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ECONOMIC AND FINANCIAL PERFORMANCE OF SPANISH FIRMS IN 2021 AND IN THE FIRST THREE QUARTERS OF 2022 ACCORDING TO THE CENTRAL BALANCE SHEET DATA OFFICE

Álvaro Menéndez and Maristela Mulino

ABSTRACT

According to the Central Balance Sheet Data Office integrated database (CBI), 2021 saw a notable recovery in the economic and financial position of most firms, partially reversing the previous year's COVID-19-related downturn. This improvement was more pronounced in the industries hardest hit by this crisis. Meanwhile, data from the Central Balance Sheet Data Office Quarterly Survey (CBQ), which allow more recent developments to be analysed, reveal that corporate profits for the sample overall continued growing at a brisk pace in the first three quarters of 2022, albeit highly unevenly across sectors. This further bolstered the economic and financial position of most of the firms in the sample. Nonetheless, the data referring only to Q3 show a loss of momentum in corporate profits, reflecting the slowdown in economic activity. This article includes a box analysing recent profit margin developments, using two different approaches. The box concludes that, thanks to the recovery in ordinary profits, the gross value added margin (which measures the proportion of this surplus retained by firms after personnel costs) continued to rise in 2022 for the CBQ overall, to stand at levels similar to the pre-pandemic figures. This is compatible with a slight contraction in the margin on sales, which is calculated as the ratio of gross operating profit to sales and enables analysis of the extent to which firms have been able to pass rising production costs through to their customers.

Keywords: activity, earnings, financial position, non-financial corporations, COVID-19.

JEL classification: L25, M21, M41.

ECONOMIC AND FINANCIAL PERFORMANCE OF SPANISH FIRMS IN 2021 AND IN THE FIRST THREE QUARTERS OF 2022 ACCORDING TO THE CENTRAL BALANCE SHEET DATA OFFICE

The authors of this article are Álvaro Menéndez and Maristela Mulino, of the Directorate General Economics, Statistics and Research.

Economic and financial performance of firms in 2021 according to the Central Balance Sheet Data Office integrated database

The sample from the Central Balance Sheet Data Office integrated database (CBI)[1] shows that business activity rallied in 2021, following the sharp downturn seen in 2020 as a result of the impact of the COVID-19 pandemic. According to these figures, the turnover of CBI firms grew 16.3% overall in 2021, in contrast to the preceding year's extraordinary 13% contraction (see Chart 1.1). The breakdown by firm size shows that sales increased slightly more at large firms (16.6%) than at SMEs (14%). A sector-by-sector breakdown reveals that, on average, the firms hardest hit by the crisis in 2020 saw a sharper rise in sales (18%) than firms in the less affected sectors (15.5%)[2] (see Chart 1.2).

Growth in productive activity in 2021 was also borne out by a substantial rise in gross operating profit (GOP) and ordinary net profit (ONP), both of which grew by around 25%, as compared with the previous year's falls of 26.9% and 42.5%, respectively. Despite this upward trend, such figures remained below their 2019 levels (8.7% and 27.7% lower, respectively). The increase in ordinary profits led to a slight rise in average return on assets, to stand at 4.1%, 0.1 percentage points (pp) up on 2020.[3] An individual analysis reveals a rise in return on assets at most firms in 2021. In terms of the median of the distribution, which reflects the situation of a representative firm, this ratio increased by 1.9 pp, to stand at 2.6%, with a sharper rise at SMEs than at large firms (see Chart 2.1). Again, the sectoral breakdown reveals a more robust recovery at firms active in the areas hardest hit by the crisis in 2020. Specifically, median profitability rose from -0.9% to 1.9% in the sectors most affected (i.e. a 2.8 pp increase). Conversely, this indicator increased less in the less affected industries (by 1.5 pp, to stand at 2.5%).

1 The CBI includes information up to 2021. At the date of publication of this article, information had been received from 537,348 firms (further information on the year is still pending, and is expected to take in around 800,000 firms). This sample represents 42.7% of the GVA generated by the entire non-financial corporations sector.

2 The hardest hit sectors are defined as those where sales fell by 15% or more in 2020, based on Tax Revenue Service figures. The less affected sectors include all other industries.

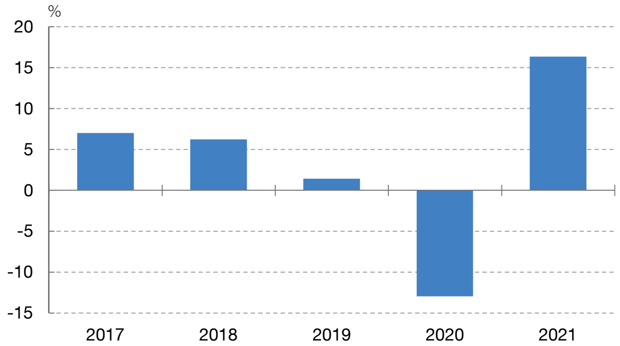
3 While ONP grew by 25% in 2021, the small rise in aggregate return on assets (of only 0.1 pp) can be explained by the lower dividends received at certain large firms that account for a sizeable share of the CBI sample.

Chart 1

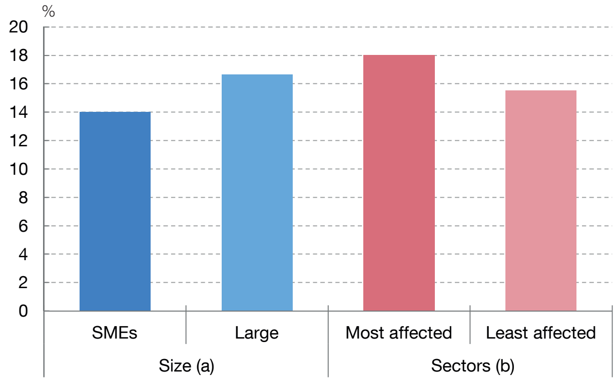
FIRMS' TURNOVER SURGED IN 2021 FOLLOWING THE SHARP DECLINE A YEAR EARLIER AS A CONSEQUENCE OF THE PANDEMIC

The overall turnover of CBI firms increased by 16.3% in 2021, in contrast to the previous year's extraordinary decline of 13%. By size, sales increased slightly more in the large corporations segment (16.6%) than at SMEs (14%), while the breakdown by sector shows that, on average, the sectors most affected by the crisis in 2020 recovered somewhat more sharply.

1 NET TURNOVER
Rate of change with respect to the same firms in the previous year



2 NET TURNOVER IN 2021. BREAKDOWN BY FIRM SIZE AND SECTOR
Rate of change with respect to the same firms in the previous year



SOURCE: Banco de España.

a The definition of "size" is in line with European Commission Recommendation 2003/361/EC.
b Sectors are defined as most affected if their sales fell by more than 15% in 2020 and as least affected otherwise. Holding companies and head offices are excluded.

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The return to profitability in 2021 also led to a significant decline in the proportion of firms posting losses. Thus, according to the CBI, 33.7% of firms found themselves in this situation last year, down 6.1 pp on 2020, a decline that was once again more pronounced at both SMEs and, in particular, in the sectors hardest hit by the economic fallout from the pandemic (see Chart 2.2).

Although uncertainty has gradually abated, this has not led to a reduction in the liquidity buffers that many firms built up in 2020. Thus, the average liquidity ratio stood at 7.1% in 2021, virtually unchanged from a year earlier (see Chart 3.1). The breakdowns by firm size and sector both reveal that any changes were generally small, with SMEs posting a slight decrease (0.3 pp), while the ratio remained very stable both at large firms and in the two groups of sectors (most and least affected by COVID-19), with variations of around 0.1 pp (see Chart 3.2).

Meanwhile, the gross financial debt of the CBI firms continued to grow in 2021 (by 6%), leading to a slight rise (of 0.3 pp) in the average debt-to-assets ratio of the sample overall, to stand at 38.2%. Conversely, the debt-to-ordinary profits ratio fell by almost 30 pp in 2021, to 626%, thanks to the positive impact associated with the growth in corporate profits.

Amid this recovery in activity, the percentage of highly indebted firms also declined. Thus, the percentage of firms whose net debt accounted for more than 75% of the

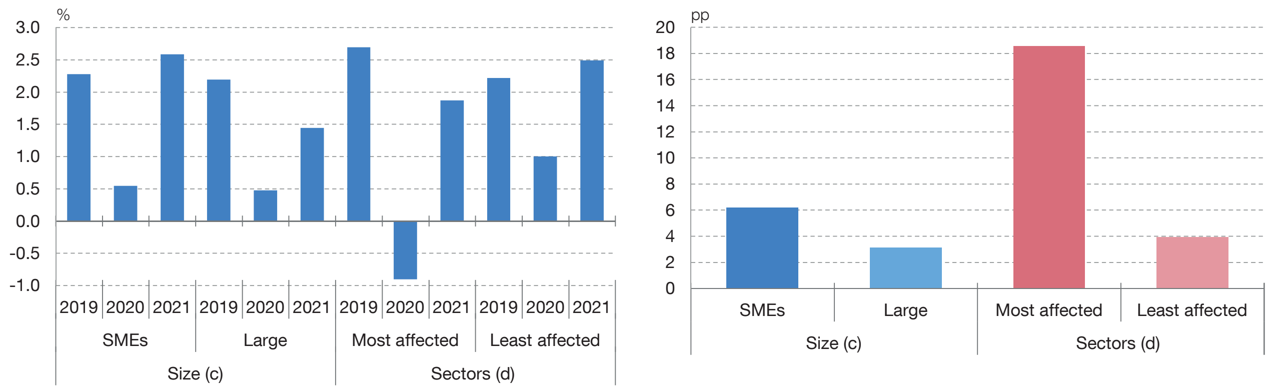
Chart 2

CORPORATE PROFITABILITY RECOVERED IN 2021

Profitability increased in most CBI firms in 2021 as a result of the recovery in activity. Thus, in terms of the median of the distribution, this ratio rose by almost 2 pp, to 2.6%, with a stronger increase in the SME segment and in the sectors most affected by the pandemic. The percentage of firms with negative profitability also declined, especially in these same groups.

1 MEDIAN ROA (a) (b)

2 REDUCTION IN THE PERCENTAGE OF FIRMS WITH NEGATIVE ROA IN 2021 (a)



SOURCE: Banco de España.

a ROA = (ONP + Financial costs) / Assets net of non-interest-bearing borrowing.
b The median for 2021 is the result of applying to the 2020 median the corresponding change between 2021 and 2020 calculated using a common firm sample.
c The definition of "size" is in line with European Commission Recommendation 2003/361/EC.
d Sectors are defined as most affected if their sales fell by more than 15% in 2020 and as least affected otherwise. Holding companies and head offices are excluded.

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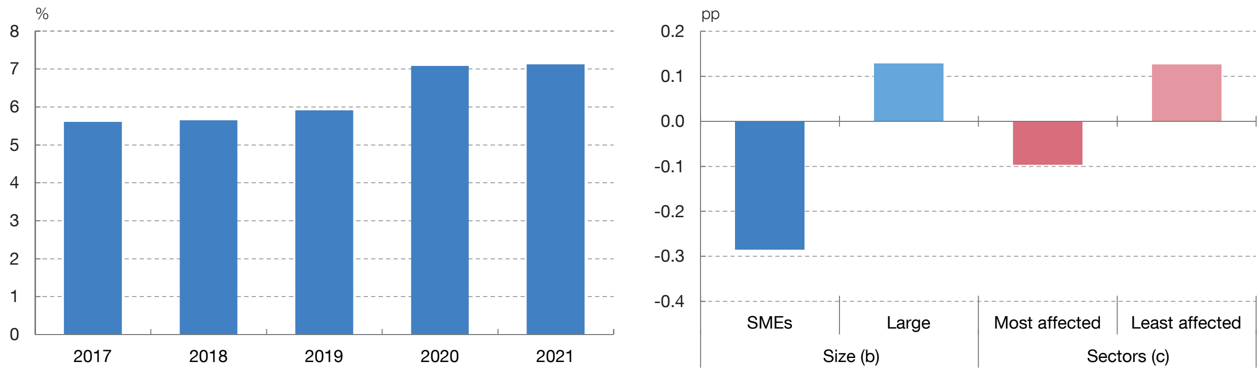
Chart 3

THE LIQUIDITY RATIO HELD STABLE IN 2021 DESPITE REDUCED UNCERTAINTY

Although uncertainty has gradually abated, this has not led to a reduction in the liquidity buffers that many firms built up in 2020. Thus, for the CBI sample as a whole, the liquidity ratio stood at 7.1 % in 2021, virtually unchanged from a year earlier. The breakdown both by size and by sector shows that changes have generally been small, with a slight decline in this ratio in the SME segment (by 3 pp) and stability both in large corporations and by sector (a change of 0.1 pp).

1 LIQUIDITY RATIO. CBI (LIQUID ASSETS (a) / TOTAL ASSETS)

2 CHANGE IN THE LIQUIDITY RATIO IN 2021. BREAKDOWN BY FIRM SIZE AND SECTOR



SOURCE: Banco de España.

a Liquid assets are calculated as the sum of cash on hand and cash equivalents.
b The definition of "size" is in line with European Commission Recommendation 2003/361/EC.
c Sectors are defined as most affected if their sales fell by more than 15 % in 2020 and as least affected otherwise. Holding companies and head offices are excluded.

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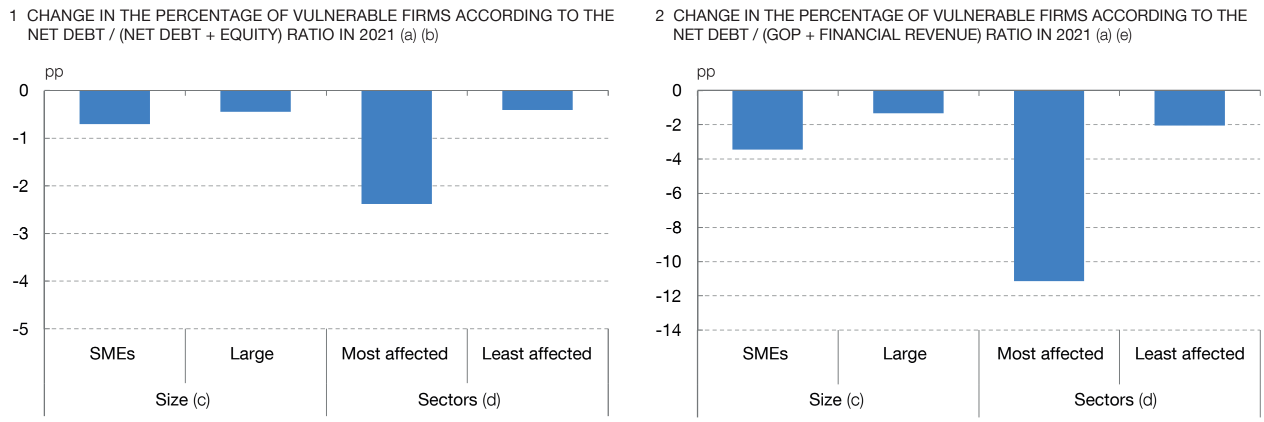
Chart 4
THE SHARE OF HIGHLY INDEBTED FIRMS DECLINED IN 2021

The percentage of firms whose net debt accounted for more than 75% of the balance sheet decreased by 0.7 pp in 2021, while the percentage of firms whose debt-to-ordinary earnings ratio was higher than 10 or that posted losses fell further still (by 3.4 pp). The lower vulnerability evidenced by these indicators was, again, more marked at SMEs and, above all, in the sectors most affected by the crisis.



SOURCE: Banco de España.

a Net financial debt is defined as interest-bearing borrowing minus liquid assets and short-term financial investments.
b Firms defined as most vulnerable are those whose Net financial debt / (Net financial debt + Equity) ratio is greater than 0.75.
c The definition of “size” is in line with European Commission Recommendation 2003/361/EC.
d Sectors are defined as most affected if their sales fell by more than 15% in 2020 and as least affected otherwise. Holding companies and head offices are excluded.
e Firms defined as most vulnerable are those whose ratio is greater than 10 or that have positive net financial debt and zero or negative earnings.

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balance sheet decreased by 0.7 pp in 2021 (see Chart 4.1), while the percentage of firms whose debt-to-ordinary profits ratio was higher than 10 or that posted losses fell further still (by 3.4 pp, see Chart 4.2), to stand at 20.4%. The lower vulnerability evidenced by these indicators was, again, more marked at SMEs and, above all, in the sectors most affected by the crisis.

Economic and financial performance of firms in the first three quarters of 2022 according to the Central Balance Sheet Data Office Quarterly Survey

Activity, employment and personnel costs

The information collected by the Central Balance Sheet Data Office Quarterly Survey (CBQ)[4] shows that, in nominal terms, in the first three quarters of 2022 firms’ turnover was up 48.7% on the same period of 2021, as compared with the 16.2% increase a year earlier (see Table 1). The growth seen in the first three quarters of this year, the

4 The CBQ contains information on the 905 firms which had reported their data for the first three quarters of 2022 by 14 November. The sample represents 12.7% of the GVA of the entire non-financial corporations sector (according to the information furnished by the National Accounts).

Table 1

THE RECOVERY IN EARNINGS AND PROFITABILITY CONTINUED IN THE FIRST THREE QUARTERS OF 2022

	CBI structure	CBI		CBQ (a)		
Bases	2021	2020	2021	2021 Q1-Q4 / 2020 Q1-Q4	2021 Q1-Q3/ 2020 Q1-Q3	2022 Q1-Q3/ 2021 Q1-Q3
Number of firms		823,518	537,348	978	991	950
Total national coverage (% of GVA)		56.0	42.7	12.1	12.4	12.7
Profit and loss account (rates of change with respect to same firms in the previous year)						
1 VALUE OF OUTPUT (including subsidies)	100.0	-12.6	14.4	17.0	13.0	44.0
Of which:						
Net amount of turnover and other operating income	*151.8*	*-12.7*	*15.9*	*21.1*	*16.2*	*48.7*
2 INTERMEDIATE CONSUMPTION (including taxes)	63.5	-12.6	15.2	18.8	13.5	54.3
Of which:						
Net purchases	*41.1*	*-15.9*	*21.5*	*29.9*	*22.4*	*71.0*
Other operating costs	*22.8*	*-9.2*	*10.3*	*8.1*	*5.7*	*23.0*
S.1 GROSS VALUE ADDED AT FACTOR COST [1 – 2]	36.5	-12.6	13.0	13.0	12.0	21.1
3 Personnel costs	24.0	-5.1	7.6	3.1	2.3	6.9
S.2 GROSS OPERATING PROFIT [S.1 – 3]	12.5	-26.9	24.9	28.4	27.2	38.5
4 Financial revenue	2.8	-14.6	-27.2	-28.6	-17.5	62.6
5 Financial costs	2.0	-3.4	-0.8	-4.1	-8.2	11.2
6 Net depreciation, impairment and operating provisions	5.6	2.1	-2.3	-4.0	-2.1	4.7
S.3 ORDINARY NET PROFIT [S.2 + 4 – 5 – 6]	7.8	-42.5	25.8	33.9	84.1	94.7
7 Gains (losses) from disposals and impairment	2.2	—	—	—	—	-24.5
7' As a percentage of GVA (7 / S.1)		-4.1	6.0	15.9	4.6	2.8
8 Changes in fair value and other gains (losses)	-0.9	-1.2	-28.6	—	9.4	—
8' As a percentage of GVA (8 / S.1)		-1.9	-2.4	-6.4	-2.6	-7.0
9 Corporate income tax	1.6	-34.8	63.2	140.9	89.6	15.0
S.4 NET PROFIT [S.3 + 7 + 8 – 9]	7.5	-67.8	174.5	—	—	68.2
S. 4' As a percentage of GVA (S.4 / S.1)		8.1	20.5	30.2	17.2	24.4
RATES OF RETURN	Formulae (b)					
R.1 Return on assets (before taxes)	(S.3 + 5.1) / NA	4.0	4.1	4.0	2.7	4.2
R.2 Interest on borrowed funds / interest-bearing borrowing	5.1 / IBB	2.0	1.9	1.7	1.6	1.6
R.3 Ordinary return on equity (before taxes)	S.3 / E	5.1	5.5	5.9	3.5	6.3
R.4 ROA – cost of debt (R.1 – R.2)	R.1 – R.2	1.9	2.2	2.4	1.1	2.6
MEMORANDUM ITEM: TOTAL SAMPLE REWEIGHTED						
S.1 GROSS VALUE ADDED AT FACTOR COST [1 – 2]		-12.7	12.0	11.1	10.1	17.4
S.2 GROSS OPERATING PROFIT [S.1 – 3]		-28.4	23.7	49.8	47.2	44.1

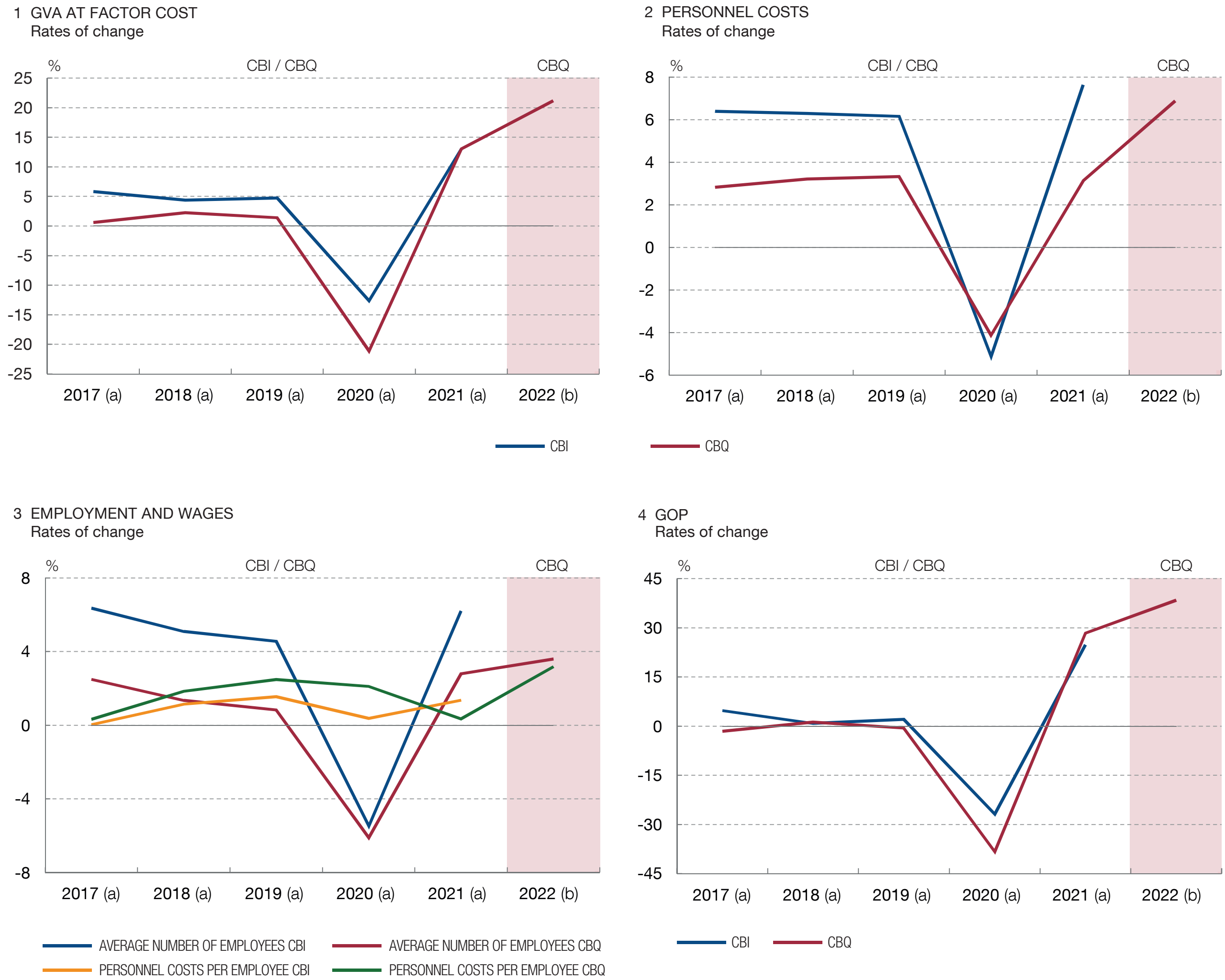
SOURCE: Banco de España.
NOTE: In calculating rates, internal accounting movements have been edited out of items 4, 5, 7 and 8.

a All the data in this column have been calculated as the weighted average of the quarterly data.
b NA = Net assets (net of non-interest-bearing borrowing); E = Equity; IBB = Interest-bearing borrowing; NA = E + IBB. The financial costs in the numerators of ratios R.1 and R.2 only include the portion of financial costs that is interest on borrowed funds (5.1).

Chart 5

PROFITS AND EMPLOYMENT CONTINUED TO INCREASE IN THE FIRST THREE QUARTERS OF 2022

GVA, GOP and employment increased between January and September 2022, continuing the recovery trend of the previous year. This growth is the highest ever recorded in the quarterly series and is driven by the increase in prices. Average compensation picked up somewhat in the sample as a whole.



SOURCE: Banco de España.

a Data for 2017, 2018, 2019, 2020 and 2021 from CBI firms, and average of the four quarters in each year with respect to the previous year (CBQ).
b Data for the first three quarters of 2022 with respect to the same period of 2021.

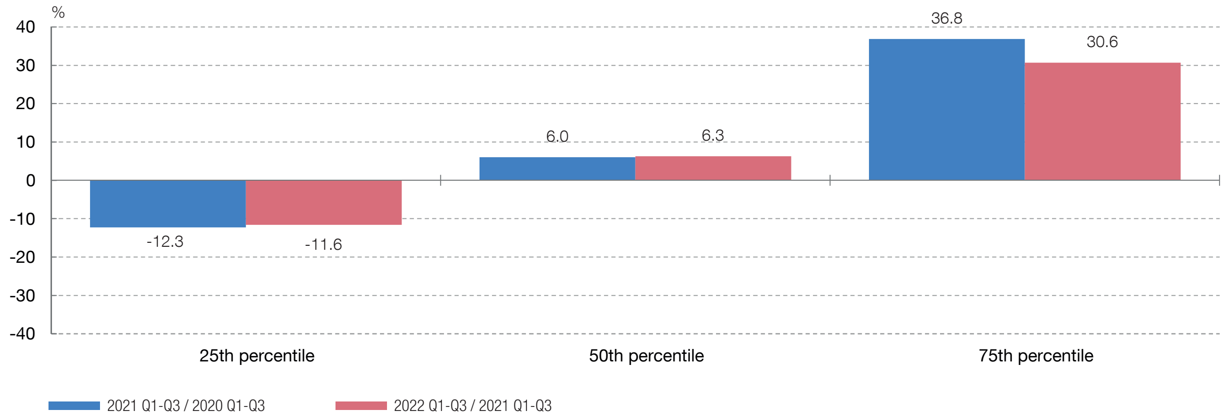
highest ever observed in the quarterly series, has been heavily influenced by the rise in selling prices. This same trend can be seen in input prices, which increased at an even faster rate in the same period (54.3%), amid a steep rise in the cost of energy and other commodities. All of which meant that gross value added (GVA) rose by 21.1% at September 2022 (compared with 12% in 2021) (see Chart 5), also representing a record for this indicator in the entire quarterly series.[5]

5 The steep rise in GVA, calculated in nominal terms, can in large part be attributed to the marked rise in prices.

Chart 6

MEDIAN GVA GROWTH WAS MORE MODERATE THAN THAT REFLECTED BY THE AVERAGE RATE

In the first three quarters of 2022 the median GVA year-on-year growth rate stood at 6.3%, compared with 6% in the same period a year earlier. The dispersion in GVA growth, as proxied by the distance between the 75th and 25th percentiles, remained high (42.2 pp), albeit somewhat lower than in 2021 (49.1 pp).



SOURCE: Banco de España.

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Chart 6 shows a much more subdued increase in the median rate of GVA growth, which stood at 6.3%, up only 0.3 pp on the previous year's figure. This suggests that the average growth in this indicator has been heavily skewed by the performance of the larger firms in the sample. Moreover, the same chart reveals significant dispersion in GVA growth, as proxied by the distance between the 75th and 25th percentiles, albeit slightly less than the dispersion seen a year earlier (42.2 pp compared with 49.1 pp in 2021).

The sectoral breakdown shows that the sharpest rises in GVA were seen in the industrial sector (32.6%), driven by growth in the refining sub-sector, associated with the surge in the price of crude, which firms have passed through to their selling prices, as well as in the trade and hospitality sector (25.1%) and the "other activities" aggregate (24.2%), spurred by the strong performance of transport companies (see Table 2). GVA also grew in the energy and information and communications sectors, albeit at a more subdued pace (16.2%[6] and 2.6%, respectively).

Despite the notable growth in GVA in 2022, the data referring exclusively to Q3 reveal a loss of momentum with respect to Q2, which is consistent with the sharp slowdown in economic activity reflected in the GDP flash estimate for the same period (see Chart 7). The sectoral breakdown shows that this pattern held true across most

6 Cumulative GVA growth in the energy sector in the first three quarters of 2022 was concentrated in Q3, since GVA fell in Q1 and Q2. This is because energy retailers were unable to revise their fixed-rate contracts upwards until Q3, when they could begin passing the rising costs through to their sales prices.

Table 2

GVA AND EMPLOYMENT GREW, ALBEIT UNEVENLY ACROSS SECTORS

	GVA at factor cost				Employees (average for the period)				Personnel costs				Average compensation			
	CBI	CBQ (a)			CBI	CBQ (a)			CBI	CBQ (a)			CBI	CBQ (a)		
Rates of change with respect to the same firms in the previous year (%)	2021	2021 Q1-Q4	2021 Q1-Q3	2022 Q1-Q3	2021	2021 Q1-Q4	2021 Q1-Q3	2022 Q1-Q3	2021	2021 Q1-Q4	2021 Q1-Q3	2022 Q1-Q3	2021	2021 Q1-Q4	2021 Q1-Q3	2022 Q1-Q3
TOTAL	**13.0**	**13.0**	**12.0**	**21.1**	**6.2**	**2.8**	**2.7**	**3.6**	**7.6**	**3.1**	**2.3**	**6.9**	**1.4**	**0.3**	**-0.4**	**3.2**
Size																
Small	17.2	—	—	—	8.3	—	—	—	12.4	—	—	—	3.8	—	—	—
Medium	10.5	12.1	12.5	12.9	5.3	7.8	7.4	6.7	7.8	5.6	4.5	11.3	2.3	-2.1	-2.7	4.3
Large	11.6	13.1	12.0	21.3	5.0	2.7	2.6	3.5	5.4	3.1	2.3	6.8	0.4	0.4	-0.4	3.2
Breakdown by activity																
Energy	8.8	11.2	4.8	16.2	2.2	-0.7	-1.2	1.7	3.1	1.5	-0.9	3.8	0.9	2.2	0.3	2.1
Industry	13.4	34.6	45.1	32.6	4.0	2.2	3.9	1.3	4.6	1.6	3.6	6.3	0.6	-0.6	-0.2	4.9
Trade and hospitality	19.0	13.2	12.2	25.1	7.2	4.0	3.9	4.3	10.0	5.4	3.4	8.4	2.6	1.4	-0.5	3.9
Information and communications	3.1	-2.8	-3.9	2.6	4.4	2.4	1.1	2.9	7.2	5.5	3.1	4.2	2.7	3.0	2.0	1.2
Other activities	12.5	10.7	8.2	24.2	6.9	2.7	2.2	4.6	8.3	1.9	1.3	7.9	1.4	-0.7	-0.9	3.2

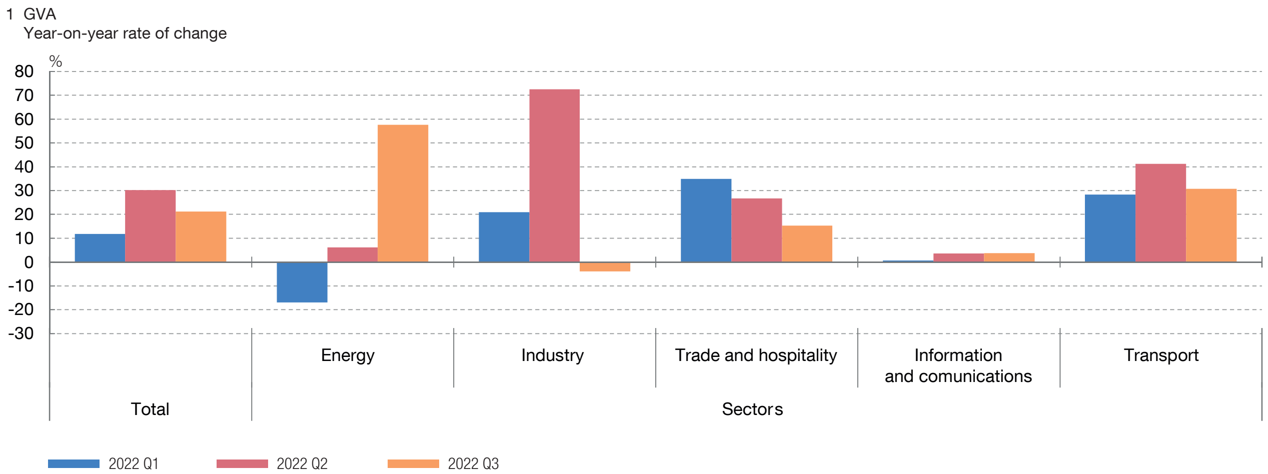
SOURCE: Banco de España.

a All the data in these columns have been calculated as the weighted average of the quarterly data.

Chart 7

THE INFORMATION REFERRING EXCLUSIVELY TO Q3 POINTS TO A LOSS OF MOMENTUM IN GVA

Despite notable growth in GVA in the first nine months of 2022, the data referring exclusively to Q3 reveal a loss of momentum with respect to Q2, reflecting the slowdown in economic activity. The sectoral breakdown shows that this pattern held true across most sectors, with a particular impact on the industrial sector and, to a lesser extent, the trade and hospitality and transport sectors.



SOURCE: Banco de España.

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Table 3

THE SHARE OF FIRMS CREATING EMPLOYMENT CONTINUED TO RISE BETWEEN JANUARY AND SEPTEMBER 2022

	CBI (a)		CBQ (b)			
Percentage of firms in specific situations	2020	2021	2020 Q1 - Q4	2021 Q1 - Q4	2021 Q1 - Q3	2022 Q1 - Q3
Number of firms	549,789	359,902	941	978	991	950
Personnel costs	100	100	100	100	100	100
Falling	57.6	28.2	51.3	37.1	37.6	28.9
Constant or rising	42.4	71.8	48.7	62.9	62.4	71.1
Average number of employees	100	100	100	100	100	100
Falling	42.9	28.2	51.0	39.1	39.9	34.3
Constant	25.0	24.9	13.3	15.3	15.2	16.0
Rising	32.1	46.9	35.6	45.6	44.9	49.7

SOURCE: Banco de España.

a The calculation of these percentages does not include firms that have no employees in either year.
b Weighted average of the relevant quarters for each column.

Table 4

ORDINARY PROFIT AND RATES OF RETURN INCREASED, ALBEIT UNEVENLY ACROSS SECTORS

	GOP				ONP				Return on assets (R.1)				ROA - cost of debt (R.1 - R.2)			
	CBI	CBQ (a)			CBI	CBQ (a)			CBI	CBQ (a)			CBI	CBQ (a)		
Rates of change with respect to the same firms in the same period of the previous year, % and pp	2021	2021 Q1-Q4	2021 Q1-Q3	2022 Q1-Q3	2021	2021 Q1-Q4	2021 Q1-Q3	2022 Q1-Q3	2021	2021 Q1-Q4	2021 Q1-Q3	2022 Q1-Q3	2021	2021 Q1-Q4	2021 Q1-Q3	2022 Q1-Q3
Total	**24.9**	**28.4**	**27.2**	**38.5**	**25.8**	**33.9**	**84.1**	**94.7**	**4.1**	**4.0**	**2.7**	**4.2**	**2.2**	**2.4**	**1.1**	**2.6**
Size																
Small	32.3	—	—	—	54.1	—	—	—	3.5	—	—	—	1.6	—	—	—
Medium	18.1	30.4	35.6	15.8	27.0	48.4	71.1	22.0	6.2	6.0	6.2	8.4	4.1	4.3	4.6	7.0
Large	23.4	28.4	27.2	38.7	19.0	33.8	84.3	95.9	3.9	4.0	2.7	4.2	2.0	2.4	1.1	2.5
Breakdown by activity																
Energy	11.3	14.6	6.7	20.3	18.7	23.1	14.1	36.9	5.2	5.7	4.5	4.8	3.6	4.1	2.9	3.6
Industry	31.4	136.1	194.1	64.7	46.3	—	—	142.0	7.0	5.6	5.1	10.8	4.9	3.4	3.0	8.6
Trade and hospitality	44.9	30.9	33.0	56.2	60.3	27.9	78.7	105.1	6.2	6.9	5.9	11.2	4.1	5.1	4.1	8.9
Information and communications	-2.1	-8.7	-8.7	1.4	-9.6	-18.0	-15.2	-1.5	5.8	7.4	7.6	7.8	3.9	6.0	6.2	6.6
Other activities	28.3	87.5	76.8	105.1	-18.4	-53.3	—	—	2.5	2.5	0.8	1.7	0.6	0.8	-0.8	0.0

SOURCE: Banco de España.

a All the data in these columns have been calculated as the weighted average of the quarterly data.

Table 5
FINANCIAL COSTS GREW IN THE FIRST THREE QUARTERS OF 2022 MAINLY AS A RESULT OF HIGHER DEBT

%	CBI	CBQ	
	2021 / 2020	2021 Q1-Q4/ 2020 Q1-Q4	2022 Q1-Q3/ 2021 Q1-Q3
Change in financial costs	-0.8	-4.1	11.2
A Interest on borrowed funds	-1.4	-1.9	10.8
1 Due to cost (interest rate)	-7.2	-8.0	1.6
2 Due to the amount of interest-bearing debt	5.9	6.1	9.3
B Other financial costs	0.6	-2.2	0.3

SOURCE: Banco de España.

industries, with a particular impact on the industrial sector and, to a lesser extent, the trade and hospitality and transport sectors.

Personnel costs rose 6.9% year-on-year in January-September 2022, driven both by the increase in the average effective workforce[7] (3.6%) and the rise in compensation, which grew 3.2% (see Table 2). Employment rose only in the permanent staff group (up 6.4%), but declined among temporary workers (down 13.4%), which may be explained both by certain staff reductions and by the impact of the labour reform approved this year, which may have triggered a shift towards permanent employment for employees on temporary contracts. In line with the positive developments in employment, almost half of the firms (49.7%) increased their effective workforce, 4.8 pp more than a year earlier (see Table 3).

Table 2 shows that the growth in employment was especially concentrated in the services sector. Thus, employment grew by 4.3% in trade and hospitality, 2.9% in information and communications and 4.6% in the “other activities” aggregate, within which the strong performance of transport firms stands out. Robust job growth in these sectors reflects the notable recovery in activity, as compared with a year earlier, attributable in large part to the lifting of the restrictions set in place due to the COVID-19 pandemic. The average workforce in the energy and industrial sectors also increased, albeit more moderately (1.7% and 1.3%, respectively).

Margins, rates of return, liquidity and debt

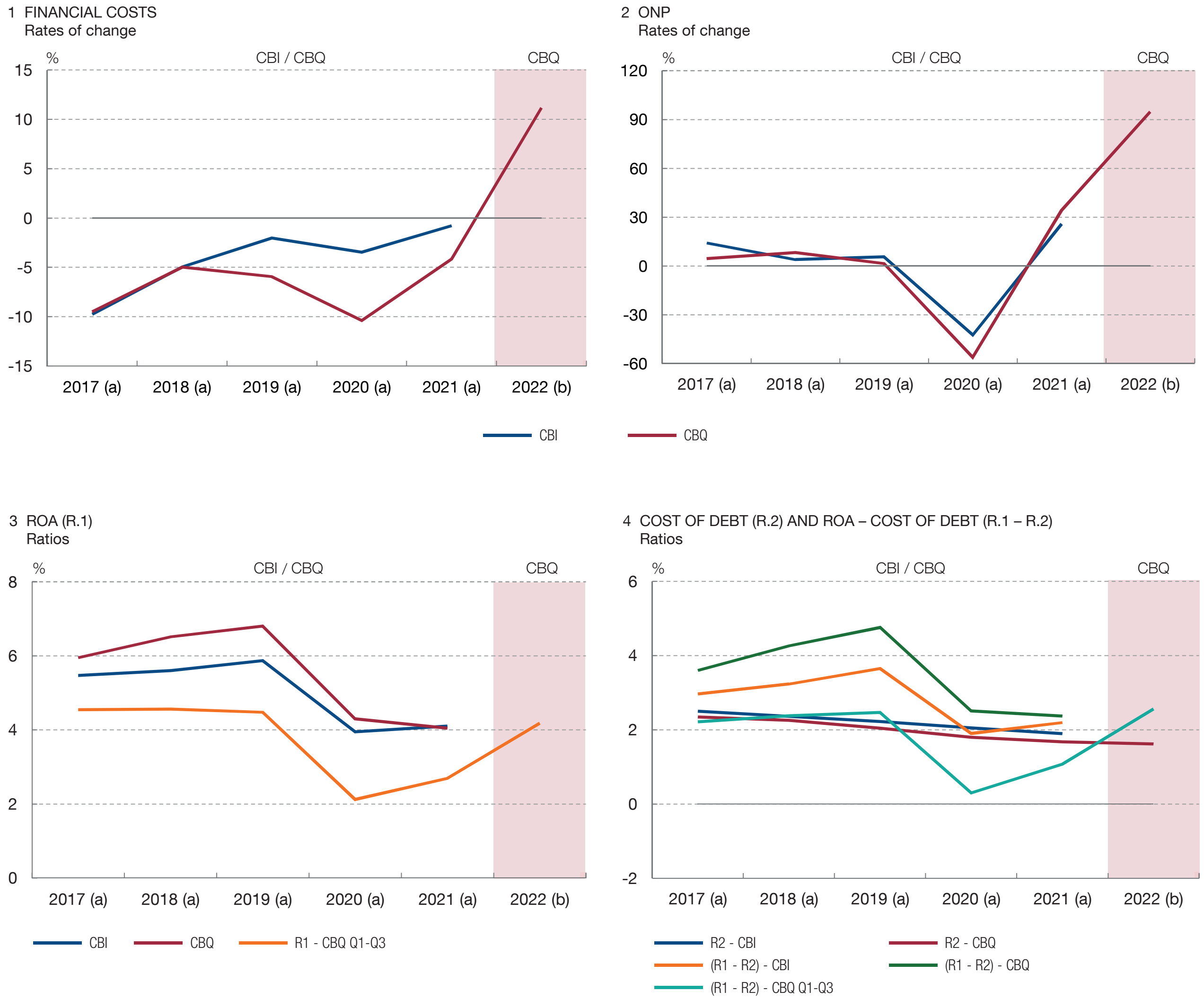
In line with the strong growth in GVA and the more moderate rise in personnel costs, the gross operating profit (GOP) of the sample grew at a very fast pace (38.5%) in the first three quarters of 2022, which is also a record increase in the quarterly series.

7 Average effective workforce means the average number of employees that worked in the period considered, excluding furloughed workers.

Chart 8

ORDINARY PROFIT AND RATES OF RETURN INCREASED IN THE FIRST THREE QUARTERS OF 2022 AND ARE NOW CLOSE TO PRE-PANDEMIC LEVELS

The increase in ordinary profit led rates of return to rise between January and September 2022, bringing them closer to, albeit still slightly below, 2019 levels. The average cost of outstanding debt remained stable throughout the year.



SOURCE: Banco de España.

a Data for 2017, 2018, 2019, 2020 and 2021 from CBI firms, and average of the four quarters in each year (CBQ). The rates are calculated relative to the previous year.
b Data for the first three quarters of 2022. The rates are calculated relative to the same period of 2021.

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The sector-by-sector figures in Table 4 point to a mixed performance, with the “other activities” aggregate posting the sharpest rise in GOP (105.1%), driven by the strong performance of the transport sector. GOP grew by 64.7% in the industrial sector. Nonetheless, this figure was heavily skewed by the growth recorded in the oil refining sub-sector, since most industrial sub-sectors saw declines in GOP. The increases were also notable in the trade and hospitality sector and, to a lesser extent, the energy sector (56.2% and 20.3%, respectively). Meanwhile, GOP rose by a mere 1.4% in the information and communications sector.

Table 6
MEDIAN RETURNS INCREASED AND THE PERCENTAGE OF FIRMS WITH LOWER PROFITABILITY DECREASED

		CBQ			
		Return on assets (R.1)		Ordinary return on equity (R.3)	
		2021 Q1-Q3	2022 Q1-Q3	2021 Q1-Q3	2022 Q1-Q3
Number of firms		991.0	950.0	991.0	950.0
Percentage of firms by profitability bracket	R <= 0%	29.8	27.9	31.6	30.5
	0% < R <= 5%	23.1	22.8	16.2	15.8
	5% < R <= 10%	13.1	12.8	9.8	10.0
	10% < R <= 15%	8.3	9.2	7.8	8.2
	15% < R	25.7	27.3	34.6	35.6
MEMORANDUM ITEM: Median return (%)		4.1	4.8	5.7	6.7

SOURCE: Banco de España.

For the CBQ as a whole, the recovery in ordinary profits meant that the GVA margin (calculated as the ratio of GOP to GVA, which measures the proportion of GVA retained by firms) continued to rise in 2022, to stand at levels similar to the pre-pandemic figures. This is compatible with a slight contraction in the margin on sales, which is calculated as the ratio of GOP to sales and enables analysis of the extent to which firms have been able to pass rising production costs through to their customers. This indicator has come under downward pressure in 2022 due to the sharp rise in such costs and, in particular, the cost of inputs (see Box 1). Nonetheless, a high degree of heterogeneity can be seen in this indicator both across and within sectors, reflecting differences in the ease with which firms have been able to pass their rising costs through to their selling prices.

Financial revenue grew by 62.6% between January and September, compared to a year earlier. This was as a result of growth in both dividends received (75.5%) and interest income (33%). Financial costs increased by 11.2% owing mainly to higher indebtedness, since the average cost of firms' outstanding debt during the first three quarters of 2022 stood only slightly above the level of the same period a year earlier (see Table 5). On a quarterly basis, this cost rose over the course of the year, going from 1.5% in 2022 Q1 to 1.7% in Q3, reflecting the gradual pass-through of market interest rate hikes as variable rate financing conditions were updated and maturing debt was rolled over.

This prompted ONP[8] to almost double in the first nine months of 2022 (a 94.7% increase) (see Chart 8), which led it to stand, for the sample as a whole, at a level similar to that recorded before the pandemic.

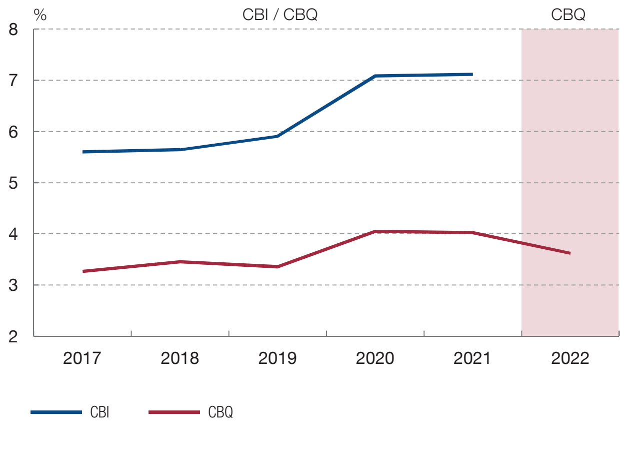
8 ONP equals GOP less financial costs and depreciation and amortisation and operating provisions, plus financial revenue.

Chart 9

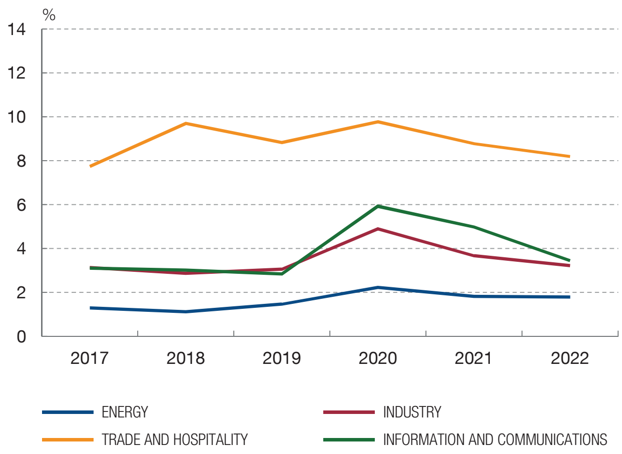
FIRMS' LIQUIDITY RATIOS DECREASED ACROSS THE BOARD IN THE FIRST THREE QUARTERS OF 2022

The average liquidity ratio of the firms in the CBQ sample fell between January and September 2022. The breakdown by sector shows that this ratio decreased in virtually all sectors of activity..

1 LIQUIDITY RATIO. CBI / CBQ (LIQUID ASSETS (a) / TOTAL ASSETS)



2 LIQUIDITY RATIO. CBQ. BREAKDOWN BY SECTOR



SOURCE: Banco de España.

a Cash on hand and other equivalent liquid assets are considered liquid.

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Extraordinary cost and income developments had a negative impact on net profit, somewhat tempering the increase in ordinary profit. This was because extraordinary income, essentially from capital gains on sales of financial assets, was significant in 2021, whereas this year similar transactions have resulted in smaller capital gains. Thus, final net income increased by 68.2% in the first three quarters of 2022, to stand at 24.4% as a percentage of GVA (somewhat more than 7 pp above the level a year earlier) (see Table 1).

Growth in ordinary profit resulted in an increase in average profit ratios. Specifically, the average return on assets (ROA) increased by 1.5 pp to 4.2% and the average return on equity (ROE) rose to 6.3% compared with 3.5% a year earlier.[9] As a result, average ROA is now very close to pre-pandemic levels (see Chart 8.3). The breakdown by sector shows ROA grew across the board, albeit with varying intensity, with higher growth in the trade and hospitality and industry sectors (see Table 4). However, profitability growth in the industrial sector is strongly influenced by the sharp increase in the coke and refined petroleum sector in 2022, while most of the industrial sub-sectors (specifically, the food industry, the chemical industry, manufacture of mineral and metal products and manufacture of computer and electronic products) experienced – in some cases significant – declines in profitability, largely linked to the strong adverse impact of the increase in production costs in these sectors.

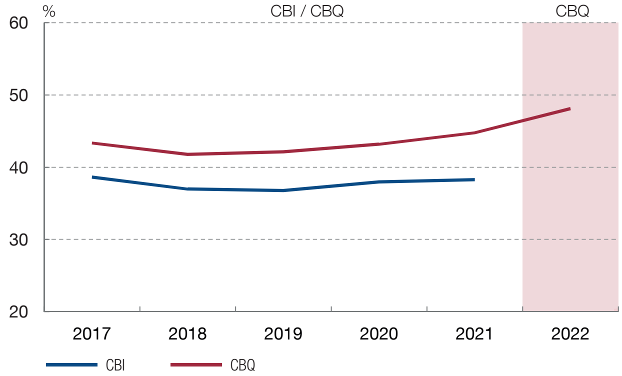
9 ROA is defined as (ONP + Financial costs) / Net assets, while ROE is defined as ONP / Equity.

Chart 10

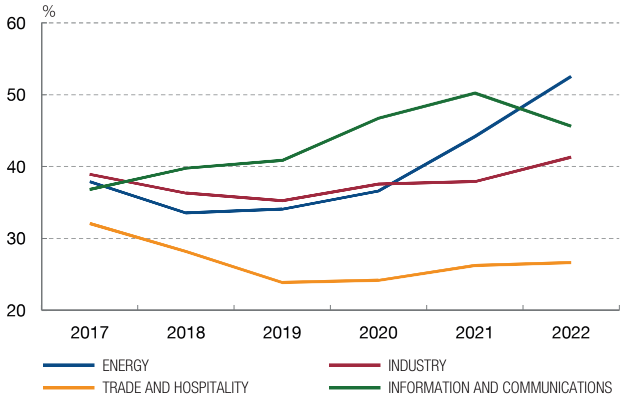
DESPITE THE INCREASE IN DEBT, REPAYMENT CAPACITY IMPROVED DUE TO THE RECOVERY IN PROFIT

In the first three quarters of 2022, on average, firms' indebtedness increased as a proportion of net assets. Conversely, it fell relative to ordinary profit, thanks to a rise in the latter. This allowed the debt burden to fall to levels even somewhat lower than in 2019, despite the increase in financial costs. By sector, energy recorded a sharp rise in the two debt ratios, although the debt burden held stable, whereas in the remaining sectors the changes were generally consistent with the average performance of the sample.

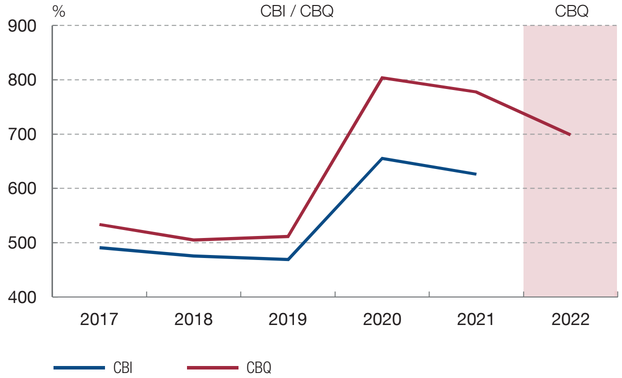
1 E1. INTEREST-BEARING BORROWING / NET ASSETS (a). TOTAL FIRMS



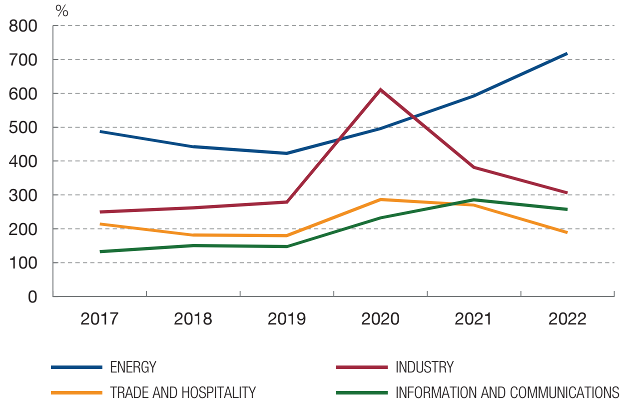
2 E1. INTEREST-BEARING BORROWING / NET ASSETS (a). BREAKDOWN BY SECTOR. CBQ
Ratios



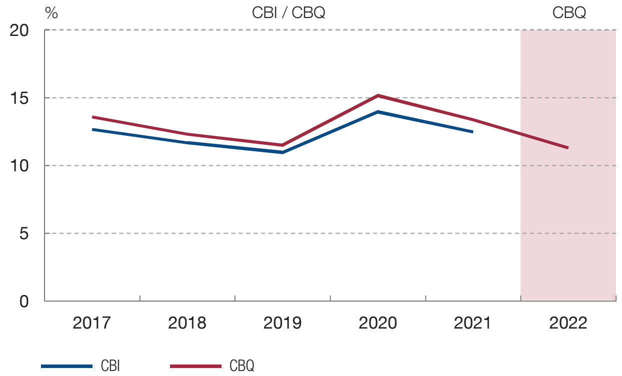
3 E2. INTEREST-BEARING BORROWING (b) / (GOP + Financial revenue) (c). TOTAL FIRMS
Ratios



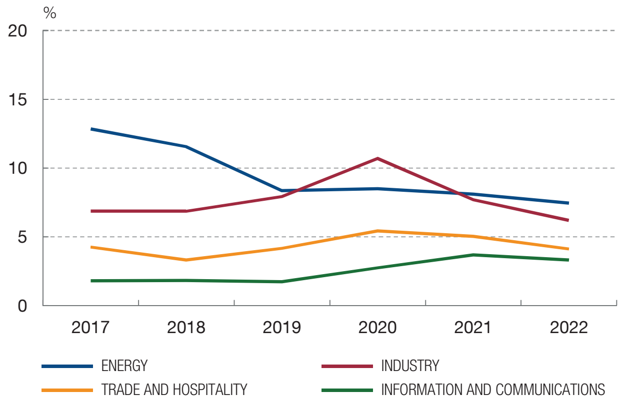
4 E2. INTEREST-BEARING BORROWING (b) / (GOP + Financial revenue) (c). BREAKDOWN BY SECTOR. CBQ
Ratios



5 INTEREST BURDEN
TOTAL FIRMS
Interest on borrowed funds / (GOP + Financial revenue) (c)



6 INTEREST BURDEN
BREAKDOWN BY SECTOR. CBQ
Interest on borrowed funds / (GOP + Financial revenue) (c)



SOURCE: Banco de España.

a Ratio calculated using final balance sheet figures. Equity includes an adjustment to current prices.
b Item calculated using final balance sheet figures. It includes an adjustment to eliminate "intra-group" debt (approximation of consolidated debt).
c The expenditure and revenue included in these ratios are calculated on the basis of cumulative four-quarter amounts.

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The median values of the profitability indicators also recorded positive changes in the CBQ as a whole: ROA rose by 0.7 pp to 4.8% and ROE by 1 pp to 6.7% (see Table 6). The table also shows that, compared with the same period of 2021, the distribution of firms by profitability bracket has shifted somewhat towards higher values, as reflected, for example, by the further decline in the proportion of firms with negative profitability.

Firms' average liquidity ratio declined in the first nine months of 2022 in almost all of the sectors analysed, except for the energy sector, where it did not change significantly (see Chart 9). In most cases, this ratio stands close to pre-pandemic levels, following the reversal of the pick-up it experienced in 2020, when firms accumulated liquid assets to protect themselves from the increase in liquidity risks.

Lastly, in September 2022 CBQ firms' gross debt stood 15% above its end-2021 level. This increase was reflected in a rise in the average debt-to-net asset ratio of somewhat more than 3 pp, to stand at 48.1% (see Chart 10). The breakdown by sector shows a mixed performance, with this ratio increasing in the industry and, above all, energy sectors, decreasing in the information and communications sector and remaining fairly stable in the trade and hospitality sector. By contrast, the average ratio of debt to ordinary profit (which is the sum of GOP and financial revenue) declined, helped by the rise in profit, to stand at 699% (78 pp down on a year earlier, albeit still well above 2019 levels). The breakdown by sector shows it fell in most sectors, with the sole exception of the energy sector, where this indicator continued to rise and is now at its highest level since the beginning of the quarterly series (in 1994). Finally, the average ratio of interest expenses to ordinary earnings continued to decline during the first three quarters of 2022 and now stands at 11.3%, 2 pp less than in 2021 and even slightly below the level in 2019. The sectoral breakdown of this last ratio shows it declined across all sectors.

1.12.2022.

Box 1

RECENT DEVELOPMENTS IN FIRMS' PROFIT MARGINS DRAWING ON CENTRAL BALANCE SHEET DATA OFFICE DATA

Firms set the selling prices for their products aiming to ensure that their sales revenue covers their production costs and generates a surplus that allows them to cover other expenses (such as financial costs or capital depreciation) and remunerate their shareholders. Profit margins are generally defined as the ratio of this surplus to the revenue firms obtain from their business activity. In practice, different approaches may be used. In this box, recent developments in firms' profit margins are analysed using two alternative definitions. The first, which we will call margin on sales, is calculated as the ratio of gross operating profit (GOP) to net turnover and enables analysis of the extent to which firms have been able to pass through the increase in their average production costs to their selling prices.[1] In particular, this indicator increases when sales revenue growth outpaces the rise in production costs (which include personnel costs and inputs), and it decreases when the opposite is the case. The second alternative is obtained by dividing GOP by gross value added (GVA), which we will call GVA margin, which measures the proportion of this surplus that remains after personnel costs.[2] This measure is equivalent to that which is generally used to proxy firms' profit margins using aggregate data such as National Accounts data.

The box draws on the data available for the first three quarters of 2022 in the sample of Spanish non-financial corporations reporting to the CBQ. The use of firm-level granular data makes it possible to study the degree of heterogeneity in firms' profit margins in more depth and to understand the idiosyncrasies that might explain the patterns observed. In any event, some of the conclusions drawn should be taken with due caution, given the small sample size (some 900 firms) and the bias towards large firms, which means some activities are under-represented.

Chart 1 shows how margins on sales have evolved between 2019 and 2022 (considering in all cases the first three quarters of each year so as to guarantee comparability), both for the total CBQ sample and broken down by economic sector.[3] As the chart shows, following the sharp fall in 2020,[4] as a result of the widespread decline in economic activity associated with the consequences of the COVID-19 pandemic, in 2021 margins on sales increased as the economic recovery took hold. But this pattern was interrupted in 2022, largely reflecting the difficulties experienced by many firms in passing higher production costs through to their customers, especially energy input costs which rose significantly in the period. This decline in margins was comparatively more acute in firms in energy and industry (excluding refining) and more moderate in information and communications. By contrast, in wholesale and retail trade and hospitality, margins on sales continued to grow, as demand recovered following the lifting of the pandemic-related restrictions.

Chart 2 depicts the recent developments in the GVA margin, showing, for the CBQ overall, that it has risen steadily in the last two years, returning to figures close to the 2019 level, after falling sharply in 2020. This is thanks to the recovery in firms' profits in 2021 and 2022, in a setting in which personnel costs have continued to grow more moderately. By economic sector, GVA margins in 2022 were similar to 2019 levels in energy and industry (excluding refining), and were clearly higher in wholesale and retail trade and hospitality. Meanwhile, in information and communications, they were below their pre-COVID level, apparently reflecting the high competition in this sector, which has led to a continued decline in margins in recent years.

The heterogeneity in firms' capacity to pass cost increases through to selling prices in 2022 was then analysed, together with the firm-specific characteristics that are conducive to that pass-through. To this end, profit margins measured as the ratio of GOP to net turnover were used, being, as indicated above, the most appropriate measure for this purpose. Chart 3 illustrates the high level of dispersion in the year-on-year change in this indicator, drawing on its distribution for the total CBQ sample and by economic sector. The median change shows that, in the first three quarters of 2022, margins on sales held steady for the total quarterly sample, compared with a

1 This relationship can be seen by rewriting GOP as the difference between sales (S) and production costs (PC=inputs + personnel costs): Margin on sales: GOP / S= (S - PC) / S = 1 – PC / S.

2 It should be noted, however, that GOP is not firms' final surplus, as other costs and revenue must still be added (financial costs and revenue, depreciation and amortisation, extraordinary items, corporate income tax) to obtain the net profit figure.

3 The "total" series includes all sample firms, whereas the breakdown by sector excludes refining, owing to the high volatility that this indicator has shown in the period analysed. It also excludes the "Other activities" sector.

4 Margins on sales decreased in 2020 in all economic sectors except the energy sector, as energy (mainly electricity) companies' production costs fell by more than their sales.

slight fall in the average change. A certain degree of heterogeneity is observed by economic sector. In particular, in some sectors such as electricity retailers and, especially, manufacture of mineral and metal products, the median change and the bulk of the distribution is in negative territory, indicating that in these sectors margins have predominantly fallen, while in others, such as electricity producers and, to a lesser extent, coke and refined petroleum, margins have generally increased.[5] In any event, within each sector

Chart 1
MARGIN ON SALES. GOP / NET TURNOVER
Breakdown by sector

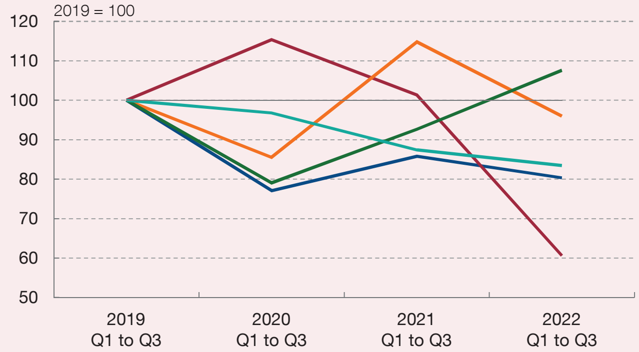


Chart 2
GVA MARGIN. GOP / GVA
Breakdown by sector

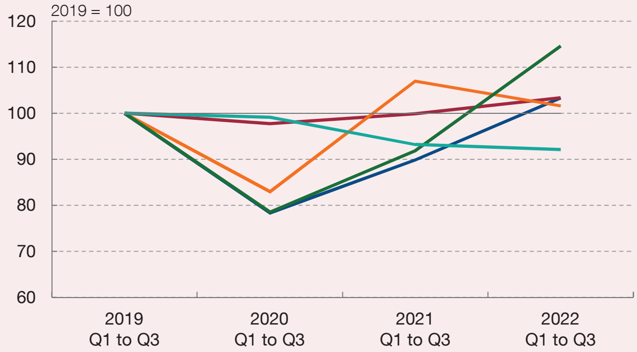


Chart 3
DISTRIBUTION OF CHANGE IN MARGIN ON SALES IN THE FIRST THREE QUARTERS OF 2022 COMPARED WITH THE SAME PERIOD OF 2021
Breakdown by sector (a)

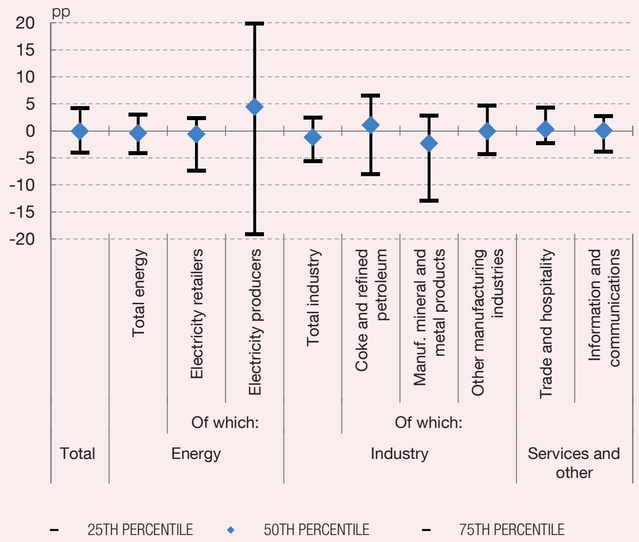
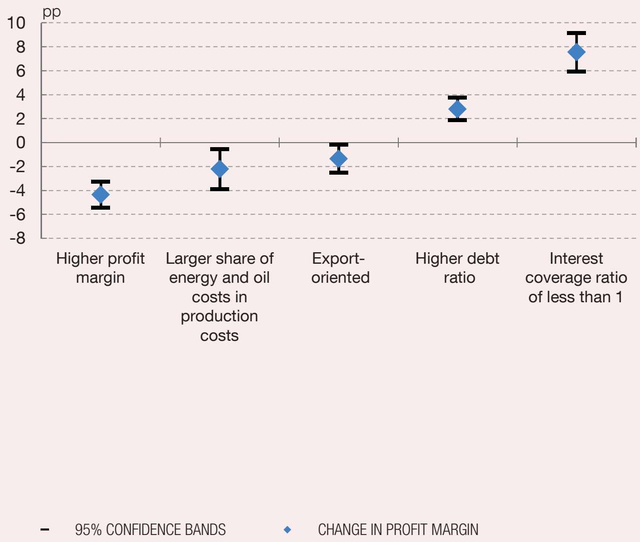


Chart 4
CHANGE IN MARGIN ON SALES IN 2022 Q1 TO Q3, COMPARED WITH 2021 Q1 TO Q3, BY FIRM CATEGORY (b)



SOURCE: Banco de España.

a Profit margin calculated as the ratio of GOP to net turnover.
b Coefficients estimated in a linear regression analysis. The explanatory variables are firm-specific. The fixed effects correspond to the sections of the CNAE-2009 (National Classification of Economic Activities).

5 This is similar to the pattern observed on Q1 data and confirms the main conclusions drawn at that time in Box 1, "Profit margins in Spain: recent developments and determinants", in "Results of non-financial corporations in 2022 Q1", Analytical Articles, *Economic Bulletin* 3/2022, Banco de España.

there is significant dispersion, suggesting that how firms' profit margins evolve depends not only on their economic sector but also on other firm-specific factors.

Chart 4 depicts the results of a regression analysis which suggests, first, that firms operating in sectors in which energy and oil costs account for a larger share of their production costs[6] saw a decline in their margins compared with other firms. This suggests that the firms that have seen the highest rises in production costs have not been able to pass all their cost increases through to their customers, although this effect is moderate in quantitative terms. Margin falls also seem to be more predominant, irrespective of economic sector, at firms that are more export oriented (and, therefore, operate in more competitive environments), and at firms whose margins were higher (and which therefore had more room to adjust their margins in the face of high cost pressure). By contrast, firms whose financial position was more vulnerable, owing to higher debt and lower interest coverage ratios, appear to have shown greater propensity to increase their margins, possibly reflecting their need to generate profits to restore their financial position.

6 The coke and refined petroleum sector (whose main activity is the sale of crude) is not included here; rather, these economic sectors include other, mainly industrial, activities with energy-intensive production processes.