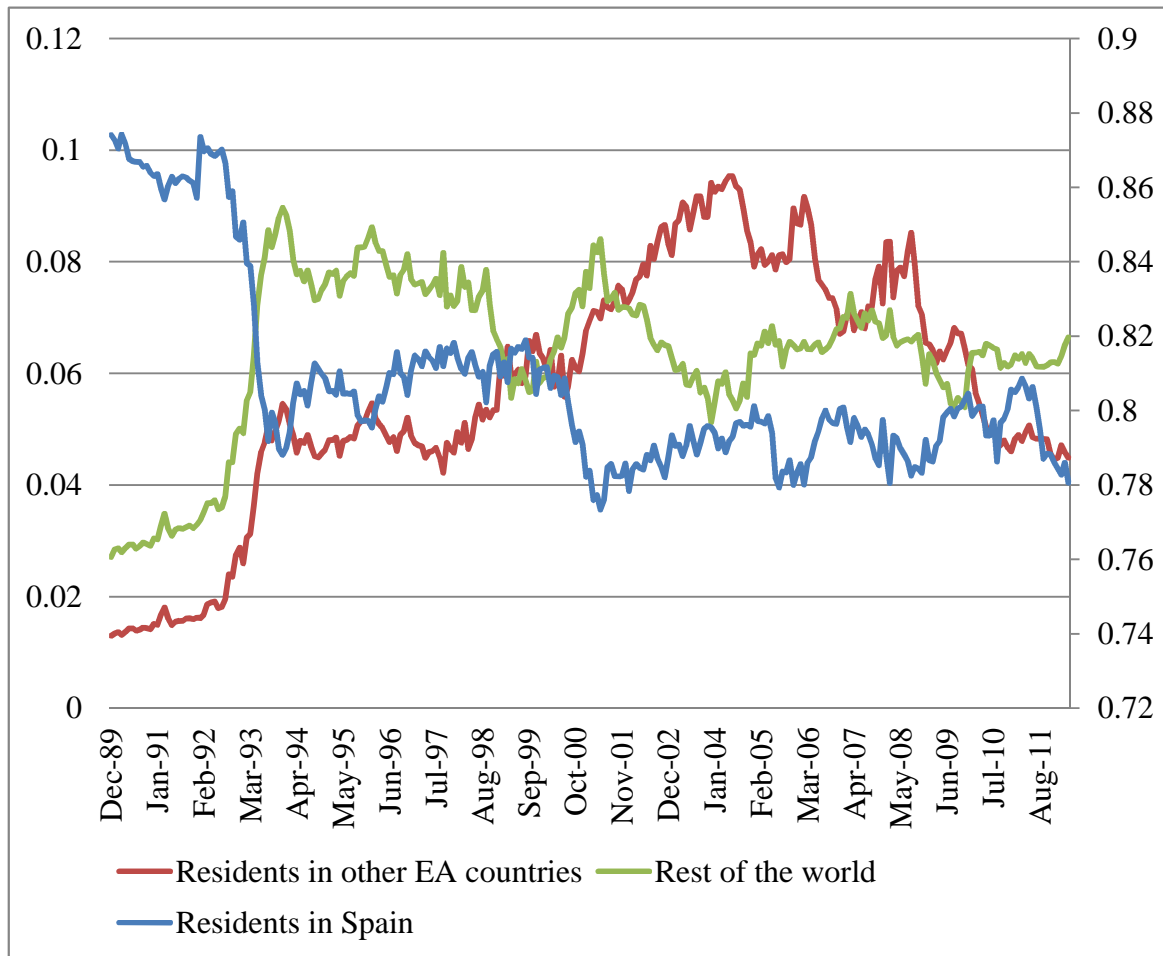


Source: Banco de España

In terms of residents regarding other monetary financial institutions (OMFI) the asset structure reveals obviously a clear preponderance of assets belonging to Spanish residents. As figure 56 shows, foreign residents not belonging to the euro area counted in 2011 with about 6percent of total assets, a larger share in comparison with the stake corresponding to residents in other euro area countries. Two major changes are worth mentioning in this respect. First, since the beginning of the nineties, following the crisis of the European Monetary System, the share of assets owned by residents in Spain decreases sharply (about 10 percent) passing from closed to 88 percent of total assets to 78 percent. Second, assets corresponding to other European Area countries residents increases steadily until

2004 and then started to decrease continuously especially since the third quarter of 2009, coinciding with the first signs of the Spanish banking crisis.

Figure 56. Structure of OMFI assets in terms of country of residence (percentage) (residents in Spain right scale)



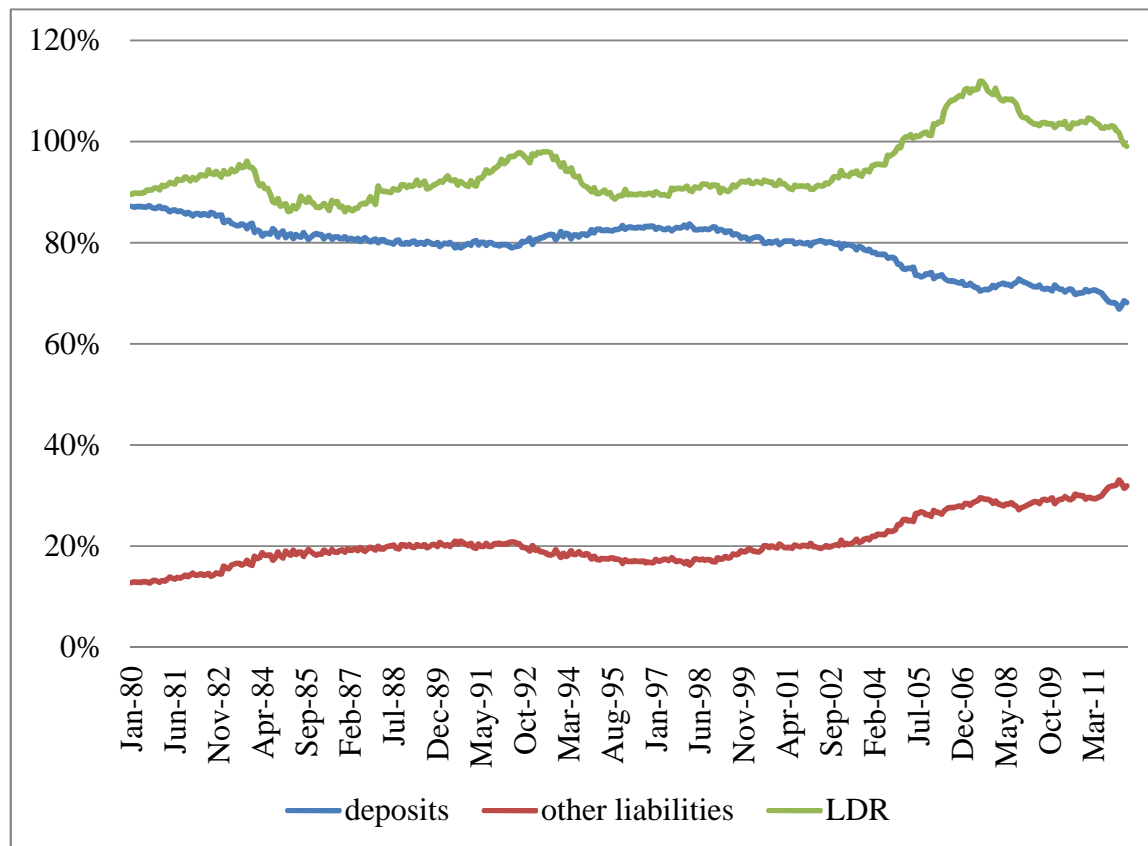
Source: Banco de España

#### 4.6 Credit institutions liabilities structure

From the liabilities side one of the most important changes to have occurred is that the banking system has increasingly relied on wholesale funding to supplement deposits as a source of funds. In fact the Loans to Deposits Ratio (LDR) that shows bank's liquidity, has increased considerably as figure 57 shows. This means that

banks are relying more on borrowed funds and that liquidity to cover any unforeseen fund requirements has declined. This liability structure makes banks more vulnerable should wholesale funding suddenly dry up or non performing loans increase as has been happening recently. The consequences are that banks are more vulnerable to a sudden stop of wholesale funding, putting banks in severe risks of liquidity and solvency problems.

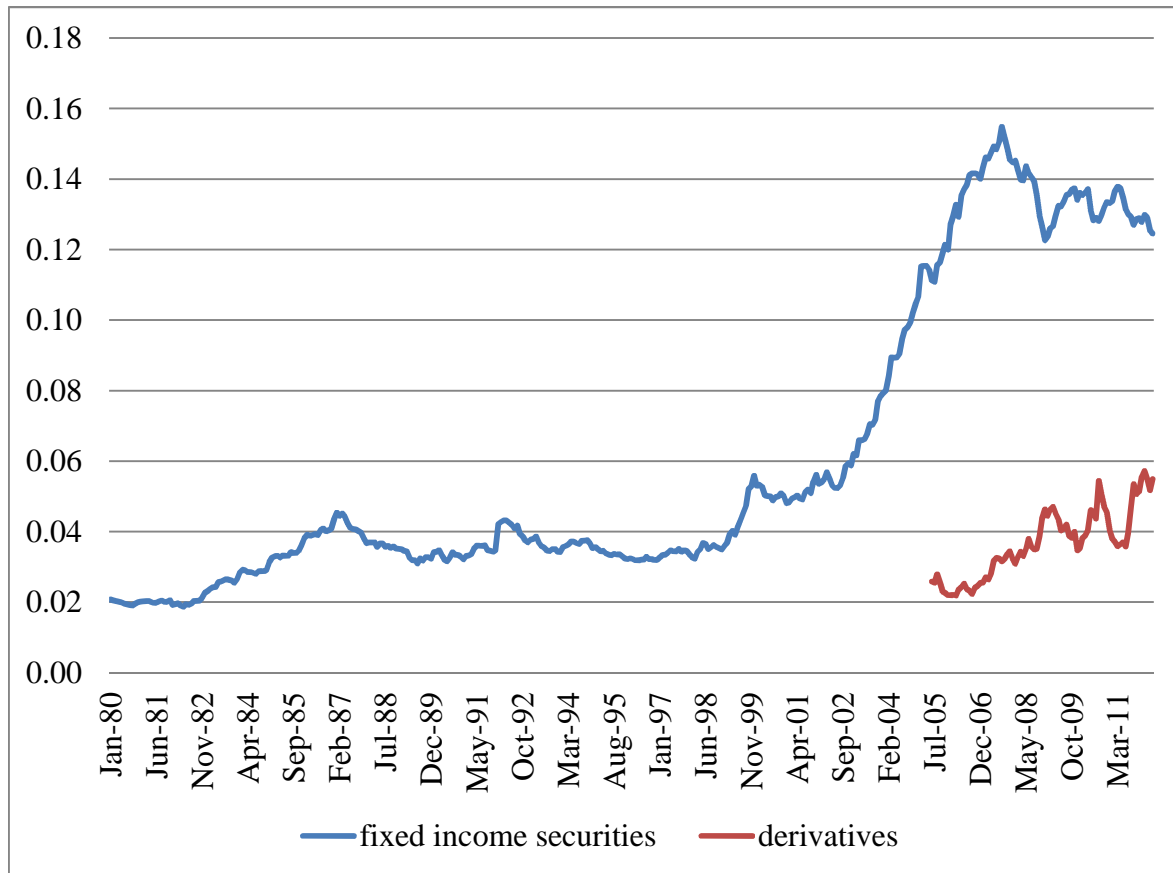
Figure 57. Credit Institutions liabilities structure



Source: Banco de España

“Other liabilities” fixed income securities and derivatives have grown the most. In the 80s fixed income securities represented about 2 percent and since 2000 it has grown steadily until reaching above 12 percent since 2005/2006 (see figure 58).

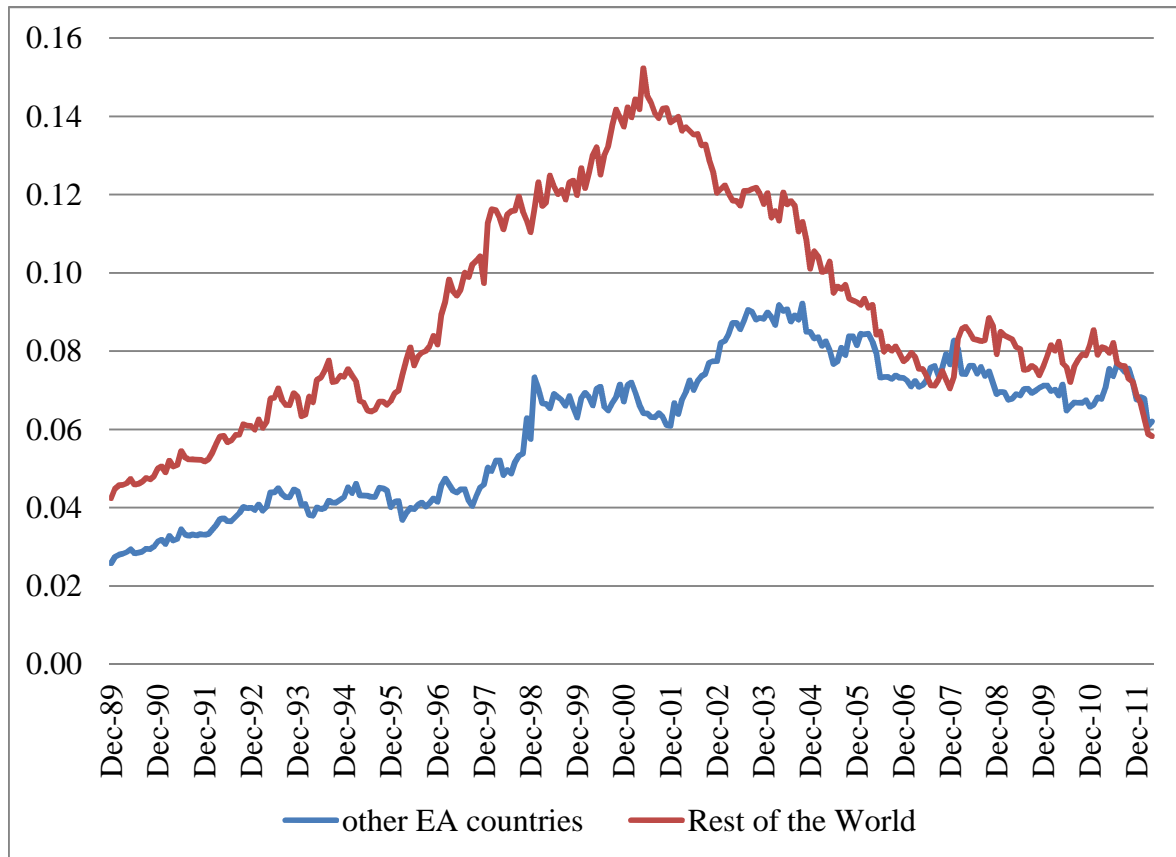
Figure 58. Share of “Other liabilities “ in total liabilities



Source: Banco de España

Regarding the ownership of liabilities, on average during the whole period, 9percent were owed to residents of the rest of the world and 4percent to other Euro Area (EA) countries (see figure 59). In total, all liabilities corresponding to non Spanish residents were about 13 percent of total liabilities, about the same percentage as that of assets. The rest of the world liabilities share grew until 2001, coinciding with the introduction of the euro. After 2001, a declining trend is visible. Since the second quarter of 2011, when the banking crisis in Spain started to become alarming, liabilities to foreigners have in general shown a sharp fall.

Figure 59. Structure of OMFI liabilities in terms of country of residence (percentage)

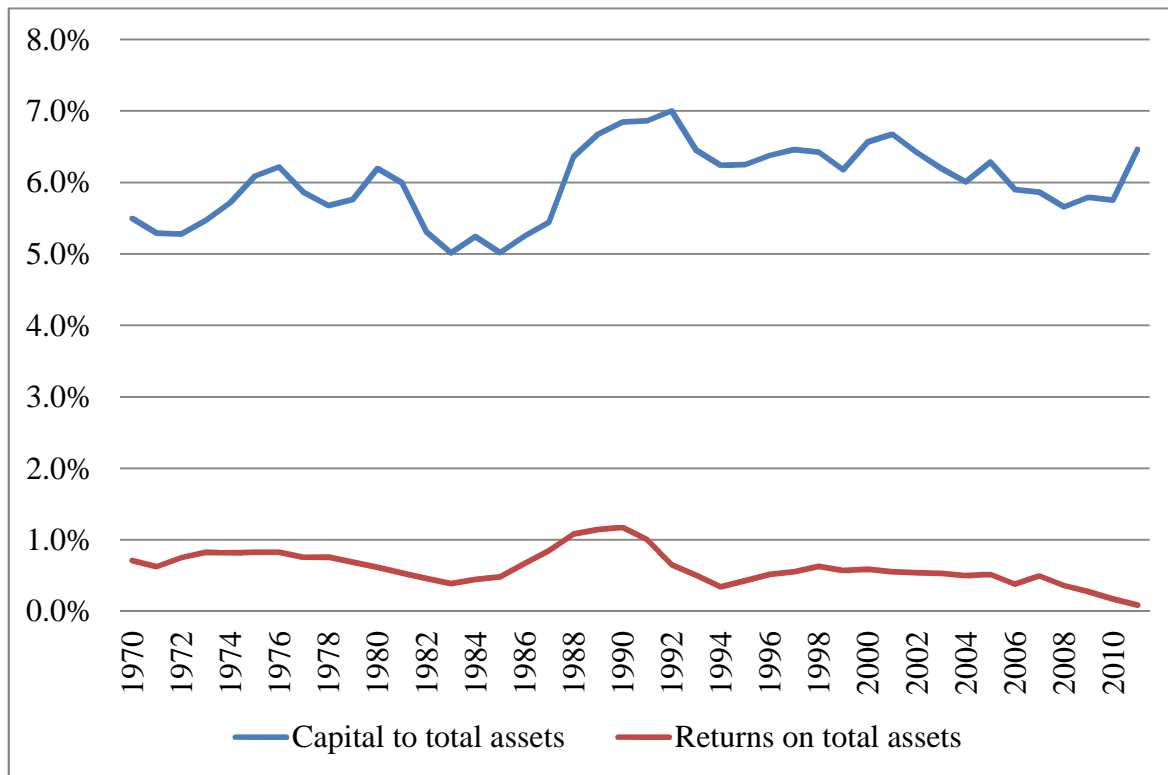


Source: Banco de España

#### 4.7 Selected indicators of credit institutions financial soundness

Two indicators regarding solvency ratios -capital to total assets and returns on average assets- show that during the banking crisis at the beginning of the eighties the capital ratio declined to 5 percent (see figure 60). After that episode the capital ratio started to rise again reaching about 7 percent at the beginning of the nineties, but then it started to decrease again below 6 percent until 2008. Thereafter, banks' recapitalization efforts have increased the ratio a bit. As far as the return on total assets is concerned, after reaching a peak above 1 percent in 1990, it has declined thereafter.

Figure 60. Credit Institutions solvency ratios



Source: Banco de España

In the table 2 there are some recent ratios regarding the profitability of the banking sector. As the table shows, the interest margin is above 50 percent, revealing that almost half of the returns in the banking sector arise from commissions and other noninterest bearing operations. Total returns on equity were quite high until the crisis, reaching close to 20 percent annually.

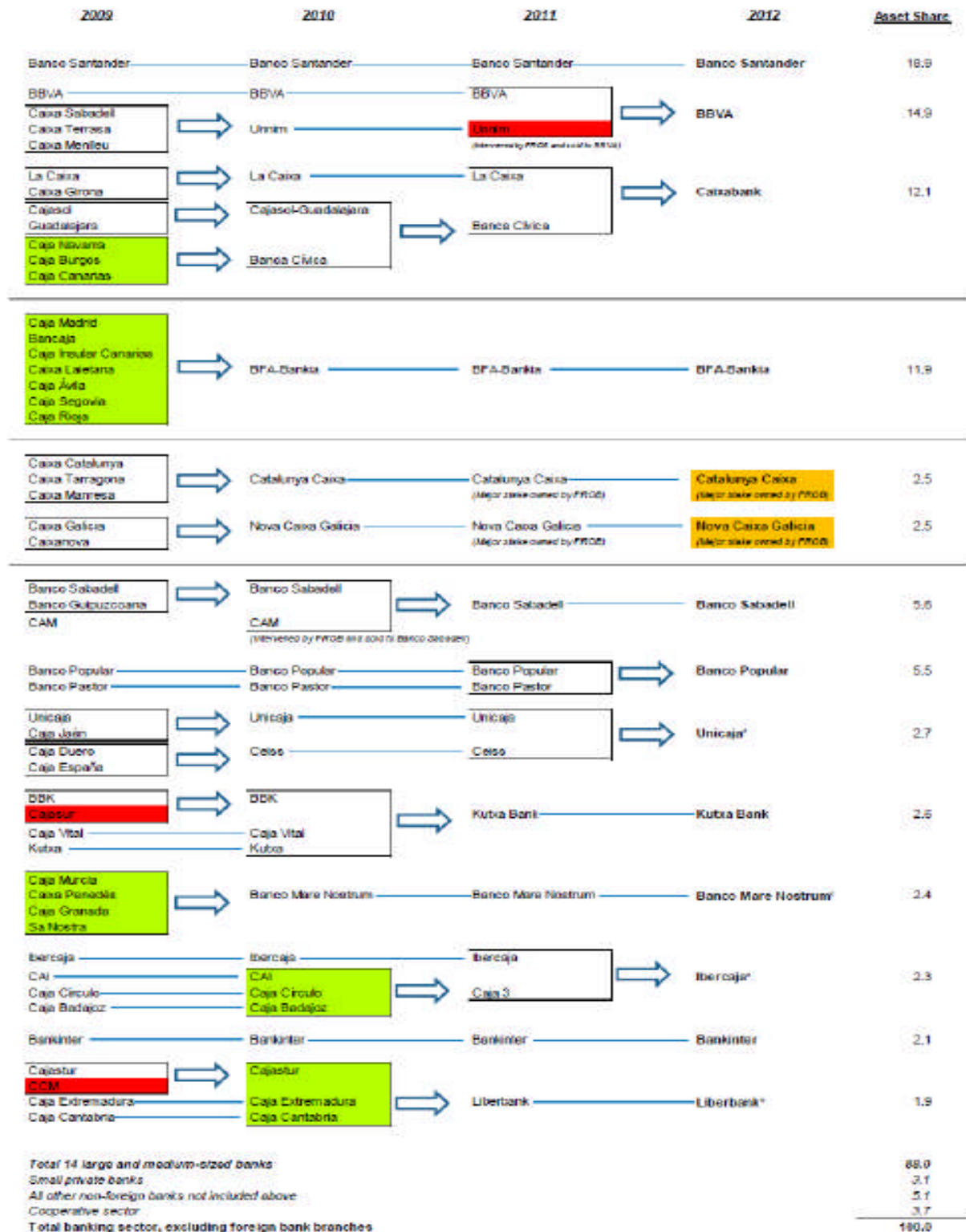


Table 2. Profitability of banking sector (percentage)

	Returns on average equity	Operating expenses to gross income	Interest margin to gross income
2005	16.6	52.1	55.7
2006	19.5	47	53.3
2007	19.5	44.4	54.8
2008	12	45.7	62.8
2009	8.8	42.7	65.5
2010	7.2	46.7	64.2
2011	2.8	49.8	65.2

Source: Banco de España

Figure 61. Spain: The Consolidation of Banking Sector



Sources: Data from the authorities; El País; and IMF staff estimates.

Note: Assets correspond to assets in Spain only, for 2011. Banks coded in red were intervened; banks in green were part of the institutional protection scheme; banks in orange have been intervened and were to have been auctioned, since put on hold.

\*These institutions have FROB support in the form of preference shares or contingent capital.

## 5. Profitability of the financial sector in Spain

This analysis aims to provide information about the profitability of the financial sector in Spain. In order to reach this objective, the analysis is divided into four sections. The first section explains the data source. Section two describes the evolution of the financial sector profitability in Spain. Section three compares the profitability of the financial sector with that of the non-financial sector. The last section summarizes the most important conclusions of the analysis.

### 5.1 Profitability of the financial sector: the role of the Financial Soundness Indicators (FSI)

In order to analyze the profitability of the financial sector in Spain, data has been collected from the Financial Soundness Indicators (FSI) available in the International Monetary Fund (IMF) web-page. According to the IMF (2006), the financial sector within a country may be divided into three different financial corporations or subsectors: deposit takers, central bank and other financial corporations. Deposit takers comprise the financial institutions commonly known as “banks” (commercial banks, savings banks, development banks, credit unions or cooperatives, investment banks, mortgage banks and building societies, microfinance institutions that take deposits and some government-controlled banks<sup>18</sup>). Central banks are excluded from the reporting population for compiling FSIs. Finally, other financial corporations include insurance corporations, pension funds, other financial intermediaries, and financial auxiliaries<sup>19</sup>. Information on profitability of the financial sector is only available for the case of deposit takers. As a consequence, the analysis here presented is based on the information for deposit takers, which will be referred to as “Financial sector”.

IMF (2006) considers that, as customers, nonfinancial corporations are important to the health and soundness of financial corporations. Nonfinancial corporations are institutional entities whose principal activity is the production of goods and nonfinancial services for sale at prices that are economically significant<sup>20</sup>. They include nonfinancial corporations, nonfinancial quasi corporations, and non-profit institutions that are producers of goods or nonfinancial services for sale at prices that are economically significant. They can be controlled by the government sector. Information on profitability of nonfinancial sector published within FSI is used in this report to compare financial and nonfinancial sectors' profitability.

According to the IMF (2006), common operating ratios used to assess bank profitability include net income to average total assets (asset-based indicator), also known as *return on assets* or ROA and the net income to average equity (capital-based indicator), also known as *return on equity* or ROE. Additionally, to analyze the financial sector's profitability some other operating ratios should be considered. This is the case of interest margin, noninterest expenses to gross income, the spread between lending and deposit rates, trading income to total income and personnel expenses to noninterest expenses. This report describes the evolution of all these indicators.

IMF provides data for the financial sector for the period 2005-2011. Additionally, information on return on assets (ROA) and return on equity (ROE) is reported from Maudos and Fernández (2008) for the period 2000-2004. As a consequence, the evolution of ROAs and ROEs is described for the period 2000-2011 while the evolution of the rest of the indicators is analyzed for the period 2005-2011.

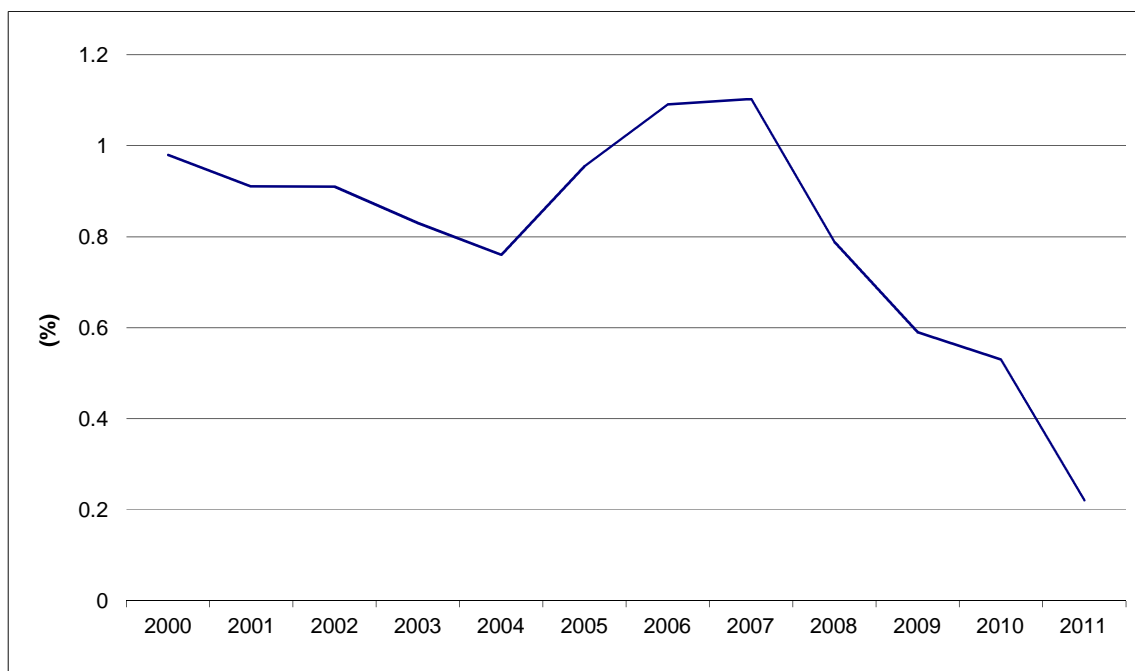
In order to compare financial and nonfinancial sectors' profitability, a profitability gap is defined as the difference between the corresponding ROEs for each period.

Data is available for the nonfinancial sector for the period 2000-2010. Consequently, the period analyzed in this last case is 2000-2010.

## 5.2 The evolution of the profitability of the financial sector in Spain.

### 5.2.1 Return on Assets (ROA)

Figure 62. Return on Assets (ROA)



Source: Author's elaboration from IMF and Maudos and Fernández (2008)

Table 3. Profitability Indicators for the financial and nonfinancial sectors in Spain.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<i>Financial Sector</i>												
Return on Assets (ROA)	0.98	0.91	0.91	0.83	0.76	0.955	1.091	1.103	0.789	0.590	0.530	0.221
Return on Equity (ROE)	15.71	14.97	16.04	15.2	15.12	16.936	19.761	19.612	12.574	9.158	7.995	3.041
Interest margin						35648.9	40815.9	49238.5	56247.4	69075.6	64555.9	62371.3
Noninterest Expenses to Gross Income						51.316	46.201	43.672	45.051	42.683	46.760	50.694
Trading Income to Total Income						8.583	11.910	12.971	9.012	10.226	8.547	6.856
Personnel Expenses to Noninterest Expenses						58.245	58.568	58.330	57.976	57.091	56.399	56.377
Spread Between Reference Lending and Deposit Rates						227.700	226.400	263.400	271.700	265.800	218.300	214.900
<i>Non-financial sector</i>												
Return on Equity (ROE)	13.384	14.368	15.239	14.406	14.468	14.789	15.609	15.566	13.613	10.762	10.783	



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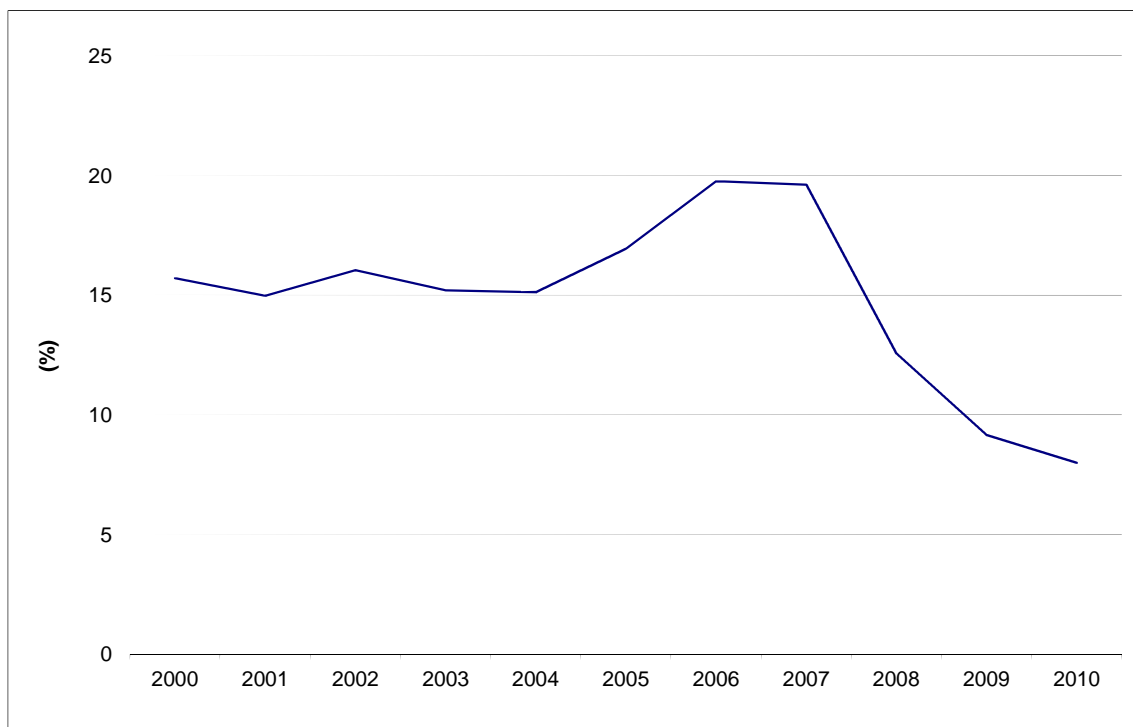


Source: IMF FSI data. Financial Sector: corresponding to the fourth quarter of each year (2005-2011) Years 2000-2004 from Maudos y Fernández (2008). There is a break in the series from 2004 to 2005 due to the source. Nonfinancial sector: Yearly data from IMF FSI.

Profitability of the Spanish financial sector in terms of the net income to average total assets (ROA) presents three different periods as may be distinguished in Figure 62 and first row in Table 3. In the period 2000-2004 ROA decreases from 0.98 percent value to 0.76 percent. In the Period 2005-2007<sup>21</sup> ROA increases from 0.955 percent to 1.1103 percent. From this moment on, there is a diminution of the profitability as reveals the diminution of ROA to 0.789 percent in 2008 until reach the minimum value 0.221 percent for the year 2011.

### 5.2.2 Return on Equity (ROE)

Figure 63. Return on Equity (ROE)



Source: Author’s elaboration from IMF and Maudos and Fernández (2008)

Net income to average capital (ROE) evolution can be seen in Figure 4 as well as in the second row of Table 3. The same three periods may be distinguished. A first period comprises the years 2000-2004 when profitability remains almost

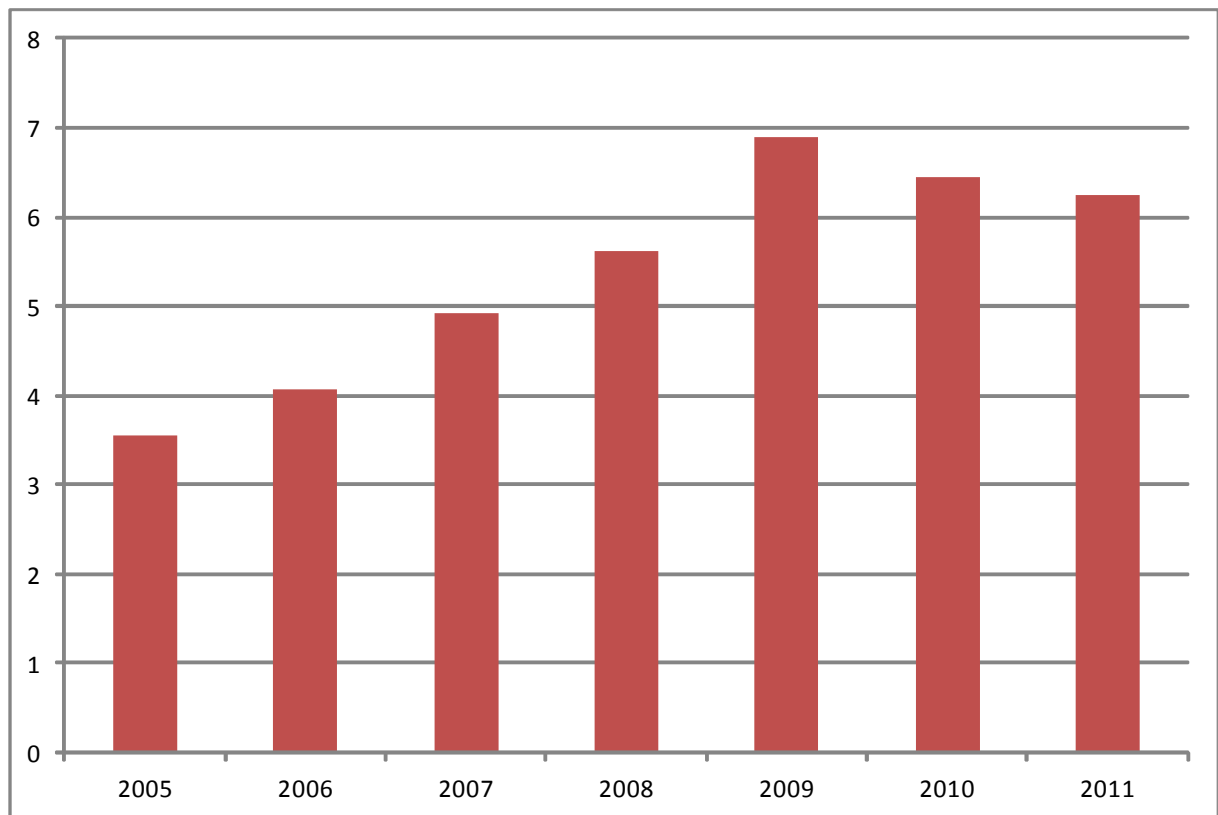


constant with a ROE's value of about percent. A second period between years 2005 and 2007 when the profitability tends to increase as revealed by ROE's values which increase from 16.936 percent to more than 19.5 percent. Finally, the period 2008 to 2011 reveals a deep diminution of the profitability of the financial sector. ROE diminishes to 12.574 percent in 2008 and the diminution continues until it reaches the value 3.041 percent in the year 2011.

The conclusion that may be drawn from the description of ROA and ROE is that after the financial crisis, the profitability of the financial sector has undergone a very sharp decrease.

### 5.2.3 Interest Margin

Figure 64. Interest Margin (percent)



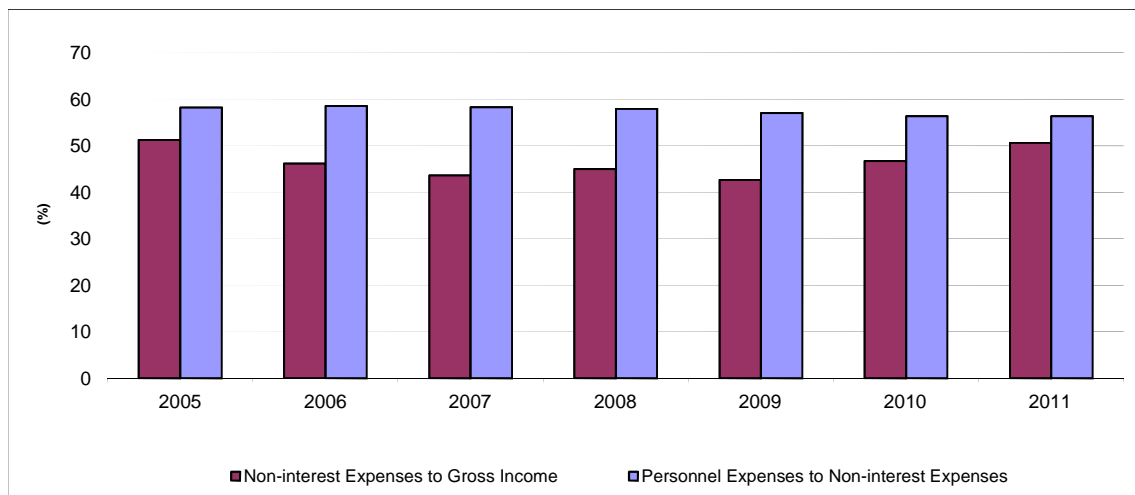
Source: Author's elaboration from IMF

The value of the interest margin to gross income (see interest margin in figure 64 and third row in Table 3) shows an increasing trend for the period 2005 to 2009, and a decrease in the last two periods (2010 and 2011). However the rates of increase and decrease have been very different. While for the period 2005-2009 the interest margin increases at rates between 14 and 23 percent, the decrease from year 2009 to 2010 is equal to 7 percent. What is more, the decreasing rate is even lower (about 3 percent) from 2010 to 2011.

### 5.2.4 Noninterest expenses to gross income and Personnel expenses to noninterest expenses

Noninterest expenses to gross income and Personnel expenses to noninterest expenses can be used as indicators of efficiency.

Figure 65. Noninterest expenses to gross income and personnel expenses to noninterest expenses



Source: Author’s elaboration from IMF

As can be seen from figure 65 and the fourth row in Table 3, noninterest expenses to gross income has kept almost constant when the first and last

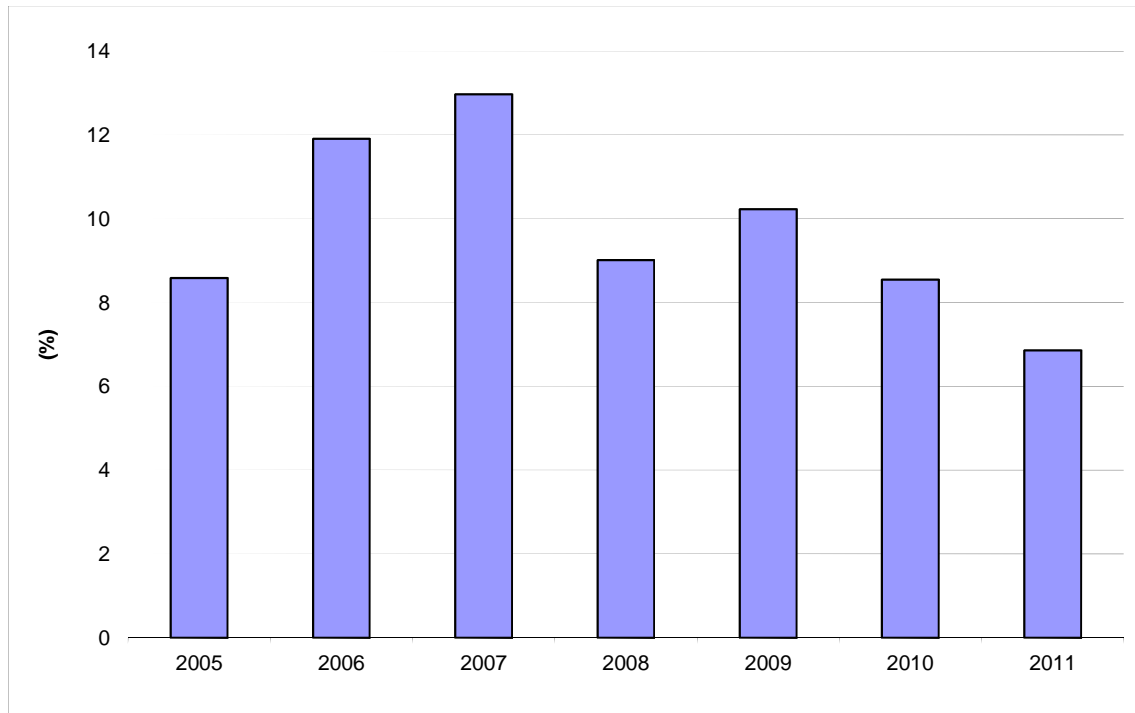
period are analyzed. However, the evolution presents some peaks. From year 2005 to 2007 the value of the indicator decreases from 51 percent until it reached a value 44 percent. Then in year 2008 it increases to 45 percent to afterwards decrease to 42 percent. From this moment on noninterest expenses to gross income increases to almost the same 51 percent ( year 2011) registered for the beginning of the period analyzed<sup>22</sup>.

Regarding personnel expenses to noninterest expenses (see Figure 65 and Table 3, sixth row), the ratio has remained almost constant.

### 5.2.5 Trading income to total income<sup>23</sup>

The indicator of the reliance by deposit takers on market-related activity to generate profits (Trading income to total income) is presented in Figure 66 and Table 3. The ratio reveals that trading income tended to represent an increasing part of the total income in the years 2005-2007 in which the trading income to total income ratio increased 39 percent from 2005 to 2006 and 9 percent from 2006 to 2007. However, the ratio decreases 31 percent from year 2007 to 2008. A recovering value is presented in 2009 although from that year on, the evolution turns out to be negative. This is revealed by the 16 percent diminution of the ratio from 2009 to 2010 and 20 percent diminution from 2010 to 2011.

Figure 66. Trading income to total income

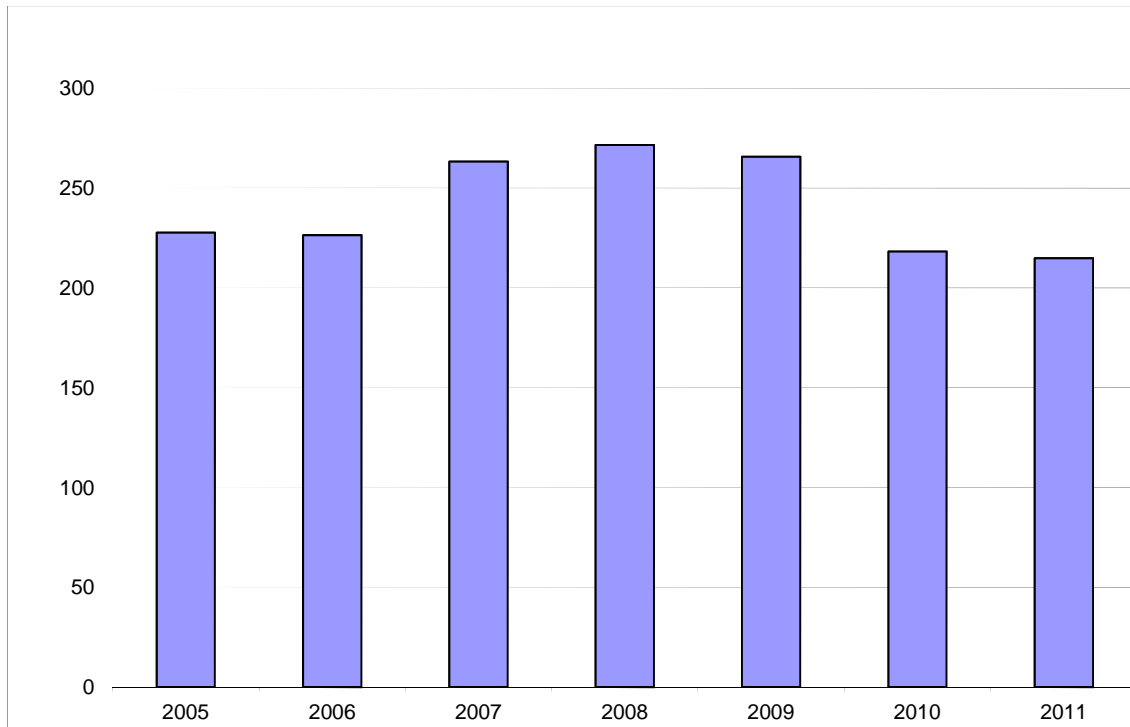


Source: Author's elaboration from IMF

### 5.2.6 Spread between Reference Lending and Deposit Rates

Analyzing the spread between Reference Lending and Deposit Rates can provide an indication of the underlying profitability of the financial sector. As shown in Figure 67 and the seventh row of Table 3, the period 2005-2008 is characterized by an increasing spread while period 2009-2011 shows a decreasing spread. What is more, while at the beginning of the period analyzed the value of the spread is equal to 227.7, at the end of the period it is only 214.9. This difference implies a final diminution of the spread equal to 5.6 percent. Since, according to IMF (2006) a high dispersion in interbank rates may signal that some institutions are perceived by their peers as vulnerable, the diminution observed for Spain in this last period could lead to a perception of lower vulnerability.

Figure 67. Spread between reference lending and deposit rates



Source: Author's elaboration from IMF

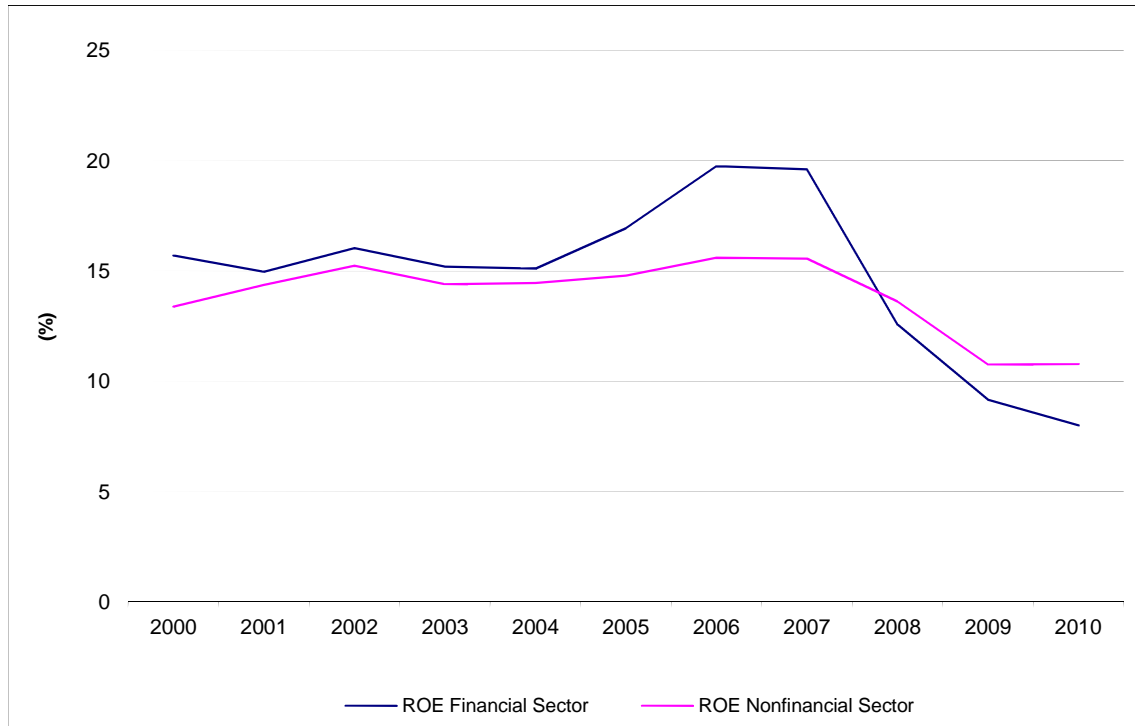
### 5.3 Financial sector profitability vs. nonfinancial sector profitability in Spain.

#### 5.3.1 Evolution of financial and nonfinancial sectors' profitability

Figure 68 shows the evolution of the net income to average capital ratio (ROE) for both the financial and nonfinancial sectors in Spain (the values are also provided in Table 3). The profitability of the different sectors presents a very similar trend. Three main periods may be distinguished. An initial period of stability from 2000 to 2004 in which the ROE value is at around 15 and 16 percent in the financial sector and at around 13 and 15 percent in nonfinancial sector. A period of increase from 2005 to 2007<sup>24</sup> (from 17 to 20 percent in the case of financial sector and from 15 to 16 percent for nonfinancial sector). And

finally, a period of decrease from 2008 to 2010 (to 8 percent for financial sector and to 11 percent for nonfinancial sector).

Figure 68. Return on equity (ROE) in Spain between 2000 and 2010: Financial sector vs. Nonfinancial sector.



Source: Author’s elaboration from IMF and Maudos and Fernández (2008)

Additionally, the value of the respective ROEs reveals that the financial sector’s profitability tended to be higher in the years before the crisis than that of nonfinancial sector. However, after the financial crisis, the pattern is the opposite: financial sector’s profitability is lower than nonfinancial sector. Consequently, according to ROE, after the crisis nonfinancial sector turns out to provide higher profits than financial sector.

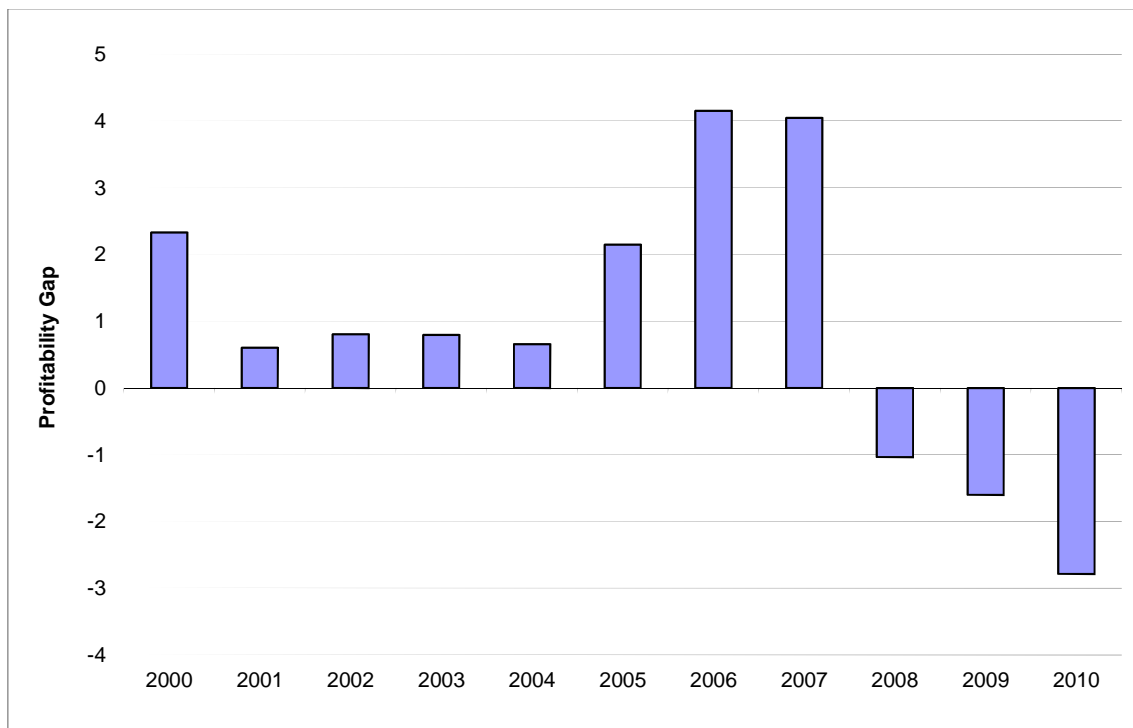
### 5.3.2 Evolution of financial and nonfinancial sector’s profitability gap

Figure 69 shows the evolution of the gap between financial and nonfinancial sector profitability. Profitability gap is defined as the difference between the values of ROE for each sector for the different period  $t$  as shown in expression 1 below:

$$ProfitabilityGap_t = ROE_t^f - ROE_t^{nf} \quad (1)$$

Where  $ROE_t^f$  is the value of the return on equity for the financial sector in year  $t$  and  $ROE_t^{nf}$  is the value of the return on equity for the nonfinancial sector in year  $t$ .

Figure 69. Profitability Gap evolution in Spain from 2000 to 2010



Source: Author's elaboration. ROE from IMF and Maudos and Fernández (2008)

As indicated in figure 69, the profitability gap is positive for the pre-crisis period 2000-2007 (notice the columns above zero level) and negative for the post-crisis period 2008-2010 (columns below zero level). Moreover, the gap diminishes

from 2000 to 2001 from a value equal to 2.3 to 0.6 value. This fact indicates a convergence between the profitabilities of both sectors. Over the years 2001 to 2004, the gap is kept almost constant (between 0.6 and 0.8). On the contrary, from year 2005 to 2006 the profitability gap increases from 2.2 to 4.2. From 2006 to 2007 the gap remained at a very similar level (4.1) but in 2008 when the situation completely changes. After the collapse of Lehman Brothers in September 2008, nonfinancial sector started to exhibit a higher profitability than nonfinancial sector as shown by the negative value of the gap (-1). Furthermore, the following periods show an increasing negative gap with values equal to -1.6 in 2009 and -2.8 in 2010. As a consequence, it may be concluded that since the crisis nonfinancial sector's profitability has been higher than financial sector's profitability and the difference in profitability with the financial sector tends to increase over time.

#### 5.4. Conclusions

The financial sector in Spain has undergone a complete change in its profitability profile in the past few years. The years prior to the crisis, along which profitability shows an increasing trend, reaches the maximum in 2007. As a matter of fact, from 2008 onwards, profitability starts to diminish until it reaches levels much lower than those registered before the crisis. This is shown by both the return on assets (ROA) and return on equity (ROE) ratios.

While, interest margin shows an increasing trend until 2009 that, afterwards starts to diminish until 2011, noninterest expenses to gross income indicator presents the same value in year 2011 as it presented in 2005. Trading income to total income indicator increases in the period 2005-2007. After it diminishing and recovering again, the last two final periods analyzed show a diminution of the ratio. Finally, the evolution of the Profitability Gap defined as the difference between financial and nonfinancial sectors' ROE's, shows a change in the



profitability patrol. While financial  
sector profitability is higher before the crisis, from year 2008 until the end of the  
period it is nonfinancial sector the most profitable one.

## 6. Nature and degree of competition between financial institutions

The market structure of the Spanish banking sector has undergone major transformations in recent decades as a result of the liberalization and deregulation processes. This has in turn brought about an intensification of competition among different credit institutions and encouraged numerous merger and takeover operations within the sector.

This report analyses how credit institutions have divided up the Spanish market between the 1980s and the present time by examining the degree of competition and concentration of financial intermediaries. The groups within the Spanish banking system that compete directly with each other are the banks, savings banks and credit cooperatives. These three categories only differ in their legal form, as they are comparable from a legal standpoint in terms of operative possibilities and are subject to the same supervisory standards. This analysis therefore focuses on these financial institutions that make up around 96 percent of total financial assets, with the remainder corresponding to Financial Credit Establishments (EFC) and the Official Credit Institute (ICO).

Two types of indicator tend to be used to analyse competitive rivalry in a market. On the one hand, there are the so-called structural indicators, which use the number of competitors or market concentration rates (such as the market share taken by large companies or the Herfindahl-Hirschmann Index). On the other hand, structural models of competition produce indicators (the Lerner Index or the Panzar-Rosse Approach) after modelling the profit maximizing behaviour of financial services providers.

Analysis of competition in the Spanish financial market here is based exclusively on structural indicators. The integration processes involving

financial institutions over the last

decade are also described which have led to an increase in the sector's degree of concentration, especially the current bank reorganisation process which got underway in 2009. This can be considered to be one of the most important both in terms of the number of corporate transactions within a limited time span and the high number of institutions involved, which have fundamentally affected savings banks.

As regards non-structural indicators, we shall confine ourselves to showing the results of some of the empirical analyses carried out by different authors using econometric techniques on the evolution and degree of competition within the Spanish banking industry.

The statistical source used to study the first task is the Statistical Bulletin (Boletín Estadístico) published by the Bank of Spain (Banco de España). Data for the period 1980-2010 is obtained from this source. This source does not provide data disaggregated by deposit institutions (banks, savings banks and credit cooperatives) subsequent to that period, but rather, includes them together owing to the operative transformation process that has taken place in savings banks, with their conversion into banks. Data obtained about mergers and takeovers made by financial institutions come from the Spanish Banking Association, the Spanish Confederation of Savings Banks and the National Union of Credit Cooperatives.

## **6.1 Evolution of the Spanish banking sector in recent years**

In the decade of the seventies, the banking system was made up of 4 very distinct groups. On the one hand, there was traditional banking, with 7 major banks: Central, Hispano Americano, Español de Crédito (Banesto), Santander, Bilbao, Vizcaya and Popular. Parallel to this, there was public banking, with

Banco Exterior, Hipotecario, Crédito

Agrícola, Crédito Industrial, Crédito Local and Caja Postal. All these banks merged into a new public bank – Argentaria – in the early 90s. A third group was made up of the savings banks, which focused on attracting people's savings. The fourth group, which was very widespread but of less importance, comprised the credit cooperatives, which were of a dual nature: on the one hand, rural savings banks or agrarian credit cooperatives, which came into being as credit cooperatives and, on the other, non-agrarian credit cooperatives of an industrial and urban nature.

Until the end of the seventies, the Spanish banking system took the form of a closed system protected from external competition and lacking innovation, highly regulated and controlled by the major banks. Furthermore, the credit institution market was divided up. Banks formed a type of industrial and commercial banking system mainly targeted to large businesses. Conversely, retail banking was exclusive to the savings banks (Cajas de Ahorro), and the savings banks also operated within a very small sphere of activity, just on a local level, which conditioned competition. In the case of credit cooperatives, these also operated on local markets, preferring to focus on the financial needs of their members. Until 1978, the opening of foreign branches was very limited. The only possibility to enter in Spain was to take over Spanish banks in bankruptcy. These limitations had a major bearing on the type of business pursued until well into the eighties, and the institutions in question tended to specialize in the wholesale business, playing a key role in the development of the inter-bank market (Saurina, 2011).

A new phase commenced in the area of competition at the end of the eighties, continuing with the liberalization process of the financial system and the Spanish economy in general. On the one hand, restrictions against the opening of branches in the savings bank sector were lifted, which encouraged their

geographic expansion beyond their territory of origin. This in turn led to an increase in the number of competitors on regional and provincial markets. On the other hand, interest rates of all asset and liability transactions were liberalized, which gave rise to price competition between banks – competition that also grew with the increase in the entry of foreign banks on the market. This therefore led to major rivalry between financial institutions, which became concentrated in what were referred to as the “asset war” and the “liability war.” Such conflicts emerged when Banco Santander included the retail market in its business with the launching of the “Super Account”, which triggered off the war by remunerating those deposits that had hitherto barely conformed to this (“liability war”)<sup>25</sup>. All this meant that the savings banks lost their market share in current and savings accounts. The liability war was succeeded by the asset war, also known as the mortgage war, resulting in greater competition regarding mortgages being offered to private individuals. A law was enacted that reduced the cost of changing mortgages between different banks that would indirectly give rise to a review of a lowering of interest rates. At the same time, banks started to enter this market, which had hitherto been dominated by the savings banks.

It might be said that the liberalization process gave rise to an equal footing in terms of the business opportunities existing among banks, savings banks and credit cooperatives. The banks, which had traditionally preferred to lend to companies, now entered the traditional domain of the savings banks, such as savings accounts and consumer financing for the household and mortgages. For their part, the savings banks entered the corporate financing market, which they had hitherto remained outside.

In addition to these factors, there are also others that have tended to favour competition within the sector. Thus, deposits were made and loans granted in traditional banking activity, although this would become increased with other

financial products not directly related to such activity. All this is linked to the transformation seen by the behaviour of customers, who were now in possession of more information and financial culture, which in turn made them more demanding with regard to financial institutions in terms of products and services.

## 6.2 Structural indicators of competition

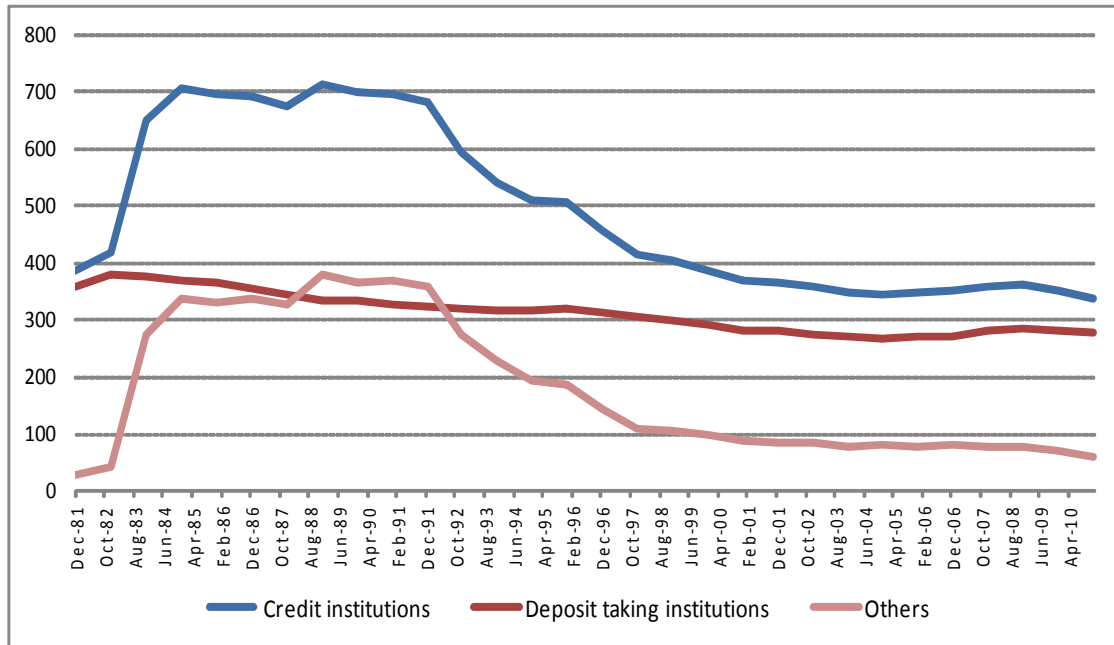
### 6.2.1 Number of competitors

The regulatory changes and mergers that have affected both banks and savings banks and cooperatives are encouraging a restructuring of the structure which translates into processes involving bank consolidation and a re-organisation of the branch network. Consequently, the banking sector has been hugely transformed in recent years. Broadly speaking, the number of deposit-taking institutions has been reduced on the one hand and, on the other, there has been an increase in the number of branches.

An analysis of the evolution of deposit-taking institutions over the period 1980-2010 shows a clear decrease in the number of such institutions in Spain. As figures 70 and 71 show, according to the Spanish Bank, the number dropped from 357 in 1981 to 276 in 2010, i.e. a reduction of approximately 33 percent. If we focus our attention on Spanish banks, it can be ascertained that the drop in number refers to three types of financial intermediary: the number of banks set up as Spanish companies decreased from 110 in 1972 to 72 in 2010. On the other hand, the number of savings banks dropped from 82 in 1981 to 36 in 2010, and in the case of credit cooperatives, from 147 to 80 in the years stated.

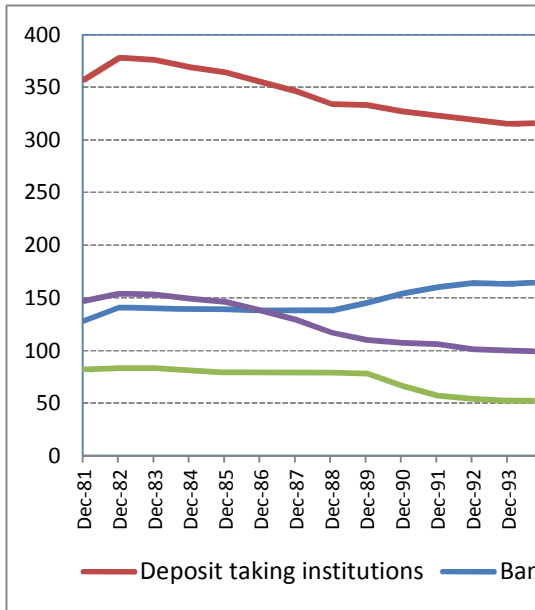
The reduction in the number of banks cannot be understood without analysing the merger and takeover process which fundamentally took place during the period 1987-2009 (Bernard, 2010).

Figure 70. Number of financial institutions (1981-2010)



Source: Author' elaboration based on Banco de España

Figure 71. Number of deposit-taking institutions (1981-2010)

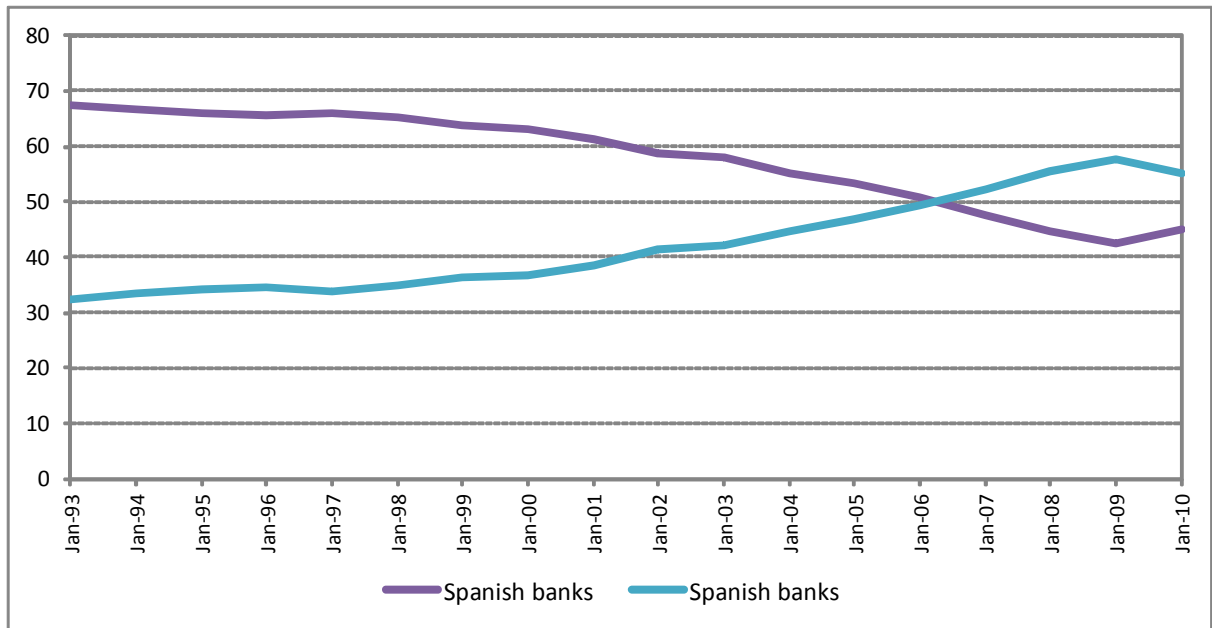


Source: Authors' elaboration based on Banco de España

Foreign banks have been excluded from the previous analysis. If we jointly analyse the latter's participation and that of Spanish Banks in all banks (see figure 72), we note that although the relative importance of the former during the period 1993-2003 was very limited as this was the time when foreign banks were making inroads in Spain, the situation has changed since then. Indeed, the number of foreign banks after 2006 exceeded the number of Spanish banks – 88 and 72 respectively in the year 2010.



Figure 72. Distribution of banks in Spain by nationality (percent total banks)



Source: Authors' elaboration based on Banco de España

As was pointed out at the beginning of this section, the other noteworthy event that has taken place in this restructuring process has been the increase in the number of branches. The growing number of deposit-taking bank branches from 1980 to 2010 bears witness to this. Nonetheless, this growth was not linear or homogenous, but rather, there were phases of major growth (the late eighties, late nineties and the years 2007-2008), and periods of lesser growth and even a slight decrease. This evolution can be explained to a large extent by expansive and recessive cycles of the Spanish economy and the merger processes that took place in savings banks in the early nineties and in banks at the end of the same decade.

The increase in the number of branches highlights the fact that, despite technological progress, their physical presence within the territory would seem to have been important in order to be able develop a banking business such as that in Spain, with an evident retail component (Delgado et al., 2008).

This general evolution has its specific features if the three financial intermediaries are analysed separately. The savings banks and credit cooperatives continually increased their number of branches throughout the period analysed, except for a slight decrease in both cases in the years 2009-2010. The number of savings bank branches practically tripled from the beginning to the end of the period (from 8,290 in 1980 to 24,253 in 2010). In the case of cooperatives, the number of branches doubled (from 2,668 in 1980 to 5,018 in 2010). At the other extreme, the banks – unlike the case of the aforementioned intermediaries – underwent a less positive evolution. Thus, the number of branches increased from 13,310 in 1980 to 15,262 in 2010 during the same period subject to analysis, i.e. an increase of barely 13 percent.

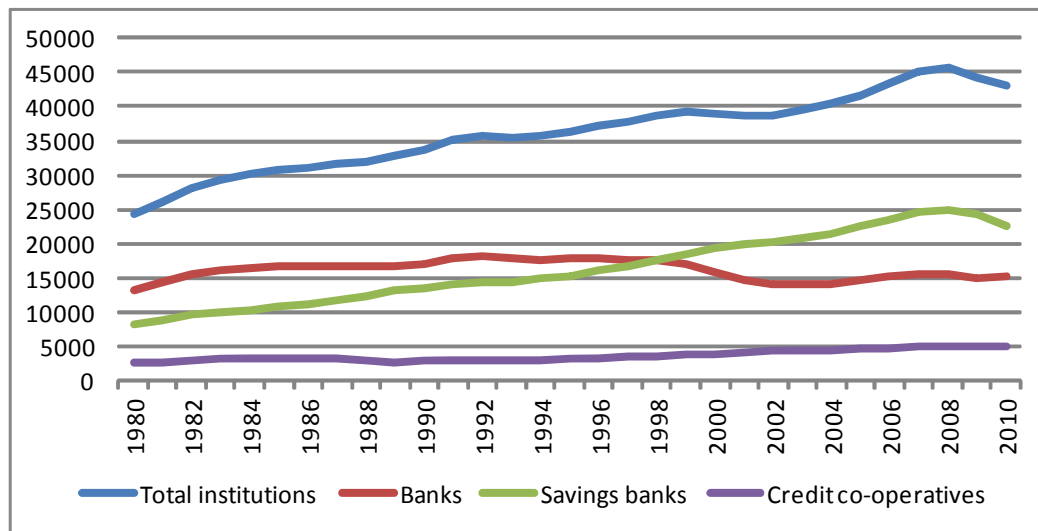
The previous evolution highlights the different strategies pursued by financial intermediaries. The territorial expansion of the savings banks and also, to a lesser extent, the cooperatives, has been a natural consequence following the lifting of restrictions to opening savings bank branches at the end of 1988. That was when the savings banks became free to decide their price strategy or to open new branches outside a specific sphere of activity.

Once the 1993 recession had been overcome, the savings banks then embarked on a continual process involving the annual growth of their branches at a rate of about 3percent until 2008. This growth can be explained by the long period of expansion experienced by the Spanish economy and the importance of the property sector in traditional savings bank business. Conversely, the crisis and collapse of the Spanish property market explain the decline in the number of branches in the years 2009-2010 by 9.3percent.

The evolution of the number of bank branches was, however, less marked, failing to record the high ratios evidenced by the savings banks (figure 73).

Attention should be drawn to the fact that since 1993 the number of branches gradually decreased as a result of the major restructuring process that entailed the merger of four leading Spanish banks. Banks opened the largest number of branches after 2006, probably in an attempt to compete with the savings banks and cooperatives.

Figure 73. Number of branches

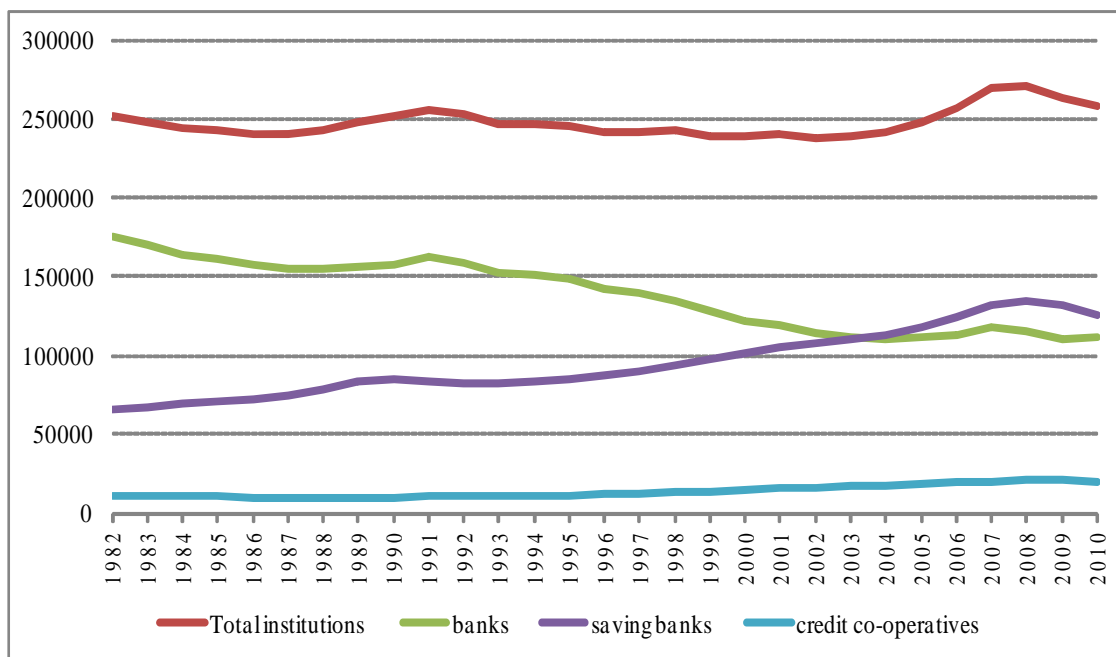


Source: Authors' elaboration based on Banco de España

In terms of the number of employees of deposit-taking institutions (figure 74), attention should be drawn to the continual growth they experienced from 1980 to 2008, since when the employee figure grew by nearly 5 percent. By analysing the percentage distribution of employees across the three types of financial intermediary, we can state that the savings banks and cooperatives increased their number of employees and their stake in the total. At the beginning of the period, bank employees represented nearly 70 percent of the total whereas this percentage had dropped to 43.5 percent by 2010. Conversely, both the savings banks and cooperatives increased their total percentage number of employees. Thus, the savings banks increased their ratio by 22.6 percentage points, whereas the savings banks did so by 12 percentage points. The increase in the

number of branches both in the case of savings banks and cooperatives would in turn explain the positive evolution in terms of the number of employees. Nonetheless, it would seem interesting to highlight the fact that, just as a reduction in the number of savings bank and cooperative branches was noted in the last two years, so did the same occur with the number of employees, dropping by 7.1 percent in the case of savings banks and 1.8 percent in the case of cooperatives in 2010 compared to 2008.

Figure 74. Number of employees



Source: Authors' elaboration based on Banco de España

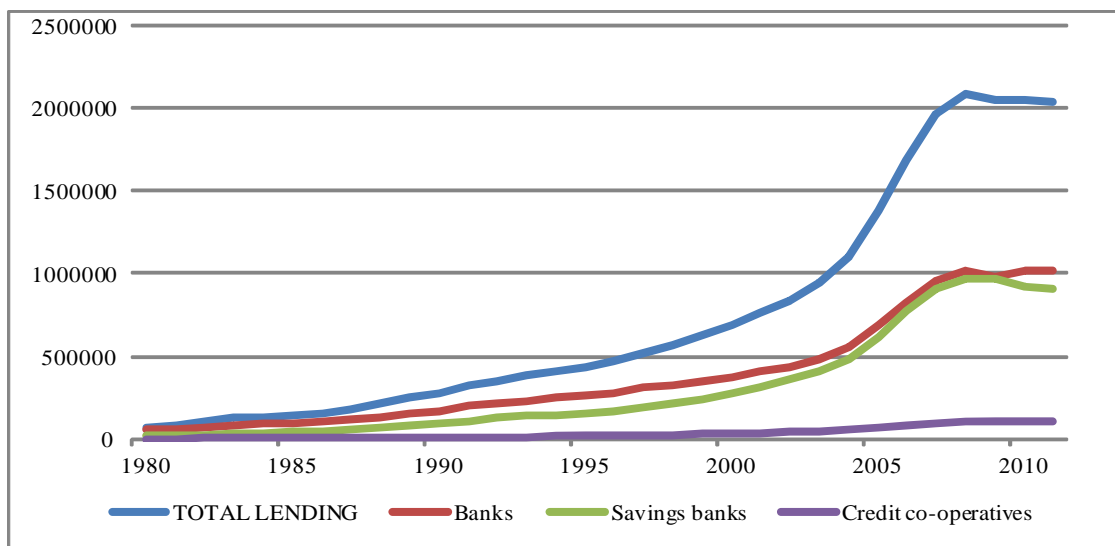
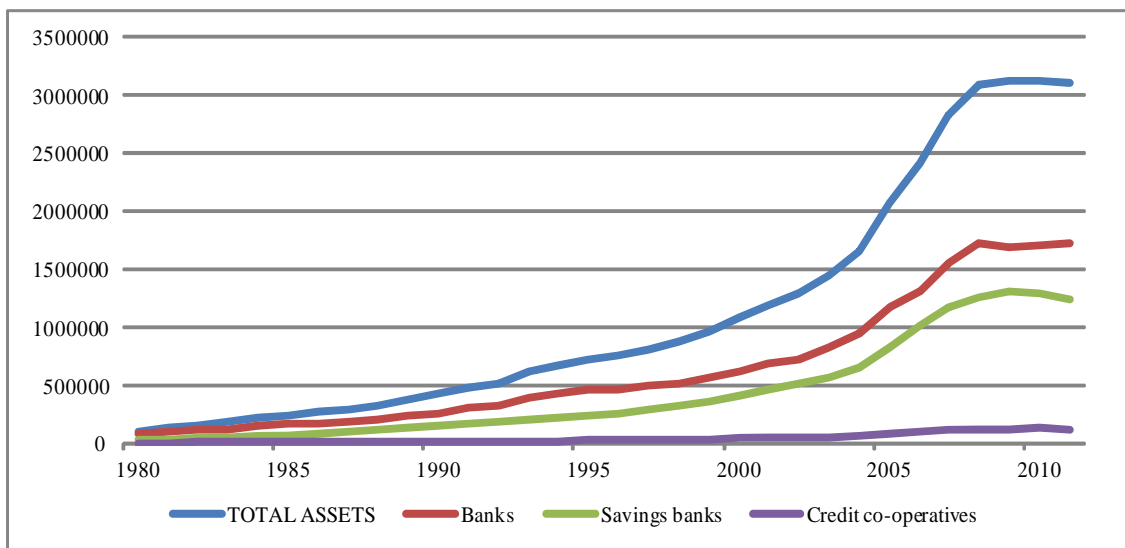
### 6.2.2 Market shares of banking institutions

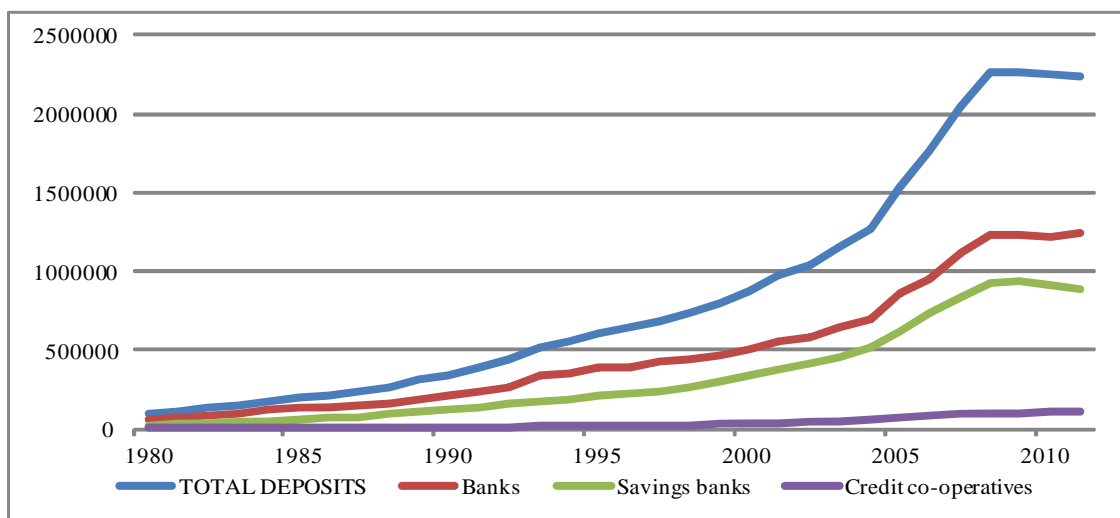
Transformations in the Spanish banking system brought about major changes in the market shares of the different financial institutions. We shall now analyse how the relative stake of banks, savings banks and credit cooperatives evolved in terms of total assets, deposits and credit for the three types of institution as a

whole, highlighting the steady increase in weight of the savings banks to the detriment of the banks.

Total assets, credit and deposits held by banking institutions in Spain increased continually during the period 1980-2009, subsequently falling, when they started to evidence the effects of the burst property bubble and the economic and financial crisis (see figure 75). Assets of financial institutions multiplied 29-fold during the period 1980-2009. Growth was more marked in the case of savings banks, whose assets multiplied 45-fold. However, in 2010 the value of their assets fell (1.8percent in comparison to the previous year), in contrast with the increase – albeit minor – in assets held by the other two deposit-taking entities. This evolution in terms of assets throughout the period 1980-2010 meant that the weight of the savings banks increased gradually, although the banks continued to have greater weight. In 1980 the banks enjoyed a 71 percent market share, this figure had fallen by 55 percent by 2010. Conversely, the savings bank market share grew from 25.7 percent to 41.2 percent, while the credit cooperatives had a 4 percent share.

Figure 75. Evolution of assets, credits and deposits, 1981-2010 (million euros)



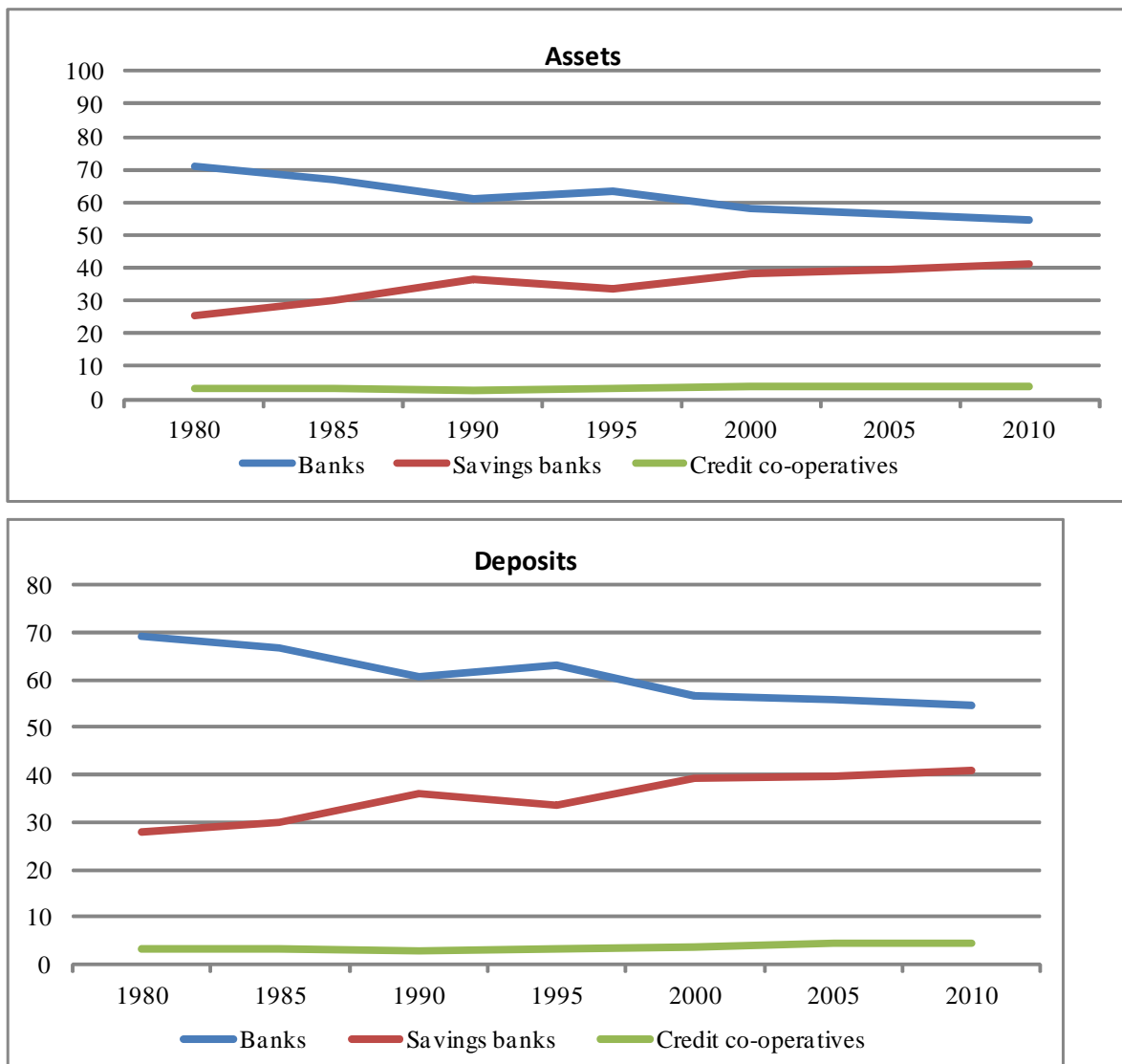


Source: Authors' elaboration based on Banco de España.

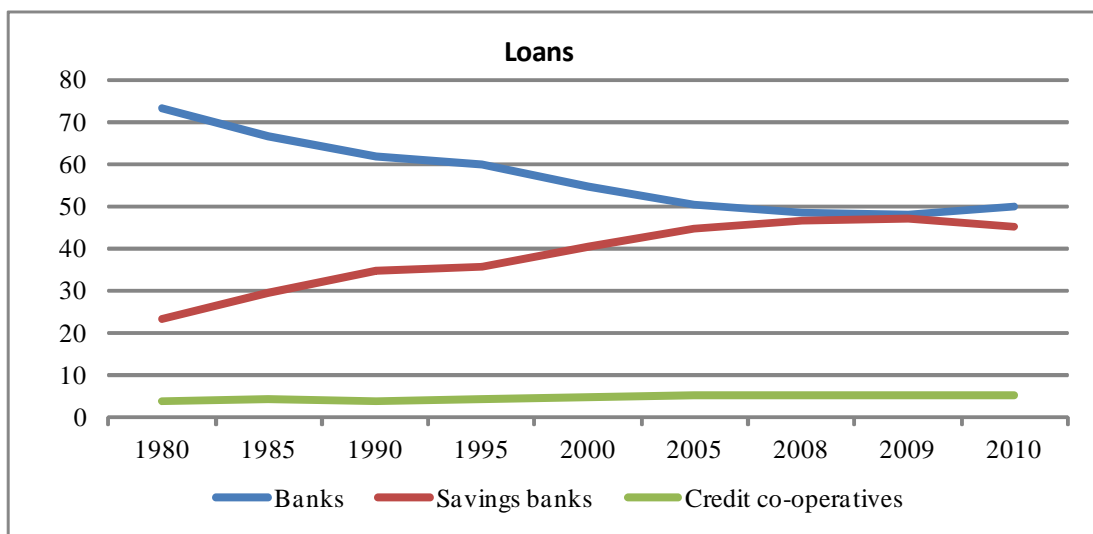
As regards deposits, the greatest expansion in the eighties took place in the savings banks. However, in the early nineties, it was bank deposits which experienced the highest growth rates and the credit cooperatives enjoyed the most expansion in the last decade. It was also in this area of financial business in which a major change took place in how the market share would be divided up, with the banks' share being reduced in favour of that of the savings banks (see figure 76). In 1980 the market share could be broken down as follows: 69 percent for banks, 27.9 percent for savings banks, and 3.2 percent for credit cooperatives. However, by 2010, although banks continued to maintain their leading position, their share had dropped by 54.5 percent, with the savings

banks rising to 40.8percent and the cooperatives to 4.7 percent. This evolution of market shares was more greatly marked in the case of deposits made by non-banking private resident sectors. The savings banks reigned supreme within this segment, holding over half of these deposits in the last decade – 20 percentage points above the share held at the beginning of the eighties. The banks, however, currently hold a share of around 43 percent - a long way off that of three decades ago (63 percent).

Figure 76. Financial market shares (percentage of total)







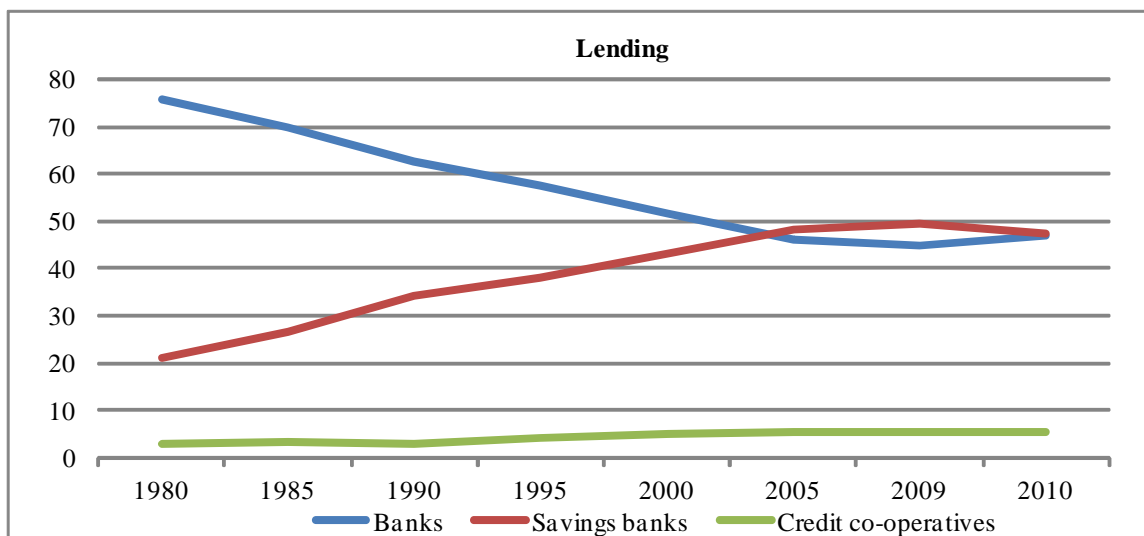
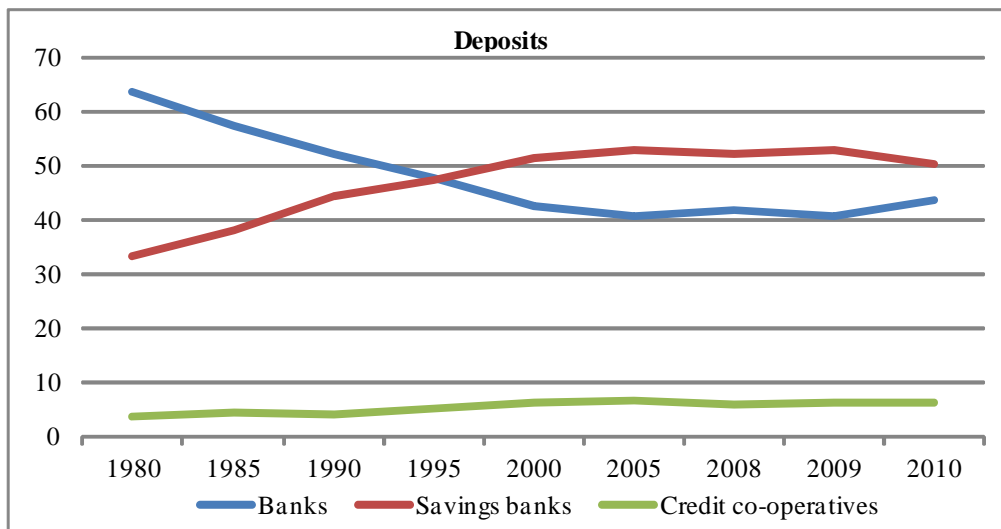
Source: Authors' elaboration based on Banco de España

The savings banks also greatly increased their stake in the credit market. In 1980, 73 percent of credit was granted by banks and 23 percent by savings banks. This situation became steadily inverted throughout the period, to the extent that by 2009 the weight of the banks on the credit market exceeded that of the savings banks by less than 1 percentage point. By 2010, half of the credit came from banks while 45 percent originated in savings banks. For their part, the credit cooperatives increased their share from 3.8 percent to 5.2 percent. This evolution of shares was in turn the result of major growth in credit during the period 2000-2008, especially that granted by savings banks, which grew by

248 percent. The expansion of credit coincided with the prolonged growth phase experienced by the Spanish economy and the significant development of the property market – a traditional area of specialisation for savings banks. Similarly, savings bank credit was the most affected by the economic crisis, to the extent that savings bank credit had fallen by nearly 5 percent by 2010 in comparison to that granted in 2008. Despite this, credit granted by credit cooperatives increased by 2.1 percent and 1 percent that granted by banks.

It can be stated that 97 percent of the credit received by the non-banking private resident sector derived from the institutions analysed (see figure 77). The remainder was divided up among other financial credit institutions (EFC) – 2percent - and the Official Credit Institute (ICO) – 1 percent. On the other hand, it can be noted that the percentage stake of savings banks enjoyed major sustained growth, rising from 21.2 percent in 1980 to 47.6 percent by the end of 2010 – a similar figure to that of the banks. The latter recorded a loss of their share on that market: in 1980 they were the suppliers of 76 percent of credit to this sector, although it should be noted that after 2008 the banks recovered some percentage points of their share in comparison to previous years, to the detriment of the savings banks, This was due to the fact that the latter had restricted credit to a more significant extent as a consequence of the crisis.

Figure 77. Distribution of deposits and loans among the non-financial private resident sector (percentage of total)



Source: Authors' elaboration based on Banco de España

Within the credit that these institutions supplied to the private sector, we are analysing the weight of financing granted to production activities over that granted to households – sectors that received 53 percent and 44 percent respectively of total credit (Table 4).

If we focus our attention exclusively on financing of the corporate sector, then the relative importance of credit supplied by banks can be ascertained which, nonetheless, has lost relative importance. Their market share fell from 71.5 percent to 53 percent between 1992 and 2010. Consequently, the shares enjoyed by savings banks and credit cooperatives experienced a positive evolution: the savings bank market share rose to 43.5 percent from 26 percent in 1992 while the cooperative share increased by 2 percentage points to 4.4 percent.

Table 4. Distribution of financing for the non-banking private resident sector (as a percentage of total)

Years	Production activity financing			Household financing			Financing for property purchase and restoration		
	Savings			Savings			Savings		
	Banks	banks	Cooperatives	Banks	banks	Cooperatives	Banks	banks	Cooperatives
1992	71.5	26.1	2.4	39.9	55.4	4.6	30.4	64.4	5.3
2000	60.3	35.4	4.2	42.5	51.8	5.7	40.2	54.2	5.7
2005	52.9	42.5	4.6	39.5	54.1	6.4	38.5	55.4	6.1
2006	52.2	43.3	4.5	38.6	55.2	6.2	37.5	56.3	6.2
2007	51.6	43.9	4.6	38.5	55.2	6.2	36.9	56.7	6.4
2008	50.9	44.6	4.5	38.6	55.0	6.4	37.2	56.3	6.5
2009	50.4	45.3	4.3	38.3	55.0	6.7	37.1	56.1	6.7
2010	52.1	43.5	4.4	39.4	53.8	6.8	38.2	55.0	6.9

Source: Authors' elaboration based on Banco de España

As far as household financing is concerned, the market shares enjoyed by the different institutions hardly noted any variation, rising slightly in the case of credit cooperatives. The savings banks proved to be the main suppliers of credit in this area of activity, with a relative stake of nearly 54 percent, while banks accounted for 39.4 percent.

Within financing for families, credit was destined mainly for the purchase and restoration of property. The increase in mortgage credit during the period 1992-2010 was extraordinary, favoured over the last decade by low interest rates. This credit multiplied during the aforementioned period 17-fold and accounted for 82 percent of the total volume of credit granted to households in comparison to 60 percent in 1992. The main sources of financing were the savings banks, with a 55 percent share, although its share had fallen by nearly 10 percentage points in comparison to 1992. Credit expansion in banks and credit cooperatives was far more marked, with their shares rising to 38.2 percent and 6.9 percent respectively.

It can therefore be stated that during the period under analysis savings banks increased their market share both in the asset segment and in that of deposits and credit – all to the detriment of the commercial banks which, nonetheless, remained the leaders in all areas of business analysed except for household financing.

### **6.2.3 Degree of concentration**

One indicator that enables an initial approximation of the competitive rivalry in a market is the degree of concentration. Two concentration indicators deserve special mention among those customarily used to study the banking sector: on the one hand, the concentration ratio  $CR_n$ , which expresses the market share

taken up by the largest institutions  $n$  on the market, and on the other, the Herfindahl-Hirschman Index (HHI), which is the result of the square sum of the squares of the market shares of all individual institutions operating on a market – not just the largest ones.

Table 5 shows the concentration ratios for the banking sector in Spain during the period 1997-2010 provided by the Central European Bank. To calculate the HHI and CR5 (concentration ratio of the 5 largest banking institutions), market shares have been taken into consideration in terms of total assets of all credit institutions that operate on the Spanish market<sup>26</sup>. When the evolution of these rates is examined, it can be ascertained that the concentration experienced a marked rise prior to the establishment of the Monetary Union (1997-2000). The highest level of concentration of the whole period under analysis was reached in the year 2000: HHI at 561 and CR5 at 45.4 percent.

Concentration rates would henceforth fall before increasing again after 2007. As a result, the degree of concentration grew during the period 1997-2010 in the banking sector: the share enjoyed by the 5 largest institutions (CR5) rose by 11 percentage points to 44.3 percent by 2010, while the HHI increased by over 90 percent over the whole period, with a value of 528 in 2010. However, it can be stated that the Spanish banking industry had a relatively low level of concentration despite the increase in concentration rates<sup>27</sup>.

Spain ranks fifth among European countries according to levels of concentration, with levels similar to those of the United Kingdom and only below Germany (with an HHI of 298 and CR5 of 32.6 percent), Luxembourg (with an HHI of 343 and CR5 of 31 percent) and Italy (with an HHI of 395 and CR5 of 39 percent). However, concentration rates in Spain are still far from those of Finland (with an HHI of 3550 and CR5 of 84 percent) and Estonia (with an HHI of



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2929 and CR5 of 92 percent), which

are

the countries that top the ranking (European Central Bank, 2011).

Table 5: Herfindahl Index for credit institutions and share of total assets held by the five largest credit institutions

Years	HHI	CR5
1997	277	31.4
1998	319	34.2
1999	427	40.3
2000	561	45.4
2001	532	43.9
2002	513	43.5
2003	506	43.1
2004	482	41.9
2005	487	42.0
2006	442	40.4
2007	459	41.0
2008	497	42.4
2009	507	43.3
2010	528	44.3

Source: European Central Bank. Structural Financial Indicators.

Among the main factors that have affected bank concentration during the period under analysis are merger processes that have affected both banks and savings banks and cooperatives, and have altered the competitive environment in which they operate. The sector that has undergone the greatest transformation is that of savings banks, above all with the restructuring process of the financial system which got underway in 2009. The banks have also experienced integration processes, although the most important ones took place in the late 80s and early 90s. The credit cooperative sector is the one that has been subject to the fewest alterations in terms of concentration, although merger and alliance processes have been taking place in recent years that may alter their degree of concentration in the future.



Merger operations started to take place in Spain involving the major banks in the late 80s, following on from the bank merger movement that had spread throughout Europe and the United States. In 1988, the Bilbao and Vizcaya Banks joined forces, creating the Banco Bilbao Vizcaya (BBV). This merger was followed by that of the Central and Hispanoamericano banks, giving rise to the Banco Central Hispano (BCH) in 1991, while public banking also merged in 1998 to create Argentaria. In the course of a second process, Banco Santander bought Banesto and joined forces with the Central Hispano bank in 1999. For its part, the BBV bought Argentaria in the year 2000 to create the BBVA. As a result, those seven major banks from the late 70s had now become three: Santander, BBVA and Popular (which in 2011 took over Banco Pastor). These mergers enabled the banks not only to remain as genuinely Spanish banking institutions but also in some cases rise to the top of the ranking in terms of world banking, as in the case with Santander – the 7<sup>th</sup> largest bank in the world and the only European bank in the top ten.

Table 6 shows the evolution of the number of mergers within the banking sector since 1995. Out of a total number of 65 operations that have taken place between 1995 and 2012, 28 have been between banks, 22 have affected savings banks and 15 in the case of credit cooperatives. Bank mergers have taken place continually throughout the period, especially during the 90s and the early noughties. In the case of credit cooperatives, mergers took place after the year 2000 and have been intensifying in recent years. The savings banks have played a leading role in the most recent bank reorganisation, the main effect of which has been the conversion of most of them into banks. This process might be considered to be one of the important, both in terms of the number of corporate movements within a limited period of time and because of the large number of institutions involved. 16 integration processes have taken place between 2009 and 2012 which have led to a reduction in the total number of savings banks

from 45 to 17, affecting over 99percent of the assets held by these institutions (only 2 savings banks have remained unaffected by integration processes). It is to be hoped that these processes will continue.

Table 6. Mergers and takeovers of financial institutions (\*)

Years	Between banks	Between savings banks	Between cooperatives	Total
1995	1	1	0	2
1996	2	0	0	2
1997	0	0	0	0
1998	2	0	0	2
1999	3	1	0	4
2000	1	2	1	4
2001	2	1	2	5
2002	3	0	3	6
2003	4	0	1	5
2004	2	0	0	2
2005	1	0	0	1
2006	1	0	0	1
2007	1	1	1	3
2008	2	0	0	2
2009	1	0	0	1
2010	1	11	3	15
2011	1	4	3	8
July 2012	0	1	1 (p)	2
Total	28	22	15	65

Source: Authors'elaboration based on Tomado de Bernard (2010) and the Spanish Banking Association, Spanish Confederation of Savings Banks and National Union of Credit Cooperatives.

(\*) Merger and takeover operations between institutions of different types are not included.

(p): The merger of the Caja Laboral and Ipar Kutxa cooperatives has been approved, which will take effect in November 2012.

The bank reorganisation process in Spain, which got underway in 2009 and has fundamentally affected the savings banks, has led to a logical increase in market concentration. Reorganisation of the number of operators would appear to be a response to the challenges faced by the competitive environment that has been brought about by the crisis, in the sense that an excessive capacity has been evidenced within the financial sector – and an attempt has been made to correct this to some extent via integration strategies (Carbó and others, 2011).

Table 7 shows the ranking of the main banking institutions in Spain according to total volume of assets. The make-up of the group of major banking institutions has varied as a result of the mergers that have taken place in the last two years, and it is expected that this will alter further in the future owing to transformations in the sector<sup>28</sup>.

Table 7. Ranking of financial institutions in Spain<sup>(a)</sup>

	2009			2011			
	Assets (mill. €)	Share (%)	Accumulated share (%)		Assets (Mill. €)	Share (%)	Accumulated share (%)
1. B Santander	422581	14.5	14.5	1. B Santander	466009	16.2	16.2
2. BBVA	396285	13.6	28.1	2. BBVA	411166	14.3	30.5
3. La Caixa	271873	9.3	37.4	3. Bankia - BFA	325204	11.3	41.8
4. Caja Madrid	191.904	6.6	44.0	4. La Caixa	284655	9.9	51.7
5. B Popular	122694	4.2	48.2	5. B Popular	129843	4.5	56.2
		4.1	52.3	6. B Español de crédito	110747	3.8	60.0
6. B Español de crédito	120858			7. B Sabadell	94214	3.3	63.3
7. Bancaja	111459	3.8	56.1	8. Catalunya Caixa	76.380	2.6	65.9
8. B Sabadell	80238	2.7	58.8	9. Novagaliciabanco	76117	2.6	68.5
9. CA del Mediterraneo (CAM)	75532	2.6	61.4	10. Banca Civica	71566	2.5	71.0
10. Caixa Catalunya	63650	2.2	63.6				

(a) Source: Authors'elaboration based on Tomado de Bernard (2010) and the Spanish Banking Association, Spanish Confederation of Savings Banks and National Union of Credit Cooperatives.

(b) Total assets of banks, savings banks and credit cooperatives have been taken into account in order to calculate market shares.

These corporate movements that have taken place since 2009 have brought about a significant change in bank concentration as a whole in Spain. The three major financial institutions (CR3 indicator) in 2011 - Banco Santander, BBVA and Bankia – concentrated nearly 42 percent of assets, exceeding the level of concentration recorded in 2009 by 4 percentage points, when the CRS rate was 37.4 percent. Similarly, the concentration of the 5 largest financial institutions (CR5) rose from 48 percent to 56 percent. Conversely, the concentration of assets increased from nearly 64 percent to 71 percent, if one takes into consideration the ten leading financial institutions (CR10).

Given that integration processes have mainly affected the savings banks, the change in market structure has come about owing to the role placed by these institutions. In 2009, the 2 largest savings banks (La Caixa and Caja Madrid) accounted for 16 percent of assets held by the Spanish banking market. A further 3 medium-sized savings banks (Bancaja, CAM and Catalunya) had a joint share equivalent to nearly 9 percent of the market. In 2011, with the bulk of the integration processes already complete, the share of the 2 largest groups of savings bank (Bankia and La Caixa) rose to 21.2 percent, whereas the share for that of the next 3 largest groups according to volume of assets (Catalunya Caixa, Novagalicia Banco and Banca Cívica) fell to 7.7 percent.

### **6.3 Non-structural indicators of competition**

The high concentration on a market is often considered to necessarily imply a lack of competition. However, economic literature on the subject has extensively questioned whether there exists a clear, direct relationship between concentration and market power.

It is customary to carry out econometric analyses using two instruments when calculating the degree of competition of banking systems: the Lerner Index and Panzar and Rosse Approach (1987). The large amount of data required to carry out this analysis prevents us from dealing with in this work, which is why we shall confine ourselves to referring to the results obtained from different empirical studies for the Spanish case.

Maudos and Pérez (2003) and Carbo et al. (2003) used this methodology to analyse the degree of competition of the Spanish banking system: the former during the period 1992-2001, and the latter during the period 1986-1999. These authors came to the conclusion that there was an increase in market power after 1996 and do not reject the monopolistic competition hypothesis. Numerous studies that analysed European markets – among them the Spanish market - in the 80s and 90s support the existence of monopolistic competition on the Spanish banking market (Lloyd-William, Moleneux and Thorthon, 1991; Biker and Haaf, 2002; Utrero-González, 2004).

However, the study carried out by Gutiérrez de Rozas (2007) for the period 1986-2005 drew the conclusion that the level of competition is higher than that referred to in literature on the subject and, that in the case of the major banks, is close to perfect competition. He also points out that there is no apparent relationship between competition and concentration.

Neither do Carbó and Rodríguez (2007) note any significant relationship between market power and concentration indicators. These last-mentioned authors analyse the evolution of Spanish bank competition by drawing a distinction between credit deposits and total profitable assets. They suggest that the greatest intensification of competition for profitable assets as a whole took place during the period following liberalization (1993-1999). However,

market power increased during the period 2000-2005 due to the proliferation of new products and transactions that generate commission. Conversely, an intensification of competition has been noted on credit and deposit markets over time.

To conclude, a recent study carried out by Maudos (2011) in which the Lerner Index referring to the market power of Spanish banking for the period 2008-2010 was calculated, highlighted the differences in asset and liability products. In the case of asset products, there was an increase in the Lerner Index, which reflected an increase in market power. When comparing this index to the European average, it can be seen that the index for Spanish banking was higher in the case of loans to companies and loans for consumption purposes. In contrast, in the case of loans provided to purchase property, the index in Spain was below the European average. As regards liability products (sight and fixed-term deposits), the behaviour of the index proved the opposite, as the crisis led to a sharp drop in 2008 which only slightly recovered in 2010. In the case of sight deposits, the Spanish bank index was higher than the European index whereas the opposite was true in the case of fixed-term deposits.

## 7. Availability and sources of funds

### 7.1 Introduction

This section discusses the sources of financing in the Spanish financial system. More specifically, we study the sources and changes in funding sources of Spanish Monetary Financial Institutions (MFIs) during the period 1997-2012. In order to do this, first, we consider the sources of funds used during the growth period from 1995 to 2007 and, secondly, the changes that have occurred since the outbreak of the financial crisis in 2007.

The Spanish economy experienced a strong growth during the expansionary phase of the economic cycle that began in 1995 that fostered the increasing activity in the financial sector, particularly in the banking sector. The dynamism of this sector is reflected in the evolution of its total assets which grew at an average annual rate of 12 percent during the period 1997-2007. This growth was particularly strong in loans to the euro area private sector, which showed average annual growth of 13.5 percent during the period considered (in this latter category loans granted for the purchase of housing are included which increased at an average annual rate of 14.3 percent). Figures 78a and 78b show the evolution (in billions and annual average growth rates, respectively) of the total assets of the banks and the loans granted to euro area residents (other than MFIs).



Figure 78. Evolution of total assets of banks and loans granted to euro area residents

Figure 78a (billions)

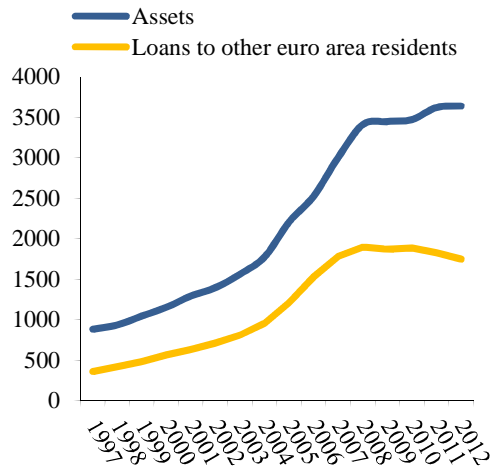
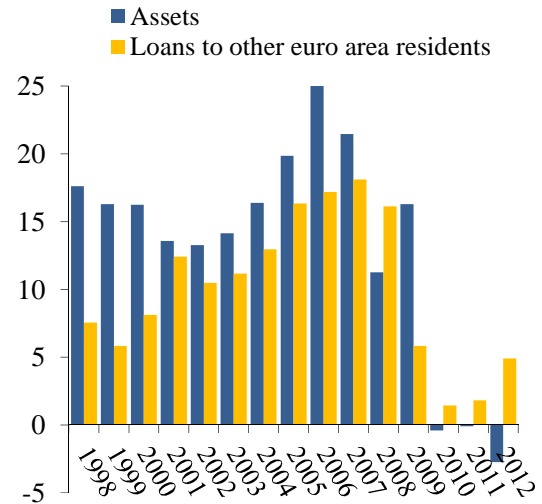


Figure 78b (annual average growth rate)



Source: Bank of Spain and own elaboration

We can observe that the growth of banking activity has been even more intense in the years around the end of the growth period, i.e. during the period 2002-2007 than during the early years. The largest growth in loans occurred in 2005 with a growth rate of 25 percent.

After the outbreak of the financial crisis the annual average growth rates for the period 2008-2012 dropped to 6.3 percent for the assets and to 4.9 percent for the loans granted to residents.

The deposits captured from the euro area residents (other than MFIs) failed to grow, however, at the same rate than the loans granted. Figures 79a and 79b illustrate the evolution of loans and deposits of "other resident sectors" in the eurozone in the Spanish MFIs over the period 1997-2012. It can be seen that the latter increased continuously during the expansionary phase of the economic cycle in Spain and even during the beginning of the financial crisis in 2007. This growth, however, was lower than that experienced in the loans, so it was

creating a growing gap which forced MFIs to turn to a higher market financing. The loans to deposits ratio increased throughout the period of economic expansion.

Figure 79. Evolution of loans and deposits of “other resident sectors “

Figure 79a (billions)

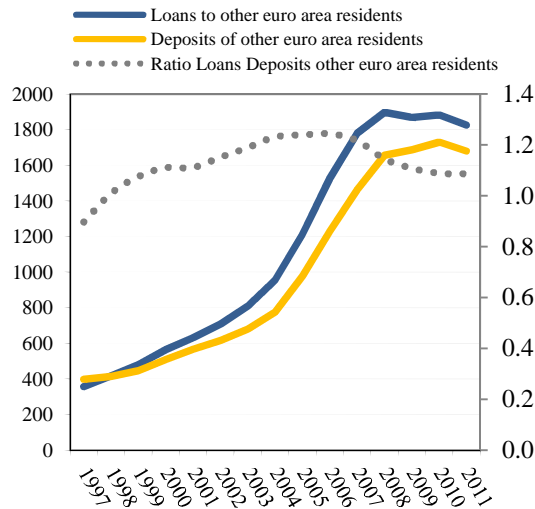
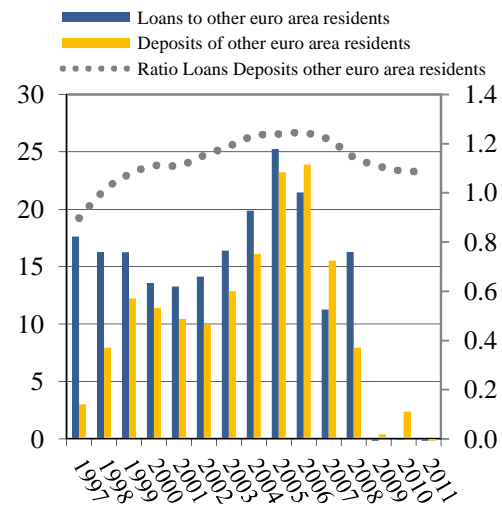


Figure 79b (annual average growth rate)



Source: Bank of Spain and own elaboration

## 7.2 Funding sources during the period of economic expansion: 1997-2007

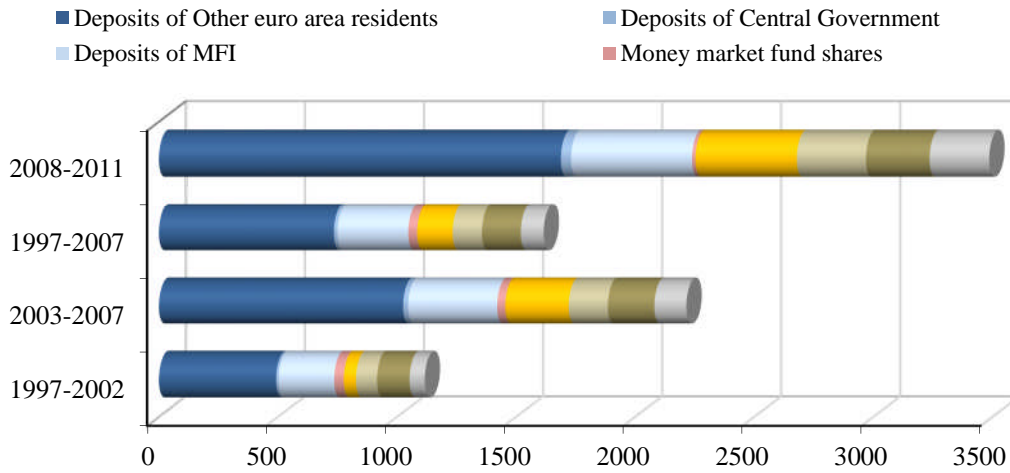
The analysis of the sources of funding used by the Spanish MFIs has been made using data on the liabilities of financial institutions provided by the Bank of Spain. The period of economic expansion has been divided into two sub-periods comprising the years 1997-2002 and 2003-2007, respectively. This time segmentation shows more clearly the changes that have occurred in relation to the use of funds.

Figures 80a and 80b show the average annual amount, and the average annual rate of change of the sources of funding of MFIs during the period mentioned. It can be seen that the primary funding source of the banking sector during the

period 1997-2007 has been capturing deposits from the euro area resident sectors. Total deposits (from IMF, other euro area residents and central government) accounted for 64.8 percent of the total liabilities of these entities on average in the period 1997-2007. These deposits grew steadily during the expansion phase of the Spanish economy at an average annual rate of 11.4 percent. The deposit growth has been more intense in the second sub-period than in the first one owing, among other reasons, the bursting in 2000 of the tech bubble that resulted in reduced profitability in the stock markets and funds investment, and consequently increased the attractiveness of deposits as a safe asset (Maudos Villarroya, 2012).

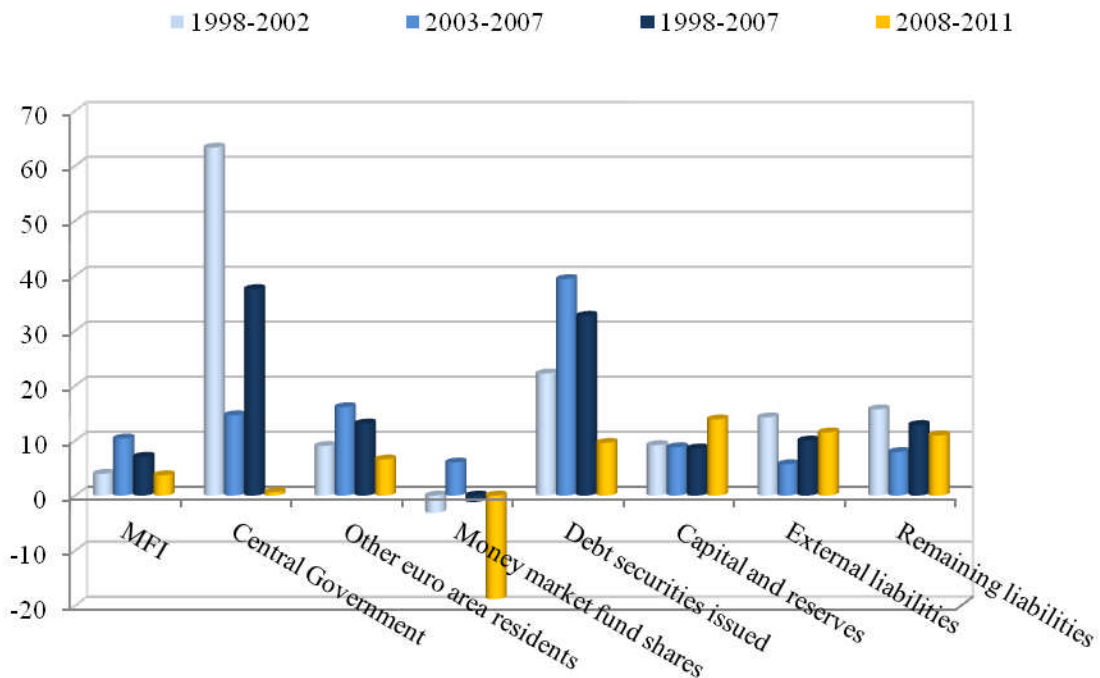
Under the heading "deposits of euro area residents" we find that deposits of the "other resident sectors" in the Spanish MFI accounted for 45 percent of the total liabilities of these entities on average in the period considered. These deposits grew at an average annual rate of 13.1 percent. Deposits of financial institutions accounted for 18.4 percent of the total liabilities and grew during the expansionary period at an average annual rate of 7.1 percent.

Figure 80a. Average annual amount of sources of financing of MFI (in billions)



Source: Bank of Spain and own elaboration

Figure 80b. Average annual rate of change of sources of funding of MFI

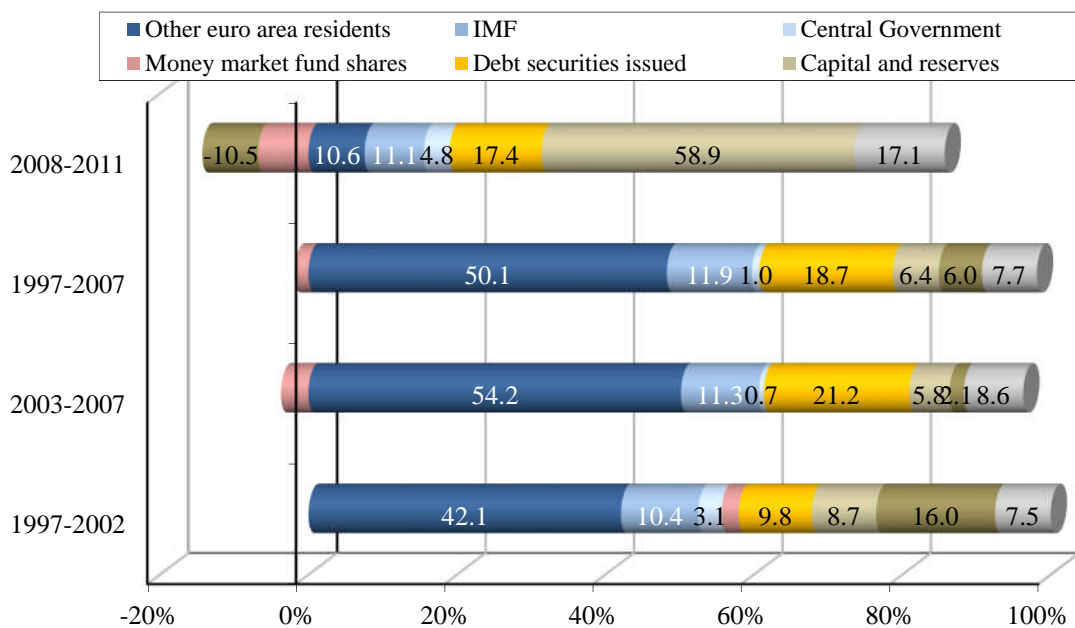


Source: Bank of Spain and own elaboration

In addition, the "deposits of euro area residents", as shown in Figure 81, explain 64 percent of the increase in the liabilities of MFIs in the period 1997-2007. And, in this heading, deposits of "other euro area residents" accounts for the 51 percent of the total liabilities for the years mentioned and deposits of MFI for the 11.9 percent.

The issuance of debt (9.2 percent of the liabilities) also grew in Spain at very high rates (39.4 percent on annual average) during that period, in contrast to what has happened to the non-euro sector who presented a growth rate of 5.7 percent. By contrast, the issuance of money market assets virtually disappeared from the liabilities of the Spanish banks.

Figure 81. Contribution to the growth of total liabilities of each funding source



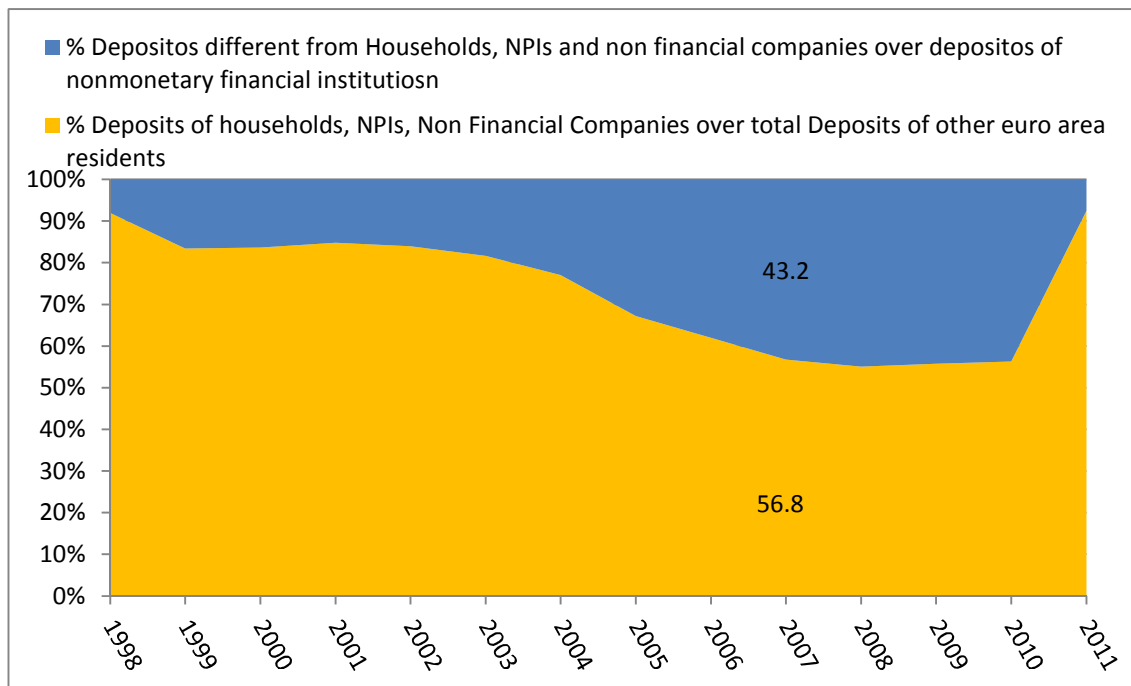
Source: Bank of Spain and own elaboration

Bank deposits were, therefore, during the period of economic expansion the preferred funding source. Bank deposits are a traditional source of funding for commercial banks, whose task is to raise funds from the public and to channel them into other sectors. Deposits are a very important part of the liabilities of

credit institutions, particularly in the case of Spain, where the commercial banking business predominates over the investment banking. However, in practice, not all bank deposits correspond to the classical definition of retail liabilities. The most obvious example are the MFI deposits (interbank deposits), which are a wholesale funding, and significantly more volatile in crisis situations (Martínez Pagés, 2012). Retail deposits correspond better with the deposits grouped under the heading "other resident sectors". Within this heading it is also possible to distinguish two groups of agents. On the one hand, we find households, NPIs and non-financial corporations and on the other, the central counterparties, insurance companies and pension funds, investment funds, the securitization issuers of preference shares, companies and brokers, and other intermediaries and financial auxiliaries.

Figure 82 allows us to have an overview of all deposits of the "other euro area residents" distinguishing those deposits associated with each of the groups of agents noted above. The share of deposits that does not correspond to households, Spanish nonfinancial corporations NPIs is large. In 2007 that share accounted for 43.2 percent of total deposits of "other euro area residents" and it was distributed among a heterogeneous set of agents, including non-monetary financial institutions which represented more than 76 percent of the outstanding in 2007. And within that share (76 percent) the largest item by far are the deposits of securitization companies and funds.

Figure 82. Deposits comprised in  
“other euro area residents



Source: Bank of Spain and own elaboration

The sharp increase in the deposits of “other euro area resident sectors” other than households NPIs and nonfinancial corporations during the years of economic expansion is to a large extent due to this type of operations (securitization companies and funds). The increase in the amount of this type of deposits, therefore, has to do with funds obtained in financial markets and not through retail deposits.

The heading of deposits of securitization corporate and funds is basically determined by the evolution of outstanding securitizations in Spain (Catarineu, Perez, 2009). In late 2007, the outstanding balance of securitization amounted to EUR 349.8 million, which accounted for 50 percent of the deposits other than deposits of households, NPIs and nonmonetary companies (see Figures 83a and 83b).

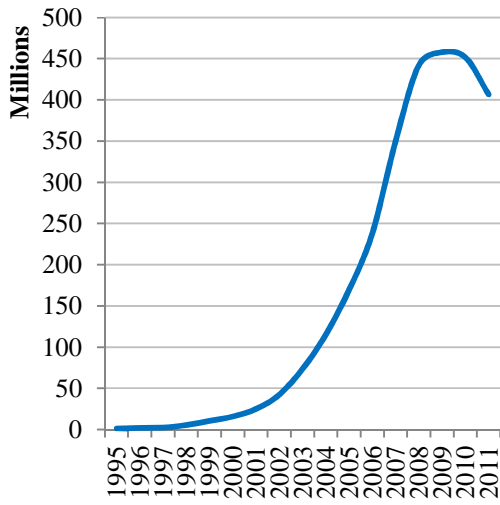


This project is funded by the European Union under the 7th Research Framework programme (theme SSH)  
Grant Agreement nr 266800



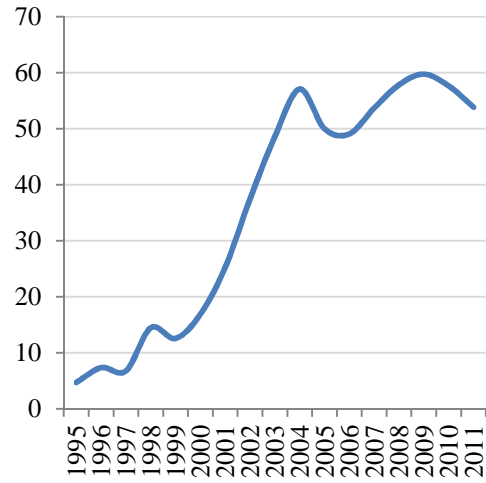


Figure 83b. Outstanding securitisation volume



Source: Bank of Spain

Figure 83a. Outstanding securitisation volume over deposits



### 7.3 Sources of financing in the financial crisis: 2007-2012

The financial crisis that broke out in 2007 is having an impact on bank financing as the fundraising activity in financial markets has been affected by rising risk aversion and investor uncertainty about the exposure of banks with problematic assets (BIS, 2011, p. 5).

With the onset of the financial turbulences, there has been a change in the relative weight of the funding sources used by financial institutions previously. The use of market financing, for example, has been displaced making way to a more traditional funding based on deposits which have been growing significantly since the bursting of the crisis. Banks, therefore, have been forced to compete fiercely between them for the capture of these deposits.

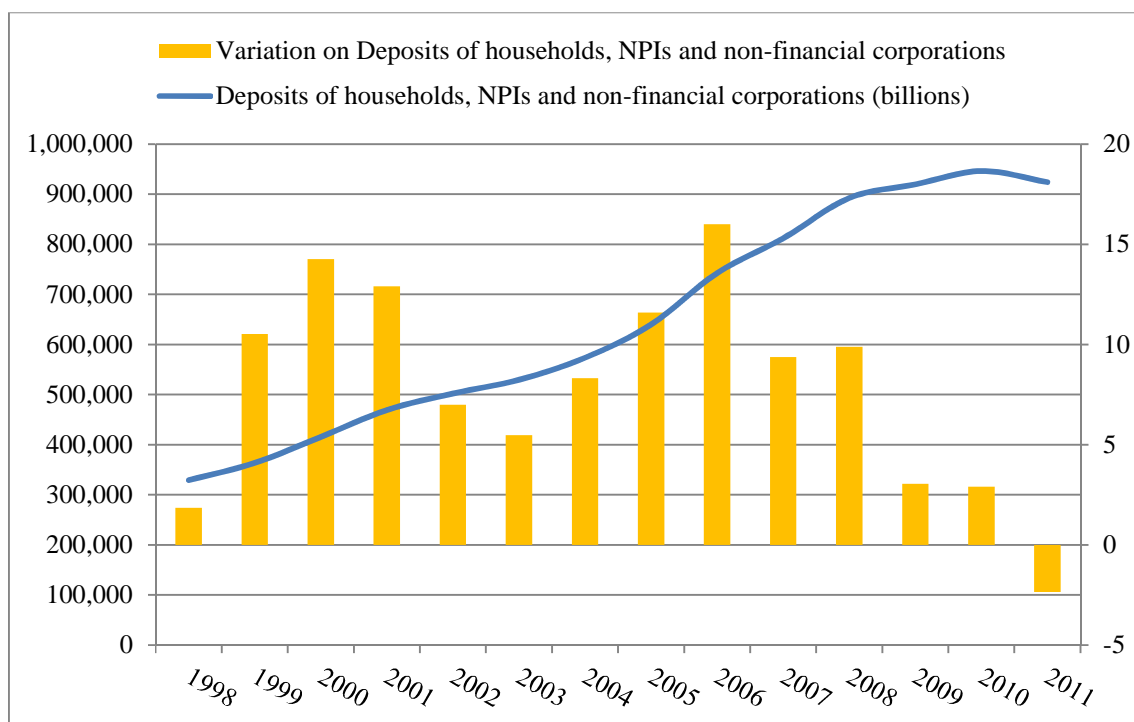
Figure 79, presented in the first section of this report, shows that the increase in the ratio between deposits and loans extended to other euro area resident sectors since the crisis began. Figure 61a reinforces this idea and shows the greater relative weight of deposits in total liabilities of MFIs and the greater average annual growth rate. Deposits of other euro area resident sectors pass from being 45.5 percent of the total liabilities in the period 1998-2007 to be 48.4 percent during the period 2008-2012.

The market funds of MFI dropped considerably from 2008 onwards. The annual volume of debt securities issued by MFIs decreased very significantly compared to the period of expansion.

Securitization, meanwhile, has continued after the outbreak of the crisis and peaked in 2009 before declining in late 2011. The drop in 2012 is due not only to the limited volume of new issues, but mainly to the increase in amortization, resulting from the early termination of certain operations on grounds of

collateral management (Martinez Pagés, 2012). In September 2012, the outstanding amount of the securitization amounted to 323.5 billion euros, 55 percent of total deposits of resident sectors other than households and nonfinancial corporations and NPIs (see Figure 83a and 83b).

Figure 86. Deposits of households, NPIs and non-financial corporations



Source: Bank of Spain and own elaboration

Figure 84 shows that deposits of Spanish household, NPIs and non-financial corporations in the MFIs have been increasing since 1997, reaching 884 billion euros billion (57percent of “other euro area resident sectors”) in September 2012. The majority of this amount came from households. The recent evolution of these deposits, however, as seen in Figure 7, shows progressively higher rates of decline. The factors that may help explain this trend are mainly two, according to Martínez Pagés (2012). On the one hand, we have the current situation that is characterized by high unemployment and the need to reduce the debt levels. This situation hampers the ability of households to generate savings to acquire financial instruments. On the other hand, a shift from bank

deposits to other financial instruments, particularly to debt securities issued by MFIs themselves has taken place in the portfolios of those agents (households, NPIs and non-financial corporation). This shift, particularly noticeable in the case of corporations, would have been encouraged by the regulatory changes introduced in 2011.

So, in July of that year, it was established that additional contributions to the Fondo de Garantía de Depósitos - Deposits Guarantee Fund (FGD) for those entities that obtain new deposits with remunerations that exceeded the interest rate of reference by more than a given amount. Shortly thereafter, in December, FGD contributions in general rose.

In short, as it has been acknowledged by the Committee on the Global Financial System (BIS, 2011) the composition of bank funding in Spain has changed little since the onset of sovereign debt tensions in late 2009. Banks have continued to follow the funding patterns initiated in 2007, increasing their use of more stable funding sources such as retail deposits and reducing their use of interbank deposits.

#### **7.4 Conclusions**

During the period of economic expansion, the main source of funding for Spanish banks has been attracting deposits of private sector residents. Thus, in 2007, the deposits of private sector residents accounted for 47.7 percent of the total liabilities of Spanish IFM. The foreign sector (funding obtained from non-euro zone residents) acquires a relative less importance in Spanish banking, as it represented a 6.9 percent over total assets. Spanish banks also are less specialized than other European banks in raising funds in the interbank market.

However, “deposits of resident sectors” includes deposits which have not a retail nature. This is the case of deposits of monetary financial institutions and more specifically, of securitization companies and funds. Hence, this heading has been an important source of funding for Spanish banks during the expansion period. The onset of the financial turbulence has been accompanied by a change in the relative weight of funding sources hitherto used by financial institutions. The use of market funding has declined giving way to increased funding from traditional deposits.

The composition of bank funding has been little changed since the onset of the crisis. Banks have continued to follow the funding patterns initiated in 2007, increasing their use of more stable funding sources such as retail deposits and reducing their use of interbank deposits.

## 8. Efficiency of the Spanish banking system

The importance given to the estimation of efficiency in the banking system lies in the widespread view that improving banking sector efficiency itself will help boost the global economic development. Hence, the importance of identifying the causes of inefficiency, and its relative weighting.

This work analyses the efficiency of Spanish banking system, paying special attention to the position in the context of the European Union. To do this, it looks at the research published in literature on the comparative analysis of efficiency in banking sector in the last decade.

The review of the literature reveals a wide dispersion between the authors about the definition of efficiency (production, costs and profits), the choice of the variables and the methodology, testing both nonparametric and parametric techniques. Consequently, the efficiency results obtained for different banking systems and, in particular, the Spanish one, differ significantly.

The pioneering work of Farrell (1957) on “The measurement of productive efficiency”, constitutes the basic framework on which a high number of papers developed dealing with the study and measurement of efficiency. Actually, the paper introduces the concept of inefficiency defined as the deviation from the frontier of optimal behavior of a firm.

To begin with the literature review about the Spanish financial system efficiency we can mention the work of Dietsch and Lozano-Vivas (2000). They compare the efficiency of the banking industries of Spain and France taking into account the particular characteristics of the environment in which they operate. These authors estimate a common cost frontier observing that the conditions under which financial institutions operate in France are more favourable than in

Spain. They concluded that the banking institutions in France and Spain operated with similar technologies and that differences in costs incurred by these industries were mainly explained by differences in the context in which banks operate (economic indicators, structure and competitiveness of the banking, consumer accessibility to banking products and regulatory conditions).

Subsequently, Lozano-Vivas, Pastor and Hassan (2001) analyzed the operating efficiency differences across 10 European banking industries countries (Belgium, Denmark, France, Germany, Italy, Luxembourg, Netherlands, Portugal, Spain and the United Kingdom). They analyzed the technical efficiency of each country of the sample using a Data Envelopment Analysis (DEA) model, incorporating only banking variables. They used 1993 data. The results showed that Luxembourg got the highest average efficiency score, around 49.5 percent, and Spain and Portugal the lowest, around 18.9 percent and 16 percent, respectively.

Some studies tried to forecast the likely efficiency effects of cross-border entry based on measured efficiency in the bank's home nation, accounting for differences in the economic environments. To illustrate it, Lozano-Vivas, Pastor and Pastor (2002) expanded and improved the existing methodology used in international banking efficiency studies by introducing environmental variables. Their hypothesis was that the banks of the countries with bad environmental conditions would get better efficiency scores if they were performing in a more favourable environment. That is why Spanish bank efficiency was the lowest in EU. Overall, the results showed that when the environmental variables were introduced into the model, the average efficiency scores increased in almost all the countries compared to the average efficiency scores of the basic model. They observed that Spanish banks became even more efficient (82.14 percent) than the banks of Luxembourg (62.30 percent), assuming that the banks of both countries operated under the same environmental conditions. Then, they found

that banks from Spain, Denmark, and Portugal were relatively efficient, and argued that this suggested that these banks could to operate efficiently in other nations of the sample.

These results agree with Chaffai, Dietsch and Lozano-Vivas (2001) who perform a comparative analysis in terms of productivity. Firstly, the study is carried out without taking into account the specific environmental conditions. The results showed that, on average, the productivity of German banks, French and Italian was higher than that of the Spanish banks. However, when the analysis included the characteristics of the environment in which banks operated, environmental factors were decisive in determining the differences in productivity between the different banking systems. In particular, it was found that the Spanish banking institutions used in its production process a technology similar to that used by other European countries. Moreover, Spanish banks seemed to be among the most efficient in Europe.

Both cost and profit efficiency was analyzed by Maudos, Pastor, Pérez and Quesada (2002) in a sample of eleven countries of the European Union for the period 1993–1996 (Austria, Belgium, Finland, France, Germany, Holland, Italy, Luxembourg, Portugal, Spain and the United Kingdom). They used three methods, namely; distribution-free approach (DFA), fixed effects (FE) and random effects models (RE).

The results of cost efficiency were of 91.4 percent for the average of the 11 countries of the European Union considered. Looking at particular countries, they found that Portugal and the United Kingdom were the least efficient countries, with values near 15 percent of total costs, and Italy and Spain standing at the opposite extreme with an inefficiency level of 4 percent and 5.4 percent, respectively. On the other hand, they concluded that the profit efficiency levels were lower than the cost efficiency levels, a result that was



similar to those obtained in other studies (Berger and Mester (1997) and Rogers (1998) for the US banking system, and Lozano-Vivas (1997) for the Spanish savings banks). The range of variation of the profit efficiency levels among countries was greater than that of the cost efficiency. The difference between the least efficient sector (Belgium) and the most efficient (Portugal, United Kingdom and Spain) was around 12 percentage points.

They also examined several possible sources of the differences in the measured efficiency, including differences in size, specialisation, other bank characteristics, and market characteristics. The results showed that: a) medium-sized banks reached the highest levels of efficiency in both costs and profits; b) the type of banking specialisation was not significant in explaining the differences of efficiency between banks; and c) the banks with a higher loans/assets ratio were more efficient. Regarding market characteristics, market concentration was positively related to profit efficiency (the higher the concentration, the greater the market power, and therefore, higher profitability) and negatively with cost efficiency (banks operating in more concentrated markets were less pressured to control costs). Higher risk was positively related to profit efficiency, and had no significant relationship with cost efficiency. The growth of the market, measured by the real growth rate of GDP, allowed higher levels of efficiency to be achieved. And finally, those banks that operated in markets with a higher network density, and therefore, that had higher structural overheads, were less cost efficient.

Carbó, Humphrey and López del Paso (2005, 2007) used a distribution free approach (DFA) to determine the cost frontier of 153 large banks in ten countries in Europe over the period 1996–2002. They determined the relative importance that a country's business environment, technical influences from a cost function, and internal bank productivity, may have in explaining cross-country differences in the cost efficiency. When applied to each of three

countries separately, cost efficiency values were 0.76, 0.57, and 0.80, respectively for Spain, Germany, and Italy, but, after adding in internal bank productivity indicators, efficiency for the same three countries rose to 0.93, 0.73, and 0.93. Applying that full model to all 10 countries in a pooled framework where country-specific environmental characteristics were added in yields efficiency that averaged only 0.48 but rose to 0.73 and 0.81, respectively. Their main result was that the large banks in each of the 10 countries had almost identical average efficiency values. Therefore, the differences in the business environment and the bank productivity across countries were not so strong as to confer a marked “natural” advantage to one or a subset of countries. Once banks accommodated to their different national environments they seemed to be about equally efficient.

Regarding the studies dedicated to the analysis of efficiency at the international level, Pérez *et al.* (2000) and Maudos and Pastor (2002) considered the problem of the effects of specialisation on efficiency. The results obtained by these authors showed that the Italian Portuguese and Spanish banking systems were not so inefficient when it was considered that their banks specialised mainly in more costly business, that is, retail banking. In other words, the results showed that part of the inefficiency traditionally attributable to these banking sectors was due to the fact that most banks of these countries were specialised in costly business and not to inefficiencies themselves. However, these studies only quantified the differences of efficiency among banking sectors using a common frontier and separate frontiers for each specialisation, without analyzing the origins of these differences. That is, they did not quantify what part of the total inefficiency was due to the combination of specializations of the banks that formed it (composition inefficiency) and what part was due to inefficiencies within the specialisation selected (intra-specialisation inefficiency).

Taking as reference the Spanish banking sector during the period 1985-1996, the study showed that the efficiency of companies improved if cost efficiency measurements were corrected for the effect of different specialisation by the estimation of separate frontiers for four different groups of competitors. For the whole Spanish banking system, cost efficiency, without taking into account the differences in technology due to specialization, would be a little over 70 percent, whereas considering the existence of different product ranges it was around 90 percent. The behavior of costs would thus be compatible with that of other competition indicators, reflecting the effects of a more competitive situation in the Spanish banking sector at the end than at the start of the period considered.

In this sense, in a later study, Pastor and Serrano (2006) compared the effects of specialization on bank efficiency across the banking systems of EU countries over the period 1992–1998. Cost inefficiencies in each nation were decomposed into two different components. The first was related to the composition of specializations in each banking system, and the second was related to inefficiencies of banks within their specialization. The results obtained revealed the existence of high cost inefficiencies, though with a slightly improving trend. Banks in Germany, Denmark and France stood out for their low inefficiency levels and those in Greece and Spain for their significantly high inefficiencies. Furthermore, the results indicated that the inefficiencies attributable exclusively to the composition of specialisations of each banking system (composition inefficiency) were high in those banking systems that specialised mostly in retail banking (Spain, Greece and Italy). That is, in these countries, even if all the inefficiencies within each specialisation were eliminated (i.e. even if they carried out perfectly the type of banking business to which they are dedicated), there would still persist a part of the inefficiency that was due to the orientation of the productive specialisation of their banks.

The results obtained regarding the influence of specialisation on the efficiency of each country agreed with those obtained by Pérez *et al.* (2000). Indeed, these authors found that what initially may be interpreted as inefficiency of the country itself was actually capturing the influence of the chosen specialisation on the conditions of production.

On the other hand, Maudos and Pastor (2003) analyzed the efficiency in costs and in profits of the Spanish banking sector (SBS) in the period 1985-1996 using a non-parametric approach. The results obtained showed the existence of profit efficiency levels well below those corresponding to cost efficiency, alternative profit efficiency being below standard profit efficiency. These results implied the existence of market power in the setting of prices and/or the existence of differences in the quality of bank output reflected in the differences in prices. Regarding a full economic and monetary integration, they concluded that the reduction of profit levels associated with higher competitive pressure may be offset by the reduction of all kinds of inefficiency, which was a very important potential source of competitiveness. Indeed, the results referring to 1996 indicated that the return on assets (ROA) and on equity (ROE) of the SBS could increase by 2.4 percent and 24.4 percent respectively, eliminating the combined inefficiency in costs and revenues. Using a non-parametric frontier approach, the evidence obtained showed the existence of average levels of cost efficiency in the savings banks and the commercial banks of 80.2 percent and 90.9 percent respectively, levels much higher than the levels of profit efficiency. The standard profit efficiency levels of the commercial banks (66.5 percent) were higher than those of the savings banks (47.2 percent), converging in the last years to such an extent that the minimum difference occurred in the last year of the sample. In the case of alternative profit efficiency, admitting the existence of market power in setting the prices of output, the commercial banks also enjoyed higher levels of efficiency (52.9 percent as against the savings banks 34.7 percent), with a reduction in the levels from the late 1980s.

In the paper titled “Nontraditional activities and bank efficiency revisited: a distributional analysis for Spanish financial institutions”, Tortosa-Ausina (2003) examined the importance of nontraditional activities (e.g., fee-based services) in the analysis of bank cost efficiency using an approach based on the analysis of the *entire* distributions. Efficiency scores were estimated non-parametrically, and distributions were assessed by means of kernel smoothing, transition probability matrices, and stochastic kernels.

The analysis was performed for a sample of Spanish financial institutions, both commercial and savings banks, for the 1986–1997 period. The analysis was very relevant given the financial turbulences registered in that period in terms of changes re-shaping the industry, coming primarily from deregulation, taking into account the considerable number of mergers and acquisitions, savings banks’ territorial expansion processes (which were forbidden in the regulatory period), or the drop of entry barriers for financial institutions from other European Union countries.

The results partly corroborated those obtained by Rogers (1998) and, in the case of the Spanish banking industry, Fernández de Guevara (2001), namely, average cost efficiency was enhanced when an alternative model that included the nontraditional activities performed by banks was considered. However, this result changed over time, and between the size (weighted mean) and type (commercial/savings banks) of firms.

Specifically, they found, first, that the exclusion of non-traditional activities biased the efficiency estimations for all financial institutions, and, second, that commercial banks and savings banks’ efficiencies differed greatly. These findings suggested that the inclusion of these types of activities was more important for the efficiency analysis than stated in previous studies. There were

clusters of firms whose relative efficiency (relative to the mean) was substantially enhanced, while for others it increased to a lesser extent and, for many others, it worsened. Thus, it seemed that an additional issue could be convoluted when analyzing these types of activities, namely, each firm's intrinsic specialization.

Again, in a later study, Tortosa-Ausina et al (2008) explored productivity growth and productive efficiency for Spanish savings banks over the (initial) post-deregulation period 1992–1998 using Data Envelopment Analysis (DEA) and bootstrapping techniques. Their results showed that productivity growth had occurred, mainly, due to improvement in production possibilities, and that mean efficiency had remained fairly constant over time. The bootstrap analysis yielded further evidence, since for many firms the productivity growth, or the decline, was not statistically significant. With regard to efficiency measurement, the bootstrap revealed that the disparities in the original efficiency scores of some firms were lessened to a great extent.

Other studies, like the one developed by Färe et al (2010), analyzed the relationship between efficiency and competition. Their analysis was focused on the Spanish banking system for years 1992 through 2003 using figures of individual banking firms. The results showed that there were remarkable differences between commercial banks and savings banks' market power indicators, and also between the efficiencies found for both types of financial institutions. The most remarkable finding was that, for the entire banking industry, the relationship between market power (measured using a non-structural indicator of the degree of market competition such as the Lerner index) and efficiency was not linear and the significance market power's impact on efficiency varied for each firm.

The authors estimated cost efficiency and its technical and allocative components. The results showed that average cost efficiency had been declining from 0.843 in 1992 to 0.698 by 1999 for all banking firms, rising since then to reach 0.760 in the year 2003. Commercial banks were the best performers; they departed from 0.912, bottomed at 0.749 by 1999, but ended up with efficiency levels similar to those of 1992. A similar pattern was found for savings banks, yet their efficiency was substantially lower. Savings banks also bottomed earlier, declining from 0.774 to 0.625 in 1998, reaching 0.683 by the end of the sample period.

Therefore, despite the intense regulatory initiatives, inefficiency not only persisted but also increased over time. In addition, although all banking firms faced the same regulation, and they could perform the same operations, cost efficiency differences among them, on average, were not fading away.

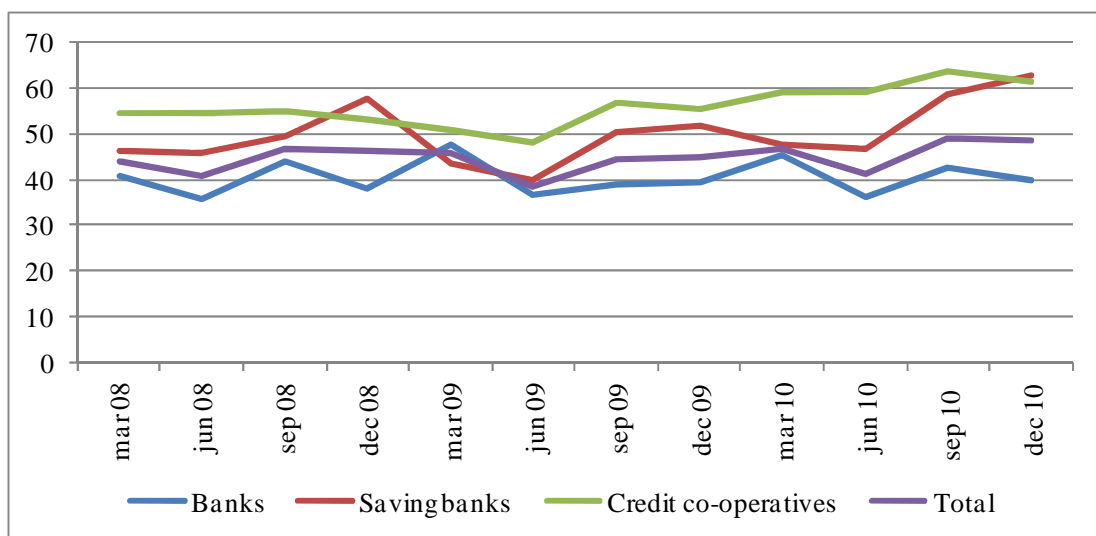
The decomposition of cost efficiency into their technical and allocative components showed that technical efficiency was remarkable, reaching *mean* values close to 100percent in some cases. Firms' performances were much closer than in the cost and revenues cases. On the other hand, allocative efficiency presented more instability, since it did not differ a great deal from technical efficiency at the beginning of the sample period, yet finished up being, on average, much lower.

As indicated, the efficiency was strongly associated with the productive employment of resources, i.e. the ability to produce at lower cost, and could be estimated both in banking and in any other companies, based on an established relationship between the products and the factors required for their achievement. The ratio "operating expenses over gross income" is considered an indicator of the efficiency of banks.

The Bank of Spain in its monthly Statistics Bulletin evaluates the efficiency of deposit institutions based on the results of that ratio. The banking output equates to gross income generated by the activity, as input and estimated operating expenses. In the case that the indicator of the efficiency ratio is set as a ratio between outputs and inputs, takes a conventional reverse sense. Therefore, the improvement of the efficiency is determined by the reduction of the ratio. Reducing the value of the ratio “operating expenses - gross income” is positive, reflecting either an increase in gross income above resulted in operating costs or more efficient use of operating costs in obtaining ordinary income. This estimator also allows comparison between the results of the entities in different countries.

The figure shows 85 the evolution of operating efficiency of Spanish deposit institutions between March 2008 and June 2011. Results indicate that the operating efficiency ratio of commercial bank is higher than the rest of the deposit institutions. Moreover, this ratio has suffered a decline in June 2011 in relation to March 2008.

Figure 85. Evolution of Spanish bank efficiency (2008-2011)



Source: Banco de España, Statistic Bulletin



The operating efficiency ratio is also used by Maudos (2012). This author analyzes the evolution of productivity and management efficiency (operating efficiency) of Spanish banking system in the period 1999-2009. These values are compared with those in European countries and in other sectors of the economy. The study shows that the Spanish financial system is more productive than the European average and the level of output per employee is more than triple of the private sector of the economy. Furthermore, compared to the lower gains in productivity of the Spanish economy in the last decade, the Spanish financial system has increased productivity at a rapid pace except the most recent crisis period.

One of the sources of productivity gains is the more efficient use of productive resources. The most commonly used indicator of efficiency in managing is the bank's operating efficiency ratio. Therefore, the less resource required to generate a unit of gross margin the more efficient bank. The operating efficiency ratios from 1999 to 2010 for the banking sectors in the EU-15 indicate the high efficiency of the Spanish banking sector, and in 2010 the Spanish banking sector is the second (after Luxembourg) more efficient with a ratio of 45 percent against 61.7 percent on average in European banking. Moreover, in the years far this crisis, the Spanish banking sector has suffered fewer consequences in terms of efficiency. Thus, from 2007 to June 2010 its operating efficiency ratio has recovered after the loss of efficiency that took place in 2008 so that the current level is similar to then. In contrast, in the EU banking-15, the efficiency has worsened.

## PART III. RELATION OF FINANCIAL TO NON-FINANCIAL SECTOR

### 9. Macroeconomic policy context

Macro-economic policy has largely (notably in the decade or so before the financial crisis) become monetary policy (at the expense of fiscal policy), and monetary policy has often taken the form (most notably within the Economic and Monetary Union) of inflation targeting whereby an 'independent' Central Bank has the objective of attaining a low inflation target by using the policy interest rate. Of particular significance here is that macroeconomic policy is transmitted through the financial system (the monetary transmission mechanism) and the impact and effectiveness of the policy depends on the ways in which the financial system responds to changes in the policy interest rate. The effects of the policy interest rate change are intended to be felt through the spectrum of interest rates and credit conditions. An important consideration within EMU is the degree to which the financial conditions (interest rates, credit conditions) in member countries respond in a similar manner to a change in the interest rates set by the European Central Bank.

In this context, it is important to analyze how the policy interest rate set by the European Central Bank influences the interest rate applied by the financial system to their customers.

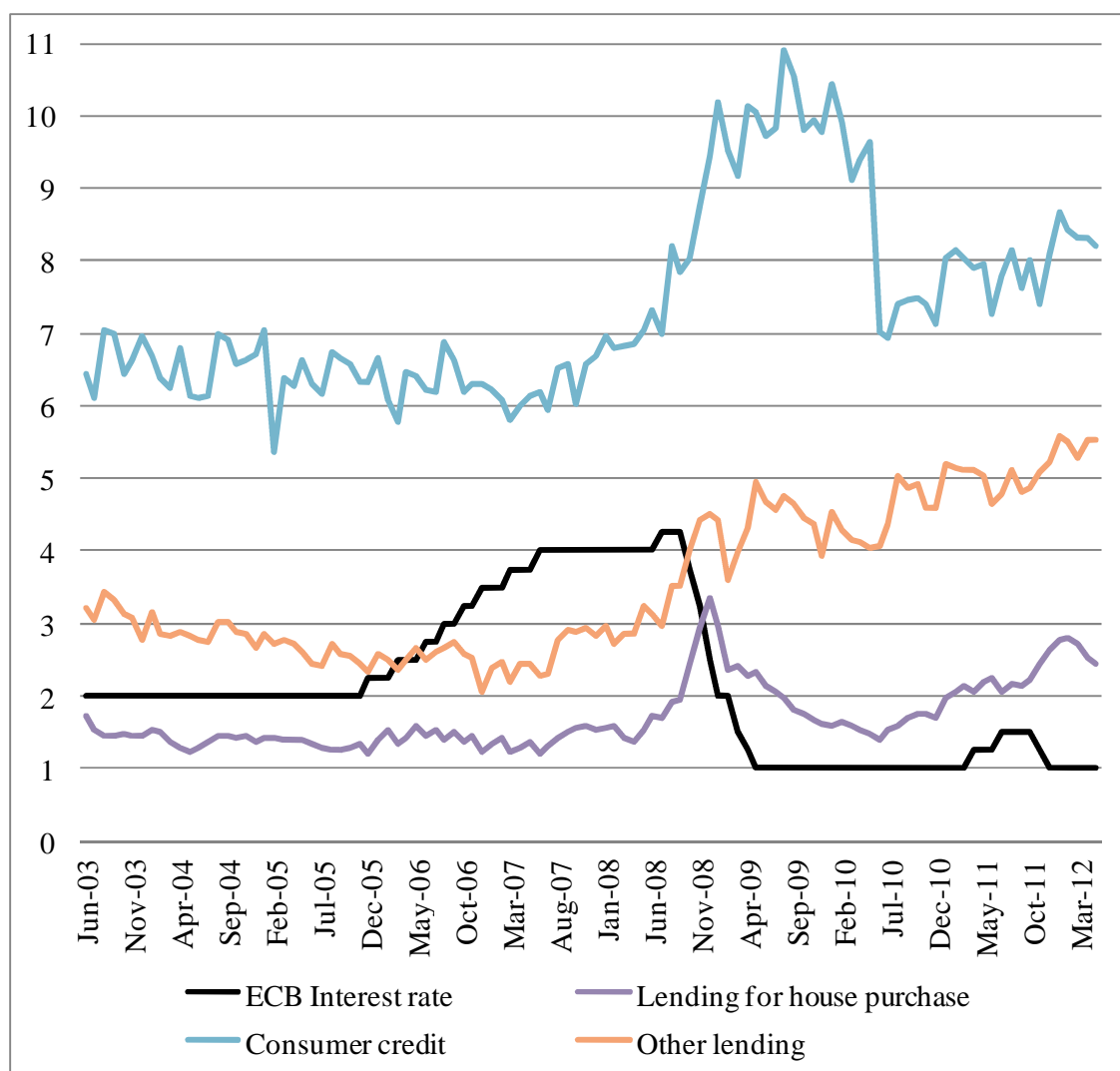
Since the Spanish credit system is the main source of funding for domestic agents, we will focus in this section in the study of the responses given by the Spanish credit system to the changes in the official interest rates approved by the European Central Bank. The source of data for this analysis is provided by the Bank of Spain, in its Statistical Bulletin<sup>29</sup>. Data included in this section refers to the interest rate applied to the new loans, in order to analyse how the

changes in the official interest rates affects to the interest rates applied to the new loans given by the monetary financial institutions to the non-financial private agents: non-financial corporations and households. Given the fact that deposit money institutions (that is, private banks, savings banks and credit co-operatives) have the lion's share of the credit institutions, we will focus on the interest rates of the former institutions.

The data are available since the year 2003. Though this involves that we have a short series, however, the conclusions we can reach from its study remain relevant since this is the period where takes place the majority of the increase in the borrowing of the Spanish private agents.

In the below figures we show, first, the ECB's official interest rate and, second, the spread between this interest rate and the interest rate applied by deposit money institutions to households and the non-financial corporations. In that way, we can see whether the monetary policy measures of the ECB are transmitted to the interest paid (credits) or received (deposits) by the customers of those institutions. Thus, we start from the assumption that the spread should remain constant (or change in the same direction) when the interest rate of the ECB is changed.

Figure 86. Spread between the ECB interest rate and the interest rate applied to households (percentage points)

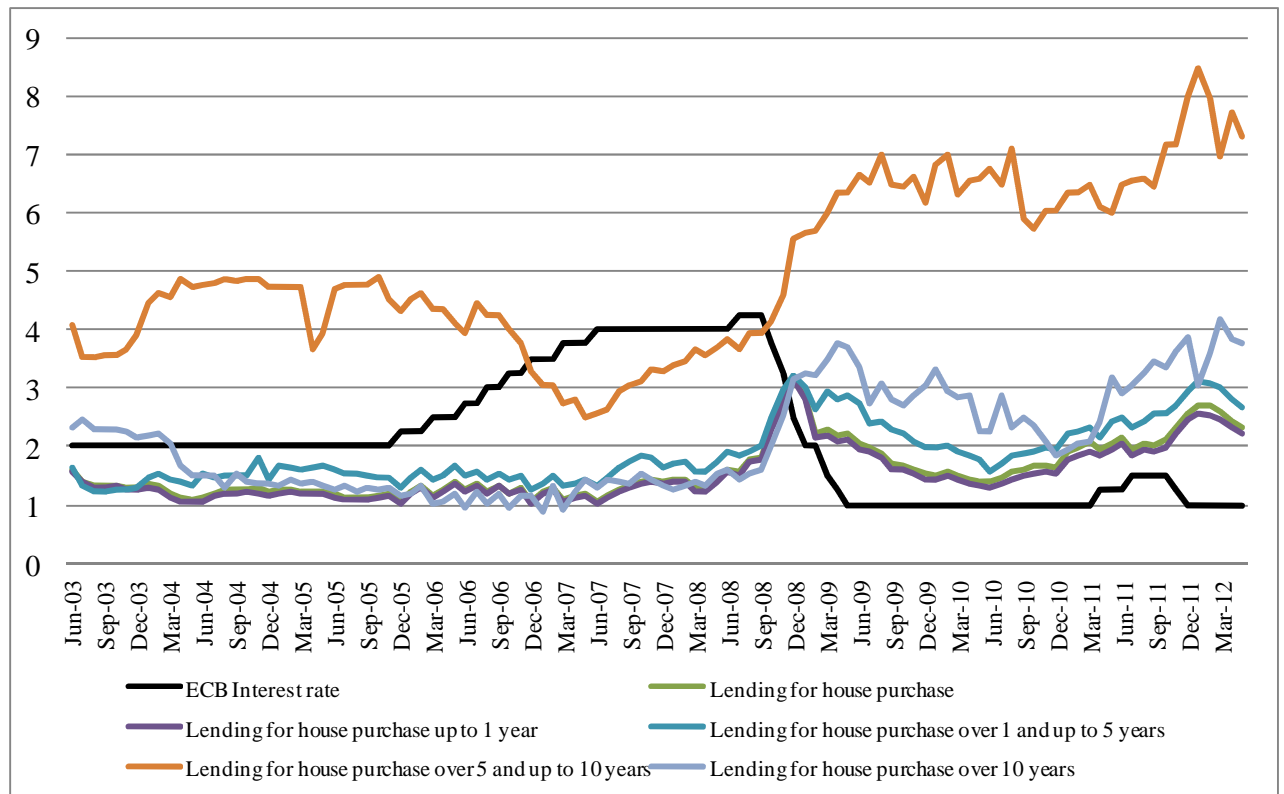


Source: Our calculations based on Bank of Spain, Boletín Estadístico, Interest rates (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest19.html>)

The figure 86 shows the evolution of the ECB interest rate and the interest applied by the Spanish banking institutions to households. As can be seen, until the summer of 2008, the changes in the ECB interest rates involved a similar change in the interest rate of lending to households: the spread remained with small changes. However, since that date the subsequent cuts in the ECB

interest rate have come with a higher spread, something that is noticeable in the case of the consumer credit and the lending for other purposes.

Figure 87. Spread between the ECB interest rate and the interest rate applied to lending for house purchase to households (percentage points)



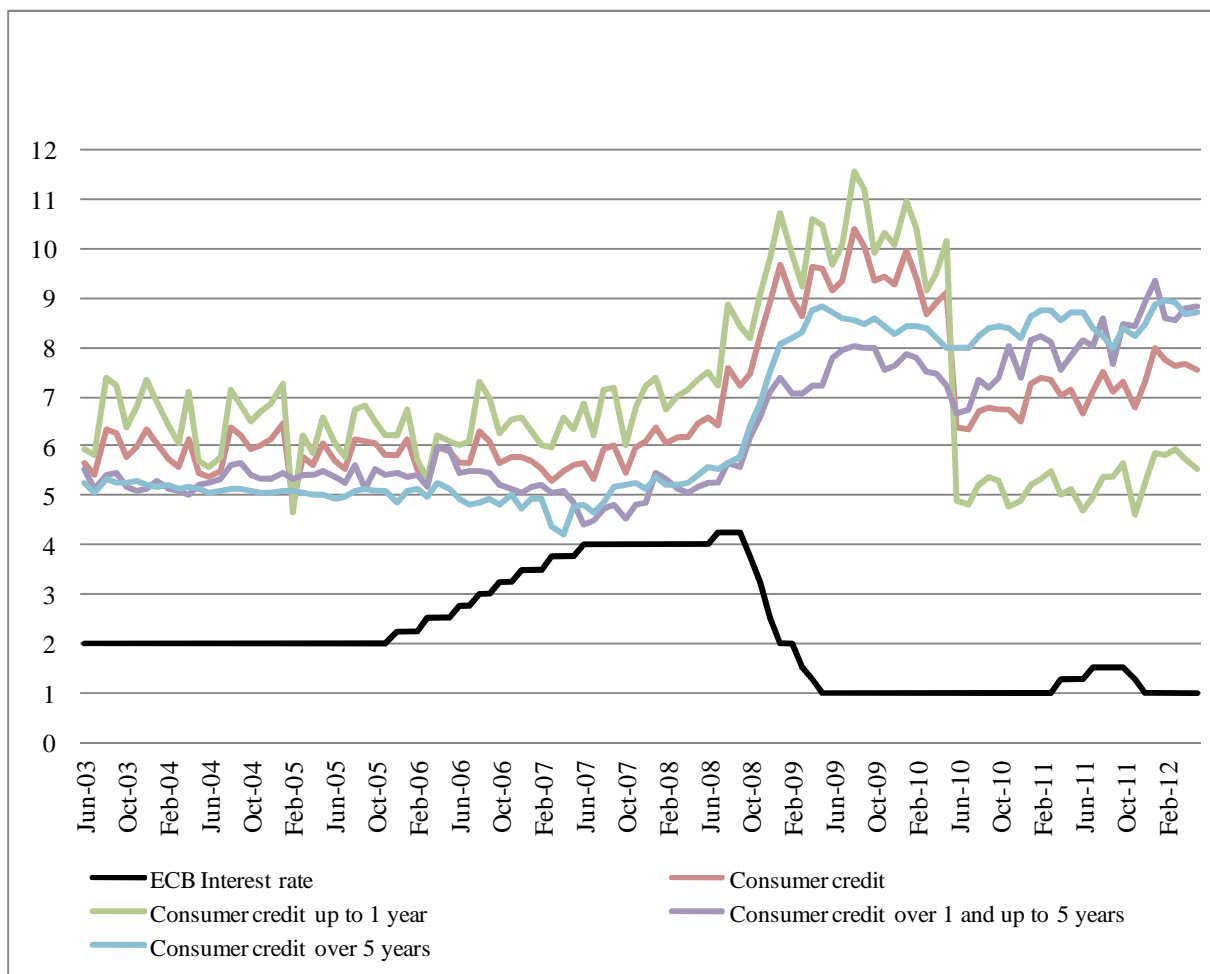
Source: Our calculations based on Bank of Spain, Boletín Estadístico, Interest rates (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest19.html>)

If we focus on the different kinds of lending to households, we can get a better view of the interest rate transmission channel of the ECB monetary policy. Thus, if we analyze the evolution of the interest rates applied to the lending for house purchase (see figure 87), we can see that the spread of the interest rates in the long-term lending for this purpose, the most relevant for the behavior of the families in their decision to purchase a house, that is, that over 5 years decreased before the burst of the financial crisis, thus helping to boost the borrowing of the Spanish households and fuelling the real estate bubble.

However, this pattern changed drastically after 2007, when the spread reached unparalleled levels, again mainly in the long-term lending for house purchase, what in turn helps to understand the burst of the bubble and the drastic fall in the new lending for house purchase.

In the case of the consumer credit (see figure 86), like in the case of the lending for house purchase, the spread of the interest rate applied to these lending against the ECB interest rate, remained quite constant until the burst of the financial crisis in the summer of 2008. Since then, the spreads increased dramatically, mainly in the case of the shorter-term credits, those up to 1 year. However, in May 2010, the spreads of the credits up to 1 year fell substantially, and since then they are below the spreads of the longer-term credits.

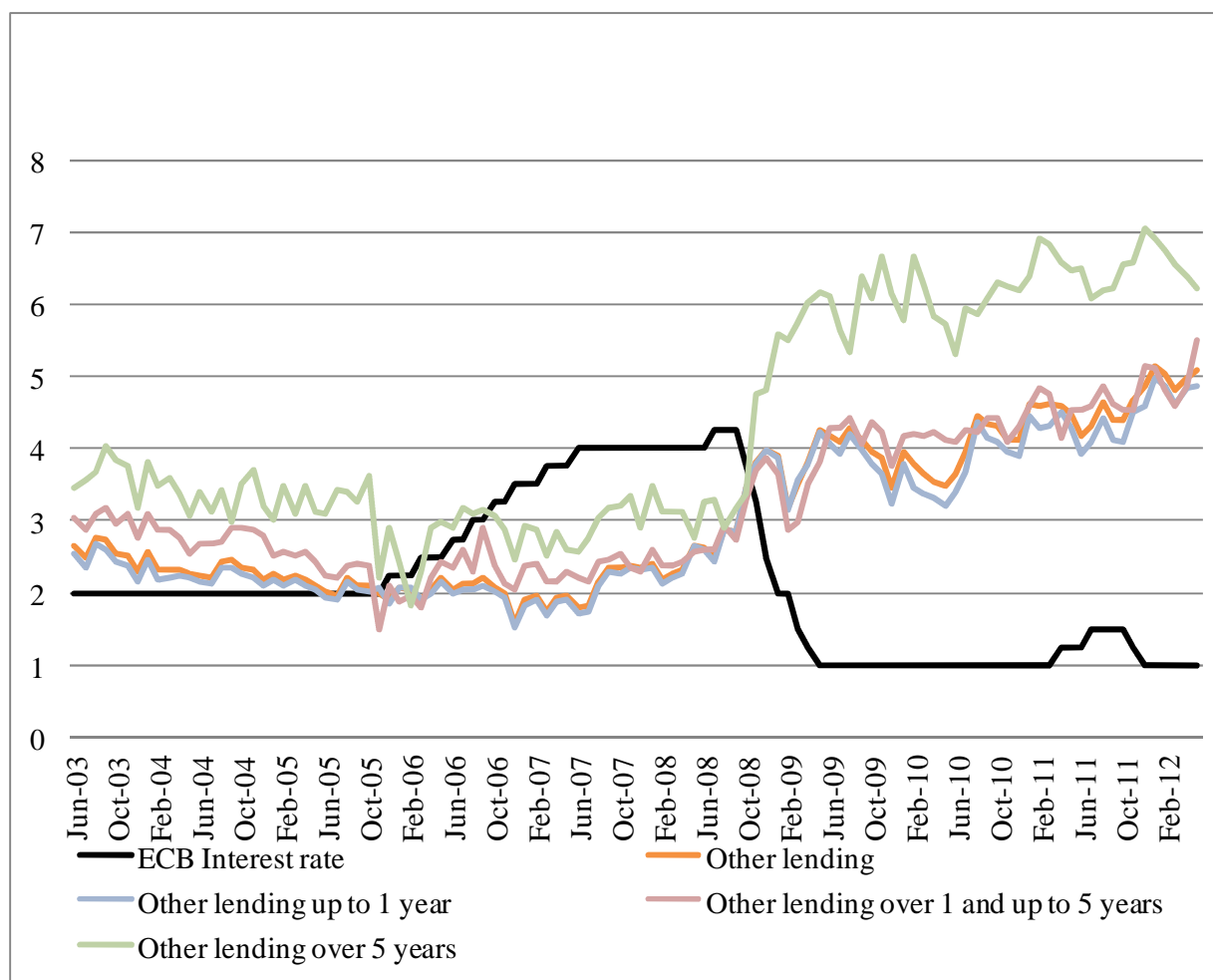
Figure 88. Spread between the ECB interest rate and the interest rate applied to consumer credit to households (percentage points)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Interest rates (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest19.html>)

Finally, in the case of the lending for other purposes (figure 89), the spreads against the ECB interest rates declined for all terms until 2007. Since then, it began to rise, mainly since the year 2008. This climbing in the spreads mainly affected, like in the case of the lending for house purchase to the longer-term lending.

Figure 89. Spread between the ECB interest rate and the interest rate applied to other lending to households (percentage points)

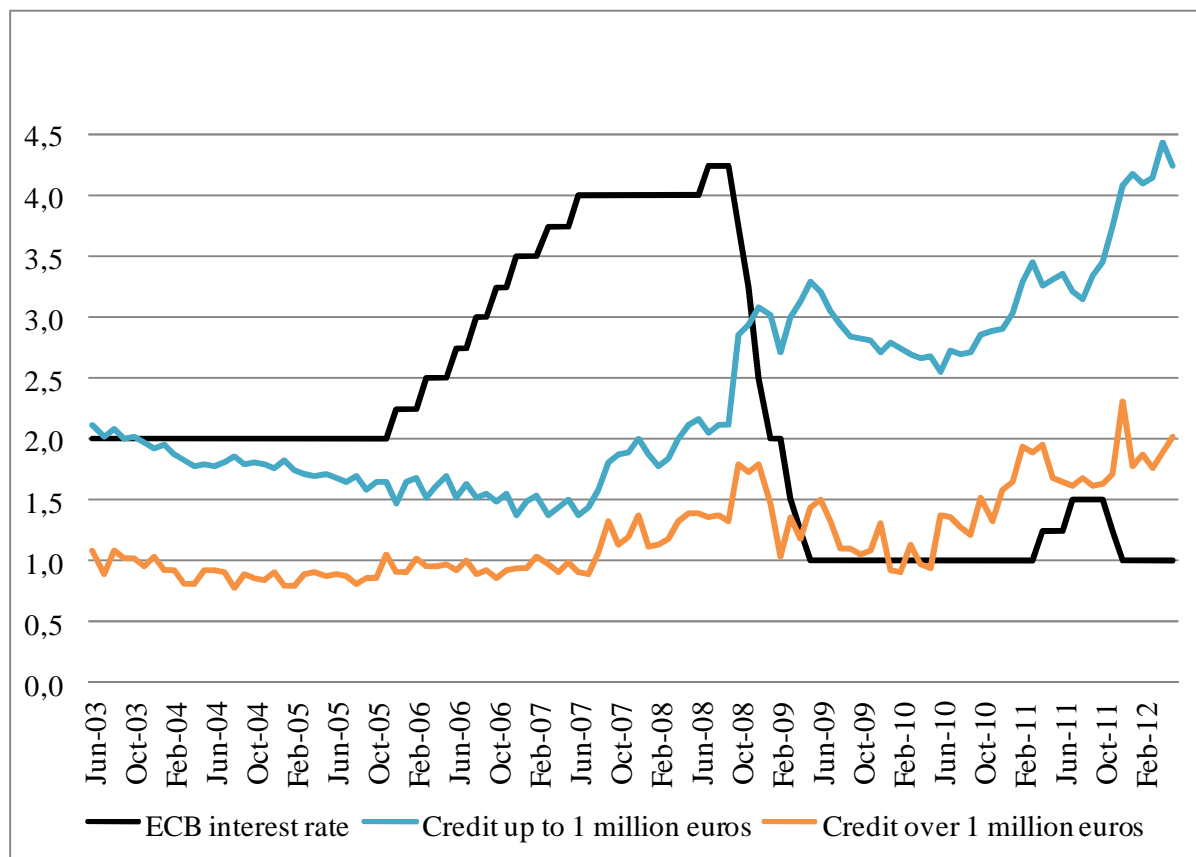


Source: Our calculations based on Bank of Spain, Boletín Estadístico, Interest rates (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest19.html>)

The following figures show, in a similar vein, the evolution of that spread, but now, corresponding to the interest rate applied by the money deposit institutions to the non-financial corporations. Now, the information supplied by the Bank of Spain is related to the term-structure of the credits and the amount of the credits, dividing the credits between those up to and over 1 million euros.



Figure 90. Spread between the ECB interest rate and the interest rate applied to non-financial corporations (percentage points)



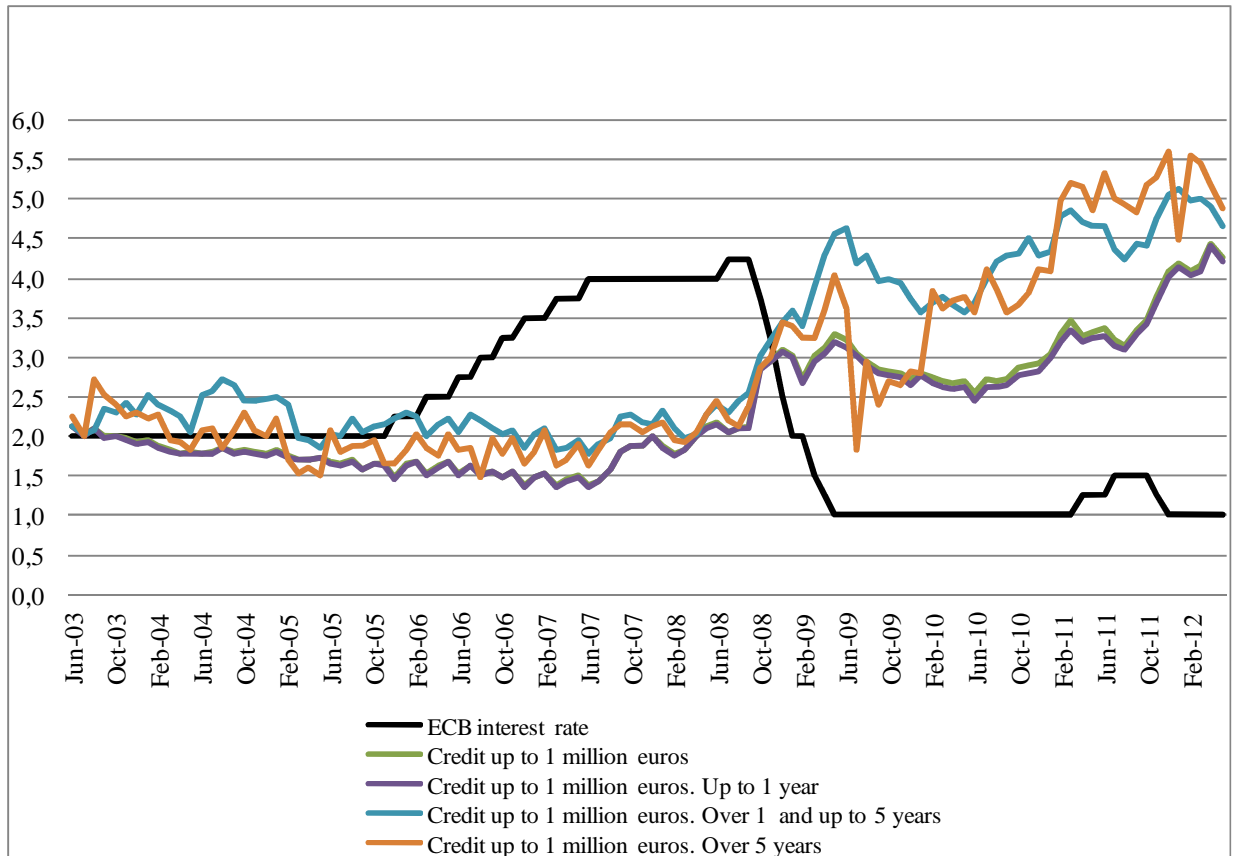
Source: Our calculations based on Bank of Spain, Boletín Estadístico, Interest rates (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest19.html>)

As figure 90 shows, in the case of the credits to non-financial corporations with the smaller size, that is, up to 1 million euros, the credit dominating at the sub-sector of the small and medium size firms, until mid- 2007 the spread of the interest rate against the ECB interest rates registered a decline above 0.5 percentage points. It is especially relevant that, until November 2005, this decline involved a fall in the nominal absolute interest rate applied to these operations. That fall finished in the summer of 2007, when a climbing in the spread began. As a result, in 2012 the absolute interest rates applied to these credits were well above the interest rate at the beginning of the analyzed period, although slightly below that registered in mid-2008.

In the case of the credits over 1 million euros, their spread remained nearly unchanged until 2007, when they began to rise. Since then, the spread has increased in 1 percentage points. Therefore, the interest rates of these credits are well below that registered at the onset of the crisis.

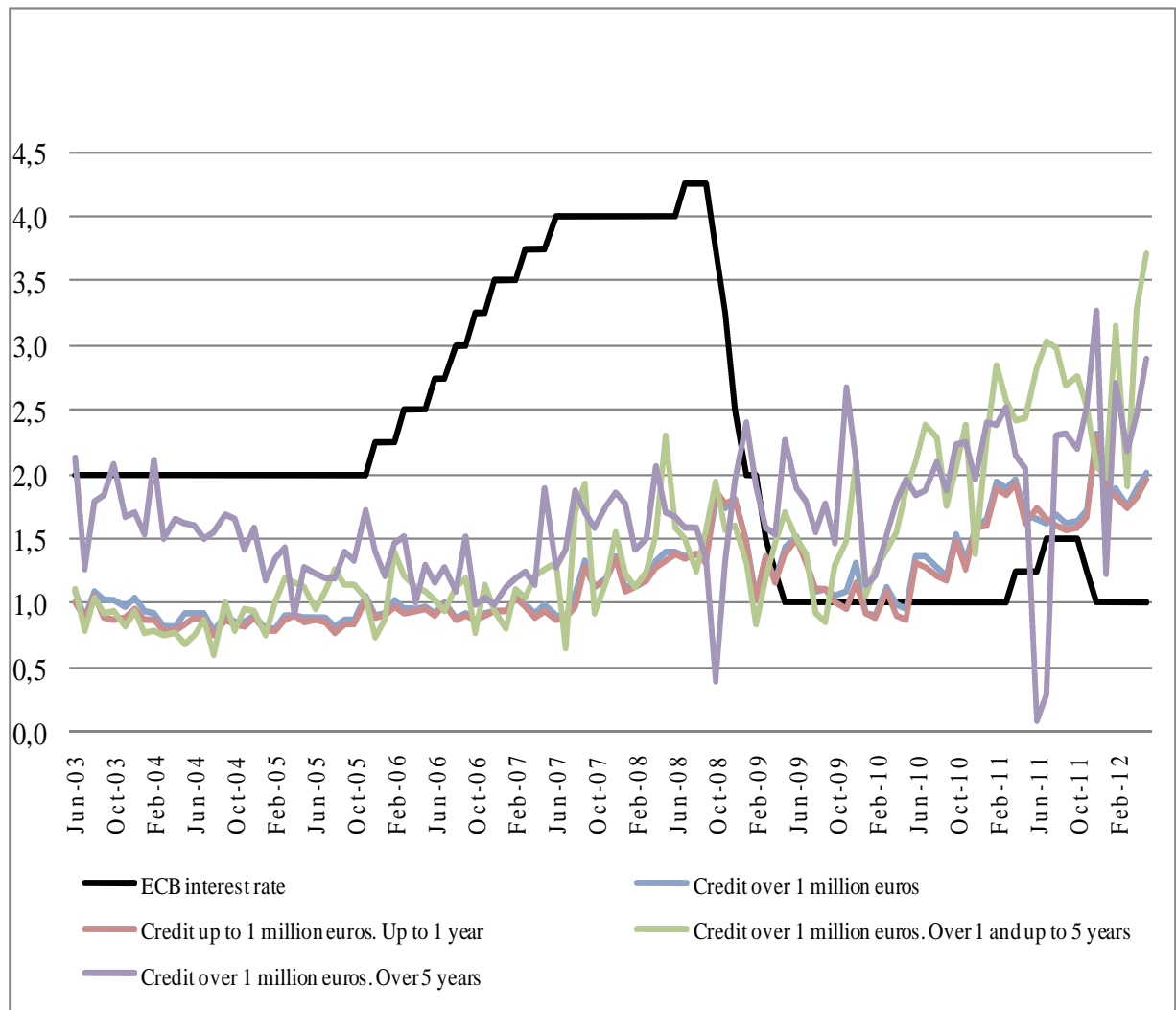
It is important to notice the different evolution of the credits to non-financial corporations according to the amount of the credit and, consequently, in an indirect way, the different impact of the financial crisis on the large and small and medium non-financial firms. Thus, it is clear that the larger impact of the crisis has fallen on the small and medium size, whose conditions in the access to the banking credit have worsened dramatically with the crisis, whilst the larger corporations have been less affected by the crisis.

Figure 91. Spread between the ECB interest rate and the interest rate applied to non-financial corporations in the credit up to 1 million euros (percentage points)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Interest rates (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest19.html>)

Figure 92. Spread between the ECB interest rate and the interest rate applied to non-financial corporations in the credit over 1 million euros (percentage points)



Source: Our calculations based on Bank of Spain, Boletín Estadístico, Interest rates (available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest19.html>)

The figures 91 and 92 divide the credits by the amount of the credit and the term structure of the credits. A common pattern in both figures is that since the crisis the difference among the spreads of the longer and the shorter term of the credits have widened, showing a rising difficulty (and cost) in the access of non-financial firms to long-term funding for these activities, something that affects mainly to the funding of investments.

## 10. Source of funds for business investment

### 10.1 Introduction

A critical aspect for the setting-up, success and development of companies is their access to external financing at a reasonable cost using financial instruments that are adapted to the features of their business. In this sphere of activity it can be stated that small and medium enterprises (SMEs) tend to experience more problems than large companies, owing to the greater difficulty on the part of financing institutions in assessing their credit risk. This situation has been aggravated by the current economic crisis which, on the one hand, has increased their external financing requirements and, on the other, has made conditions of access to such financing more stringent.

The evolution and standpoints regarding conditions of access to the financing of Spanish non-financial corporations, especially small and medium-sized enterprises, given their major weight within the Spanish business fabric, is now analysed. In Spain, companies with less than 250 workers account for nearly 78 percent of employment in the non-financial sector and 68 percent of added value (Pérez García et al. 2011). The following have been used to carry out this study: data and survey provided by the National Statistics Institute regarding Spanish non-financial corporations as a whole and that provided by the European Central Bank for SMEs, *Survey on the Access to Finance of SMEs in the Euro Area*, which has been issued since 2009.

Prior to getting underway with this analysis, the financial structure of Spanish corporations is first examined together with their level of indebtedness over the last few decades. Data obtained from the Central Balance Sheet Data Office of

the Bank of Spain (Banco de España) and financial accounts has been used for such purposes.

## 10.2 Structure of Spanish corporate financing

An analysis of the structure of non-financial corporate liabilities provides evidence about the importance of external resources in corporate financing.

Table 8 shows the structure of the liabilities of Spanish corporations classified according to size. It shows that external financing is the main resource available to companies, with the relative importance of short-term resources being the highest one

Table 8. Evolution of the structure of Spanish liabilities, 2000-2010 (percent)

	Small			Medium			Large		
	2000	2007	2010	2000	2007	2010	2000	2007	2010
I. EQUITY	38	42	47	41	40	42	38	34	36
II .EXTERNAL FINANCIAL RESOURCES	62	57	52	57	59	55	55	63	61
- Long term	17	18	17	13	18	18	24	28	30
- Short term	45	39	35	44	41	37	32	34	31
III. ALLOWANCES	1	1	1	1	1	3	6	4	3
LIABILITIES	100	100	100	100	100	100	100	100	100

Source: Banco de España, Central Balance Sheet Data Office.

According to the company size, the large companies have the highest percentage of external resources (61 percent). They have increased their

external resources in 6 percentage points from 2000 to 2010. Small companies show in 2010 slightly lower ratios than those of medium-sized ones: 52 percent and 55 percent, respectively.

Furthermore, it is clear to see that the use of external financing started to fall in the wake of the crisis in favour of self-financing, especially in the case of small enterprises. Likewise, in the case of SMEs, short-term external resources had greater weight than those of larger size. In the case of the latter, use of long-term resources increased to the detriment of short-term ones.

In accordance with data provided by the Central Balance Sheet Data Office of the Banco de España, over 60 percent of liabilities pertaining to non-financial corporations are financial liabilities.

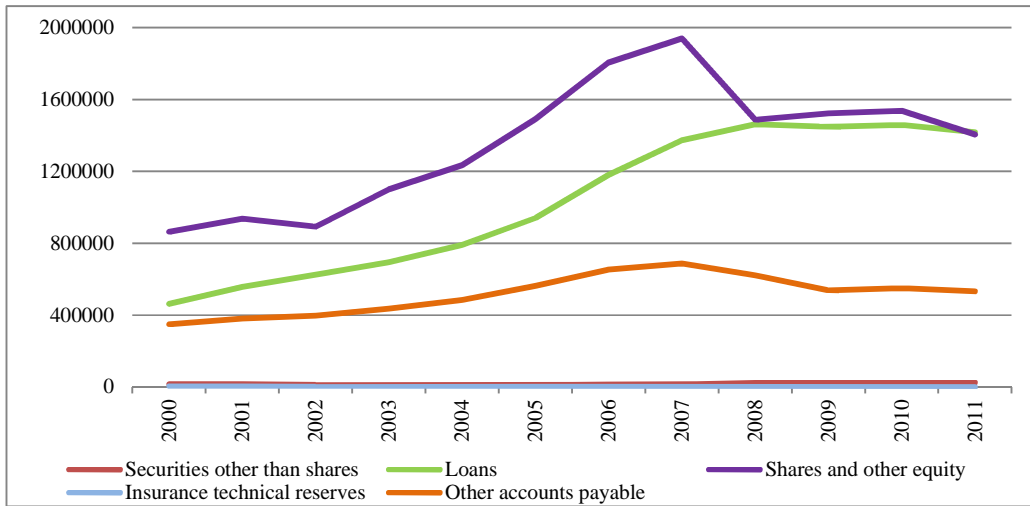
The evolution of financial liabilities of corporations is shown in figure 74 and table 9, with a distinction being drawn according to the type of instrument and sector of origin. It can be seen that liabilities enjoyed continual growth until 2007, when they started to fall. As far as the instruments in which non-financial corporate indebtedness is in evidence, attention should be drawn to shares and other shareholding stakes.

Notwithstanding the aforementioned, the relative importance of loans has increased in recent years, accounting for a similar rate to that of variable rate securities (40 to 42 percent).

Non-financial corporate indebtedness has essentially been with financial institutions (32 percent), although in the years prior to the crisis the main source of financing was the sector itself (36 to 38 percent). External financing dependency increased throughout the period, accounting for 25.2 percent of total financial liabilities in 2011. Conversely, that of households and non-profit-

making institutions (IPSFL) fell to the point of accounting for 10percent of the debt acquired by non-financial corporations.

Figure 93. Non-financial corporations. Evolution of outstanding liabilities (EUR millions)



Source: Authors' elaboration based on Banco de España. Financial accounts.



Table 9. Non-financial corporations. Structure of outstanding financial liabilities (percent)

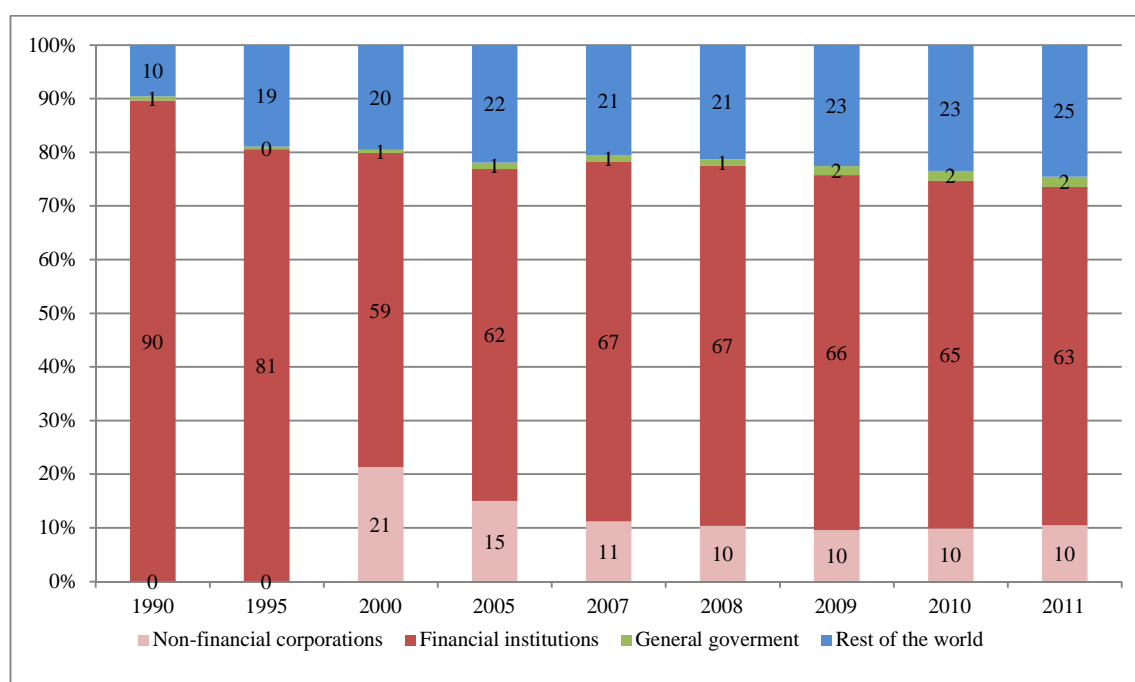
	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011
I. ACCORDING TO INSTRUMENTS										
Securities other than shares	6.1	3.0	0.9	0.4	0.4	0.4	0.7	0.7	0.6	0.7
Loans	30.6	25.0	27.3	31.3	32.3	34.2	40.7	41.0	40.9	41.9
Shares and other equity	29.6	45.4	50.9	49.5	49.4	48.3	41.4	43.1	43.1	41.6
Insurance technical reserves	0.7	0.8	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Other accounts payable	33.0	25.8	20.5	18.7	17.9	17.1	17.3	15.2	15.4	15.8
II. ACCORDING TO COUNTERPART SECTOR										
Non-financial corporations	30.6	31.4	37.5	37.9	37.1	35.9	33.5	31.0	30.5	29.8
Financial institutions	33.0	26.3	25.3	24.8	26.5	28.0	32.2	33.0	32.3	32.0
General Government	3.9	4.5	2.9	2.7	2.5	2.4	2.7	3.0	2.9	3.4
Households and non-profit-making institutions	16.7	17.9	13.4	14.5	14.8	13.6	10.1	10.3	10.8	9.5
Rest of the world	15.8	19.9	20.8	20.1	19.1	20.1	21.5	22.6	23.4	25.2

Source: Authors' elaboration based on Banco de España. Financial accounts.

The loans received by non-financial corporations were of diverse origins. Figure 75 shows that loans derived mainly from banking institutions (63 percent) in

2011. These institutions have lost their relevance since 1990, when they supplied 90 percent of loans. The relative proportion of loans granted by other companies also increased during the period under analysis, to the extent of accounting for 25 percent of total loans to non-financial corporations in 2011. This is followed, albeit a long way behind, by loans provided by the rest of the world (10 percent). Loans from public administrative bodies barely accounted for 2 percent and increased their share in the wake of the crisis. In this last-mentioned case, special mention should be made of the fact that the percentage of companies – especially SMEs – that applied for credit from the Official Credit Institute (ICO) increased.

Figure 94. Loans to non-financial corporations by the counterpart sector



Source: Authors' elaboration based on Banco de España. Financial accounts.

### 10.3 Corporate indebtedness

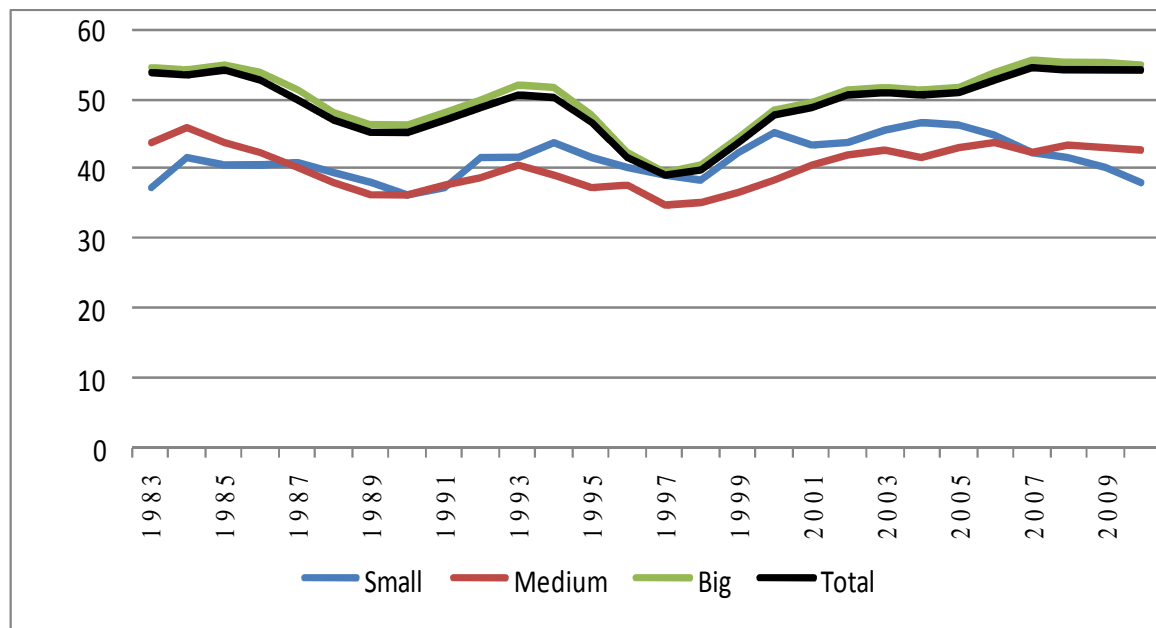
The expansion of corporate financial liabilities during the decade of the nineties and until 2007 was a widespread phenomenon in most European countries and

especially in Spain. As a result, levels of indebtedness for the corporate sector reached high levels.

Different indicators can be used to measure levels of indebtedness. The most commonly-used ratios are the debt to asset ratio (which provides information about the percentage of the balance sheet financed by stockholder equity), financial burden (the interest payment coefficient in terms of the debt acquired), and the debt to gross profit (which measures the capacity to repay debt using generated income). High levels of these ratios indicate company vulnerability by suggesting excessive dependency on external funds or high percentages of profit set aside for the payment of debts.

Levels of indebtedness of Spanish companies are examined for the period 1983-2010 in this study, using data obtained from the Central Balance Sheet Data Office of the Banco de España. The first of the indicators referred to – i.e. the structure of the balance sheet (debt to asset ratio) indicates that the indebtedness ratio for the total number of non-financial corporations continued to pursue two markedly different trends: a decreasing trend from the initial years until 1996 or 1997, with drops of over 10 percentage points, and the other, which commenced after this turning point, showed an obvious increase in the indebtedness rate (see figure 95). In the latter period, not only were initial levels recorded in the 80s attained, but actually exceeded by nearly one percentage point. However, SMEs have reduced their indebtedness ratio in recent years as a result of the crisis.

Figure 95. Cost to net asset debt ratio



Source: Authors' elaboration based on Central Balance Sheet Data Office, Banco de España

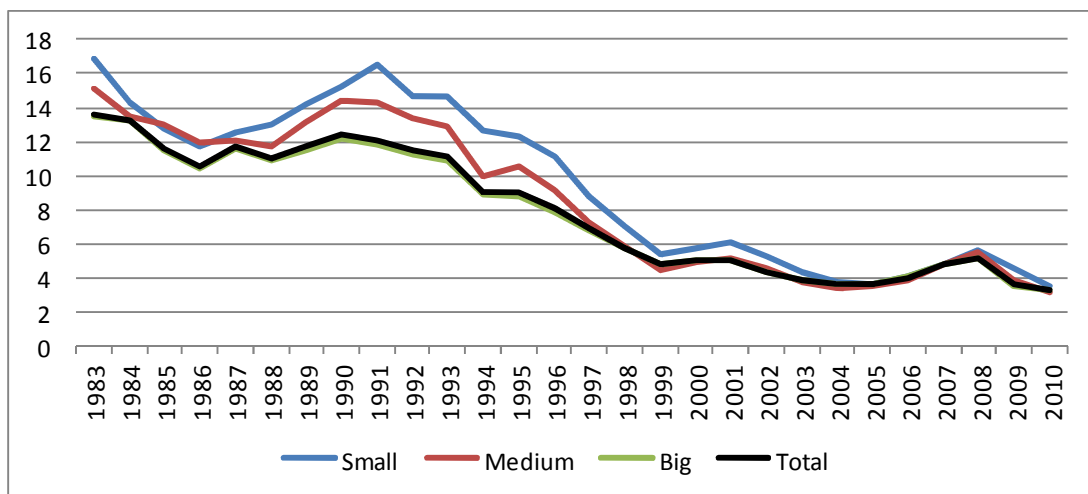
As regards differences in evolution of indebtedness according to size of companies in general, large corporations evidenced a higher indebtedness rate and also greater variations than other companies, i.e. small and medium-sized enterprises. Indeed, one aspect that characterizes SME indebtedness is its limited variability. Indebtedness ratios did not exceed 45.8 percent in the case of medium-sized enterprises in 1984 as a maximum limit or drop below 35.2 percent in 1996. A similar situation may explain the behaviour of the indebtedness ratio of smaller-sized enterprises. This data suggests less sensitivity on the part of the latter to changes within the milieu (Salas et al, 2010).

The second indicator that measures the level of indebtedness is the evolution of financial cost as part of the cost of capital. Real mean cost is calculated as the interest coefficient of external financing as a corporate debt to cost ratio. Broadly speaking, the evolution showed by the total number of companies

which, as we can see, is linked to the evolution of large corporations, took the form of a sharp drop in the real mean cost of financing during the period 1983-2010 (see figure 96). This drop ceased during the period from 2006 to 2008 when costs showed an increasing trend that situated them above the 5.2 percent ratio. However, the ratio started to fall again when the crisis started.

Once again, major fluctuations in their evolution were in evidence in the real mean costs of financing SMEs. Furthermore, SMEs evidenced higher mean costs than those of large corporations. Thus, in 1992 the percentage of the real mean cost of financing small enterprises was 16.5 percent as opposed to 14.1 percent in the case of medium-sized enterprises and 12.1 percent in the case of large corporations. The situation changed after 2004, when the real mean cost for some companies was practically the same and the aforementioned evolution continued.

Figure 96. Real average cost of financing



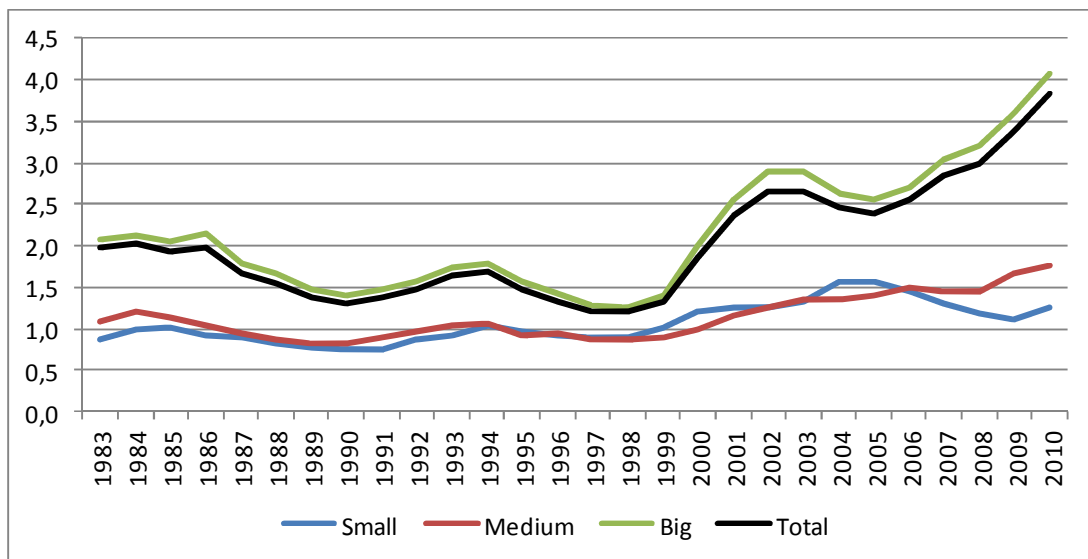
Source: Authors' elaboration based on Central Balance Sheet Data Office, Banco de España

Generally speaking, it can be stated that the evolution of the real mean cost of debt continued to evidence a profile opposed to that shown by the indebtedness

ratio measured as a debt to asset ratio, although their evolution proved to be similar in the wake of the crisis.

Lastly, the third indicator shows the evolution of the debt to cost/added value ratio with companies (figure 97). Among corporations as a whole, the debt to added value ratio fell from 2 percent to 1.2 percent between the early 80s and 1998. It would subsequently increase, attaining a debt level that represented 3.8 times added value. The debt ratio of SMEs was significantly lower. Once again attention should be drawn to the limited variability of the indicator shown in SMEs during the period under analysis – indeed, levels at the beginning and end of the period were 1.1percent and 1.8percent respectively in the case of medium-sized companies. As for small enterprises, levels were between 0.9 percent in 1983 and 1.3 percent in 2010.

Figure 97. Debt to cost/added value ratio



Source: Central Balance Sheet Data Office, Banco de España. Put together by the author

The previous analysis carried out according to the size of Spanish companies supports the fact that there were significant differences in terms of their level

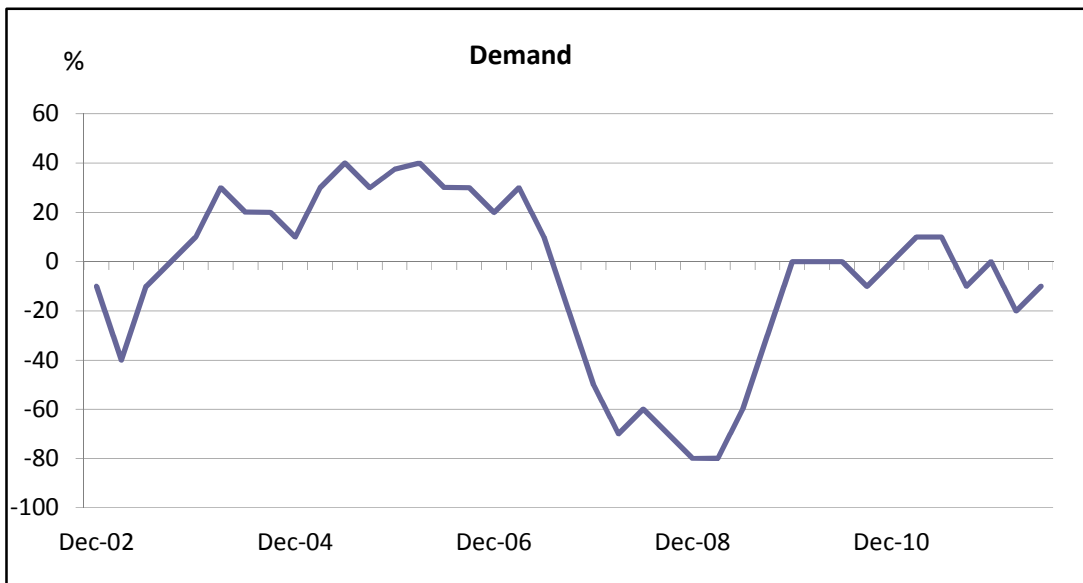
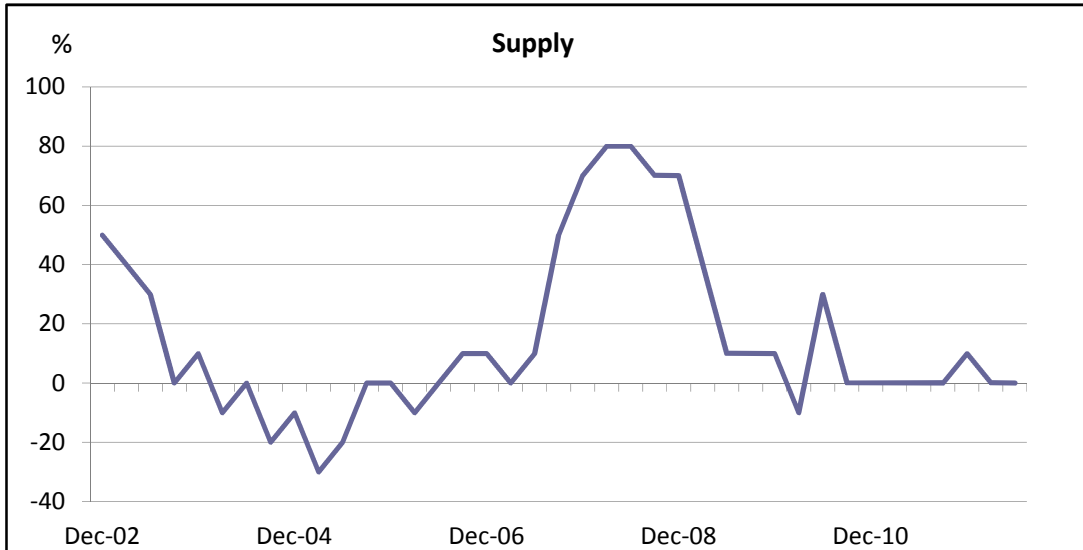
of indebtedness. On average, small enterprises tend to be less indebted than large ones. However, there are studies, such as that carried out by Jodar-Rosell and Martínez Carrascal (2012), which show that the level of indebtedness depends on the branch of activity in question. This study shows that small enterprises belonging to the manufacturing and trade sectors were more indebted than large ones; in contrast, small enterprises from the services or construction sectors were less indebted.

Companies had been embarking on a deleverage process since 2007, with this process being less marked in the case of SMEs. The reduction in levels of indebtedness can be explained mainly by the lesser demand for financing, due to lower levels of economic activity, less investment and greater retaining of profits, and greater restrictions regarding available financing.

As regards this last-mentioned aspect, it should be pointed out that indeed the financial crisis has had a profound effect on bank financing channels. On the one hand, the banks found it more difficult to access credit on inter-bank markets owing to the crisis, whereby the lack of liquidity translated into a reduction in their credit activity. In accordance with the results of the survey regarding bank loans issued by the Banco de España, banking institutions made the criteria for approval of credit destined for corporations more stringent, as shown in the top panel of figure 79, which reflects banks' opinion about the conditions governing access to credit. These conditions became stabilized in 2010, although they continue to be more stringent than prior to the crisis. On the other hand, the demand for credit by companies dropped considerably after 2007. Demand has recovered to a certain extent since 2010, which can be explained by the need to finance stocks and current capital while the demand for credit set aside for financing investment in capital goods and corporate merger and takeover operations increased in 2011. The demand for funds

destined for restructuring debt also rose, which showed that companies were taking advantage of low interest rates to renew loans at lower cost.

Figure 98. Survey regarding loans banks. Credit for companies



Source: Banco de España. Data until the first quarter of 2012.

Supply: an increase/decrease in the rate indicates a toughening/relaxing of access to credit in comparison to the previous quarter.

Demand: an increase/decrease indicates an increase/decrease in demand for credit by non-financial corporations. Indicator = percent of institutions that indicate a considerable increase x 1 + percent of institutions that indicate a certain increase x 1/2 - percent of institutions that indicate a certain decrease x 1/2 - percent of institutions that indicate a considerable decrease x 1.



## 10.4 Access to external financing

Company size affects access to external financing. On the one hand, obtaining external financing requires being able to pass on accurate information regarding management capacity and the value of assets, in addition to the capacity to offer additional guarantees. In this respect, size is important as markets have little information about small enterprises: neither do their contracts tend to be public nor do they issue publicly-quoted securities. Another factor that explains the difficulties facing small enterprises in accessing external financing is the high costs of some external financing instruments that make their use for low-volume transactions prohibitive. As a result, SMEs are turning increasingly to self-financing, and when size increases, external financing tends to gain prominence. Bank credit plays a key role within external financing sources for SMEs, whereas financing via capital markets – whether via the issuing of fixed income securities or by attracting new shareholders – is very limited. These financing instruments steadily gain weight as the size of the company grows.

Two representative surveys are analysed in order to examine the difficulties in gaining access to external financing experienced by companies. The first is provided by the National Statistics Institute (INE) and the second by the European Commission's DG Enterprise and Industry, in cooperation with the European Central Bank (ECB). The latter refers exclusively to SMEs.

The *Survey on Access to Corporate Financing* carried out by the National Statistics Institute (INE) provides information about the problems and limitations companies experience to be able to access financing. It analyses the different alternatives and types of financing, and assesses their situation in 2010 and the changes compared to the situation in 2007.

This survey highlights the fact that access to financing by Spanish companies has been made considerably difficult as a result of the current crisis. Table 10 reveals the fact that there has been a slight increase in companies with a need to access financing owing to the crisis, although it shows major variations in terms of their success in actually being granted it. As regards financial loans, 38 percent of companies turned to this type of financing in 2010. Of these, 25.2 percent failed in their attempt to obtain a loan, which means an increase of 15.4 percentage points in comparison to 2007. The percentage of companies that confirm having been fully successful in obtaining financial loans in 2010 was greater: 50.6 percent of companies as opposed to 80.3 percent in 2007. Worse was the evolution of capital financing (informal investors, venture capital funds - private equity and venture capital - etc.), which 5.9 percent of companies turned to, with over half of them failing in the attempt. However, in 2007 the percentage failure was 18.6 percent. Lastly, one in every three companies applied for some other type of financing (account overdrafts, credit lines, leasing and supplier credit), with a 62.7 percent success rate as opposed to 81.2 percent in 2007.

Table 10: Indicators for access to financing by Spanish companies (percent of companies)

Types of financing	Need for financing		Degree of success					
	2010	2007	2010			2007		
			Total	Partial <sup>(a)</sup>	Failed	Total	Partial <sup>(a)</sup>	Failed
Financial loans	38.0	36.3	50.6	24.2	25.2	80.3	10.0	9.8
Capital financing	5.9	4.4	32.6	15.7	51.7	70.2	11.2	18.6
Other sources	32.8	30.6	62.7	20.1	17.2	81.2	12.9	5.9

Source: INE

Note: the options shown are not exclusive.

(a) Not all financing requested was obtained or was not obtained under the conditions desired.

The reasons why financial loans were prevented from being obtained or made difficult to obtain are shown in Table 11. The main reasons given by banks and other sources of financing for either partially or totally turning down applications for loans to companies were the lack of guarantees or sufficient collateral<sup>30</sup> and the poor categorisation of their financial solvency. For their part, the main problems encountered by companies when trying to obtain loans were the high interest rates and the fact that other conditions attached to loans were deemed unacceptable. Generally speaking, it is noted that the reasons given were of similar intensity before and after the crisis, with the major reduction by 11.2 percentage points being the greatest variation observed. The latter refers to the lack of companies' own capital, which highlights the fact that companies had made a considerable effort to capitalize themselves as one of their responses to the less favourable financial environment they were facing at the time.

Table 11. Reasons why the granting of loans to companies was prevented or made difficult (percent)

	2010	2007
<b>BY BANKS AND OTHER FINANCIAL SOURCES</b>		
Insufficient guarantees or collateral	38.6	31.2
Limited financial solvency	36.9	39.5
Too much outstanding debt	35.5	32.6
Lack of own capital	12.2	23.3
Risky projects or projects of doubtful success	8.8	6.0
Other reasons	12.9	15.2
No reason given	35.5	32.6
<b>BY COMPANIES THEMSELVES</b>		
High interest rates	33.7	36.8
Other unacceptable conditions	26.3	26.6
Other reasons	7.7	7.4

Source: INE

Note: the options are not exclusive.

Table 12 contains the origin of financial loans, showing the major dependency on loans from financial institutions, which hardly varies with the crisis. In 2010, nearly 97percent of companies which sought financing via loans turned to the banks. The increase in percentage of companies that turned to non-banking credit highlights the fact that companies have tended to seek diversification of financial sources as a response to the crisis. 21.6percent applied for loans from owners and managers of the company itself, and 12.4percent from other companies.

Table 12 Origin of financial loans (percent)

	2010	2007
Banks	96.8	96.0
Company owners and managers	21.6	13.6
Other companies	12.4	6.8
Other company employees	9.4	4.7
Family members, friends and other persons outside the company	9.1	5.1
Other sources	6.4	5.6

Source: INE

Note: the options are not exclusive.

The survey also shows the difficulties faced by companies in obtaining financing. 60 percent of companies considered the willingness of banks to provide financing to have worsened since 2007. Likewise, over half considered that the economic cost of obtaining financing had increased and that their financial situation had worsened. On the other hand, companies stated that the main factors that would limit their growth over the coming years would be the general economic outlook (87.2 percent of companies), the reduction in demand

on domestic markets (70 percent) and price competition (59.4 percent). One in four thought that their future growth would be affected by insufficient financing.

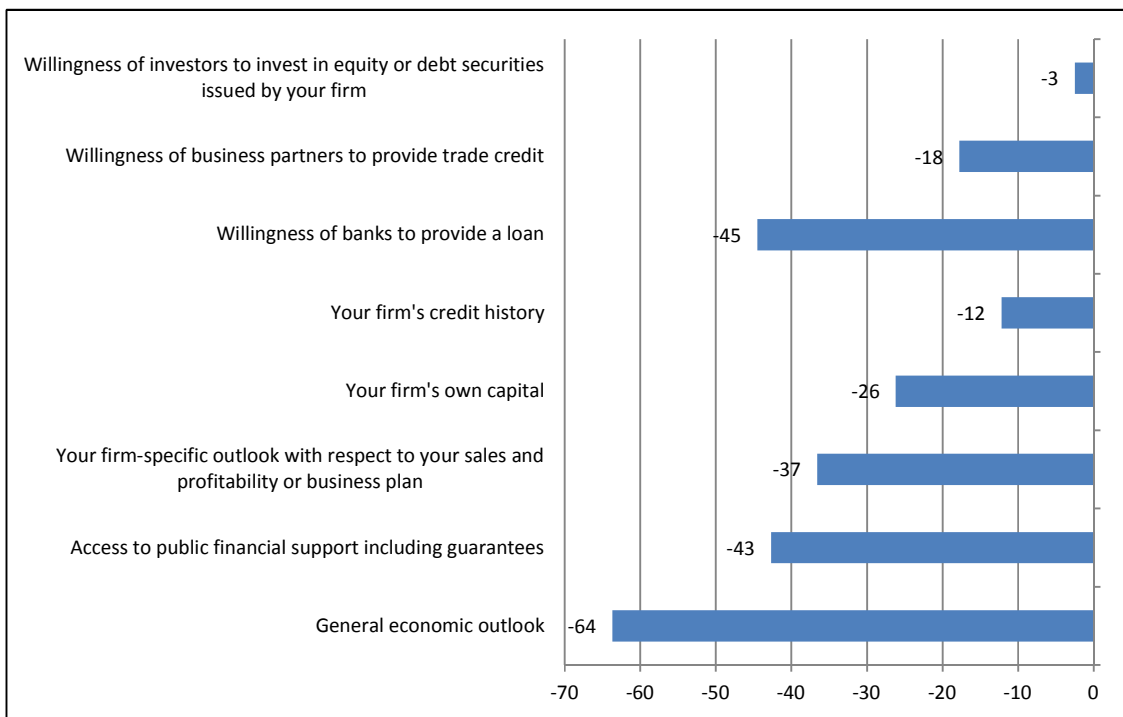
The *SME Access to Finance* survey<sup>31</sup> carried out by the European Commission's DG Enterprise and Industry, in cooperation with the European Central Bank (ECB): data regarding the 2011 survey and in some cases that of 2009 will be taken into consideration.

According to the survey, 15 percent of EU companies in 2011 pointed out that access to financing was the main problem they faced, whereas in Spain the figure was 24 percent. If we compare this data to that of the year 2009, it can be seen that access to financing now took on greater importance, especially in Spain – indeed, it rose from 23 percent in 2009 to 24 percent in 2011. In contrast, the trend in the EU was the opposite. Despite this being one of the major challenges facing Europe, as we have already noted, it fell from 16 percent in 2009 to 15 percent in 2011. The search for customers was another major concern shared by entrepreneurs, and 24 percent of EU companies considered this to be their main problem, with the percentage in Spain rising to 29 percent.

Below is shown the opinion of Spanish SMEs as regards which factors they considered most relevant for the purpose of accessing external financing. To this end and in line with what we have done so far, we will take into account the survey from both 2009 and 2011. The data taken into consideration is the net result after subtracting the percentage of companies that considered the factor about which they had an opinion had improved and those that think it had worsened. With this in mind, in 2009 79 percent of entrepreneurs answered that the general economic outlook had worsened in comparison to the previous six months. 56 percent thought that sales and profit forecasts for their companies had worsened. Likewise, 52 percent were of the opinion that conditions imposed

by banks to provide credit had become more stringent. During 2011, the net percentages obtained in the survey regarding these factors had improved in comparative terms except in that regarding access to public financing. The percentage in both cases was 43percent.

Figure 99. The availability of external financing depends on various factors, Spain 2011



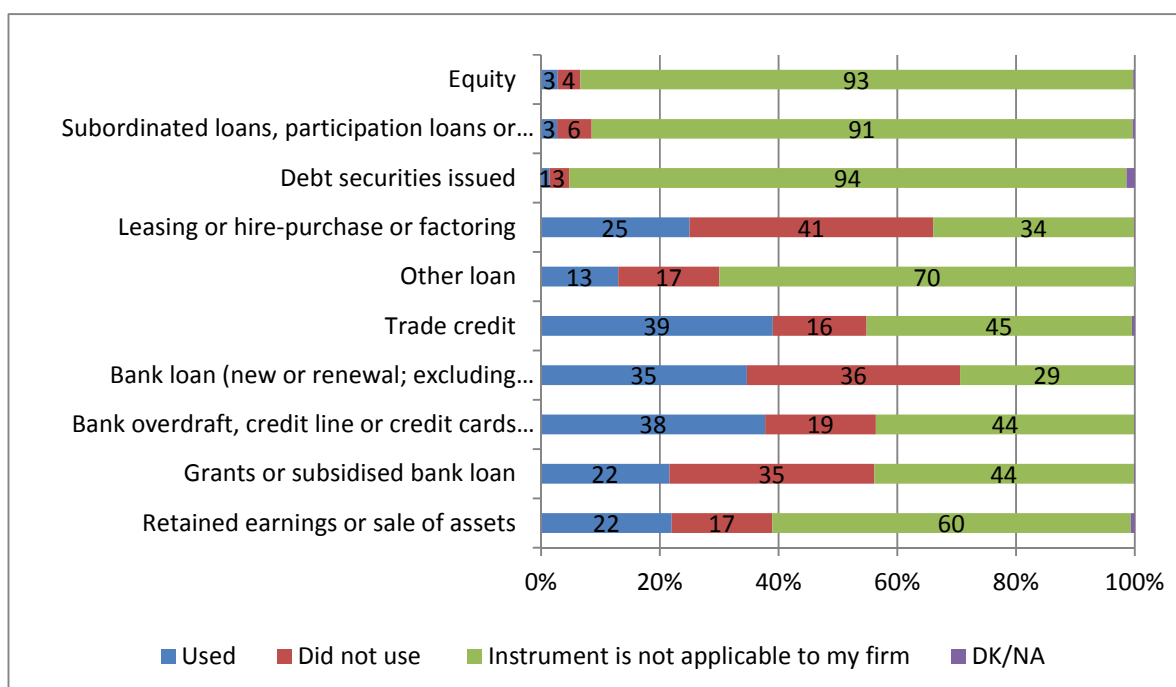
Source: European Central Bank. SME access to finance, 2011.

As regards the EU, 2011 data shows that a large percentage of entrepreneurs – 60 percent - pointed out that the general economic outlook had worsened over the previous six months, whereas only 9 percent were of the opinion that it had improved.

Regarding their opinion about future sales and profits for their company, they appeared more optimistic. 38 percent believed that their situation had worsened over the previous months, whereas 41 percent thought that the situation remained unchanged. 16percent even pointed out that it had improved.

In terms of the main sources of financing used over the last six months of 2011 by Spanish SMEs (figure 100), attention should be drawn among the rest to bank credit lines, bank overdrafts, credit instruments and leasing – in short, financial banking instruments. Conversely, 93 percent of entrepreneurs pointed out that stakes in their equity were not deemed to be an instrument applicable to their company. The same occurs with retained earnings or sale of assets.

Figure 100. Sources of financing used in your firm during the past 6 months. Spain 2011



Source: Central European Bank. SME access to finance, 2011.

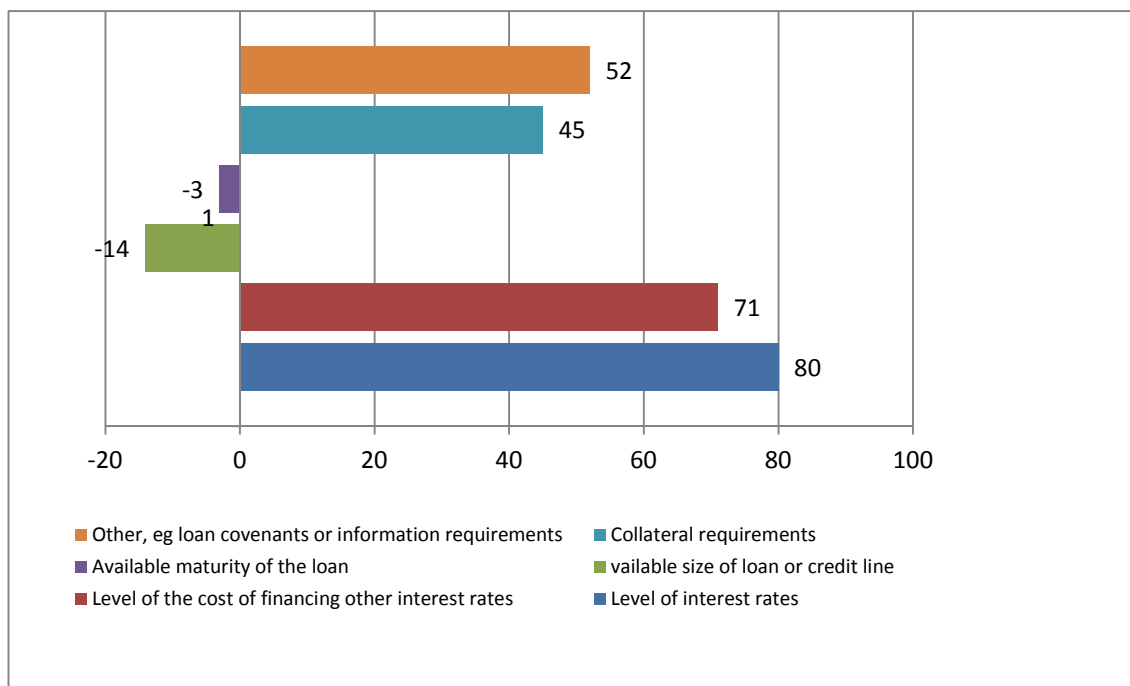
The companies that had requested bank loans over the last six months were asked to assess the changes that had taken place with regard to the conditions imposed for accessing such financing. 52 percent of EU entrepreneurs who applied for bank credit in the last six months answered that interest rates had been raised by their bank during that period, whereas in Spain the same percentage rises to 80 percent.

Generally speaking, SMEs both in the EU and Spain considered that bank financing conditions had worsened during the previous six months in 2009 and 2011 (see figure 101). This perception was seen to be particularly more intense in Spain and had worsened in 2011 in comparison to 2009. Specifically, if the net percentage of entrepreneurs who thought that financing costs apart from interest rates (commission, fees) had increased was 47.5 percent in 2009, the ratio had risen by 2011 to 71.1 percent. Conversely, as far as the availability of credit was concerned, if in 2009 the net percentage of entrepreneurs who thought it had worsened was 33 percent, this had dropped to 14 percent by 2011. In general, 48.4 percent was the net percentage of entrepreneurs who thought that the time needed for approval of the guarantees required for loans in 2009 had worsened. By 2011, this figure had risen to 52.2 percent.

The same concepts assessed by EU entrepreneurs produced lower ratios than those recorded in Spain, although in both cases they adopted a more pessimistic attitude in 2011 than in 2009. By way of example, 52 percent thought that interest rates had increased in 2011 as opposed to 32 percent in 2009. We note the same with other types of cost such as commission and other fees, and thus the percentage of entrepreneurs who were of the opinion that they had been raised by the banks was 36 percent in 2009 as opposed to 48 percent in 2011. As regards collateral requirements, 28 percent of entrepreneurs thought in 2009 that they had increased in the previous six months as opposed to 33 percent in 2011.



Figure 101. Terms and condition of bank financing (including bank loans, overdraft and credit lines). Spain 2011



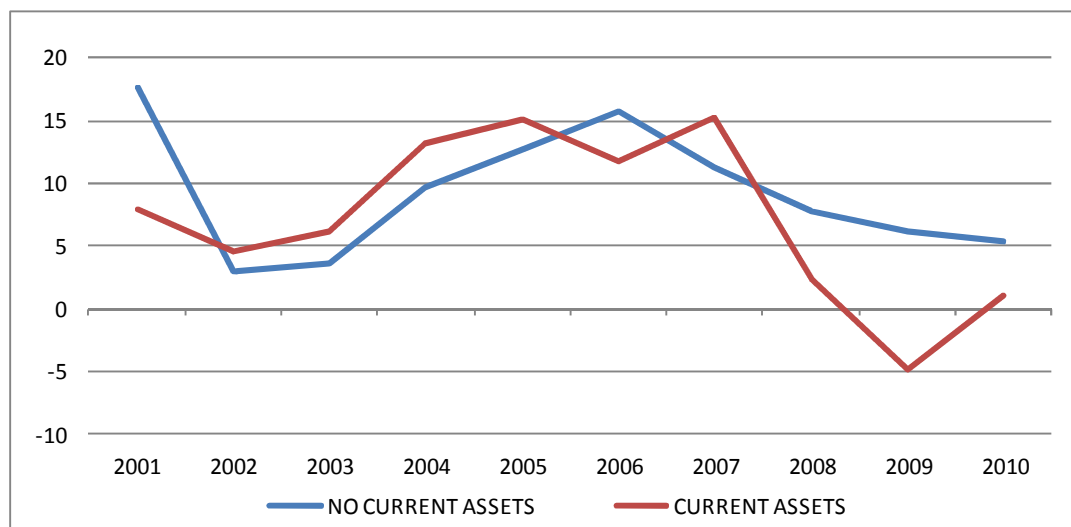
Source: Central European Bank. SME access to finance, 2011.

### 10.5. Structure and investor behaviour of Spanish business

The growing indebtedness of Spanish non-financial corporations was the result of the major continual growth in the volume of investment they made. Variations noted in the volume of fixed and current assets constitute an indicator of the intensity of this investment cycle. Figure 102 reveals that both and current and non-current assets evidenced positive growth rates over the whole period under analysis, with the exception of the year 2009, when current assets decreased. On the other hand, the crisis that commenced in 2007 marked a turning point. Thus, assets grew annually at a rate close to 15 percent during the immediately preceding years, slowing down in subsequent years. It can also be seen that non-current or fixed assets evidenced higher growth rates than those of current assets - a reverse in trends noted in the pre-crisis years.

Within non-current assets, investment in tangible fixed assets grew at a noticeably more moderate rate than investment in intangibles (research and development, intellectual property, commercial fund...) and long-term financial investments. As for current assets, attention should be drawn to the greater increases in stocks and cash and equivalent liquid assets.

Figure 102. Evolution of assets. Annual variation rates (percent)



Source: Authors' elaboration based on Banco de España, Central Balance Sheet Data Office

From this evolution, Table 13 shows the changes noted in investment structure and financing of Spanish business. As regards investment structure, it can be seen that fixed assets increased by 4.5 percentage points out of total assets as a consequence of the investment reactivating process in the last decade, until the point of accounting for 67 percent. However, its weight fell mainly on long-term financial investment (40.6 percent of total assets in 2010), which grew in percentage terms to the detriment of tangible fixed assets (32.8 percent).

Table 13. Asset structure (expressed as a percentage)

Item	2000	2005	2006	2007	2008	2009	2010
I. NON-CURRENT ASSETS	62.8	62.6	63.5	62.6	63.8	66.3	67.2
1. Intangible fixed assets	2.0	2.3	3.2	2.8	3.0	3.1	3.1
2. Tangible fixed assets and property investment	27.9	25.4	23.7	23.0	23.1	23.5	23.6
3. Long-term financial investments	32.9	34.9	36.6	36.8	37.8	39.7	40.6
II. CURRENT ASSETS	37.2	37.4	36.5	37.4	36.2	33.7	32.8
1. Non-current assets retained for sale	0.0	0.0	0.0	0.0	0.7	0.3	0.3
2. Stocks	6.4	7.7	8.5	8.6	7.7	6.8	6.6
3. Commercial debtors and other accounts to be charged	17.4	17.1	16.6	16.3	14.3	14.0	13.4
4. Short-term financial investments	11.9	10.8	9.6	10.5	9.7	8.5	9.0
5. Cash and other equivalent liquid assets	1.4	1.6	1.8	1.8	3.7	4.0	3.3
6. Adjustments due to accruals	0.2	0.2	0.1	0.1	0.1	0.1	0.1
TOTAL ASSETS	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Banco de España, Central Balance Sheet Data Office. Put together by the author

For their part, current assets lost relative importance – a loss which fell essentially on commercial debtors and other accounts to be charged associated with operating costs, as well as short-term financial investment. Cash and other liquid assets was the only item within current assets that increased its prominence among assets as a whole, rising from 1.4 percent to 3.3 percent.

## 11. Culture and norms

### 11.1 Introduction

The issue of culture and norms, as pointed out in the terms of reference, has a large number of aspects that should be considered. First, the issue of the culture of the financial system itself. Second, the culture and norms fostered and created by the financial system. Third, the issue of the changes in everyday life and therefore culture and norms induced by financialisation. Fourth, there is the specific concern that finance has created a short-termism culture that has worked against long-term investment in industry. Fifth, there is the financialisation of public services. Sixth, the issue of the payments technology of society in itself and as a dominant provider of savings and credit facilities for households.

Additionally, as it is also pointed out in the terms of reference, these points should be considered or not depending on two different factors. On the one hand, they should be adapted to the particular country that is being analyzed. On the other hand, the analysis of the different points strongly depends on the literature and data available for the country.

In the case of Spain, all the points listed above could be discussed but for the point number five. In Spain, the health system is public and universal. As a consequence, people have not the necessity to pay for health services. This fact translates into the lack of necessity to change culture and norms concerning the public service. The same happens in the case of education. In Spain, scholars are financed by the government and, consequently, no change in their culture and norms is necessary a priori. On the other hand, lack of data prevents from analyzing first and second points of list above.

Consequently, the following pages offer an approach to each of the points listed above. In order to do so, the work is developed in the same order that points have been listed above. The last section contains the most important conclusions of the report.

## **11.2 Culture and norms: the case of Spain.**

### **11.2.1 Finance in everyday life**

The way in which finance has become a part of everyday life may be discussed on the light of the data published by the ECB on the use of credit cards, e-money, credit transfers, direct debits and cheques in the dataset “Payments and Settlement Systems Statistics”. In the following pages time series on the number and value (in euros) of this usage is presented and described.

Figure 84 describes the usage of different types of payment by number. Cards issued in Spain with a debit function have been increasingly used from a value equal to 612.429 millions in 2002 to 1062.295 millions in 2011. On the contrary, cards with an e-money function have been decreasingly used from 1.205 millions in 2002 to 0.147 millions in 2011. When all the cards are taken into account, the trend is also increasing from 1039.119 millions in 2002 to 2386.274 millions in 2011.

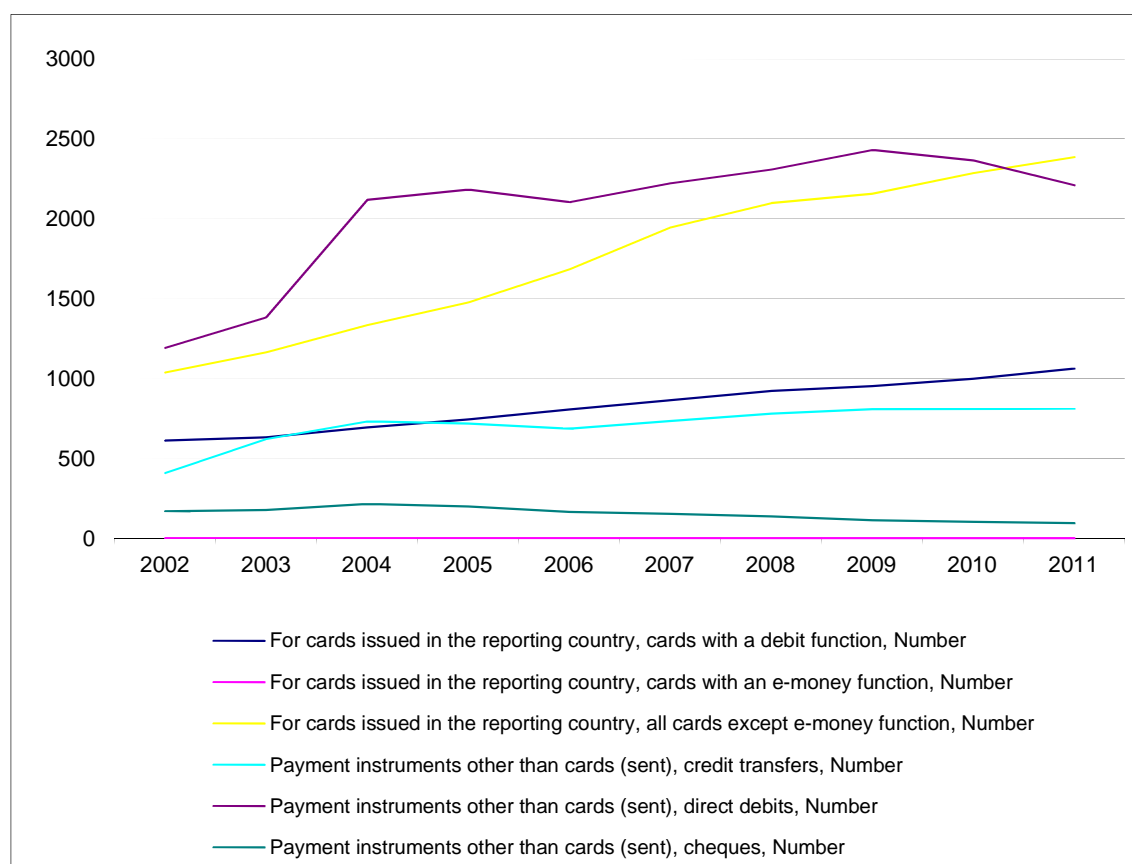
What credit transfers is concerned, the overall evolution through the period has been positive although in the period 2005 to 2006 it is observed an smooth decrease. As a consequence, three periods may be described. The first period, from 2002 to 2004 the number of this type of transfers increased from 409.6 million to 731.556 million. The second period, from 2005 to 2006 when the

number diminished to 684.625 million and, finally, the period from 2006 to 2011 when it increased until 812.342 million.

Direct debits<sup>32</sup> were kept almost constant in the first periods, that is to say, 2002 (1192.2 millions) and 2003 (1382.947 millions). The usage started to increase from 2004 (2118.146 millions) to the end of the period. The final value registered in 2011 reaches 2210.981 millions.

The usage of check as instrument of payment decreased when beginning and final periods are compared. However, the evolution has not been equal along the whole period. From 2002 to 2004 it increased from 168 to 214.418 millions. Afterwards the trend has been decreasing. As a consequence, the final value registered for the year 2011 is equal to 94.645 millions.

Figure 103. Number of payments done by type of payment in Spain.



Source: Author's elaboration from Payments and Settlement Systems Statistics data (ECB).

Figure 104 describes the usage of different types of payment according to the total value of the transactions in millions of euros. Cards with a debit function have been increasingly used from a value equal to 30574.219 millions of Euro in 2002 to 44873.9 millions in 2011. On the contrary, as when the usage is measured according to number occurs, the value of the usage of cards with an e-money function shows a declining trend. The starting value 4.62 millions of Euro in 2000 declined until 1.841 value in 2003. In 2004 a slight increase is registered (2.046 millions) to decrease again in 2005 and increase afterwards in 2006 (value 1.982 millions of Euro). From this moment on, the trend is clearly decreasing, more quickly at the beginning and slower at the end. The final value registered in 2011 is equal to 0.618 millions. When all the cards issued in Spain are taken into account except those with an e-money function, the trend observed is clearly increasing for the whole period except for the year 2009 in which the usage diminished. In the final period 2011 the value reached 107294.512 millions of Euro.

The usage of credit transfers in terms of value, presents an increasing trend for every each year of the whole period analyzed but for the last years. As a matter of fact, the starting value in 2002 is equal to 1563000 millions of Euro while the final value registered in 2011 is equal to 10597469.5 millions of Euro.

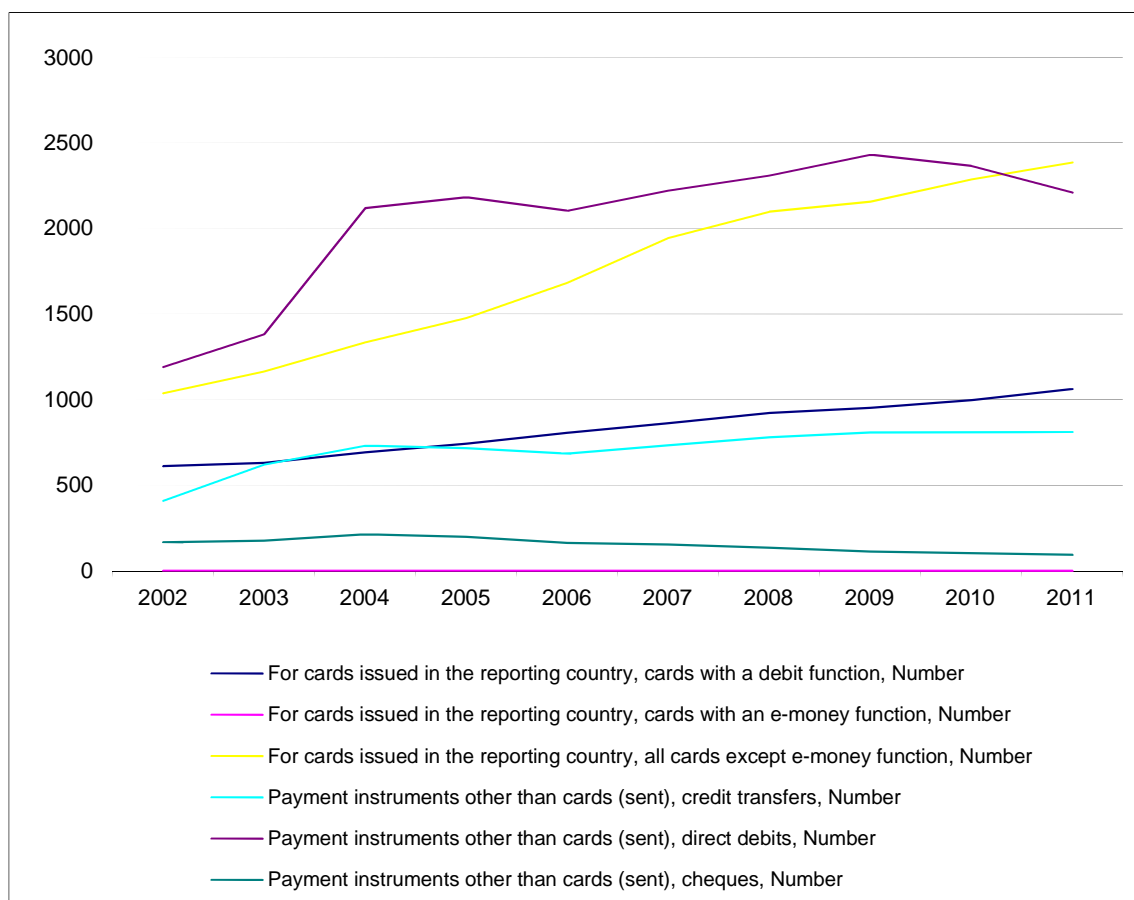
The value of the usage of Direct Debits has increased from 438200 millions of Euro in 2002 to 594407.397 millions of Euro in 2011. However the evolution has been unstable. More concretely, the trend has gone increasing and decreasing in cycles formed by 2 years in the vast majority of the cases.

Finally, the value of the usage of checks started increasing from 735800 millions of Euro in 2002 to 1053655.3 millions in 2003, and then it decreased in

2004 to again increase in 2005 and 2006 until value 957094.424 millions of Euro. From this year on, a quick decline is registered. The final value reached in 2011 is equal to 462102.469 millions of Euro.

In sum, in Spain financial habits and culture in everyday life has changed. While citizens tend to use more cards and credit transfers as well as direct debits checks has enter into disused.

Figure 104. Value of payments done by type of payment in Spain.



Source: Author's elaboration from Payments and Settlement Systems Statistics data (ECB)

### 11.2.2 Investment

The fourth point to be analyzed on a short-termism culture against long-term investment in industry can be addressed by using research undertaken by Mas,



Pérez and Uriel (2011). The research looks at real and nominal investment and their evolution over the period 1964 to 2011.

Real investment was relatively stable at the beginning of the period 1964-1985. In the mid of 1990's there was a huge expansion. This positive trend reached its maximum in 2007. Afterwards, as crisis goes ahead from 2007 to 2010, Fixed Capital Gross Formation undergoes major negative consequences. However, when the initial and final periods are compared, it is observed that real investment is, in 2010, six times the level of the year 1964.

Nominal investment increase has been dominated by two types of assets: *housing* and *other constructions*. Both show a huge increase until the crisis starts. In this moment, housing shows a profound and deeper diminution than the one showed by other constructions. The opposite position is held by investment on TICs, which in nominal terms, show a modest increase for the whole period as well as a modest decrease for the years after the crisis. However, when real investment is analyzed, the huge increase in the prices on housing together with the decrease of the prices of TICs allow to reach a very different conclusion. In the final period real investment in housing is just multiplied by 2.2 factor compared to the initial period while real investment in TIC assets in the period has been multiplied by 130 factor.

Capital stock in each type of asset in a given period of time depends on past investment flows and the related depreciation. Net capital stock along the period 1964-2010 shows that this type of capital did multiply by 5.5, being the period of higher increase that from 90's to the beginning of the crisis. From the capital stock existing in the year 2010, 45.4 percent is due to housing, another 42.2 percent to non residential private capital and the remaining 12.3 percent to public capital stock.

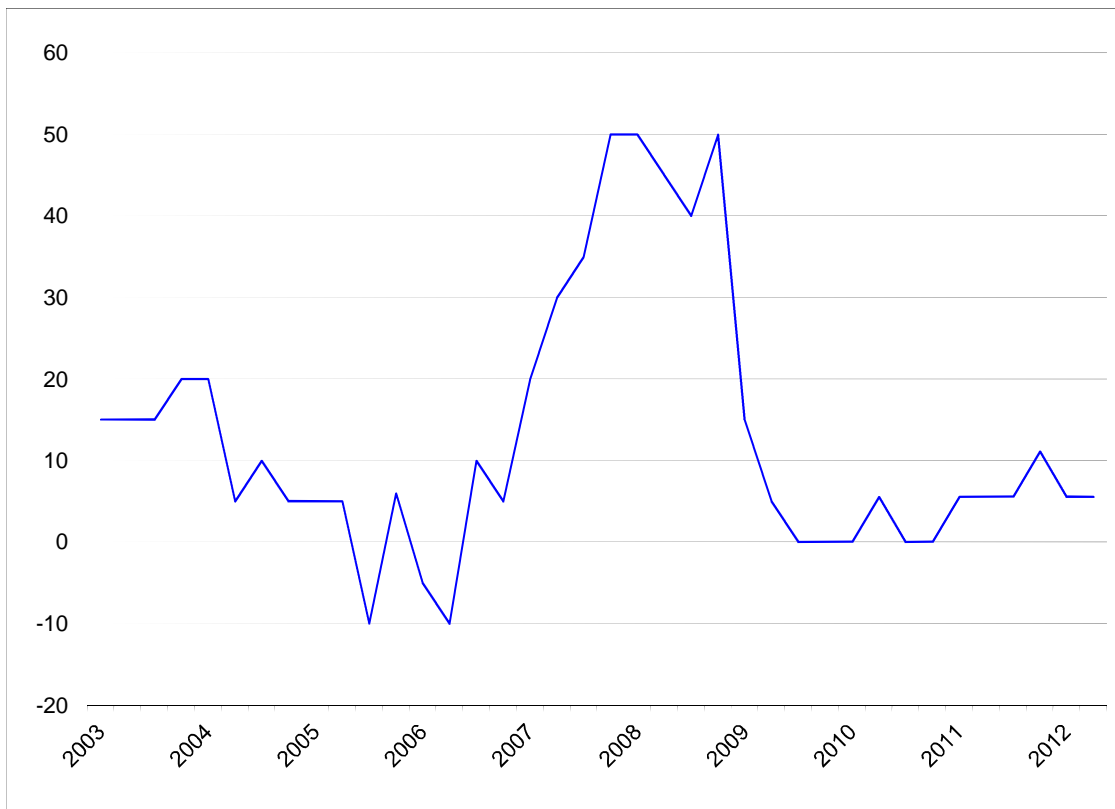
When the period before and after the crisis (1995-2010) is more closely analyzed, it can be concluded that economic growth in the expansions of Spanish business cycle presents a higher increase in production factors than in GDP itself. This fact shows the inefficiency of the production process which best reflects the weakness of economic growth in Spain.

### **11.2.3 Financial inclusion and exclusion of households.**

The analysis of the last point regarding financial inclusion and exclusion of household is addressed using data from the Bank of Spain's "Encuesta sobre préstamos bancarios" ("bank lending survey") that tackles with the issue on the changes in the conditions under which loans are given to households.

Figure 105 shows quarterly data on the evolution of the credit standard for approving loans to households in order to buy a house from year 2003 to first half of year 2012. As can be seen from the figure, from the year 2003 to the first half of the year 2005 the criteria were made stricter. In the third quarter of the year 2005 the criteria were relaxed. This relaxing trend continued for the first two quarters of year 2006 with the only exception of the year 2005. From this moment on, the criteria were made stricter at higher rates, especially in year 2007. As a matter of fact it is not until the beginning of year 2009 that criteria are comparatively relaxed. The last half of year 2009 criteria remain constant while in the second quarter of year 2010 they are again made stricter. In the year 2011 a new stricter trend is applied to those loans for house purchase. The last data available reveals a less stricter policy applied by financial entities.

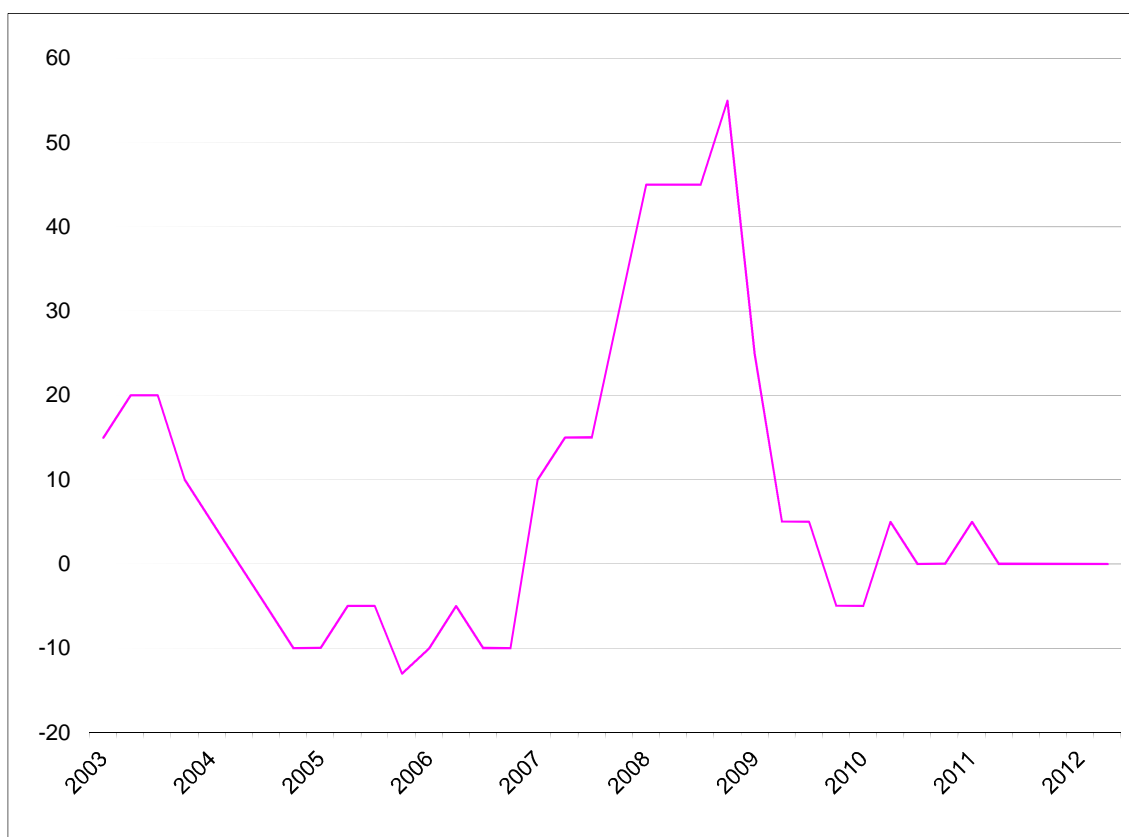
Figure 105. Changes in bank's credit standards for approving loans to households for house purchase. Net percentage: percentage of entities that have endured their standards minus those that have relaxed them



Source: Author's elaboration from "Bank lending survey" (Bank of Spain).

Figure 106 shows quarterly data on the evolution of the bank's credit standards for approving loans to households for consumption and others from 2003 to the first half of 2012. Criteria are made stricter for the year 2003 and first quarter of the year 2004. While criteria remain constant at the beginning of 2004, they are relaxed from the third quarter of year 2004 to the end of year 2006. From 2007 to 2008 a stricter criteria is applied. From 2009 on, less strict policy is applied until the first quarter of year 2011 in which a slightly stricter criteria is registered.

Figure 106. Changes in bank's credit standards for approving loans to households for consumption. Net percentage: percentage of entities that have endured their standards minus those that have relaxed them



Source: Author's elaboration from "Survey of bank lending" (Banco de España).

### 11.3 Conclusions

Regarding the finance in everyday life, cards issued in Spain have been increasingly used from 2002 to 2011. This trend, however, is different when comparing the different type of cards. While those cards with a debit function have been increasingly used, cards with an e-money function have been decreasingly used in the period. What credit transfers is concerned, the overall evolution through the period has been positive although in the period 2005 to 2006 it is observed an smooth decrease. On the other hand, the usage of direct debits started to increase from 2004 to the end of the period while the usage of

checks as instrument of payment decreased when initial and final periods are compared.

Real investment in Spain in the year 2010 was six times the level of the year 1964. Although the increase in nominal investment has been dominated by *housing* and *other constructions*, when real investment is analyzed, the huge increase in the prices on housing together with the decrease of the prices of TICs allow to reach a very different conclusion: TIC assets had undergone a much greater increase than housing. Net capital stock along the period 1964-2010 in Spain is multiplied by 5.5, being the period of higher increase that from 90's to the beginning of the crisis. From this capital in the year 2010, 45.4 percent was due to housing. Additionally, Spanish business cycle presents a higher increase in production factors than in GDP in its expansions. This fact shows the inefficiency of the production process which best reflects the weakness of economic growth in Spain.

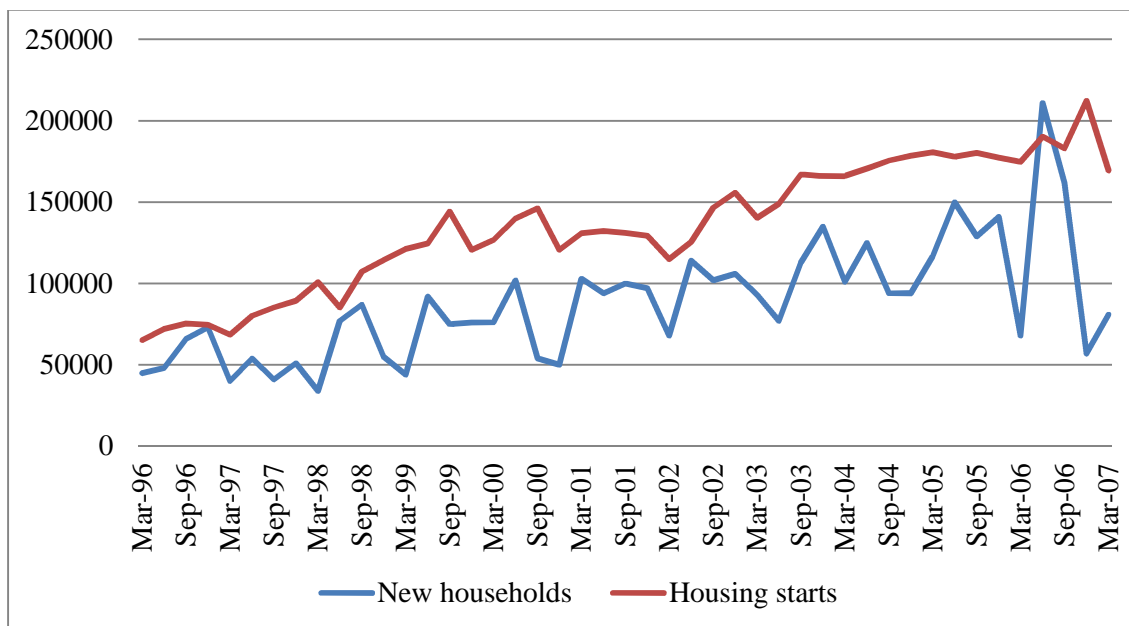
Finally, regarding the financial inclusion and exclusion of households in Spain, it is observed that the criteria applied by financial institutions to approve loans for households has become stricter. This is observed both, in the loans for house purchase and in those for consumption.

## 12. Housing market

In the housing market, the demand for housing depends on demographic, social and economic factors. (see Esteban and Altuzarra, 2008. In the Spanish housing market it is also important to distinguish between demand for primary homes and vacation homes. While demand for primary housing is mainly affected by demographic, social and economic factors, demand for vacation homes is affected mostly by economic factors, though demographic factors must be also taken into account. Demand for vacation homes in Spain has come not only from national residents but also from foreign demand, mainly from the EU.

Among demographic factors that have operated in the Spanish housing market two must be highlighted. On the one hand, the process of immigration since the mid-1990s which amounted (until 2007) to around 3 million people, taken into account only those with a legal status. On the other, housing demand is also affected by the population age structure because this variable is closely related to the rate of household formation. In Spain, housing demand for primary homes is highest for the group of 20-34 years, while demand for vacation homes is highest for the group of 35-49 years (García Montalvo and Mas 2000). These groups of population have been increasing at a fast rate between 1991 and 2007 due to the Spanish baby boom of the 60s and 70s. While total population has grown 11.8% in this period (39.4 to 44.1 million people), the 20-34 age group has increased 16.5% (9.2 to 10.7 million people) and the 35-49 age group 43.2% (7.1 to 10.1 million people). As can be seen in Figure 107, the number of housing starts in the last decade in Spain has followed the pace of household formation.

Figure 107. New Households and Housing Starts



Source: Our calculations

This demographic evolution has been accompanied by significant social changes in Spanish society such as the integration of women in the labour market, the increase of divorces, separations, monoparental families and other forms of households. These demographic and social trends have resulted in an important and steady increase in the number of households. This evolution has spread across all Spanish regions, being specially marked in the Mediterranean Coast, Balearic Islands and Madrid and its hinterland. Undoubtedly, demographic factors are connected to the booming of housing demand in Spain.

Amongst economic factors, the most important ones have been the real disposable income of households and the cost of use of housing. Real disposable income of households is influenced by the level of occupation and unemployment and the evolution of productivity. Job creation has been strong during the growth period. Between 2001 and 2006 employment increased by 3.6 million jobs.

Housing has also a cost of use. Its most important components are the mortgage rate and other financial conditions. Mortgage rate has sharply decreased in Spain since the mid 1990s. Mortgage costs in real terms fell because of declining nominal rates and because of rising inflation.

The households' effort to buy homes should take into account other financial factors such as for instance the length of the mortgage, the price of housing or the amount of the mortgage in relation to the price of housing. The liberalisation of the mortgage market has played a significant role in the expansion of housing over the last decade. As competition between lenders is strong, by mid 1990s mortgage lenders began to offer more favourable terms in the form of extended loan terms of 25 to 30 years (and even 40-50 for first buyers) and increased loans to house value ratios. They also started to extend mortgages to up to 100% of dwelling value.

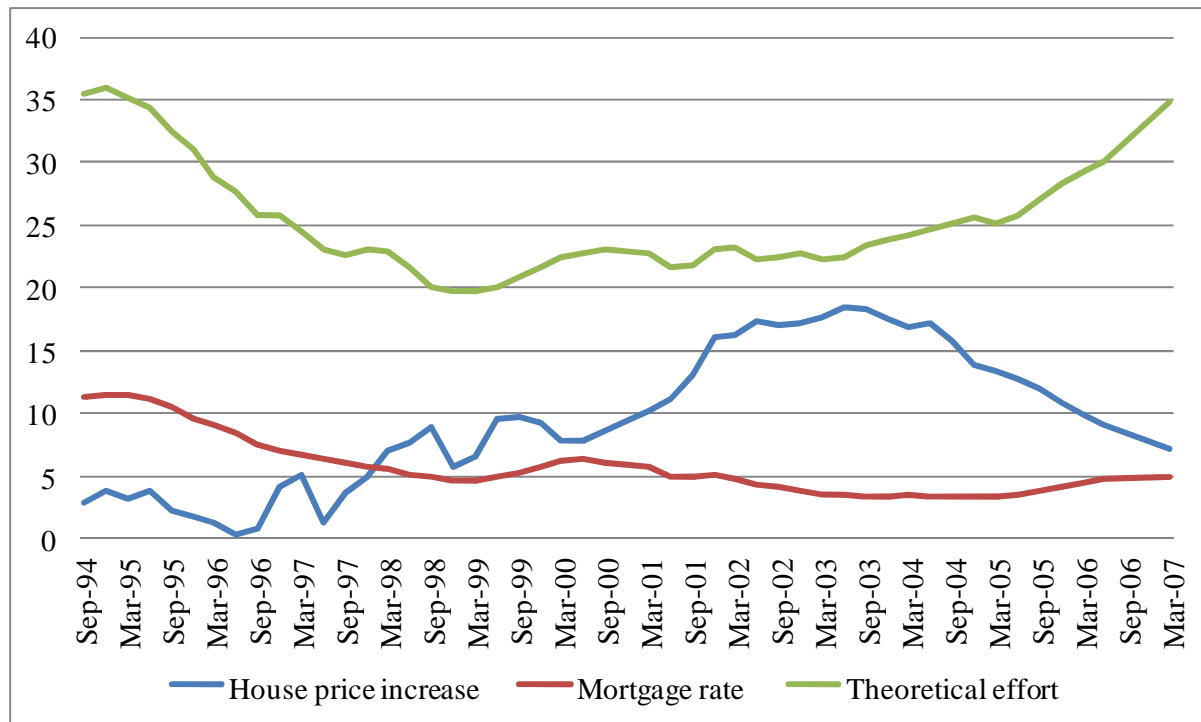
This partly explains why Spanish housing demand has risen at a time of high housing inflation, thus fuelling the boom in the market. By 1995 households had to pay a 35% of their nominal disposable income. The favourable evolution of the mortgage rate and other financial conditions (e.g., length of the mortgage, total price/mortgage amount ratio) led to a gradual decrease in the effort made till a minimum of 19.8% in the mid 1999. The decrease of the mortgage rate between March 2004 and September 2005 was more than offset by the increase in house prices, thus pushing up the theoretical effort which nevertheless remained below 25% (see figure 108). The rise of the mortgage rate since the end of 2005 has significantly augmented households' effort by ten percentage points till 36% in June 2007 and brought house price inflation down.

In the period Dec 2005 - Dec 2006 mortgage interest rates rose on average by 1.28%, more than 40% over the very low levels of early 2005. Yet mortgage



lending rose by more than 25% between 2005 and 2006, so that the increase in interest rates only had a limited effect in restricting demand.

Figure 108. Evolution of house price inflation, mortgage rate and theoretical effort (percent)

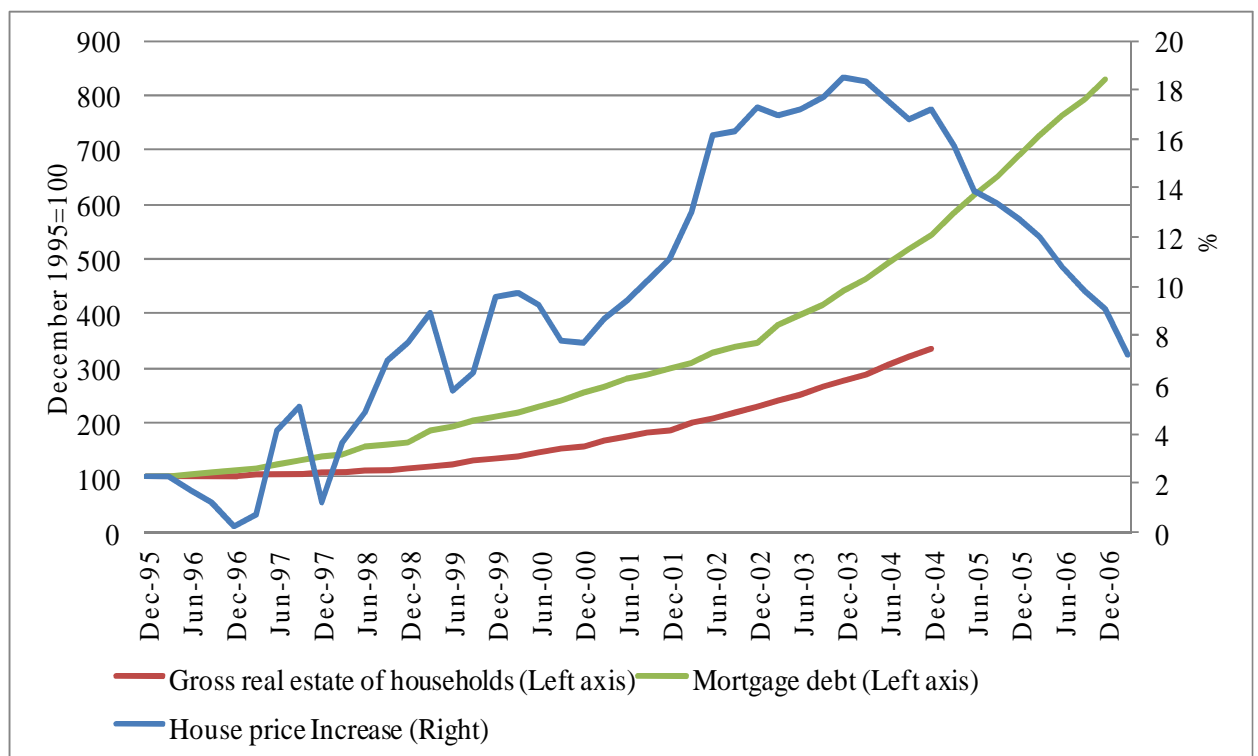


Source: Our calculations based on Banco de España

Housing can also be demanded as an asset, as a form of wealth. Undoubtedly, an important driver of Spanish housing demand has been the expectations of substantial capital gains in an environment of cheap and easy borrowing. In this case the behaviour of households is determined by the expected evolution of house prices and the financial conditions of the market. Fiscal benefits are of minor importance in this respect since fiscal benefits apply only to primary homes. The net real estate of households measures the value of property less the mortgage obligations. As house prices increase, the resulting capital gains lead housing demand up and households are willing to borrow from the market. Thus, there is a positive correlation between house prices and mortgage debt in

the short run. However, a time arrives when the pace of debt accumulation exceeds the increase in house prices and the rate of increase of net real estate of households begins to fall. At that moment demand for housing as an asset begins to fall as a consequence of the wealth effect of the net real estate of households in housing demand. Figure 109 shows that as house prices have been escalating, thus pulling the gross real estate of households up, these have been willing to increase their debt. One can expect that the landing of house prices since 2005 will progressively bring down the revaluation of households' real estate and hence the investment component of housing demand.

Figure 109. Evolution of gross real estate of households, mortgage debt and house prices



Source: Our calculations based on Banco de España

In addition, it is worth mentioning a cultural factor. Spanish housing conditions are some of the most crowded in the EU and dwellings tend to be also among the smallest. As a compensating element, Spanish households have a high

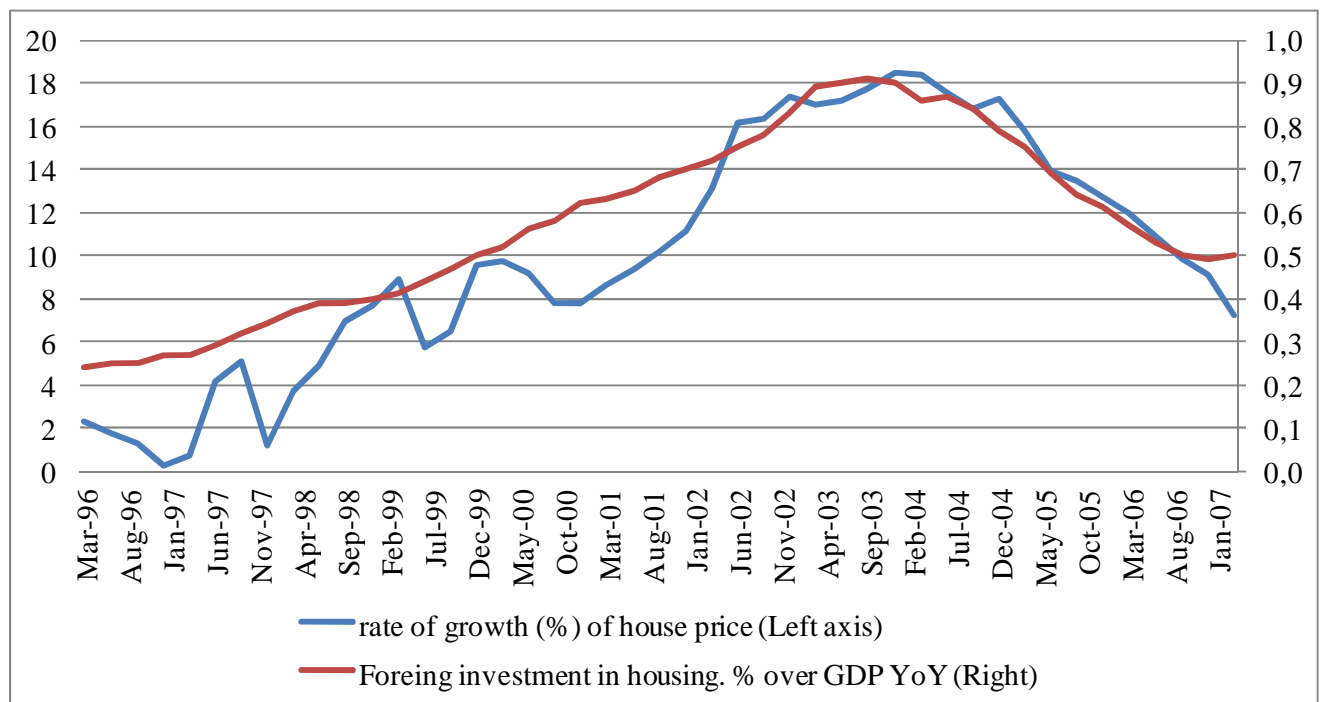
propensity to own a second home in the countryside or on the coast: over a fifth already own one. Much of housing demand has come, in fact, from the secondary home market.

Around a third of the stock of existing dwellings is not in the primary home sector, almost certainly the highest share in the EU. The secondary home market satisfies thus a housing need of Spanish households, which may be considered as structural to the market, and at the same time is a way to accumulate wealth for the future instead of entering into the financial markets (Stock Exchange Market, Pension Funds, etc.).

Moreover, the secondary home market operates, in part, independently from the primary one, and is influenced not only by domestic factors but also by the economic conditions in countries such as Germany, the Netherlands and the UK because many buyers are foreigners. Housing investment by foreigners, especially in the coast, increased since the mid 1990s picking in 2004 when it represented 0.91% of GDP. Since then it has gradually decreased amounting to 0.49% of GDP in December 2006.

Housing investment by foreigners, especially in the coast, increased since the mid 1990s picking in 2004 when it represented 0.91% of GDP. Since then it has gradually decreased amounting to 0.49% of GDP in December 2006. Yet, the economic recovery of their home countries has led to a new upturn of this variable (Figure 110). The presence of foreign purchasers in the second-hand market is very difficult to identify but it has been also significant.

Figure 110. Foreign investment in housing



Source: Our calculations based on Banco de España

In short, the Spanish housing boom was not just an artificial bubble created by low interest rates and speculation, but the result of increasing wealth of Spanish and European population, changing demographics and new mortgage products that have helped the purchasing of homes both in the primary and second residence markets. The rise in housing prices was not in all parts of the country, then, the result of excessive speculation, as it occurs in a bubble. Probably, in the absence of the actual severe financial shock, a soft adjustment of the house prices could have been expected. However, the financial crisis has led to the need of a more severe adjustment, particularly in the most touristic areas.

## **13. Inequality**

### **13.1. Introduction**

The issue of inequality in terms of the financial system and financialisation process has not been deeply studied. In Spain there are three datasets that provide some information on this issue. First, data on income and living conditions offered by the National Statistical Institute. Second, the Survey on Household Finance published by the bank of Spain and third, the data from the Social Spanish Barometer made by Ioé. Additionally, European Union provides some indexes and coefficients in Eurostat that are available, both, for the European Union as a whole and for each selected country within the European Union.

This chapter presents information on all the data mentioned above. The first section reviews data on income inequality in Spain according to some published reports. The second section describes inequality according to the data available in Eurostat. This second section may be divided into four different points: i) Evolution of Gini coefficient in Spain compared to that of European Union; ii) Evolution of the income quintile share ratio in Spain compared to that of European Union; iii) Evolution of the income quintile ratio in Spain by sex; iv) Evolution of the income quintile ratio in Spain by age. Some concluding remarks are offered at the end of the chapter.

### **13.2 Inequality and financiarization: review of Spanish literature.**

According to the report made by Ioé (2011), in Spain, financial and fixed assets have been the most important components of the wealth. They have grown at double the speed of GDP. However, data from Survey on Household Finance reveals that inequality has increased, particularly along the last years of the

crisis. Inequality ratio between 25percent of richest households and poorest changed from a value equal to 33.3 in 2002 to a value equal to 39.3 in 2005 and to a value equal to 50.4 in the first quarter of 2009. When aggregate values are analyzed, the 25 percent richest increased its wealth around 19.9 percent between the years 2005 and 2009 while the poorest 25 percent reduce it around 6.4 percent.

Another report made by Ioé (2012), conclude that there is an increase in the gap between social classes, particularly in the years of the crisis. On the one hand, income inequality has increased between those households with higher income and those with lower income. On the other hand, those holders have perceived on average 3.4 times more income than workers in the period 1995-2010. Additionally, poor households have a debt 17 times higher than rich households. Moreover, with the crisis and increase in unemployment, poverty and evictions have also increased.

The same report concludes that wage inequalities by sex and age are high and they have increased in the last decade. While in 2000 women wage was 22.7 percent inferior to the average, in 2010 this value was equal to 31.5 percent. When it is compared the wage of immigrants to that of natives it is observed that immigrants' wages are 49.2 percent lower. Additionally, they conclude, debt to be paid represents 87.5 percent of wealth for poor households while it represents a 6 percent for richest ones.

### **13.3 Analysis from Eurostat data**

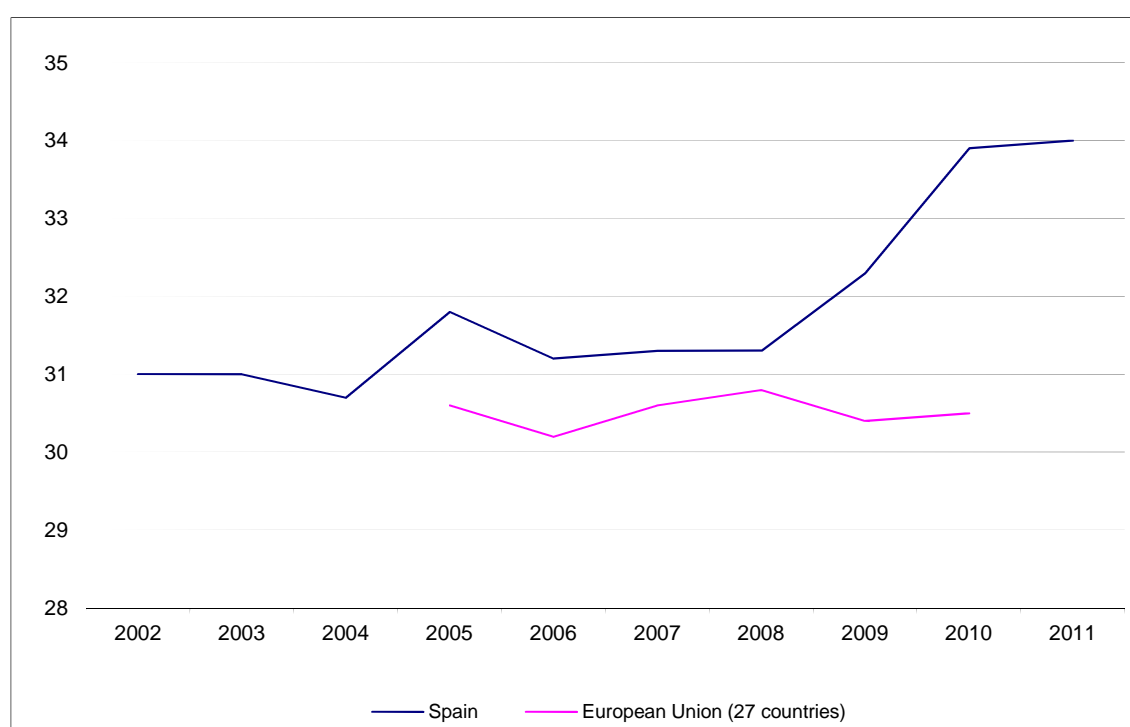
#### **13.3.1 Gini Coefficient**

Figure 111 shows the evolution of the Gini coefficient for the period 2002-2011 for both Spain and the EU27 (data for the latter is only available for the period

2005-2010)<sup>33</sup>. Inequality in Spain remained constant between years 2002 and 2003 when gini coefficient value was equal to 31. In the year 2004 the value slightly diminished to 30.7 but it again increased in year 2005 to the value 31.8. The period 2006 to 2008 was characterized by a relative stability of income inequality as revealed by the constant value of the index around 31.3. However, inequality started an increasing trend in years 2009 and 2010 that is maintained for year 2011 at a value 34.

When the value is compared to that of the EU27, it can be concluded that in Spain inequality is higher than in the European Union as revealed by the higher values of the gini coefficient for Spain. Moreover, while in Spain along the period 2009-2010 inequality tended to increase, in the EU27 the trend tended to slightly decrease from 30.6 and 30.8 values to 30.4 and 30.5 values.

Figure 111. Gini coefficient in Spain and European Union (EU27)



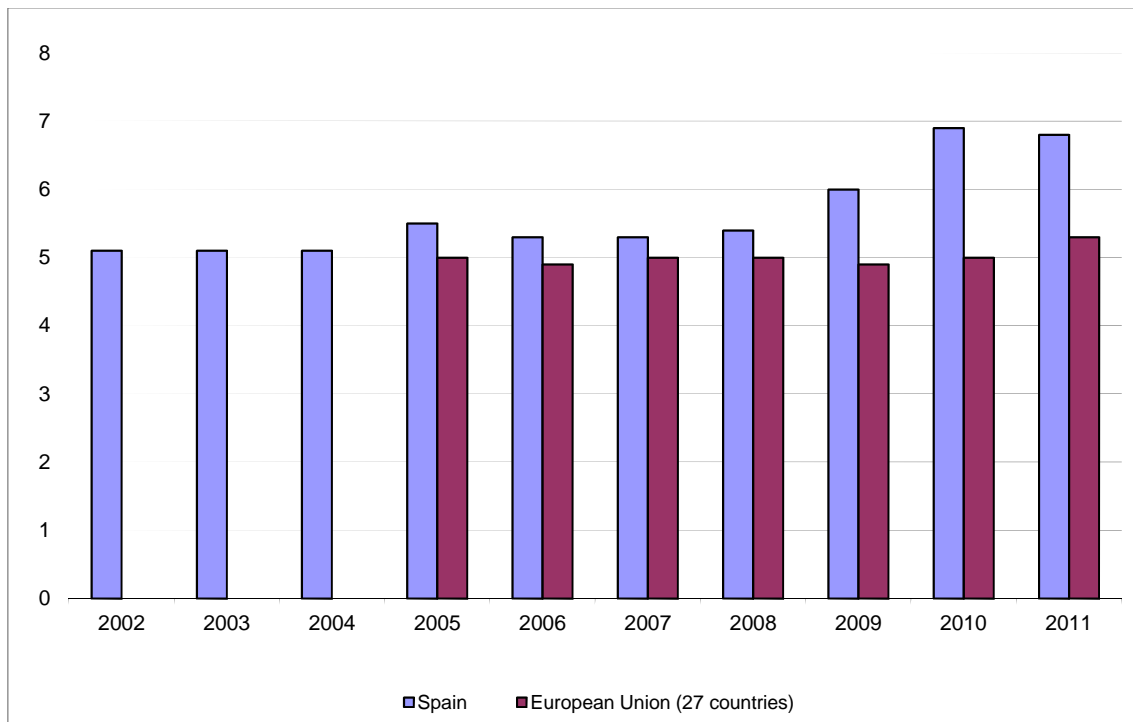
Source: Own elaboration from Eurostat SILC

### 13.3.2 Income quintile share ratio

Another index that may be useful to understand the evolution of income inequality is the income quintile share ratio S80/S20. Figure 112 shows the value of this ratio for both, Spain and European Union (EU27)<sup>34</sup>. From 2002 to 2004 the income quintile share ratio remained constant at 5.1 value. In the year 2005 the value peaked to 5.5 to, afterwards diminished to 5.3 value for the years 2006 and 2007. In 2008 it started to increase until 6.9 value reached in 2010. The last period available, 2011, reveals a slight decrease of the value to 6.8.

The comparison between Spain and EU27 reveals that Spanish society has a higher inequality than the European Union as values for the former are always higher than those for EU27.

Figure 112. Income quintile share ratio S80/S20 in Spain and European Union (EU27)



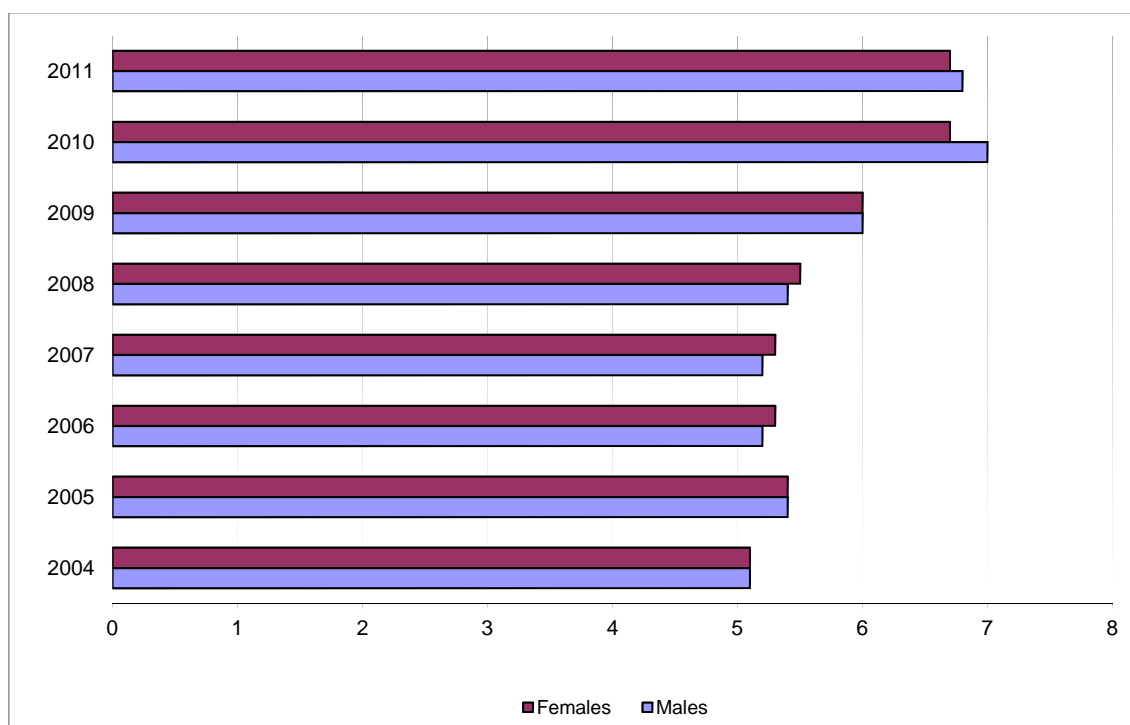
Source: Own elaboration from Eurostat SILC



### 11.3.3 Income quintile share ratio by sex

Gender inequalities may be also analyzed by comparing the income quintile share ratio between both males and females. Figure 113 provides information on this issue for the period 2004-2011. The degree of income inequality was equal for both, males and females in the years 2004 (5.1 value) and 2005 (5.4 value). However, in 2006 a divergence against females is observed. While the value of income quintile ratio diminished to 5.2 for males, for women it just diminished to 5.3 value. This difference is kept constant in 2007. Year 2008 still showed a higher inequality for females against males. However, in the year 2009 both genders undergo the same inequality (6.0 value). What is more, years 2010 and 2011 reveal that inequalities among female are lower than those of males, especially in year 2010.

Figure 113. Income quintile share ratio S80/S20 in Spain by sex

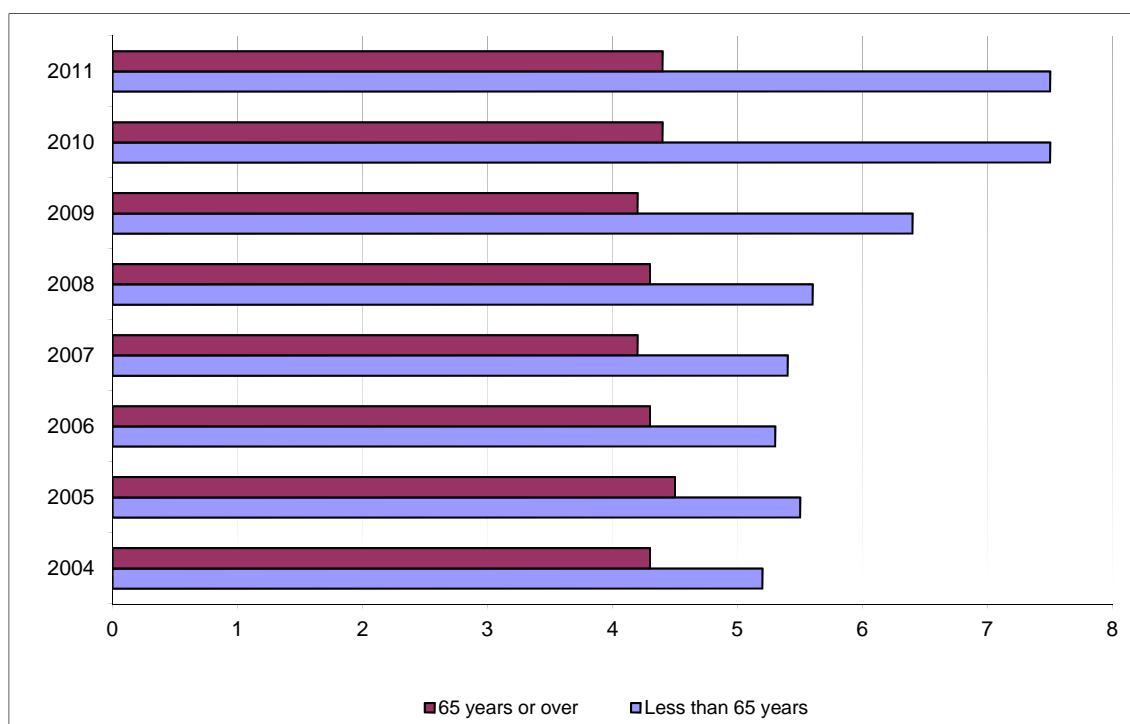


Source: Own elaboration from Eurostat SILC

### 13.3.4 Income quintile share ratio by age

Inequalities turn out to be different depending on the age of the population underlying the analysis. In an aging society, thus, it is important to analyze the different features of inequalities attending also to the age structure of such society. Figure 114 shows the evolution of income quintile share ratio by age for Spain for the period 2004-2011. Concretely, they are represented two groups of people: those younger than 65 years and those 65 or older. The first conclusion that may be drawn from the figure is that inequalities are higher among Spanish people younger than 65 as revealed by the higher value of the ratio compared to that of those 65 or older. While the ratio of people younger than 65 evolves between 5.2 and 7.5 values, for those 65 or older it takes values between 4.2 and 4.5. Additionally, inequality evolution is different for both groups of people. The youngest group shows an unstable evolution of the inequality. While in 2005 inequality increases for them, it decreases in 2006. From 2007 onwards the trend is increasing up to reach value 7.5 for both years 2010 and 2011. What the oldest group is concerned, the evolution of inequality seems to be more stable. As a matter of fact the value of the ratio increases and decreases slightly but it always remains between 4.2 and 4.5 values.

Figure 114. Income quintile share ratio S80/S20 in Spain by age



Source: Own elaboration from Eurostat SILC

### 13.4 Conclusions

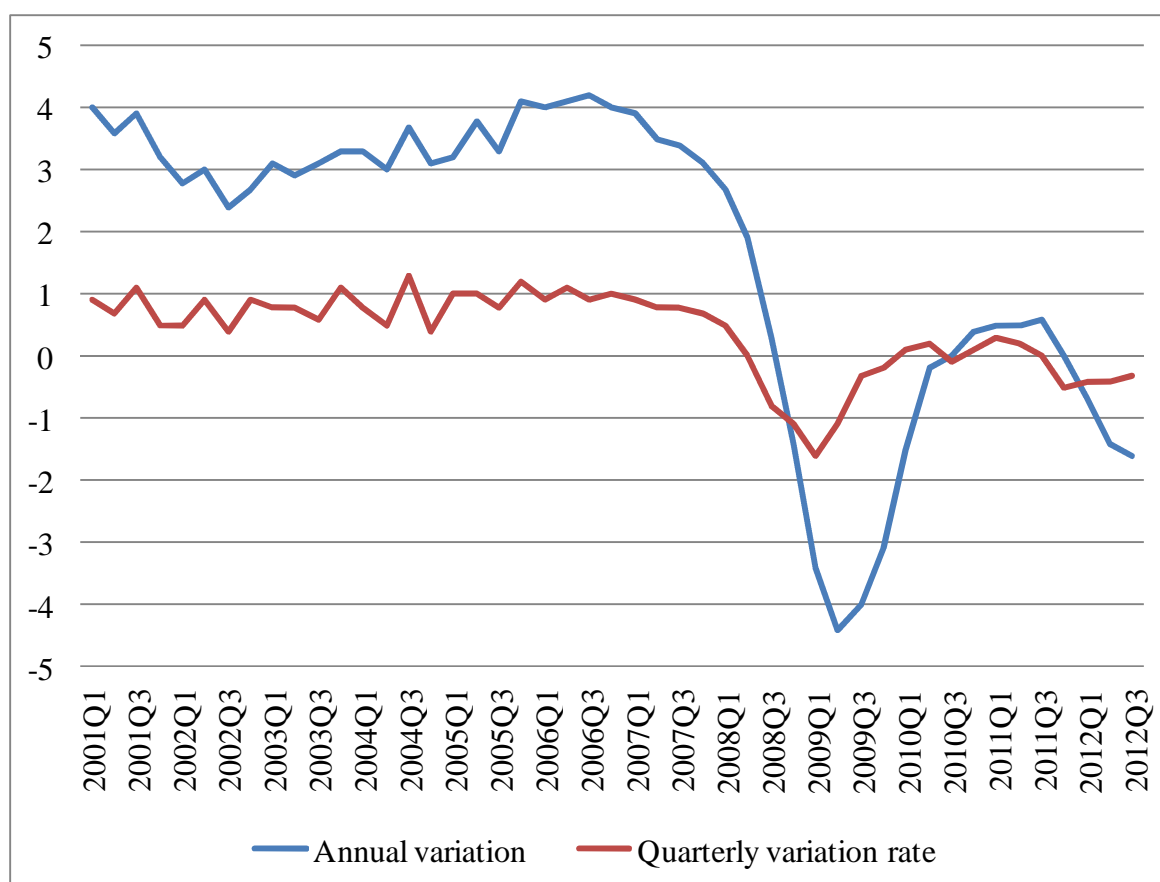
Financiarization process in Spain has evolved at the same time that inequality has increased, particularly, after the economic crisis. This is noticeable for households in general (Survey of Household Finance) as well as for different groups of people with females and immigrants being the most affected (Ioé, 2011 and 2012). Data on income and living conditions provided by Eurostat shows that inequality has increased after the crisis. However this increasing trend seems to stabilize for the year 2011. Data reveals that inequality was higher for females compared to males in the years prior to the crisis. However, after the crisis, the pattern changes with males the ones who show higher inequalities than females. The analysis of different groups according to age reveals that inequality is higher among the youngest (65 or less year old) compared to the oldest (those aged 65 or more) both before and after the crisis.

## PART IV. RECENT DEVELOPMENTS AND CONCLUSIONS

### 14. Preliminary outline of crisis

The economic crisis in Spain has led to a dramatic fall in the economic rate of growth. The figure 115 shows the evolution of the Spanish GDP rate of growth, where the rate of growth is measured as an annual variation and as a quarterly variation rate.

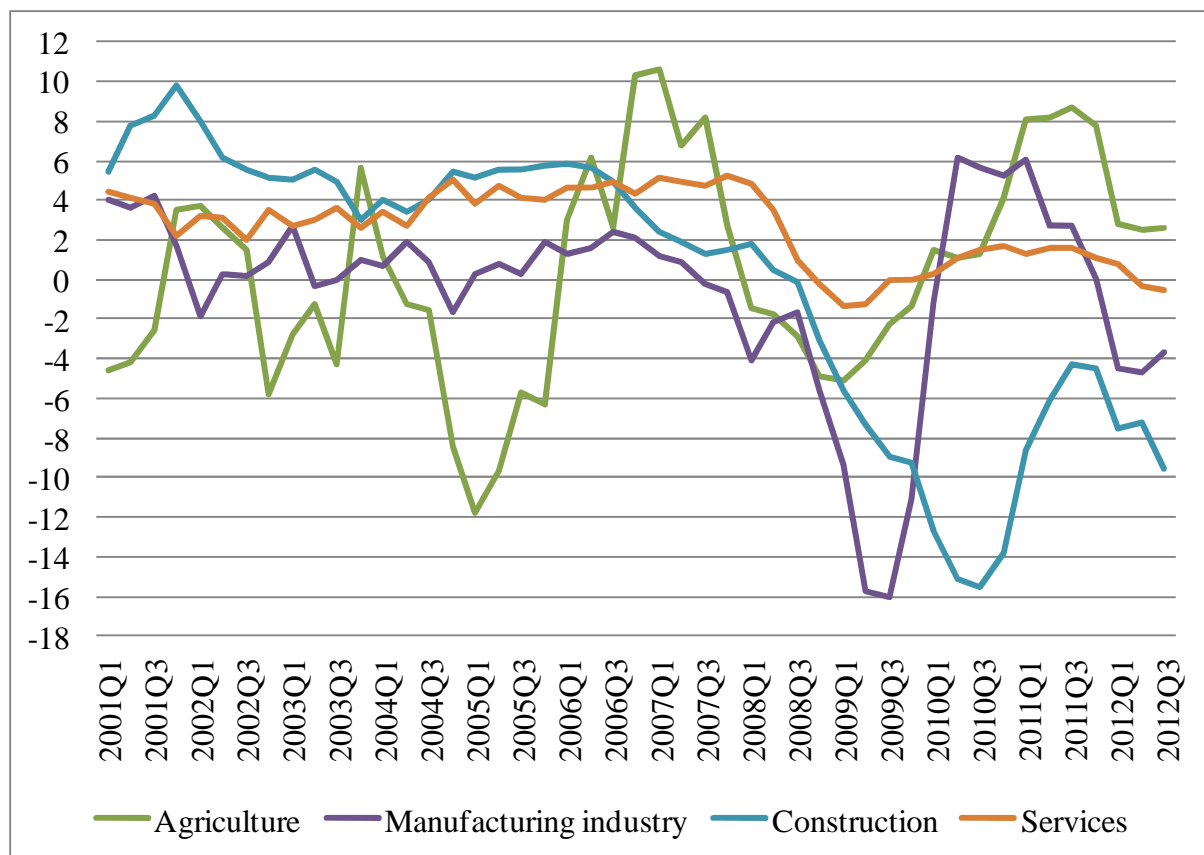
Figure 115. GDP rate of growth (percent)



Source: Spanish National Institute of Statistics, Quarterly Spanish National Accounts. Base 2008 (available at the Institute's website: <http://www.ine.es/jaxi/menu.do?type=pcaxis&path=percent2Ft35percent2Fp009&file=inebase&L=1>)

During most of the last decade, Spain was growing at a stable and sustained way, between 3 and 4 percent per year. This path of economic growth collapsed in the year 2008. The trough of the crisis was reached in the second quarter of 2009, when the rate of growth was -4.4 percent. In the year 2010, the economy started a timid recovery, growing at positive rates but below 0.6 percent. However, in 2012, the economy entered in a new recession.

Figure 116. Gross value added rate of growth: annual variation (percentage)

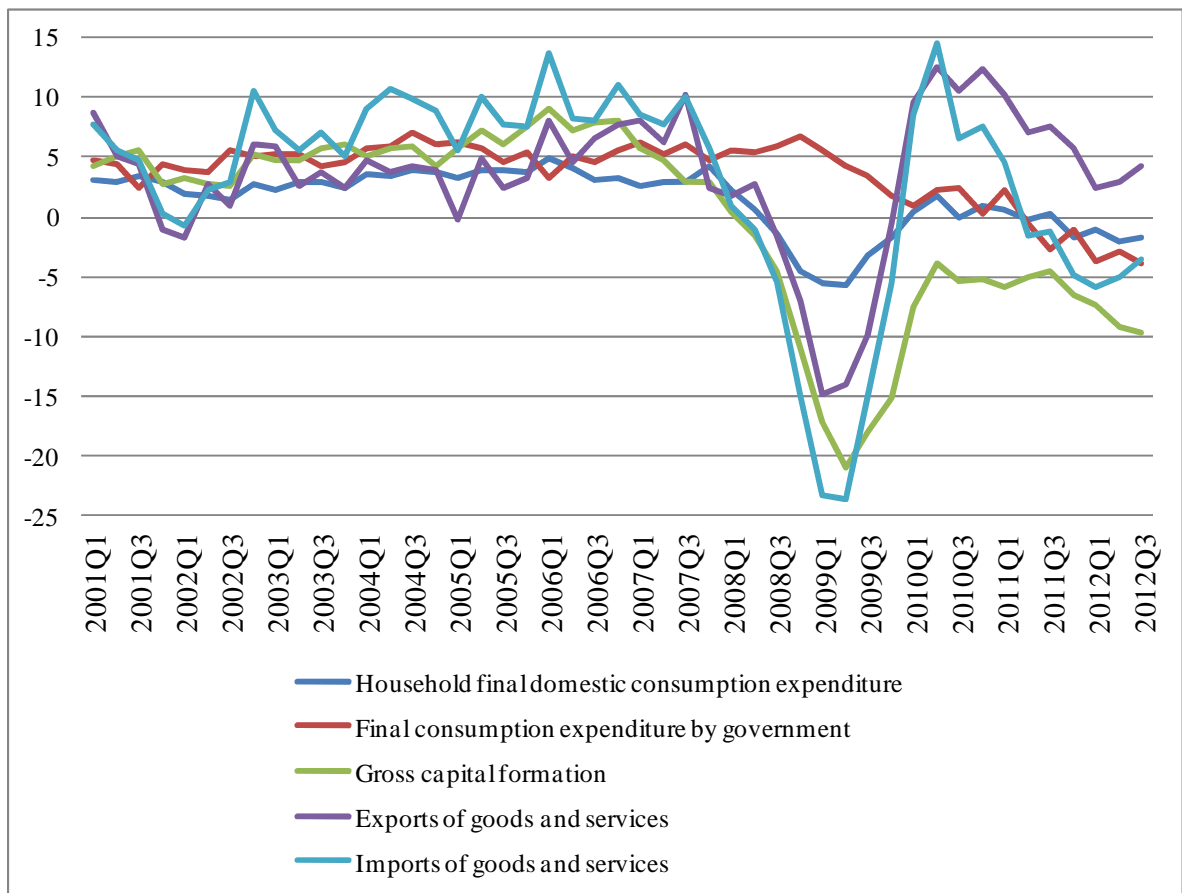


Source: Spanish National Institute of Statistics, Quarterly Spanish National Accounts. Base 2008 (available at the Institute’s website: <http://www.ine.es/jaxi/menu.do?type=pcaxis&path=percent2Ft35percent2Fp009&file=inebase&L=1>)

The economic crisis has affected negatively all the sectors of the economy (see figure 116), with construction and manufacturing sectors being the most affected, with the services sector having only been affected by a brake in its

growth (mainly due to the countercyclical behaviour of the public administrations). However, the agriculture sector soon recovered its trend growth. Moreover, since 2010 the manufacturing sector entered in a new period of expansion, mainly driven by the growth in the exports of goods, though in 2012 the sector has again registered a decline in its activity.

Figure 117. Rate of growth of the components (percentage)

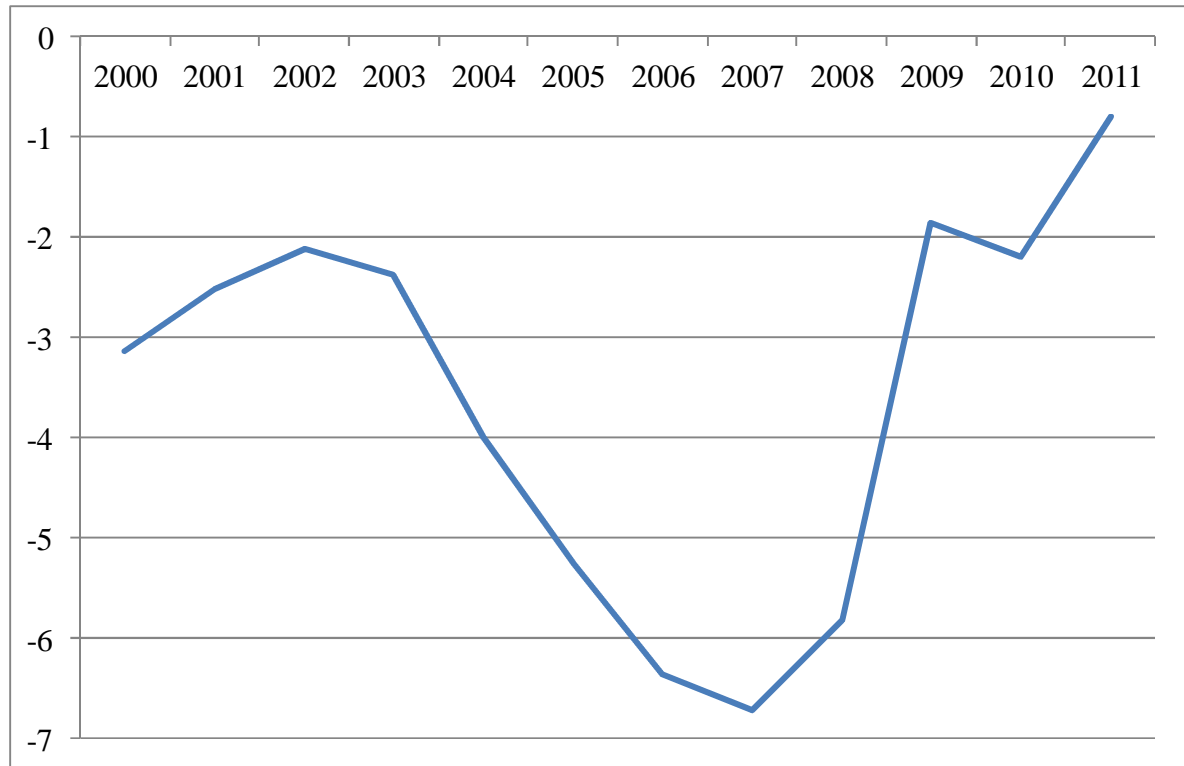


Source: Spanish National Institute of Statistics, Quarterly Spanish National Accounts. Base 2008 (available at the Institute's website: <http://www.ine.es/jaxi/menu.do?type=pcaxis&path=percent2Ft35percent2Fp009&file=inebase&L=1>)

The figure 117 shows that before the crisis the gross capital formation and the imports of goods and services were the components of the GDP that registered the highest rates of growth. The economic crisis led to a dramatic fall in the

GCF and in the imports of goods and services. The household consumption has also seen how its rates of growth turned negative in most of the quarters since 2008. It is only the exports sector that has been increasing and the only engine of the Spanish economy since the crisis.

Figure 118. Balance of the exchange of goods and services (percentage of GDP)

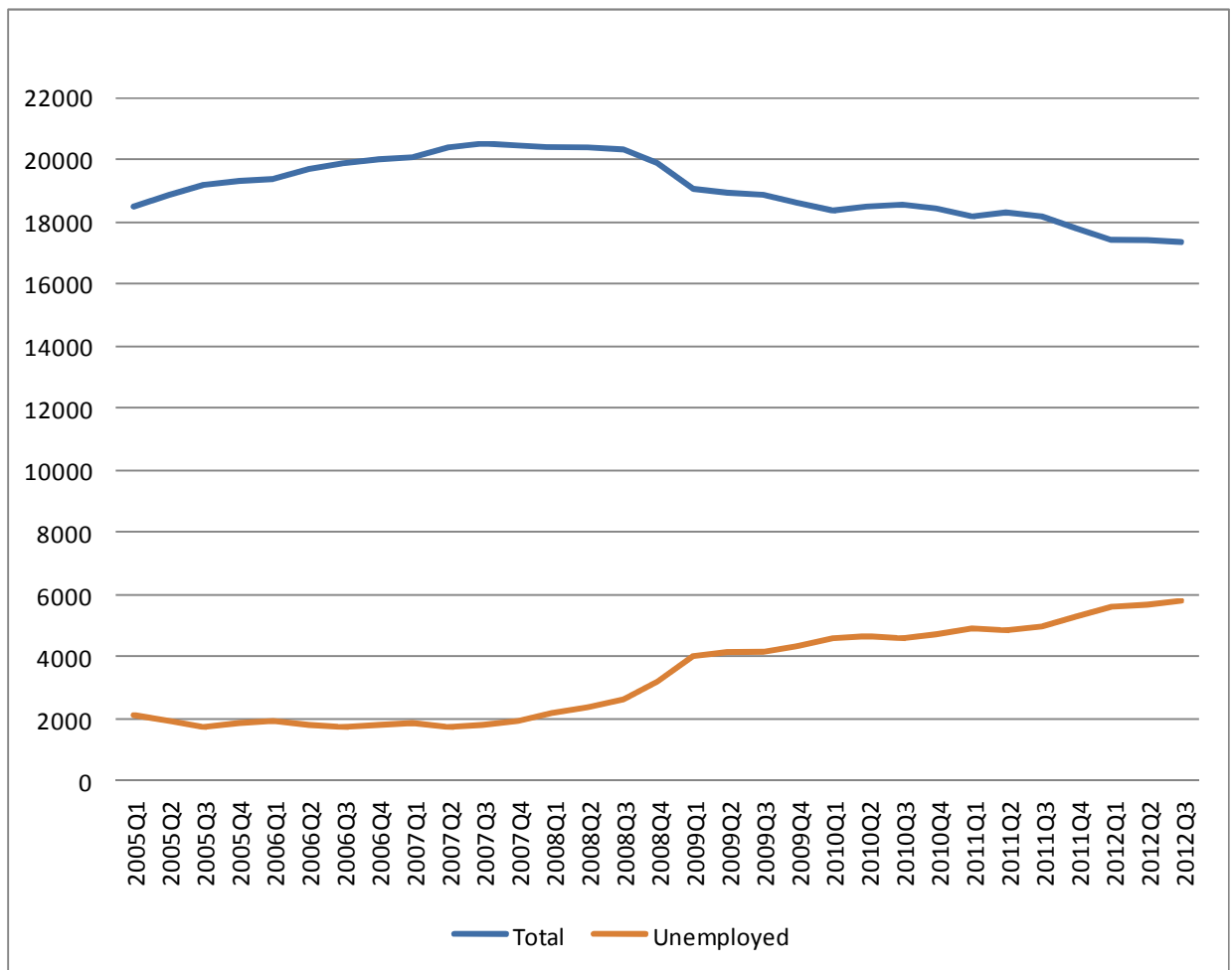


Source: Spanish National Institute of Statistics, Spanish National Accounts. Base 2008 (available at the Institute's website: <http://www.ine.es/jaxi/menu.do?type=pcaxis&path=percent2Ft35percent2Fp008&file=inebase&L=1>)

Precisely, the acceleration in the exports of goods and services and the decline in the imports of goods and services have helped to solve the external imbalance of the Spanish economy in a very short time: thus, in 2011 the balance of trade of goods and services registered a deficit equivalent to 0.8 percentage points of the GDP, compared to the deficit of 6.7 percentage points of the GDP in 2007 (see figure 118).

But surely, the most relevant (negative) impact of the crisis is its impact on the labour market, with the huge destruction of employment and the massive increase of unemployment (see figure 119).

Figure 119. Employed and unemployed workers (000)



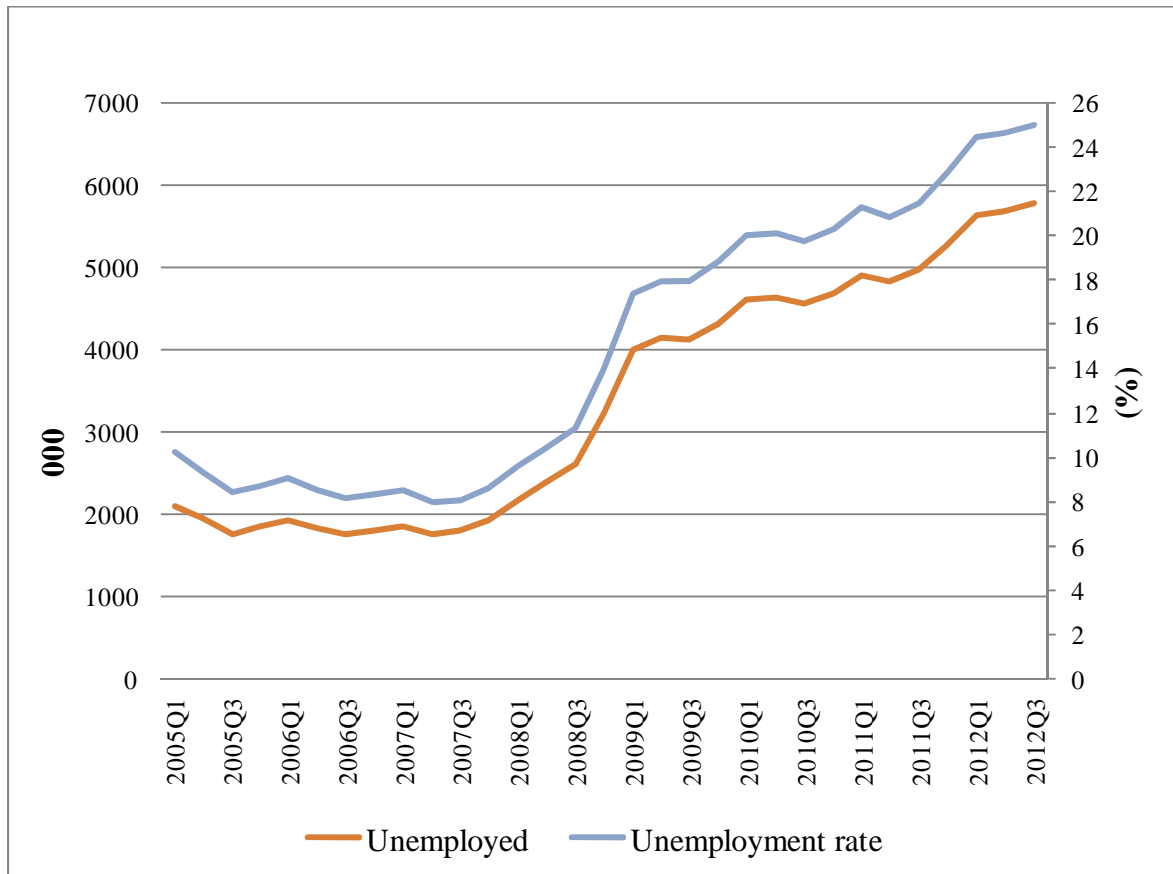
Source: Spanish National Institute of Statistics, Economically Active Population Survey (methodology 2005) (available at the Institute's website: [http://www.ine.es/jaxi/menu.do?type=pcaxis&path=percent2Ft22percent2Fe308\\_mnu&file=inebase&L=1](http://www.ine.es/jaxi/menu.do?type=pcaxis&path=percent2Ft22percent2Fe308_mnu&file=inebase&L=1))

As the figure 96, since 2008 the Spanish labour market suffers a permanent destruction of employment and an increase in the figures of unemployed



workers. Since the last quarter of 2007 until the third quarter of 2012, the Spanish labour market has lost 3.2 million jobs, and the figure of unemployed workers has risen in 3.8 million workers, reaching an absolute figure of unemployed worker of 5.8 million people.

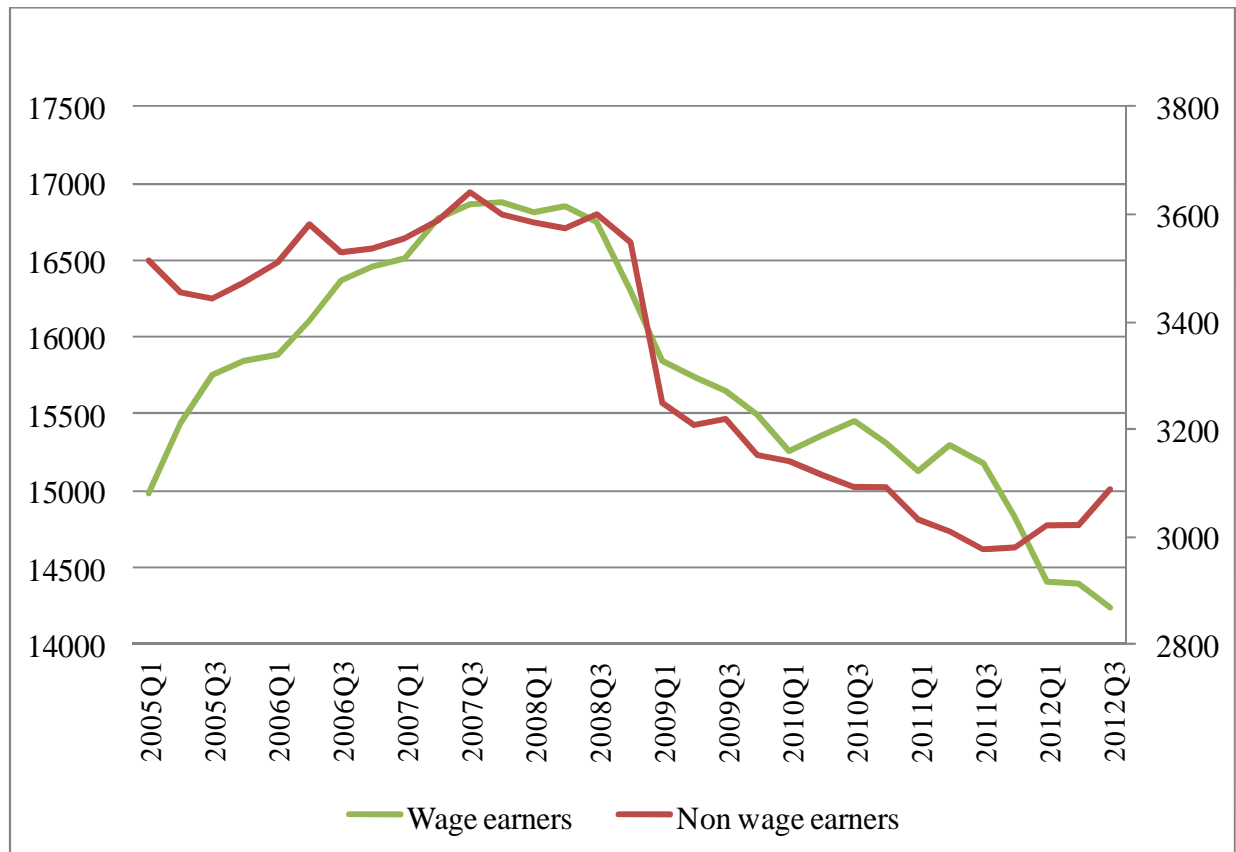
Figure 120. Unemployed workers and unemployment rate



Source: Spanish National Institute of Statistics, Economically Active Population Survey (methodology 2005) (available at the Institute's website: [http://www.ine.es/jaxi/menu.do?type=pcaxis&path=percent2Ft22percent2Fe308\\_mnu&file=inebase&L=1](http://www.ine.es/jaxi/menu.do?type=pcaxis&path=percent2Ft22percent2Fe308_mnu&file=inebase&L=1))

The increase in the figures of unemployed workers means that the unemployment rate has peaked 25 percent in the third quarter of 2012, from the 8 percent registered in the third quarter of 2007 (see figure 120).

Figure 121. Employed workers (000)



Source: Spanish National Institute of Statistics, Economically Active Population Survey (methodology 2005) (available at the Institute’s website: [http://www.ine.es/jaxi/menu.do?type=pcaxis&path=percent2Ft22percent2Fe308\\_mnu&file=inebase&L=1](http://www.ine.es/jaxi/menu.do?type=pcaxis&path=percent2Ft22percent2Fe308_mnu&file=inebase&L=1))

Though the crisis has affected all kind of workers, it is clear that wage earners have suffered the worst of the job destruction, with a loss of 2.6 million salaried jobs since the third quarter of 2007 (see figure 121).

In turn, within the rank and files of the salaried jobs (figure 122), the salaried workers with a fixed-term employment contract have concentrated most of the job destruction, with a fall of 1.8 million temporary workers since the second quarter of 2007, whilst the wage earners with a permanent employment contract has “only” fell in 0.8 million jobs<sup>35</sup>.

Figure 122. Wage earners (000)



Source: Spanish National Institute of Statistics, Economically Active Population Survey (methodology 2005) (available at the Institute's website: [http://www.ine.es/jaxi/menu.do?type=pcaxis&path=percent2Ft22percent2Fe308\\_mnu&file=inebase&L=1](http://www.ine.es/jaxi/menu.do?type=pcaxis&path=percent2Ft22percent2Fe308_mnu&file=inebase&L=1))

## 15. CONCLUSION

The objective of this report has been to provide to the reader a general overview of the process of transformation and development of the financial system in Spain that has taken place since the decade of the seventies in the past century. The report shows the main distinctive features of the financialisation process of the Spanish economy, its main determinant elements, and its economic impact, paying special attention to the current economic and financial crisis.

Unlike other countries, in Spain the financial system is a system controlled by the banking sector. This control is not only reflected in the high weight of the credit institutions in the whole financial sector, but also in the fact that many of the non-credit financial institutions in Spain are owned by the credit institutions (i.e., private banks and the former savings banks). Due to this fact, the analysis of the Spanish financial system is mainly focused on the analysis of the credit institutions.

The liberalization process of the Spanish banking system started in the mid-seventies during a deep restructuring economic crisis that led, and that, in turn, was explained by, one of the deepest banking crisis of the last century in the advanced economies. This banking crisis, that in that occasion was concentrated in the sub-sector of the private banks, gave rise to a simultaneous process of liberalization and restructuring of the sector (reducing the number of banks, increasing the size of the remaining banks, internationalizing the biggest banks), that was in the origin of the financialisation process of the Spanish economy.

This financialisation process, that in the report is proxied by the evolution of the size of the financial sector in the Spanish economy, took place in a sustained but moderated way until the end of the decade of the nineties. Since then, until

the year 2011, the growth of the size of the assets of the credit institutions (measured as a percentage of the GDP) accelerates in a sudden way, fuelled by the funding given by the credit institutions to the Spanish non-financial corporations, and to a lower extent, by the growth in the mortgages given to the household sector. The increase in the indebtedness of the non-financial private agents came with a parallel increase in the indebtedness of the financial institutions, mainly with an increase of the external debt of the Spanish credit institutions, and a higher dependence of the international monetary and financial markets.

The sub-sector of the savings banks played a relevant role in this process of expansion of the credit institutions. Since the late eighties, the savings banks adopted a business model similar to those of the private banks, spreading out along the whole economy, giving up their traditional local-regional territorial basis, and also giving up the traditional financial activity focused on the households and the small and medium enterprises.

The financial expansion process, joined to an excessive risk-taking in certain sectors and industries, mainly in the residential construction sector, resulting from an inaccurate supervision by the regulator (the Banco de España) of the risks adopted by the credit institutions, led to an excessive and unsustainable indebtedness both of the non-financial private agents and the credit institutions, which burst abruptly, with dramatic consequences for the sector and the whole economy, in 2008.

Unlike the banking crisis of the decade of the seventies in the past century, the saving banks are the financial entities more affected by the crisis, with the result that the bulk of the public interventions in the Spanish credit institutions has been concentrated in this kind of credit institutions.

As a consequence, the result of the current financial crisis is an intense process of reorganisation and restructuring of the banking system in Spain, a process that is still in process. In this sense, the interested reader can consult the relevant information about the restructuring process of the Spanish financial system in the website of the Banco de España:  
<http://www.bde.es/bde/en/secciones/prensa/infointeres/reestructuracion>

## ENDNOTES:

1 This is one of the reasons that help to explain why commercial banking retained strong positions regarding its investment portfolios in industrial securities. The absence of a capital market (during the 50s, 60percent of securities issued were public debt) combined with a credit market that focused on the short term, limited the availability of resources for making long-term investments. The entry of commercial banking in industrial business capital was the only way for such companies to undertake this type of investment.

2. As we will see later, this process, however, started later than in other European and developed countries, accelerating at the beginning of the decade of the 2000s.

3. The Instituto de Crédito Oficial (ICO) is a State-owned bank attached to the Ministry of Economic Affairs and Competitiveness through the Secretariat of State for Economy and Business Support. It has the status of the State's Financial Agency. The ICO was created in 1971 as the institution responsible for co-ordinating the State-Owned Banks existing at the time. In 1988 and 1991, the ICO was reformed, ceasing to work as a commercial bank, and working since then as Financial Agency of the State and a State-owned bank. The main objectives of the ICO are the financing of both SME and large-scale infrastructure projects, not only in Spain but also abroad. The institute's purpose is to boost any economic activity which, on account of its social, cultural, innovative or ecological significance, merits promotion and development. For more information, see the ICO's website: [www.ico.es](http://www.ico.es).

4. For a deeper analysis of the internationalization process of the Spanish financial and non-financial corporations, first, in Latin America, and later, in Europe and the United States of America, see: Ferreiro and Rodriguez (2004),

Casilda (2007 and 2008). Ferreiro, Gómez and Rodríguez (2008), Ruesga and Casilda (2008)

5. Yearly available data finish in 2007.

6. The Spanish National Accounts Base 2008 provides homogenous data since the year 2000. The Spanish National Accounts Base 1986 provides homogenous data for the period 1971-1997. The Spanish National Accounts Base 1986 provides homogenous data for the period 1971-1997. The Spanish National Accounts Base 1995 provides homogenous data for the period 1995-2003. The Spanish National Accounts Base 2000 provides homogenous data for the period 1995-2009.

7. Since the year 2002 the four existing stock markets (the stocks markets located in Barcelona, Bilbao, Madrid and Valencia, were integrated in one single operator: Bolsas y Mercados Españoles (BME). Out of these four markets, the Madrid stock market was the most important one. For more information, see the BME's website: [www.bolsasymercados.es](http://www.bolsasymercados.es).

8. These figures do not mean that the financialisation process has come necessarily with a worsening of the net total wealth of the Spanish households. At a great extent, the borrowing of the households is related to the purchase of houses, and consequently the higher debt of the households has come with higher non-financial assets.

9. For the European Central Bank, insurance corporations comprise both insurance (life and non-life) and reinsurance types of business. Pension funds consist only of those pension funds that are institutional units separate from the units that create them. These are funds that have autonomy of decision-making and keep a complete set of accounts. Nonautonomous pension funds set up, for



example, by credit institutions or non-financial corporations are not covered since they are not separate institutional units. Social security schemes are not included in this definition of insurance corporations or pension funds.

10. The Banco de España was founded in the late 18th century. Two important landmark events in its recent history have been the Law of Autonomy in 1994 that definitively conferred responsibility for monetary policy ensuring its independence from the Government when designing monetary policy and its amendment in 1998 establishing that the Banco de España was part of the European System of Central Banks (ESCB). Since the autonomy law in 1994 and until joining the ESCB, the Bank of Spain operated an inflation targeting strategy. Beyond the functions played as a member of the ESCB, the Bank of Spain principal mandates are promoting the proper working and stability of the financial system, supervising solvency and compliance with the specific rules of credit institutions and providing treasury services and acting as financial agent for government debt.

11. Since the July 2010 (RDL 11/2010) Law, saving banks have been forced to transform into private banks. Saving banks as such are no longer operative as banks and are representatives only of public foundations.

12. The ICO is a State-owned entity attached to the Ministry of Economic Affairs and it is the State's Financial Agency. It is a specialized Credit Institution for the provision of medium and long-term financing for productive investments by enterprises established in Spain. In this area, ICO works in two ways, as a mediator for loans with banks and saving banks and as direct lender for enterprises. As the State's Financial Agency it provides funds, on the Government's express instructions, for victims of serious economic crises, natural disaster or similar situations. In these cases ICO operates once the

public funds have been allocated and/or through the compensation of interest rate spreads.

13. However, the actual needs of resources are below that figure, around 40 billion euros (European Commission, 2012).

14. Saving banks were set up and owned by non-for-profit regional foundations with strong political connections and to a large extent dominated by local political elites because they were run by representatives directly appointed by the ruling political parties in their respective regions. As deposit institutions they undertook the full range of banking activities, but being active mainly within regional boundaries. They could not be absorbed by banks because they were not constituted as capitalist societies. This led unsurprisingly to an enormous growth of their balance sheets linked almost entirely to finance the property boom at the regional level, to an unprofessional management easily captured by political interests, to an excessively concentrated geographical risk and to no market discipline.

15. The rest of the system comprises small private banks, international banks with operations in Spain, and the cooperative sector.

16. Banco de Santander is present with own foreign affiliates in the four largest Latin America countries that represent more than 50percent of their profits, the European Union and the USA. Spanish business represents only 13percent of total profits in 2011. BBVA operates also with own affiliates in more than 10 countries. Total profits in 2011 are distributed between Mexico (30percent), South America (26percent), Eurasia (21percent), Spain (16percent) and USA (8percent).

17. A recent scandal about the so called “preferentes” is a good proof of the ability by the banking system to sell through its extended web of banking “shops” risky and complicated financial assets to any household.

18. See IMF (2006) for more detailed information.

19. See IMF (2006) for more detailed information.

20. See IMF (2006) for more detailed information.

21. Notice that the value for the year 2004 is not directly compared to that of the year 2005 because of the break in the series (see data section for further detail).

22. Available data begins in the year 2005.

23. According to the IMF (2006), this Financial Soundness Indicator is calculated by using gains or losses on financial instruments as the numerator and gross income as the denominator. It is an indicator of earnings and profitability, which is intended to capture the share of deposit takers’ income from financial market activities, including currency trading—that is, it measures the deposit takers’ reliance on market-related activity to generate profits.

24. Notice that the value on year 2004 is not directly compared to that of the year 2005 because of the break in the series (see data section for further detail).

25. The Banco Bilbao Vizcaya was the bank that most increased its market share with the launching of the “libretón” account book (Coronado, 2003).

26. Assets held by Financial Credit Institutions and by the Official Credit Institute (ICO) are included in addition to those held by banks, savings banks and credit cooperatives in order to calculate these rates.

27. A highly concentrated market tends to be defined as that which has an HHI of over 1800, and a little concentrated market as that with an HHI lower than 100 (Carbó and others, 2000).

28. Bankia, the third largest banking institution, was set up in 2010 via the merger of 7 savings banks: Caja Madrid, Bancaja, Caja Insular Canarias, Caixa Laietana, Caja Avila, Caja Segovia and Caja Rioja. It was quoted on the Stock Exchange in July 2011 and its administration was taken over in May 2011. Elsewhere, Catalunya Caixa and Novagalicia Banco have been nationalised and are currently waiting to be put up for tender. Administration of the CAM (Caja de Ahorros del Mediterraneo) was taken over by the Banco de España in July 2011 and subsequently absorbed into Banco Sabadell in December of that year.

29. Information available at the Bank of Spain's website: <http://www.bde.es/webbde/en/estadis/infoest/bolest19.html>.

30. As a result of the need on the part of companies to provide guarantees and toughening of credit conditions, there has been an increase in activity by reciprocal guarantee companies (SGR) (Crespo et al, 2011). These companies lend financial support to SMEs by granting collateral that vouches for their financial position for banking institutions, suppliers, customers and public administrative bodies. On the other hand, the drastic restriction on credit is now leading companies – especially smaller ones – to seek alternative sources of financing. Among these sources is the Alternative Stock Market (MAB), which is a market that was set up in 2008 to help companies with limited capitalization

to try and expand. It is regulated on a tailor-made basis and designed specifically for them, with costs and processes adapted to their features.

31. The current Flash Eurobarometer *access to finance* (No 271) was commissioned by the European Commission's DG Enterprise and Industry, in cooperation with the European Central Bank (ECB). It was set up to measure EU companies' use of various sources of finance, to assess the extent to which companies face difficulties when it comes to accessing finance and to study companies' expectations in terms of financing their future projects and developments.

32. Direct debits are here those defined by the ECB in Payments and Settlement Systems Statistics data.

33. Although the data available is different for Spain and EU27, it is helpful to make the comparison between both. Moreover, the data comprises the period before and after the crisis.

34. For EU27 data is only available from year 2005.

35. The concentration of labour adjustment in the temporary employment is a structural feature of the Spanish labour market since the labour reform approved in 1984 (Ferreiro and Serrano, 2001; Ferreiro and Gomez, 2006).

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#### THE ABSTRACT OF THE PROJECT IS:

The research programme will integrate diverse levels, methods and disciplinary traditions with the aim of developing a comprehensive policy agenda for changing the role of the financial system to help achieve a future which is sustainable in environmental, social and economic terms. The programme involves an integrated and balanced consortium involving partners from 14 countries that has unsurpassed experience of deploying diverse perspectives both within economics and across disciplines inclusive of economics. The programme is distinctively pluralistic, and aims to forge alliances across the social sciences, so as to understand how finance can better serve economic, social and environmental needs. The central issues addressed are the ways in which the growth and performance of economies in the last 30 years have been dependent on the characteristics of the processes of financialisation; how has financialisation impacted on the achievement of specific economic, social, and environmental objectives?; the nature of the relationship between financialisation and the sustainability of the financial system, economic development and the environment?; the lessons to be drawn from the crisis about the nature and impacts of financialisation? ; what are the requisites of a financial system able to support a process of sustainable development, broadly conceived?'

THE PARTNERS IN THE CONSORTIUM ARE:

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