# 2 THE INDEBTEDNESS OF THE SPANISH ECONOMY: CHARACTERISTICS, CORRECTION AND CHALLENGES

#### 1 Introduction

Private-sector debt in Spain reached high levels before the onset of the crisis...

During the expansion prior to the crisis, against an international background marked by low interest rates, optimistic expectations about economic growth and underpriced risks, the debt levels of households and non-financial corporations in the advanced economies increased markedly. In Spain this phenomenon became notably acute and debt ratios higher than those observed in peer countries were recorded (see Chart 2.1). EMU membership prompted an upward revision of expected incomes and set in place very loose financing conditions, the expansionary impulses of which on lending were not sufficiently countered by other economic policies. With the onset of the crisis, whose recessionary effects were sharper in Spain than in other countries owing – among other causes – to burgeoning private debt, the value of household and corporate wealth and future income expectations were revised downwards. Under these conditions, lowering the debt ratios of the non-financial private sector became a necessity. While these ratios have fallen from their mid-2010 peaks, they are still higher than in the past and exceed those of other developed economies.

... while public-sector debt rose swiftly during the crisis

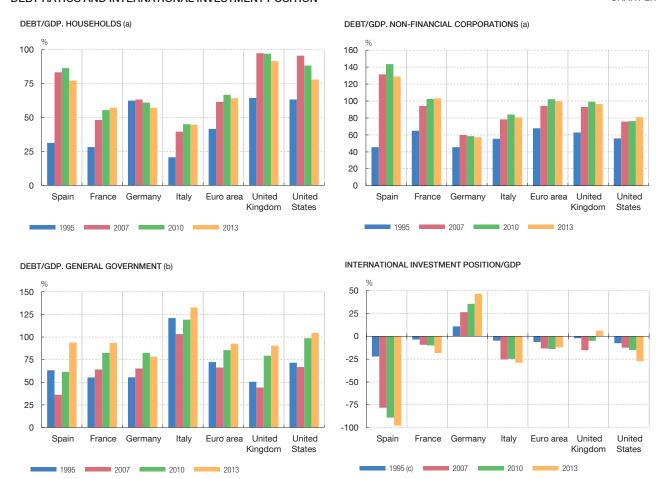
At the start of the crisis, public debt was nevertheless low, from both an historical and international standpoint; but during the crisis, budget deficits and general government debt rose swiftly. At end-2013, the public debt/GDP ratio stood at 93.9%, far exceeding the 60% benchmark set under the Maastricht Treaty and slightly above the average euro area level (see Chart 2.1).

As a result of high private and public debt, the economy as a whole shows a swollen external debt The increase in public and private debt, which has not been accompanied by a comparable rise in the financial assets of these sectors, has translated into a towering figure for the nation's net debt vis-à-vis the rest of the world: 98% of GDP at end-2013, a figure substantially higher than that of other advanced economies (see Chart 2.1). This high dependence on external saving is a considerable factor of vulnerability, as highlighted during the collapse in the financing of the balance of payments in summer 2012.

The resort to debt allows expenditure time profiles to be attained that are not constrained by the distribution over time of revenue...

Debt, along with saving, is the instrument economic agents use to optimise their expenditure time profiles without being constrained by the distribution of their income over time. Thus, for example, in the initial stages of their life cycle, households usually incur higher expenses relative to their income than in later stages, meaning that debt levels are relatively higher among younger households. Likewise, companies resort in the short term to external funds to finance investment projects that generate earnings in the medium and long term, and general government uses debt so that the profile of public spending is less volatile over the course of the business cycle than that of revenue, which is highly sensitive to economic fluctuations.

... but high debt levels increase borrowers' financial vulnerability, amplify the economic effects of adverse shocks and bear down on economic recovery after a crisis Given that debt enables borrowers either to attain the expenditure time profile they wish or to undertake profitable investment projects, the resort to debt helps increase social well-being. At the same time, however, debt increases their vulnerability to unforeseen shocks that constrain current or expected revenue, reduce wealth and worsen financing conditions. The readjustment of consumption and investment plans prompted by these adverse changes will tend to be greater the higher the accumulated debt. In turn, the perception by lenders that borrowers' level of debt may be excessive raises the cost of new loans and diminishes loan availability, which likewise restricts the possibilities of expanding expenditure. In a situation such as that prevailing at present in the Spanish economy, this



SOURCES: ECB, OECD, European Commission, national sources and Banco de España.

- a Debt includes loans and fixed-income securities.
- **b** For EU countries according to the Excessive Deficit Procedure.
- c For Italy, the figure is for 1997; for the United States and the euro area, for 1999.

restriction weighs down significantly on growth and its correction is unavoidable if a path of recovery is to firm.

To analyse debt in a sector, its particularities and the heterogeneity of the agents comprising it must be taken into account...

Diagnosing situations of excess debt for a specific sector, whether public or private, is no easy task, since its optimum level depends on future paths of financing costs and revenues, which are highly uncertain and complex to estimate. Moreover, the conditions of indebted agents within each sector are usually considerably mixed. That means the analysis cannot confine itself solely to aggregate data and to historical and international comparisons of such figures, but that it must also delve into the informational wealth of microeconomic data. As a result, the estimates available in the economic literature on the thresholds beyond which leverage causes negative effects on economic growth<sup>1</sup> must be viewed with due caution. Indeed, a specific level of debt of, for instance, non-financial corporations as a whole may have very different consequences for growth depending on what its distribution is.

<sup>1</sup> On the existence of debt thresholds beyond which economic growth declines, see C. Reinhart and K. Rogoff (2010), "Growth in a Time of Debt", American Economic Review, 100 (2), pp. 573-578; S. Cechetti, M. S. Mohanty and F. Zampolli (2011), The real effects of debt, Bis working paper 352; and U. Panizza and A. F. Presbitero (2013), "Public Debt and Economic Growth in Advanced Economies: A Survey", Swiss Journal of Economics and Statistics (SJES), Swiss Society of Economics and Statistics (SSES), vol. 149 (II), pp. 175-204.

A relatively standard way of identifying possible situations of excess debt is through debt sustainability analysis where, essentially, the conditions needed for liabilities to stabilise in relation to borrowers' ability to pay are characterised. This approach is of some use in the case of the public sector, but its application to households and non-financial corporations is more complex, since these sectors are made up of a much higher number of heterogeneous agents.

... as must interrelatedness with the other sectors in the economy Nor can an analysis of the debt of each of the economy's institutional sectors ignore the fact that the position of each sector can affect the rest through different transmission channels that operate both through quantities (e.g. a reduction in consumption and in investment to amortise private debts may adversely impact economic activity and, therefore, general government revenue and expenditure) and through costs (e.g. through the pass-through of the sovereign risk premium to the credit premia paid by the private sector). Accordingly, the view offered by an itemised analysis of the sectors should be complemented by a broader overview of the nation's aggregate debt.

This chapter analyses the Spanish economy's debt, assesses the progress in its correction and discusses the challenges it poses From this perspective, this chapter primarily characterises households' and non-financial corporations' debt and assesses progress in its adjustment. It then analyses how the financial position of these sectors has, along with financial-sector and general government measures, shaped aggregate debt in the Spanish economy. Finally, it discusses the challenges posed in squaring the necessary reduction of private and public debt with the ongoing adjustment and the restoring of sustained growth in the medium term for the Spanish economy.<sup>2</sup>

# 2 Private-sector debt in the Spanish economy

## 2.1 HOUSEHOLD DEBT

Household debt grew at a very sharp pace before the crisis

From 1995 to 2007, credit raised by Spanish households increased at an annual average rate of 17%, compared with an average increase in nominal GDP of 7.5% (see Chart 2.2). This strong growth in their debt is due to a combination of several factors. First, the comfortable financing conditions – prompted by the context of financial innovation and lax credit standards at the international level, by the convergence of Spanish and euro area interest rates, and by the continuation of an expansionary monetary policy – provided for access to credit at a lower cost. In parallel, greater macroeconomic stability and the favourable growth expectations associated with EMU entry led lenders and borrowers to underestimate the risks of debt. Lastly, the high demand for housing, fuelled by demographic and institutional factors as well as the two foregoing elements, led to a real estate boom which increased the expected value of real assets and which, in turn, facilitated indebtedness since the assets in question acted as collateral for the loans received.

The effects of these three factors were, moreover, mutually reinforcing: the increase in lending boosted spending, which in turn raised economic growth and asset prices, stimulating high demand for credit and ready access to it via the rise in the value of the assets that could be used as collateral.

Most debt was assigned to purchasing real estate assets

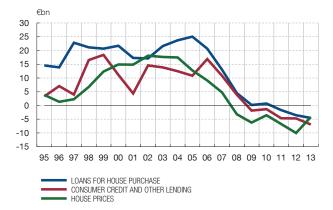
This interaction between the demand for credit and asset prices was particularly intense in the real estate market.<sup>3</sup> Most household debt was thus assigned to house purchases, meaning that the weight of this type of lending rose from 56% of the sector's liabilities in

<sup>2</sup> The role of fiscal policy in the growth of public debt during the crisis and the analysis of its sustainability were addressed in Chapter 2 of the 2010 Annual Report.

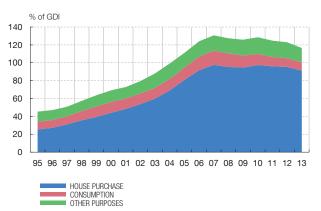
<sup>3</sup> For an empirical analysis of the relationship between house prices and real estate lending in Spain, see R. Gimeno and C. Martínez Carrascal (2010), "The relationship between house prices and loans for house purchase. The Spanish case", *Journal of Banking and Finance*, 34, pp. 1849-1855.

HOUSEHOLD DEBT CHART 2.2

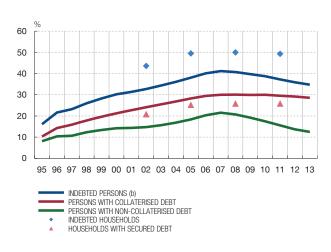
# HOUSEHOLD CREDIT (a) AND HOUSE PRICES (Year-on-year growth)



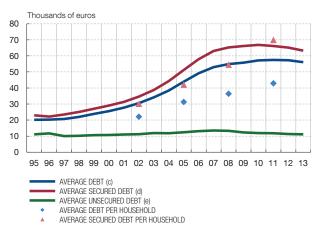
#### HOUSEHOLD DEBT. BREAKDOWN BY PURPOSE



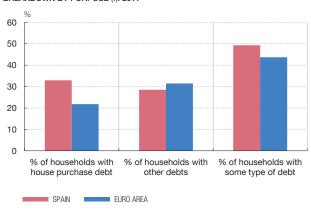
#### PROPORTION OF INDEBTED AGENTS



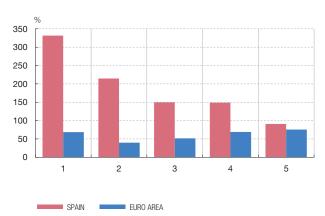
#### DEBT AMOUNT



# PERCENTAGE OF HOUSEHOLDS WITH OUTSTANDING DEBT. BREAKDOWN BY PURPOSE (f). 2011



#### MEDIAN DEBT/INCOME RATIO. BREAKDOWN BY INCOME QUINTILE (f). 2011



SOURCES: Banco de España and Eurosystem Household Finance and Consumption Survey.

- a Includes securitised credits and loans transferred to Sareb.
- **b** As a proportion of total persons aged over 16.
- c Average debt of persons with outstanding loans.
- d Average secured debt of persons with this type of loan.
- e Average unsecured debt of persons with this type of loan.
- f For Spain, the data refer to 2011. For the euro area, the reference year is 2010 for most countries.

1995 to 75% in 2007. Consumer credit and other lending increased at a slower pace, but also expanded notably (posting annual average growth of 11%).

The debt/income ratio stands above the average level for the euro area and the United States As a result of these developments, household debt as a percentage of GDP, which stood in 1995 at 31% (a low level compared with other advanced countries), climbed to 83% in 2007. This figure exceeded the average for the euro area, though not that observed in the United States and the United Kingdom (see Chart 2.1). In terms of gross disposable income (GDI), the increase was likewise notable, rising from 45% to 131%. Debt relative to GDI peaked in 2008 but, in terms of GDP, it continued increasing during the initial years of the crisis owing to the negative trend of output, peaking in 2010. Both ratios have since tended to fall slowly, while remaining above the average figure for the euro area, and the debt/GDI ratio has reached a level higher than that of the United States.

The increase in debt was the outcome both of a higher proportion of households with loans and of an increase in debt per indebted household According to Central Credit Register (CCR) figures, the increase in household debt during the expansion prior to the crisis reflects both the rise in the proportion of households in debt (up from 15% in 1995 to 40% in 2007) and the increase in the average debt borne by each household (which rose, in nominal terms, from €20,000 to €52,000 over this same period). The Spanish Survey of Household Finances (EFF by its Spanish acronym) – which provides much more detailed information on the socio-economic characteristics of indebted households but which is only available every three years, from 2002 – corroborates this. According to this source, the percentage of households with some form of debt increased from 43.6% in 2002 to 50% in 2008, while the median of this debt, in constant 2011 terms, rose from €28,000 to €38,700 over the same period. The latest edition of the EFF, which refers to the end-2011 situation, evidences the slight decline in the proportion of indebted households, while median debt shows an additional increase of 11% which, nonetheless, is fully determined by the behaviour of debt tied to house purchase.<sup>4</sup>

There is high heterogeneity across the debt ratios of the different population groups ...

As might be expected, the EFF also shows that the proportion of indebted households grows commensurately with level of income (22% in the first quintile of the distribution and 65% in the last) and declines in step with the age of the household head (higher than 70% in the age bracket below 44). The median debt/income ratio is higher in the lower-income segments (around 330% for the first quintile of the distribution) and for households whose head is younger (around 300% for the under-35 segment).<sup>5</sup>

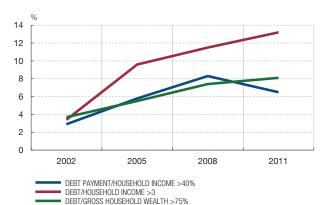
... but they are higher in Spain than in the euro area for most of the debtor segments Compared with the euro area, the proportion of indebted households was, at the end of the current decade, somewhat higher in Spain owing to the greater weight of lending for house purchases in our country. The greater incidence of mortgage loans in Spain also explains why the debt/income ratio of the representative indebted household is higher, given that the amounts of the loans for property purchases are usually higher and that the loan-to-value ratio for these assets is, nevertheless, less than in the euro area (although this difference has narrowed recently as a result of the decline in house prices in Spain).

<sup>4</sup> In the remaining components there was, in fact, a contraction. See "Survey of Household Finances (EFF) 2011: methods, results and changes since 2008", *Economic Bulletin*, January 2014, Banco de España. The figures for median debt are expressed in 2011 euro.

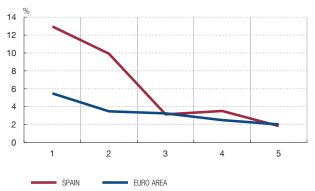
<sup>5</sup> These data refer to 2011.

<sup>6</sup> The euro area data are based on the Eurosystem household finance and consumption survey, which contains similar information to that of the EFF for 15 euro area countries, and whose first edition referred to the start of the current decade. For further details on the comparison with the euro area, see M. A. Marchetti and C. Martínez Carrascal (2013), "Un análisis del endeudamiento de las familias a partir de la encuesta del Eurosistema sobre la situación financiera y el consumo de los hogares de 2010", Boletín Económico, December, Banco de España.

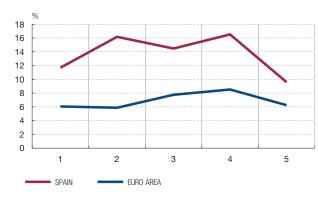
PROPORTION OF HOUSEHOLDS WITH HIGH FINANCIAL PRESSURE INDICATORS



PROPORTION OF HOUSEHOLDS WITH DEBT PAYMENTS EXCEEDING 40% OF THEIR INCOME. BREAKDOWN BY INCOME QUINTILE (a). 2011



PROPORTION OF HOUSEHOLDS WITH DEBT/INCOME RATIO > 3. BREAKDOWN BY INCOME QUINTILE (a). 2011



PROPORTION OF HOUSEHOLDS WITH DEBT/GROSS HOUSEHOLD WEALTH RATIO > 75%. BREAKDOWN BY INCOME QUINTILE (a). 2011



SOURCES: Spanish Survey of Household Finances and Eurosystem Household Finance and Consumption Survey.

a For Spain, the data are for 2011. For the euro area, the reference year is 2010 for most countries.

The household segment subject to most financial pressure in the short term also accounts for a higher percentage in Spain than in the euro area, although this figure has recently fallen somewhat

The segment of households subject to most financial pressure in the short term, understood as those whose debt burden associated with debt payments exceeds 40% of their income, is also higher in Spain (6.5%) than in the euro area (3.4%). This percentage grew uninterruptedly from 2002 to 2008 (see Chart 2.3), but fell in 2011 (the latest available wave of the EFF) thanks to the lowering of interest rates during the crisis. By population group, lower-income, lower-wealth households with outstanding debts and those whose household head is young are those that most frequently face higher financial pressure.

The indicators generally used to approximate the proportion of households subject to greater financial pressure more into the medium term (a debt/income ratio above 3 and a debt/wealth ratio over 75%) evidence a continuation of the growing path prior to the crisis. In the first place, the percentage (13.2%) is also higher than that observed in the euro area, while in the second instance (8.1%) it is similar. As occurs with the short-term indicator, the percentage of indebted households facing greater financial pressure in the medium term is higher among lower-income, lower-wealth households and in those in which the household head is young.

The high level of household debt has intensified the

Over the past five years there has been a positive relationship in the advanced economies between the increase in household debt in the run-up to the crisis and the intensity of the contraction in consumption during the crisis

crisis, through the effect exerted by debt on the reduction in consumption (durable goods in particular). This effect can operate through three channels. First, through a wealth effect, which leads consumption to vary in the face of changes in household net wealth. Debt enables a higher volume of assets to be acquired and, therefore, raises household exposure to declines in the value of such assets, as was the case during the crisis. Moreover, debt levels exert a greater constraint on access to credit, which raises the proportion of households subject to liquidity restrictions and, therefore, with less spending capacity. Finally, greater uncertainty prompts an increase in precautionary saving, which reduces consumption. This increase in uncertainty is probably greater for households that are more indebted and, therefore, more exposed to the shocks that usually accompany a crisis.<sup>8</sup>

There is empirical evidence in Spain on how important these channels were in the unfolding of the crisis. Studies conducted drawing on the EFF reveal, first, that the wealth effect is relatively small in our economy: given a decline in (net real estate) wealth of €100, consumption falls by only €1 (€0.4 in the case of durable goods). However, according to the same source, the percentage of households reporting saving for "emergency reasons", which may be considered as an indicator of the trend of precautionary saving, increased from 11.6% in 2005 to 19.1% in 2011, and the increase was substantially greater (12.5 pp) in the quintile of the most indebted households (see Table 2.1).

As regards the role of liquidity constraints, the percentage of households applying for a bank loan fell from 27.1% in 2005 to 17.7% in 2011. The decline was greater among households with some type of debt (by almost 20 pp) than among those with none; and, among the former it was higher for those in the upper quintile of the distribution of the debt/ income ratio (in this latter case the reduction was almost 30 pp) (see Table 2.2). Partly, this shows that households in that quintile were also those that reported having increased to a greater extent their propensity for emergency saving (and, by saving more, they would cease to resort to credit). Nonetheless, the proportion of households that did not apply for a loan because they thought it would not be granted also increased more in this quintile, suggesting that their debt restricted their capacity to gain access to new credit.

2.2 NON-FINANCIAL CORPORATIONS' DEBT

Non-financial corporations' debt reached very high levels...

During the expansionary phase prior to the crisis, non-financial corporations' debt also increased at a very high rate (15% in annual average terms, from 1995 to 2007). As in the case of households, this expansion in debt was driven by very loose financing conditions and by optimistic expectations about the return on investments. The phenomenon was particularly intense in certain sectors of activity, particularly those linked to the real estate

<sup>7</sup> It has been estimated with international data that, for each 10 pp increase in household debt prior to the crisis, consumption fell by 2.6 pp [see IMF (2012), "Dealing with Household Debt", chapter 3, World Economic Outlook, Spring]. In the United States, most of the decline in GDP during the 2007-2009 recession was due to the reduction in household consumption (durable goods in particular), which was much sharper in those areas in which households were more indebted [see A. Mian and A. Sufi (2010), "Household Leverage and the Recession of 2007 to 2009", IMF Economic Review, 58 (1), pp. 74-117, and Th. Philippon and V. Midrigan (2011), Household Leverage and the Recession, NBER working paper 16965].

<sup>8</sup> See K. Dynan (2012), Is a Household Debt Overhang Holding Back Consumption?, Brookings Papers on Economic Activity, Spring, pp. 299-362; T. Jappelli and L. Pistaferri (2013), Fiscal Policy and MPC Heterogeneity, CEPR Discussion Paper 9333; and Á. Estrada, D. Garrote, E. Valdeolivas and J. Vallés (2014), Household Debt and Uncertainty: Private Consumption after the Great Recession, Documento de Trabajo del Banco de España, forthcoming.

<sup>9</sup> See O. Bover (2005), Wealth effects on consumption: Microeconometric estimates from the Spanish Survey of Household Finances, Documentos de Trabajo, no. 0522, Banco de España, and C. Barceló and E. Villanueva (2010), The response of household wealth to the risk of losing the job: evidence from differences in firing costs, Documentos de Trabajo, no. 1002, Banco de España. The estimates of the wealth effect in relation to spending on durable consumption are taken from a panel survey of Spanish municipalities for which spending on cars from 2007 to 2012 is related to the changes in real estate wealth recorded in these municipalities [see D. López-Rodríguez and F. Elías (2014), Mortgage Lending Cycles with Heterogeneous Credit Quality: Evidence from the Spanish Housing Boom and Bust, Documento de Trabajo del Banco de España, forthcoming].

EMERGENCY SAVINGS (a) TABLE 2.1

% of total households

		2005	2008	2011
Total households		11.6	16.4	19.1
Occupancy status of main residence	Ownership, without mortgage	13.2	16.7	19.8
	Ownership, with mortgage	11.6	17.5	17.4
	Other	8.1	13.8	19.3
Real estate wealth	Below 25th percentile	10.0	12.5	18.8
	Between 25th and 50th percentile	10.3	14.4	17.1
	Between 50th and 75th percentile	11.4	16.9	18.6
	Between 75th and 90th percentile	14.7	22.6	23.8
	Between 90th and 100th percentile	18.1	21.8	19.7
Debt/income (indebted households)	Below 20th percentile	11.1	21.1	17.5
	Between 20th and 40th percentile	11.1	14.2	16.5
	Between 40th and 60th percentile	10.5	15.8	15.9
	Between 60th and 80th percentile	9.9	15.9	16.0
	Between 80th and 100th percentile	9.7	13.1	22.2

SOURCES: Spanish Survey of Household Finances (EFF), Banco de España (EFF2005, EFF2008, EFF2011).

### LOAN APPLICATIONS AND LOANS REJECTED OR GRANTED FOR A LOWER AMOUNT IN THE PAST TWO YEARS

TABLE 2.2

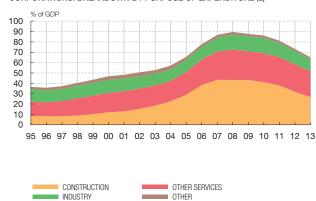
		2005		2008		2011	
		Application	Applications rejected as a % of applications made	Application	Applications rejected as a % of applications made	Application	Applications rejected as a % of applications made
Total households		27.1	12.0	22.9	12.4	17.7	23.2
Occupancy status of main residence	Ownership, without mortgage	19.6	11.5	16.2	7.4	12.2	17.6
	Ownership, with mortgage	43.4	10.2	36.6	14.6	26.8	21.4
	Other	26.5	17.0	24.3	18.2	21.8	37.3
Real estate wealth	Below 25th percentile	23.1	18.2	19.8	18.1	18.4	37.1
	Between 25th and 50th percentile	29.5	11.0	24.6	12.8	18.4	23.5
	Between 50th and 75th percentile	27.5	12.7	22.0	13.8	15.8	22.8
	Between 75th and 90th percentile	25.5	8.0	25.3	5.1	18.5	7.6
	Between 90th and 100th percentile	31.4	3.6	25.4	7.3	17.5	11.3
Debt/income (indebted households)	Below 20th percentile	48.0	11.0	38.8	10.2	30.1	23.4
	Between 20th and 40th percentile	53.6	10.2	41.9	9.1	38.1	17.5
	Between 40th and 60th percentile	45.7	8.3	43.8	3.4	31.5	18.4
	Between 60th and 80th percentile	54.8	7.0	41.0	7.2	35.1	16.8
	Between 80th and 100th percentile	66.6	15.0	59.5	19.8	36.9	24.2

SOURCES: Spanish Survey of Household Finances (EFF), Banco de España (EFF2005, EFF2008, EFF2011).

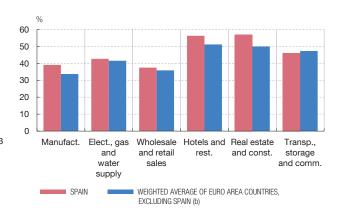
sector, where around 55% of the increase in bank lending to companies was concentrated (see Chart 2.4). The heavy fall in property sales that accompanied the crisis, along with the decline in property prices, meant growing difficulties for a significant portion of these companies in meeting meet their payment obligations. Other firms, however, used borrowings to finance international expansion processes which, in general, have

a Percentage of households affirming emergency savings.

# RESIDENT CREDIT INSTITUTIONS' LENDING TO NON-FINANCIAL CORPORATIONS. BREAKDOWN BY PURPOSE OF EXPENDITURE (a)



### NFCs: DEBT/TOTAL ASSETS. BREAKDOWN BY SECTOR. 2012



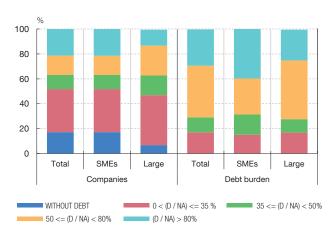
#### NFCs: DEBT/GROSS OPERATING PROFIT. BREAKDOWN BY SECTOR. 2012



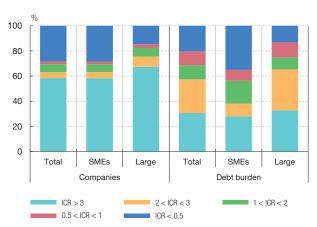
# DEBT RELATIVE TO ASSETS AND INCOME. BREAKDOWN BY SIZE. SPAIN (c) AND EURO AREA (d). 2012



### COMPANIES BY DEBT/NET ASSETS RATIO (D / NA) SEGMENT. 2012



### COMPANIES BY INTEREST COVERAGE RATIO (ICR) SEGMENT. 2012 (f)



SOURCES: Banco de España and Bank for the Account of Companies Harmonised.

- a Includes securitised credits and loans transferred to Sareb.
- b GDP-weighted average of the ratios in Germany, France, Italy, Portugal, Belgium and the Czech Republic. For Germany and the Czech Republic, the ratio is for 2011, as the 2012 figure is not available. For Germany, unlike the other countries, liabilities include debt with group and associated companies.
- c Weighted average based on the sectoral distribution of the gross value added in the euro area of the sectoral ratios.
- d GDP-weighted average and value added in the euro area of the sectoral ratios in Germany, France, Italy, Portugal, Belgium and the Czech Republic. For Germany, unlike the other countries, liabilities include debt with group and associated companies.
- e Gross operating profit.
- f ICR defined as (gross operating profit + financial revenue)/financial expenditure. Companies without financial expenditure are included in the group with ICR > 3.

contributed to the greater geographical diversification of their revenue, helping soften the impact of the decline in domestic business.

The corporate debt/GDP ratio, which stood below that of other developed countries in the mid-1990s (at around 45%), climbed to 132% in 2007 (117% if intercompany loans are excluded), far higher than the figures observed on average for the euro area (94%), the United Kingdom (93%) and the United States (76%) (see Chart 2.1). The inertia of financing flows and the unfavourable course of GDP meant that this ratio continued rising, up to almost 145% of GDP by mid-2010. Following the correction since, it stood at end-2013 at 128% of GDP, almost 30 pp above the figure for the euro area and also higher than that of other advanced economies, such as the United Kingdom and the United States.

... which affects both SMEs and larger companies, proving more prominent in certain sectors, such as those linked to the real estate market... Compared with the euro area average, corporate debt is higher in Spain in most sectors of activity, especially when set in relation to earnings, although the differences are more marked in sectors linked to the real estate market. This suggests that the need for debt to be corrected, while more acute in the sectors linked to the real estate market, is not confined to the latter.

The breakdown by size (proxied by the volume of sales) shows that, in relation to assets, the debt of the biggest Spanish corporations is higher than that of their euro area peers, while for smaller firms the levels are similar. In terms of income generated, the ratio is higher in Spain for both groups of companies, even after controlling for differences in sectoral distribution, and the discrepancies are more marked for smaller-sized firms which, having been more affected by the recession, saw a greater contraction in their earnings.

... although there is a significant proportion of companies with moderate debt levels In any event, there is notable dispersion in the degree of debt within each sector of activity and for companies of different sizes. Thus, somewhat more than 15% of SMEs and almost 7% of larger companies do not have interest-bearing debt. And among the companies that do, for 42% of these the leverage ratio is lower than 35%, while for 26% it exceeds 80%. This heterogeneity is also discernible when indicators measuring the degree of financial pressure associated with debt incurred are used. For instance, while 30% of companies (whose borrowings are equivalent to 31% of corporate liabilities) obtained revenue flows in 2012 that did not suffice to cover their financial expenses, almost 60% of them (accounting for a further 31% of corporate debt) did not have to pay interest or earmarked in this connection less than one-third of their ordinary profits. Therefore, these data show that the high aggregate debt of the non-financial corporations sector is compatible with the existence of a notable proportion of firms with moderate levels of debt. For these companies, their degree of leverage does not appear to be an obstacle to obtaining borrowed funds with which to finance profitable investment projects. Along these lines, information on micro-scale credit shows that, in 2012 and 2013, around 40% of companies underwent no contraction whatsoever in their outstanding credit balance.

Companies' debt has influenced their recent activity

The evidence available since the start of the crisis reveals that the most indebted companies have seen their activity trend more adversely in terms of employment and investment (see Box 2.1). That would suggest that the sector's high debt influences macroeconomic developments and highlights the need to complete the ongoing restructuring of that part

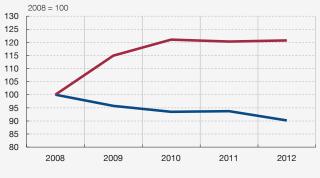
<sup>10</sup> To assess the degree of debt of the corporate sector, intercompany loans should preferably not be included since these are liabilities of certain companies but assets of others. However, details on these loans are not available either for the United States or for the United Kingdom. Accordingly, in this chapter the concept of liabilities used to make the international comparison includes intercompany debt.

Before the crisis, the debt of non-financial corporations increased very quickly. Afterwards, it has decreased slowly and progressively against a background characterised by a macroeconomic recession in which employment and productive investment have deteriorated notably. This Box analyses to what extent the employment and tangible fixed-asset investment behaviour of non-financial corporations differs depending on their level of debt. To do this, use is made of the merged CBSO and Mercantile Register database (CBI)<sup>1</sup>, which contains microeconomic data from a sample of around 600,000 firms per year, for the period from 2008 to 2012 (latest year available). The firms are separated into two groups according to whether at the beginning of each year their ratio of debt to net assets is above or below the average for their sector of activity.

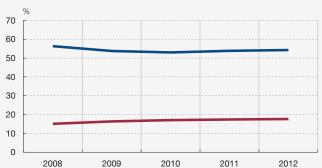
1 This database is obtained by merging the CBA and CBB databases. The CBA database contains information on some 10,000 firms reporting annually to the Central Balance Sheet Data Office and is somewhat biased towards larger firms. The CBB database is constructed from financial statements lodged by firms in the mercantile registers and contains information on small and medium-sized enterprises. Panel 1 shows the financial debt of the two groups of companies. It can be seen that, whereas the most indebted firms progressively reduced their borrowed funds from 2008, the debt of other firms followed an upward path until 2010 and then remained steady for the following two years. A more detailed analysis by sector of activity and firm size confirms the existence of similar behaviour patterns in all sectors of activity, and in both SMEs and larger firms. As a result of this behaviour the ratio of debt to net assets of both aggregates became slightly more similar (see Panel 2). This convergence is more evident if construction is excluded, since this sector's debt ratio was pushed upward by the high losses in the period analysed, which reduced the denominator of this indicator.

Panels 3 and 4 show investment in tangible fixed assets (measured as the ratio of the flow of gross fixed capital formation to its balance a year earlier) and unemployment for each of the two groups of firms analysed (more indebted and less indebted). Both aggregates show declining investment and job destruction, but the falls are sharper for more indebted firms. This pattern is observed in all sectors of activity, in both SMEs and large firms.

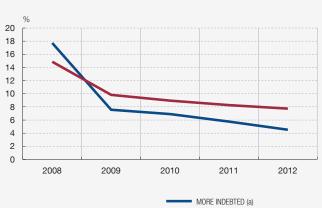
### 1 INTEREST-BEARING DEBT



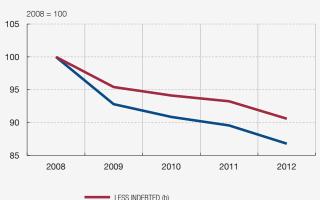
#### 2 DEBT/NET ASSETS



### 3 GFCF (c)/TANGIBLE FIXED ASSETS AT t-1



### 4 EMPLOYMENT



SOURCE: Banco de España.

- ${f a}$  Firms whose debt ratio is greater than the average debt in their industry at t-1.
- **b** Firms whose debt ratio is equal to or less than the average debt in their industry at t-1.
- c Gross fixed capital formation. In CBB firms this flow is approximated by the difference between the balance-sheet amounts of tangible fixed assets less depreciation expense.

In short, the results reported in this Box indicate that the level of firms' indebtedness influenced their investment and employment decisions during the crisis. In particular, more indebted firms were comparatively more strongly affected by the crisis, since they

were more vulnerable to the contraction of their income. That obliged them to adjust their balance sheet and to reduce employment and investment more sharply compared with financially sounder firms.

of the productive system subject to a greater degree of financial pressure. The experience of past economic recoveries following episodes of financial crisis further points to initial patterns of growth which, in the case of companies, tend to be underpinned to a greater extent by less credit-intensive activities and financed with alternative funds, such as self-financing or own funds. This tends to contain price adjustments insofar as the most indebted companies will face greater difficulties in adjusting their profit mark-ups.<sup>11</sup>

2.3 PROGRESS IN THE

CORRECTION OF PRIVATESECTOR DEBT

Private-sector debt can be reduced through several means

The debt ratio can be reduced either through a decline in the outstanding balance of debt (the numerator of this ratio) or as a result of an increase in the funds agents have to meet this balance (the denominator). A decline in the balance of liabilities may, in turn, occur because the repayments of outstanding debt exceed the flow of new gross financing (net negative financing flow), because the loans are unpaid or because their valuation changes (write-downs and valuation effects).

Past experience reveals that debt-reduction processes following financial crises tend to be slow and rest, initially, on contractions in the outstanding balance of debt. The main reason is that these processes are accompanied by weak growth in income, which restricts agents' spending and is a drag on economic recovery. Later, once the economy begins to recover, the decline in the ratio tends to be compatible with more moderate growth in debt than that of nominal GDP.

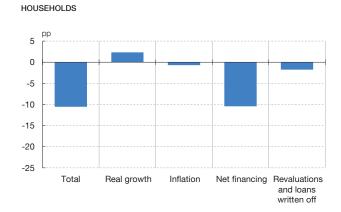
The correction of private debt in the advanced economies is occurring at different degrees of intensity and through different channels, depending on each country's situation. Where the pick-up in economic activity has come about earlier and has been greater, and where household debt restructuring has had a greater incidence (the United States), the reduction in debt has been swifter. It has also proceeded more briskly in those countries where the inflation rate has been higher (the United Kingdom).<sup>13</sup>

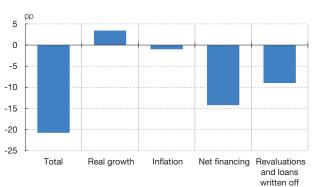
In Spain, the reduction in non-financial private-sector debt has advanced significantly, despite sluggish GDP In Spain, private-sector debt/GDP ratios peaked in mid-2010. Since then there has been a cumulative reduction to end-2013 of 11 pp in the case of households, and of 21 pp (16 pp when intercompany debt is included) in that of non-financial corporations. In both, the reduction has essentially come about through negative net debt flows, i.e. through debt repayments higher than the gross flow of new financing. This factor contributed almost 11 pp of the reduction for households and 15 pp for firms (see Chart 2.5). In this latter

<sup>11</sup> See J. M. Montero and A. Urtasun (2014), *Price-Cost Mark-ups in the Spanish Economy: a Microeconomic Perspective*, Documentos de Trabajo, no. 1407, Banco de España.

<sup>12</sup> See, for example, O. Aspachs-Bracons, S. Jódar-Rosell and J. Gual (2011), *Perspectivas de desapalancamiento* en España, Documentos de economía «la Caixa», and McKinsey (2012), *Debt and deleveraging: uneven* progress on the path to growth, McKinsey Global Institute.

<sup>13</sup> See D. Garrote, J. Llopis and J. Vallés (2013), Los canales del desapalancamiento del sector privado: una comparación internacional, Documentos Ocasionales, no. 1302, Banco de España.





SOURCES: Banco de España.

a Debt ratio is defined debt (excluding intercompany loans), relative to GDP.

case, the write-downs and valuation effects, including the impact of the transfer of real estate loans to Sareb, have also played a significant role (8 pp). Conversely, inflation has made a marginal contribution and real growth, which has been negative, has exerted a counter-effect (increase in the debt ratio). The reduction in overall Spanish corporate and household debt has been greater than that recorded in economies such as the United States, the United Kingdom and the Netherlands, which also faced private-sector over-indebtedness problems. However, the level of the Spanish ratio continues to stand above that of these countries.

NON-FINANCIAL CORPORATIONS

The decline in household debt has been sharper in loans not intended for house purchase In the household sector, the contraction in debt has been quantitatively more significant in loans not linked to house purchase, which reflects both the shorter relative term of these transactions (which makes their repayment swifter) and the lack of collateral in this type of loan, thereby raising the risk for lenders (leading supply-side conditions to be more cyclically sensitive). Indeed, in this type of financing the reduction in the outstanding balance began in 2008, before it did so in the case of real estate debt. Moreover, this reduction was the result both of the proportion of indebted households and of average loan amounts (see Chart 2.2). Conversely, in loans for house purchase the proportion of indebted households stabilised between 2006 and 2010, and fell very slowly only from 2011, while the average amount of debt has fallen somewhat more sharply since this latter date. Part of the decline in the outstanding balance of debt for property purchases is linked to the cancellation of loans associated with the hand-over of houses when borrowers are in situations of financial difficulty. Specifically, during 2012 and 2013, such transactions accounted for 1.4% of outstanding mortgages.

Companies have used different means to reduce their debt, and those that have done so most intensely are the most indebted ones In the case of companies, the decline in debt has been fairly widespread across sectors and has affected both large corporations and, especially, SMEs; that said, the reduction is most concentrated in the most indebted companies, which are those that have greater balance-sheet restructuring requirements. On the contrary, those other companies with little debt have, on average, increased their debt. Companies that have reduced their borrowings have used different means to do so, such as the use of internally generated funds, capital increases or asset (essentially financial assets and, in particular, shares and

<sup>14</sup> See Á. Menéndez and M. Méndez (2013), "Spanish non-financial corporations' debt since the start of the crisis. A disaggregated analysis", Economic Bulletin, January, Banco de España.

holdings in other companies) disposals. Some of the biggest corporations have resorted especially to asset disposals.<sup>15</sup>

Spain is a heavily banked economy, meaning that the bulk of financing raised by households and non-financial corporations is from the national banking system. Consequently, the

counterpart of the strong growth in household and corporate debt in the years prior to the

crisis was the expansion of resident credit institutions' balance sheets and activity. From 1995 to 2007 their total assets increased by 286%, the number of offices did so by 25%

and employment in the industry by 12%. In 2008, the lending/GDP ratio stood at around

170%, far higher than in other developed countries (105% in the euro area, 132% in the

United Kingdom and 64% in the United States). As earlier discussed, the expansion was accompanied by a progressive concentration in transactions linked to the real estate

#### 3 The nation's debt

3.1 THE ROLE OF THE BANKING SYSTEM

The banking system financed the increase in private-sector debt by raising funds on international markets...

market.

Given the insufficiency of domestic saving to finance this expansion in lending, banks resorted to international debt markets. Most funds were raised through the issuance of long-term fixed-income securities, directly by the banks themselves (as in the case of covered bonds, for instance) or through special vehicles (as in the case of asset-backed bonds). As a result, non-residents' holdings of fixed-income instruments issued by domestic financial institutions climbed from 0.4% of GDP in 1995 to 62.5% of GDP in 2007, against the generalised background of the internationalisation of financial flows, and driven also by Spanish euro area entry.

... meaning that the banking system's situation was much affected by the crisis... The excessive size of the banking system, along with the bias of its portfolios towards real estate sector-related activities, made it vulnerable to adverse macroeconomic shocks, and in particular to those linked to the real estate market. In these circumstances, the economic crisis that broke in 2008 ultimately undermined the financial and balance-sheet position of the banking system, albeit with a very mixed degree of incidence from bank to bank.

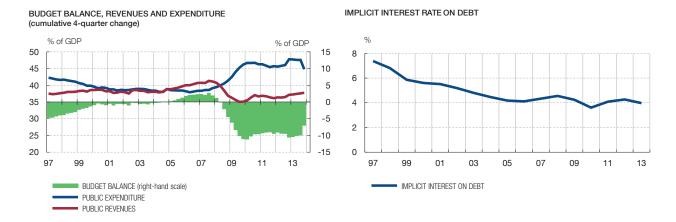
... which made it necessary to undertake a major restructuring, recapitalisation and clean-up of the banking system, along with regulatory reform As a result, it was necessary to overhaul the banking system by means of a four-pronged reform: restructuring, recapitalisation, balance sheet clean-up and the reform of the regulatory and supervisory framework. These measures are analysed in Chapter 1 of this Report, as they are one of the most significant factors behind developments in the Spanish economy during the reference period.

3.2 THE ROLE OF THE PUBLIC SECTOR

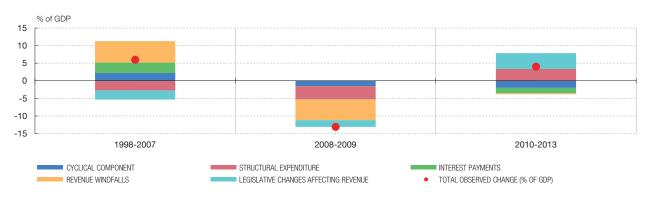
State aid for the restructuring of the banking system came on top of growing general government financing requirements The banking system clean-up and restructuring measures required public injections of capital. The necessary resources were obtained, in part, from a specific European support programme totalling €41 billion, which was requested in July 2012 and successfully concluded in early 2014. The financing of these capital injections came on top of growing general government financial requirements in the wake of the crisis, linked essentially to the operation of the automatic stabilisers and to the expansionary discretionary measures adopted (see Chart 2.6). The assistance and stimuli to the private sector, set against the strong decline in tax receipts, translated into growing budget deficits and into a rapid increase in public debt. It was through all these measures that the link between both sectors progressively increased, in such a way that a portion of the private-sector adjustment costs ultimately passed through to the public sector.

<sup>15</sup> For further details on the means used by large corporate groups to reduce their debt, see Box 1 in Á. Menéndez and M. Méndez (2013), "Results of non-financial corporations to 2012 Q4 and summary year-end data", Economic Bulletin, March, Banco de España.

<sup>16</sup> See Chapter 3 of the Financial Stability Report, November 2012, Banco de España.



DETERMINANTS OF THE CHANGES IN THE SPANISH GENERAL GOVERNMENT BUDGET BALANCE (CUMULATIVE PERCENTAGE OF TREND GDP)



SOURCE: Banco de España.

Most of the increase in public debt had to be financed through resort to the rest of the world and to the banking system itself, through which 31% and 47%, respectively, of new funds were raised. As a result, there was a rise not only in the Spanish economy's external debt but also a sizable increase in banks' exposure to the public sector.

The link between the banking system and the public sector gave rise to a risk feedback loop between both that has hampered resolution of the debt crisis The heightened bank exposure to general government and the assumption by the latter of a most sizeable portion of the restructuring bill for certain financial institutions contributed to increasing the interrelatedness between the financial position of the banking system and that of the public sector. The combination of both situations with the worsening macroeconomic outlook shaped the three sides of a triangle of negative interactions. These were particularly acute at the height of the tension on financial markets during the European debt crisis and they ultimately highlighted the difficulty of maintaining a single currency in the presence of highly integrated financial markets if, at the same time, supervisory and banking resolution policies remained in the hands of the national authorities.<sup>17</sup> The weakness of expected economic growth dented banks' earnings expectations. This adversely impacted their financing costs, and the pass-through of

<sup>17</sup> For empirical evidence on these negative interactions between the banking and public sectors, see V. V. Acharya, I. Drechsler and Ph. Schnabl (2012), "Tale of two overhangs: the nexus of financial sector and sovereign credit risks", and R. Breton, C. Pinto and P.-F. Weber (2012), "Banks, moral hazard, and public debts", in Banque de France (2012), Public debt, monetary policy and financial stability. Financial Stability Review, April. The European crisis, in general, and the nature of the links between the financial fragility of the banking system and of the public sector, in particular, were addressed more fully in Chapter 2 of the Annual Report, 2012.

these greater costs to the price of credit detracted from the possibility of higher growth. Further, it negatively affected the projections of public finances through the attendant impact on the automatic stabilisers and also as a result of the perceived greater risk of a potential public intervention in the financial system, which had been fuelled by the abovementioned effects on bank profitability. The subsequent expected difficulties in general government being able to exert a stabilising effect fed through, in turn, to expectations of excessively weak growth.

#### 3.3 EXTERNAL DEBT

As a result of the changes in the financial position of the different sectors and of their interrelatedness, the nation's debt increased strongly The debt of the various domestic economic agents and their interrelatedness are reflected in the nation's overall financial position vis-à-vis the external sector. Thus, the build-up of debt by the private sector during the pre-crisis expansionary phase, which outpaced the public sector's saving capacity, translated into successive deficits on the current and capital accounts. And owing to these deficits and to the trend of the relative prices of our assets and liabilities vis-à-vis the rest of the world<sup>18</sup>, the net external liabilities of resident agents as a whole increased substantially (as a percentage of GDP) from the mid-1990s to the onset of the global financial crisis in 2007 (see Chart 2.7). They carried on rising thereafter, albeit at a lesser pace, in a setting in which the economy continued to evidence net borrowing requirements, albeit increasingly smaller ones, until posting net lending capacity in 2013. Gross liabilities increased to a greater extent, since this growth was accompanied by the greater internationalisation of the Spanish economy, reflected in a growth of its claims on the rest of the world.

The course of liabilities was essentially determined by the behaviour of external debt, which includes only liabilities that entail payment obligations, as opposed to others, such as investment in equity instruments, which do not give rise to such commitments. Considering gross external debt (160% of GDP in December 2013) exclusively, the Spanish economy's current position is not significantly different from that of nations such as Germany, and this debt proportion is even lower than that of France and the United Kingdom. However, given that these countries have a greater volume of claims on the rest of the world, Spain's international investment position in net terms shows high figures (98% of GDP), exceeded only by Portugal, Ireland and Greece among the euro area countries and far above the 35% threshold set by the European Commission as a benchmark for identifying macroeconomic imbalances under the new EU surveillance procedure.

The risks associated with a specific position against the rest of the world depend on the magnitude involved and on the composition of liabilities

The sustainability of the external financial position depends ultimately on the ability to meet the periodic payments associated therewith, their repayment at maturity and, also, potential withdrawals of funds by foreign investors or the non-rollover of the operations which, at the time of maturing, need to be rolled over. Accordingly, what is important is not only the volume of foreign liabilities, but also their composition in terms of maturities and instruments.

Direct investment and investment in listed shares entail, from this perspective, a lower risk given the generally more durable nature of the former and the lesser callability of the latter. Under other investment (portfolio investment and other investment), their callability varies with the maturity of the instruments. Lastly, euro area membership generates asset- and liabilities-side positions among the participating central banks (intra-system claims) that do

<sup>18</sup> According to estimates based on information from the Spanish balance of payments and international investment position, the valuation effects (along with other adjustments) account for somewhat more than half of the increase in net external liabilities from 1995 to 2007.

INDEBTEDNESS OF THE NATION CHART 2.7

#### EXTERNAL LIABILITIES INTERNATIONAL INVESTMENT POSITION (a) % of GDP 80 250 40 200 0 150 -40 100 -80 50 -120 -160 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 02 03 04 05 06 07 80 09 10 13 12 EXTERNAL LIABILITIES FS INTERNATIONAL INVESTMENT POSITION (SIGN CHANGED) GROSS EXTERNAL DEBT LIS GROSS EXTERNAL DEBT (a) EXTERNAL LIABILITIES % of GDP 450 2,500 2,000 300 1,500 1,000 150 500 00 01 02 03 04 05 06 07 08 09 10 11 12 13 DIRECT INVESTMENT PORTFOLIO INVESTMENT: SHARES DE PORTFOLIO INVESTMENT: S/T OTHER INVESTMENT: S/T PORTFOLIO INVESTMENT: L/T OTHER INVESTMENT: L/T ■ FINANCIAL DERIVATIVES PORTFOLIO INVESTMENT AND OTHER FOREIGN INVESTMENT IN SPAIN (b) **EXTERNAL ASSETS** €bn €bn 1,000 2,500 2,000 800 1.500 600 400 1,000 200 500 0 0 GEN. GVT. OMFI OSR Total 02 03 04 05 06 07 08 09 10 11 12 13 DIRECT INVESTMENT PORTFOLIO INVESTMENT LONG-TERM

SOURCES: IMF, national sources and Banco de España.

MEMORANDUM ITEM: PORTFOLIO INVESTMENT AND OTHER INVESTMENT ABROAD

a Countries are named with their ISO code (ES: Spain; DE: Germany; FR: France; IT: Italy; PT: Portugal; US: United States; GB: United Kingdom; JP: Japan; IE: Ireland).

OTHER INVESTMENT

BE + RESERVES

FINANCIAL DERIVATIVES

b Excluding the Banco de España.

SHORT-TERM

not have a specific maturity and which are not, therefore, callable in the strict sense. However, the level is informative since a high net debtor position in these assets corresponds to greater dependence by resident credit institutions on financing from the Eurosystem.<sup>19</sup>

Although the bulk of external financing corresponds to longterm portfolio investment and refinancing risks in the short term are limited...

The bulk of foreign liabilities corresponds to non-residents' portfolio investments in longterm instruments (issued mainly by financial institutions). Close to 80% of short-term investments, which entail higher refinancing risks, correspond to Spanish credit institutions' liabilities. In turn, a sizeable portion of the latter are interbank loans, of which one-third are collateralised. Furthermore, 58% of those that are not collateralised correspond to foreign banks. Both factors significantly reduce the risks of their potential non-rollover. Taking available interbank claims on the external sector also into account, the net noncollateralised debtor position of domestic banks was practically zero at end-2013.

In the remaining sectors, claimable foreign liabilities are essentially long-term instruments. Moreover, as indicated for credit institutions, these sectors also have claims on the foreign sector which, though they have fallen in recent years, and even bearing in mind the fact that the private agents holding these assets do not exactly match the borrowers, they still provide for something of a buffer to withstand possible fund withdrawals.

... maintaining such a high net debtor position is a major factor of vulnerability

Although refinancing risks are contained, maintaining a high net debtor position vis-à-vis the external sector is a factor of vulnerability for the Spanish economy, due both to the draining off of resources entailed by the payments associated with this debt and, above all, to the exposure to potential bouts of instability.

# The reduction of debt: conditioning factors and challenges

The economy's high level of debt conditions growth and is a major factor of vulnerability, meaning its reduction is unavoidable

The adjustment has begun.

but it is gradual and must be completed under demanding conditions

High public debt makes continuing fiscal consolidation vital

The swollen debt of Spanish households, firms and general government sectors conditions their capacity to undertake new spending and hiring decisions. At the same time, the aggregation of this debt translates into a high debtor position of the whole of the economy vis-à-vis the rest of the world, which makes it vulnerable to potential shocks that alter the normal functioning of international financial markets or that affect foreign investors' confidence in our economy. Accordingly, reducing these debt ratios to more comfortable levels is a vital condition for setting in place a stable growth path.

The redressing of private-sector debt began some time back, but the singular macroeconomic conditions prevailing restrict the speed of its progress. First, the momentum behind economic growth that is needed to reduce the weight of the debt rests largely on the continuous attainments of gains in competitiveness, which requires maintaining price restraint that ensures the favourable behaviour of the inflation differentials in relation to the euro area average. The low levels of inflation in the euro area at present and the projections on its future behaviour show that the easing in debt ratios that an increase in the level of prices may provide will continue to be fairly limited. Also, the foreseeable path of recovery of the economy suggests moderate real growth rates, whose contribution to reducing the debt ratios will likewise be modest.

Despite the progress achieved in fiscal consolidation, the decline in public debt has not yet begun. On the forecasts available, the fiscal adjustment still needed to stabilise the public debt/GDP ratio remains considerable. In particular, according to the latest Stability Programme update, keeping the public debt/GDP ratio below the 100% threshold in 2017

<sup>19</sup> See the note "Banco de España claims on the Eurosystem in the Balance of Payments" (http://www.bde.es/ webbde/en/estadis/bpagos).

would require a cumulative 6.4 pp reduction, in terms of GDP, in the primary deficit. It should be borne in mind that the fiscal consolidation that enabled public debt to stabilise at 70% of GDP in the first half of the 1990s involved a reduction in the primary deficit for the period as a whole of 3.6 pp.<sup>20</sup>

These considerations underscore the significance of fiscal consolidation for firstly stabilising and subsequently reducing the public debt ratio. That would lessen the vulnerability of our economy to potential adverse shocks, while contributing to reducing the cost of financing for the other sectors in the economy, providing for a reduction in private debt.

Under these conditions, structural reform policies are the most evident option available to square the need to correct the economy's debt with economic growth... Under these conditions, supply-side policies are the best option for squaring the adjustment of private and public debt with sustained economic growth. The habitual objection to these types of reforms in recessions is that they may, in the short run, cause reductions in agents' incomes that translate into an increase in private debt ratios and in their associated burdens. However, if there are constraints on the capacity to incur debt, as is the case at present, structural reforms that improve the workings of the product and labour markets may – practically immediately – stimulate employment and aggregate demand, raising by extension economic agents' incomes (see Box 1.2). Moreover, the positive effects of these reforms on productivity result in gains in competitiveness which, along with those prompted by the adjustment of labour costs, contribute to stimulating economic growth and to reducing external debt.

... accompanied by mechanisms that help provide for the survival of viable companies with financial problems ... Given the non-contingent nature of traditional debt agreements, the cost they entail for debtors does not adjust to changes in their financial position or adverse shocks that affect their revenue flows. Nonetheless, it is in the interest of creditors to avoid debtor insolvency when such adverse shocks arise. Thus, under certain conditions, agreements that smooth debt service through the orderly amendment – in clearly defined cases – of certain contractual terms may be favourable to both parties. The challenge consists of legally designing procedures that avert the problems of moral hazard and do not jeopardise the solvency of creditors, as the latter are also vulnerable to default in a financial crisis situation.<sup>21</sup>

The legal framework for insolvency proceedings was regulated in Spain in 2003, but it has since been the subject of intense reform, including most recently Royal Decree-Law 4/2014. This process has essentially been aimed at setting in place more flexible and orderly mechanisms that facilitate the survival of companies that are under pressure in the short run but are viable in the medium and long term (see Box 2.2).

In the case of households, the types of loans involved – mortgage loans in the main, with a single lender – mean that the mechanisms for the private restructuring of the debt are less complex. In December 2013 (the latest available figure), refinancing and restructuring operations affected 10% of house mortgage loans. Additionally, shorter-dated financial pressure problems are more limited since they affect a smaller proportion of borrowers compared with what occurs with non-financial corporations and because, on the latest EFF data, there has been a decline in this proportion in recent years (see the upper left-hand panel of Chart 2.3), largely linked to the fall in interest rates prompted by a very expansionary monetary policy.

<sup>20</sup> See P. Hernández de Cos and J. F. Jimeno (2013), Fiscal policy and external imbalances in a debt crisis: the Spanish case, Documentos Ocasionales, no. 1303, Banco de España.

<sup>21</sup> See A. Mian, A. Sufi and F. Trebbi (2012), Resolving Debt Overhang: Political Constraints in the Aftermath of Financial Crisis, NBER working paper 17831.

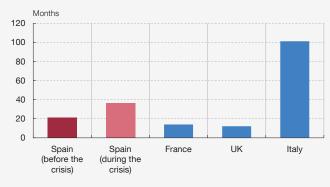
Corporate insolvency proceedings are a legal proceeding which aims to address the situation of a borrower's insolvency either through an agreement (accord) between the creditors and the debtor firm or through the winding-up of the latter. In the first case, a reduction in the nominal value of the debt is agreed (partial acquittance) and/or in the schedule of payments (payment period). In the second case, the creditors are paid by selling the company's assets in accordance with the legally stipulated order of priority of creditors. These proceedings exist in all developed countries and most emerging economies. In Spain, they are currently governed by the Insolvency Law, which was approved in 2003 and came into force on 1 September 2004. The economic crisis underlined some of the shortfalls in the Law and, consequently, it has been subject to four major reforms through Royal Decree-Law 3/2009<sup>2</sup>,

Law  $38/2011^3$ , the Entrepreneurs' Law<sup>4</sup> and Royal Decree-Law  $4/2014^5$ .

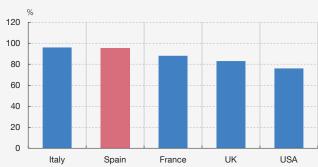
The main function of insolvency proceedings is to overcome problems of coordination and asymmetric information which make it difficult to renegotiate debt privately and for debts to be recovered individually and may lead to suboptimal results for lenders and borrowers. Coordination problems arise where there is a high number of creditors with diverging interests, whereas the asymmetric information problems are particularly important in the case of small creditors, with little information and a short commercial relationship with the debtor, and in the case of small borrowers. Individual recoveries of the debts of a firm whose

- 1 This proceeding may also be used by individuals without a business activity (consumers), although this box focuses on firms.
- 2 Royal Decree-Law 3/2009 of 27 March 2009 on urgent tax, financial and insolvency measures in the face of economic developments.
- 3 Law 38/2011 of 10 October 2011 reforming Insolvency Law 22/2003 of 9 July 2003.
- 4 Law 14/2013 of 27 September 2013 to support entrepreneurs and their internationalisation.
- 5 Royal Decree-Law 4/2014 of 7 March 2014, adopting urgent measures on corporate debt refinancing and restructuring.

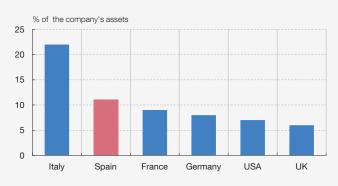
#### 1 DURATION OF INSOLVENCY PROCEEDINGS (a)



# 2 PERCENTAGE OF FIRMS SUBJECT TO INSOLVENCY PROCEEDINGS THAT ARE WOUND UP (b)



### 3 DIRECT COSTS OF INSOLVENCY PROCEEDINGS (c)



## 4 BUSINESS INSOLVENCY RATES (d)



- a Data for Spain are for 2007 (before the crisis) and 2012 (during the crisis), data for France and Italy are for 2007 and data for the United Kingdom are for 2006. Sources: Consejo General del Poder Judicial (2012 and subsequent years), "La Justicia Dato a Dato. Año 2012", Estadística Judicial; Ministère de la Justice (2010), "Annuarie statistique de la Justice", Édition 2009-2010 and S. Frisby (2006), "Report on Insolvency Outcomes, The Insolvency Service Report, U.K." Istat.
- b The data for Spain, the United Kingdom and the United States are for 2004-2012, the data for Italy are for 2004-2007 and the data for France are for 2004-2008. Sources: M. Celentani, M. García-Posada and F. Gómez (2010), "The Spanish Business Bankruptcy Puzzle and the Crisis", Working Paper 2010-2011, FEDEA; Consejo General del Poder Judicial and E. van Hemmen (2013 and subsequent years), "Estadística concursal. Anuario 2012", Colegio de Registradores de la Propiedad y Mercantiles de España, Madrid; The Insolvency Service, United States Courts. The data on insolvencies in the United Kingdom also include the sale of the whole business to third parties and, consequently, they overestimate the percentage of companies which are dismantled.
- c Year 2013. Source: Doing Business (World Bank).
- d Year 2010. Sources: Eurostat, OECD, national sources and Euler Hermes (2011); "Economic Outlook 2011", No. 4, Business Insolvency Worldwide, Evreux.

assets do not cover its liabilities usually result in a creditors' race for the available funds. This may lead to the dismantling of a firm which is solvent but has liquidity problems and to losses for all creditors.

Insolvency proceedings in Spain attempt to overcome these problems through several arrangements. Generally, the beginning of the insolvency proceedings halts all enforcement proceedings against the firm. Additionally, a list is drawn up of all the company's assets and the claims against it, so that all creditors have the same information about the company's net worth position. Finally, for a creditors' agreement to be approved the favourable vote of ordinary creditors representing at least 50% of the firm's liabilities, which are not collateralised, is required.

However, in practice, several factors have prevented insolvency proceedings in Spain from carrying out their function satisfactorily. First, they last a very long time compared with similar proceedings in other developed countries, except for Italy, and their duration has increased significantly since the beginning of the crisis (see Panel 1). Second, a very high proportion of firms which are subject to insolvency proceedings (95%) are ultimately wound up. Since it is unlikely that practically all the firms entering insolvency proceedings are non-viable, the system would seem to be incapable of restructuring the debt of solvent companies with liquidity problems. As for other developed countries, only Italy has a similar percentage, whereas the figures for France, the United Kingdom and the United States are substantially lower (see Panel 2). Finally, as shown by Panel 3, insolvency proceedings in Spain have high direct costs which consume a large share of the firm's assets. These costs are higher than in the United Kingdom, the United States, Germany and France, and only lower than those in Italy. These factors contribute to insolvency proceedings being used much less in Spain by firms under financial pressure than in most developed countries as shown by the insolvency rates (the number of companies commencing insolvency proceedings divided by those leaving the market), shown in Panel 4.

The need to have rapid and flexible proceedings in place is particularly important in the case of large and medium-sized firms where coordination problems can reduce the success of private negotiations owing to the large number of creditors involved. By contrast, private restructurings are more likely to work at small companies in view of the small number of lenders (35% of Spanish

SMEs with bank debt use only one bank and 60% use one or two banks) $^6$ .

The reforms of the Insolvency Law implemented recently by the Entrepreneurs' Law and Royal Decree-Law 4/2014, develop the alternatives to insolvency proceedings. The former creates a specific procedure – the out-of-court agreement for payment – for the self-employed and small businesses, which habitually used insolvency proceedings least due to their high fixed costs. The latter introduces changes into how pre-insolvency refinancing works to make it more appealing and effective so that firms can restructure their debt more flexibly without having to apply for insolvency proceedings.

More specifically, Royal Decree-Law 4/2014 simplifies the proceedings required for undertaking such operations and for halting individual debt enforcement proceedings while negotiations take place. It extends the list of conditions of these agreements which can be imposed on dissident creditors. Thus, in addition to partial acquittances, provision is also made for the possibility of reductions in the payment period, the conversion of debt into equity, and the transfer in payment of debt of the assets or claims of the company in difficulties. The mere capitalisation of debt by creditors does not make them persons specially related to the insolvent legal person. Consequently, they avoid the detrimental treatment (subordination of their loans) generally received by the claims of shareholders or partners of a firm subject to insolvency proceedings. The Royal Decree-Law also stipulates that temporarily during a period of two years from the entry into force of the law, any fresh financing (previously 50%) which has been extended in the framework of a refinancing agreement will be considered preferential credit, thus giving it a higher priority in the ranking of claims. Insofar as the agreements reached respond to a feasible plan permitting the continuity of the firm, the liabilities arising from the negotiations will, logically, have a lower risk of default. In the particular case of bank creditors, restructured debts, providing that they comply with the strict criteria established, would be classified as standard exposure, as was clarified by the Banco de España's communication to banks in March 2014. This would reduce the need to record provisions for them and would thus increase the capacity of banks to meet new solvent demand for lending.

<sup>6</sup> Source: Central Credit Register, May 2013.

... and measures aimed at correcting frictions in the credit market that hamper the channeling of new flows to their most efficient uses So that the reduction in debt should not hamper economic growth, it is also important that the containment of lending at the aggregate scale – which is vital for reducing debt ratios – should be compatible with the availability of financing for more solvent agents with profitable investment projects.

The evidence available suggests that, in the case of corporations, this type of reallocation of credit among companies might already be taking place. Hence, over the past two years, despite the aggregate contraction in corporate debt, around 40% of Spanish firms with debt have increased or maintained the outstanding balance of their bank borrowings. These companies are characterised by having a sounder financial position than those whose debt has contracted (higher profitability and a lower degree of debt and interest burden) and by showing more dynamic activity (high growth in sales and in employment).

To boost this pattern of healthy credit reallocation among companies, it is important to smooth the frictions bearing down on credit supply. These frictions arise, in part, from the financial fragmentation in Europe that is preventing monetary impulses from being passed through in full to all the euro area countries. In this respect, the successful conclusion of banking union in Europe is pivotal to achieving greater financial market integration in the area. Another strand of the frictions, however, relates to the asymmetric information problems that hamper SMEs' access to financing. The public assistance schemes for this type of company and the measures aimed at improving the quality of credit information are examples of measures that can contribute to mitigating these problems.<sup>22</sup>

The speed of the adjustments will influence the pace and scope of the recovery

Past experience shows that recovery following episodes of crisis with a strong financial component tends to be slow. In the current setting, part of this slowness is due to the difficulties involved in correcting financial imbalances when real and nominal growth in the economy is low.

Despite these difficulties, adjustments in the financial positions of the various institutional sectors of the Spanish economy are not only unavoidable; indeed, the speed at which they ultimately come about will influence the pace and scope of the economic recovery under way. If corporations, households and general government maintain an excessive level of debt, investment and consumption will not prove dynamic enough to recoup the losses in output and employment caused by the crisis and to place the economy on a stable growth path.

<sup>22</sup> See J. Ayuso (2013), "An analysis of the situation of lending in Spain", Economic Bulletin, October, Banco de España.