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RESULTS OF NON-FINANCIAL CORPORATIONS
IN 2022 Q1

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ABSTRACT

The Central Balance Sheet Data Office Quarterly Survey (CBQ) data show that corporate earnings and activity continued to recover in 2022 Q1. Against this background, average profitability levels increased relative to the same period in 2021, but remained below pre-pandemic values. The debt of the sample firms taken as a whole grew in 2022 Q1 compared with a year earlier, leading to a slightly higher average debt-to-asset ratio. Conversely, the average ratio of debt to ordinary earnings, which proxies repayment capacity, fell, helped by the recovery in earnings. The increase in ordinary profit also enabled the average interest coverage ratio to continue to decline, albeit at a slower pace than in 2021 on account of the rise in financial costs associated with the higher debt. This article includes a box analysing changes in the profit margins of the CBQ firms during the last year, an important question in the current setting of sharp cost increases. For the median firm in the sample, the profit margin has remained virtually unchanged. However, there is a high level of heterogeneity, not only across sectors, but also within each sector. The differences in the course of this variable are attributable to certain characteristics, such as the growth in costs, firms' financial position and the buoyancy of their activity.

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

JEL classification: L25, M21, M41.

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Introduction

The results of the Central Balance Sheet Data Office Quarterly Survey (CBQ) show that the recovery that began in 2021 in the sample firms' activity continued in 2022 Q1, as illustrated by the growth in net turnover and in employment, although these have not yet returned to pre-pandemic levels. This upturn has come amid a sharp increase in production costs, owing to the impact associated with both rising commodity prices (including energy) and production chain bottlenecks. Firms that experienced a sharper rise in such costs saw a squeeze in their profit margins (proxied as the ratio of ordinary profit to sales). However, changes in this indicator have also been influenced by other characteristics, such as their profit margin level in 2021 Q1, the share of export activity, the dynamism of activity and the financial position of each firm (see Box 1).

In this setting, ordinary profit continued to grow for the sample as a whole in 2022 Q1 compared with that reported a year earlier, leading to higher average profitability levels, albeit, again, without returning to pre-pandemic values. These positive economic developments led to an improvement in debt repayment capacity, reducing the average ratio of debt to ordinary earnings (gross operating profit (GOP) plus financial revenue), and in the average interest coverage ratio. Lastly, the liquidity ratio of most firms and sectors in the sample fell in 2022 Q1, but remains, on average, comfortable and above pre-pandemic levels.

Activity, employment and personnel costs

The CBQ reveals that the significant recovery in the activity of the sample firms taken as a whole continued in January-March 2022. Thus, in nominal terms, turnover rose by 45.3% compared with the same period in 2021,1 in contrast to the 3.3% decline a year earlier (see Table 1 and Chart 1). At the same time, intermediate consumption also increased at a fast pace (49.9%, outstripping turnover), amid surging energy and other commodity prices. Nevertheless, gross value added (GVA) rose by 11.1%, after falling by 1.3% a year earlier.

¹ The CBQ contains information on the 910 firms which had reported their 2022 Q1 data by 17 June. The sample represents 11.4% of the GVA of the entire non-financial corporations sector (according to the information furnished by the National Accounts).

Table 1 THE RECOVERY IN ACTIVITY AND PROFITS CONTINUED IN 2022 Q1

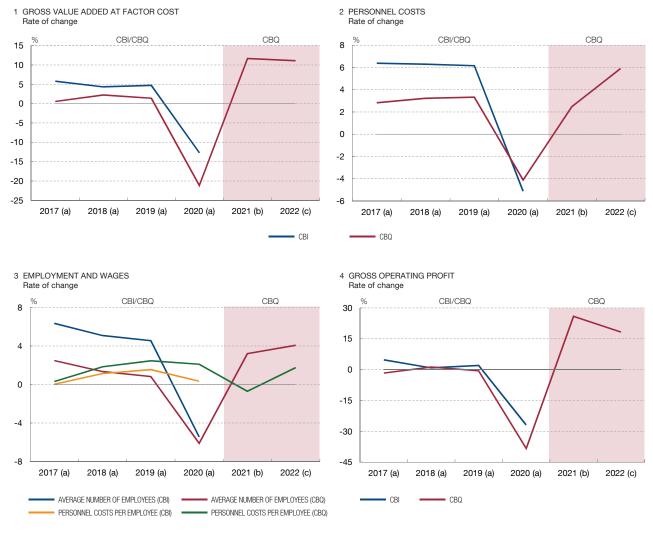
	CBI Structure	CE	31	CBQ				
Databases	2020	2019	2020	2021 Q1-Q4 / 2020 Q1-Q4 (a)	2021 Q1 / 2020 Q1	2022 Q1 / 2021 Q1		
Number of firms		836,810	780,808	962	1,006	910		
Total national coverage (% of GVA)		55.3	53.1	11.7	12.1	11.4		
Profit and loss account (rates of change with respect to same firms in previous year)								
VALUE OF OUTPUT (including subsidies)	100.0	2.7	-12.7	17.8	-3.6	38.2		
Of which:								
Net amount of turnover and other operating income	148.7	1.5	-12.9	21.1	-3.3	45.3		
2 INTERMEDIATE CONSUMPTION (including taxes)	63.1	1.6	-12.7	20.6	-4.5	49.9		
Of which:								
Net purchases	38.4	1.9	-16.0	32.2	-0.4	72.1		
Other operating costs	24.2	3.8	-9.1	7.8	-5.6	22.7		
S.1 GROSS VALUE ADDED AT FACTOR COST [1 – 2]	36.9	4.7	-12.7	11.7	-1.3	11.1		
3 Personnel costs	26.1	6.2	-5.1	2.5	-2.4	5.9		
S.2 GROSS OPERATING PROFIT [S.1 – 3]	10.8	2.0	-26.9	25.9	0.3	18.2		
4 Financial revenue	4.0	9.2	-14.5	19.4	-17.9	53.0		
5 Financial costs	2.2	-2.0	-3.1	-6.7	-1.2	8.0		
6 Net depreciation, impairment and operating provisions	6.2	2.4	2.2	-2.7	-5.9	3.3		
S.3 ORDINARY NET PROFIT [S.2 + 4 - 5 - 6]	6.4	5.6	-42.4	68.7	8.1	62.4		
7 Gains (losses) from disposals and impairment	-1.7	-69.9	_	_	_	_		
7' As a percentage of GVA (7 / S.1)		1.5	-4.5	11.2	-7.2	1.7		
8 Changes in fair value and other gains (losses)	-0.7	6.5	3.6	-90.1	94.7	74.6		
8' As a percentage of GVA (8 / S.1)		-1.6	-1.8	-6.0	-0.2	-1.1		
9 Corporate income tax	1.0	-6.5	-36.0	123.4	93.8	-0.5		
S.4 NET PROFIT [S.3 + 7 + 8 - 9]	3.0	-7.2	-68.2	_	_	_		
S. 4' As a percentage of GVA (S.4 / S.1)		21.9	8.2	33.5	-0.2	16.1		
RATES OF RETURN	Formulae (b)							
R.1 Return on assets (before taxes)	(S.3 + 5.1) / NA	5.8	3.9	4.7	1.6	2.1		
R.2 Interest on borrowed funds / interest- bearing borrowing	5.1 / IBB	2.2	2.0	1.6	1.6	1.5		
R.3 Ordinary return on equity (before taxes)	S.3 / E	7.9	5.1	7.0	1.6	2.6		
R.4 ROA – cost of debt (R.1 – R.2)	R.1 – R.2	3.6	1.9	3.0	-0.0	0.6		
MEMORANDUM ITEM: TOTAL SAMPLE REWEIGHTED								
S.1 GROSS VALUE ADDED AT FACTOR COST [1 – 2]		4.7	-12.2	13.1	-3.1	12.1		
S.2 GROSS OPERATING PROFIT [S.1 – 3]		2.1	-25.0	51.6	-4.7	_		

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).

ACTIVITY, EARNINGS AND EMPLOYMENT CONTINUED TO RISE IN 2022 Q1

GVA, GOP and employment increased in January-March 2022, prolonging the trend of recovery reported in 2021. Average compensation also rose somewhat in the sample as a whole.



Reporting non-financial corporations		2017	2018	2019	2020	2021	2022
Number of corporations	CBI	813,798	788,214	836,810	780,808	_	_
	CBQ	993	1,030	1,029	940	962	910
% of GVA of the non-financial corporations sector	CBI	55.7	56.9	55.3	53.1	_	_
	CBQ	14.0	13.0	13.0	11.6	1.7	11.4

- a 2017, 2018, 2019 and 2020 data, drawing on CBI firms, and average for the four quarters of each year compared with the previous year (CBQ).
- **b** Average for the four quarters of 2021 relative to the same period in 2020.
- c 2022 Q1 data relative to the same period in 2021.

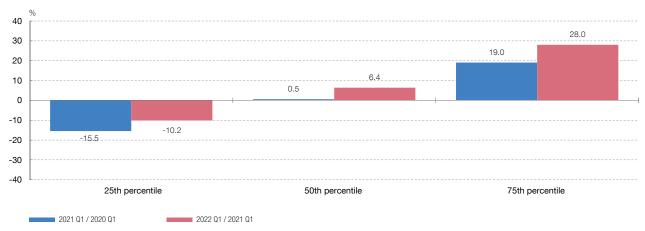


Chart 2

GVA PERFORMED MORE FAVOURABLY IN 2022 Q1, IN THE THREE QUARTILES OF THE DISTRIBUTION, COMPARED WITH A

YEAR EARLIER

In 2022 Q1, the median year-on-year growth rate of GVA stood at 6.4%, compared with 0.5% in 2021 Q1. In the top distribution quartile, the improvement relative to a year earlier was somewhat more pronounced.



SOURCE: Banco de España.



Chart 2, which presents data for three percentiles of the distribution of CBQ firms by change in GVA, shows a median growth rate of 6.4% in 2022 Q1, compared with 0.5% a year earlier. In the top distribution quartile, reflecting the firms that reported sharper increases in GVA, the improvement relative to a year earlier is more pronounced.

The breakdown by sector of activity shows a recovery in GVA in most cases, with trade and hospitality being notable for posting the strongest recovery (29.2%) (see Table 2). GVA declined in the information and communication sector (0.7%) and, in particular, in energy (15.7%). However, the decrease in information and communication was much smaller than that reported a year earlier (12.1%).

Despite increasing in the sample as a whole, GVA was still 5.3% below the figure for 2019 Q1 (see Chart 3). The sectoral breakdown shows that the trade and hospitality sector and industry² exceeded pre-pandemic levels, while the other sectors have not yet returned to levels close to those of 2019 Q1.

Personnel costs rose 5.9% year-on-year in January-March 2022, driven by the increase in the average effective workforce³ and, to a lesser extent, higher average compensation, which grew 1.8%. Specifically, average effective employment grew by 4.1% in 2022 Q1, compared with the drop of 2.7% a year earlier. Thus, the average

² The return to pre-pandemic levels indicated for some sectors in the CBQ should be regarded with caution, as it may be influenced by the fact that this sample mainly comprises large firms and does not properly capture developments in SMEs.

³ Average effective workforce means the average number of employees that worked in the period considered, excluding furloughed workers.

Table 2

GVA AND EMPLOYMENT GREW, ALBEIT UNEVENLY ACROSS SECTORS

	GVA at factor cost				(ave	Employees (average for the period)				Personnel costs				Average compensation			
	CBI		CBQ		CBI		CBQ		CBI		CBQ		CBI		CBQ		
Rate of change with respect to the same firms in the previous year, %	2020	2021 Q1-Q4 (a)	2021 Q1	2022 Q1	2020	2021 Q1-Q4 (a)	2021 Q1	2022 Q1	2020	2021 Q1-Q4 (a)	2021 Q1	2022 Q1	2020	2021 Q1-Q4 (a)	2021 Q1	2022 Q1	
Total	-12.7	11.7	-1.3	11.1	-5.4	3.2	-2.7	4.1	-5.1	2.5	-2.4	5.9	0.3	-0.7	0.3	1.8	
Size																	
Small	-11.0	_	_	_	-5.9	_	_	_	-8.4	_	_	_	-2.6	_	_	_	
Medium	-6.3	12.2	6.7	9.1	-4.0	7.8	-1.3	6.4	-4.5	5.5	-5.7	12.1	-0.5	-2.1	-4.4	5.4	
Large	-14.4	11.7	-1.4	11.1	-5.4	3.1	-2.7	4.0	-3.4	2.4	-2.4	5.8	2.2	-0.7	0.4	1.7	
Breakdown by activity																	
Energy	-5.9	3.0	-1.7	-15.7	-1.7	-1.0	-1.4	-0.2	-0.1	1.6	0.5	1.5	1.7	2.6	1.8	1.7	
Industry	-10.8	38.2	43.2	22.9	-3.7	3.4	2.5	-0.3	-3.5	2.5	1.0	4.7	0.2	-0.8	-1.5	5.0	
Trade and hospitality	-17.3	13.7	0.8	29.2	-10.2	4.8	-4.9	7.1	-10.6	3.5	-3.7	8.8	-0.5	-1.2	1.3	1.6	
Information and communication	-7.1	-2.8	-12.1	-0.7	0.5	2.4	-0.4	3.8	0.1	3.5	0.1	4.8	-0.4	1.0	0.5	1.0	
Other activities	-13.4	10.4	-22.3	19.4	-3.9	2.8	-3.9	4.2	-3.8	1.6	-5.2	6.1	0.1	-1.2	-1.4	1.8	

workforce stood at levels similar to those in 2019 Q1 (see Chart 3). Employment grew both in the permanent staff group (up 4.1%) and among temporary workers (up 3.9%). In line with these positive developments in employment, nearly half of the firms (49.5%) increased their effective workforce, 14 percentage points (pp) more than a year earlier (see Table 3).

Table 2 shows that the growth in employment was especially concentrated in the trade and hospitality and the "other activities" sectors, which posted rates of 7.1% and 4.2%, respectively. This could be linked to the fact that these sectors have particularly benefited from the gradual lifting of the COVID-19 restrictions over the past year. Conversely, the average workforce in energy and industry declined slightly, by 0.2% and 0.3%, respectively.

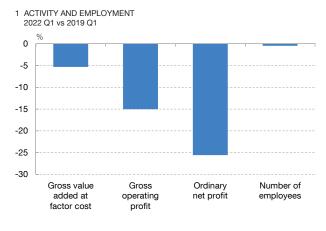
Rates of return, liquidity and debt

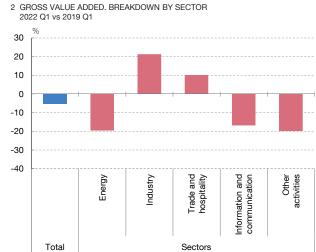
In keeping with the recovery in activity, GOP grew by 18.2% in 2022 Q1. The breakdown by sector shows a highly mixed performance, with trade and hospitality

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

FOR THE CBQ SAMPLE TAKEN AS A WHOLE, EARNINGS AND EMPLOYMENT IN 2022 Q1 REMAINED BELOW PRE-PANDEMIC LEVELS

Despite the greater activity, in 2022 Q1 both earnings (GVA, GOP and ONP) and employment remained below 2019 Q1 levels. In the case of GVA, the sectoral breakdown reveals that, while some sectors (such as industry and trade and hospitality) already exceeded pre-pandemic levels, energy, information and communication and other activities remained below this mark. Conversely, employment stood close to pre-pandemic levels.





DOWNI GAB

SOURCE: Banco de España.

Table 3

THE SHARE OF FIRMS CREATING EMPLOYMENT CONTINUED TO GROW IN JANUARY-MARCH 2022

	СВ	I (a)	CBQ (b)							
Percentage of firms in specific situations	2019	2020	2020 Q1-Q4	2021 Q1-Q4	2021 Q1	2022 Q1				
Number of firms	563,874	524,122	940	962	1,006	910				
Personnel costs	100	100	100	100	100	100				
Falling	32.3	57.7	51.3	37.2	49.8	30.1				
Constant or rising	67.7	42.3	48.7	62.8	50.2	69.9				
Average number of employees	100	100	100	100	100	100				
Falling	29.4	43.0	51.0	39.1	49.6	34.3				
Constant	26.1	24.9	13.4	15.4	15.0	16.3				
Rising	44.5	32.1	35.6	45.5	35.4	49.5				

- 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 DESPITE THE SLIGHT FALL IN AVERAGE BORROWING COSTS. FINANCIAL COSTS INCREASED IN 2022 Q1 **DUE TO HIGHER INDEBTEDNESS**

Percentages	CBI	CBQ			
	2019/2020	2021 Q1-Q4 / 2020 Q1-Q4	2022 Q1 / 2021 Q1		
Change in financial costs	-3.1	-6.7	8.0		
A Interest on borrowed funds	-3.0	-4.2	7.9		
1 Due to cost (interest rate)	-8.0	-9.8	-2.7		
2 Due to the amount of interest-bearing debt	5.0	5.6	10.5		
B Other financial costs	-0.1	-2.5	0.1		

Table 5 MODERATE INCREASE IN MEDIAN RETURNS AND NEGLIGIBLE CHANGES IN THE DISTRIBUTION BY BRACKET

		CBQ								
		Return on	assets (R.1)	Ordinary return on equity (R.3)						
		2021 Q1	2022 Q1	2021 Q1	2022 Q1					
Number of firms		1,006	910	1,006	910					
Percentage of firms by	R ≤ 0%	31.6	31.1	34.2	34.9					
profitability bracket	0% < R ≤ 5%	25.9	23.8	16.7	15.4					
	5% < R ≤ 10%	11.2	11.9	9.7	10.3					
	10% < R ≤ 15%	7.8	8.4	7.4	7.6					
	15% < R	23.6	24.8	32.1	31.8					
Memorandum item: median return (%)		2.8	3.3	4.2	4.7					

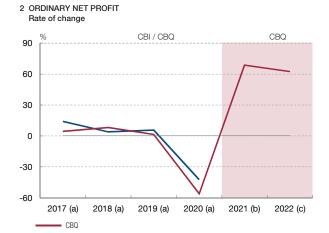
SOURCE: Banco de España.

reporting the sharpest increase, of 80.7%. The transport sector (included in the "other activities" aggregate) also saw a robust recovery in GOP. In both cases, this growth appears to owe largely to the lifting of COVID-19 restrictions, compared with a year earlier, which has especially benefited these two sectors. Industry as a whole also saw a notable increase in GOP (45%), although this was highly influenced by the extraordinary growth in the oil refining sub-sector, amid the sharp hikes in crude oil prices that these firms have, to a large extent, passed through to their selling prices. By contrast, other industrial sub-sectors, such as the manufacture of computer, electronic and optical products and the manufacture of transport equipment, saw a sharp decline in earnings, likely affected by component supply problems and higher production costs. Meanwhile, in information and communication, GOP contracted

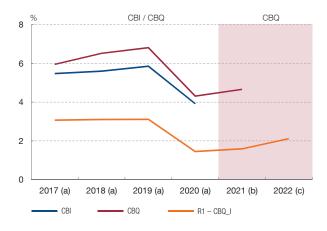
ORDINARY PROFIT AND RETURNS GREW IN 2022 Q1, BUT REMAINED BELOW PRE-PANDEMIC LEVELS

The rise in ordinary profit led average return on assets to grow in 2022 Q1, albeit without returning to 2019 levels. In a context in which the average cost of outstanding debt declined slightly, this allowed the spread between these two ratios to widen.

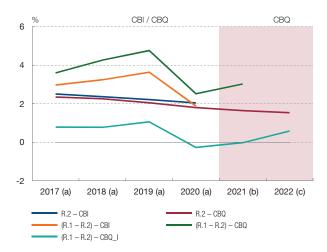




3 RETURN ON ASSETS (R.1)



4 COST OF DEBT (R.2) AND ROA - COST OF DEBT (R.1 - R.2)



Reporting non-financial corporations		2017	2018	2019	2020	2021	2022
Number of corporations	CBI	813,798	788,214	836,810	780,808	_	_
Number of corporations	CBQ	993	1,030 1,029 940 962	910			
% of GVA of the non-financial	CBI	55.7	56.9	55.3	53.1	_	_
corporations sector	CBQ	14.0	13.0	13.0	11.6	1.7	11.4

- a 2017, 2018, 2019 and 2020 data, drawing on CBI firms, and average for the four quarters of each year compared with the previous year (CBQ). For the rates, the calculation is made relative to the previous year.
- b Average for the four quarters of 2021. For the rates, the calculation is made relative to the same period in 2020.
- c 2022 Q1 data. For the rates, the calculation is made relative to the same period in 2021.



Table 6 ORDINARY PROFIT AND RATES OF RETURN INCREASED IN THE SAMPLE AS A WHOLE. ALBEIT UNEVENLY ACROSS SECTORS

		G	OP			O	NP	Return on assets (R.1)				ROA-cost of debt (R.1-R.2)				
	CBI		CBQ		CBI		CBQ		CBI		CBQ		CBI		CBQ	
Rates of change with respect to the same firms in the same period of the previous year, % and pp	2020	2021 Q1-Q4 (a)	2021 Q1	2022 Q1	2020	2021 Q1-Q4 (a)	2021 Q1	2022 Q1	2020	2021 Q1-Q4 (a)	2021 Q1	2022 Q1	2020	2021 Q1-Q4 (a)	2021 Q1	2022 Q1
Total	-26.9	25.9	0.3	18.2	-42.4	68.7	8.1	62.4	3.9	4.7	1.6	2.1	1.9	3.0	0.0	0.6
Size																
Small	-18.9	_	_	_	-34.2	_	_	_	2.5	_	_	_	0.6	_	_	_
Medium	-11.2	31.5	56.4	2.3	-21.6	50.7	145.3	-0.7	5.3	6.2	5.4	5.0	3.2	4.4	3.9	3.6
Large	-30.8	25.9	0.0	18.4	-45.8	68.8	7.1	63.4	4.3	4.7	1.6	2.1	2.2	3.0	0.0	0.6
Breakdown by activity																
Energy	-8.6	3.5	-2.4	-21.4	-11.5	10.7	-2.8	-26.2	5.2	5.2	4.0	2.4	3.2	3.7	2.4	1.2
Industry	-23.2	150.2	_	45.0	-37.4	_	_	110.0	5.0	6.7	4.8	9.1	2.9	4.5	2.4	6.9
Trade and hospitality	-32.8	37.4	13.7	80.7	-48.8	40.2	55.4	181.0	4.3	7.2	3.1	7.3	2.2	5.4	1.2	5.6
Information and communication	-15.8	-7.2	-19.9	-4.7	-38.9	-15.8	-30.9	-18.2	6.9	7.6	7.1	6.4	4.7	6.2	5.8	5.3
Other activities	-37.9	88.7	-91.0	_	-40.0	5.1	_	30.7	3.2	3.6	-0.4	0.0	1.2	2.0	-2.0	-1.6

by 4.7%, amid strong competition among telecommunications firms and a gradual downward adjustment of their mark-ups. Lastly, in the energy sector, GOP declined by 21.4%, attributable mainly to the negative performance of electricity suppliers, which, in many cases, were unable to fully pass the increase in production costs through to their selling prices (see Box 1).4

However, as with GVA, for the quarterly sample as a whole GOP was still clearly below pre-pandemic levels (by 15%) (see Chart 3).

Financial revenue up to March increased by 53%, above all as a result of higher dividends received (which grew 74%), although interest income also rose (30.1%). For their part, financial costs grew by 8% on account of the higher debt, despite the lower average cost of firms' outstanding debt (see Table 4).

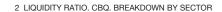
a All the data in these columns have been calculated as the weighted average of the quarterly data.

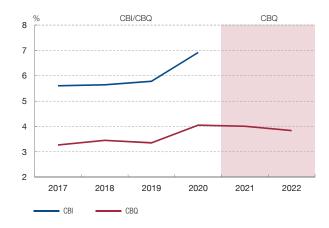
⁴ Electricity producers recorded higher production costs, due especially to the rising price of gas - an input for combined cycle power plants -, which they passed through to their selling prices. Meanwhile, electricity suppliers were unable to do the same vis-à-vis some of their customers (on the free market) as, in such cases, they are bound by long-term contracts stipulating fixed prices.

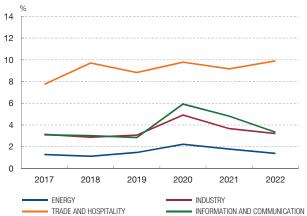
LIQUIDITY RATIOS CONTINUED TO DECLINE IN 2022 Q1 FOR MOST SAMPLE FIRMS AND SECTORS

The average liquidity ratio of CBQ sample firms declined slightly in January-March 2022. The sectoral breakdown reveals that this ratio fell in most sectors, with the exception of trade and hospitality which recorded a slight increase.

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







SOURCE: Banco de España.

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



All this allowed ordinary net profit (ONP)⁵ to rise by 62.4% year-on-year in 2022 Q1, well above the 8.1% increase recorded a year earlier (see Table 1 and Chart 5). As with the other ordinary earnings analysed above, ONP for the CBQ sample as a whole remained below its pre-pandemic level (by 25.6%).

Extraordinary costs and revenue gave a further boost to net profit. This was mainly because, in contrast to the heavy impairment losses recorded on tangible and financial fixed assets in 2021, financial asset sales have generated some capital gains, albeit for a small amount, in 2022. This led to a positive net profit in 2022 Q1, which, as a percentage of GVA, stood at 16.1%, compared with the slightly negative figure of -0.2% a year earlier (see Table 1).

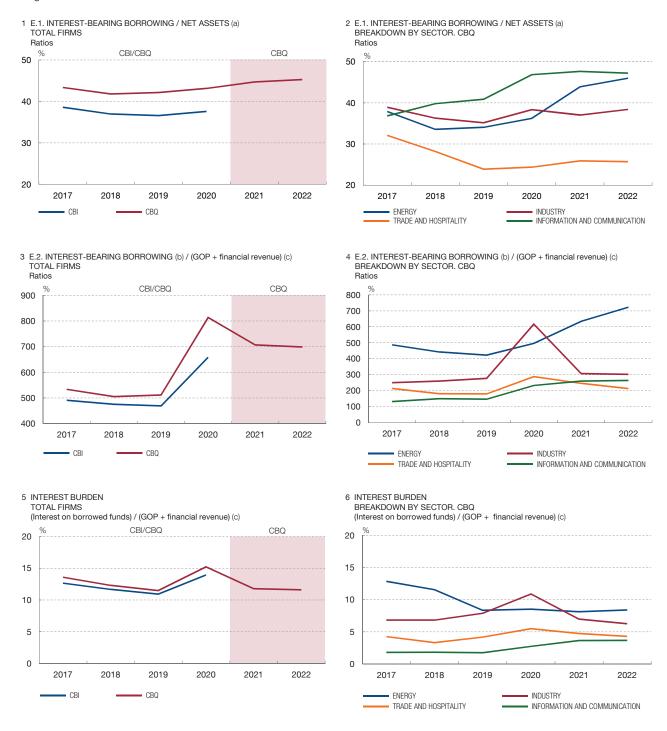
The growth in ordinary earnings resulted in an increase in average profit ratios. Specifically, return on assets (ROA) grew by 0.5 pp to 2.1% and return on equity (ROE) rose by 1 pp to 2.6%. The median values of these indicators also performed favourably, with a similar increase in ROA (rising to 3.3%, compared with 2.8% a year earlier) and a somewhat more moderate rise in ROE (up from 4.2% to 4.7%) (see Table 5). Table 5 shows negligible changes in the distribution of firms by profitability bracket since

⁵ ONP equals GOP less financial costs and depreciation and amortisation and operating provisions, plus financial revenue.

⁶ ROA is defined as (ONP + financial costs) / net assets, while ROE is defined as ONP / equity.

DESPITE THE INCREASE IN DEBT, REPAYMENT CAPACITY IMPROVED OWING TO THE RECOVERY IN PROFITS

In 2022 Q1, on average firms increased their indebtedness as a proportion of net assets. Conversely, indebtedness relative to ordinary earnings declined thanks to growth in the latter. The interest burden also fell as a result of the recovery in profits, despite higher interest expenses. By sector, the energy sector stands out for the sharp rise in its debt ratios, although the interest burden ratio held stable. The changes were moderate in the other sectors.



- a Ratio calculated from final balance sheet figures. Equity includes an adjustment to current prices.
- **b** Concept calculated from final balance sheet figures. 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.



2021 Q1, although the percentage of firms with negative profitability remains high (above 30%). Lastly, Chart 4 shows that, despite trending upwards in 2022 Q1, ROA remained, on average, around 1 pp below the level observed in 2019 Q1.

The sectoral breakdown reveals an uneven performance of ROA. Thus, on the one hand, profitability levels rose in the trade and hospitality sector and, in particular, in industry, to stand at 7.3% and 9.1%, respectively. On the other, profitability fell by 1.6 pp in the energy sector and by 0.7 pp in the information and communication sector, reaching 2.4% and 6.4%, respectively (see Table 6).

The average cost of borrowing declined slightly, by 0.1 pp to 1.5%. Developments in ROA and borrowing costs led to a 0.6 pp increase in the spread between these two ratios compared with the previous year, to stand at 0.6 pp.

For the CBQ sample taken as a whole, the average liquidity ratio of firms decreased slightly in 2022 Q1 (see Chart 5.1). Chart 5.2, which provides a sectoral breakdown, shows that the average liquidity ratio declined virtually across the board, except in trade and hospitality, where it increased slightly.

Lastly, between January and March 2022 the debt of CBQ firms stood 2.5% above the end-2021 level. As a result, the average debt-to-net asset ratio grew by 0.6 pp to 45.3% (see Chart 6). The sectoral breakdown shows that this ratio increased in industry and, above all, in the energy sector, while it held virtually unchanged in the trade sector and in information and communication. By contrast, the ratio of debt to ordinary profits (the sum of GOP and financial revenue) declined slightly, helped by the improvement in ordinary profit, to stand at 698% (8 pp down on a year earlier), which is still well above 2019 levels. The sectoral breakdown reveals that the ratio fell in the trade and hospitality sector, while it rose in the energy sector to its highest level since the quarterly series began in 1994. Lastly, the average interest coverage ratio continued to decline in 2022 Q1 (albeit at a slower pace than in the previous year); this was because, despite the growth in ordinary profits, interest payments likewise grew (albeit to a lesser extent), thus putting the ratio at 11.6%, down 0.2 pp on 2021 and reaching a level similar to that recorded in 2019. The sectoral breakdown for this ratio shows a decline in industry and the trade and hospitality sector, and a largely stable performance in the energy and information and communication sectors.

15.7.2022.

BANCO DE ESPAÑA

Over the last few quarters, most firms have seen production costs rise sharply as a result of the global production and supply chain bottlenecks and the increase in many commodity prices, including energy commodities. Firms that have been unable to pass these rising costs through to selling prices have experienced a narrowing of their profit margins, understood as the ratio of profit to net turnover. In any event, developments in profit margins may also have been conditioned by other factors, such as economic growth.

This box assesses the recent developments in profit margins, drawing on CBQ data. The use of granular data serves to study the degree of heterogeneity between firms and to understand the role played by the rise in production costs and by other characteristics. That said, some of the conclusions 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 underrepresented.

Chart 1 shows the statistical distribution of the year-onyear change in profit margins between 2021 Q1 and 2022 Q1 for the sample as a whole and for the different sectors and sub-sectors.¹ Profit margins are defined as the ratio of gross operating profit to net turnover. The results reveal highly uneven developments in firms' profit margins. In particular, the median change, which proxies changes for the representative firm, stands close to zero for the sample as a whole, indicating that margins have increased for approximately half of the firms and decreased for the other half. The reason for this heterogeneity partly lies in the sectoral dimension. Specifically, in some sectors (such as electricity supply and the mineral and metal products sector), the median change and much of the distribution stand in negative territory, which indicates the predominance of narrowing margins in those sectors. Conversely, in other sectors (such as coke and refined products), rising margins predominate. In any event, notable heterogeneity is evident within each of these sectors, as illustrated by the breadth of the distance between the 25th and 75th percentiles of the distribution. This suggests, therefore, that the different profit margin developments are not explained by the economic sector alone; rather, there are other, firm-level factors that may have played an important role.

With a view to analysing the determinants of the recent developments in profit margins, a linear regression has been performed in which the dependent variable is the change in profit margin between 2021 Q1 and 2022 Q1, and the explanatory variables of interest refer to different firm-level characteristics. Specifically, a series of dichotomous indicators are used, which take a value of either one, where the following variables stand above their median, or zero otherwise: (i) profit margin, (ii) growth in unit production costs,2 (iii) exports as a proportion of total sales, (iv) increase in the number of employees, and (v) the ratio of interest-bearing net debt to net assets. A further dichotomous variable is also used, which takes a value of either one, where the interest coverage ratio³ is lower than one, or zero otherwise, and sectoral fixed effects are utilised.4 All of the level-based variables refer to the situation in 2021 Q1, while the change-based variables capture the difference between 2021 Q1 and 2022 Q1.

Chart 2 sets out the results of the exercise, showing the coefficient estimated for each variable and the 95% confidence bands. As can be seen, all of the coefficients are statistically significant at this confidence level. The results indicate that a rise in unit production costs is associated with a narrowing of profit margins. This suggests that firms whose costs rose to a greater extent have been unable to pass the increase through to their customers in full. Thus, the coefficient is estimated to stand at -1.5 pp, meaning that firms with above-median production cost growth have seen their profit margin decrease by that amount, as compared with the other firms. Nevertheless, this effect is relatively moderate bearing in mind that the average profit margin for the sample of firms stood at 8.7% in 2021 Q1. Firms' export

¹ This year-on-year approach avoids the problems relating to the seasonality of this variable, while simultaneously capturing the recent period of rising production costs

² Production costs include both input and labour costs. The growth in unit costs, which aims to capture the change prompted exclusively by prices, is proxied by the rate of change in the ratio between production costs and employment. This proxy is used due to the limited information on the total volume of inputs (including labour) used in the production process and implicitly assumes that these grow at the same rate as employment. In practice this assumption may not hold, and therefore the variable includes a measurement error.

³ The interest coverage ratio is defined as the ratio of ordinary profits (GOP plus financial revenue) to interest expenses.

⁴ The sectors correspond to the first level NACE Rev. 2 classification, consisting of headings identified by an alphabetical code.

PROFIT MARGINS IN SPAIN: RECENT DEVELOPMENTS AND DETERMINANTS (cont'd)

propensity, proxied by exports as a share of turnover, also has a negative impact on the change in profit margins, and one that is somewhat larger in magnitude in absolute terms (-1.9 pp). This impact may be associated with the greater competition faced by companies exposed to foreign trade. Firms that started out with wider margins

Chart 1
DISTRIBUTION OF THE CHANGE IN PROFIT MARGIN, 2022 Q1 VS 2021 Q1.
BREAKDOWN BY SECTOR (a)

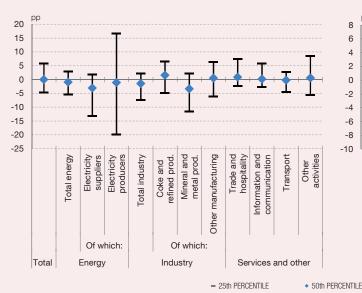


Chart 2 CHANGE IN PROFIT MARGIN, 2022 Q1 VS 2022 Q1. BY FIRM CATEGORY (a) (b)

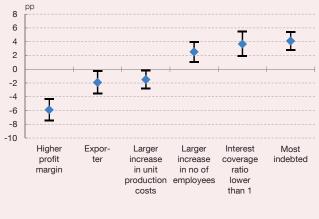


Chart 3 CHANGE IN SELLING PRICE AND UNIT PRODUCTION COSTS, 2022 Q1 VS 2021 Q1. BREAKDOWN BY NON-ENERGY SECTOR (c)

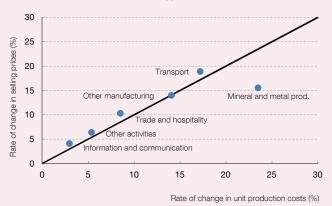
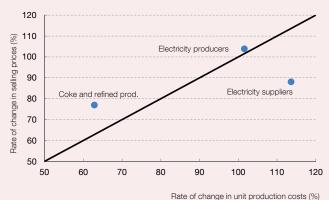


Chart 4 CHANGE IN SELLING PRICE AND UNIT PRODUCTION COSTS, 2022 Q1 VS 2021 Q1. BREAKDOWN BY ENERGY AND REFINING SECTOR (c)

- 70th PERCENTILE



- a Profit margin calculated as the ratio between GOP and net turnover.
- b The diamonds denote the coefficients estimated in a linear regression analysis in which the dependent variable is the change in profit margin between 2021 Q1 and 2022 Q1 and the explanatory variables of interest refer to a series of firm-level characteristics. Specifically, a series of dichotomous indicators are used, which take a value of either one, where the following variables stand above their median, or zero otherwise: (i) profit margin, (ii) growth in unit production costs, (iii) exports as a proportion of total sales, (iv) change in the number of employees, and (v) the ratio of interest-bearing net debt to net assets. A further dichotomous variable is also used, which takes a value of either one, where the interest coverage ratio is lower than one, or zero otherwise, and fixed effects corresponding to the NACE Rev. 2 sections are utilised. The vertical lines indicate the 95% confidence bands.
- c The rate of change in selling prices is proxied by the annual percentage rise in the ratio of sales to employment. The rate of change in unit production costs, which include input and labour costs, is proxied by the year-on-year percentage change in the ratio between production costs and employment. Plotted on the chart are the median rates of change in unit production costs and in selling prices obtained for each sector.

PROFIT MARGINS IN SPAIN: RECENT DEVELOPMENTS AND DETERMINANTS (cont'd)

also saw these squeezed, with a larger quantitative impact than in the above cases. This effect may capture these firms' greater capacity to absorb the rise in costs through a reduction in profit margins. By contrast, the firms whose activity has grown the most, proxied by employment developments, have widened their profit margins (perhaps owing to the existence of fixed costs), indicating the procyclicality of this variable.⁵ Lastly, firms in a more vulnerable financial position, proxied by high indebtedness and a lower interest coverage ratio, have also seen their margins increase. This is in keeping with previous papers⁶ and may be linked to these firms needing to improve their profitability and, accordingly, their net cash flows, given the financial pressure that they are under.

To further the analysis of the costs increase experienced by the different sectors, and the capacity of the firms in each one to pass these increases through to their customers, Charts 3 and 4 show, for each of the sectors considered above, the median increase in unit production costs and the median growth in selling prices. According to the results, the sectors related to energy and oil recorded the sharpest rises in production costs, reflecting

the fact that energy commodities constitute their main input. Of the other sectors, mineral and metal products, transport and other manufacturing industries stand out as having experienced the strongest growth in unit production costs, owing to their high energy intensity. At the other extreme, the sector with the most moderate increase in unit production costs is information and communication, which is consistent with its relatively low energy intensity.

In most sectors, the median growth in selling prices appears similar to that in unit costs; therefore, in the chart they are plotted close to the diagonal. This suggests that the representative firm in those sectors has largely passed the increase in costs through to its customers. However, other sectors stand some way off the diagonal. In particular, in trade of electricity and the mineral and metal products sector, the median firm's selling prices have grown far less than production costs, which would have prompted the contraction of profit margins observed in Chart 1. At the other extreme stands the coke and refined products sector, where the median growth in selling prices outstripped that in unit production costs, which would have led the median firm's profit margin to widen.

BANCO DE ESPAÑA

⁵ The existence of fixed costs means that when firms' activity grows, total costs rise at a slower pace than sales, assuming that selling prices and unit variables costs remain unchanged. The result is an increase in profit margins.

⁶ J. Montero and A. Urtasun "Markup dynamics and financial frictions: the Spanish case". *International Review of Economics & Finance*, Volume 71, January 2021. pp. 316-341.

⁷ As with the proxy used to measure the increase in unit production costs, the growth in average selling prices is proxied by the annual percentage rise in the ratio of sales to employment. See footnote 2 in this box for a discussion of the implicit assumption and the measurement error in this approach.