

European non-financial listed groups: Analysis of 2023 data

ERICA (European Records of IFRS Consolidated Accounts) WG
European Committee of Central Balance Sheet Data Offices (ECCBSO)

February 2025



ERICA Working Group
eccbso
European Committee of Central
Balance Sheet Data Offices

EUROPEAN NON-FINANCIAL LISTED GROUPS: ANALYSIS OF 2023 DATA

Members of the ERICA (European Records of IFRS Consolidated Accounts) WG

Alfredo Maldonado (Chair)

Banco de España

Riccardo Renzi

Banca d'Italia

Javier González

Banco de España

Alexandre Neves (Vice-Chair)

Banco de Portugal

Dimitrios Charopoulos

Bank of Greece

Stamatios Molaris

Bank of Greece

Margarita Skiada

Bank of Greece

Despoina Tavlatou

Bank of Greece

Anne-Charlotte Lefebvre

Banque de France

Elliott Stubbs

Banque de France

Karen De Vlaminck

Banque Nationale de Belgique

Vincenzo Favale

Centrale dei Bilanci / Cerved Group

Carola Parodi

Centrale dei Bilanci / Cerved Group

Florian Gerlach

Deutsche Bundesbank

Michael Scholz

Deutsche Bundesbank

Lena Leontyeva

Deutsche Bundesbank

Birgit Bernhard

Oesterreichische Nationalbank

Sabine Wukovits

Oesterreichische Nationalbank

Ioannis Gkrintzalis

European Central Bank

IMPORTANT INFORMATION ABOUT THE SOURCE USED (ERICA¹ DATABASE) AND ABOUT THE FIGURES BY COUNTRY

The data used in this study are obtained from publicly available financial statements of listed European non-financial groups, having been treated manually by CBSO statisticians and accounting specialists to fit a standard European format (ERICA format). This manual treatment involves, in some cases, interpretation of the original data, a constraint that readers of this document should bear in mind.

The database does not represent the total population of European non-financial groups. Nevertheless, the coverage of listed European groups attained with ERICA² (in the whole dataset of approximately 1,000 groups) is well-attuned to the situation and national composition of the stock markets. The analysis performed in this document, with the proviso expressed in the previous paragraph, provides a view of the position and performance of the listed non-financial European groups. However, it also includes some comments on the performance of listed European groups depending on the country where the parent company is based. As the largest ERICA groups are multinationals, it should be borne in mind that the performance of the groups from any given country does not necessarily reflect the performance of the country itself.

The opinions of the authors of this document do not necessarily reflect those of the national central banks to which they belong or those of the ECCBSO.

All the charts and tables presented in the document are from the same source (ECCBSO-ERICA database).

¹ ERICA (European Records of IFRS Consolidated Accounts) is a database of the European Committee of Central Balance Sheet Data Offices (ECCBSO).

² Austria, Belgium, France, Germany, Greece, Italy, Portugal and Spain contributed to the dataset for 2023.

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I. EUROPEAN NON-FINANCIAL LISTED GROUPS: INTRODUCTION AND MAIN FINDINGS FROM 2023 DATA

The ERICA Working Group (WG) is a group of experts from European central banks. Under the aegis of the European Committee of Central Balance Sheet Data Offices (ECCBSO), this WG focuses on the impact of the International Financial Reporting Standards (IFRS) on the accountancy of non-financial corporations and groups, and their effects on European central balance sheet data offices' databases and questionnaires. The ERICA WG was established in 2008 to assess the potential opportunities and risks associated with the adoption of IFRS by European companies and groups. The group has since developed IFRS-compliant standard formats (using the IFRS Taxonomy defined by the IASB-XBRL Team) and created the ERICA (European Records of IFRS Consolidated Accounts) database.

The ERICA database is a repository of annual IFRS consolidated financial statements for non-financial corporations listed on European stock exchanges. The data is collected from publicly available financial statements, and it is manually treated by CBSO statistics and accounting specialists to fit a standard European format (ERICA format). The data is then used by central banks to monitor the financial health of non-financial corporations and groups in Europe.³

This document presents the results of the analysis carried out by members of the ECCBSO's ERICA WG of the information available in the ERICA 2023 database (listed non-financial groups,⁴ with a total of approximately €8,800 billion in assets and €5,200 billion in revenue), and the most relevant facts for 2023 regarding the profitability and financial structure of European non-financial listed groups, as well as the financial debt structure and cost of debt.

This report uses three different samples:⁵

- A *static* sample: This sample includes all groups for which data are collected in ERICA for 2023. The static sample consists of 818 groups;
- A *sliding* sample: This sample is obtained by selecting all groups for which data are collected in ERICA for both 2022 and 2023. The sliding sample encompasses 730 groups. Groups that underwent a change in sector or size are excluded from the sliding sample;
- A *fixed* sample: This sample only takes into account those groups for which data are collected in ERICA for each year over the 2019-2023 period. The fixed sample captures 626 groups.

Each sample is compiled by country and by sector, depending on the type of analysis. In samples by country, all country doubles (i.e. subsidiary groups of a higher-level group allocated to the same country) have been removed. In samples by sector, all sector doubles (i.e. subsidiary groups of a higher-level group allocated to the same sector) have been removed. Moreover, the static and sliding samples, which are made up of size classes, are adjusted by eliminating global doubles (i.e. subsidiary groups of a higher-level group that is also included in the sample).⁶ For all the findings stemming from the total data, the same conditions (i.e. elimination of global doubles) apply. Therefore, the total data generally differ – in aggregates or numbers – from the sum of their components (i.e. countries, sectors or sizes).

³ The ERICA WG's work has been influential in shaping the implementation of IFRS in Europe. The group's recommendations have been taken into account by European regulators and standard setters, and the ERICA database is used by central banks across the continent.

⁴ The final version of the 2023 ERICA database comprises a higher number of listed non-financial groups. However, at the start of the analysis process in October 2024, 2023 data collection had been completed for 818 groups.

⁵ Figures refer to the global samples.

⁶ All country doubles and sector doubles are by definition global doubles.

Considering the major impact of some large groups, weighted average figures by country or sector are often biased. For that reason, the analysis in this document mainly focuses on the median values of ratios. These median values represent more accurately the behaviour of the majority of the population, unaffected by the weight of the largest groups. Nevertheless, in-depth analysis reveals that median figures may also be strongly influenced by a single group or just a few groups. In these cases, it is not the largest, but the median groups that determine changes in the median ratios.

The main findings of the study using 2023 data are:

1 Macroeconomic conditions led to a further slowdown in growth.

2023 saw a slowed growth in a context of continuing disruptions in energy and commodity markets due to Russia's invasion of Ukraine, the cost-of-living crisis, and the tightening of global monetary conditions to combat high inflation. In the total sample (by sector), aggregate revenues declined by around -7%, mainly as a result of weaker market prices in the energy sector. The median figures for EBIT increased by around 10%, but the median profit before tax dropped by -12%, revealing the sharp impact of rising interest rates. Profitability, measured by the EBIT margin (EBIT / revenue), decreased by -0.6 percentage points (pp) to 7.3%.

All sectors, except the energy sector, posted declines in profitability between -0.3 pp and -1.4 pp, the greatest decline being in the construction sector. Groups in the energy sector, however, saw a remarkable increase in profitability (+4.1 pp) as the lower average market prices for power and energy commodities led to falling revenues and lower operating costs. The industry sector generally faced impaired competitiveness and weak production. Additionally, high inflation (caused by an increase in cost production factors, such as labour costs) and rising interest rates weighed down profits. In particular, groups in the chemical and other manufacturing sub-sectors, encompassing consumer goods, reported substantial reductions in profits, while the automotive industry experienced a catch-up effect. In the services sector, travel-related groups showed further improvements due to the continued recovery in demand for air travel, while other sub-sectors stagnated or decreased. Notably, real estate groups recorded a sharp fall in profitability, which was related to negative changes in the fair value of investment property. The profitability of the construction groups was greatly impacted by the rise in interest rates and the persistently high construction costs.

Analysed by size, the negative impact of the challenging macroeconomic environment was much stronger for small groups, resulting in a sharp cutback in profitability (-1.7 pp). Total median EBIT growth was mainly supported by the medium-sized groups, while aggregate profit growth was underpinned by the large groups.

The other measures of profitability (EBITDA-to-assets ratio and return-on-equity ratio) behaved similarly overall, but varied in some sectors and by group size depending on changes in the related equity and total assets.

2 The median equity ratio decreased slightly, while net indebtedness remained constant.

The financial position of the groups in the sample showed nuanced changes in equity and indebtedness ratios across different sectors and size classes. Overall, total equity grew slightly (by 1.5%), primarily driven by an increase in retained earnings and attenuated by negative effects from foreign currency translation. While energy groups recorded a robust 7.4% increase in equity, services groups took a hit of -1.3%. Size-wise, large groups' equity rose at a rate of 1.8%, whereas medium-sized and small groups faced declines of 1.0% and 6.0%, respectively, as weak earnings hampered their ability to strengthen the equity base.

The median equity ratio decreased slightly by 0.4 pp to 38.8%, largely due to a 9.4% increase in median total assets, which overshadowed equity growth. Industrial groups maintained the highest median equity ratio at 42.1%, despite a marginal decrease, while the energy and construction sectors showed improvements due to reduced cost pressures and lower total assets, respectively.

Overall, net indebtedness remained stable at 19.3% in 2023 and the distribution of its individual components remained basically unchanged. The ratio for the construction sector declined by 4.0 pp alongside higher total assets. At country level, Spanish groups posted a 2.5 pp drop in the net indebtedness ratio, consistent with an over-representation of the construction sector in Spain. The downward trend for Portuguese and Greek groups reversed in 2023. Small groups notably reduced their median net indebtedness ratio by 1.6 pp, primarily due to lower non-current financial liabilities. The analysis by branch of activity shows a rising ratio for 10 branches and a falling ratio for four.

3 Rising interest rates reshaped debt costs

In 2023, the cost of debt for European non-financial listed groups skyrocketed, driven by a significant rise in Euribor rates across all time frames. This surge led to a complete reshaping of rankings by country, sector and group size.

Despite the overall surge, the real estate and food products sectors held steady with the lowest debt costs by sector, as did French and German groups by country. Greek groups and medium-sized groups experienced a notable increase, positioning them as the country and the size class with the highest median cost of debt. By sector, construction kept the first position. Italian groups and wholesale sector groups climbed significantly in the cost of debt rankings while the energy sector groups moved from the fourth highest median cost of debt by sector to the fifth lowest.

While debt costs surged, the overall structure of corporate financial debt remained stable in 2023. A significant 94% of companies relied on loans from financial institutions, a trend that held across most countries and sectors, except for Belgium (77%). Leasing usage averaged 91%, but was less common among French firms (76%) and the real estate sector (68%). Bond issuance became more common among larger corporations and energy sector groups.

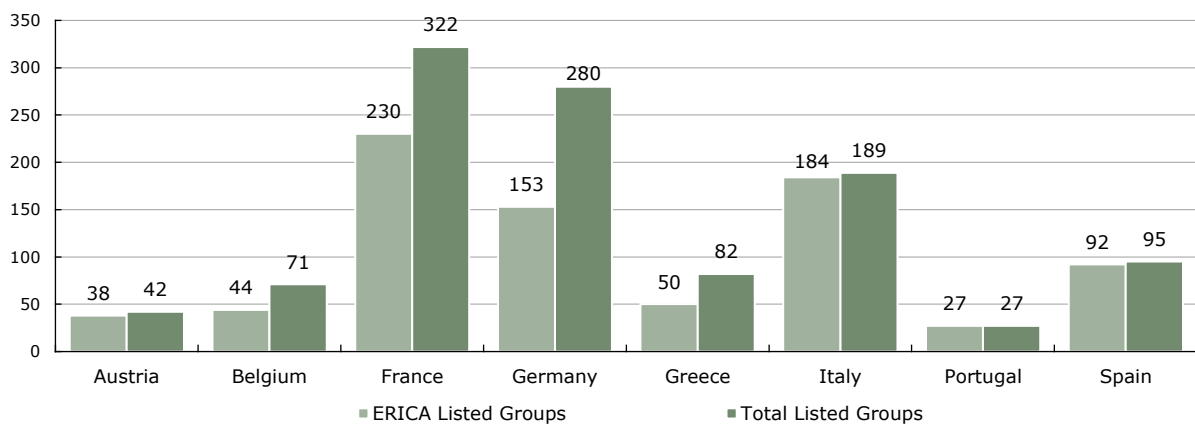
Larger companies preferred bonds over loans to satisfy their funding needs. Belgian firms were particularly notable, as 78% of their debt was in the form of bonds, while Greece relied more on financial institutions (51%). Sectoral preferences varied, with 83% of total financial debt in food products groups coming from bonds, while the transportation and storage sectors relied more on loans (53%).

II. ERICA DATABASE: COVERAGE AND MAIN FIGURES

The 2023 ERICA database comprises 818⁷ groups. 2023 continued with the “higher than expected” inflation rate that led to maintaining a restrictive monetary policy, continuing the trend initiated in 2022. This implied a series of spiking interest rates that ultimately tightened financial conditions for real economy agents and led to a slowdown in the European economy’s growth. Consequently, inflation in the euro area seemed to be wrangled, paving the path for lowering interest rates in the latter part of 2023.

As Chart 1 shows, in absolute terms, the ERICA database covers a number of ERICA listed groups studied for 2023, ranging from 27 real cases in Portugal to 230 in France.

CHART 1 LISTED GROUPS BY COUNTRY IN 2023 (absolute number)



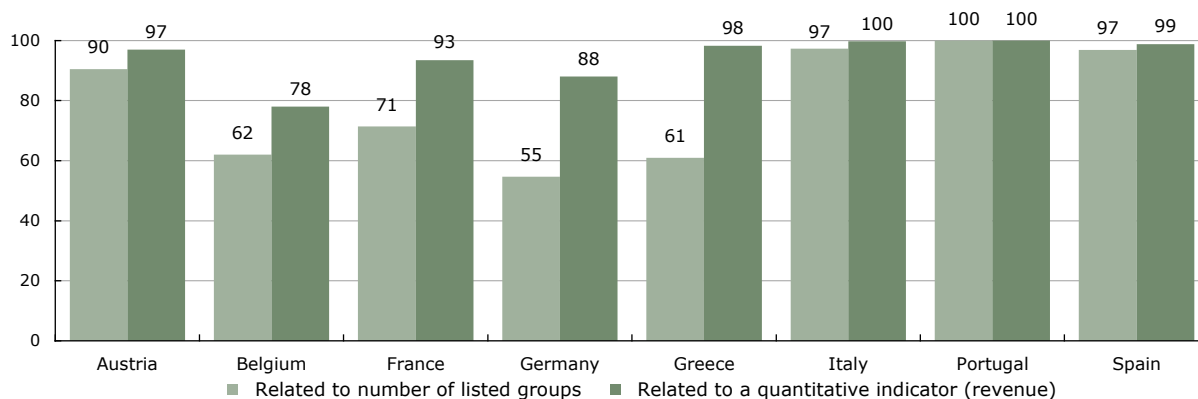
Source: ERICA 2023 and national databases.

The ERICA database’s coverage in terms of a quantitative indicator (revenue) in Chart 2 shows that it is highly representative of the total population of listed European non-financial groups: coverage is high for almost all countries, varying from 78% in Belgium to 100% in Italy and Portugal.

In relative terms, by number of listed groups, when the ERICA database is compared with the total population of listed groups, the coverage rate varies from 55% in Germany to 100% in Portugal.

⁷ Double country identification leads to a reduction in the coverage related to the total number of ERICA listed groups by country, particularly in Italy (5), Germany (2), Belgium (2), Portugal (2) and Spain (3).

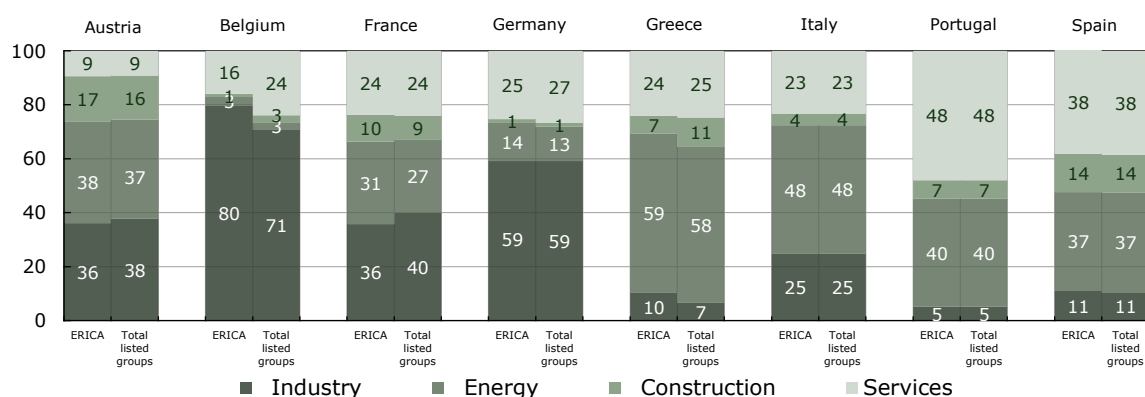
CHART 2 DATABASE COVERAGE IN 2023 (in %)



Source: ERICA 2023 and national databases.

Regarding the sectoral breakdown in Chart 3, listed European groups differ greatly from country to country. Both the sample and the population are mostly aligned in every country. Industry is especially important in Belgium and Germany while energy, which is important in almost all the country members, has a high weight mainly in Greece and Italy. The construction sector has the largest share in Austria and Spain. Lastly, the services sector is important in almost all countries, but is especially significant in Portuguese and Spanish ERICA listed groups.

CHART 3 STRUCTURE BY COUNTRY AND SECTOR IN 2023 (in % of revenue)



Source: ERICA 2023 and national databases.

III. PROFITABILITY: IMPACT OF MACROECONOMIC CONDITIONS

Profitability figures, along with the coverage, financial structure and cost of debt analysis set out in this document, are based on financial data for 2023, available in the ERICA database for non-financial European groups listed on a European stock exchange. Three different samples are used, as explained in the introduction. Within or between countries and sectors, separate group entities (such as parent companies and subsidiaries) may feature independently. The way in which samples are composed differs, depending on the purpose of the analysis.

TABLE 1 ERICA: OVERVIEW OF AGGREGATE PROFITABILITY VARIABLES IN 2023

In € billion	Number	Total assets	EBIT	EBITDA	P/(L) before tax	Revenue
By country						
Austria	38	198.91	12.74	20.99	12.18	142.19
Belgium	44	320.40	18.96	29.33	13.20	134.43
France	230	2,935.26	177.86	292.66	168.42	1,649.86
Germany	153	3,095.91	151.12	284.31	136.84	2,043.59
Greece	50	87.41	6.88	10.01	6.06	67.45
Italy	184	1,160.18	57.97	106.45	43.51	553.81
Portugal	27	133.61	8.22	13.59	7.45	92.55
Spain	92	843.03	49.26	92.40	37.98	455.79
Total	818	8,774.70	483.01	849.75	425.65	5,139.68
By sector						
Industry	347	3,565.06	198.90	341.16	185.99	2,154.42
Energy.....	59	2,236.59	156.24	254.07	150.01	1,331.04
Construction.....	49	424.83	23.53	37.99	19.95	316.26
Services	362	2,476.23	101.79	210.30	68.14	1,308.75
Total	817	8,702.70	480.45	843.52	424.08	5,110.48
By size (revenue)						
Small groups (< 250 m)	256	91.89	-0.39	2.00	-1.20	26.11
Medium-sized groups (250 m – 1.5 bn).....	271	419.79	15.29	29.74	10.52	194.10
Large groups (>1.5 bn).....	288	8,187.57	465.53	811.74	414.71	4,890.12
Total	815	8,699.24	480.43	843.49	424.02	5,110.32

Source: ERICA 2023 static sample.

Note: The number of firms by country and by sector or by size differs: some double-counted groups belong to different countries but are in the same sector. Main figures for 2023 (filter used to avoid double-counting in each sector, size and country counting), with data in €billion.

Chapter II shows how highly representative the ERICA database is for non-financial listed groups. Table 1 provides a breakdown of the 2023 static sample by country, sector, and size. It reveals the high proportion of French and German groups in ERICA, as they account for around 70% of total assets and revenues. Regarding size, although the ERICA sample is balanced in terms of number of groups, it is however dominated by the large groups, with a share of 90% in the analysed financial variables. Considering the groups' main business activity, those in the industry sector account for around 40% in terms of total assets and revenues, followed by the energy and services sectors (around 25% each). Construction is the smallest sector in all variables.

III.1 EBIT AND PROFIT BEFORE TAX: A FURTHER SLOWDOWN IN GROWTH AND PRESSURE FROM RISING INTEREST RATES

2023 saw slowed growth in a context of continuing disruptions in energy and commodity markets due to Russia's invasion of Ukraine, the cost-of-living crisis, and the tightening of global monetary conditions to combat high inflation. Total aggregate EBIT and profit before tax for the European groups in the ERICA sample increased by around 9% while total revenues decreased by around -7% owing to weaker market prices in the energy sector. The median figures for profit before tax reveal the impact of rising interest rates, leading to a decline of -16%.

Generally, the gap between the aggregate and the median rate of change reflects the weight of large dominant groups, while the median is less affected by these groups.

TABLE 2 RATE OF CHANGE IN 2022-2023

	EBIT	Median EBIT	EBITDA	Median EBITDA	P/(L) before tax	Median P/(L) before tax	Revenue	Median Revenue
By country								
Austria	-36.3%	-23.3%	-29.8%	-4.9%	-39.5%	-49.4%	-13.4%	0.3%
Belgium	-8.8%	36.7%	-13.2%	15.4%	-15.2%	16.9%	-12.6%	5.2%
France	26.0%	4.1%	14.7%	-26.0%	48.8%	-25.2%	-1.8%	5.6%
Germany	8.1%	-2.5%	-6.1%	1.5%	3.4%	-14.0%	-9.2%	4.9%
Greece	-4.4%	-1.7%	-4.9%	-2.4%	-7.4%	20.3%	-13.7%	29.9%
Italy	-4.8%	-22.5%	-0.2%	10.4%	-24.2%	-20.8%	-17.5%	5.9%
Portugal	8.3%	-14.5%	-3.5%	-7.5%	-3.9%	-33.7%	-4.4%	6.5%
Spain	2.0%	35.8%	1.0%	4.5%	-8.4%	16.2%	-3.6%	-0.2%
Total	8,7%	8.9%	0.7%	3.7%	8.9%	-16.2%	-7.4%	5.9%
By sector								
Industry	-7.0%	13.2%	-11.9%	3.8%	-4.6%	7.9%	1.5%	3.1%
Energy	56.3%	43.8%	31.3%	37.7%	59.1%	37.1%	-26.0%	-18.9%
Construction	33.5%	20.2%	23.4%	38.2%	33.0%	103.5%	13.5%	-5.7%
Services	-8.2%	-33.3%	-7.4%	-10.8%	-20.7%	-50.5%	0.8%	7.4%
Total	9,3%	9.8%	0.9%	1.1%	9.8%	-12.2%	-7.4%	5.9%
By size (revenue)								
Small groups (< 250 m)	-118.5%	-5.1%	-63.5%	-16.9%	-156.5%	-33.4%	2.4%	5.3%
Medium-sized groups (250 m – 1.5 bn)	-23.9%	5.6%	-14.7%	-3.7%	-42.1%	-15.4%	4.5%	1.4%
Large groups (> 1.5 bn)	11.4%	-2.6%	1.8%	-9.7%	13.1%	1.3%	-7.9%	-1.5%
Total	9,3%	9.1%	0.9%	0.6%	9.8%	-14.7%	-7.5%	6.1%

Source: ERICA 2023 sliding sample.

Note: The number of firms is the same for each year analysed, 698 for size, 724 for sector, and 730 for country analysis. For sector and size analysis the number of firms considered is netted by the firms that have changed size or sector.

Note: The median rates of change for the selected variables in this table do not necessarily relate to the changes in the median profitability ratios calculated, which are presented in chapter III.2.

The energy sector, which was mainly composed of large groups, showed the highest growth rates in 2023 in terms of EBIT and profit before tax, while at the same time posting aggregated revenue cuts of -26% and -19%, respectively, in the median. The significant decrease in revenues resulted primarily from lower average market prices for power and energy commodities (coal, oil and gas) and lower industrial demand due to weak economic growth. However, the decline in average market prices also led to a decrease in the cost of materials (execution of contracts at lower spot market prices at the settlement date) and in operating expenses (fair value changes in commodity derivatives). Hence, power generating groups in particular broadly posted a notable rise in profits, while for some important oil and

gas producing groups the weakening oil and gas prices led to a decline in profits. Another aspect of the decline for oil manufacturers was seen in the deterioration of the refining and chemical business segment, caused by the economic slowdown, global competitive pressure and environmental obligations. In general, the growing competition from renewables involves a structural change. Particularly for Germany and France, and to a lesser degree also for Portugal, the contribution of energy groups to the countries' overall EBIT growth was clearly positive. For Austria, Greece, Italy and Spain, whose energy sectors were dominated by large oil and gas groups showing substantial profit cutbacks, the contribution was negative. According to the countries' sectoral compilation, the energy sector had a major impact on the overall performance of the Greek and Italian samples, as well as on the Austrian, Spanish and Portuguese ones.

Generally, the differences in countries' total performance were partly due to the countries' sample compilations (see Chart 3 for a sectoral breakdown), leading to results that probably did not fully reflect the situation of the entire sector within a country, and partly due to structural country specifics.

Growth in the industry sector was low as reflected in the rate of change in revenue (+1.5% in aggregate terms and 3.1% in the median). Due to effects from the pandemic, demand for goods increased much slower than demand for services, hence industrial production was very weak. High energy prices, though falling, and increased labour costs led to impaired competitiveness. Moreover, high inflation and rising interest rates weighed down profits. In aggregate terms, the European industry groups' EBIT and profit before tax shrank by -7% and -4.6%, respectively. In the median, the industry sector in total showed moderate growth in EBIT (+13%) and in profit before tax (+8%). The breakdown by sub-sector revealed that groups in the chemical industry and other manufacturing suffered substantial reductions. The chemical industry saw production losses as a result of the overall weak demand for industrial goods, the correspondingly low demand for intermediate inputs from the chemical industry and ongoing import pressure from China. Other manufacturing encompassed consumer goods, demand for which fell considerably following the boom during the coronavirus lockdowns. Furthermore, the high inflation rates in many countries reduced private purchasing power and dampened growth in consumption overall. The automotive industry, however, showed a catch-up effect after the disruptions in the supply chains had largely receded. Production showed robust growth, underpinned by the greater demand for battery electric vehicles.

Analysis by country showed that the highest profit setbacks were recorded for the Austrian, Greek and Portuguese industry groups (profit cuts of a third and more). While the industry sector was less important for the Greek and Portuguese group samples, the weak performance of the industry groups weighed down the total figures for Austria. The German industry sector, the largest in the ERICA sample and dominated by the automotive sector and important chemical groups, also showed an aggregate downward trend in profits, albeit to a lesser degree. This was mainly caused by a sharp slump in the chemical sector, outweighing the moderate growth in the automotive sector. For France, by contrast, the sound growth in vehicle manufacturing offset the lower growth in chemicals. Further supported by the favourable performance of the metals and electronics sub-sector, the French industry sector recorded an overall, albeit small, increase in profits. The Italian industry sector showed the highest growth rates for aggregate EBIT and profit before tax, backed by all sub-sectors, including chemicals. The median profit, however, depicted a clear downward trend as the strong increases were mainly seen for large groups. The Belgium sample was clearly dominated by the industry sector (80%, see Chart 3) in terms of revenue, particularly by the largest brewing group worldwide. The declining profits of this group biased the aggregate figures. The median showed a more positive picture, with the medium-sized groups in particular recording rising profits. The Spanish industry sector, though less important in the

total country sample, included significant automotive and chemical groups. Despite the positive contribution of vehicle manufacturing, the sector in total recorded an aggregate decline.

The services sector posted the highest median growth rate in revenues. However, profit decreased substantially in both aggregate and median terms. This fall was apparent for all group sizes, but was less pronounced for large groups and particularly sharp for the small groups. An analysis of the sub-sectors revealed different developments. The travel-related groups (included in the transportation and other services sub-sectors) showed further profit growth as the recovery in demand for air travel continued after the COVID-19 pandemic, most notably in tourist travel. Also, the retail trade sector showed moderate growth, mainly supported by groups operating in food and textile distribution. Conversely, the profit situation of the real estate groups deteriorated drastically due to a substantial decrease in the volume of transactions in the European real estate market, the sharp rise in interest rates and persistently high construction costs. The negative market conditions led to aggregate losses in EBIT and profit before tax related to negative changes in the fair value of investment property and to an increase in the cost of debt. Compared to 2022 profits, the groups lost in total around €10 bn in EBIT and €15 bn in profit before tax, which eroded the overall performance of the services sector. The wholesale sub-sector was also confronted with a substantial fall in profits due to the macroeconomic conditions leading to a decline in demand in some important markets, particularly in construction (which saw a significant decline in the demand for building materials), the steel market and engineering. Sector information and communication regularly includes countries' telecommunication groups, most of which are large and important groups, as well as IT, internet services and television groups. Telecommunication groups are subject to various legal and regulatory frameworks in their markets and must also comply with European regulations (e.g. EU-wide roaming). Hence, the performance of this sub-sector varies according to the different countries' regulations and specifics.

The services sector accounted for a substantial share of the Portuguese and Spanish group samples and for a lower but still significant share of the group samples of Germany, Greece, France, Italy and Belgium. In the Austrian sample, the services sector represented only a share of around 10% of total revenues. Depending on the compilation of the services sector, ERICA countries showed different sectoral developments. The contribution of the services sector to the countries' total EBIT growth was positive for Belgium, Greece, Italy, Portugal and Spain and negative for the other countries. Overall, the countries benefitted from the positive trend in the travel business, most relevant for Spain and less so for Belgium.

Additionally, sub-sector retail trade contributed materially to the positive performance of Greece, Spain and Portugal. In the Portuguese sample, growth was mainly due to the increase in profit for one sample-dominating group operating in the food distribution and specialised retail sectors. In the German and French sample, the services groups posted decreasing profits. In both countries, the wholesale sub-sector in particular had a clear negative impact. Sub-sector information and communication was also important in both countries' sector compilation, as well as for Spain, Italy and Greece. Single large telecommunication groups often biased the changes in profit, depending on the countries' regulations and structural specifics. A significant positive contribution was seen for Germany, Italy and Greece, and a negative one for France and Spain. The real estate sub-sector generally posted a sharp decline across the countries. In the case of France, which had the highest share of real estate groups in the sample by far, the profit slump was particularly serious and weighed down the performance of its services sector.

The construction sector, the smallest in the ERICA sample, was impacted in many countries by the rise in interest rates and the persistently high construction costs, leading to stagnating or lower production, mainly in building construction. However, there was also a very positive momentum, particularly in relation to the climate-related renovation and refurbishment of existing buildings. In addition, civil

engineering had a stabilising effect, as it mostly involves long-term projects with public financing. The construction groups in the ERICA sample saw a total decline in revenues of -5.7% in the median but still posted the highest growth rates in median EBIT and profit before tax in the sectoral comparison. The rise in profit before tax was particularly pronounced as construction groups showed stronger relative cash positions and the higher interest rates pushed up financial income. However, the positive effects were mainly reserved to the large and medium-sized construction groups, while the small groups suffered sharp profit cutbacks, leading to aggregate negative profit before tax. The construction sector accounted for a relatively bigger share of revenue in the Austrian and Spanish group samples, despite the number of companies being small. The two major construction groups of the Austrian sample went in opposite directions regarding profits. The Spanish construction groups also showed a mixed picture; in total, however, they posted a moderate increase in EBIT and a sound increase in profit before tax, backed by the larger groups.

Analysis by group size revealed that aggregate profit growth was underpinned by large groups, mainly pushed by the energy sector, whereas the median showed only minor growth for profit before tax and even a decline in EBIT. Total median EBIT growth, however, was mainly supported by the medium-sized groups. The negative impact of the general challenging macroeconomic environment was particularly apparent for small groups across all the sectors, except energy. Mostly affected were the small groups in the services sector, which posted profit collapses leading to an aggregate negative EBIT and profit before tax in the total sample of small groups (see Table 1).

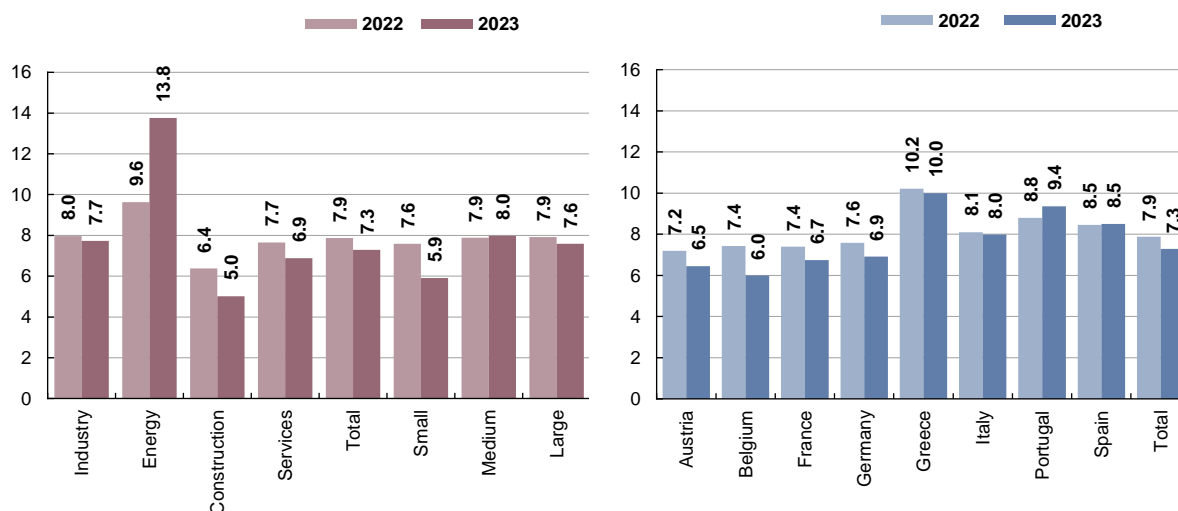
III.2 EBIT MARGIN: SLIGHT DECLINES IN MOST SECTORS AND COUNTRIES – A BOOST FOR THE ENERGY SECTOR

The profitability analysis is based on the EBIT margin, measured as EBIT/revenue. In median terms, the total EBIT margin showed a slight reduction of 0.6 pp in 2023, standing at 7.3% (see Chart 4). Analysis by group size showed only minor changes in medium and large groups (0.1 pp and -0.3 pp, respectively). Small groups saw a stronger decline of -1.7 pp, leading to the weakest EBIT margin (5.9%). Additionally, the weighted figures revealed an even sharper decrease for small groups, with a drop of 10.6 pp, leading to a negative EBIT margin. Approximately half of the small groups reported declines in EBIT, and about a third showed a negative EBIT, particularly in the services sector.

Almost all sectors recorded declines between 0.2 pp and 1.4%. Only the energy sector saw a remarkable increase of 4.1 pp, raising its EBIT margin to 13.8%, significantly higher than that of all other sectors. By contrast, with an EBIT margin of 5.0%, the construction sector remained at the lower end of the ranking.

Most countries posted slight reductions of between 0.1 pp and 1.7 pp. Belgium suffered the sharpest decline, recording the lowest EBIT ratio of all countries (6.0%). Over 60% of Belgian groups saw a reduced EBIT margin in 2023. However, according to the weighted figures, Belgian groups showed the highest EBIT margin of all countries (14.1%), strongly influenced by the high EBIT of one large brewery group (see Annex B). Only Portuguese groups were able to slightly improve their median EBIT ratio by 0.6 pp, while the Spanish groups remained virtually stable. In median terms, the highest ratio was again posted by Greek groups (10.0%).

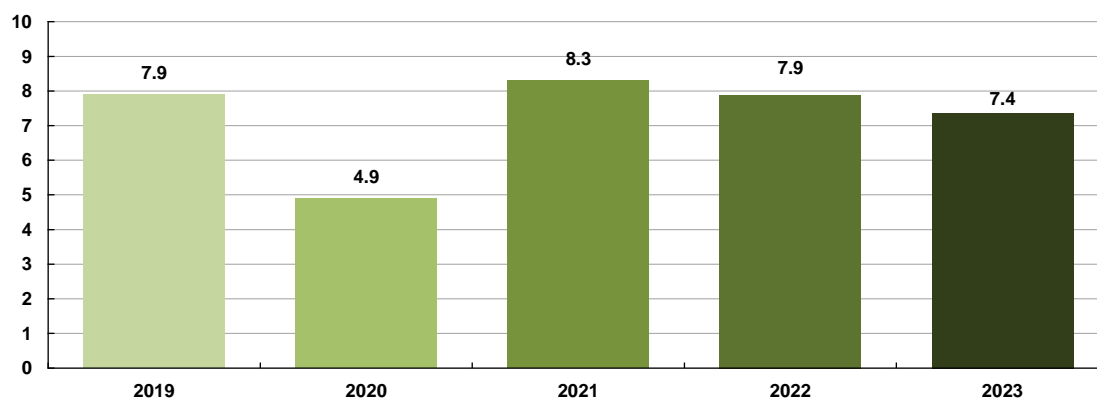
CHART 4 MEDIAN EBIT MARGIN – EBIT / REVENUE 2022-2023 (in %)



Source: ERICA 2023 sliding sample.

On a timescale covering the last five years for a (smaller) fixed sample of groups, the median EBIT margin showed another decline (of 0.5 pp) in 2023. The margin of 7.4% was not only below the values of 2021 and 2022 but also below the pre-COVID-19 levels (see Chart 5).

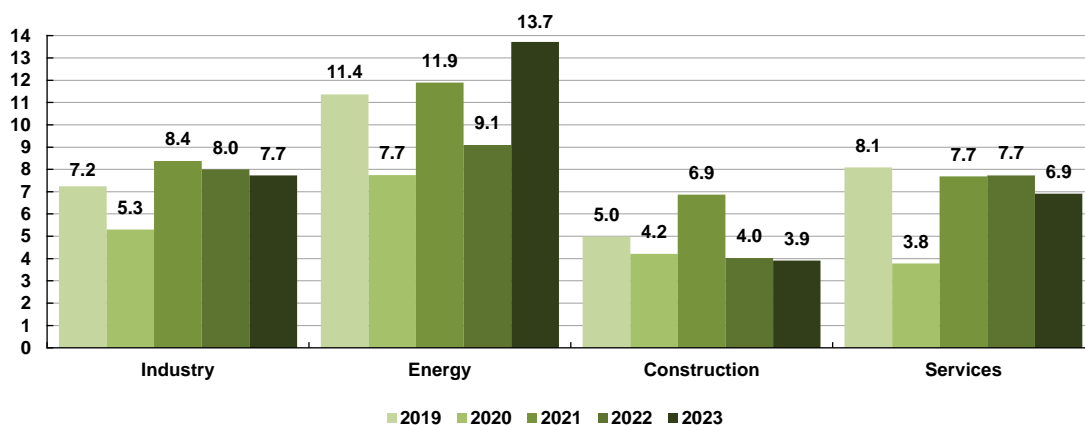
CHART 5 MEDIAN EBIT MARGIN – EBIT / REVENUE 2019-2023 (in %)



Source: ERICA 2023 fixed sample.

Except for the energy sector, all sectors showed a declining trend over the past three years. While the construction sector recorded a new all-time low of 3.9%, the energy sector reached a new high of 13.7% over a volatile five-year period. However, due to the relatively small share of energy groups in the ERICA sample, the positive effect was limited (see Chart 6).

CHART 6 **MEDIAN EBIT MARGIN BY SECTOR 2019-2023 (in %)**

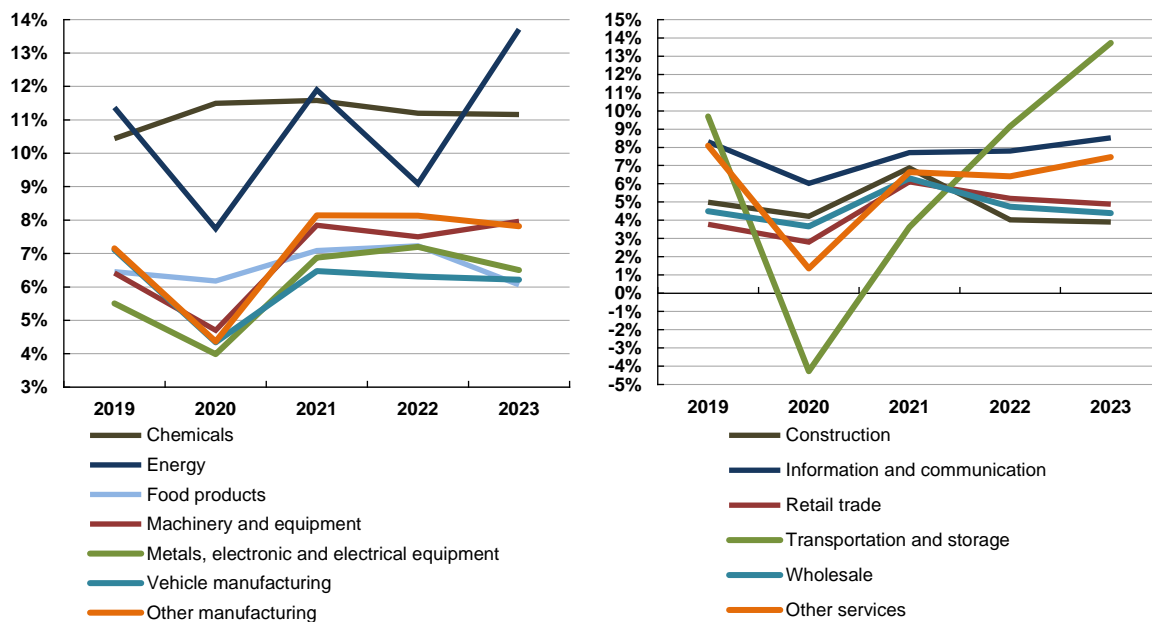


Source: ERICA 2023 fixed sample.

Most sectors, according to branches of activity, followed an overall sideways trend in 2023. Within the industrial sector, most sub-sectors performed uniformly and recorded only slight reductions in their margins, ranging from 0.1 pp to 1.2 pp (see Chart 7). Only the energy sector posted a stronger increase of 4.6 pp. Following the decline in 2022, it reached a new all-time high of 13.7% within the five-year observation period, followed by the chemical industry at 11.2%.

While most sub-sectors within the services sector saw minor changes of between -0.4 pp and 0.7 pp in their median EBIT margin, the transportation and storage sector stood out owing to its volatility from 2019 to 2023. After a sharp drop from 9.7% to -4.3% in 2020, the sub-sector showed a strong rebound, with annual growth rates of over 5 pp, leading to a new all-time high of 13.7% in 2023. This is clearly related to the major impact of the COVID-19 crisis on European airlines and airline operators and their surpassing pre-pandemic levels. As in previous years, the real estate sector (not shown in Chart 7 due to scaling) also recorded an extremely volatile trend. From an all-time high in 2019 (65.3%), the EBIT margin fell sharply to 28.2% in 2020, recovered in 2021 (59.6%) and finally dropped to a new all-time low of -12.0% in 2023. This was clearly related to changes in the fair value of investment property.

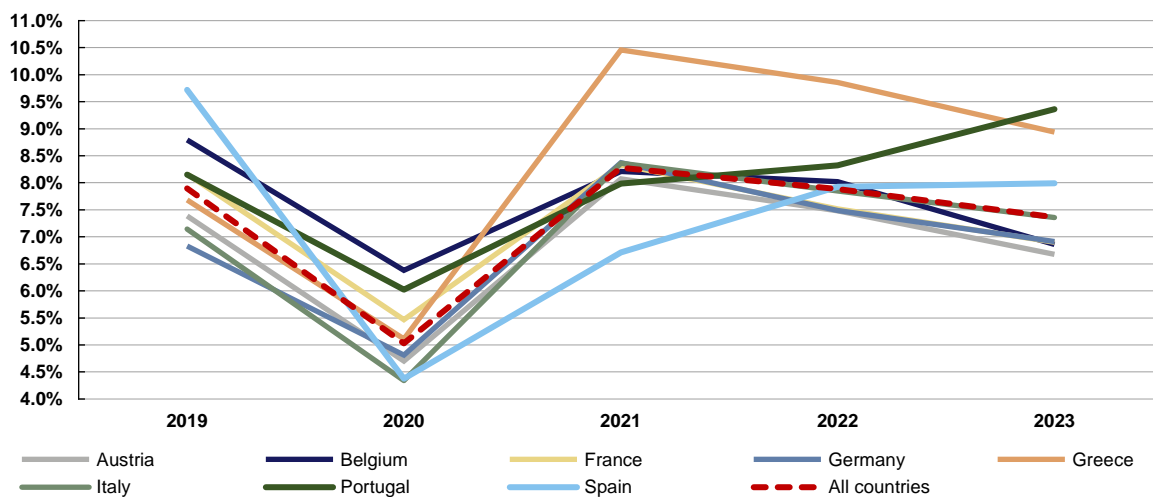
CHART 7 MEDIAN EBIT MARGIN BY BRANCH OF ACTIVITY 2019-2023



Source: ERICA 2023 fixed samples.

The time series at country level showed slight declines in most countries in 2023, ranging between -0.6% and -1.2% (see Chart 8). Only Portuguese groups were able to grow at the highest rate of all country groups (+1.0 pp) to reach 9.4%, followed by Greek and Spanish groups (8.9% and 8%, respectively). The EBIT margin of the remaining countries ranged between 6.7% (Austria) and 7.4% (Italy), leaving most of them below pre-pandemic levels.

CHART 8 MEDIAN EBIT MARGIN BY COUNTRY 2019-2023

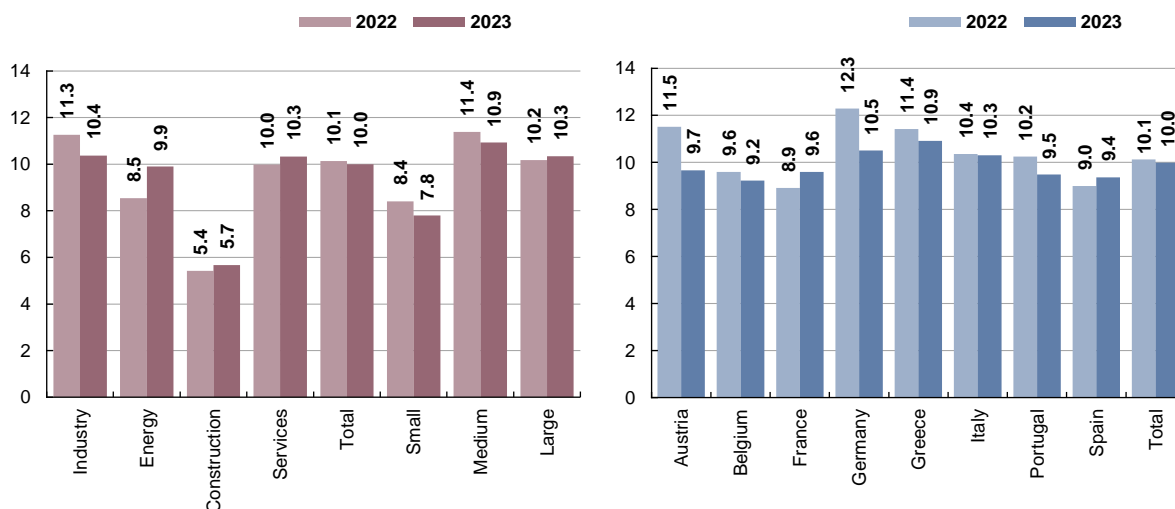


Source: ERICA 2023 fixed sample.

III.3 EBITDA RATIO: LARGELY STABLE PERFORMANCE ACROSS ALMOST ALL SECTORS AND COUNTRIES

EBITDA is an approximate measure of a group's operating cash flow, calculated as earnings before interest, taxes, depreciation and amortisation.

CHART 9 MEDIAN EBITDA TO ASSETS RATIO 2022-2023 (in %)



Source: ERICA 2023 sliding sample.

The median EBITDA-to-assets ratio stabilised at 10.1% in 2023. With the single exception of industry, all other sectors saw moderate growth of between 0.2 pp and 1.4 pp. Despite a decline of 0.9 pp, the industry sector reported the highest margin at 10.4%, matching the services sector, while the construction sector remained at the bottom of the ranking with a margin of 5.7%. All group sizes showed only minor changes, ranging from -0.6 pp to 0.2 pp, with small groups still reporting a significantly lower ratio compared to both medium and large groups.

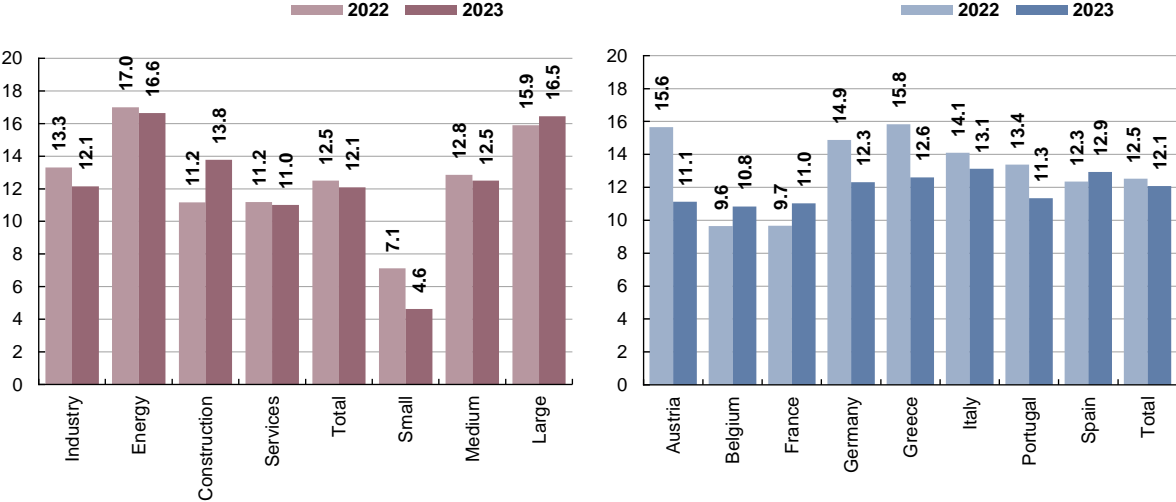
Most countries posted a decrease of between -0.4 pp and -1.8 pp in their median EBITDA-to-assets ratio. While Italian groups remained stable, French and Spanish groups reported slight improvements of 0.4 pp and 0.7 pp, respectively. Despite a decline of 0.5 pp, Greek groups achieved the highest ratio of all countries at 10.9%, followed by German (10.5%) and Italian groups (10.3%). The decline among Austrian and German groups (-1.8 pp) was even more pronounced for Austria when considering the weighted data (-4.1 pp), while German groups showed stable performance (see Annex B).

III.4 ROE: STABLE PERFORMANCE IN MOST SECTORS, SIZES AND COUNTRIES

Looking at pre-tax profit relative to equity, the median return-on-equity (ROE) ratio posted by European listed groups in 2022 decreased slightly by 0.4 pp to 12.1%. With the single exception of the construction sector, all sectors showed declines of between 0.2 pp and 1.2 pp. The construction sector recorded an increase of 2.6 pp, achieving an ROE of 13.8%, which is now higher than the industrial sector (12.1%) and the services sector (11.0%). Only the energy sector performed significantly better with an ROE of 16.6%. By size, small groups experienced a decline of 2.5 pp, resulting in an ROE of 4.6%, which is significantly lower than that of medium and large groups. Large corporations, after an increase of 0.6 pp to 16.5%, once again showed the best ROE.

The country breakdown shows a decline in most countries, led by Austria with a decrease of 4.5 pp, followed by Greece (-3.3 pp) and Germany (-2.6 pp). Based on weighted data, the decline in Austria was even more pronounced at 9.5 pp, with significant decreases in profits across all sectors except the construction sector (see Annex B). Overall, the countries showed a similar level of ROEs, ranging between 10.8% and 13.1%.

CHART 10 MEDIAN RETURN ON EQUITY: PROFIT (LOSS) BEFORE TAX / EQUITY 2022-2023 (in %)



Source: ERICA 2023 sliding sample.

IV. FINANCIAL POSITION: THE MEDIAN EQUITY RATIO DECREASED SLIGHTLY, WHILE THE MEDIAN NET INDEBTEDNESS RATIO REMAINED CONSTANT

This chapter presents an analysis of the financial structure of the groups included in the ERICA database, focusing on key indicators for reliance on equity and debt financing, respectively. The ERICA dataset covers 818 listed non-financial groups for 2023, with total assets worth approximately €8,800 billion. As the 288 largest groups account for 94% of total assets, they dominate the aggregate figures and weighted averages. This chapter therefore uses median values for analysing the sample, while Annex C reports weighted averages for comparison purposes.

TABLE 3 OVERVIEW OF AGGREGATE FINANCIAL STRUCTURE POSITIONS IN 2023

In € billion	Number	Total assets	Financial debt	Cash & cash equivalents	Equity
By country					
Austria	38	198.91	46.41	21.28	87.09
Belgium	44	320.40	111.32	20.94	130.59
France	230	2,935.26	818.45	279.42	984.68
Germany.....	153	3,095.91	1,048.07	210.29	1,060.86
Greece.....	50	87.41	27.35	11.61	28.53
Italy	184	1,160.18	421.56	73.42	267.31
Portugal	27	133.61	51.80	10.81	37.16
Spain	92	843.03	300.38	70.14	275.95
Total.....	818	8,774.71	2,825.34	697.91	2,872.17
By sector.....					
Industry.....	347	3,565.06	1,158.84	296.58	1,341.34
Energy	59	2,236.59	624.42	147.29	646.46
Construction	49	424.83	128.00	62.59	94.55
Services.....	362	2,476.23	892.65	188.12	771.85
Total.....	817	8,702.71	2,803.91	694.58	2,854.20
By size (revenue).....					
Small groups (< 250 m).....	256	91.89	33.03	8.21	43.60
Medium-sized groups (250 m – 1.5 bn) ...	271	419.79	151.38	37.76	177.51
Large groups (> 1.5 bn)	288	8,187.57	2,618.90	648.41	2,630.54
Total.....	815	8,699.25	2,803.31	694.38	2,851.65

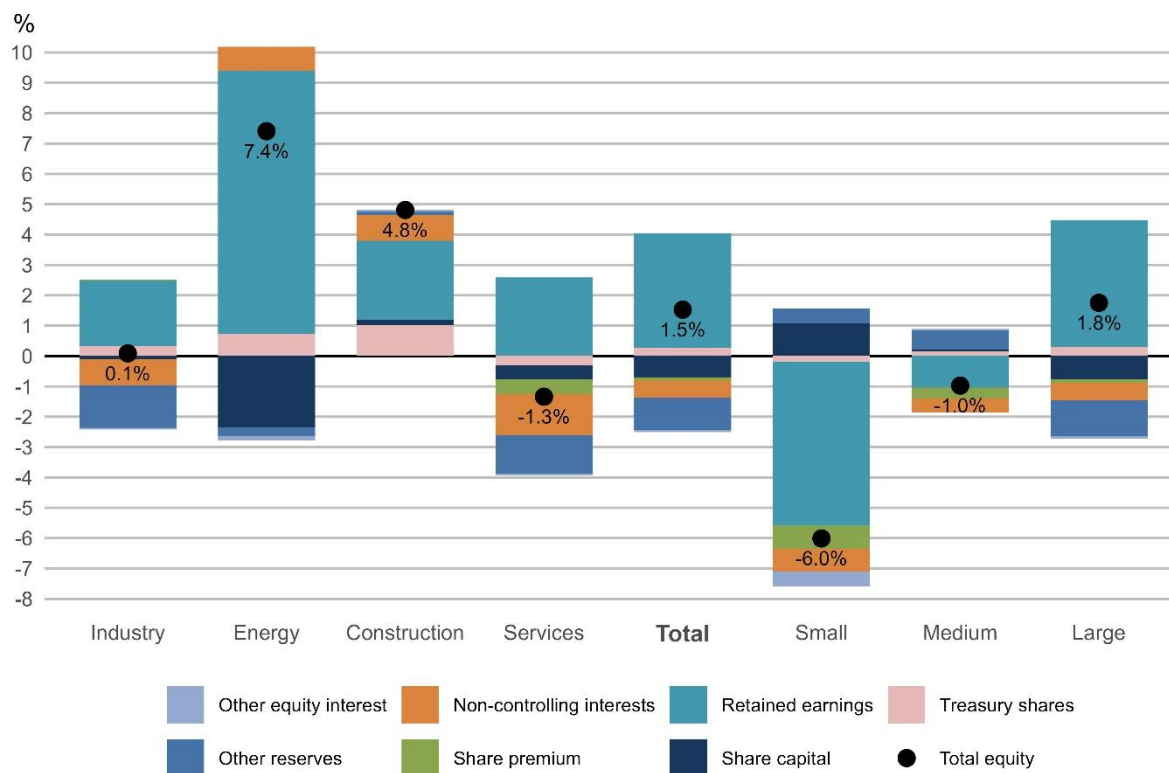
Source: ERICA 2023 static sample.

Note: The number of firms by country and by sector or by size differs: some double-counted groups are in different countries but belong to the same sector. Main figures for 2023 (filter used to avoid double-counting for each sector, size and country), with data in € billion.

IV.1 SLIGHT DECREASE IN THE MEDIAN EQUITY RATIO

Chart 11 gives an overview of changes in equity in 2023. The contributions of the seven line items composing total equity are presented for the various sectors and size classes.

CHART 11 CONTRIBUTIONS TO TOTAL EQUITY GROWTH, BY SECTOR AND BY SIZE IN 2023



Source: ERICA 2023 sliding sample.

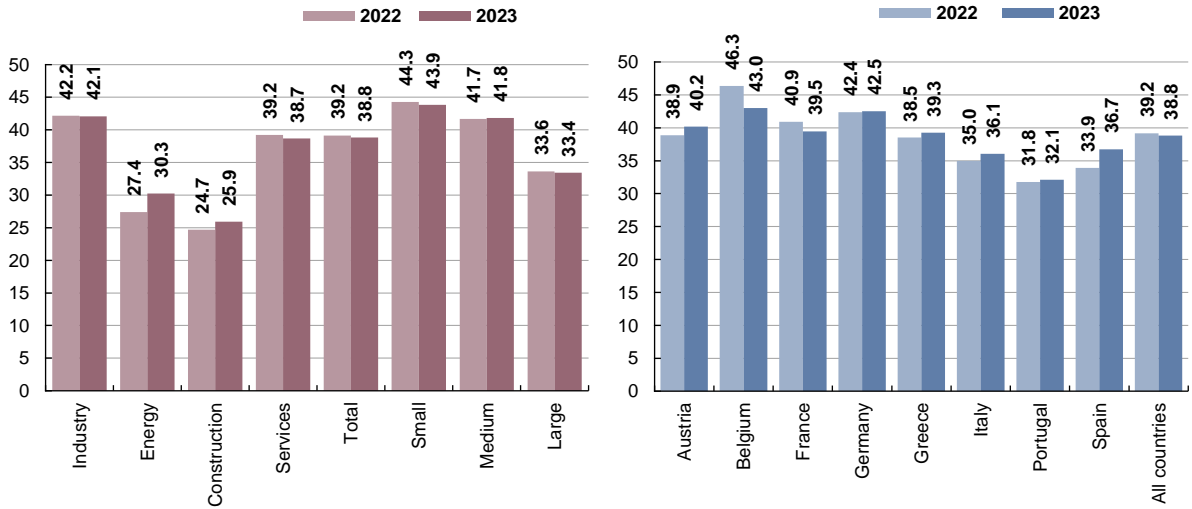
Overall, groups' total equity grew slightly by 1.5% year-on-year. The main driver was an increase in retained earnings, causing a rise in total equity of 3.8% and resulting primarily from the net income for the year. Negative effects from currency translation led to a reduction of other reserves, contributing to a decline in equity of 1.1%. A drop in share capital led to a 0.7% decrease and stemmed predominantly from a large energy group which performed a capital to eliminate accumulated losses within its retained earnings. Non-controlling interests had a negative impact of 0.6%, which was mainly due to two large groups from the industry and services sector, which deconsolidated a large subsidiary and bought back shares of a subsidiary, respectively. At individual level, total equity increased for approximately two-thirds of the groups.

The disaggregation by economic sector shows a mixed picture for equity growth in 2023. Services groups' equity took a hit of 1.3%, mainly driven by the decrease in non-controlling interests and the share premium account of a large German group that, as already mentioned, repurchased the shares of one of its subsidiaries. On aggregate, this one-off event, together with a generally negative impact from currency translation, which was recognised in other reserves, largely offset the positive contribution from retained earnings. In the energy sector, equity was up by 7.4% primarily due to higher retained earnings, which had a positive effect of 8.7%. A part of this effect was related to the capital reduction

mentioned above and eventually reflects a reclassification from share capital to retained earnings amounting to 2.6% of equity. For groups in the industry and construction sector, retained earnings were the major driver of equity growth, contributing a rise of 2.2% and 2.6%, respectively. In the industry sector, losses from currency translation and the exit of non-controlling interests from a large German group attenuated the increase in equity to 0.1%. Construction groups recorded a positive impact from higher non-controlling interests and a reduction in treasury shares, in particular due to the cancellation of shares by a large French group, with the growth rate totalling 4.8%.

The breakdown by size classes confirms the heterogeneous performance observed in the ERICA WG's previous report. For the large groups, equity rose at a rate of 1.8%, similar to that for the total sample. Medium-sized and small groups suffered a decline of 1.0% and 6.0%, respectively. Across all size classes, the most important reason for this was the change in retained earnings. Although there were outliers that determined the extent of this change for medium-sized and small groups, the results also indicate that medium-sized and small groups generally struggled with weak earnings in 2023. 17% and 38% of these groups, respectively, had negative net income, which hampered their ability to strengthen the equity base. For large groups, losses from currency translation recognised in other reserves were another important factor influencing the change in total equity, leading to a reduction of 0.9%. For small groups, the share capital increases that stemmed mainly from two groups from Belgium and France, raised equity by 1.1%, softening the negative contribution from retained earnings at aggregate level.

CHART 12 MEDIAN EQUITY RATIO 2022-2023 (in %)



Source: ERICA 2023 sliding sample.

Chart 12 provides the median equity ratio for the different sectors, size classes and countries in the sample. Overall, the median equity ratio shrank slightly by 0.4 pp to 38.8% in 2023. The reason for this development was the change in total assets, which grew by 9.4% at the median, more than offsetting the growth in total equity.

At sector level, the distribution of the median equity ratio is similar to the previous report. The ratio was highest for industrial groups, standing at 42.1% with a marginal decline of 0.1 pp year-on-year. Groups in the services sector had the second-highest equity ratio with a median value of 38.7%, experiencing a drop of 0.5 pp that is consistent with the decrease in total equity. Despite a positive trend, the energy and construction sectors posted the lowest equity ratios in the sample. Energy and construction groups recorded a median equity ratio of 30.3% and 25.9%, a year-on-year gain of 2.9 pp and 1.2 pp,

respectively. In particular, for energy groups, the easing of commodity prices led to reduced cost pressures that helped to increase net income and retained earnings. At the same time, the median total assets in the sector were down by 7.7%, reflecting mainly a decrease in the value of derivative positions.

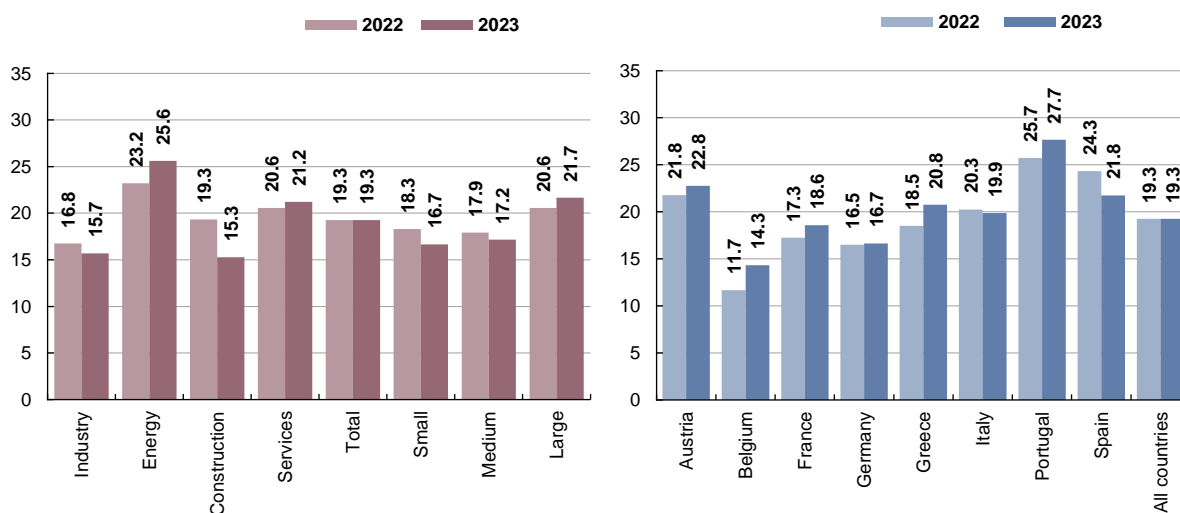
Across the different size classes, there were no major changes in the median equity ratio. Small groups continued to show the highest ratio with the median at 43.9%, which was slightly less than in 2022. The median values for medium-sized and large groups remained rather stable at 41.8% and 33.4%, respectively.

The breakdown by country shows a mixed picture for the median equity ratio. For Belgian and French groups, the median value declined by 3.3 pp and 1.4 pp, while there was an increase for groups from all other countries. As groups from Belgium and France represented a third of the total population of the ERICA database in 2023, they had a dominating impact on the median equity ratio of the total sample, which decreased to 38.8%. The rise of 2.8 pp recorded for Spanish groups did not fully offset this impact because these groups represented a smaller part of the population and their median equity ratio of 36.7% was below the median of the total sample.

IV.2 THE MEDIAN NET INDEBTEDNESS RATIO REMAINED CONSTANT

The net indebtedness ratio is calculated as the sum of current and non-current financial liabilities less cash and cash equivalents relative to total assets. It represents the proportion of a corporate group's total assets that is financed through external borrowings, excluding cash and cash equivalents.

CHART 13 MEDIAN NET INDEBTEDNESS RATIO 2022-2023 (in %)



Source: ERICA 2023 sliding sample.

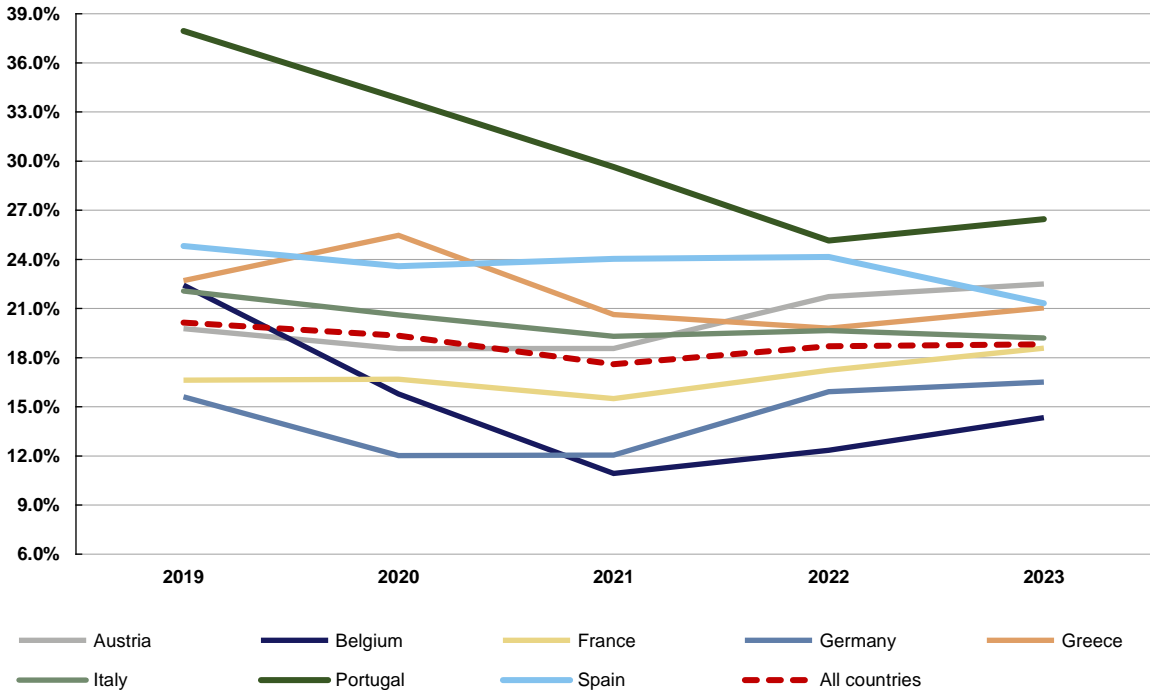
Chart 13 presents the median net indebtedness ratio by economic sector, size class and country of location for the sliding sample. In total, the median net indebtedness ratio remained constant at 19.3% through 2023. A disaggregation of the ratio reveals that the distribution of the individual components was largely unchanged. Thus, for instance, the interquartile range of the respective balance sheet items was similar to 2022. This observation holds true in particular for the industry and the services sectors,

where the median net indebtedness ratio changed only slightly (by -1.1 pp and 0.6 pp, respectively). Energy groups recorded an increase in the median ratio of 2.4 pp as many of these groups held less cash, which is consistent with lower holdings of cash collateral resulting from a reduced value of derivative positions. In the construction sector, the median net indebtedness ratio decreased by 4.0 pp as total assets grew significantly.

Across the different size classes, small groups posted a reduction in the median net indebtedness ratio of 1.6 pp to 16.7%. One reason for this development was a decline in the non-current financial liabilities at approximately 60% of these groups. For medium-sized and large groups, there were slight changes in the median values of -0.7 pp and 1.1 pp, respectively, without any of the underlying balance sheet positions showing noteworthy trends.

At country level, Belgian groups experienced the strongest growth in the median net indebtedness ratio, rising 2.6 pp to 14.3%. However, their median value was still the lowest of all countries. At the other end of the distribution, there was a slight to moderate increase in the ratios for Portuguese, Austrian and Greek groups, which – together with Spanish groups – had the highest values in the sample. The range between the highest and the lowest median value by country was relatively constant at 13.4 pp.

CHART 14 MEDIAN NET INDEBTEDNESS BY COUNTRY 2019-2023



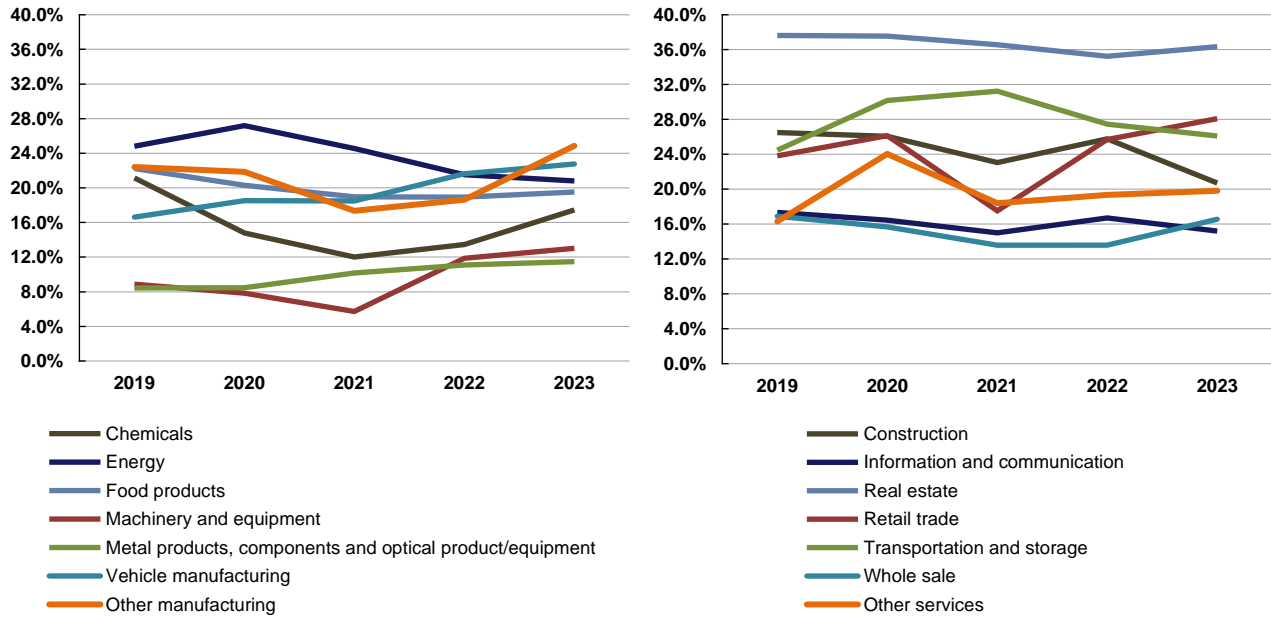
Source: ERICA 2023 fixed samples.

Based on the fixed sample, Chart 14 shows the performance of the net indebtedness ratio by country for the most recent five-year period. The median of all countries had a maximum value of 20.1% in 2019 when IFRS 16 became effective and led to the recognition of additional lease debts, driving up net indebtedness. In the first year of the COVID-19 pandemic (2020), the median ratio fell to 19.3% as many groups had higher cash holdings consistent with reduced capital expenditure during the crisis. This trend continued, falling to a low of 17.6% in 2021, before the median net indebtedness ratio reversed and ended up with relatively stable values of 18.7% in 2022 and 18.8% in 2023. In general, the weighted

average figures⁸ stand at a higher level, but reveal similar tendencies, in particular the drop in 2021 and the stable trend in the past two years.

In median terms, the recent rise in the ratio for Portuguese groups interrupted a downward trend that had persisted since 2019. The reversal is related to higher non-current financial liabilities and smaller cash balances of these groups, but there does not seem to be a link to any concentration in particular economic sectors. The decline in the median value of Spanish groups is consistent with an over-representation of the construction sector in the Spanish sample (17% of Spanish groups are from the construction sector, compared to 6% of the total sample). As discussed above, construction groups posted a reduction in their median net indebtedness ratio, which correlated with higher total assets, in line with developments for Spanish groups. Belgian groups reduced net indebtedness sharply between 2019 and 2021, but, as was the case with the German groups, have shown a reversion towards the total median value in the past two years.

CHART 15 MEDIAN NET INDEBTEDNESS BY BRANCH OF ACTIVITY 2019-2023



Source: ERICA 2023 fixed samples.

Chart 15 confirms the mixed picture in terms of the median net indebtedness for the different branches of activity observed in the previous report by the ERICA WG.⁹ The most recent median values fell in 4 branches and rose in 10, mainly from the industry sector, with manufacturing, chemicals and wholesale showing the strongest increases. These branches generally had higher levels of current and non-current financial liabilities in 2023 compared with the previous year. Chart 15 presents the results for the fixed sample, showing a decrease for energy groups in contrast to the increase reported for these groups in Chart 13. The reason is a different sample composition, which comprises 54 energy groups in the sliding sample of Chart 13, but only 43 in the fixed sample used for Chart 15.

Groups in the real estate branch had the highest relative net indebtedness over the entire period, while the lowest values were recorded for groups in the metal products, components and optical

⁸ A chart showing the weighted average net indebtedness ratio per country is included in Annex C.1.
⁹ Charts showing the weighted average net indebtedness ratio for each branch of activity are included in Annex C.2.

products/equipment, and machinery and equipment branches. However, the two latter branches exhibited an upward trend during the sample period, which moved their median ratios closer to that for the total sample.

V. FINANCIAL DEBT: SOARING COST OF DEBT

This chapter provides insights into financial preferences and European non-financial listed groups' access to borrowing in 2023 across three dimensions: size, country and sector. For each category, distinct patterns and tendencies are revealed. This is followed by changes in borrowing costs compared with the previous year, by size, country and sector.

TABLE 4 ERICA: OVERVIEW OF FINANCIAL DEBT AGGREGATE VARIABLES IN 2023

In € billion	Number	of which financial debt	Financial debt	Financial institutions	Bonds issued	Leases	Interest expense
By country.....							
Austria	38	38	46.41	22.48	14.10	7.33	1.86
Belgium.....	44	44	111.32	12.56	87.05	5.59	4.97
France	230	230	818.45	185.11	433.23	70.34	26.37
Germany.....	153	153	1,048.07	168.47	562.55	127.12	26.45
Greece.....	50	50	27.35	13.91	9.96	2.98	1.38
Italy	184	184	421.56	187.77	154.82	34.66	23.13
Portugal	27	26	51.80	9.71	27.12	9.69	2.00
Spain	92	92	300.38	115.61	107.26	44.29	12.96
Total.....	818	817	2,825.32	715.63	1,396.08	301.99	99.12
By sector.....							
Chemicals.....	82	82	191.24	39.02	116.85	12.72	6.90
Construction.....	49	49	128.00	43.69	66.04	10.07	6.05
Energy	59	59	624.42	167.04	358.30	48.38	33.54
Food products.....	33	33	110.55	11.86	91.37	4.78	4.91
Information and communication.....	111	110	333.71	54.53	188.15	71.00	14.25
Machinery and equipment..	44	44	32.34	10.66	6.31	7.89	1.41
Metals, electronic & electrical equipment	85	85	176.02	30.58	106.09	8.95	5.51
Other manufacturing	60	60	50.71	14.73	17.02	15.69	1.62
Other services.....	93	93	126.49	33.73	35.08	26.20	5.50
Real estate.....	41	41	114.23	43.26	64.97	2.78	3.04
Retail trade	35	35	55.54	18.09	9.82	21.20	2.41
Transportation and storage	31	31	234.19	123.85	43.07	43.23	5.67
Vehicle manufacturing.....	43	43	597.99	107.45	285.60	20.05	6.25
Wholesale.....	51	51	28.49	10.27	7.41	7.00	1.24
Total.....	817	816	2,803.91	708.75	1,396.07	299.92	98.30
By size (revenue).....							
Small groups (< 250 m).....	256	255	33.03	19.03	8.92	2.52	1.32
Medium-sized groups (250 m - 1.5 bn)	271	271	151.38	69.63	48.99	18.16	5.84
Large groups (> 1.5bn).....	288	288	2,618.90	619.62	1,338.15	279.24	91.12
Total.....	815	814	2,803.31	708.27	1,396.07	299.91	98.27

Source: ERICA 2023 static sample

Note: The number of groups by country and by sector or by size differs: some double-counted groups belong to different countries but are in the same sector. Main figures for 2022 (filter used to avoid double-counting for each sector, size category and country), data in € billion.

V.1 BANK LOANS ARE WIDELY USED, BUT THE BULK OF FUNDING ACROSS GROUPS IS RAISED FROM BONDS

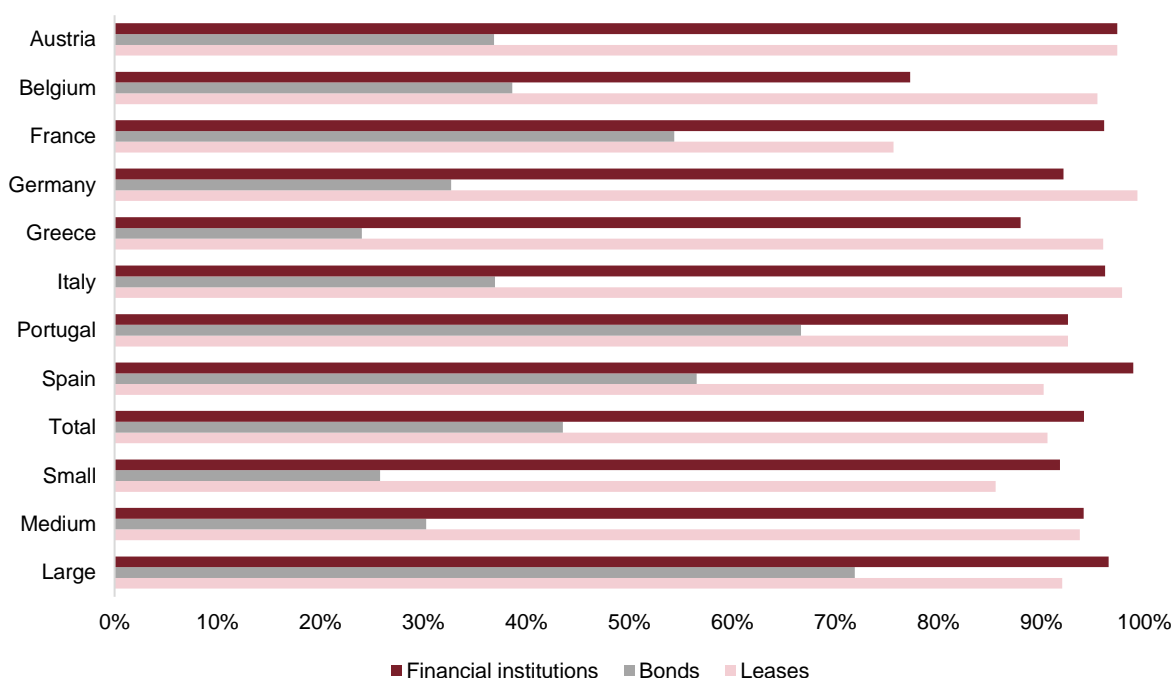
Overall, in 2023 loans from financial institutions were the most common source of funding (see Chart 18), with 94% of European non-financial listed groups applying for them, followed by leases (91%) and bonds (44%). This general trend reflects the widespread ease of access to traditional bank financing and leasing.

When broken down by size, larger groups have the most significant preference for bond issuance (72%) compared to medium (30%) and small groups (26%). This disparity reflects the greater ability of large groups to access capital markets due to higher credit ratings, greater transparency and scale. The use of bank loans and leases is more uniform across sizes.

At country level, funding from financial institutions and leasing are widely used, with only two notable deviations from the overall trend: only 77% of Belgian groups had bank loans and barely 76% of French groups opted for leasing.

As regards bonds, Portugal leads, with 67% of groups using this kind of funding, well above the average of 44%. Spain (57%) and France (54%) also show significant engagement, while Greece (24%) and Germany (33%) show a much lower preference.

CHART 18 FINANCIAL DEBT STRUCTURE BY COUNTRY AND SIZE IN 2023 (number of groups)



Source: ERICA 2023 static sample.

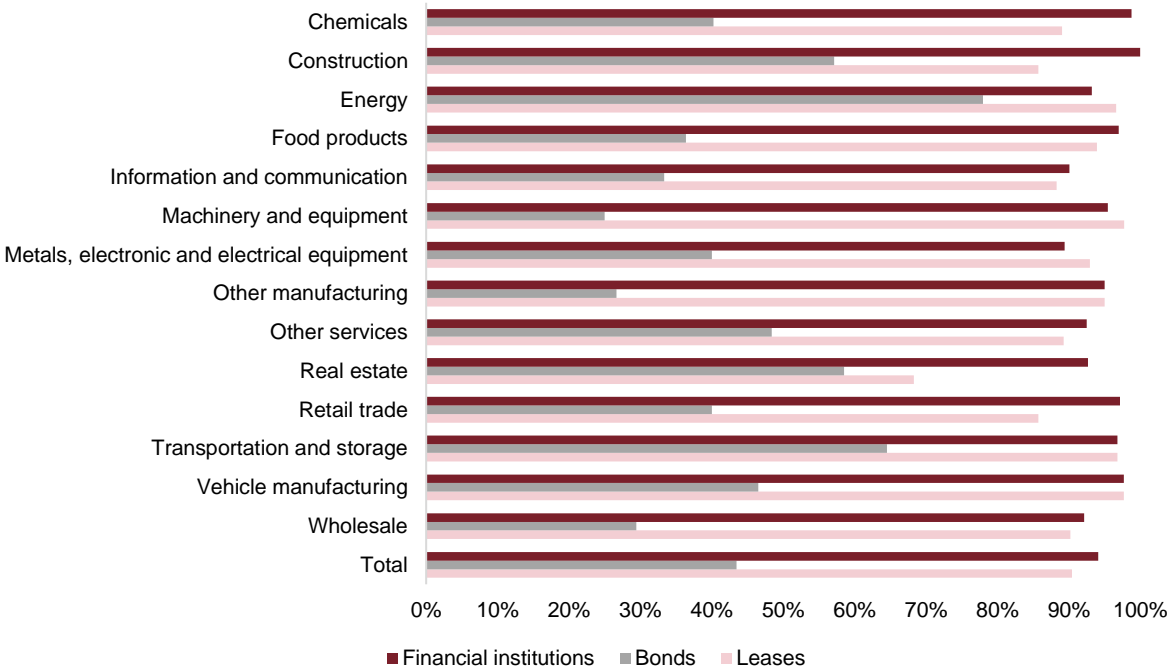
At sub-sector level (Chart 19), there is significant variation in the use of financial instruments. Loans from financial institutions are universally relied upon, with construction (100%), chemicals (99%) and

vehicle manufacturing (98%) showing the highest levels. The sectors with comparatively lower usage include metals, electronics and electrical equipment (89%) and information and communication (90%). Lease financing is heavily utilised in capital-intensive sectors such as machinery and equipment (98%) and vehicle manufacturing (98%), while real estate shows a notably lower preference at 68%. Bonds exhibit the widest variation across sectors, with energy (78%) and transportation and storage (65%) showing the highest usage, reflecting their need for long-term financing. By contrast, machinery and equipment (25%) and other manufacturing (27%) show minimal preference for bonds, suggesting differing financial needs or barriers to access.

In summary, the data point to a strong reliance on financial institutions across all categories, with noticeable variations in leasing and bond usage depending on firm size, geographic location and sub-sector.

Large groups and energy groups show a greater capacity to use bonds, while smaller groups and groups from machinery and equipment or other manufacturing sectors simply rely on financial institutions and leases. Geographic differences further underscore the role of economic conditions and financial market structures in shaping financial behaviour.

CHART 19 FINANCIAL DEBT STRUCTURE BY BRANCH OF ACTIVITY IN 2023 (number of groups)



Source: ERICA 2023 static sample.

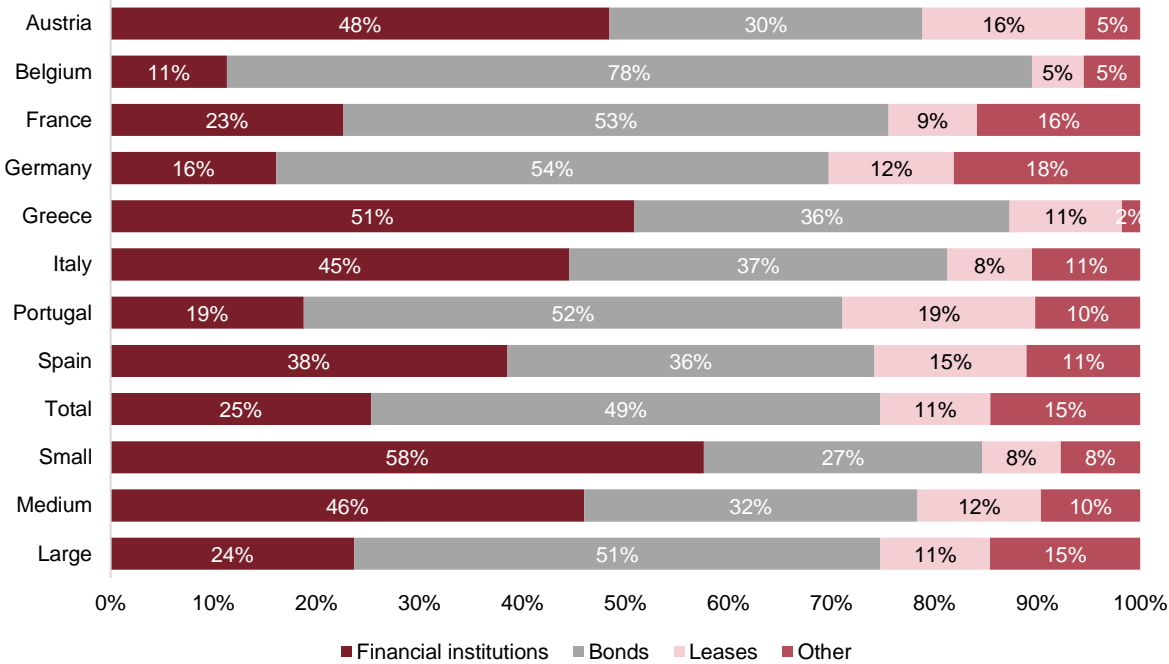
Chart 20 presents data on the nominal outstanding amounts for various financial instruments - loans from financial institutions, leases and bond issuance. The total figures indicate a notable reliance on bonds, which account for half of the nominal outstanding, followed by financial institutions (25%) and

leases (11%). This overall distribution reflects the prominence of bonds as a primary long-term financing source, while financial institutions and other instruments play significant yet supplementary roles.

The reliance on bonds increases consistently with firm size, while dependence on loans from financial institutions decreases. Smaller firms rely heavily on financial institutions (58%), whereas larger firms shift their preference towards bonds (51%) as their primary source of financing. Medium-sized firms fall in between, although they more closely resemble small firms than large firms, as 46% of their funding comes from financial institutions and only 32% from bonds.

There is significant variability at country level. Belgium stands out as the most bond-reliant country, with an overwhelming 78% of debt financing allocated to bonds, followed at a greater distance by Germany (54%) and France (53%). Conversely, Greek and Austrian groups depend more heavily on loans from financial institutions (51% and 48%, respectively). Spain uses a balanced approach, with its funding needs split equally between bank loans and bonds.

CHART 20 FINANCIAL DEBT STRUCTURE BY COUNTRY AND SIZE IN 2023 (total amounts)

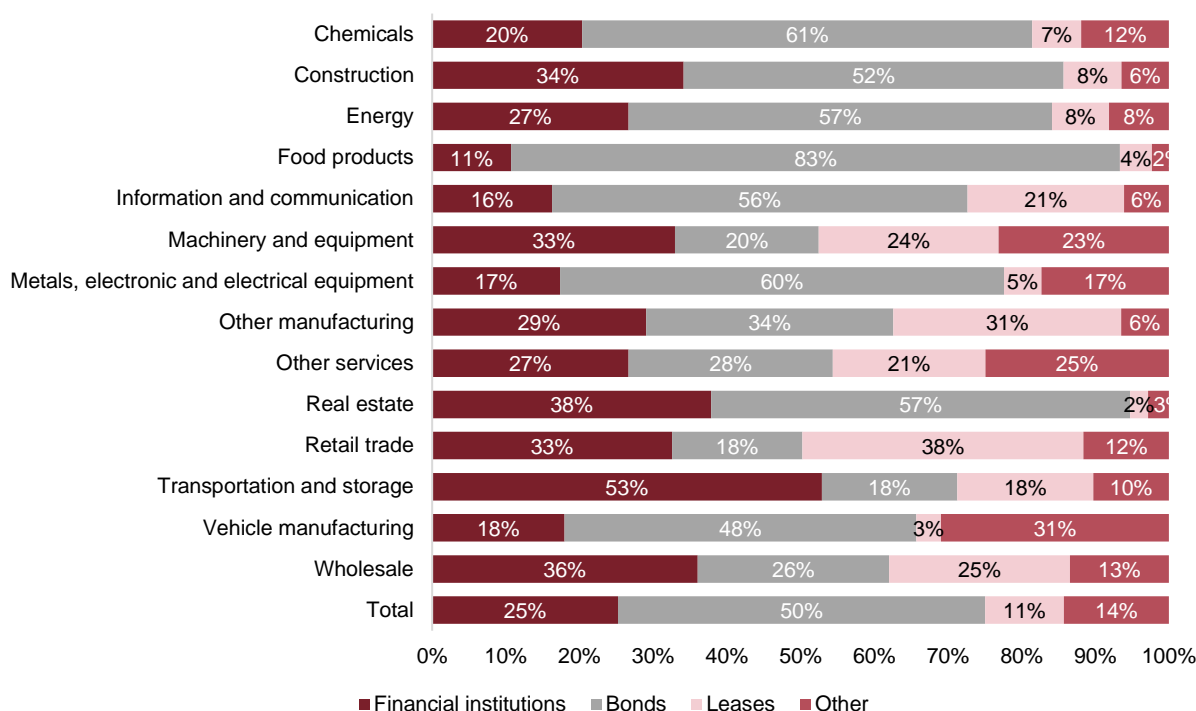


Source: ERICA 2023 static sample.

At sub-sector level (Chart 21), notable disparities emerge in the use of financial instruments. Food products display an overwhelming reliance on bonds (83%), while loans from financial institutions (11%) and other instruments play marginal roles. Substantial bond reliance is also evident in metals, electronic and electrical equipment (60%), chemicals (61%), energy (57%) and real estate (57%). By contrast, transportation and storage lean primarily on bank loans (53%). Meanwhile, sectors such as wholesale, machinery and equipment, other manufacturing and other services show more diversified patterns, with an even spread across financial instruments.

In conclusion, the data on nominal outstanding amounts illustrates the dominance of bonds as a financing source, particularly for larger groups. Financial institutions remain critical for smaller groups and certain sub-sectors.

CHART 21 FINANCIAL DEBT STRUCTURE BY BRANCH OF ACTIVITY IN 2023 (total amounts)



Source: ERICA 2023 static sample.

V.2 THE COST OF DEBT SURGED IN 2023, MARKING A SIGNIFICANT JUMP FROM 2022

From 2022 to 2023, the cost of debt of European listed groups rose. The median cost of debt increased by +1.53 pp, from 2.53% in 2022 to 4.06% in 2023. All countries and sizes increased their cost of debt.

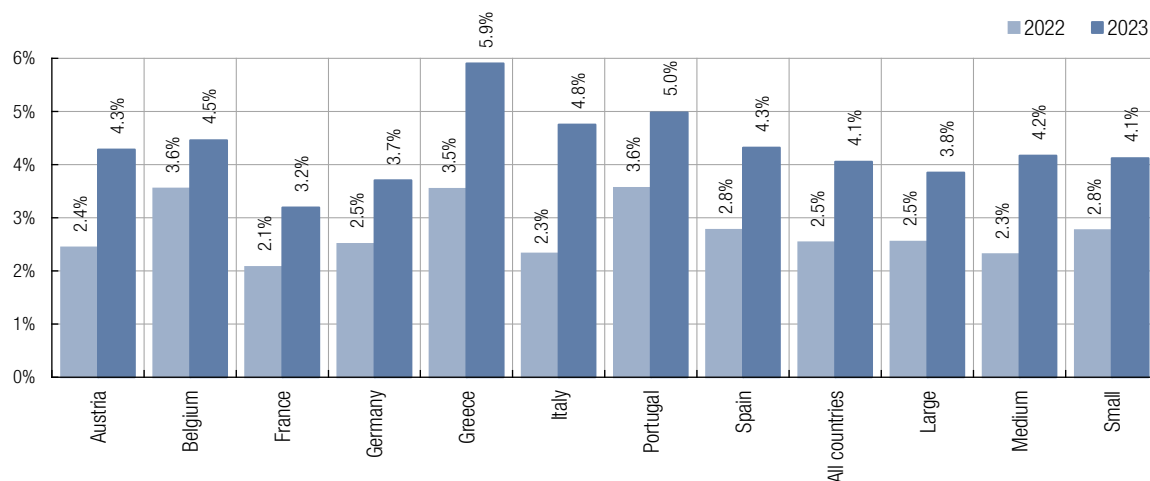
Italy experienced the highest spike, more than doubling its cost of debt from 2.32% in 2022 to 4.75% in 2023, an impressive rise of +2.43 pp. Greece followed closely with a significant increase of +2.37 pp despite its cost of debt already being one of the highest in 2022. Both countries surpassed Belgium in the median cost of debt ranking, as Belgian groups recorded the smallest growth overall (+0.9 pp). Austria posted an increase of +1.84 pp, the third highest (from 2.44% in 2022 to 4.28% in 2023).

By contrast, France, which already had the lowest cost of debt in 2022 at 2.08%, posted the second lowest increase (a mere +1.11 pp, to 3.19%) in 2023. Germany followed closely with a minor rise of +1.19 pp, from 2.51% to 3.70%.

Portugal and Spain recorded similar increases (+1.42 and +1.55 pp, respectively). As a result, Portugal was no longer the country with the highest cost of debt in 2023.

The changes in the cost of debt from 2022 to 2023 point to a clear upward trend across all group sizes. Medium-sized groups faced the steepest increase (from 2.31% in 2022 to 4.17% in 2023), becoming the size class with the highest cost of debt after rising from the initial lowest cost of debt position by size class. Small and larger groups recorded similar rises of 1.36 % and 1.30 % during the period.

CHART 22 **MEDIAN COST OF DEBT BY COUNTRY AND SIZE 2022-2023 (in %)**



Source: ERICA 2022-2023 sliding sample.

The data for 2022 to 2023 show that all countries recorded increases in statistical moments, with varying degrees of change. The interquartile range expanded for all countries.

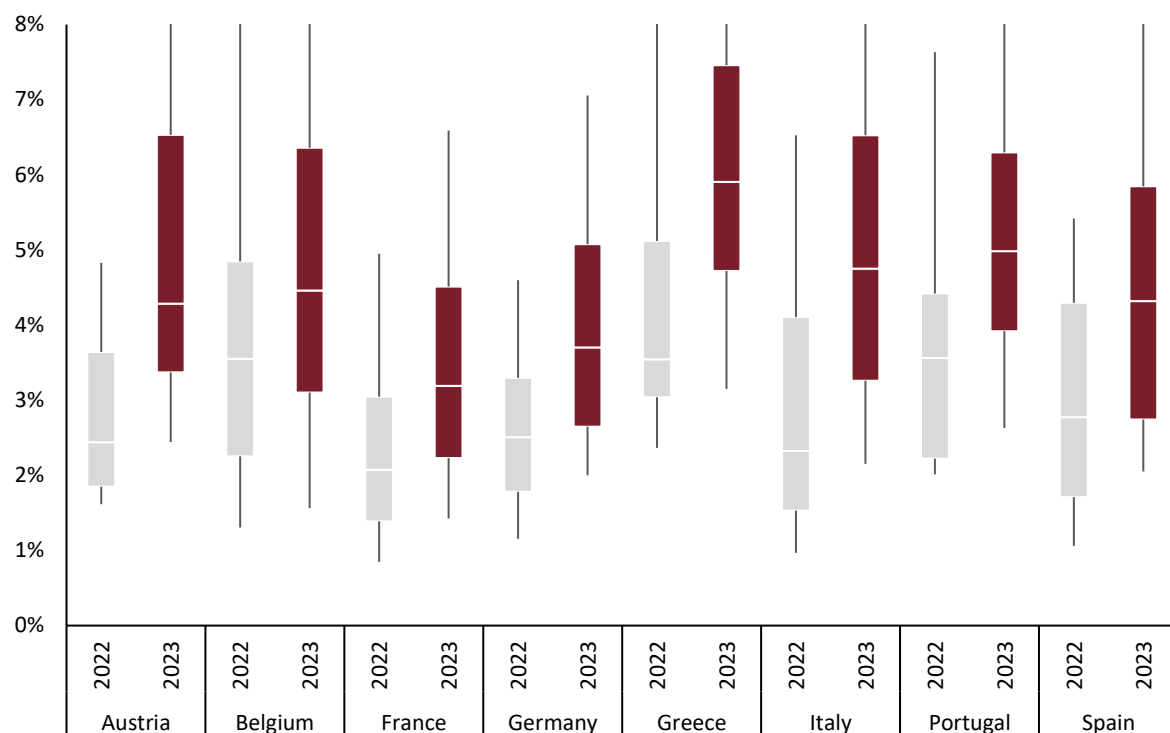
Two distinct groups emerged in the first quartile: Italy, Austria, Greece and Portugal saw increases ranging from 1.52% to 1.73%, while the remaining countries experienced more modest rises of approximately 1%.

The interquartile range saw the most significant rise in Austria (+1.4 pp). This expansion was driven by the strongest 2.9 pp change in the third quartile. Italy and Greece also recorded substantial increases in the third quartile, with rises of 2.3 pp and 2.4 pp, respectively.

Portugal, on the other hand, had the smallest rise in its interquartile range (+0.2 pp). This more moderate expansion reflects a steady progression across all statistical moments, with uniform changes observed in the first quartile, the median and the third quartile.

In Belgium, France and Germany, the increases were more modest, about 1% in both the first quartile and the median. Only the change in the third quartile was more pronounced, suggesting a stronger upward movement at the higher end of the distribution. Spain mirrored the increases of these three countries in the 1st and 3rd quartiles, but its median saw a slightly larger rise.

CHART 23 COST OF DEBT BOX PLOT BY COUNTRY 2022-2023



Source: ERICA 2022-2023 sliding sample.

Chart 24 provides an overarching view of the relationship between the cost of debt and indebtedness levels from 2022 to 2023. Borrowing costs rose significantly across the board, from 2.53% in 2022 to 4.06% in 2023. However, regardless of these rising costs, the median indebtedness level remained steady at 29.5%.

Belgium emerges as a notable case in this analysis. It was the country where the median cost of debt rose the least despite the highest rise in the median of the financial debt to total assets ratio.

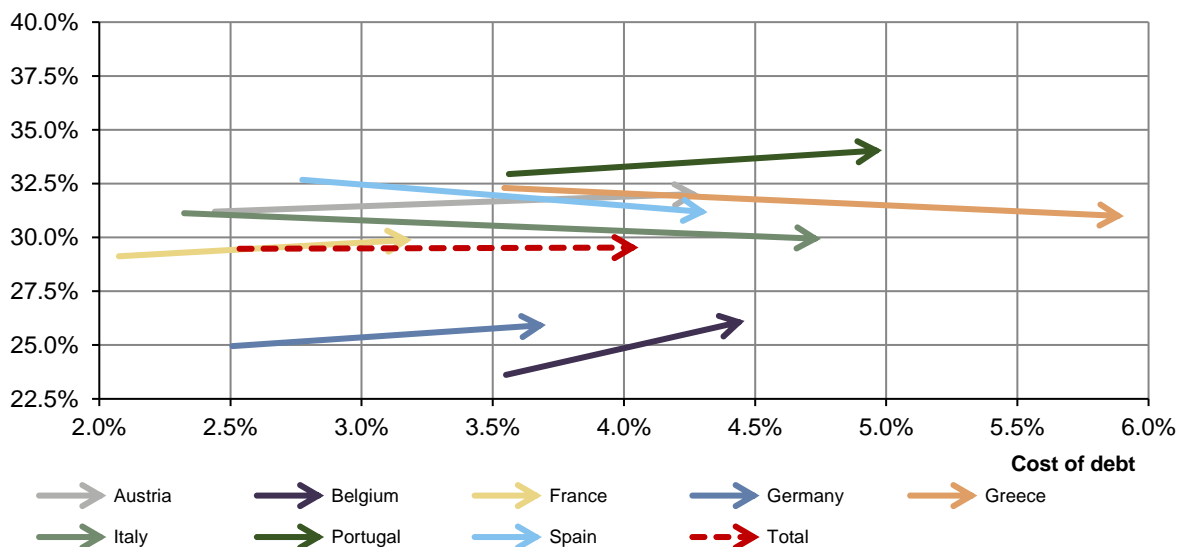
In Portugal and Spain borrowing costs measured by the median increased similarly, unlike their indebtedness levels. Portugal was the country with the second highest increase in the level of indebtedness, while Spain was the country where the median of the financial debt to total assets ratio decreased the most.

Greece and Italy illustrate the lingering challenges faced by economies with historically high debt burdens. Despite a slight reduction in their indebtedness levels in 2023, along with Spain, they experienced the highest cost of debt rise of 2.4 pp in the same period.

Germany and France, on the other hand, represent a stark contrast. Their cost of debt hardly rose in 2023, meaning that, among the countries analysed, they were the ones with the lowest cost of debt despite the (modest) increase in their indebtedness levels.

CHART 24 COST OF DEBT AND FINANCIAL DEBT TO TOTAL ASSETS BY COUNTRY IN 2023

Financial debt / Total Assets



Source: ERICA 2022-2023 sliding sample.

V.3 AN UNPRECEDENTED RISE IN THE COST OF DEBT ACROSS ALL SECTORS IN 2023

Between 2022 and 2023, there was a notable increase in the cost of debt across all sectors (from 2.53% to 4.03%). Some sectors experienced sharp increases, while others saw modest ones, leading to changes in their relative rankings.

Among the sectors, the construction sector groups had the highest median cost of debt in both years, rising significantly from 3.22% in 2022 to 5.06% in 2023. Aside from this, the construction sector was also one of the top four sectors in terms of absolute change.

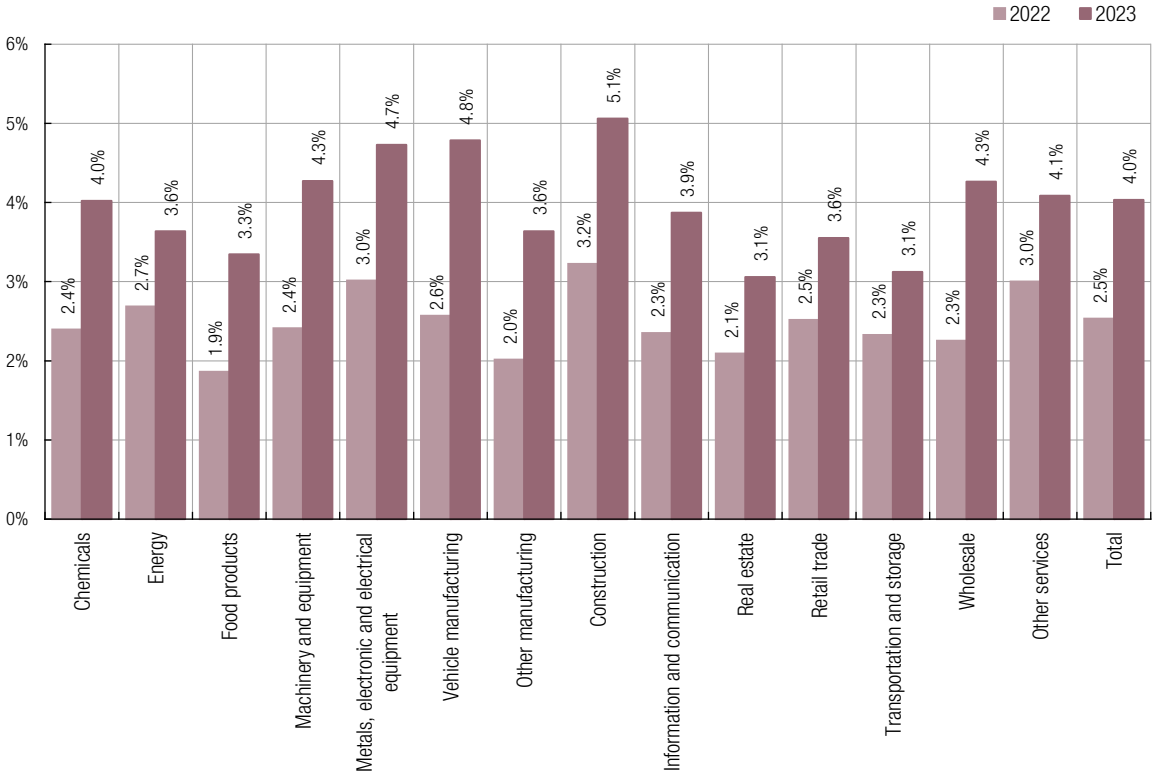
Similarly, metals, electronic and electrical equipment, vehicle manufacturing and machinery and equipment not only raised their cost of debt in both years, with their 2023 rates standing at 4.73%, 4.79% and 4.27%, respectively, but also recorded the highest increases in absolute terms across all sectors.

Notably, the wholesale sector experienced the second most pronounced increase, climbing from 2.25% in 2022 to 4.27% in 2023, suggesting it had faced significant pressures due to supply chain issues, inflation and changes in the cost of goods sold. This change propelled it from being one of the lower-cost sectors in 2022 to a more intermediate position in 2023. Similarly, other services raised significantly its cost of debt median from 3.00% in 2022 to 4.09% in 2023.

The energy sector saw a more modest increase of 0.95 pp, from 2.69% in 2022 to 3.64% in 2023, while real estate saw a similar smaller growth of 0.96 pp, with median cost of debt rising from 2.09% in 2022 to 3.06% in 2023. Real estate became the bottom sector in 2023 in terms of median cost of debt after food products sector groups (which began 2022 with the lowest borrowing costs at 1.86%) experienced a significant increase, standing at 3.35% in 2023. The lowest rise in the median cost of debt across sectors (+0.8 pp) was posted by transportation and storage sector groups (from 2.33% in 2022 to 3.12% in 2023).

In summary, the data show an upward trend in the cost of debt across sectors, with some sectors experiencing more significant increases than others. While construction remained at the top, wholesale rose in the rankings due to a significant increase. Conversely, real estate and food products maintained their position among the lower-cost sectors, with moderate increases, while energy groups dropped from the fourth highest median cost of debt to the fifth lowest in 2023.

CHART 25 MEDIAN COST OF DEBT BY BRANCH OF ACTIVITY 2022-2023 (in %)



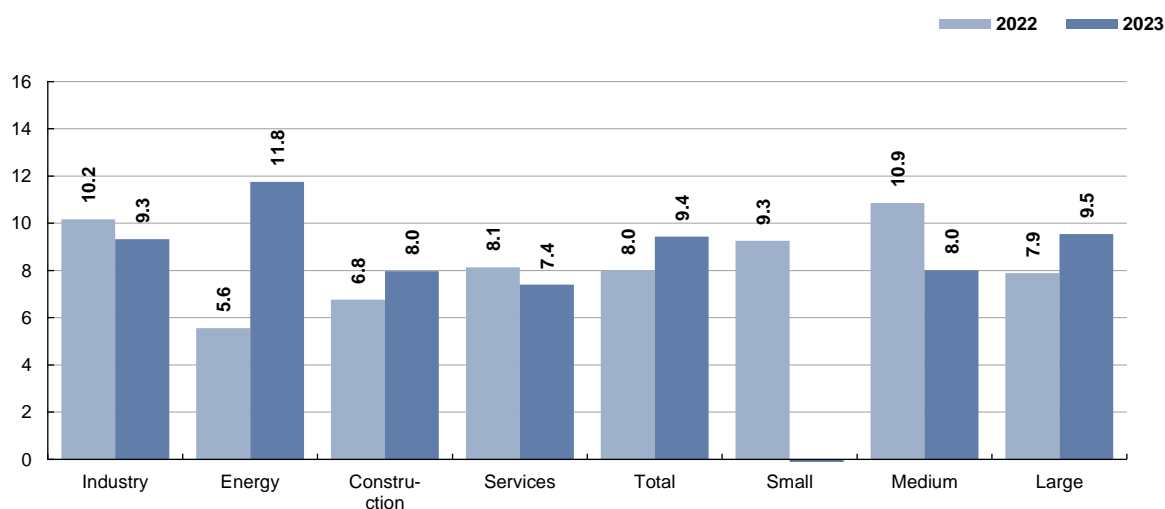
Source: ERICA 2022-2023 sliding sample.

ANNEX A: DEFINITION OF THE BRANCHES OF ACTIVITY

Name of the sector	NACE-BEL 2008 (2 digits)
Food products	01; 02; 10 - 12
Chemicals	20 - 23
Metals, electronic and electrical equipment	24 - 27
Machinery and equipment	28
Vehicle manufacturing	29 - 30
Other manufacturing industry	03; 07 - 09; 13 - 18; 31 - 33
Energy	05 - 06; 19; 35 - 36
Construction	41 - 43
Retail trade	45; 47
Wholesale	46
Transportation and storage	49 - 53
Information and communication	58 - 63
Real estate	68
Other services	37 - 39; 55 - 56; 69 - 96

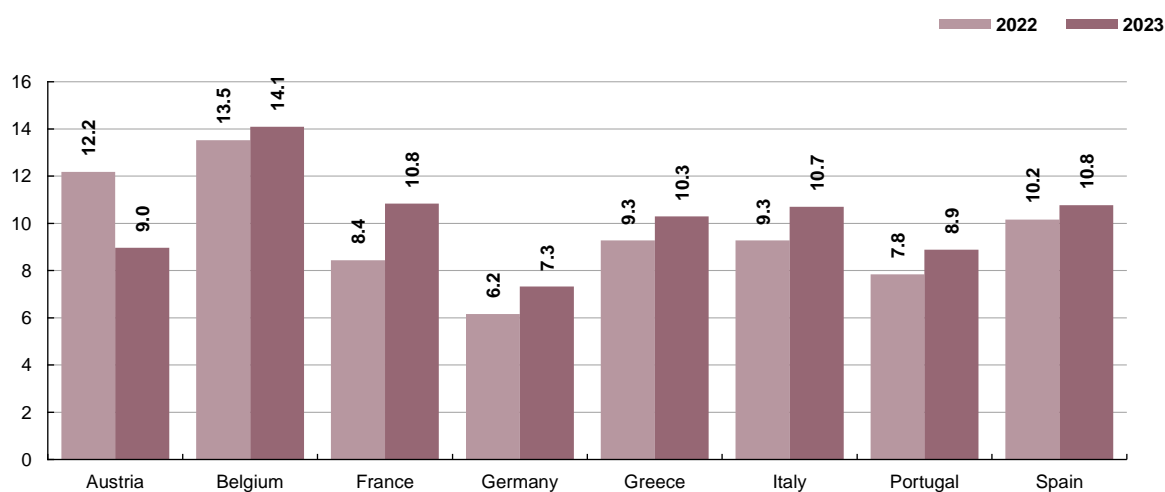
ANNEX B: PROFITABILITY RATIOS – WEIGHTED AVERAGE BY SECTOR, BY SIZE AND BY COUNTRY

1. WEIGHTED AVERAGE EBIT MARGIN: EBIT / REVENUE 2022-2023 (in %)



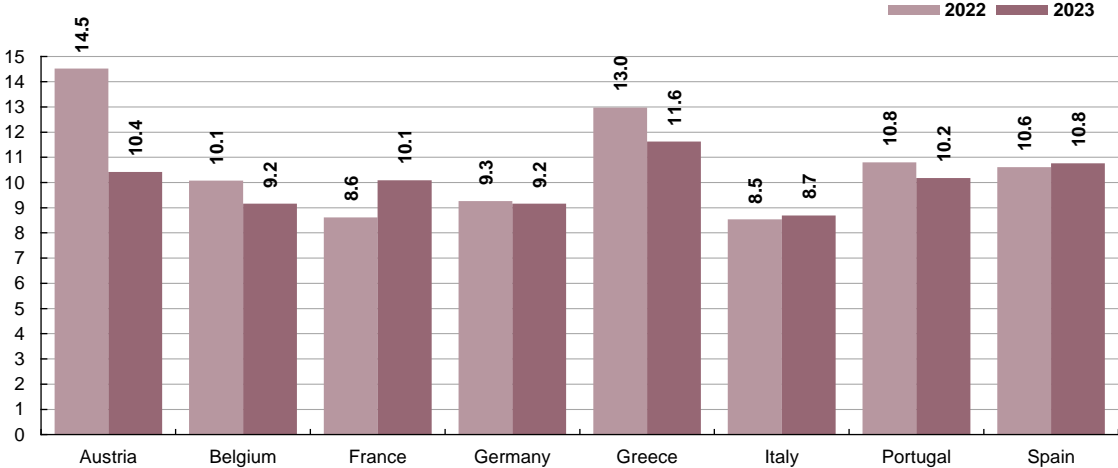
Source: ERICA 2023 sliding sample.

2. WEIGHTED AVERAGE EBIT MARGIN: EBIT / REVENUE 2022-2023 (in %)



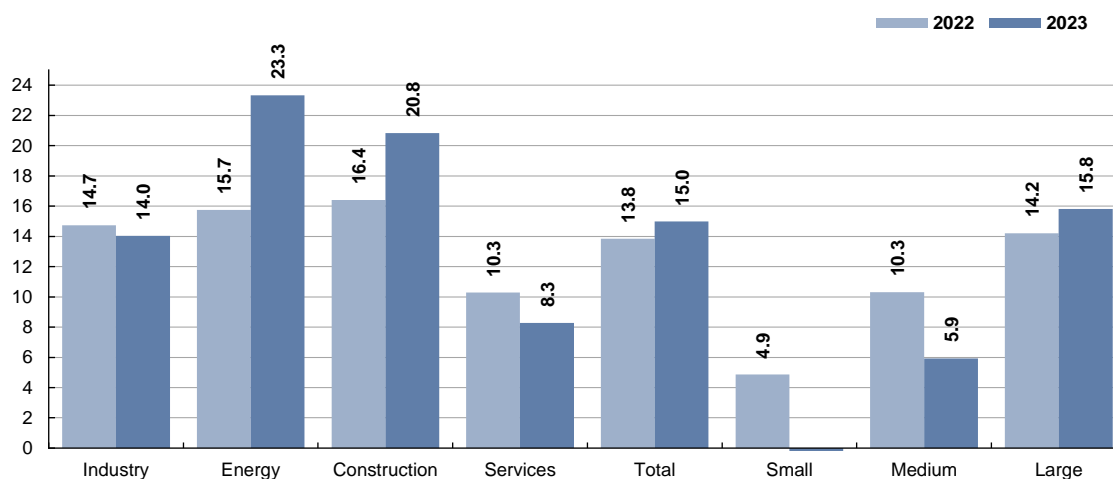
Source: ERICA 2023 sliding sample.

3. WEIGHTED AVERAGE EBITDA-TO-ASSETS RATIO 2022-2023 (in %)

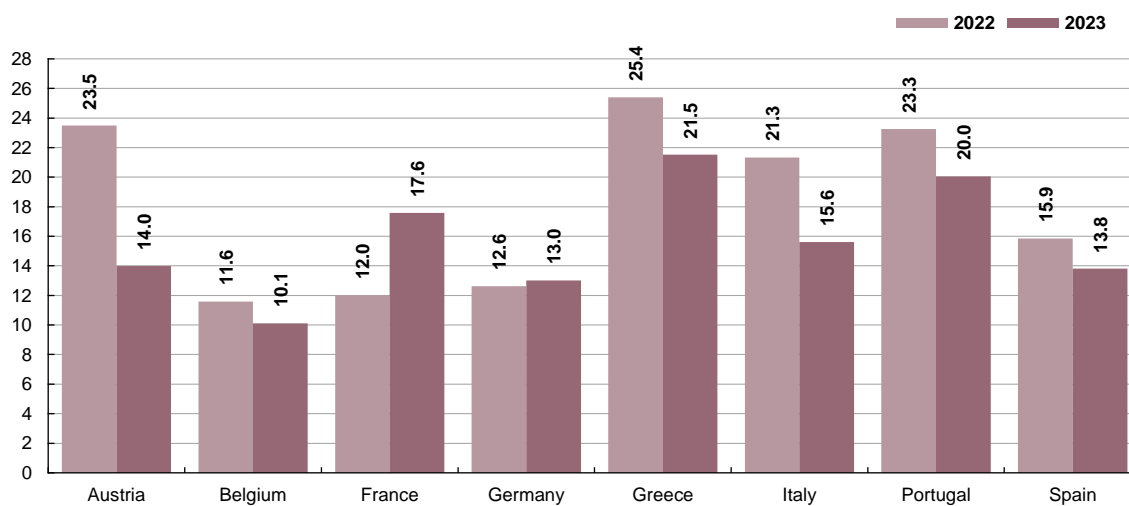


Source: ERICA 2023 sliding sample.

4. WEIGHTED AVERAGE RETURN ON EQUITY 2022-2023 (in %)



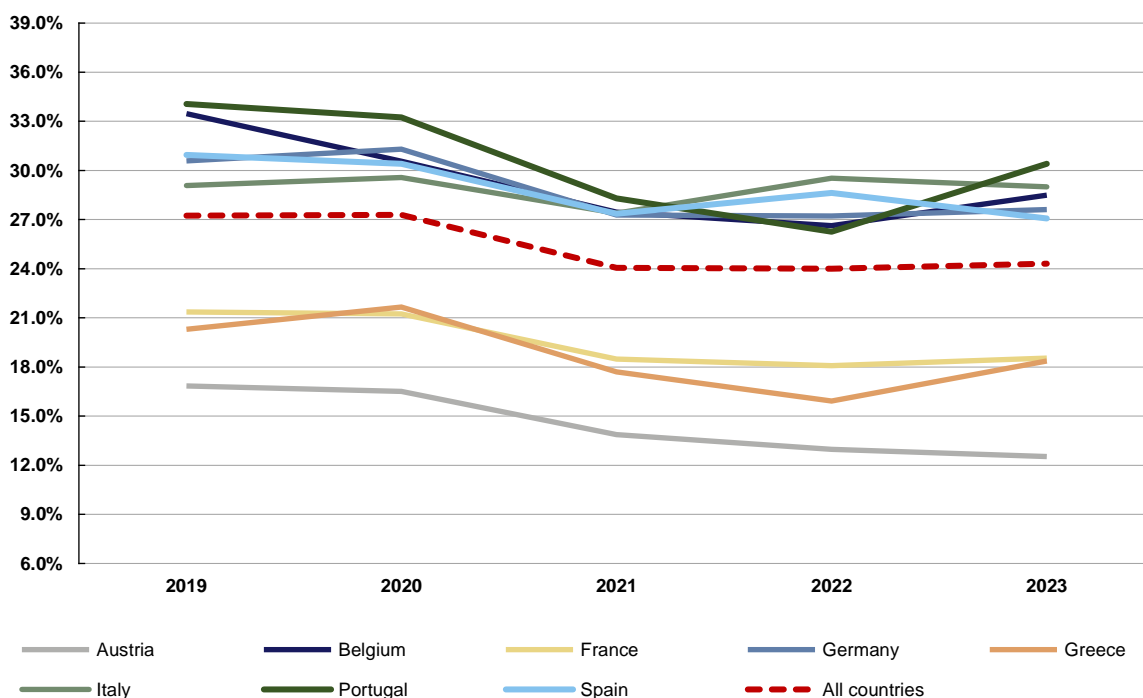
Source: ERICA 2023 sliding sample.



Source: ERICA 2023 sliding sample.

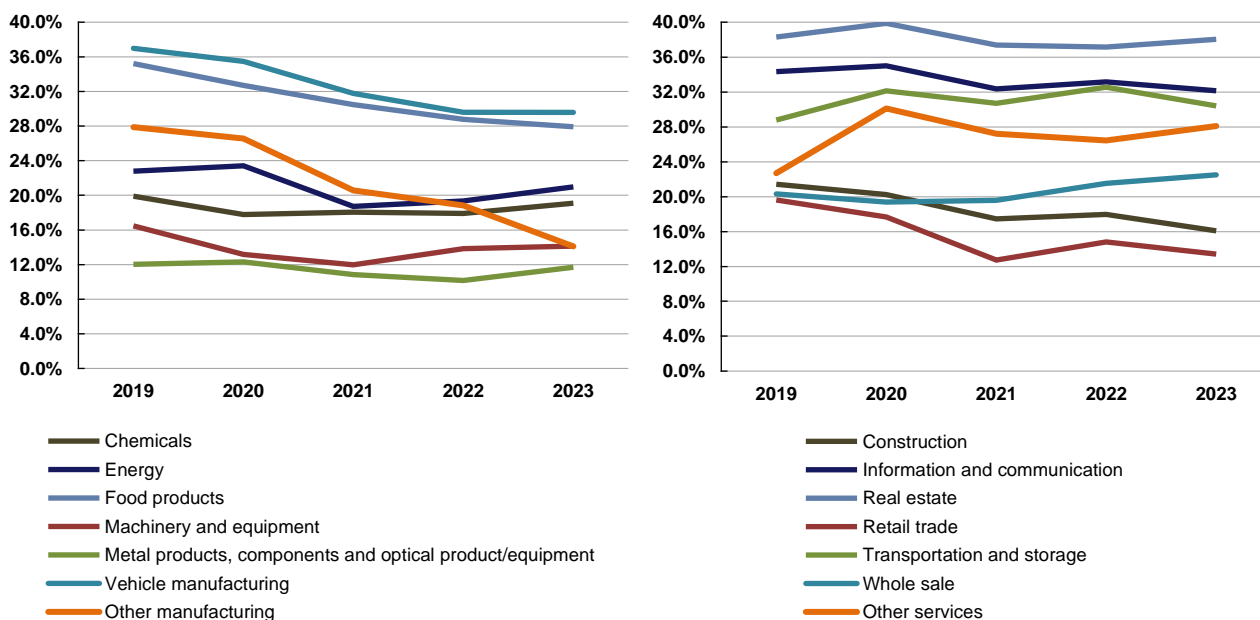
ANNEX C: NET INDEBTEDNESS – WEIGHTED AVERAGE BY COUNTRY AND BRANCH OF ACTIVITY

1. WEIGHTED AVERAGE NET INDEBTEDNESS BY COUNTRY 2019-2023



Source: ERICA 2023 fixed samples.

2. WEIGHTED AVERAGE NET INDEBTEDNESS BY BRANCH OF ACTIVITY 2019-2023



Source: ERICA 2023 fixed samples.

ANNEX D: DEFINITION OF MAIN RATIOS

PROFITABILITY		
NAME	DESCRIPTION	FORMULA
EBITDA	Earnings Before Interest, Taxes Depreciation and Amortisation (proxy for operating cash flow)	(Profit (loss) from operating activities + depreciation and amortisation + impairment losses) _t
EBIT	Earnings Before Interest and Taxes	Profit (loss) from operating activities _t
Profit/Loss	Profit/Loss after Taxes	Profit (loss) from operating and financing activities after taxes _t
EBITDA/Total Assets	Earnings Before Interest, Taxes Depreciation and Amortisation / Total assets, also known as EBITDA-ROI (proxy for operating cash flow per monetary unit of assets invested)	(Profit (loss) from operating activities + depreciation and amortisation + impairment losses) _t / Total assets _t
EBIT margin	Earnings Before Interest and Taxes / Revenues	Profit (loss) from operating activities _t / Revenues _t
ROE	Return on Equity	Earnings Before Taxes _t / Equity _t
FINANCIAL STRUCTURE AND COST OF DEBT		
Equity Growth	Change in consolidated equity year on year (YoY)	Equity _t / Equity _{t-1-1} or (Equity _t -Equity _{t-1}) / Equity _{t-1}
Equity Ratio	% of total assets financed with equity (a kind of leverage ratio)	Equity _t / Total assets _t
Cost of Debt	Weighted (by external financing source) average cost of external financing debt	Total interest expense _t / Financial debt _t
Financial Debt Ratio	Use of credit to finance operations and investment	Non-current and current interest-bearing borrowings _t / Total assets _t
Net Indebtedness Ratio	% of total assets financed through external borrowings that are not covered by cash or cash equivalents	(Non-current and current interest-bearing borrowings _t - Cash & cash equivalents _t) / Total assets _t