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News release:

***FINANCING COSTS AND FINANCIAL
PRESSURE: WERE NON-FINANCIAL
CORPORATIONS PREPARED FOR THE
PANDEMIC CRISIS?***

An international comparison

FSA (Financial Statement Analysis) WG

European Committee of Central Balance Sheet
Data Offices (ECCBSO)



Members of the Financial Statement Analysis Working Group (FSA WG):

Merve Artman (Chairwoman)

Central Bank of the Republic of Turkey

Olivier Gonzalez

Banque de France

Carla Ferreira (Vice-chairwoman)

Banco de Portugal

Gonca Zeynep Özdemir

Central Bank of the Republic of Turkey

Eva Esteban

Banco de España

Mariana Oliveira

Banco de Portugal

Carolin Schuerg

Deutsche Bundesbank

Ewa Sokolowska

Narodowy Bank Polski

Valentina Nigro

Banca d'Italia

Heraklios Lykiardopoulos

Bank of Greece

Letizia Sampoli

Cerved Group Spa

Disclaimer

The views expressed in this paper are those of authors and do not necessarily represent those of the ECCBSO or those of the national central banks. The financial cost indicator used in this study was calculated with a harmonized definition. Nevertheless, it reflects national charts of accounts, which may not be completely harmonized.

Contents

Between 2017 and 2019 financing costs decreased in most of the European countries 2

Figure 1 – Financing costs' median between 2000 and 2019 (micro companies excluded)..... 2

In most of the countries, almost 50% of firms have financing costs below 2.5% in 2019..... 2

Figure 2 – Percentage of corporations, by class of financing costs, in 2019* (micro companies excluded) 3

Comparing pre-crisis periods, in general the financial pressure was lower in 2019..... 3

Figure 3 – Quartiles of the financing cost distribution, by country: values for 2007 and 2019* (micro companies excluded)..... 4

Activity sectors' financing costs depend on the countries 5

Figure 4 – Financing costs' median in 2019, by country and activity sector (micro companies excluded) 5

The percentage of resilient firms was higher in 2019..... 5

Figure 5 – Percentage of firms with interest coverage ratio < 2 in 2007 and 2019 (micro companies excluded)..... 6

Figure 6 – Percentage of debt of firms with ICR < 2 in 2007 and 2019 (micro companies excluded) 6

Annexes 7

Annex I: Methodology 7

Table 1 – Composition of the Financing Cost indicator 7

Table 2 – Composition of Interest coverage ratio 8

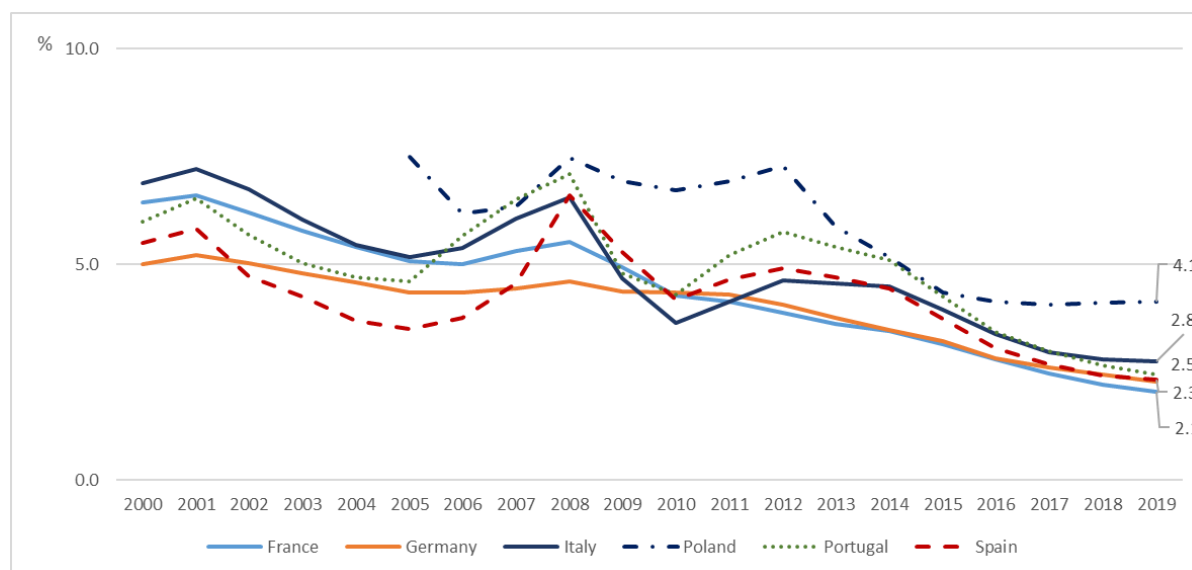
Annex II – Participating countries and sector/size criteria 9

Annex III – Number of companies included by country and activity sector 10

Between 2017 and 2019 financing costs decreased in most of the European countries

Between 2017¹ and 2019, the median of financing costs has continued to decrease in the majority of the countries (Figure 1). France and Portugal show the most significant reductions in this period. On its hand, Poland presented a slightly increase in corporations' financing costs.

Figure 1 – Financing costs' median between 2000 and 2019 (micro companies excluded)



In most of the countries, almost 50% of firms have financing costs below 2.5% in 2019

Through the analysis of the distribution of companies by financing cost classes, it is possible to draw the following conclusions (Figure 2):

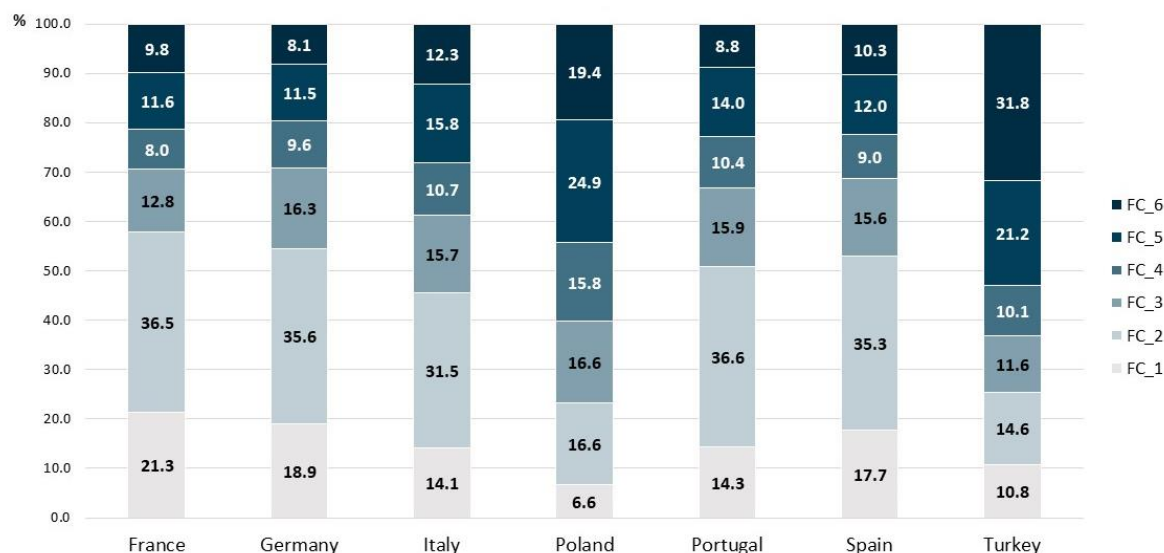
- In France, Germany, Spain and Portugal, more than 50% of the corporations had financing costs below 2.5% in 2019;
- In all the presented countries, except Poland and Turkey², more than 30% of the corporations had financing costs between 1% and 2.5%;

¹ See News release “The financing costs of nonfinancial corporations in European countries”, available on [ECCBSO website](#).

² Turkish data refers to the first nine months of 2021.

- All the countries had more than 8% of the corporations with financing costs above 7.5% and in Poland almost 20% of the corporations had financing costs overhead 7.5%; this percentage is higher in Turkey (32%).

Figure 2 – Percentage of corporations, by class of financing costs, in 2019* (micro companies excluded)



* Turkish data refers to the first nine months of 2021.

FC Classes	Abbreviation	Thresholds
Class 6	FC_6	FC ≥ 7.5%
Class 5	FC_5	4.5% ≤ FC < 7.5%
Class 4	FC_4	3.5% ≤ FC < 4.5%
Class 3	FC_3	2.5% ≤ FC < 3.5%
Class 2	FC_2	1% ≤ FC < 2.5%
Class 1	FC_1	FC < 1%

When these results are compared with the 2017's, it is observed a shift of corporations into the lower classes in all the countries, with the exception of Poland.

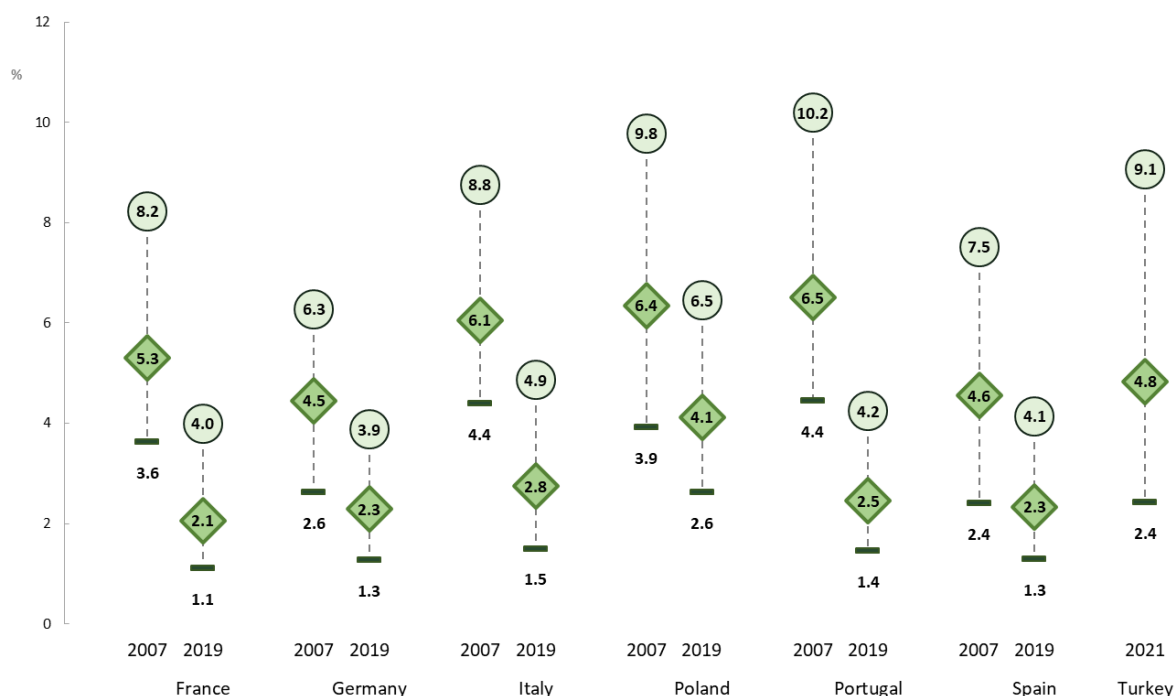
Comparing pre-crisis periods, in general the financial pressure was lower in 2019

In 2020 the world faced a pandemic crisis that is not yet completely overpassed. Despite the fact this crisis is very different from the international economic and financial crisis faced in 2008 and in the

following years, this analysis gives very useful insight in understanding the financial strength of the companies and therefore their resilience, in comparison with the 2008 crisis³.

Financing costs are a good indicator of the financial pressure that corporations face. Actually, almost all countries' corporations seem to face lower financial pressure these days (Figure 3). For the majority of the countries, in 2019, the third quartile of financing cost was lower than the median in 2007. These data show that, overall, in 2019 companies were financially much stronger than in 2007, and therefore much more equipped to face crisis.

Figure 3 – Quartiles of the financing cost distribution, by country: values for 2007 and 2019* (micro companies excluded)



* Turkish data refers to the first nine months of 2021.

Legend

- P(75): Third quartile --> 25% of the companies face financing costs equal to or greater than the third quartile
- P(50): Second quartile (or median) --> Half of the companies borne FC higher than the median value; the other half borne FC lower than the median value
- P(25): First quartile --> 25% of the companies face financing costs that equal to or less than the first quartile

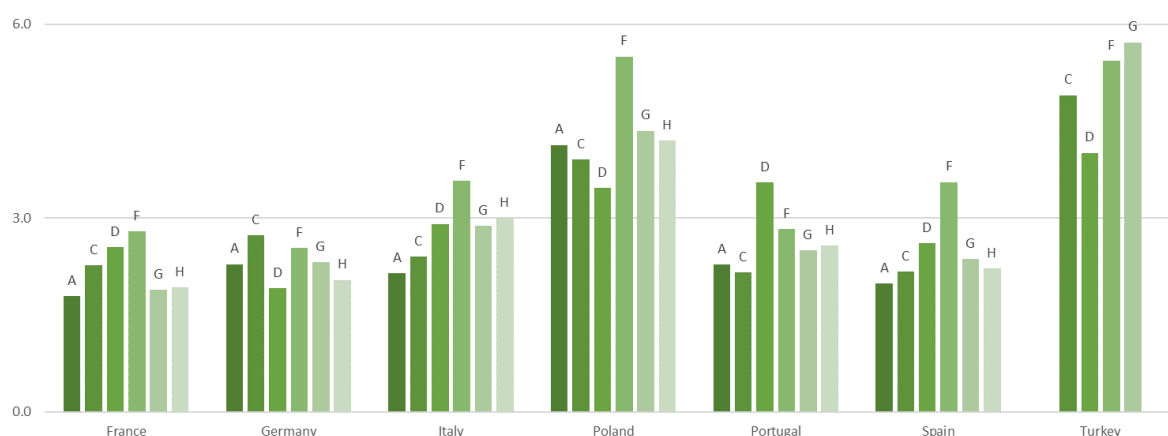
(These interpretations assume a prior sort of the individual company's values for the FC indicator, in ascending order)

³ See Outlook 9, from BACH-WG “European non-financial corporations: a comparison for pre-crisis periods”, available on [ECCBSO website](https://www.eccbs.org).

Activity sectors' financing costs depend on the countries

As previously presented in the last edition of this news release⁴, the ranking of the financing costs' median by activity sector differs from country to country and there is not a clear sectorial pattern (Figure 4). For example, France, Italy and Spain present similar patterns with the highest financing costs for the construction and energy sectors and the lowest for agriculture. At the same time, the energy sector has the lowest financing costs in Germany, Poland and Turkey, while trade and construction face almost the highest. So, there is not a particular sector that stands out for permanently displaying the lowest or highest median, independently of the country.

Figure 4 – Financing costs' median in 2019, by country and activity sector (micro companies excluded)



* Turkish data refers to the first nine months of 2021.

Legend	
A	Agriculture, Mining, etc.
C	Manufacturing
D	Energy and Water
F	Construction
G	Trade
H	Services

The percentage of resilient firms was higher in 2019⁵

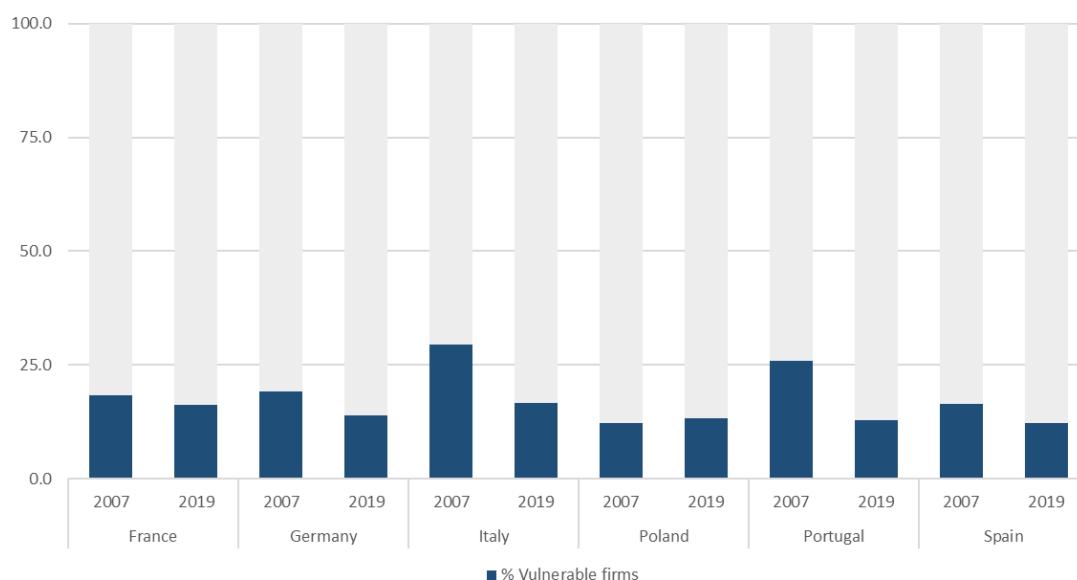
Comparing the percentage of corporations with interest coverage ratio (ICR) below two, for both pre-crisis periods, the same conclusion previously presented is gathered: a lower percentage of firms was under financial pressure in 2019 (Figure 5).

⁴ See News release “The financing costs of nonfinancial corporations in European countries”, available on [ECCBSO website](#).

⁵ Interest coverage ratio is not available for Turkey.

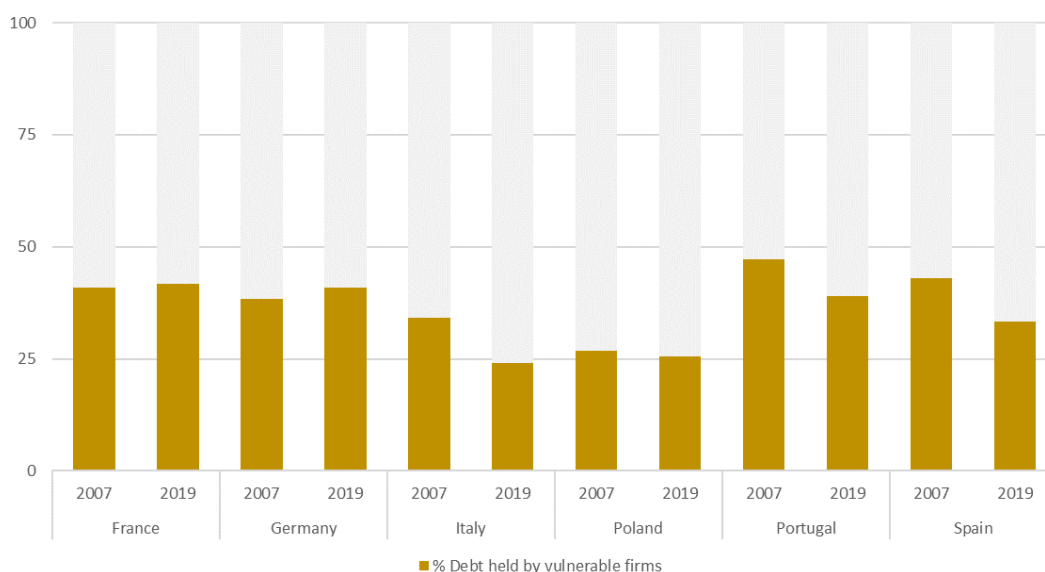
In 2019, almost all the presented countries showed less than 15% of corporations with EBITDA (earnings before interest, taxes, depreciations and amortizations) below two times the financial expenses. Actually, the percentage of resilient corporations increased for almost all the countries (except Poland).

Figure 5 – Percentage of vulnerable firms (ICR<2) in 2007 and 2019 (micro companies excluded)



The percentage of debt of the most vulnerable firms (firms with ICR < 2) also decreased for the majority of countries. Only Germany presented a slight increase when comparing 2007 and 2019 figures (Figure 6).

Figure 6 – Percentage of debt held by vulnerable firms (ICR < 2) in 2007 and 2019 (micro companies excluded)



Annexes

Annex I: Methodology

Financial Cost indicator

The financing cost ratio (FC) was compiled using BACH database items. Table 1 presented below provides a more detailed insight on the data used.

Table 1 – Composition of the Financing Cost indicator

Financing Cost indicator (FC)	
Numerator	I_{10}
Denominator	$L_1 + L_2 + L_{31}$
FC	$\frac{I_{10}}{L_1 + L_2 + L_{31}} \times 100$

Legend:

- I₁₀**: Interests on financial debts
- L₁**: Bonds and similar obligations
- L₂**: Amounts Owned to Credit Institutions
- L₃₁**: Other financial creditors

Data selection

Some exclusion criteria were applied to the database to avoid statistical noise and outliers that could bias the results. More precisely, there were three groups of data excluded from the database:

- a) Outlier observations, classified as observations that satisfy any of the following conditions:

$$P25(FC) - 6 \times IQR$$

$$P75(FC) + 6 \times IQR$$

FC: Financing Cost indicator

P25: 25th percentile (or first quartile)

P75: 75th percentile (or third quartile)

IQR: Interquartile range (which is equal to P75-P25)

- b) Companies with outstanding debt, but without financial expenses;

c) Companies without debt, but with financial expenses.

For reasons of confidentiality, the results for samples with less than 30 companies are not disclosed, as they were replaced by missing.

Interest coverage ratio

The interest coverage ratio (ICR) was compiled with the formula presented in Table 2 (based on BACH database items).

Table 2 – Composition of Interest coverage ratio

Interest coverage ratio (ICR)	
Numerator	$EBITDA = I_1 + I_2 + I_3 + I_{41} - I_{42} - I_5 - I_6 - I_7 - I_{81} - I_{83}$
Denominator	I_{10}
ICR	$\frac{EBITDA}{I_{10}} \times 100$

Legend:

I₁: Net turnover

I₂: Variation in stocks of finished goods and work in progress

I₃: Capitalised production

I₄₁: Operating subsidies and supplementary operating income

I₄₂: Financial income

I₅: Cost of goods sold, materials and consumables

I₆: External supplies and services

I₇: Staff costs

I₈₁: Operating taxes and other operating charges

I₈₃: Financial expenses other than interests on financial debt

I₁₀: Interests on financial debts

Annex II – Participating countries and sector/size criteria

Participating countries:

Participating countries	
France	FR
Germany	DE
Italy	IT
Poland	PL
Portugal	PT
Spain	ES
Turkey	TR

Sector	Code	NACE Rev. 2
Agriculture, Mining, etc.	A	A, B
Manufacturing	C	C
Energy and Water	D	D, E
Construction	F	F*
Trade	G	G
Services	H	H, I, J, L, M**, N, P, Q, R, S
Total	To	(All NACE codes, except F43.1, M70.1, K, T and U)

* except F43.1 - "Demolition and site preparation"

** except M70.1 - "Head Offices"

Sizes	Code	Sales Thresholds*, in €M (millions of euros)
Micro	SZ1	Sales ≤ €2M
Small	SZ2	€2M < Sales ≤ €10M
Medium	SZ3	€10M < Sales ≤ €50M
Large	SZ4	Sales > €50M
Total without Micro	SZ0	Sales > €2M

* 2015 base year, deflated by HICP (Harmonized Index of Consumer Prices) in each year

Annex III – Number of companies included by country and activity sector**Financial Cost indicator, total without micro in 2019**

	Total	Agriculture, Mining, etc.	Manufacturing	Energy and Water	Construction	Trade	Services
France	92 037	1 465	17 383	1 866	10 746	33 963	26 614
Germany	31 188	334	8 454	1 713	2 902	7 859	9 926
Italy	72 380	1 299	26 442	2 248	5 696	21 822	14 873
Poland	13 887	298	4 706	851	1 051	3 747	3 234
Portugal	15 203	383	3 809	358	1 162	5 730	3 761
Spain	32 498	938	7 658	526	2 598	12 681	8 097
Turkey*	1 253	-	451	202	172	124	304**

* Turkish data refers to the first nine months of 2021. As noted in the previous publication, for Turkey, financing expenses in financial statements of firms cover broader definition than interest on financial debts; interest and other financing expenses. Therefore, a new database, which covers the Turkish non-financial corporations with an outstanding foreign denominated credit amount higher than 15 million US, allowed the calculation of corresponding financing costs. This database includes a separate account of interest expenses on financial debts.

**For Turkey, services aggregate include mining and holding companies.

Interest coverage ratio, total without micro in 2019

	Total	Agriculture, Mining, etc.	Manufacturing	Energy and Water	Construction	Trade	Services
France	87 969	1 381	16 539	1 724	10 338	32 669	25 318
Germany	29 178	319	7 955	1 609	2 791	7 275	9 229
Italy	72 200	1 243	26 326	2 227	5 632	21 765	15 007
Poland	13 006	277	4 444	797	989	3 516	2 983
Portugal	14 028	351	3 530	332	1 073	5 301	3 441
Spain	29 771	869	7 086	480	2 398	11 589	7 349