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News release:

FINANCING COSTS OF NON-FINANCIAL CORPORATIONS IN EUROPEAN COUNTRIES

A Statistical Analysis based on Accounting Data

FSA (Financial Statement Analysis) WG

European Committee of Central Balance Sheet Data Offices (ECCBSO)

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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

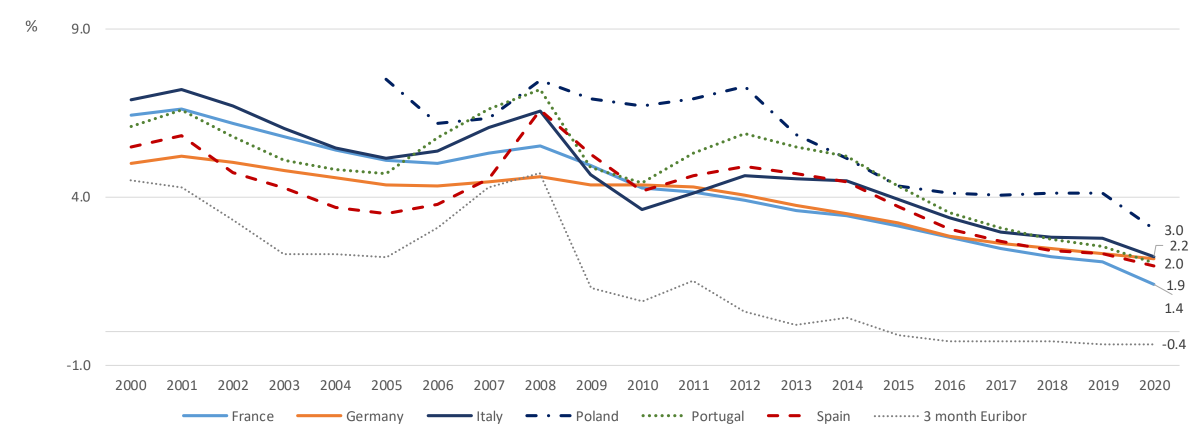
In this release, we analyze the financing costs of non-financial corporations. The main indicator of financing costs is computed on the basis of accounting data. This indicator -based on BACH [1] methodology described in Annex I- is calculated by country, as well as by sector of activity and size of companies. The present release is an update of previous issues. It covers a time span ranging from 2000 to 2020, which is the most recent year with available data. Details about the participating countries, as well as about the sectors and size criteria can be found in Annex II. The number of companies in each country by sector is reported in Annex III.

Financing costs reached a historical low level in 2020 in all countries

The median of financing costs decreased in all countries over the last 20 years. In particular, since 2012 financing costs decreased almost monotonically in each country, reaching a historical low level in 2020 (Figure 1). France and Portugal had the most significant reductions over this period.

Comparing the level of financing costs in 2020 across European countries, the lowest are in France and the highest in Poland.

Figure 1 – Financing costs' median between 2000 and 2020.



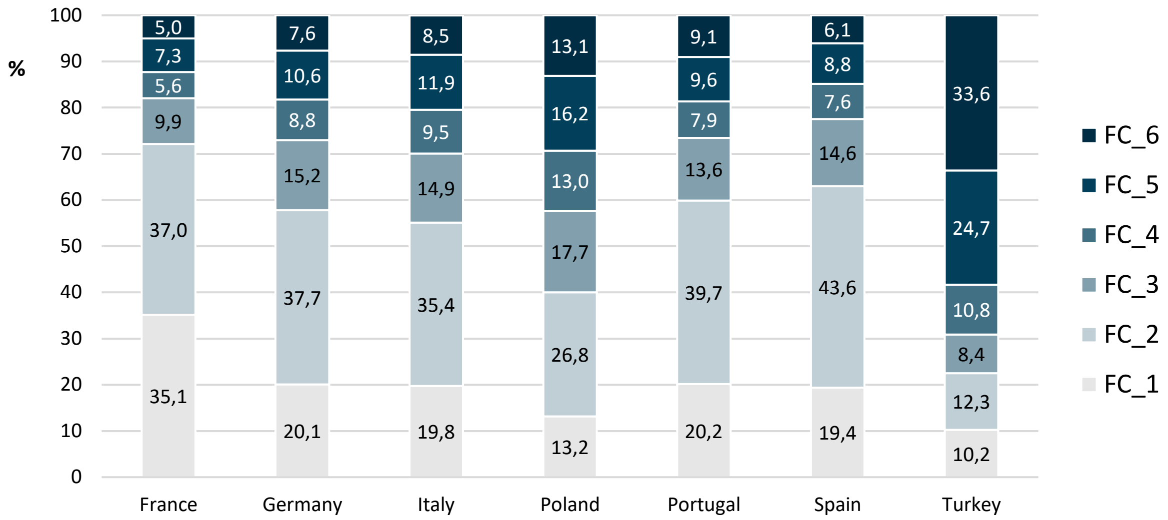
Note: Micro companies excluded.

[1] The Bank for the Accounts of Companies Harmonized (BACH) database contains aggregated and relatively harmonized annual accounting data of non-financial enterprises.

In most countries, the majority of firms has financing costs below 2.5% in 2020

In order to assess the heterogeneous levels of financing costs faced by firms within countries, it is useful to distinguish several financing cost classes. The first class refers to firms facing financing costs below 1%, while, at the other extreme, the sixth class above 7.5 %.

Figure 2 – Percentage of corporations, by class of financing costs, in 2020*.



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%

*Note: Micro companies excluded. * Turkish data refers to 2021.*

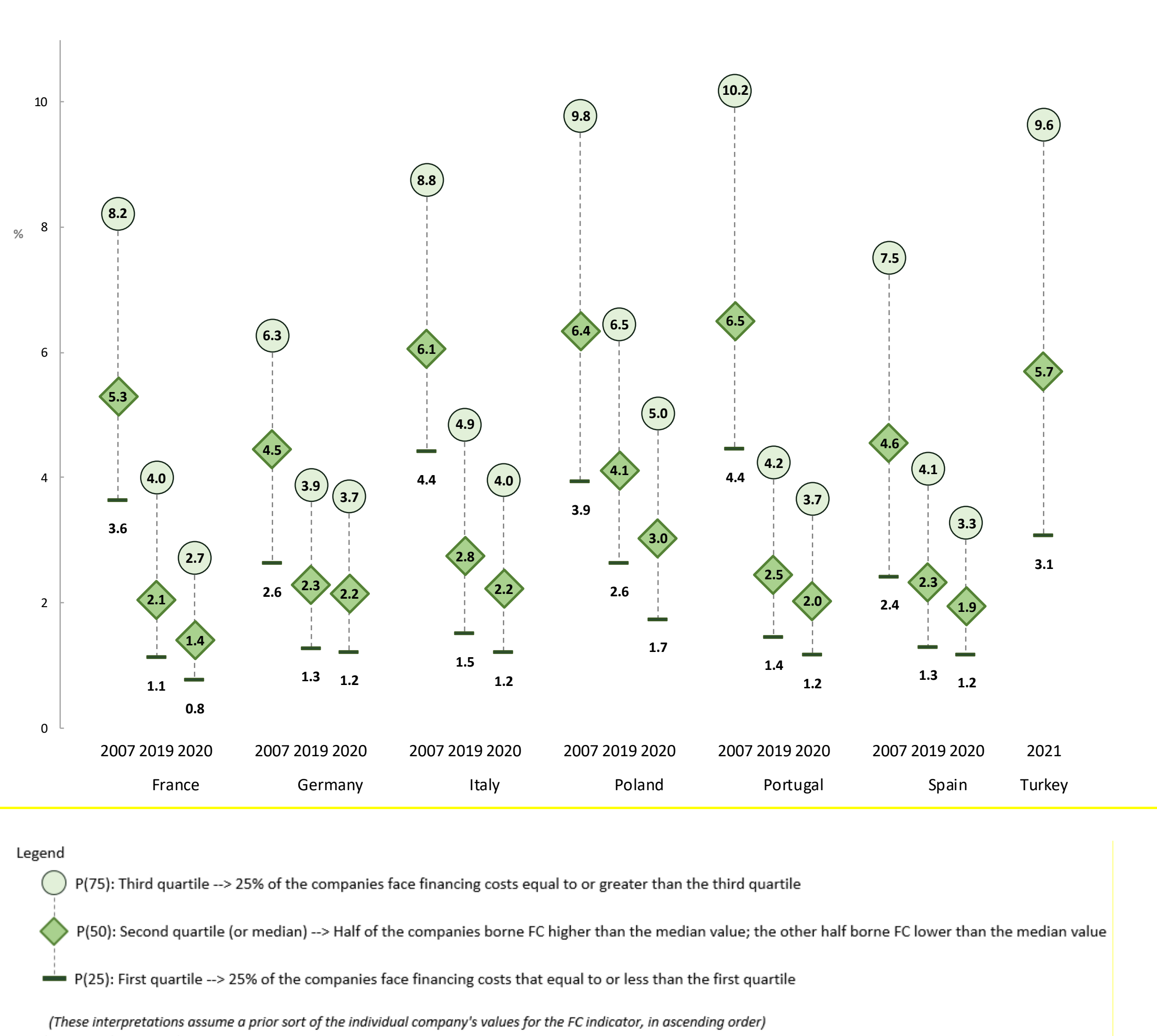
It is then possible to compare across countries the percentages of corporations by class of financing costs in 2020 (Figure 2) and to draw the following conclusions:

- In France, Germany, and Portugal, more than 20% of corporations have financing costs below 1% in 2020. The percentage of firms with financing costs below 1% is also very close to 20% in Italy and Spain;
- The large majority of firms has financing costs below 2.5% in most countries, except Poland and Turkey;
- In all countries, a non-negligible percentage of corporations faces financing costs above 7.5%: from 5% of firms in France to 34% in Turkey.

The financial pressure faced by firms is even lower in 2020 than in 2019

Financing costs are a good indicator of the financial pressure that corporations face. It is therefore useful to investigate not only the evolution of the median financing costs over time (Figure 1), but also that of all the quartiles of the distribution (Figure 3). Indeed, this analysis provides insights about the financial strength of companies and, therefore, also their possible resilience during a crisis.

Figure 3 – Quartiles of the financing cost distribution, by country, in 2007, 2019, and 2020*.



*Note: Micro companies excluded. * Turkish data refers to 2021.*

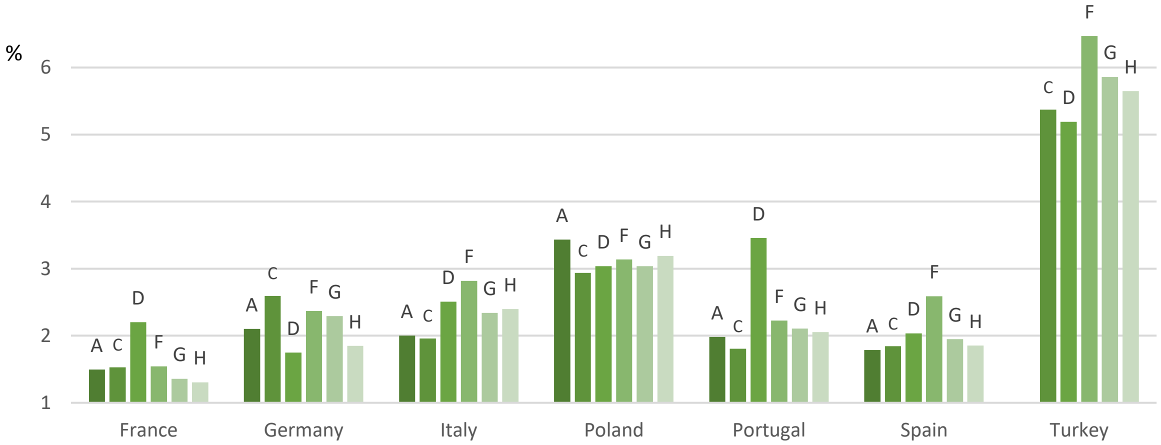
In all countries, the financing costs faced, not only by the second, but also by the first quartile of the distribution was significantly lower in 2019 (i.e., before the crisis of Covid-19 pandemic) than in 2007 (before the international economic and financial crisis). Moreover, it has further slightly decreased in

2020. Even more important in terms of resilience to a crisis, the financing costs faced by firms in the highest quartile of the distribution plunged between 2007 and 2019 (in most countries below the median value in 2007), and decrease even further in all countries in 2020.

Sectoral financing costs are heterogeneous across countries

The ranking of activity sectors in terms of their median financing cost is heterogeneous across countries (Figure 4). For example, in France and Portugal firms in the energy sector face significantly higher financing costs compared with other sectors within the same country, while the opposite is true in Germany. In the latter country, firms in the manufacturing sector face instead the highest financing costs, while in most countries this sector has relatively low financing costs. The same is true for the agricultural sector in Poland. Construction firms face higher financing costs than the other sectors in Italy, Spain, and Turkey. In conclusion, no sector stands out consistently across countries as characterized by the lowest or highest median financing costs.

Figure 4 – Median of financing costs, by country and activity sector in 2020*.



*Note: Micro companies excluded. * Turkish data for available sectors refers to 2021.*

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

In some countries the relative ranking of sectors, as far as their financing costs are concerned, has evolved over time. In Poland, for instance, the median financing cost in the agricultural sector, which in 2020 is higher than in any other sector in the country, was the lowest in previous years. In France, the median financing cost in the energy sector has been high since several years, but the financing costs in the construction sector used to be higher (and the highest) and in the agriculture sector lower than in trade and services (and the lowest). Financing costs in the construction are also persistently high in Portugal and Poland, as well as the highest in Spain, Italy, and Turkey. Indeed, the construction sector is very pro-cyclical, as a consequence of its reliance on external financing, and lenders typically demand a debt financing premium for the higher perceived risk.

The proportion of vulnerable firms has not significantly increased in 2020

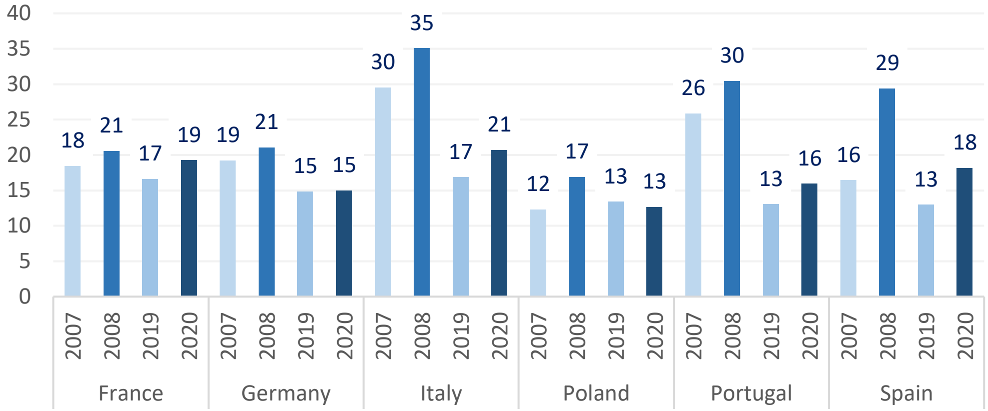
In 2020, the percentage of companies with an ICR (interest coverage ratio) below 2 remains stable in Germany and Poland compared to 2019, despite the economic consequences of the Covid-19 crisis (Figure 5).

On the contrary, the proportion of vulnerable companies has increased slightly in France, Portugal, Italy and, more significantly, in Spain (5 percentage points). In all these countries, the impact of the Covid-19 crisis on the proportion of vulnerable firms appears, however, to be weaker than that of the 2008 financial crisis. This is also the case for Germany and Poland, where this percentage had increased in 2008, while it remained stable between 2019 and 2020.

Thus, even if the financial and the Covid-19 crises are of a very different nature in their origins and their implications, it seems that the measures taken by the governments to limit the economic consequences of 2020 crisis on non-financial firms have played their role as a buffer against the resulting drop in activity.

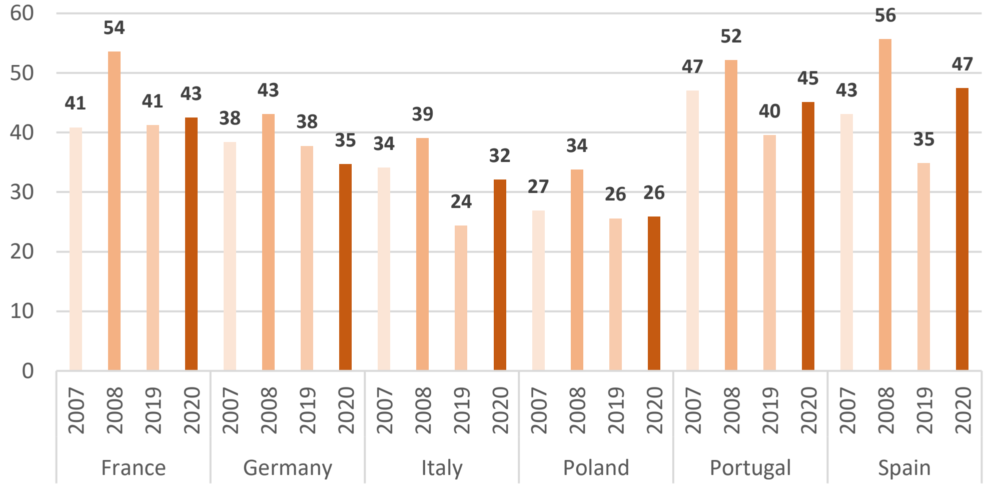
In most countries, also the percentage of debt held by vulnerable firms slightly increases between 2019 and 2020 (Figure 6). The exceptions are: Germany, where the percentage of vulnerable debts decreases (by 3 percentage points), and Spain, where this percentage increases sharply in 2020 (by 12 percentage points).

Figure 5 – Percentage of vulnerable firms (ICR<2) in 2007, 2008, 2019 and 2020.



Note: Micro companies excluded.

Figure 6 – Percentage of debt held by vulnerable firms (ICR < 2) in 2007, 2008, 2019 and 2020.



Note: Micro companies excluded.

Annexes

Annex I: Methodology

Financial Cost indicator

The financing cost ratio (FC) was computed according to the definition in the BACH database. Table 1 provides more detail on the calculation.

Table 1 – Composition of the Financing Cost indicator

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

Legend:

I_{10}*: Interests on financial debts*

L_1*: Bonds and similar obligations*

L_2*: Amounts Owned to Credit Institutions*

L_{31}*: 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:

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

$$FC < P25 - 6 \times IQR$$

$$FC > P75 + 6 \times IQR$$

where FC is the financing cost indicator, P25 is the 25th percentile (or first quartile) of FC, P75 is the 75th percentile (or third quartile), and IQR is the 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.

Interest coverage ratio

The interest coverage ratio (ICR) is calculated according to the formula presented in Table 2 (based on BACH database items definitions).

Table 2 – Composition of Interest coverage ratio

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

Legend:

I_1: *Net turnover*

I_2: *Variation in stocks of finished goods and work in progress*

I_3: *Capitalised production*

I_{41}: *Operating subsidies and supplementary operating income*

I_5: *Cost of goods sold, materials and consumables*

I_6: *External supplies and services*

I_7: *Staff costs*

I_{81}: *Operating taxes and other operating charges*

I_{10}: *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 2020

	Total	Agriculture, Mining, etc.	Manufacturing	Energy and Water	Construction	Trade	Services
France	104 367	1 837	18 467	2 277	11 596	40 769	29 421
Germany	33 758	343	8 980	1 820	3 319	8 650	10 646
Italy	67 822	1 299	25 135	2 206	5 568	20 801	12 813
Poland	13 620	302	4 671	848	1 090	3 726	2 983
Portugal	14 557	402	3 624	355	1 272	5 733	3 171
Spain	30 579	945	7 410	531	2 777	11 893	7 023
Turkey*	*1 289*	-	*482*	*221*	*184*	*131*	*253*

** Turkish data refers to 2021. Total includes mining. 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.*

Interest coverage ratio, total without micro in 2020

	Total	Agriculture, Mining, etc.	Manufacturing	Energy and Water	Construction	Trade	Services
France	99 530	1 739	17 525	2 076	11 135	39 249	27 806
Germany	31 652	322	8 436	1 713	3 180	8 140	9 861
Italy	67 684	1 257	24 931	2 198	5 564	20 863	12 871
Poland	12 673	282	4 347	804	1 020	3 477	2 743
Portugal	13 417	376	3 340	327	1 162	5 311	2 901
Spain	28 250	889	6 890	491	2 566	10 963	6 451