DEBT OF SPANISH NON-FINANCIAL CORPORATIONS. DEVELOPMENT OVER TIME AND COMPARISON WITH THE EURO AREA

Debt of Spanish non-financial corporations. Development over time and comparison with the euro area

The authors of this article are Arturo Fraile Izquierdo and Carmen Martínez Carrascal, of the Directorate General Economics, Statistics and Research.

Introduction

Between the mid-1990s and 2007, the rate of growth of borrowing by Spanish non-financial corporations rose very sharply, outpacing the rate of growth of GDP and of income generated by the sector. In consequence, aggregate debt ratios to gross operating surplus and GDP, which were initially lower than the euro area average, rose above said average and above the ratios of most other euro area countries, exceeded only by those of Portugal and Belgium (see Chart 1). Over the past two years, the rate of growth of corporate debt has moderated significantly, recording negative rates of change since end-2009. Nevertheless, low growth in GDP and corporate profits has meant that debt ratios have remained high.

To assess the implications for macroeconomic and financial stability of this change in the financial situation of firms, it is important not only to study aggregate indicators for the whole non-financial corporations sector but also to make a more disaggregated analysis. In particular, a study at sectoral level that may help determine whether this comparatively high aggregate debt is the result of widespread greater recourse to borrowing across all branches of activity, or of a greater increase in borrowing in just some areas of activity or a specific pattern by productive specialisation concentrated on activities with greater propensity for debt. Similarly, to estimate the level of leverage attained, comparisons by sector with other euro area countries are also appropriate.

This article analyses the debt ratios of Spanish non-financial corporations by sector, both over time and in comparison with other euro area countries, using the BACH database that contains harmonised data on the balance sheets and profit and loss accounts, aggregated by sector, of a sample of firms from the main euro area countries. The article first examines the debt ratios of these corporations in the present decade, a period of maximum growth in corporate debt. There follows a comparative analysis with the euro area for 2007 (permitting an approximation of the financial position of Spanish firms vis-à-vis their euro area peers immediately before the economic crisis) and for 2008 (the last year for which information is available in the BACH database). Accordingly, the analysis reflects the impact on debt ratios of the initial phase of the recent economic crisis.

Development of Spanish non-financial corporations' debt ratios, 2000-2007

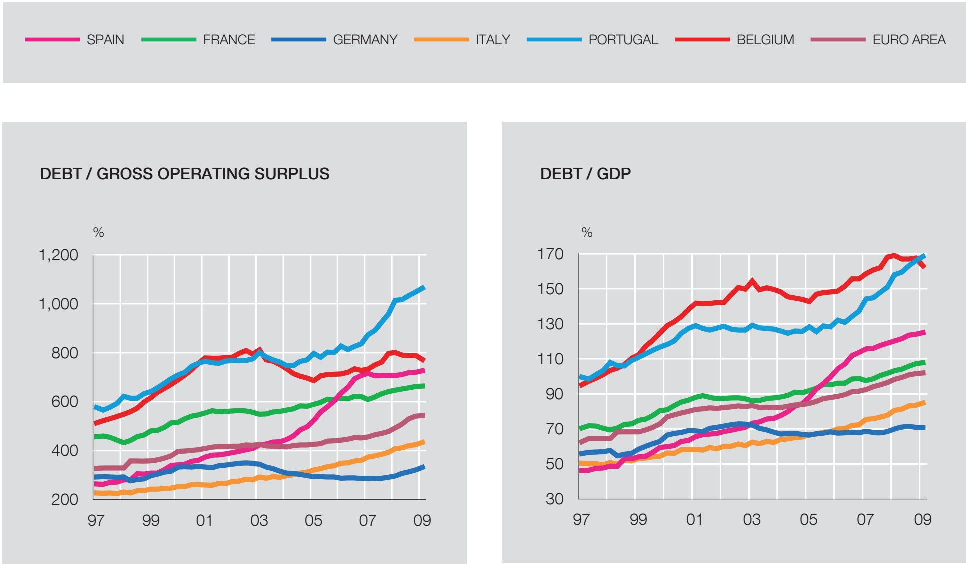
One advantage of accounting data is that they permit analysis of indicators that are not available in the national accounts, such as, for example, debt-to-asset ratios. However, the BACH database does not distinguish between interest-bearing and trade debt, both of which are included under liabilities. A further disadvantage is that the database covers only a sample of firms (although the coverage is reasonable), meaning that the findings must be interpreted with caution.[1]

This article analyses three indicators: i) the ratio of debt to gross operating profit (GOP), which measures the capacity to meet the cost of debt repayments with profits generated; ii) the ratio of financial costs to GOP, which reflects the debt burden and also helps identify cases in which

1. Thus, while in Belgium and France there is blanket coverage of the different sectors of activity considered, in other countries the coverage is only partial. For Spain the coverage is average for the group of countries overall. The lowest levels of coverage are for Germany and Portugal for the hotels and restaurants sector; in both cases the sample firms represented 20% of the total value added of this branch of activity in 2007. In Spain, the lowest level of coverage corresponded to the real estate sector, where the firms considered represented 34% of total sector employment in 2007.

DEBT OF NON-FINANCIAL CORPORATIONS

CHART 1



SOURCES: Eurostat and Banco de España.

higher debt levels are connected with a higher volume of trade rather than interest-bearing debt; and iii) the debt-to-asset ratio, which reflects the portion of assets that are financed by borrowing and is the habitual measure of leverage.

Regarding the sectoral breakdown, seven branches of activity are considered: real estate; construction; wholesale and retail trade; hotels and restaurants; manufacturing; energy (electricity, gas and water supply); and transport, storage and communications.[2]

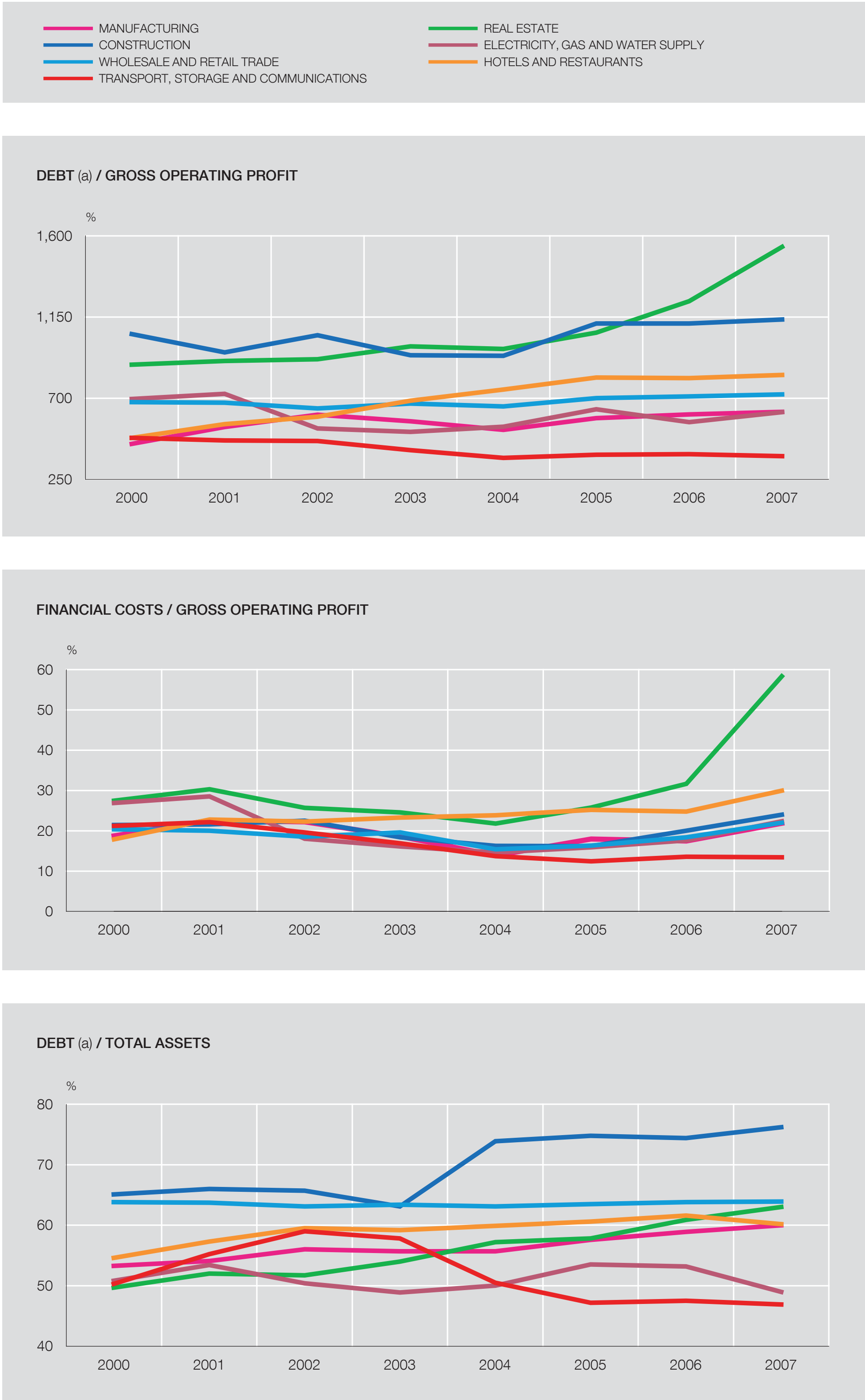
As Chart 2 shows, the debt-to-GOP ratio rose in the non-financial corporations sector as a whole between 2000 and 2007, with a quite widespread increase across the different branches of activity. In fact, transport, storage and communications (which recorded the lowest ratio in most years) and energy were the only sectors in which it did not rise. However, the extent of the increase varied considerably by sector. Real estate firms saw the sharpest rise, especially in the latter years of the period, resulting in a debt-to-GOP ratio in 2007 that was some 650 pp higher than in 2000. The increase was also quite significant in the hotels and restaurants sector (350 pp). Conversely, the lowest climb was seen in wholesale and retail trade (43 pp), followed by construction, whose ratio did not rise significantly (80 pp) since the marked increase in sector debt was partially offset by the strong income momentum in the period.

Although debt ratios rose, the decline in the cost of borrowing meant that between 2000 and 2004 the proportion of gross business income needed for debt servicing declined. As from 2004, against the backdrop of a tightening in the monetary policy stance, this ratio began to rise, especially in real estate services due to their comparatively high debt levels. In this sector, the portion of GOP absorbed by financial costs rose by 31 pp between 2000 and 2007, with most of this growth concentrated in the final years of the period. The construction sector recorded a much more moderate increase (2.6 pp; 7.8 pp as from 2004), similar to that of most other branches of activity, since although its debt levels were among the highest, a comparatively large proportion

2. On average in the period, these branches of activity represented 71% of the value added of all non-financial corporations. For the euro area they represented 66% in 2007. The sectors not covered were either not available for all the countries considered or were of marginal weight in the total non-financial corporations sector.

DEBT AND DEBT BURDEN OF NON-FINANCIAL CORPORATIONS. 2000-2007

CHART 2



SOURCE: BACH.

a. Debt includes trade credit.

corresponded to trade debt. The only two sectors in which this indicator did not rise in the period analysed were energy, and transport, storage and communications, in line with the decline in their debt ratios in the period and, prior to 2005, due to the decline in the cost of borrowing.

In the case of the debt-to-asset ratio, the increase was also quite widespread, but less marked, with real estate and construction firms posting the strongest growth. Real estate firms saw their leverage ratio climb by 13 pp between 2000 and 2007, from a relatively low level at the start of the decade in comparison with other branches of activity to one of the highest by 2007. In the case of construction, which recorded the highest debt-to-asset ratio throughout the period, the rise was also notable, albeit somewhat smaller (11 pp). The other service activities analysed presented much more moderate increases (or virtually none at all in the case of wholesale and retail trade), while in transport, storage and communications and in energy the ratio declined, in step with the debt-to-GOP ratio. Accordingly, these continued to be the least indebted sectors in 2007.

Comparison with the euro area of Spanish firms' debt ratios before the crisis

Table 1 presents, for each country and sector, the 2007 values for all three ratios analysed, while Chart 3 compares the Spanish indicators with the euro area average.[3] As the table shows, in most countries the debt-to-GOP ratio differs significantly by sector, with real estate and construction firms posting comparatively high values. In fact in 2007 real estate firms recorded the highest debt ratios in all countries save for Germany and Italy where construction firms presented the highest leverage. Conversely, electricity, gas and water supply firms recorded, on average, the lowest levels. The comparison by country shows that the most significant differences between Spain and the rest of the euro area were in real estate: in this sector Spanish firms' ratios were among the highest, second only to their Portuguese peers, and almost 50% higher than the weighted average as a function of GDP. Spanish construction firms presented debt-to-GOP ratios similar to the average of the other countries (and below the weighted average), while Spanish transport, storage and communications firms recorded lower ratios, reflecting a greater debt repayment capacity than their euro area peers.

In step with their higher debt-to-GOP ratios, real estate firms also presented the highest debt burden ratios in all countries except Italy. By contrast, construction firms' ratios were lower, despite their relatively high leverage, possibly owing to their comparatively large proportion of trade debt. The comparison by country shows that, in the real estate sector, Spanish firms presented the second highest ratios (behind their Portuguese peers). Specifically, Spanish real estate firms dedicated almost 60% of their gross income to servicing debt, 13 pp above the average for the other countries and more than 20 pp above the weighted average as a function of GDP (see Chart 3). By contrast, in all other branches of activity, Spanish firms posted ratios generally very similar to those of the other countries analysed.

In the case of the debt-to-asset ratio, the construction sector recorded the highest figure in most countries in 2007 and the electricity, gas and water supply sector the lowest. Spain was noteworthy in that it presented a comparatively high ratio both in construction and manufacturing (and, to a lesser extent, in energy). In all other branches of activity, Spanish firms tended to post recourse to debt levels similar to the euro area average, save in transport, storage and communications where Spanish firms recorded lower leverage than most of their euro area peers (see Chart 3).

To draw implications regarding the comparatively high debt levels thrown up by these aggregate indicators for Spanish firms in comparison with their euro area peers, the extent to which

3. The BACH database includes data from the Netherlands and Austria, but neither country is included in the analysis: the Netherlands, due to the lack of information on financial costs, and Austria, because the sectoral breakdown available for 2007 is different from that of the other countries.

DEBT AND DEBT BURDEN RATIOS
BACH database. 2007

TABLE 1

%

	COUNTRIES (a)							
	Spain	France	Germany	Italy	Portugal	Belgium	Weighted average (b)	Average ratio (c)
DEBT / GROSS OPERATING PROFIT								
Manufacturing	624.1	503.5	536.6	626.3	554.2	745.0	559.9	593.1
Real estate	1,538.7	979.5	1,097.1	816.1	2,331.5	1,369.4	1,039.9	1,318.7
Construction	1,136.7	703.2	2,250.0	1,163.7	1,299.1	546.4	1,412.0	1,192.5
Electricity, gas and water supply	622.3	530.4	356.0	502.5	530.7	1,183.8	491.5	620.7
Wholesale and retail trade	720.7	637.1	643.9	1,035.3	864.4	721.4	746.6	780.4
Hotels and restaurants	829.2	538.8	269.1	826.5	1,121.3	914.7	540.5	734.1
Transport, storage and communications	377.7	559.5	561.5	747.8	748.2	559.1	610.8	635.2
Average (d)	*835.6*	*636.0*	*816.3*	*816.9*	*1,064.2*	*862.8*	*771.6*	*839.2*
Weighted average as function of GVA (e)	*868.7*	*689.3*	*773.4*	*813.9*	*1,027.7*	*823.9*	*767.4*	*825.6*
FINANCIAL COSTS / GROSS OPERATING PROFIT								
Manufacturing	21.8	15.5	20.5	18.6	24.5	36.0	19.5	23.0
Real estate	58.4	30.3	40.8	25.2	76.6	55.6	35.5	45.7
Construction	24.0	13.7	26.7	33.3	49.0	17.4	24.5	28.0
Electricity, gas and water supply	22.4	21.1	9.5	13.3	23.0	35.8	15.6	20.6
Wholesale and retail trade	22.0	15.2	17.9	27.5	34.6	35.6	20.8	26.1
Hotels and restaurants	30.0	17.1	10.5	28.1	35.9	38.5	18.9	26.0
Transport, storage and communications	13.4	23.7	30.2	23.2	30.7	24.5	26.3	26.5
Average (d)	*27.4*	*19.5*	*22.3*	*24.2*	*39.2*	*34.8*	*23.0*	*28.0*
Weighted average as function of GVA (e)	*27.7*	*20.4*	*24.8*	*24.0*	*38.5*	*36.0*	*24.2*	*28.7*
DEBT / TOTAL ASSETS								
Manufacturing	60.0	56.9	42.9	60.9	57.0	49.7	52.2	53.5
Real estate	63.0	62.5	65.2	62.2	71.5	55.1	63.3	63.3
Construction	76.2	68.7	67.3	73.5	72.3	51.7	68.5	66.7
Electricity, gas and water supply	49.0	41.3	37.8	51.6	49.0	55.9	43.4	47.1
Wholesale and retail trade	63.9	65.5	60.4	73.7	66.1	59.6	65.2	65.1
Hotels and restaurants	60.2	67.5	45.3	64.8	63.7	67.9	58.3	61.8
Transport, storage and communications	46.9	66.2	39.1	56.8	64.1	50.1	52.7	55.3
Average (d)	*59.9*	*61.2*	*51.1*	*63.4*	*63.4*	*55.7*	*57.7*	*59.0*
Weighted average as function of GVA (e)	*62.4*	*62.5*	*51.6*	*64.1*	*63.9*	*53.9*	*58.3*	*59.2*

SOURCES: Eurostat, BACH and Banco de España.

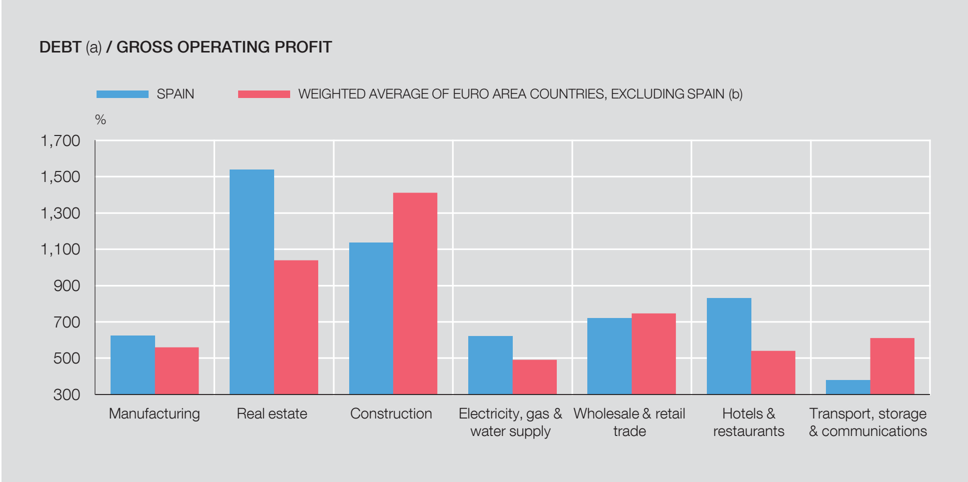
a. Non-consolidated data.
b. As a function of the GDP of each country, excluding Spain.
c. Excluding Spain.
d. For each country, simple mean of the sectoral ratios.
e. For each country, weighted average as a function of the GVA of each sector.

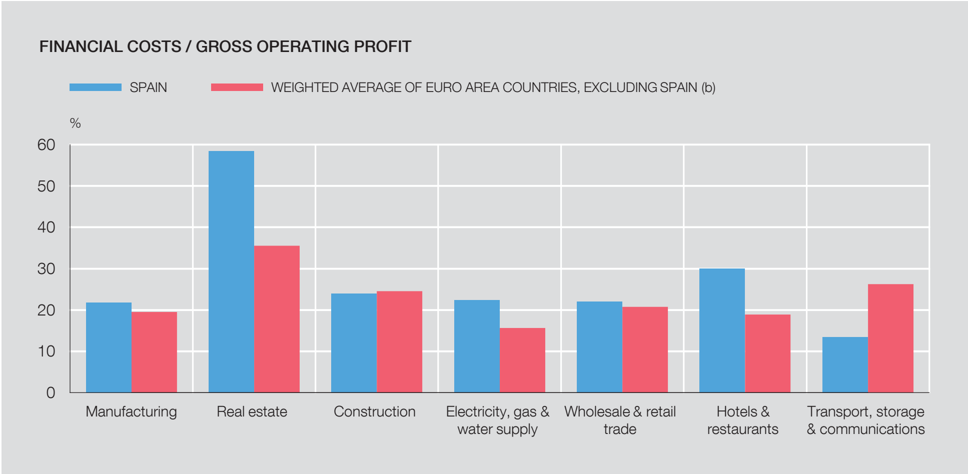
these findings reflect the greater weight in Spain, in terms of activity, of the sectors with greater propensity for debt (construction and real estate services) was analysed (see the first four bars of all three panels in Chart 4). Specifically, the first two bars show, for each of the ratios analysed, average sectoral values for Spain and for an aggregate of the other economies, considering the weight in terms of GVA of each sector in each country. The next two bars depict the same ratios calculated by applying an equal sector weighting to all countries (based on weight in terms of euro area GVA). This exercise shows that, in the case of the debt-to-GOP and debt-to-asset ratios, with the same sector breakdown the comparatively high level of debt in Spain tends to converge towards that of the euro area, although it remains higher. Conversely, in the case of the debt burden ratio, the gap increases slightly. If real estate firms are excluded, the debt-to-GOP and debt burden ratios become virtually level (see the last two bars of all three panels in Chart 4),[4] but in the case of the debt-to-asset ratio there is no further

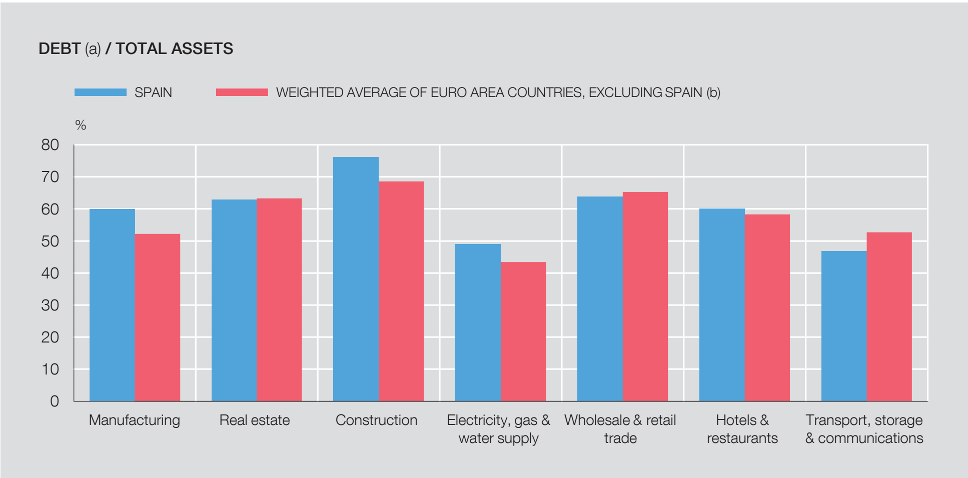
4. In fact, in the case of the debt-to-GOP ratio, Spain would dip below the aggregate of the other countries.

DEBT AND DEBT BURDEN OF NON-FINANCIAL CORPORATIONS.
SECTORAL BREAKDOWN. 2007

CHART 3





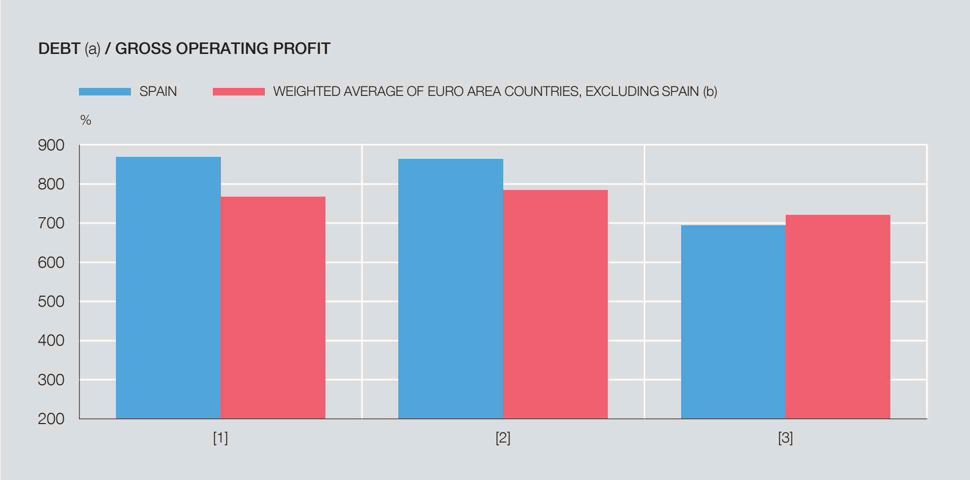


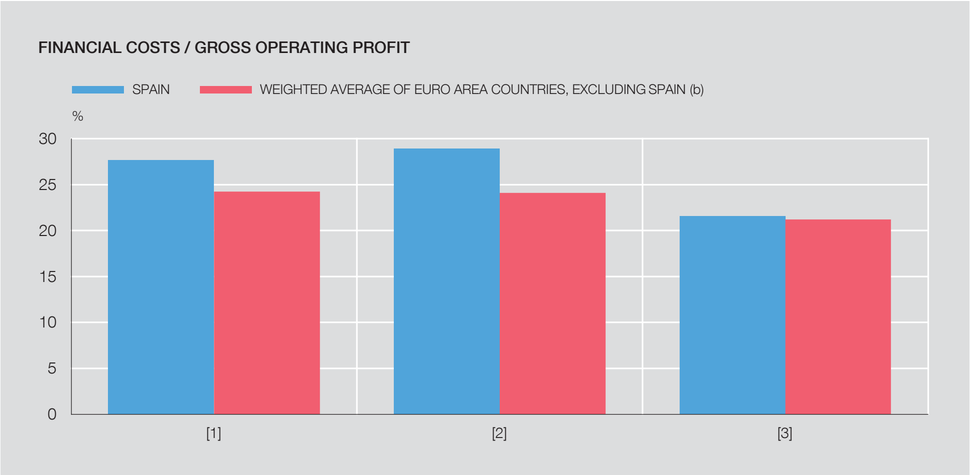
SOURCES: Eurostat, BACH and Banco de España.

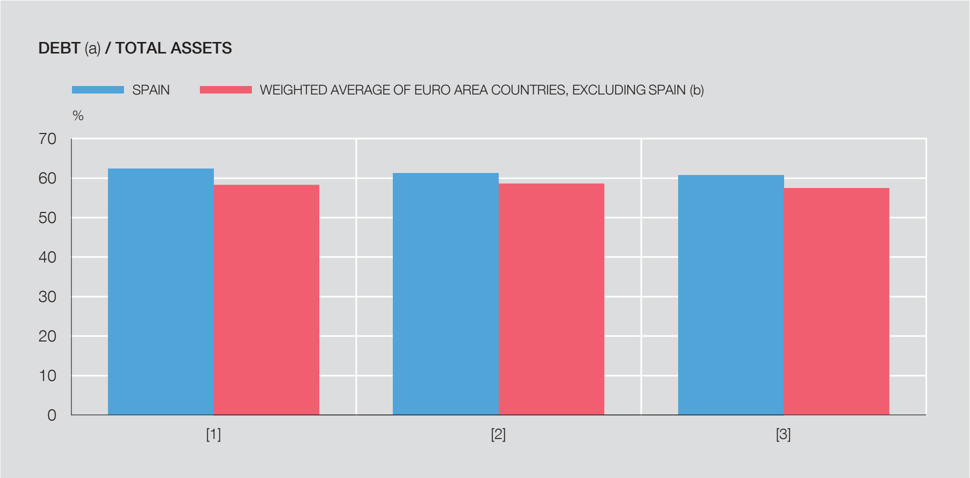
a. Debt includes trade credit.
b. Weighted average by GDP of ratios in Germany, France, Italy, Portugal and Belgium.

DEBT AND DEBT BURDEN OF NON-FINANCIAL CORPORATIONS. AGGREGATE INDICATOR. 2007

CHART 4







SOURCES: Eurostat, BACH and Banco de España.

a. Debt includes trade credit.
b. Weighted average as a function of GDP of debt ratios of Belgium, France, Germany, Italy and Portugal.

[1]: Aggregate ratio, weighting the sectoral values in each country by the gross value added (GVA) of that branch of activity.
[2]: Aggregate ratio, weighting each sector equally in all countries (in accordance with weight in euro area GVA).
[3]: Aggregate ratio, weighting each sector equally in all countries (in accordance with weight in euro area GVA), excluding real estate.

DEBT AND DEBT BURDEN RATIOS
BACH database. 2008

TABLE 2

%

	COUNTRIES (a)							
	Spain	France	Germany	Italy	Portugal	Belgium	Weighted average (b)	Average ratio (c)
DEBT / GROSS OPERATING PROFIT								
Manufacturing	890.5	608.5	653.1	724.2	641.6	903.5	669.8	706.2
Real estate and construction	1,869.8	879.2	1,127.3	1,265.1	1,962.4	1,064.4	1,104.2	1,259.7
Electricity, gas and water supply	768.8	616.1	632.8	497.5	523.6	1,203.9	622.7	694.8
Wholesale and retail trade	805.5	643.1	598.3	1,134.4	875.9	767.6	756.5	803.9
Hotels and restaurants	1,157.4	574.2	222.3	1,037.5	1,519.3	821.8	588.1	835.0
Transport, storage and communications	401.7	609.2	555.5	760.2	754.5	581.4	627.2	652.2
Average (d)	*982.3*	*655.1*	*631.6*	*903.1*	*1,046.2*	*890.4*	*728.1*	*825.3*
Weighted average as function of GVA (e)	*1,178.7*	*720.9*	*752.3*	*982.2*	*1,119.6*	*876.4*	*814.1*	*890.3*
FINANCIAL COSTS / GROSS OPERATING PROFIT								
Manufacturing	37.9	23.9	25.3	25.6	31.5	55.4	26.7	32.4
Real estate and construction	68.5	24.0	37.5	39.0	80.7	43.2	35.2	44.9
Electricity, gas and water supply	29.7	30.9	16.8	15.7	36.8	54.2	23.2	30.9
Wholesale and retail trade	26.8	18.1	17.9	36.6	51.6	43.9	24.7	33.6
Hotels and restaurants	48.4	19.7	10.9	41.0	53.0	40.9	23.5	33.1
Transport, storage and communications	16.2	26.8	32.1	25.7	34.5	31.6	29.0	30.1
Average (d)	*37.9*	*23.9*	*23.4*	*30.6*	*48.0*	*44.9*	*27.0*	*34.2*
Weighted average as function of GVA (e)	*44.9*	*23.2*	*27.3*	*32.4*	*51.4*	*45.4*	*28.9*	*35.9*
DEBT / TOTAL ASSETS								
Manufacturing	58.9	58.1	42.6	58.8	57.9	50.7	51.9	53.6
Real estate and construction	69.2	64.4	65.2	72.4	72.9	53.1	66.3	65.6
Electricity, gas and water supply	52.8	45.3	40.0	53.6	49.2	55.1	45.9	48.7
Wholesale and retail trade	63.4	64.7	58.8	70.9	67.1	58.7	63.7	64.0
Hotels and restaurants	64.1	67.1	42.3	57.9	64.3	60.3	55.0	58.4
Transport, storage and communications	48.7	67.7	39.7	57.4	65.0	51.6	53.6	56.3
Average (d)	*59.5*	*61.2*	*48.1*	*61.8*	*62.7*	*54.9*	*56.1*	*57.8*
Weighted average as function of GVA (e)	*62.4*	*63.0*	*51.3*	*64.8*	*64.9*	*53.8*	*58.5*	*59.5*

SOURCES: Eurostat, BACH and Banco de España.

a. Non-consolidated data.
b. As a function of the GDP of each country, excluding Spain.
c. Excluding Spain.
d. For each country, simple mean of the sectoral ratios.
e. For each country, weighted average as a function of the GVA of each sector.

correction of the difference that remained after applying the same sector breakdown, although for this ratio the differences are smaller.

Comparison with the euro area of Spanish firms' debt ratios after the first phase of the recent crisis (2008)

The BACH database for 2008 includes a change in the sectoral groupings, the main implication for the purposes of this analysis being that a large proportion of firms that were previously classified as real estate services are now included in the construction sector. Accordingly, these two branches of activity have been grouped together, it being impossible to maintain the sectoral definitions used in the preceding sections.[5]

As Table 2 shows, debt-to-GOP ratios rose in general in 2008, both in Spain and in the other euro area economies. Although this was a result, in some cases, of higher corporate debt (for example, in the energy sector and, somewhat less generally, in construction and real estate services), it was

5. The other branches of activity are also affected by changes in the sectoral groupings, but to a lesser extent. In any case, for the purposes of this analysis, the rate of change of the indicators between 2007 and 2008, constructed on the basis of the new sectoral groupings available, has been applied to the 2007 levels, to prevent any possible skips in levels arising from changes in the sectoral breakdowns.

RATES OF GROWTH OF DEBT, GROSS OPERATING PROFIT, ASSETS AND FINANCIAL COSTS OF NON-FINANCIAL CORPORATIONS
BACH database. 2008

TABLE 3

%

	COUNTRIES					
	Spain	France	Germany	Italy	Portugal	Belgium
SECTORS						
MANUFACTURING						
Debt	0.1	4.6	2.5	1.3	7.8	7.7
Gross operating profit	-29.9	-13.5	-15.8	-12.4	-6.9	-11.2
Financial costs	21.8	33.9	3.7	20.5	19.7	36.5
Total assets	**2.0**	**2.4**	**3.1**	**4.9**	**6.1**	**5.6**
REAL ESTATE AND CONSTRUCTION						
Debt	-1.7	4.6	1.4	10.4	10.2	14.4
Gross operating profit	-28.9	1.6	7.2	-0.3	-5.5	4.9
Financial costs	14.7	7.1	1.6	18.4	28.7	21.3
Total assets	**-4.0**	**5.1**	**1.9**	**11.1**	**8.7**	**16.7**
ELECTRICITY, GAS AND WATER SUPPLY						
Debt	26.4	18.8	15.1	5.2	9.7	12.8
Gross operating profit	2.3	2.3	-35.3	6.3	11.2	11.0
Financial costs	35.8	49.5	13.9	24.8	78.0	67.9
Total assets	**17.3**	**8.3**	**8.8**	**1.3**	**9.2**	**14.4**
WHOLESALE AND RETAIL TRADE						
Debt	-1.0	1.3	-0.4	0.6	3.2	3.6
Gross operating profit	-11.4	0.3	7.2	-8.1	1.9	-2.6
Financial costs	8.1	19.6	7.2	22.1	51.8	20.2
Total assets	**-0.2**	**2.5**	**2.3**	**4.6**	**1.7**	**5.2**
HOTELS AND RESTAURANTS						
Debt	17.4	1.9	-12.6	16.7	10.6	-7.2
Gross operating profit	-15.9	-4.3	5.8	-7.1	-18.4	3.3
Financial costs	35.6	10.2	10.0	35.7	20.5	9.7
Total assets	**10.3**	**2.6**	**-6.4**	**30.5**	**9.5**	**4.4**
TRANSPORT, STORAGE AND COMMUNICATIONS						
Debt	6.7	6.7	4.9	3.4	6.3	9.0
Gross operating profit	0.3	-2.0	6.0	1.7	5.4	4.8
Financial costs	20.6	10.9	12.8	12.2	18.2	35.3
Total assets	**2.7**	**4.3**	**3.2**	**2.3**	**4.8**	**5.8**

SOURCES: Eurostat, BACH and Banco de España.

largely owing to a less favourable profit performance (see Table 3). The most marked profit contractions were, in general, in manufacturing and in hotels and restaurants, and in the case of Spain also in the real estate sector. In Spain, where the data available does distinguish between construction and real estate services, debt-to-GOP ratios rose in both, but much more markedly in real estate.

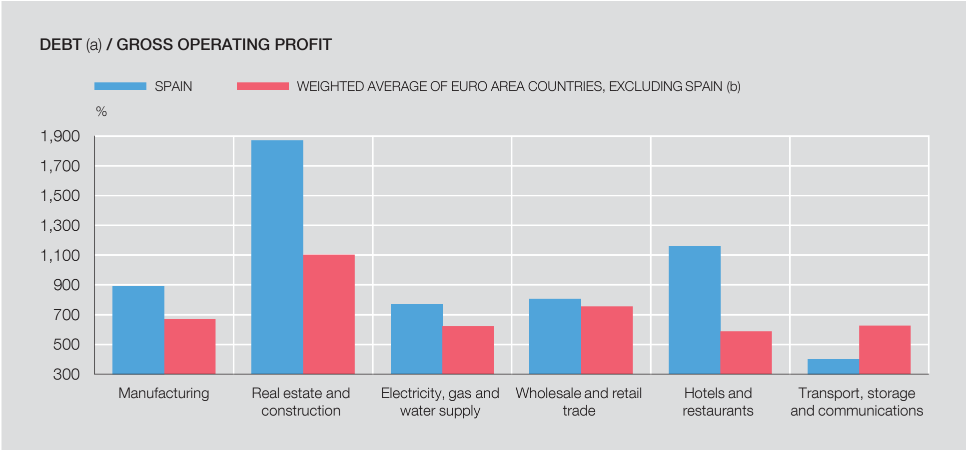
Spanish firms recorded a particularly severe contraction in corporate profit in 2008 (see Table 3), prompting a higher increase in their debt-to-GOP ratios, especially in firms linked to the real estate sector and, to a lesser extent, in hotels and restaurants and manufacturing firms. Thus, in 2008, Spanish non-financial corporations recorded higher ratios than their euro area peers in most branches of activity, with the sole exception of the transport, storage and communications sector (see Chart 5).

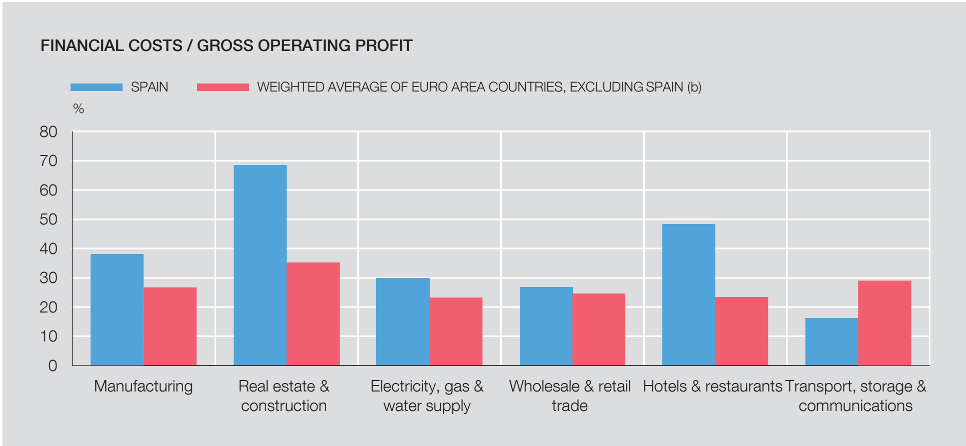
The debt burden ratio also rose, in general, by country and by sector, and more markedly than the debt-to-GOP ratio, reflecting the rise in the average cost of borrowing.

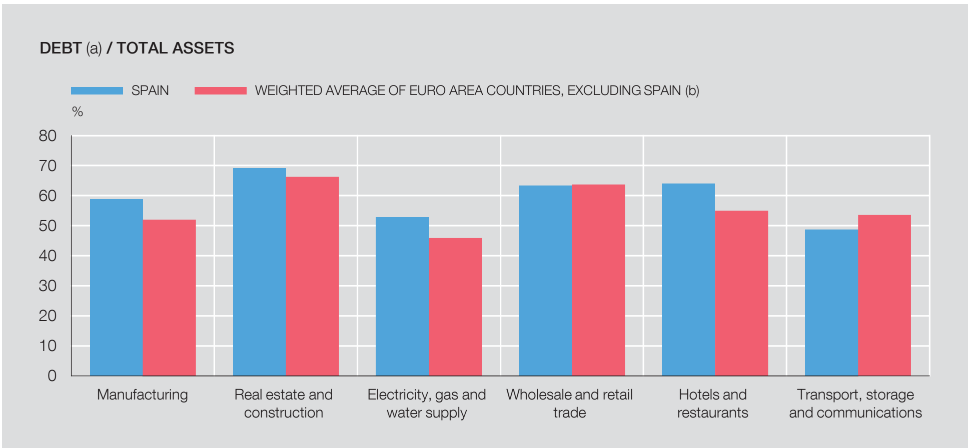
As regards the debt-to-asset ratio, the differences between Spanish firms and their euro area peers were less marked than in the case of the debt-to-GOP ratio, although on this indicator

DEBT AND DEBT BURDEN OF NON-FINANCIAL CORPORATIONS. SECTORAL BREAKDOWN. 2008

CHART 5





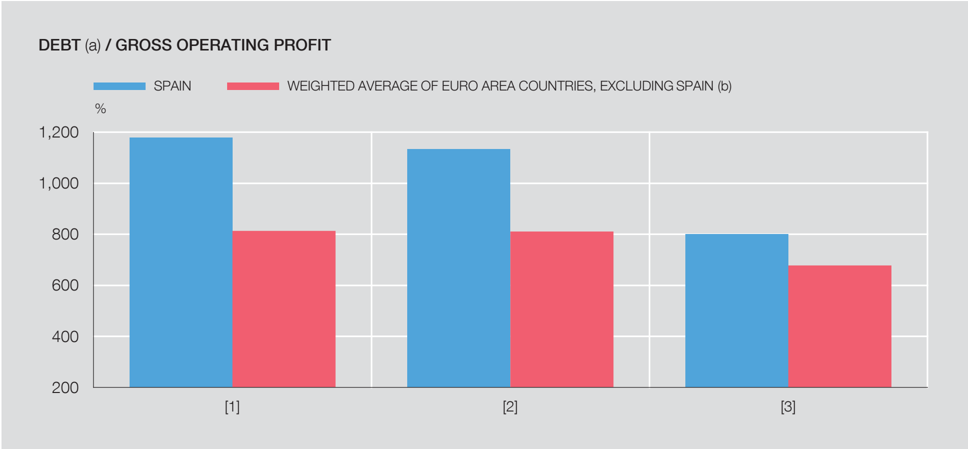


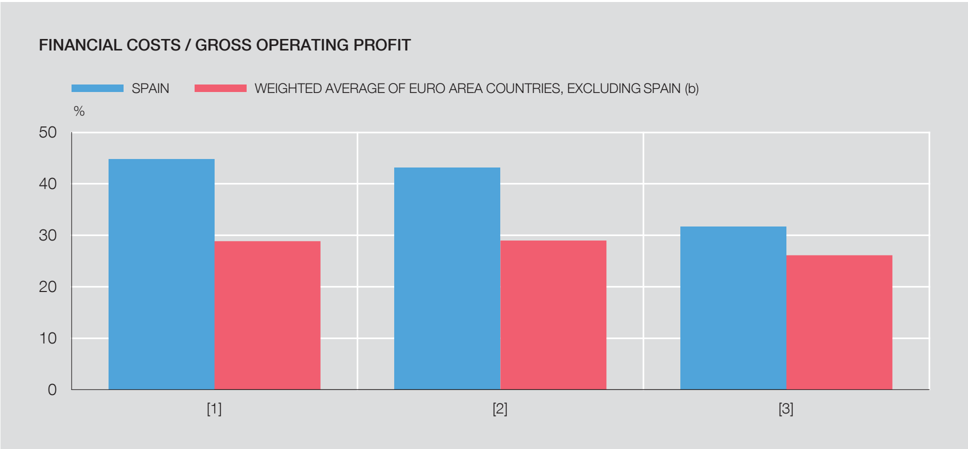
SOURCES: Eurostat, BACH and Banco de España.

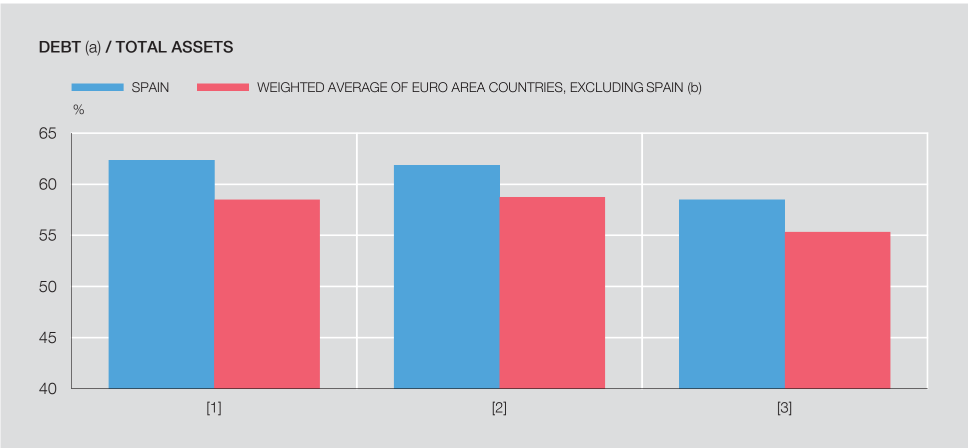
a. Debt includes trade credit.
b. Weighted average by GDP of ratios in Germany, France, Italy, Portugal and Belgium.

DEBT AND DEBT BURDEN OF NON-FINANCIAL CORPORATIONS.
AGGREGATE INDICATOR. 2008

CHART 6







SOURCES: Eurostat, BACH and Banco de España.

a. Debt includes trade credit.
b. Weighted average as a function of GDP of ratios in Germany, France, Italy, Portugal and Belgium.

[1]: Aggregate ratio, weighting the sectoral values in each country by the gross value added (GVA) of that branch of activity.
[2]: Aggregate ratio, weighting each sector equally in all countries (in accordance with weight in euro area GVA).
[3]: Aggregate ratio, weighting each sector equally in all countries (in accordance with weight in euro area GVA), excluding real estate and construction

also leverage was higher in Spain than in the rest of the euro area, save in transport, storage and communications and in wholesale and retail trade.

When the same exercise as before is conducted to identify factors that may explain why Spanish firms present higher aggregate debt, it is seen, as in 2007, that if equal weight is assigned to each sector in all the economies, the difference between the Spanish debt-to-GOP ratio and the euro area average narrows slightly, although less so than in 2007 (see Chart 6). If real estate and construction firms are excluded from the sample, a large part – but not all – of the difference is corrected.

In the case of the debt burden ratio, applying the same sectoral breakdown in all the countries prompts minimal convergence towards the euro area aggregate. Specifically, the difference (16 pp) decreases by 1.6 pp. If real estate and construction firms are then excluded from the sample, the Spanish ratio falls more than the euro area aggregate, narrowing the gap. But there remains a difference between them of 5.6 pp, as in 2007.

Turning lastly to the debt-to-asset ratio, the differences in sectoral breakdown account for 20% of the divergence between the Spanish and euro area ratios. However, in contrast to the case of the other two indicators, and as in 2007, excluding the construction sector and real estate services from the sample does not prompt any convergence towards the leverage of the other euro area countries.

Conclusions

These findings, based on the financial statements of a broad sample of firms, indicate that the increase in debt ratios in the Spanish non-financial corporations sector overall between 2000 and 2007 was the result of a quite widespread increase across the different branches of activity. This increase was particularly marked in the case of real estate services.

The comparison with the euro area shows that part of the higher debt of Spanish firms reflected in the aggregate ratios prior to the recent economic crisis was associated with the situation of Spanish real estate firms, whose debt-to-GOP ratios were much higher than those of their European peers. The fact that the sectors with greater propensity for debt had greater weight in Spain in terms of activity (especially the construction sector) also helps explain, in some of the indicators analysed, some of the differences with the euro area average, although save in the case of the debt-to-asset ratio this is comparatively less important. In the other sectors, the differences between Spanish and other euro area firms were generally smaller, though they also reflected higher debt among Spanish firms, save in the case of the debt-to-asset ratio where the differences tended to be less marked, even in the real estate sector.

The less favourable profit performance of Spanish non-financial corporations during the economic crisis led to a widening of the gap between their debt-to-GOP and debt burden ratios and those of their European peers, especially among real estate firms. In the case of debt-to-asset ratios the differences also widened somewhat in comparison with 2007, but to a lesser extent.

In short, all the above highlights the need for Spanish firms to make changes in their balance sheets to reduce debt levels, especially considering that the widespread risk reassessment resulting from the crisis should also prompt a downward revision of desirable debt ratios. However, these findings also signal that, in this respect, some areas of activity will need to make greater efforts than others: the real estate sector, for example, which during the growth phase came to account for too large a share of the Spanish economy in terms of assets and liabilities. In all other branches, which are more significant in terms of productive investment, fewer adjustments appear to be needed.

14.5.2010.