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ECONOMIC AND FINANCIAL PERFORMANCE

OF SPANISH FIRMS IN 2020 AND 2021 ACCORDING

TO THE CENTRAL BALANCE SHEET DATA OFFICE

Álvaro Menéndez and Maristela Mulino

### **ABSTRACT**

This article describes the economic and financial performance of Spanish non-financial corporations in 2020, a year marked by the impact of COVID-19. According to the information available in the Central Balance Sheet Data Office integrated database, the crisis severely affected activity, causing a sharp decline in turnover and profitability, albeit with very uneven effects across sectors. There was also a deterioration of many firms' financial position, caused by both rising debt and, to a larger extent, falling revenue. Firms were able to meet the greater liquidity needs without any widespread strains. In fact, easier access to external financing allowed firms, on average, to increase their liquidity buffers as a precautionary measure. More recent developments are also analysed on the basis of Central Balance Sheet Data Office Quarterly Survey (CBQ) data for the first three quarters of 2021. This period has seen a gradual improvement in firms' economic and financial position that has partially reversed last year's deterioration, in line with the economic recovery. The article includes two boxes. The first analyses the impact of the COVID-19 crisis on average supplier payment and customer collection periods. The second analyses recent developments in activity drawing on other statistical sources with a more extensive or representative coverage of the corporate sector than the CBQ.

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

JEL classification: L25, M21, M41.

## ECONOMIC AND FINANCIAL PERFORMANCE OF SPANISH FIRMS IN 2020 AND 2021 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.

The impact of the COVID-19 crisis on the financial and economic position of the corporate sector in 2020 according to the Central Balance Sheet Data Office integrated database

The measures adopted by the authorities in 2020 restricting activity and mobility to contain the spread of the pandemic and heightened uncertainty led to a sharp fall in most firms' revenue. Specifically, drawing on available preliminary information, in 2020 the overall turnover of the firms in the Central Balance Sheet Data Office integrated database (CBI) sample<sup>1</sup> fell by 14.3%, the largest drop on record in this database since the start of its time series (see Chart 1.1). The breakdown by size shows somewhat sharper reductions in the large corporations segment (15%) than in the SME segment (9.4%), indicating that the sectors most affected by the crisis have a substantially higher weight in the large corporations segment than in the SME segment.<sup>2</sup> The breakdown by sector reveals a high degree of heterogeneity, with an average decline in sales of 26.1% in the sectors severely affected by the crisis, compared with a fall of only 8.5% in those largely unaffected<sup>3</sup> (see Chart 1.2). Faced with this sharp contraction in activity, firms reacted in various ways. First, they adjusted their intermediate consumption (which fell by 13.7%), although this did not prevent the CBI sample's overall gross value added (GVA) from declining significantly (by 13.2%) (see Chart 1). A sharp fall in the average effective workforce<sup>4</sup> was also recorded (5.6%), largely explained by the increase in the number of furloughed workers (see Chart 1.3). Once again, the steepest declines (13.6%) were seen in the most affected sectors (see Chart 1.4).

<sup>1</sup> The CBI includes information up to 2020. At the date of this article going to press, information for that year on 465,362 firms had been received (further information for that year, bringing the total to around 800,000 firms, is yet to be received). The CBI sample represents 40.5% of the GVA generated by the entire non-financial corporations sector.

<sup>2</sup> Specifically, the severely affected sectors accounted for 20% of the sales of large corporations and 13.7% of the sales of SMEs in 2019. Severely affected sectors are those whose sales fell by 15% or more in 2020, drawing on information from the tax authorities. In this article, sectors are classified into another two groups according to the degree to which they are affected by the crisis: the moderately affected sectors and the largely unaffected sectors. The moderately affected sectors are those whose sales fell by between 9% and 15% in 2020. Lastly, the largely unaffected sectors are all other sectors.

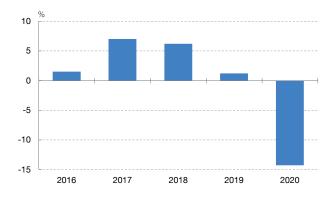
<sup>3</sup> For a definition of the sectors, see footnote 2.

<sup>4</sup> Average effective workforce means the average number of employees that worked in the period considered, excluding furloughed workers.

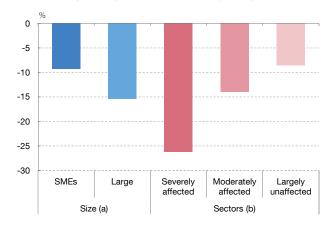
### TURNOVER AND EFFECTIVE EMPLOYMENT FELL SHARPLY IN 2020 AS A RESULT OF THE PANDEMIC

The measures adopted in response to COVID-19 and heightened uncertainty led to a steep decline in firms' activity, which translated into a sharp drop in turnover and employment. While these effects were widespread and affected most firms, they were more intense in those firms in sectors that were more directly hit by the COVID-19 pandemic.

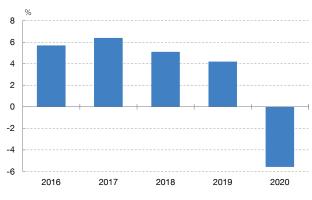
1 NET TURNOVER
Rates of change with respect to the same firms in the previous year



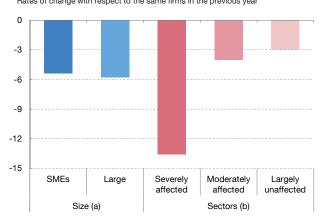
2 NET TURNOVER IN 2020. BREAKDOWN BY FIRM SIZE AND SECTOR Rates of change with respect to the same firms in the previous year



3 AVERAGE NUMBER OF WORKERS (c)
Rates of change with respect to the same firms in the previous year



4 AVERAGE NUMBER OF WORKERS IN 2020. BREAKDOWN BY FIRM SIZE AND SECTOR
Rates 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 severely affected if their sales fell by more than 15% in 2020 and as moderately affected if their sales fell by between 9% and 15%. Other sectors are deemed to be largely unaffected. Holding companies and head offices are excluded.
- c The average number of workers is calculated as the average number of employees that worked in the period considered, excluding furloughed workers.



The fall in expenses wasn't enough to offset the sharp decline in revenue, which translated into a notable drop in ordinary profit and, therefore, in most firms' return on ordinary activities. Thus, for the sample as a whole, ordinary net profit (ONP) contracted by 42.6% and the return on assets (ROA) fell by almost 2 percentage points (pp) to 4%. An individual analysis of the performance of this indicator shows a high degree of heterogeneity depending on firms' characteristics. Although in

Table 1 FIRMS' ACTIVITY INCREASED BETWEEN JANUARY AND SEPTEMBER 2021 AND PROFITABILITY RATIOS ROSE

	CBI structure	C	CBI	CBQ (a)			
Databases	2020	2019	2020	2020 Q1-Q4 / 2019 Q1-Q4	2020 Q1-Q3 / 2019 Q1-Q3	2021 Q1-Q3 / 2020 Q1-Q3	
Number of firms		684,107	465,362	939	951	909	
Total national coverage (% of GVA)		52.3	40.5	11.6	11.8	11.6	
Profit and loss account (rates of change with respect to same firms in previous year, %)							
1 VALUE OF OUTPUT (including subsidies)	100.0	2.6	-13.5	-19.7	-21.1	15.2	
Of which:							
Net amount of turnover and other							
operating income	149.6	1.3	-13.9	-19.9	-21.5	16.8	
2 INPUTS (including taxes)	63.4	1.4	-13.7	-19.0	-20.6	17.2	
Of which:							
Net purchases	39.0	1.8	-17.4	-25.1	-26.1	27.6	
Other operating costs	23.9	3.6	-9.2	-10.4	-10.7	6.7	
S.1 GVA AT FACTOR COST [1 - 2]	36.6	4.6	-13.2	-21.0	-22.2	10.9	
3 Personnel costs	25.4	5.9	-4.9	-4.5	-4.6	1.7	
S.2 GOP [S.1 – 3]	11.2	2.1	-27.6	-37.9	-39.8	24.8	
4 Financial revenue	4.6	9.4	-15.9	-20.9	-36.2	-4.1	
5 Financial costs	2.3	-2.3	-3.9	-10.3	-8.2	-8.2	
6 Net depreciation, impairment and operating provisions	6.4	2.2	2.3	0.1	0.5	-5.4	
S.3 ONP [S.2 + 4 - 5 - 6]]	7.0	6.0	-42.6	-56.0	-71.1	94.9	
7 Gains (losses) from disposals and impairment	-2.0	-69.5	_	_	_	_	
7' As a percentage of GVA (7 / S.1)		1.6	-5.4	-5.9	-21.1	3.8	
8 Changes in fair value and other gains (losses)	-0.7	6.1	15.2	39.0	60.2	10.1	
8' As a percentage of GVA (8 / S.1)		-1.7	-2.0	-3.6	-3.2	-2.8	
9 Corporate income tax	1.1	-6.9	-32.7	-50.5	-48.9	116.0	
S.4 NET PROFIT [S.3 + 7 + 8 - 9]	3.2	-7.2	-69.9	-80.2	_	_	
S. 4' As a percentage of GVA (S.4 / S.1)		22.6	8.7	9.9	-14.6	17.6	
RATES OF RETURN	Fórmulae (b)						
R.1 Return on assets (before taxes)	(S.3 + 5.1) / NA	5.9	4.0	4.3	2.1	2.8	
R.2 Interest on borrowed funds / interest-bearing borrowing	5.1 / IBB	2.2	2.0	1.8	1.8	1.6	
R.3 Ordinary return on equity (before taxes)	S.3 / E	8.1	5.2	6.2	2.4	3.8	
R.4 ROA – cost of debt (R.1 – R.2)	R.1 – R.2	3.7	2.0	2.5	0.3	1.2	
MEMORANDUM ITEM: TOTAL SAMPLE REWEIGHTED							
S.1 GVA AT FACTOR COST [1 – 2]		4.6	-12.8	-21.6	-23.2	11.0	
S.2 GOP [S.1 – 3]		2.2	-27.0	-44.3	-47.1	39.8	

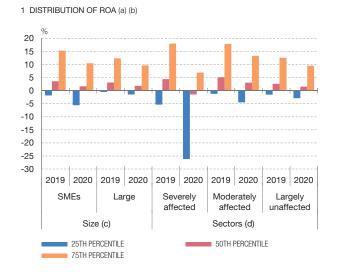
### SOURCE: Banco de España.

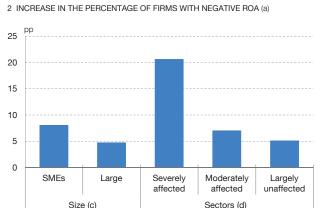
NOTE: In calculating rates, internal accounting movements have been edited out of items 4, 5, 6, 7 and 8.

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).

### RETURN ON ASSETS DECLINED MARKEDLY IN 2020 AND THE PERCENTAGE OF FIRMS WITH NEGATIVE PROFITABILITY INCREASED

As a result of the sharp decline in revenue in 2020, most CBI firms experienced a significant drop in their return on ordinary activities. This fall was most pronounced in the 25th percentile of the SME segment and in the sectors most affected by the pandemic. These sectors and SMEs also saw the highest increase in the percentage of firms with negative profitability.





### SOURCE: Banco de España.

- a Return on assets (ROA) = (ONP + Financial costs) / Net assets (net of non-interest-bearing borrowing).
- **b** The 2020 percentiles are the result of applying to 2019 percentiles the corresponding change between 2020 and 2019 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 severely affected if their sales fell by more than 15% in 2020 and as moderately affected if their sales fell by between 9% and 15%. Other sectors are deemed to be largely unaffected. Holding companies and head offices are excluded.



terms of the median of the distribution, the fall in profitability in SMEs was similar to that seen in large corporations, the deterioration in the lower end of the distribution among smaller firms was considerably greater than among large corporations. Specifically, for SMEs, the 25th percentile (which shows the value below which 25% of the firms with the lowest profitability fall) decreased from -1.8% in 2019 to -5.6% in 2020, compared with a reduction from -0.6% to -1.5% among large corporations (see Chart 2.1). Once again, the breakdown by sector shows that firms engaged in the activities hardest hit by the crisis were more adversely affected. Thus, in the severely affected sectors, median profitability dropped from 4.3% to -1.6% (5.9 pp). By contrast, in the moderately affected and largely unaffected sectors, median profitability declined to a lesser extent (2 pp and 1.5 pp, to 3.2% and 2.5%, respectively).

The decline in profitability in 2020 also entailed a significant increase in the number of firms with negative values for this indicator. According to the CBI, this was the case for almost 40% of firms (8 pp more than in 2019). Again, this increase was more intense in the sectors most affected by the pandemic (see Chart 2.2).

One of the direct consequences of the severe contraction in firms' activity was a surge in liquidity needs. To meet these greater needs, firms resorted in part to external financing, prompted by the credit support measures adopted by the national and supra-national economic authorities, such as the public guarantee scheme managed by the Official Credit Institute for bank loans. Consequently, CBI firms' gross financial debt grew by 4.9% (far exceeding the 0.7% increase in debt, on average, between 2017 and 2019). This increase was more marked in firms operating in the sectors severely affected by the crisis (9.1%). Liquidity risk concerns led many firms to accumulate liquid assets financed, partially, through debt (see Chart 3.1). This resulted in a higher average liquidity ratio for CBI firms (see Chart 3.2). However, a detailed analysis shows a very uneven performance of this ratio, with liquid assets falling for a significant share of firms, which would have used them to cover part of their liquidity needs (see Chart 3.3). In particular, the firms that relied most heavily on liquid assets to cover their financing needs appear to be those that had no financial debt before the crisis (see Chart 3.4). This behaviour would reflect their reduced willingness to take on debt and/or their limited access to external financing. In any event, on average, these firms had high liquidity ratios (14.3%) with which to meet their liquidity needs. Conversely, on average, those with outstanding financial debts increased their liquidity ratios. By firm size, the increase in the liquidity ratio was sharper, on average, among SMEs than among large corporations, with no clear pattern by sector.

Average supplier payment periods increased very slightly on average, indicating that most firms did not experience liquidity stress. By contrast, some firms, particularly those operating in the sectors hardest hit by the crisis or those with a riskier profile, may have faced some stress, as reflected by the greater increase in their average supplier payment periods (see Table 1).

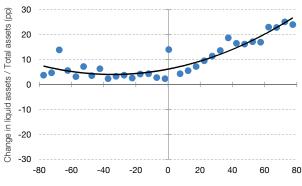
Moreover, the increase in debt and the fall in profit worsened many firms' financial positions. To illustrate this worsening, Charts 4.1 and 4.2 show the changes in the share of the most financially vulnerable firms in 2020, defined as those whose debt ratio exceeded certain thresholds. Two indicators are used to this end. The first indicator, more structural in nature, measures net financial debt (defined as gross financial debt less minus liquid assets) in relation to the value of this debt plus equity at each firm. The second indicator, which is calculated as the ratio of net financial debt to ordinary earnings (defined as gross operating profit (GOP) plus financial revenue), measures firms' ability to service their financial debt with the profit for the year generated by their activity.

The results show that the percentage of firms where net debt accounted for more than 75% of the balance sheet increased by 1.6 pp in 2020 (see Chart 4.1), while the share of firms whose debt-to-ordinary earnings ratio was higher than 10 or with losses grew more (by around 5 pp, to 24.7%) (see Chart 4.2). The greater impact observed in the latter indicator appears to be due to the sharp fall in

### MANY FIRMS INCREASED THEIR LIQUIDITY BUFFERS IN 2020 FOR PRECAUTIONARY REASONS

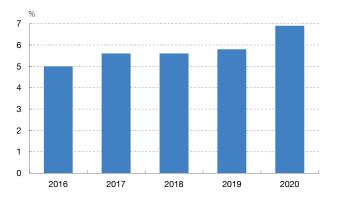
Liquidity risk concerns led many firms to accumulate liquid assets financed, partially, through debt, thus driving up the average liquidity rattio. However, a detailed analysis shows a very uneven performance of this ratio, with liquid assets falling for a significant share of firms, which would have used them to cover part of their liquidity needs, particularly in the case of firms that had no financial debt before the crisis.

1 CHANGE IN GROSS FINANCIAL INTEREST-BEARING DEBT TO LIQUID ASSETS IN 2020 COMPARED WITH 2019 (a)

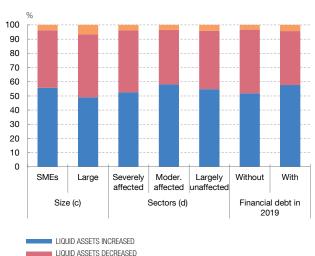


Change in gross financial interest-bearing debt / Total assets (pp)

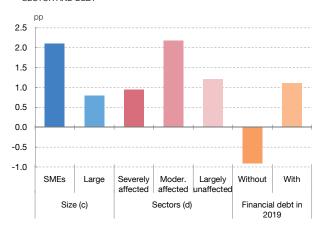
2 LIQUIDITY RATIO. CBI (LIQUID ASSETS (b) / TOTAL ASSETS)



3 DISTRIBUTION OF FIRMS ACCORDING TO THE CHANGE IN THEIR LIQUID ASSETS IN 2020. BREAKDOWN BY FIRM SIZE, SECTOR AND DEBT



4 CHANGE IN THE LIQUIDITY RATIO IN 2020. BREAKDOWN BY FIRM SIZE, SECTOR AND DERT



### SOURCE: Banco de España.

LIQUID ASSETS REMAINED STABLE

- a Each point on the chart represents the average change in gross interest-bearing debt to total assets and the average change in liquid assets to total assets, which are obtained in intervals of 5 pp of the change in debt to assets. Only those intervals with more than one firm are considered.
- **b** Liquid assets are calculated as the sum of cash on hand and cash equivalents.
- $\boldsymbol{c}\,$  The definition of "size" is in line with European Commission Recommendation 2003/361/EC.
- d Sectors are defined as severely affected if their sales fell by more than 15% in 2020 and as moderately affected if their sales fell by between 9% and 15%. Other sectors are deemed to be largely unaffected. Holding companies and head offices are excluded.

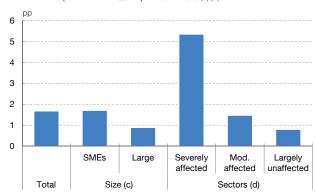


earnings (the denominator of the ratio). The higher vulnerability evidenced by these indicators is, once again, more marked in SMEs and, above all, in the sectors most affected by the crisis.

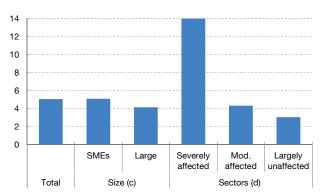
### THE PROPORTION OF FINANCIALLY VULNERABLE FIRMS INCREASED SIGNIFICANTLY IN 2020

The percentage of the most vulnerable firms (those whose net debt accounted for more than 75% of the balance sheet or whose debt-to-ordinary earnings ratio was higher than 10 or which posted losses) increased in 2020. The greater impact observed in the latter indicator appears to be due to the sharp fall in earnings (the denominator of the ratio). The higher vulnerability appears to be, once again, more marked in SMEs and, above all, in the sectors most affected by the crisis.

1 CHANGE IN THE PERCENTAGE OF VULNERABLE FIRMS ACCORDING TO THE NET DEBT / (NET DEBT + EQUITY) RATIO IN 2020 (a) (b)



2 CHANGE IN THE PERCENTAGE OF VULNERABLE FIRMS ACCORDING TO THE NET DEBT / (GOP + FINANCIAL REVENUE) RATIO IN 2020 (a) (e)



### SOURCE: Banco de España.

- a Net financial debt is defined as interest-bearing borrowing minus liquid assets and short-term financial investments.
- b The most vulnerable firms are defined as 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 severely affected if their sales fell by more than 15% in 2020 and as moderately affected if their sales fell by between 9% and 15%. Other sectors are deemed to be largely unaffected. Holding companies, the financial service sector, development of building projects, buying and selling of own real estate, and head offices are excluded.
- e The most vulnerable firms are defined as those whose ratio is greater than 10 or that have positive net financial debt and zero or negative earnings.



## Economic and financial performance of firms to 2021 Q3 according to the Central Balance Sheet Data Office Quarterly Survey

### Activity, employment and personnel costs

In the first three quarters of 2021, the activity of firms in the Central Balance Sheet Data Office Quarterly Survey<sup>5</sup> (CBQ) recovered significantly overall, owing mainly to the growth recorded from April onwards. Thus, between January and September the sample's GVA grew, in nominal terms, by 10.9%, compared with the same period of the previous year, following the extraordinary decline recorded in 2020 (a fall of 22.2%) as a result of the crisis caused by the COVID-19 pandemic (see Table 1). GVA growth in 2021 is the result of a still slightly negative performance in 2021 Q1 (which saw a year-on-year decline in GVA of 1.1%), of a 25.2% increase in Q2 and of a somewhat more moderate increase (11.1%) in Q3, compared with the same periods of 2020.

<sup>5</sup> The CBQ contains information on the 909 firms which had reported their 2021 Q1, Q2 and Q3 data by 18 September. The sample represents 11.6% of the GVA of the entire non-financial corporations sector (according to the information furnished by the National Accounts).

Table 2
IN 2021, FIRMS' GVA, EMPLOYMENT AND PROFITABILITY LEVELS INCREASED, ALBEIT UNEVENLY ACROSS SECTORS

		GVA at factor cost		Employees (average for the period)			ONP					ROA (R.1)				
	CBI		CBQ (a)		CBI	(	CBQ (a)		CBI		CBQ (a)		CBI		CBQ (a	)
Rate of change with respect to the same firms in the previous year (%)	2020	2020 Q1-Q4	2020 Q1-Q3	2021 Q1-Q3	2020	2020 Q1-Q4	2020 Q1-Q3	2021 Q1-Q3	2020	2020 Q1-Q4	2020 Q1-Q3	2021 Q1-Q3	2020	2020 Q1-Q4	2020 Q1-Q3	2021 Q1-Q3
TOTAL	-13.2	-21.0	-22.2	10.9	-5.6	-5.9	-6.2	2.3	-42.6	-56.0	-71.1	94.9	4.0	4.3	2.1	2.8
Size																
Small	-10.6	_	_	_	-5.9	_	_	_	-31.7	_	_	_	2.7	_	_	_
Medium	-5.1	-9.3	-9.5	12.1	-3.8	-5.6	-5.4	5.4	-18.3	-28.2	-27.0	63.8	5.7	4.6	4.5	6.5
Large	-15.0	-21.1	-22.3	10.9	-5.8	-5.9	-6.2	2.3	-45.7	-56.1	-71.3	95.3	4.3	4.3	2.1	2.8
Breakdown by activity																
Energy	-6.4	-7.5	-8.1	4.8	-2.1	-2.2	-2.0	-1.3	-10.9	-10.7	-18.8	19.7	5.2	5.4	4.2	4.7
Industry	-12.2	-26.7	-30.9	48.5	-4.1	-5.2	-6.6	5.7	-41.4	-94.4	_	_	4.9	1.4	-1.3	5.6
Wholesale and retail trade and hospitality	-16.1	-15.9	-15.8	10.1	-9.4	-7.0	-7.2	3.5	-46.1	-48.1	-61.9	75.0	4.5	5.6	3.5	5.8
Information and communication	-8.5	-16.3	-13.7	-4.9	-0.2	-3.0	-3.4	1.1	-38.3	-44.1	-41.5	-15.4	6.9	9.2	9.2	8.0
Other activities	-14.7	-33.2	-35.4	5.2	-4.6	-6.5	-6.4	0.8	-38.9	-46.5	_	_	3.3	3.7	1.1	0.9

SOURCE: Banco de España.

An analysis by sector reveals mixed behaviour; the industrial and the wholesale and retail trade and hospitality sectors posted the strongest recovery in 2021, while firms in the information and communication sector reported further reductions in GVA (see Table 2).

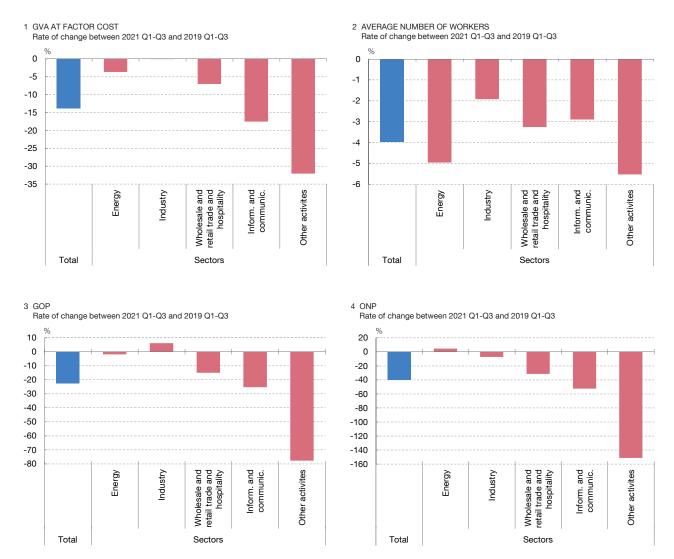
In any event, GVA for all CBQ firms in the first three quarters of 2021 was still 13.8% below the levels observed in the same period of 2019 (see Chart 5.1). This chart also shows that, while in some sectors, such as energy or industry, GVA is already close to its 2019 values, in service-related sectors this indicator is still far from its pre-COVID-19 levels. These data are consistent with the information furnished by the tax authorities on the corporate turnover of over one million firms. According to these data, sales between January and September 2021 in the sectors severely affected by the crisis remained well below sales in the same period of 2019, while in the moderately affected and the largely unaffected sectors, 2021 sales appear to have returned to a level similar or even higher than that recorded two years earlier (see Box 2).

Staff expenses grew by 1.7% to September 2021, mainly on account of an increase in the average effective workforce, amid a slight decline in average compensation.

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

## DESPITE GROWTH IN ACTIVITY AND EMPLOYMENT BETWEEN JANUARY AND SEPTEMBER 2021, PRE-PANDEMIC LEVELS HAVE NOT YET BEEN REGAINED

Although activity has experienced significant growth in 2021, which translated into a notable increase in ordinary earnings and employment, the decline in 2020 has not yet fully reversed in most of the sectors analysed. However, while in some sectors, such as energy or industry, the level of ordinary earnings is approaching its 2019 values, in service-related sectors this indicator is still far from pre-COVID-19 levels. In terms of effective employment, the sectors analysed are still between 1.9% and 5.5% below pre-pandemic values.



SOURCE: Banco de España.



In period average terms, effective employment grew by 2.3% in the first three quarters of 2021, compared with the drop of 6.2% a year earlier. Table 2 shows that employment grew across almost all sectors (except for energy, where it fell by 1.3%), with the industrial and the wholesale and retail trade and hospitality sectors posting the largest increase. Despite this increase, the average workforce of CBQ firms in the first three quarters of 2021 was still 3.8% smaller than in the same

period of 2019, with figures ranging from 1.9% in the industrial sector to 5.5% in the other activities sector (see Chart 5.2).

### Rates of return, liquidity and debt

As a result of the recovery in activity, GOP grew by 24.8% between January and September 2021. As with GVA, GOP is still below its pre-COVID-19 levels (by 22.6%) (see Chart 5.3).

In 2021 financial revenue fell by 4.1% driven by lower dividends received (which declined by 9.8%), while interest income increased by 12.4%. Financial costs continued to decline (this time by 8.2%) owing to the lower average cost of borrowing borne by firms, which offset the counteracting effect associated with the increase in average debt for the period (see Table 3).

All this, along with the drop in depreciation and operating provisions (down 5.4%, primarily on account of lower inventory write-downs), allowed ONP<sup>6</sup> to increase by 94.9% in the first nine months of 2021, following the sharp drop of 71.1% a year earlier. As with other ordinary earnings, CBQ firms' overall ONP between January and September 2021 is still below that observed in the same period of 2019 (by 40.3%) (see Chart 5.4). Extraordinary costs and revenue had an additional positive impact on net profit, owing to large unrealised losses and impairments in 2020 and to the high gains recorded in 2021 to date, arising from sales transactions and changes in the value of financial assets in both cases. This led to a positive net profit

Table 3
FINANCIAL COSTS CONTINUED TO DECLINE IN 2021 OWING TO LOWER BORROWING COSTS, OFFSETTING
THE DECLINE ASSOCIATED WITH HIGHER DEBT

Percentages	CBI	CBQ			
	2020/2019	2020 Q1-Q4 / 2019 Q1-Q4	2021 Q1-Q3 / 2020 Q1-Q3		
Change in financial costs	-3.9	-10.3	-8.2		
A Interest on borrowed funds	-4.2	-11.5	-8.0		
1 Change due to cost (interest rate)	-8.9	-11.6	-12.0		
2 Change due to the amount of interest-bearing debt	4.7	0.0	4.0		
B Other financial costs	0.2	1.3	-0.2		

SOURCE: Banco de España.

<sup>6</sup> ONP equals GOP less financial costs and depreciation and amortisation and operating provisions, plus financial revenue.

Table 4

MEDIAN RETURN INCREASED AND THE PERCENTAGE OF FIRMS WITH NEGATIVE PROFITABILITY DECLINED

		CBQ						
		Return on assets (R.1)		Ordinary return	n on equity (R.3)			
		2020 Q1-Q3	2021 Q1-Q3	2020 Q1-Q3	2021 Q1-Q3			
Number of firms		951	909	951	909			
Percentage of firms by profitability bracket	R <= 0%	35.9	30.0	38.2	31.9			
	0% < R <= 5%	23.9	23.8	16.8	16.6			
	5% < R <= 10%	12.5	12.8	9.8	9.9			
	10% < R <= 15%	6.6	8.1	6.3	7.3			
	15% < R	21.1	25.3	28.8	34.3			
Memorandum item: median return (%)		2.3	3.8	3.0	5.5			

SOURCE: Banco de España.

figure, in contrast to the negative value recorded in the sample between January and September 2020. As a percentage of GVA, net profit stood at 17.6%, compared with -14.6% a year earlier.

The increase in ordinary profit resulted in higher rates of return, with levels in the first nine months of 2021 clearly above those for the same period of 2020. Specifically, ROA grew by 0.7 pp to 2.8%, although it is still far from pre-crisis levels, since in the first three quarters of 2019 this indicator stood at 4.5%. Meanwhile, return on equity (ROE) increased by almost 1.5 pp to 3.8%. The sectoral breakdown reveals an uneven performance of ROA. Thus, profitability levels rose in the energy and the wholesale and retail trade and hospitality sectors and, especially, in the industrial sector (which recorded a negative value in the previous year), to stand at 4.7%, 5.8% and 5.6%, respectively. Conversely, the information and communication and other activities sectors posted lower levels of ROA than in the previous year (see Table 2).

The median values of these indicators performed even more favourably: ROA rose to 3.8% compared with 2.3% a year earlier and ROE increased from 3% to 5.5% (see Table 4). This table also shows a reduction of around 6 pp in the percentage of firms that recorded negative values for these indicators, to 30% in the case of ROA and to 31.9% in that of ROE, although these values remain higher than before the COVID-19 crisis (26% and 28%, respectively).

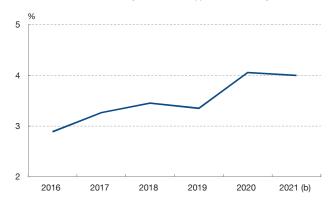
The average cost of borrowing remained on the downward path of recent years, falling by 0.2 pp to 1.6%. This development, along with the recovery in ROA, led the

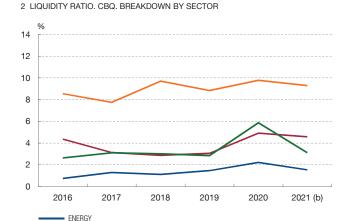
<sup>7</sup> ROA is defined as (ONP + financial costs) / net assets, while ROE is defined as ONP / equity.

### THE AVERAGE LIQUIDITY RATIO DECLINED SLIGHTLY IN 2021, FOLLOWING THE SHARP INCREASE A YEAR EARLIER

Firms' average liquidity ratio declined slightly in the first nine months of 2021, following the sharp increase a year earlier. The sectoral breakdown reveals that it fell across all sectors, albeit with varying intensity. This suggests that the gradual reduction in uncertainty has enabled a growing number of firms to release part of the liquidity buffers that they had built up over the previous year.

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.
- **b** The 2021 figures are for Q3.



spread between these two ratios to improve by 0.9 pp compared with the previous year, to stand at 1.2 pp.

INDUSTRY

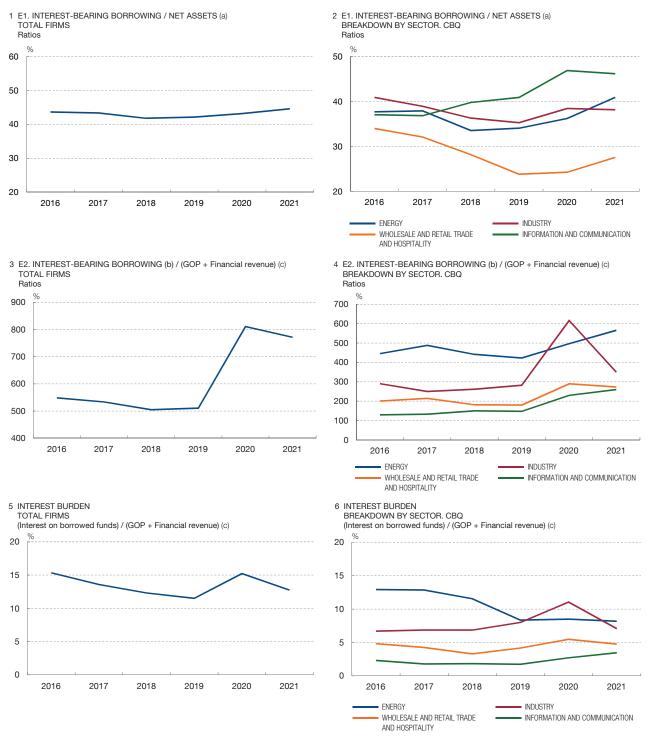
WHOLESALE & RETAIL TRADE & HOSPITALITY INFORMATION AND COMMUNICATION

Firms' average liquidity ratio declined slightly in the first nine months of 2021, following the sharp increase a year earlier (see Chart 6). The sectoral breakdown reveals that it fell across all sectors, albeit with varying intensity, indicating that this was the prevailing trend in most firms. This suggests that the gradual reduction in uncertainty has enabled a growing number of firms to release part of the liquidity buffers that they had built up over the previous year.

Lastly, in 2021 Q3 CBQ firms' overall debt was 5% above its end-2020 level. However, this was influenced by several loans granted to large corporations with a high weight in this sample, as reflected by the negative median growth of these firms' debt (-1.7%) over that period. As a result, the average debt-to-net asset ratio grew by 1.5 pp, to stand at 44.6% at end-Q3 (see Chart 7), while the median ratio fell by 4 pp. The breakdown by sector shows moderate increases in the energy and trade and hospitality sectors, and slight declines in the industrial and information and communication sectors. By contrast, the average debt-to-ordinary earnings ratio (the sum of GOP and financial revenue) fell in 2021 as a result of the increase in ordinary earnings, to stand at 771% (down some 40 pp on end-2020). The sectoral breakdown shows increases in the energy and information and communication

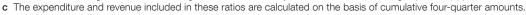
### THE INCREASE IN ORDINARY EARNINGS IN 2021 LED TO SOME IMPROVEMENT IN FIRMS' FINANCIAL POSITION

In the first three quarters of 2021, CBQ firms' average stock of debt increased and the average level of debt relative to net assets rose. By contrast, the debt-to-ordinary earnings ratio (the sum of GOP and financial revenue) fell in 2021, as a result of the increase in ordinary earnings. Finally, the ratio of interest expenses to ordinary earnings resumed its downward path, following the strong surge in the previous year, driven by both the continuing fall in interest rates paid and the rebound in corporate earnings.



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).





sectors, a slight fall in the trade and hospitality sector, and a significant decline in industry owing to the positive earnings performance. Finally, the average ratio of interest expenses to ordinary earnings resumed its downward path, following the strong surge in the previous year, driven by both the fall in financial costs and the rebound in earnings, to stand at 12.8%, 2.4 pp down on 2020 but still above the 11.5% recorded two years earlier. The sectoral breakdown for this latter ratio shows declines in both trade and hospitality and, above all, industry, a slight increase in information and communication, and a largely stable performance in the energy sector.

2.12.2021.

### RECENT DEVELOPMENTS IN NON-FINANCIAL CORPORATIONS' AVERAGE SUPPLIER PAYMENT AND CUSTOMER COLLECTION PERIODS

The sharp contraction in some firms' revenue in 2020 could have made it difficult for them to meet payment commitments to their suppliers, leading to delays in payments. Thus, liquidity stress may have been passed on from some firms to others along the production chain. To analyse these issues, this box examines developments in average supplier payment and customer collection periods (which measure the number of days a firm takes, on average, to pay its suppliers or to collect payment from its customers<sup>1</sup>) in 2020.2 This is done using the Central Balance Sheet Data Office integrated database (CBI), which includes, for 2020, data for more than 460,000 firms, the vast majority of which are small and medium-sized. This allows for the inclusion in the analysis of smaller firms, which were hit harder by the shocks within each sector and which generally have a more limited access to external financing, and may thus have experienced greater liquidity stress.

Chart 1 shows that, according to CBI data, in 2020 average supplier payment periods increased only marginally. Specifically, this indicator rose, on average, by barely one day (from 48 to 49 days) for all the firms in this sample. The breakdown by size also shows very small increases in this indicator, both in the large corporation segment and for medium-sized and micro enterprises, with the small-sized segment remaining practically stable.

Chart 2 analyses the changes in average supplier payment periods by dividing companies according to different characteristics that are considered relevant and which are related with the difficulties they may have encountered in meeting their payment commitments. This breakdown makes it possible to identify certain groups of firms whose supplier payment periods lengthened more significantly. In particular, in firms belonging to the sectors severely

affected by the crisis, average payment periods increased on average by ten days. This result suggests that the significant declines in these firms' turnover translated into some liquidity stress that made it difficult for them to pay their providers. Average supplier payment periods at firms with a high probability of default<sup>3</sup> increased on average by four days, suggesting that these firms also faced greater liquidity stress, perhaps because it was more difficult for them to access external financing. Furthermore, this chart shows that firms with smaller liquidity buffers<sup>4</sup> and, therefore, with a priori less room to cover the greater liquidity needs created by the crisis, slightly lengthened their supplier payment times, while the opposite is observed for firms with a more comfortable liquidity situation.

Naturally, the lengthening of supplier payment periods at some firms translated into an increase in customer collection periods at others. In this regard, Chart 3 shows that, in 2020, average customer collection periods increased, on average, by 3 days<sup>5</sup> to 40 days for the overall CBI sample. The breakdown by size does not show significant differences in these developments depending on firm size.

The latest information (from the CBQ) shows that average supplier payment and customer collection periods have remained around their pre-pandemic levels throughout the first three quarters of this year, following the sharp upsurge in 2020 Q2 (see Chart 4). This appears to reflect the gradual return to normal business activity and the improved macroeconomic environment.

In conclusion, the evidence presented in this box reveals that, despite the significant decline in firms' turnover in 2020, there has been no widespread liquidity stress, since average payment and collection periods increased on

<sup>1</sup> Specifically, the average supplier payment period is calculated as the ratio of the balance of suppliers (net of advances) at the end of the period to purchases in the period (a quarter or a year), plus work performed by other companies and VAT borne by suppliers for domestic transactions, multiplied by the number of days in the period (90 days on quarterly data and 365 on annual data). The average customer collection period is calculated in an equivalent fashion (customers, net of advances, over annual sales, plus VAT charged to customers for domestic transactions, multiplied by the number of days in the period).

<sup>2</sup> A similar analysis was previously carried out drawing on the information in the Central Balance Sheet Data Office Quarterly Survey (CBQ), which only includes 900, generally large, companies. See A. Menéndez and M. Mulino, "Recent developments in trade finance granted and received by non-financial corporations", Box 1, Analytical Articles, *Economic Bulletin* 4/2021, Banco de España.

<sup>3</sup> Probability of default is estimated on 2019 data based on a credit default prediction model that uses information relating to five financial ratios for each firm which measure activity, profitability, liquidity, financing structure and leverage, as well as macroeconomic and sectoral variables. A probability of default over 1% is considered high.

<sup>4</sup> Firms with small liquidity buffers are considered to be those whose liquidity ratio in 2019 was below the median value for this indicator.

<sup>5</sup> The difference between payment and collection periods (both in their level and in their variation) is due to commercial transaction counterparties not always being CBI firms; some are firms not included in this sample or other institutional sectors (households, general government and non-residents).

## RECENT DEVELOPMENTS IN NON-FINANCIAL CORPORATIONS' AVERAGE SUPPLIER PAYMENT AND CUSTOMER COLLECTION PERIODS (cont'd)

average only very slightly. This evidence applies to both large corporations and SMEs. However, when firms are divided according to other characteristics, somewhat sharper increases in supplier payment periods are seen in firms in the sectors most affected by the pandemic, in riskier firms and, to a lesser extent, in firms with smaller

liquidity buffers. These results point to these types of firms as those that faced more difficulties in meeting their payment commitments in 2020. Lastly, more recent data, albeit only available for a small sample, suggest that average trade credit payment periods are on average around pre-crisis levels.

Chart 1 AVERAGE SUPPLIER PAYMENT PERIOD. BREAKDOWN BY FIRM SIZE. PURCHASE-WEIGHTED MEDIAN (a) (b)



Chart 2 AVERAGE SUPPLIER PAYMENT PERIOD BY FIRM CHARACTERISTICS. PURCHASE-WEIGHTED MEDIAN (a) (b)

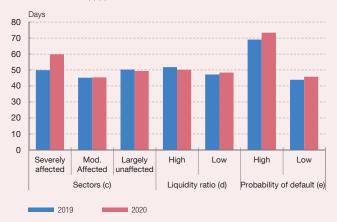
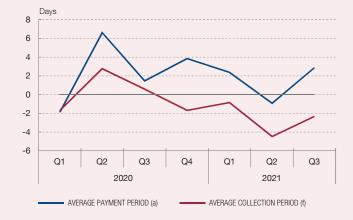


Chart 3 AVERAGE CUSTOMER COLLECTION PERIOD. BREAKDOWN BY FIRM SIZE. SALES-WEIGHTED MEDIAN (b) (f)



Chart 4
CHANGE IN THE MEDIAN AVERAGE SUPPLIER PAYMENT AND CUSTOMER
COLLECTION PERIODS VIS-À-VIS THE SAME QUARTER OF 2019. CBQ



### SOURCE: Banco de España.

- a The supplier payment period is defined as the ratio of suppliers to annual purchases multiplied by 365.
- b The definition of "size" is in line with European Commission Recommendation 2003/361/EC.
- c Sectors are defined as severely affected if their sales fell by more than 15% in 2020 and as moderately affected if their sales fell by between 9% and 15%. Other sectors are deemed to be largely unaffected.
- d The liquidity ratio is defined as (Cash and cash equivalents + Short term financial investments other than loans) / Total assets. A firm is considered to have a high liquidity ratio if in 2019 it was above its median value.
- e The probability of default has been estimated using a model that includes financial ratios for each firm for 2019. A probability of default over 1% is considered high.
- f The customer collection period is defined as the ratio of customers to annual sales multiplied by 365.

### AN ANALYSIS OF DEVELOPMENTS IN FIRMS' ACTIVITY IN 2021 DRAWING ON OTHER SOURCES OF INFORMATION

The developments in firms' economic and financial position presented in the main text of this article are based on Central Balance Sheet Data Office Quarterly Survey (CBQ) data. These microdata provide for a very detailed analysis, but limited to a small sample size (some 900 firms) consisting mainly of large corporations, with a very low coverage of certain economic sectors. In order to complement this analysis, this box draws on other sources of information. First, the tax authorities' sectoral sales statistics, which include over one million firms. Second, information from the fourth round of the Banco de España Business Activity Survey<sup>1</sup> (EBAE), conducted from late August to early September 2021, which contains a representative sample of the corporate sector. Lastly, information on bank lending from the Banco de España statistics, including the volume of all loans granted by resident financial institutions to Spanish non-financial corporations, with a breakdown by sector. These analyses allow a more granular study to be conducted at the sectoral level and differential developments by size to be observed, which cannot be done with the CBQ sample.

Chart 1 shows that sales in the sectors severely affected by the crisis between January and September 2021 remained well below those in the same period of 2019 (before the pandemic), although the difference appears to have narrowed in all cases compared with a year earlier. Among these sectors, accommodation and food service activities stands out particularly as the one with the lowest turnover figures for 2021 compared with those observed before the pandemic (50% below the level recorded two years earlier). Conversely, in both the moderately affected and the largely unaffected sectors, the decline in 2020 appears to have completely reversed, with sales in 2021 already at a level similar or even above that recorded in 2019.

Chart 2, which draws on information from the fourth round of the EBAE for 2021 Q3, shows how microfirms (with fewer than 10 employees) and small enterprises (with between 10 and 49 employees) fared worse in 2020 and 2021 in terms of sales, compared with their prepandemic level, than their sector on average, although in the case of small enterprises the differences appear to have narrowed somewhat in 2021. By contrast, the sales performance of larger firms (medium-sized and large) remained more positive in both periods, compared with

the sector average. Furthermore, it has been verified that the differences observed between the changes in the sales of micro and small firms, with respect to the other two groups, are statistically significant.

The EBAE also asks respondent firms when they expect their activity to return to pre-pandemic levels. From the replies to this question it is worth noting, first, that around one-third of all respondent firms considered either that their level of activity in 2021 Q3 would already be comparable to that before the crisis (28%) or that this level would be reached in 2021 Q4 (4%) (see Chart 3). Around 26% of the firms expected pre-pandemic levels to be reached in 2022 and 14% believed this would not happen until 2023 or later. In any event, it should be noted that a high percentage of respondent firms (28%) could not specify when pre-crisis levels would be regained, given the high level of uncertainty that still persists, in their view.

Lastly, Chart 4 presents the developments in the stock of bank credit in the three groups of sectors according to the impact of the crisis, up to 2021 Q2 (latest information available). It can be seen that in 2020 the stock of bank credit in the sectors severely affected by the pandemic grew more than in the other two groups, reflecting their greater financing needs. In both the moderately affected and largely unaffected sectors, bank lending also grew in 2020, but to a lesser extent, especially in the latter group. In the firms belonging to the sectors most affected by the crisis, the stock of bank credit continued to grow until 2021 Q1, probably reflecting the fact that these firms continued to have additional liquidity needs, but declined slightly in Q2. However, in the other two groups, bank financing began its downward trend in 2020 H2, which was more marked in the sectors largely unaffected by the crisis. Thus, in the latter group, the stock of credit in 2021 Q2 stood only slightly above its pre-crisis level. These results suggest that in 2021 H1 corporate sector debt followed a less expansionary path than that inferred from the CBQ sample.

In conclusion, the evidence presented in this box shows that smaller firms and, particularly, those in the sectors most affected by the pandemic, are finding it more difficult to regain their pre-crisis levels of activity. Moreover, the debt of firms operating in these sectors appears to

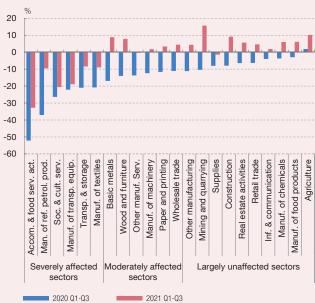
<sup>1</sup> The EBAE is the Business Activity Survey conducted quarterly by the Banco de España since 2020 Q4 on a sample of non-financial corporations to gain a better understanding of the impact of the COVID-19 crisis on their activity and short-term outlook.

### AN ANALYSIS OF DEVELOPMENTS IN FIRMS' ACTIVITY IN 2021 DRAWING ON OTHER SOURCES OF INFORMATION (cont'd)

continue on a more expansionary path, despite the reduction in the stock of bank loans in 2021 Q2 for the first time since the outbreak of the crisis. These results

point to a slower improvement in the financial position of SMEs and, particularly, of firms operating in the sectors hardest hit by the crisis, than for other firms.

FIRMS' TURNOVER, BY SECTOR (a) Rate of change with respect to the same period of 2019 20 10



GIBIT 2
FIRMS' TURNOVER, BY FIRM SIZE (b)
Change with respect to 2019 Q4 (difference vis-à-vis the sector average) 3 2 0 -2 -3 ≥ 250 0-9 10-49 50-249 employees employees employees employees

Chart 3 EXPECTED RETURN TO PRE-PANDEMIC LEVEL OF ACTIVITY (b)

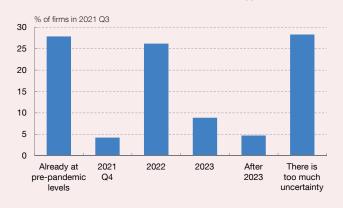
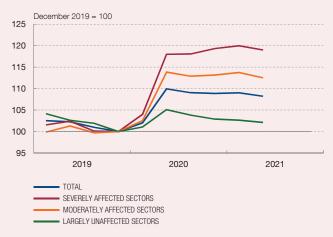


Chart 4 STOCK OF CREDIT TO PRODUCTIVE ACTIVITIES, BY SECTOR (a) (b)

= 2021 Q3

2020.04



SOURCES: AEAT, EBAE and Banco de España.

- a Sectors are defined as severely affected if their sales fell by more than 15% in 2020 and as moderately affected if their sales fell by between 9% and 15%. Other sectors are deemed to be largely unaffected.
- **b** The financial intermediation sector is excluded.