

European non-financial listed groups: Analysis of 2019 data

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

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EUROPEAN NON-FINANCIAL LISTED GROUPS: ANALYSIS OF 2019 DATA

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

The data used in this study is obtained from publicly available financial statements of European non-financial listed 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 ERICA (in the whole dataset of approximately 1,000 groups) is well-attuned to the situation and national composition of the stock markets. The analyses performed in this document, with the proviso expressed in the previous paragraph, provide a view of the position and performance of listed non-financial European groups. However, the analysis includes some commentaries on the performance of listed European groups according to the country where the parent company is based. The largest ERICA groups are multinationals, whereby the following has to be borne in mind: the performance of the groups belonging to 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 graphs 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.

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I. EUROPEAN NON-FINANCIAL LISTED GROUPS: INTRODUCTION AND MAIN FINDINGS FROM 2019 DATA

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 2019 database (close to 1,000 listed non-financial groups, with a total of approximately € 8,200 billion in assets and € 4,600 billion in revenue), with the most relevant facts for the year 2019 regarding the profitability and financial structure of European listed non-financial groups, as well as the financial debt structure and cost of debt. Furthermore, an exceptional additional chapter is devoted to the impact of the Covid-19 pandemic crisis on the financial performance and structure in 2020. For accounting periods 2017 to 2019, the ERICA database also includes data from Turkish non-financial listed groups. As a result, analysis that is limited to the 2018-2019 period does take into account the Turkish data². For five-year period time series, however, the information available is not sufficient and Turkish data had to be excluded. This document is supplemented by other documents, known as “the ERICA series”, which provide deeper analysis of consolidated groups on a variety of themes (including the impact of non-recurrent items, cash flow statement analysis and goodwill), some of which are currently under development.

This report uses three different samples³:

- A *static* sample: This sample includes all groups for which data is collected in ERICA for the year 2019. The static sample consists of 947 groups;
- A *sliding* sample: This sample is obtained by selecting all groups for which data is collected in ERICA for both 2018 and 2019. The sliding sample encompasses 858 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 is collected in ERICA for each year over the 2015-2019 period. The fixed sample captures 657 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)⁴. For all conclusions derived from the total data, the same strictures (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).

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 are regarded as more accurately representing 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.

² Except for the cost of debt analysis, due to the unavailability of interest expenses data.

³ Figures refer to the global samples.

⁴ All country doubles are by definition global doubles as well.

The main findings of the study using 2019 data are:

1 The deterioration in operating results and profitability continued in 2019.

The positive trend as reported by European listed groups in previous years came to a stop in 2017 and turned into a downward trend over the last two years. While aggregate revenue rose by 4 %, the figures for 2019 revealed a decline in aggregate EBIT and profit before tax of about - 3 % and - 6 % respectively. All these variables, in particular EBIT and profit before tax, have again been influenced significantly by large energy groups and outliers. Excluding these, the adjusted figures showed only minor changes as – across all countries – those effects balanced out broadly equally in both directions. However, considerable effects on some individual countries were apparent. Almost all profitability measurements analysed in this document – the EBIT margin, the EBITDA-to-assets ratio and return on equity – showed a decrease in 2019, in both aggregate and median terms. In the (smaller) fixed sample covering the last five years, the total EBIT margin already shrank in 2018 – after an all-time high in 2017 – and continued the downward trend in 2019, mainly driven by the decline in EBIT in the most important industry sector. The country comparison of the median EBIT margin reveals shrinkage in most countries, except Spain and Portugal where the picture is, fairly stable and - most pronounced of all - French groups which posted sizeable growth rates boosted by the luxury goods industry and the telecommunication sector. Representing the overall downward trend, the Greek, Turkish and German groups, by contrast, showed large decreases in all profitability ratios, reflecting the extensive impact of the challenging environment. Despite the sizeable decrease in 2019, Turkish groups remained the most profitable of all ERICA countries in terms of EBIT margin. However, this must be seen in the context of a bias due to the selection of top Turkish companies.

2 Modified accounting rules result in poorer solvency and higher net indebtedness

Driven by retained earnings, total equity grew again in 2019, but at a slower pace than in the previous year. The slow-down in equity growth was mainly due to industry, particularly the German automotive industry, and services groups. Moreover, large groups completely offset higher growth rates of small and medium-sized groups. As balance sheet totals increased faster than equity, the upward trend in the median equity ratio came to an end in 2019, falling back to 38.4 %. The drop is observed in all country samples but is most pronounced for Greek groups. Although the degree varies, a decline in the median equity ratio is also recorded in all branches of activity except for the real estate sector. This branch of activity was least affected by the first application of the new accounting standard for leases – called IFRS 16 – that boosted balance sheet totals. As a result of this change in accounting rules, net indebtedness was negatively affected as well. The median ratio soared from 16 % in 2018 to 20 % in 2019. At country level, IFRS 16 seemed to have had little or no impact on Greek and Turkish groups, while Spanish groups were hit the hardest. In some activity branches – such as the trade sectors – the recognition of additional lease debts entirely wiped out deleveraging efforts of recent years.

3 New lease standard raises relative importance of lease debts but does not stop the downward trend in the cost of financial debt.

The financial debt structure of European non-financial listed groups was modified by the first adoption of the new lease standard in 2019. The relative number of groups reporting leases in their statement of financial position rose from 55 % in 2018 to 83 % in 2019. In half of the countries under review, leasing replaces borrowing from financial institutions as the most frequent source of financing. In terms of amounts raised, however, the share of leases is still only 11 %, despite considerable growth. The increased importance of lease debts is most pronounced in the trade sectors, other manufacturing and

other services. Financial market funding via bonds remains the main source of debt, except for Greek groups.

The current market conditions combined with the recognition of additional lease debts in the statement of financial position resulted in an overall decline in the median cost of debt. This might be explained by the fact that the terms of leases are on average more favourable than those of other types of debt. Thanks to this new approach, Italian groups joined their French counterparts in having the lowest median cost of debt. This measure remains highest among Greek groups. In general, the 2018-2019 decline can be observed in all sectors and size classes: but nevertheless, four branches of activity reported an increase in their median cost of debt in 2019. For construction groups, the median cost of debt remains nearly twice as high as for food manufacturing groups.

4 2020 half-year figures demonstrate that the Covid-19 crisis seriously affects the profitability and solvency of European non-financial listed groups.

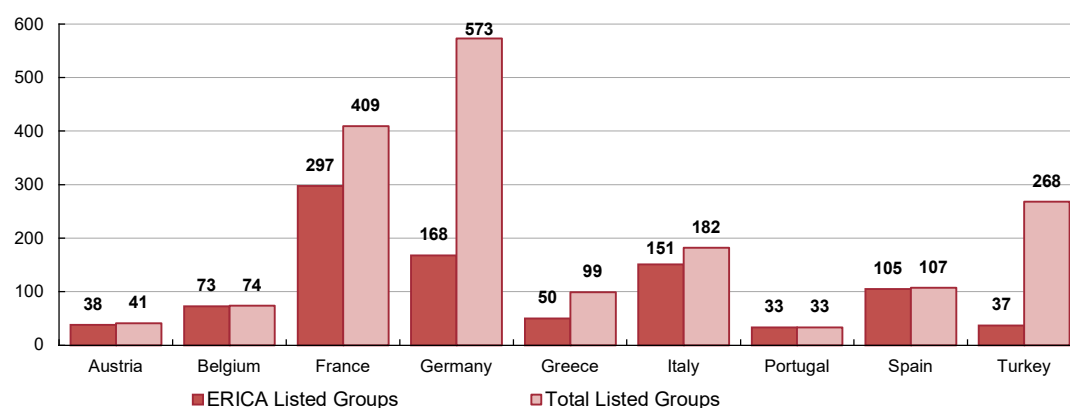
The outbreak of Covid-19 at the beginning of 2020 hit the world economy at full force. Nearly the whole of Europe went into lock-down, resulting in the temporary closure of manufacturing plants and other businesses. Up to now, the Covid-19 virus continues to rage and economic activity is bounded by restrictions in order to protect the safety and well-being of the people as much as possible. Based on a sample of 239 groups, it is clear that the economic consequences of this health crisis are substantial. During the first six months of 2020, the restricted economic activity resulted in a 15 % drop in revenue. This income reduction in combination with additional expenses (for safety measures, for instance) and overhead expenses that cannot be lowered in the short term, resulted in a much deeper impact on profitability: EBIT and profit/loss plummeted, with an overall negative impact on equity and the equity ratio. As operating cash flows also went down by a quarter, many groups were in danger of running out of liquidity over time. While during the first six months of 2019 there was still a financing cash outflow in all countries under review, a financing cash inflow was recorded everywhere – except in Portugal – in the comparable period of 2020. Balance sheet data reveals that these cash flows originated from an extension of interest-bearing borrowings, in particular short-term loans. However, the major part of these additional funds was not used immediately to finance operating activities or investments. Instead, these resources were kept as cash and cash equivalents in order to reinforce the liquidity position for what is yet to come. Further developments in 2020 and early 2021 indeed revealed that the crisis is still not under control, and therefore many have to bridge an even longer period of limited activity.

II. ERICA DATABASE: COVERAGE AND MAIN FIGURES

The 2019 ERICA database comprises 952⁵ groups. The 2020 Covid-19 pandemic outbreak meant a challenge for the WG with regard to the fulfilment of deadlines for constructing the ERICA annual database, given the economic activity shutdown. Fortunately, there were no significant delays regarding this aspect, so the ERICA WG was able to adhere to the set timetable.

The coverage of the ERICA database in absolute terms involves a number of listed groups studied for 2019, ranging from 33 real cases in Portugal and 37 in Turkey⁶ to 168 in Germany and 297 in France.

CHART 1 LISTED GROUPS BY COUNTRY IN 2019 (absolute number)



Source: ERICA 2019 static sample and national databases.

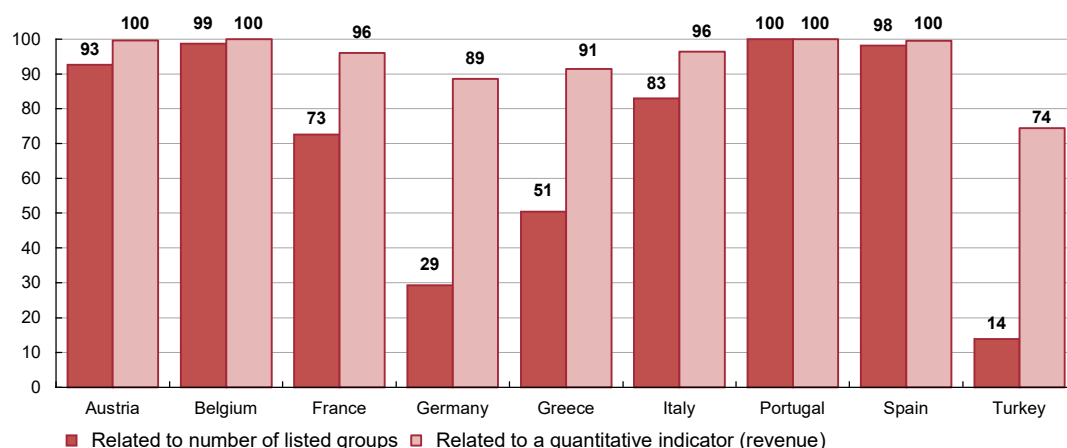
The ERICA database's coverage in terms of a quantitative indicator (revenue) in Chart 2 shows that it is highly representative of the total population of listed European non-financial groups: coverage is high for almost all countries, ranging from 74 % in Turkey and 89 % in Germany to 100 % in Austria, Belgium, Portugal and Spain.

In relative terms by number of listed groups, comparing the ERICA database with the total population of listed groups, the coverage rate varies from 14 % in Turkey to 100 % in Portugal.

⁵ The identification of doubles in ERICA listed groups leads to a reduction in the coverage, in both the nominator and the denominator, particularly in Italy (10), Germany (7), Belgium (1) and Spain (1).

⁶ Second year for which Turkish consolidated data is available.

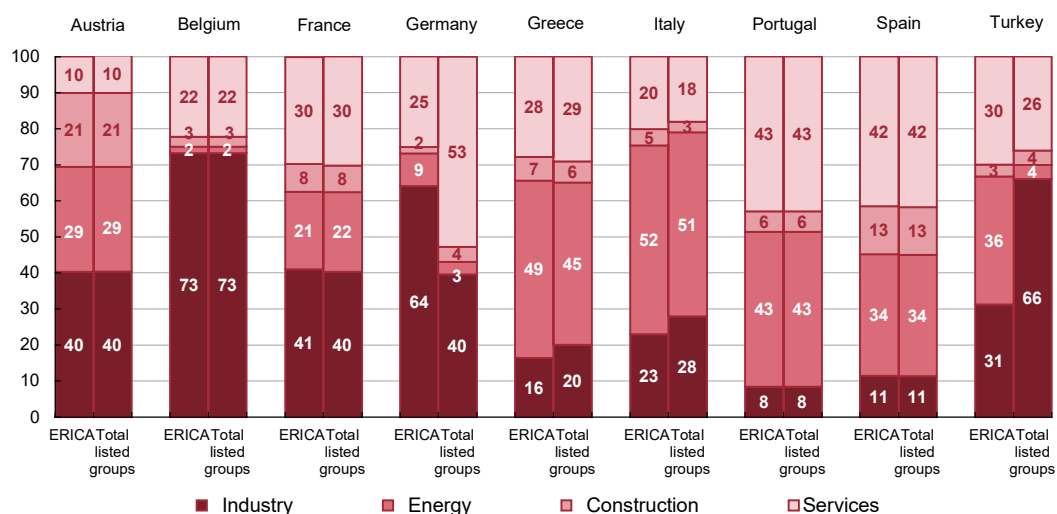
CHART 2 DATABASE COVERAGE IN 2019 (in % and in relation to total of listed groups)



Source: ERICA 2019 static sample and national databases.

The sectoral breakdown in Chart 3 for listed European groups differs greatly from country to country. Both sample and population are mostly similar in every country except in Germany and Turkey, where the industry and energy sectors respectively, are over-represented in the sample compared to the total population of non-financial listed groups. In the ERICA sample, industry is especially dominant in Belgium and Germany, and energy has a high weight principally in Italy and Greece. The share of the construction sector is largest in Austria and Spain. Lastly, the services sector is important in almost all the countries, being especially relevant in Portuguese and Spanish ERICA listed groups.

CHART 3 STRUCTURE BY COUNTRY AND SECTOR IN 2019 (in % of revenue)



Source: ERICA 2019 static sample and national databases.

III. PROFITABILITY: DECLINE IN MOST COUNTRIES DRIVEN BY INDUSTRY AND ENERGY

Profitability, along with the financial structure and cost of debt analysis set out in this document, is based on financial data for 2019, 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 according to the purpose of the analysis.

TABLE 1 ERICA: OVERVIEW OF AGGREGATE PROFITABILITY VARIABLES IN 2019

In € billion	Number	Total assets	EBIT	EBITDA	P/(L) before tax	Revenue
By country						
Austria	38	154.58	8.71	17.21	8.64	101.77
Belgium.....	73	357.18	21.54	34.43	17.02	155.19
France	297	3,064.84	161.85	296.32	141.27	1,719.43
Germany.....	168	2,599.10	96.17	241.65	88.93	1,611.16
Greece.....	50	63.21	0.59	6.17	-0.18	46.55
Italy	151	948.13	30.52	76.33	25.82	351.68
Portugal.....	33	109.01	5.33	11.34	4.56	71.09
Spain	105	780.27	33.98	82.09	25.47	420.45
Turkey.....	37	146.35	11.59	16.74	8.96	117.89
Total	952	8,222.68	370.28	782.27	320.48	4,595.20
By sector						
Industry.....	412	3,534.84	177.99	347.15	160.04	2,069.57
Energy.....	60	1,878.92	71.24	168.71	56.93	950.28
Construction.....	51	350.62	15.25	28.96	13.21	242.23
Services.....	424	2,386.76	104.77	229.77	89.64	1,282.76
Total	947	8,151.13	369.25	774.39	319.83	4,544.83
By size (revenue)						
Small groups (<250mn).....	349	106.35	3.79	6.91	3.42	33.61
Medium-sized (250mn -1.5bn) .	287	447.91	26.84	44.22	21.81	196.53
Large groups (>1.5bn)	311	7,596.87	338.62	723.26	294.59	4,314.69
Total	947	8,151.13	369.25	774.39	319.83	4,544.83

Source: ERICA 2019 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 2019 (filter used to avoid double-counting for each sector, size category and country), with data in € billion.

Chapter II shows how highly representative the ERICA database is for non-financial listed groups. Table 1 gives a breakdown of the 2019 static sample by country, sector and size. It reveals the high proportion of French and German groups in ERICA (as is the case in the total population): 49 % in terms of the number of groups and between 69 % and 72 % in terms of the other quantitative indicators. Regarding size, of all variables analysed in this chapter (assets, revenue, EBIT, EBITDA, profit/loss) between 92 % and 95 % are reported by the large groups (those with revenue of over € 1.5 billion). If we consider the main activity of the groups, the weight of the industrial groups is 43 % in terms of total assets, rising to 50 % for profit/loss before tax.

The second-biggest sector of activity for all variables is services (between 28 and 30 %). Taken together, the services and industry sectors account for 88 % of the number of groups analysed.

III.1 EBIT AND PROFIT BEFORE TAX: CONTINUATION OF LAST YEAR'S DECLINE AFTER FOUR YEARS OF GROWTH

After four consecutive years of steadily increasing aggregate figures for EBIT, the 2018 data on European listed groups already showed a 4 % decline, followed by another 3 % decrease in 2019. The energy sector, which has provided an additional boost in recent years, saw a moderate fall. However, there was a bias in several country samples due to the weight of this sector in the respective country data sets (sectoral breakdown shown in Chart 3). The sample of large groups was affected accordingly. Table 2 presents both the overall changes for the group samples and the adjusted values, excluding the impact of large energy groups and outliers.

TABLE 2 RATE OF CHANGE IN 2018-2019 (in %)

	EBIT	EBIT adjusted*	P/(L) before tax	P/(L) adjusted*	Revenue	Revenue adjusted*	Total assets
By Country							
Austria	0.5	-6.5	-1.1	-10.8	2.6	6.2	7.3
Belgium.....	-4.1	-6.1	23.9	-12.1	4.5	6.1	6.0
France	10.8	10.0	9.1	3.6	3.9	5.0	9.2
Germany	-14.7	-13.2	-18.3	-17.0	4.1	4.3	8.7
Greece	-78.7	-15.5	-109.9	-20.4	-2.8	-11.3	6.1
Italy	-6.0	-5.5	-17.5	25.9	3.0	6.4	8.4
Portugal	-5.9	-2.3	-12.0	-15.3	0.2	-4.8	8.3
Spain	-7.5	-5.5	-15.8	-13.9	3.1	4.7	8.2
Turkey.....	-16.0	-10.1	-18.0	-7.9	1.6	-0.3	11.5
Total	-3.1		-6.1		3.6		8.7
By Sector							
Industry.....	-4.8		-9.1		5.7		8.2
Energy	-3.7		-8.9		-0.6		6.4
Construction.....	9.1		4.1		5.1		10.8
Services	1.2		3.9		3.2		11.3
Total	-2.5		-5.4		3.6		8.7
By Size (revenue)							
Small groups (<250mln).....	8.9		9.5		3.7		11.3
Medium-sized (250mln-1,5bn)..	-0.4		-1.9		3.6		11.0
Large groups (>1,5bn).....	-2.8	-1.6	-5.7	-6.1	3.5	4.4	8.5
Total	-2.5		-5.3		3.5		8.6
Total adjusted*		-2.4		-6.5		4.4	

Source: ERICA 2019 sliding sample.

* excluding large energy groups from all samples and additionally excluding outliers in country samples and large groups.

Adjusted figures for 2019 (excluding large energy groups and outliers) show a 2.4 % decrease in aggregate EBIT. While the industry sector and the energy sector revealed a drop in EBIT and an even more pronounced fall in profit before tax compared to previous year, this was partly balanced out by the good performance of the construction and services sectors.

Regarding group size, only the small-sized groups posted a sizeable rise of around 9 %, whereas the medium-sized and large groups saw a slight decrease in adjusted EBIT (-0.4 pp and -1.6 pp respectively) and an even larger decline in profit before tax (-1.9 pp and -6.1 pp respectively). The aggregate EBIT figures of some countries in which energy groups have a large share of their sliding sample were strongly influenced by this sector. Depending on the determining factors, the effect on the country samples was either positive or negative.

The impact on the samples from Greece, Germany and Turkey was strongly negative, whereas the impact for Austria was quite positive.

The Greek sample exhibits the strongest negative impact of large energy groups on EBIT, caused by a large electric power company. High impairments of assets associated with the decommissioning of its lignite plants led to a massive loss. Excluding this effect, the EBIT rate of change improves from -78.7 % to -15.5 %, though remaining clearly negative. In fact, all sectors revealed negative growth rates, most of all the services sector driven by one telecommunication group that faced higher impairment losses on the assets of a Romanian subsidiary.

The German sample was also negatively affected by developments in the energy sector, though to a minor degree. In particular, one energy group faced a considerable EBIT fall due to effects outside the core business, such as an increase in other operating expenditures relating to financial derivatives and expenses resulting from the determination of own-use-contracts, as part of an initial purchase price allocation from 2018. Nevertheless, the drop in adjusted EBIT still stood at a substantial -13.2 %. The major contribution to this reduction in EBIT came from the German industry sector (the automotive and chemical industries) which suffered from unfavourable world economic conditions, international trade conflicts, the detrimental effect of Brexit and structural changes in the car industry. This adverse development is also shown in the median EBIT figures, which were mostly unaffected by the weight of large groups, thus confirming the far-reaching impact of the challenging environment on German listed groups.

After the exclusion of large energy groups in the Turkish sample, there is still a 10.1 % decrease in EBIT. In particular groups in the import-dependent energy and industry sectors faced rising production costs, mainly caused by higher expenses for imported energy products and raw materials.

In contrast, in the case of Austria large energy groups boosted the EBIT. Excluding their contribution, EBIT was down from 0.5 % to -6.5 %. However, this decline was mainly due to one large industry group, impacted by the slowdown in the automotive sector and the delayed start-up of a US automotive component plant. The services sector, in particular the real estate and information and communication subsectors, partly compensated for this development.

To sum up, in 2019 only one of the nine countries covered in the ERICA sample, namely France, managed to post rising adjusted EBIT. This exceptional achievement, considering the unfavourable world economic conditions, was positively influenced by French groups in the industry and services sectors, where the luxury goods industry and telecommunication groups in particular showed sizeable growth rates. However, the global downward trend was strongly influenced by the industry and energy sectors, which recorded sizeable decreases in 2019 after boosting the overall EBIT figures in previous years, thus weighing down many of the country samples.

Aggregate profit before tax showed an even stronger downward trend than EBIT. The aggregated total declined by 5.3 %, and by 6.5 % with adjusted values. There is a considerable difference between the unadjusted and adjusted values for some country samples, related once again to large energy groups and outliers mentioned for EBIT.

The Belgian sample shows a growth rate of 23.9 % in profit before tax. As in the previous year, it was strongly influenced by the figures for one sample-dominating brewing group. While that group's EBIT saw a slight decrease, the financial result rose sharply in comparison to the previous year due to high losses arising from financial instruments in the previous year and a considerable increase in financial income in 2019. If this group is excluded, Belgium records a 12.1 % drop in adjusted profits. While the services and construction sectors showed a slight increase, the industry sector suffered a notable decline, including one group in the chemical sector facing high impairments due to reduced expectations concerning the future growth of the shale oil and gas stimulation market.

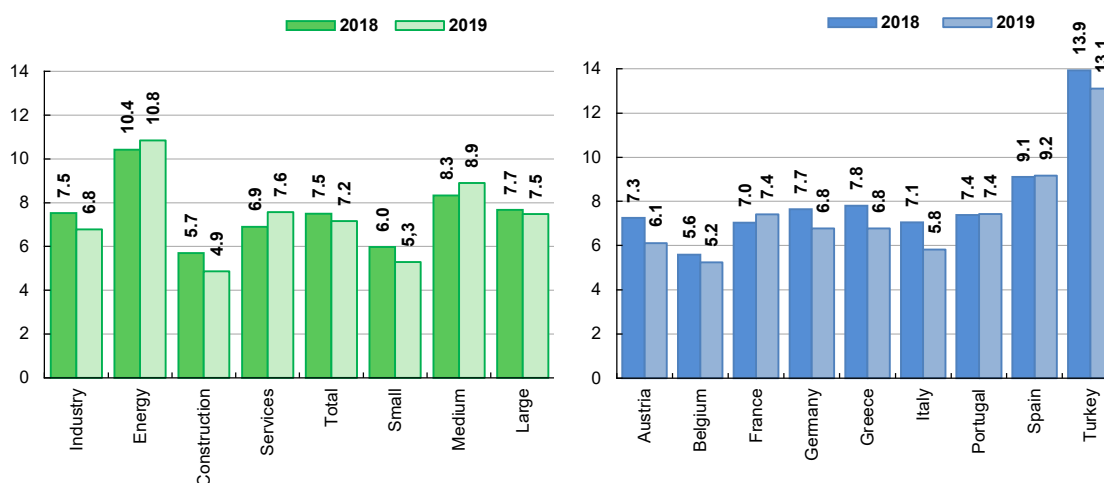
The Italian sample suffered a 17.5 % decline in profit before tax due to the strong negative impact of large energy groups. Beside impairment losses due to a weaker performance or less competitive plants and early decommissioning of coal-fired plants in the energy sector, one large group saw heavy losses on financial instruments due to a changed accounting policy concerning the recognition of commodities with physical delivery within the scope of IFRS 9 in 2019. Excluding large energy groups, the adjusted profit surged by 25.9 % in 2019. All sectors showed notable increases - most of all the services sector, including one telecommunication group recording substantial gains from litigation in 2019.

In 2019, the aggregate adjusted revenue of European listed groups was up by 4.4 %, the large energy groups having only a relatively small impact on the aggregate figures but showing a quite positive influence in the Greek and Portuguese samples.

III.2 EBIT MARGIN: SHRINKING MARGINS FOR MOST COUNTRY SAMPLES

The profitability analysis is based on the EBIT margin, measured as EBIT/revenue. The total EBIT margin decreased by 0.3 pp in median terms to 7.2 % in 2019. While the services (0.7 pp) and energy sectors (0.4 pp) posted increased EBIT margins, the industry (-0.7 pp) and construction (-0.8 pp) sectors both suffered a decline. Alternatively looking at the weighted average reveals a quite different picture due to the high impact of large groups, with a drop in all sectors except construction (see Annex B).

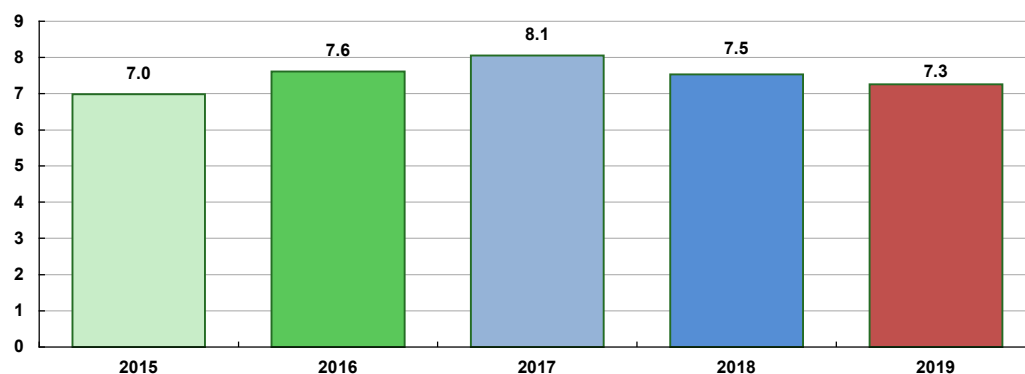
CHART 4 MEDIAN EBIT MARGIN – EBIT / REVENUE 2018-2019 (in %)



Source: ERICA 2018 sliding sample.

On the basis of a size comparison, medium-sized groups achieved the highest margin, as in 2017 and 2018, while small groups ranked lowest. Comparisons by country highlight that only the group samples for France, Spain and Portugal showed increased or at least stable margins. All other countries saw declining EBIT margins, most of all Italy (- 1.3 pp), Austria (- 1.2 pp), Greece (- 1.0 pp) and Turkey (- 0.8 pp), with Turkish groups once again posting the highest ratio in a country comparison, positively influenced by the sample selection itself. The coverage of the Turkish sample is lower than for the other countries (see Charts 1 and 2) and the selection is biased in favour of the most profitable groups.

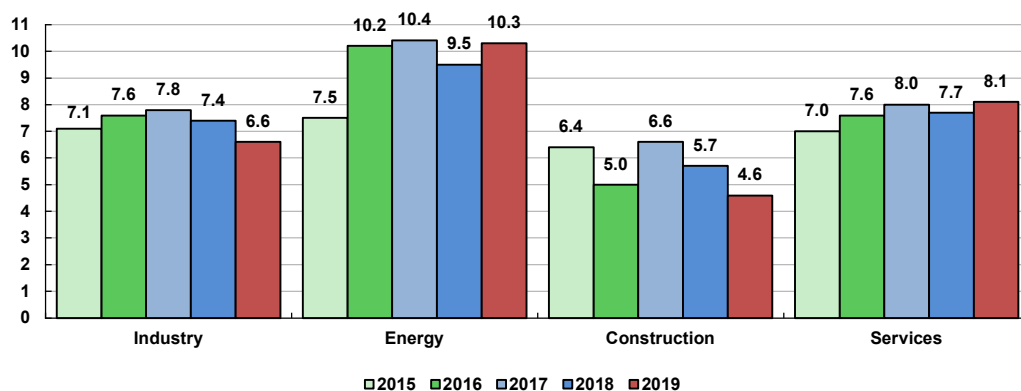
CHART 5 MEDIAN EBIT MARGIN – EBIT / REVENUE 2015-2019 (in %)



Source: ERICA 2019 fixed sample.

On a time-scale covering the last five years for a (smaller) fixed sample of groups, after an all-time high in 2017 and a 0.6 pp decrease in 2018, the 2019 median margin shrank by another 0.2 pp to 7.3 % and thus almost reached the all-time low of 2015 (see Chart 5). This development was mainly driven by the decline in EBIT in the most important industry sector and the construction sector over the last two years, resulting in the lowest margin at 4.6 % (see Chart 6). By contrast, due to a recovery in 2019, the energy sector achieved the highest median margin (10.3 %) and thus almost equalled the all-time high of 2017.

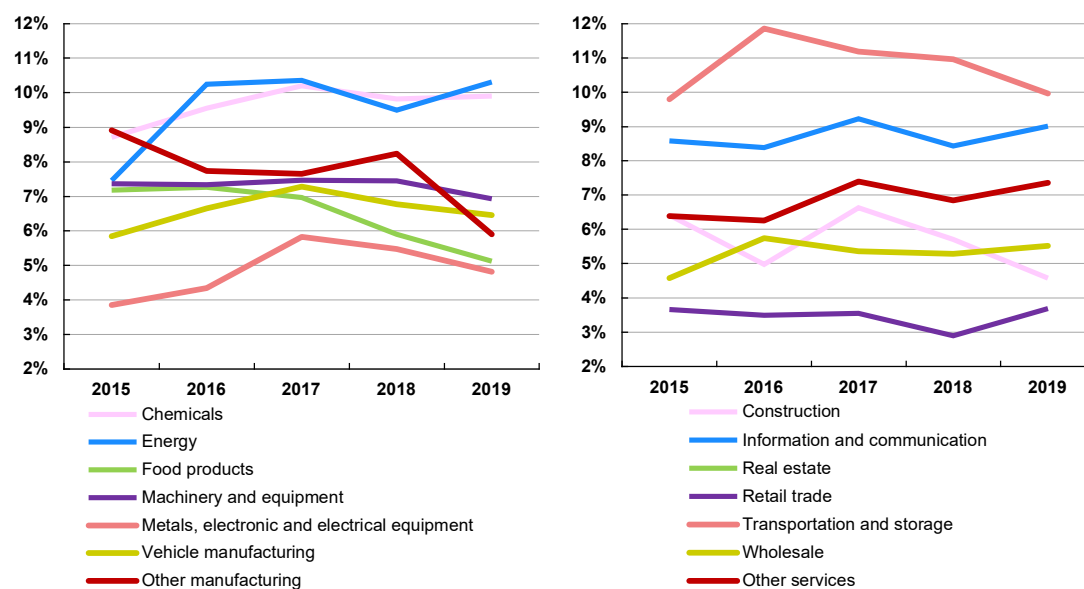
CHART 6 MEDIAN EBIT MARGIN BY SECTOR 2015-2019 (in %)



Source: ERICA 2019 fixed sample.

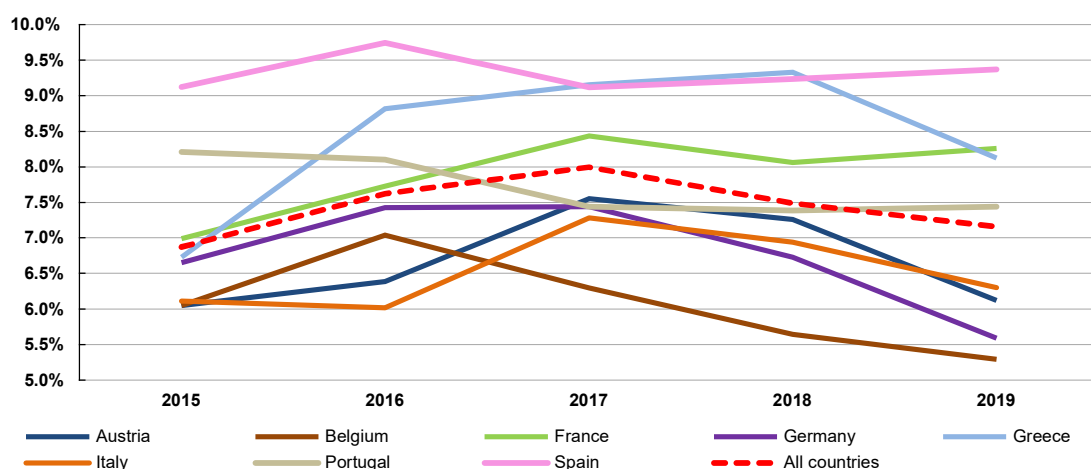
Analysis of the sectors according to branches of activity⁷ shows a contrasting picture. Within the industry sector most branches, above all other manufacturing (- 2.3 pp) followed by food products (- 0.8 pp) and metals, electronic and electrical equipment (- 0.7 pp) suffered a decline in their EBIT margin in 2019. By contrast, in the services sector, almost all branches showed a slight recovery, most of all retail trade (0.8 pp), information and communication (0.6 pp) and other services (0.5 pp) whereas the transportation and storage sector reveals a greater decline (- 1.0 pp). The real estate sector climbed to an all-time high and reached an EBIT margin of 89 % (not shown in Chart 7).

CHART 7 MEDIAN EBIT MARGIN BY BRANCH OF ACTIVITY 2015-2019



Source: ERICA 2019 fixed samples.

CHART 8 MEDIAN EBIT MARGIN BY COUNTRY 2015-2019



Source: ERICA 2019 fixed sample.

⁷ A definition of the different branches of activity is provided in Annex A.

The time series at country level reveals the downward trend in 2019 for almost all countries, most pronounced of all in the samples from Greece (- 1.2 pp), Germany (- 1.1 pp) and Austria (- 1.1 pp). In the samples from Portugal and Spain, the decline showed up earlier, in 2017. Consequently, Portuguese and Spanish groups remained almost stable in the last two years. Belgian groups saw a downward trend over the last three years and thus reached an all-time low (5.3 %) in 2019, while Spanish listed groups posted the highest margin at 9.4 % (see Chart 8).

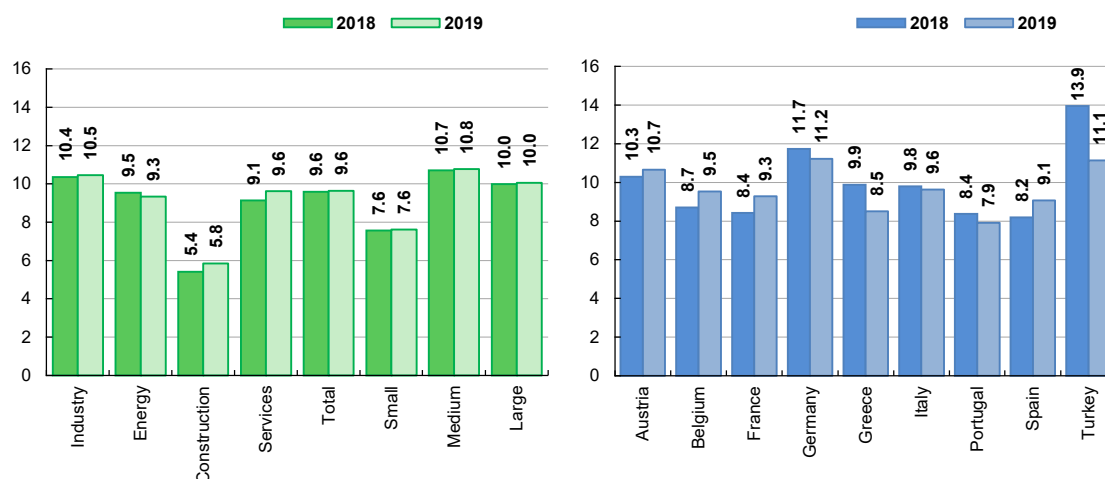
III.3 EBITDA-RATIO: STABLE SITUATION IN 2019

EBITDA is an approximate measure of a company's operating cash flow, calculated by looking at earnings before interest, taxes, depreciation and amortisation.

In 2019 the aggregate figures for assets and EBITDA of listed European groups showed sizeable increases of 9 % and 10 % respectively, both influenced by the first application of IFRS 16. While the lowest contribution in EBITDA came from the industry sector (8 %), all other sectors posted double-digit growth rates between 11 % and 18 %.

Chart 9 illustrates the ratio of EBITDA to assets. The median EBITDA-to-assets ratio was stable in 2019, at 9.6 %. While the industry sector maintained almost the same level, showing the highest ratio of 10.5 % in a sector comparison, the energy sector suffered a slight decline in growth rates (- 0.3 pp). The services and construction sectors both showed a moderate increase (+ 0.5 pp and + 0.4 pp respectively) in 2019.

CHART 9 MEDIAN EBITDA TO ASSETS RATIO 2018-2019 (in %)



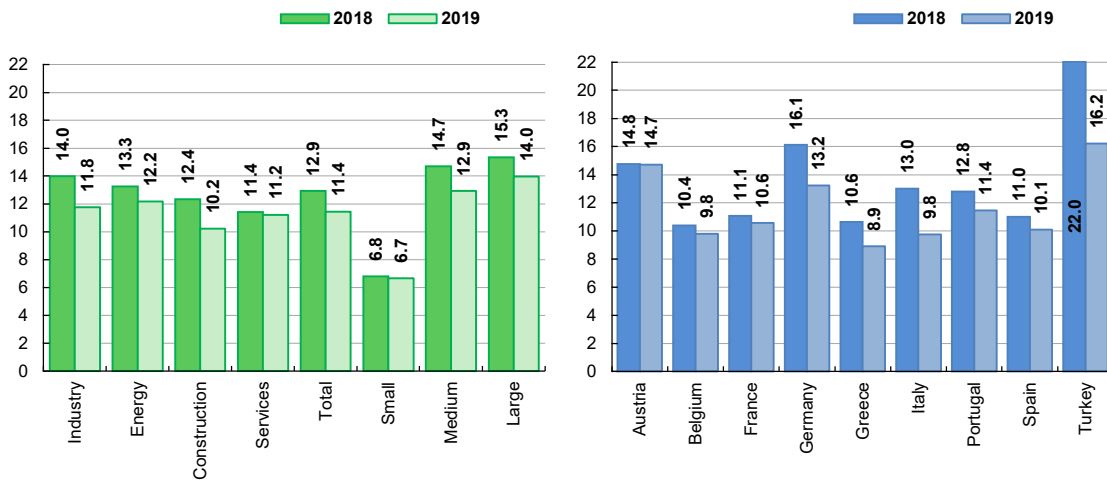
Source: ERICA 2019 sliding sample.

The country breakdown shows a notable decline for the Turkish (- 2.8 pp) and Greek (- 1.4 pp) samples, followed by German listed groups (- 0.5 pp), while French, Spanish and Belgian groups posted a considerable rise (+ 0.9 pp and + 0.8 pp respectively). Despite the downward trend in 2019, German and Turkish groups still achieved the highest median EBITDA-to-assets ratio (11.2 % and 11.1 % respectively), followed by Austrian groups with 10.7 %. The Portuguese sample, also showing a slight reduction (- 0.4 %), remained at the bottom of the rankings.

III.4 ROE: FALLING RATIOS FOR ALL SECTORS AND ALL COUNTRY SAMPLES

Looking at pre-tax profit in relation to equity, the median return-on-equity ratio posted by European listed groups in 2019 dropped substantially by 1.5 pp to 11.4 %. All sectors and every size group recorded at least a slight decrease in 2019, led by the industry sector (- 2.2 pp), followed by the construction sector (- 2.2 pp) and the energy sector (- 1.1 pp). On a size comparison, small groups again showed the lowest values on all profitability measures (6.7 %). In fact, the gap in relation to the medium-sized and large groups as regards return on equity is strikingly large.

CHART 10 MEDIAN RETURN ON EQUITY: PROFIT (LOSS) BEFORE TAX / EQUITY 2018-2019 (in %)



Source: ERICA 2019 sliding sample.

The country breakdown reveals a downward trend for all country samples in median terms. The Turkish groups, in particular, saw a dramatic decline (- 5.8 pp), although they held on to the top position in the country comparison with a ratio of 16.2 % due to their country sample biased in favour of the most profitable groups. Also, Italian and German groups posted substantial declines in 2019 (- 3.2 pp and - 2.9 pp respectively), followed by Greek groups (- 1.7 pp), which came bottom of the ranking with a ROE of 8.9 %. Austrian groups alone were able to almost maintain the previous year's high level at 14.7 %, due to fairly proportional growth rates in profits and equity.

IV. FINANCIAL POSITION DROPS SIGNIFICANTLY, MAINLY AFFECTED BY NEW LEASING STANDARD

The ERICA dataset provides information on listed corporate groups in continental Europe. For the year 2019, the database covers almost 1,000 groups, thus providing a highly relevant assessment of the non-financial sector in continental Europe. Based on data for non-financial enterprise groups with assets worth approximately € 8.2 billion, this chapter provides an analysis of the key financial structure items. As the 311 largest groups account for more than 93 % of total assets in 2019, they dominate the aggregate figures. Therefore, median numbers are reported in the chapters, but weighted averages are also shown in Annex C.

TABLE 3 OVERVIEW OF AGGREGATE FINANCIAL STRUCTURE POSITIONS IN 2019

In € billion	Number	Total assets	Financial debt	Cash & cash equivalents	Equity
By country					
Austria	38	154.58	38.75	12.61	63.34
Belgium	73	357.18	137.36	20.05	131.39
France	297	3,064.84	903.93	255.51	1,073.82
Germany.....	168	2,599.10	928.08	146.73	769.50
Greece.....	50	63.21	22.06	8.83	20.06
Italy	151	948.13	346.09	52.96	228.25
Portugal	33	109.01	43.24	6.67	32.91
Spain	105	780.27	298.46	59.91	238.73
Turkey	37	146.35	54.24	26.19	56.29
Total	952	8,222.68	2,772.21	589.46	2,614.30
By sector					
1. Industry.....	412	3,534.84	1,192.73	270.01	1,244.16
2. Energy	60	1,878.92	538.60	106.21	556.74
3. Construction.....	51	350.62	114.80	43.52	88.17
4. Services.....	424	2,386.76	909.82	164.23	705.18
Total	947	8,151.13	2,755.94	583.97	2,594.24
By size (revenue)					
1. Small groups (<250mln).....	349	106.35	33.13	12.00	55.40
2. Medium-sized (250mln-1,5bn).....	287	447.91	168.19	45.52	181.85
3. Large groups (>1,5bn)	311	7,596.87	2,334.63	526.45	2,356.99
Total	947	8,151.13	2,755.94	583.97	2,594.24

Source: ERICA 2019 static sample.

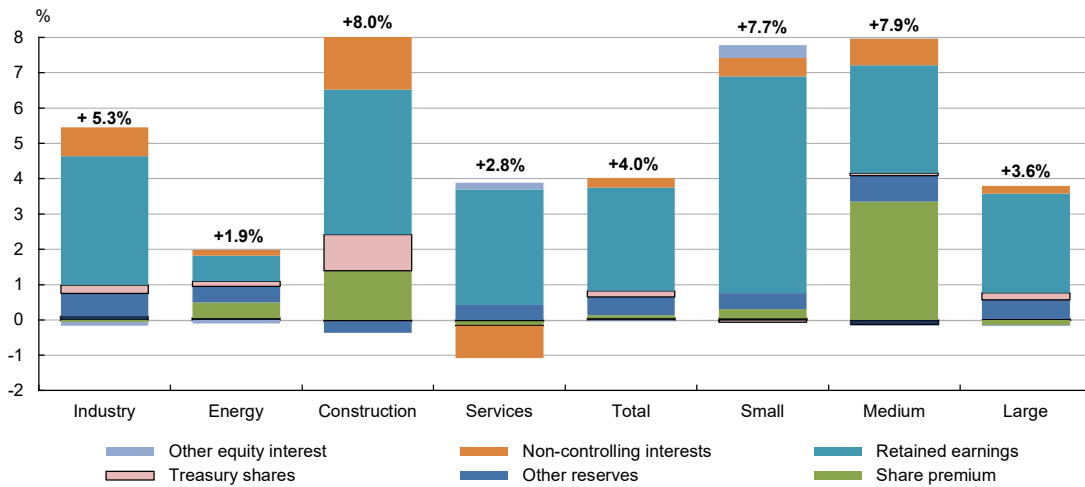
Note: The number of firms by country and by sector or by size differs: some double-counted groups are in different countries but belong to the same sector. Main figures for 2019 (filter used to avoid double-counting for each sector, size and country), with data in € billion.

IV.1 DECLINE IN EQUITY GROWTH

Rate of equity growth declines in 2019: retained earnings remain the key driver

Chart 11 gives an overview of changes in equity in 2019. For the various sectors and size classes, the growth contributions of seven classes of equity are presented.

CHART 11 CONTRIBUTIONS TO EQUITY GROWTH IN TOTAL, BY SECTOR AND BY SIZE IN 2019



Source: ERICA 2019 sliding sample.

Despite the acceleration in total asset growth of 8.7 % compared to 6.9 % in 2018, the level of equity growth declined by 1.8 pp in comparison to 2018 (+ 5.8 %) with 67.5 % of the companies in the sample experiencing some growth in equity. Chart 11 shows the contributions to equity growth by sector and size. The deceleration was mainly caused by declining equity growth rates in both industry and the services sector. Since the industry and services sectors combined account for 74.6 % of the equity, the soaring construction sector figure (equity + 8.0 %) and the rising equity growth rate in the energy sector were not sufficient to offset the movement in those sectors.

The main contribution to equity growth at individual level stems from a Belgian group in the industry sector accounting on its own for more than 13.9 % of the total equity growth. Retained earnings remained a key contributor to equity growth across all sectors and all size classes, accounting for about 80 % of the total. It was only in case of medium-sized companies that share premiums also made a significant contribution to equity growth. The reason for this is a Spanish group in the services sector, which raised capital by twice issuing new shares in 2019.

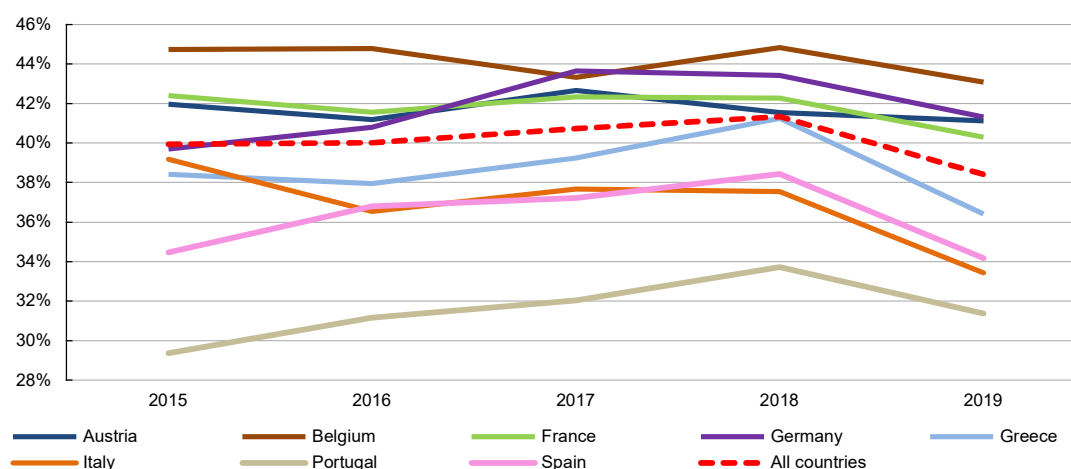
The equity growth rate of the industry sector slowed down in 2019 to 5.3 % from 8.2 % in the previous period. This was mainly due to declining contributions to equity growth from the German automotive industry. In the energy sector, most of the growth in equity was due to retained earnings of German, French and Spanish groups, which accounted for approximately two-thirds of the total equity increase in that sector. French companies are mainly responsible for the equity growth in the construction sector with one French group in particular accounting for 63.5 % of that growth. In this group, both retained earnings and a rise in non-controlling interests are responsible for the sharp peak in equity growth.

Among the size classes, variations are apparent in the level of equity growth. Medium-sized and small companies in particular experience an increase in the growth rate, whereas large groups face a rather sharp deceleration in equity growth.

Change in accounting rules breaks upward trend in equity ratio

Based on a fixed sample, Chart 12 shows that the upward trend in the median equity ratio peaked in 2018 (41.3 %), after which the ratio subsided to 38.4 %. Overall, this cannot be traced back to a deterioration in the level of equity, as balance sheet totals in general increased faster than equity. Balance sheet totals were boosted by IFRS 16 being applied for the first time. IFRS 16 requires a lessee to recognise assets and liabilities for nearly all leases with a term of more than 12 months, including those that used to be recorded off-balance under the former IAS 17. Therefore, when the new standard was first applied, that resulted in significant growth in lease debts. Only Austrian groups managed to limit the drop in the ratio to merely 0.4 pp. Austrian groups seem to have been relatively less affected by the new lease standard. This observation is confirmed in the next section. Further investigation revealed that the impact of IFRS 16 was most significant in services groups⁸, and coverage figures demonstrate that this sector is – in relative terms – least represented in the Austrian sample.

CHART 12 MEDIAN EQUITY RATIO BY COUNTRY 2015-2019



Source: ERICA 2019 fixed sample.

Greek groups were hit the hardest: their median equity ratio tumbled from 41.3 % in 2018 to 36.4 % in 2019. Twenty three out of 34 Greek groups in the sample experienced a deterioration in their solvency, driven by higher non-lease debts. Weighted average figures⁹ for Greek groups show a similar picture, except that the downturn started one year earlier and at a lower level. The analysis in the next section will demonstrate that this observation is not linked to higher net indebtedness overall¹⁰. Aggregate equity of Greek groups lost 9 % in value between 2017 and 2019, mainly due to negative results recorded by a large energy group. Albeit for a different reason, the 2019 weighted average equity ratios display an unfavorable trend for all countries, except for Belgium. Sustained by good profitability and debt

⁸ Based on the four broad sectors construction, energy, industry and services.

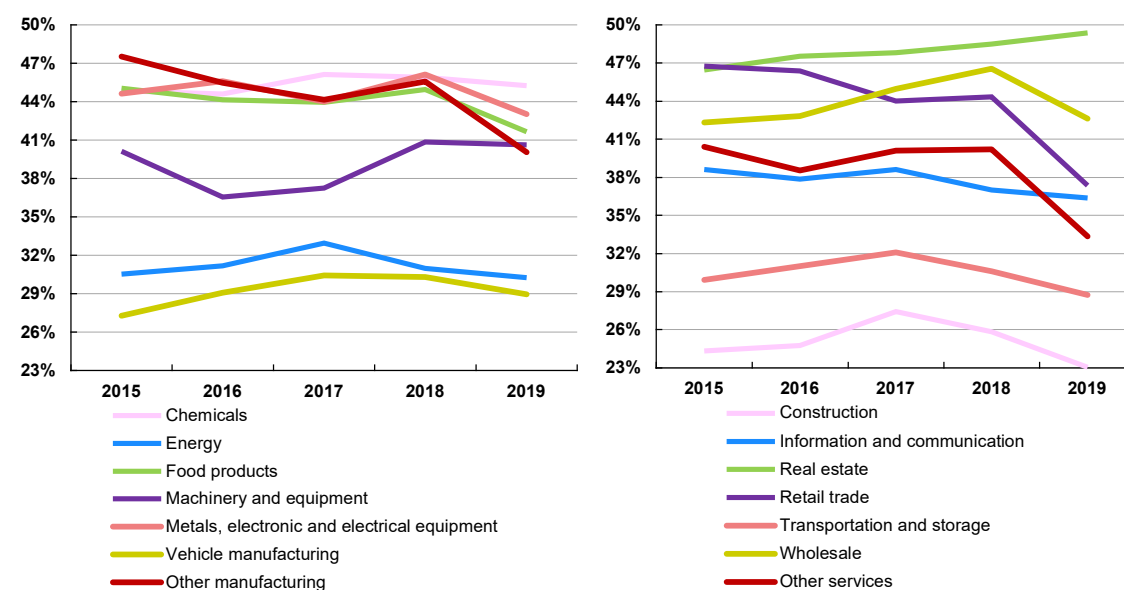
⁹ A chart showing the weighted average equity ratio per country is included in Annex C.1.

¹⁰ In the calculation of net indebtedness, higher debt is offset by increased cash and cash equivalents.

reduction, Belgium's biggest (brewery) group clearly marks its stamp on the country's weighted average, thus masking the situation in the majority of Belgian groups.

Chart 13 presents median equity ratios calculated by branch of activity¹¹. Real estate is the only sector that recorded a rise in the median equity ratio in 2019. Although the degree varies, IFRS 16 seems to have had an impact in many activity branches. Entities from the real estate sector, however, generally play a role as lessor rather than lessee. IFRS 16 significantly changes the accounting for lessees but has minimal impact for lessors. This results in a continuous improvement in the real estate sector's solvency over time, thus enlarging the gap with other branches of activity. The sharpest deterioration in solvency is observed in retail trade, other services and other manufacturing, both in median terms and as a weighted average¹². The most notable difference between the two measures is seen in the food industry. The median equity ratio of this sector dropped by 3.3 % while the weighted average increased by 3.1 % under the influence of the biggest Belgian group and two large French groups.

CHART 13 MEDIAN EQUITY RATIO BY BRANCH OF ACTIVITY 2015-2019



Source: ERICA 2019 fixed samples.

IV.2 HIGHER RATE OF NET INDEBTEDNESS

The net indebtedness ratio is calculated as the sum of the current and non-current financial liabilities reduced by cash and cash equivalents in relation to the total assets. It represents the proportion of an enterprise group's total assets that is financed through external borrowings, excluding cash and cash equivalents.

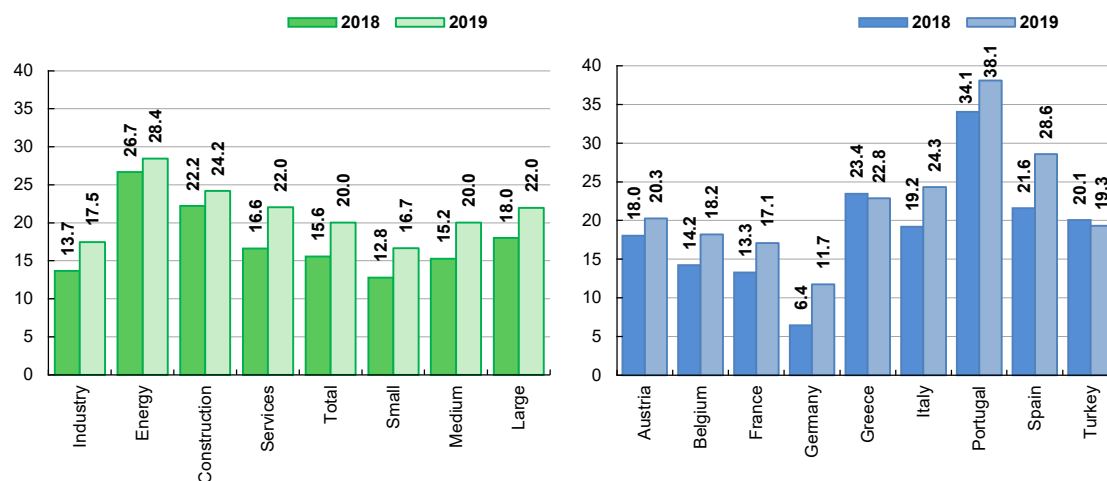
Chart 14 shows the median net indebtedness ratio for different sectors, size classes and country of location of the groups' parent entity in the sliding sample. The trend of a rising net indebtedness ratio continues and accelerates in 2019 with a rather sharp increase, from 15.6 % in 2018 to 20.0 %. This increase in the median net indebtedness ratio is visible across all sectors and size classes. The services

¹¹ A definition of the different branches of activity is provided in Annex A.

¹² Charts showing weighted average equity ratio per branch of activity are included in Annex C.2.

sector faced the highest increase of about 5.4 pp, while median net indebtedness in the other sectors rose by between 1.7 pp in the energy sector and 3.8 pp in the industry sector. In the case of the size classes, there is less disparity in the change in median net indebtedness. The change in the median net indebtedness ratio ranges from 3.9 pp for small companies to 4.8 pp for the medium-sized companies.

CHART 14 NET INDEBTEDNESS RATIO 2018-2019 (in %)



Source: ERICA 2019 sliding sample.

The country breakdown shows a certain fragmentation. Greece and Turkey both record a slight decline in the median net indebtedness, down by 0.6 pp and 0.8 pp respectively, whereas all other countries experience an increase. Spain, Italy and Germany show over 5 pp growth in the net indebtedness ratio. While all three countries face a steep increase in the median net indebtedness ratio, Spain and Italy started from a higher level with 21.6 % and 19.2 % respectively in 2018. The third group of countries experienced moderate growth ranging between 2.3 pp and 4.0 pp. Since the countries facing a higher increase in the median net indebtedness ratio outnumber the other countries, the median follows suit with an increase of 4.5 pp. In the majority of countries, the median net indebtedness ratio of large companies is significantly higher than that of small and medium-sized companies. However, there are two exceptions. The first is Portugal with a slightly lower median for large companies than that of small and medium-sized companies. The second is Austria with a significantly higher median for small and medium sized companies, mostly driven by the generally high net indebtedness ratio of small Austrian groups.

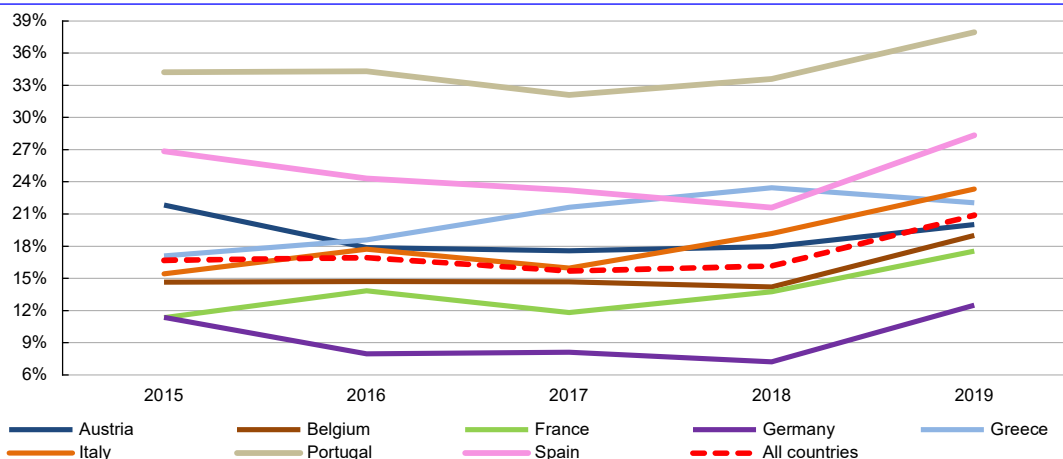
New accounting standard for leases breaks time series of net indebtedness

Based on a fixed sample of European non-financial listed groups, the median net indebtedness ratio remained fairly stable around 16-17 % between 2015 and 2018, but in 2019 this ratio climbed to 20.9 %. As already mentioned, the first application of IFRS 16 resulted in the recognition of additional lease debts. The impact of the new accounting standard is observed in all countries except Greece, where median net indebtedness dropped by 1.4 percentage points. A reduction in net indebtedness in three Greek groups had a positive impact on the median figure. Weighted average numbers¹³ also reveal that

¹³ A chart showing weighted average net indebtedness per country is provided in Annex C.3.

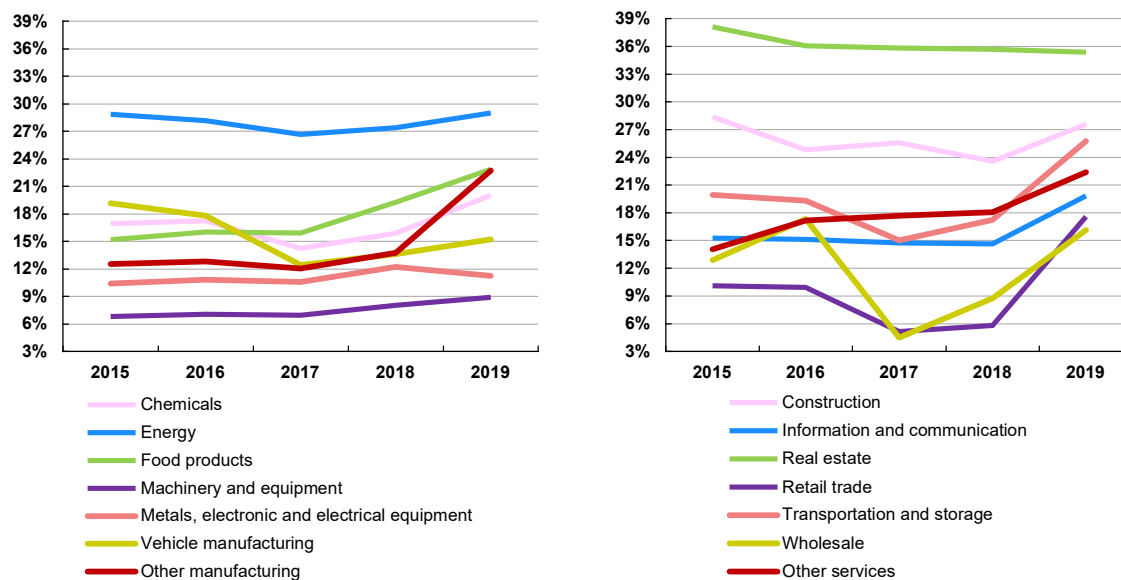
the new leases standard seems to have had a relatively smaller impact in Greek groups. Further investigation demonstrated that the energy sector was least affected¹⁴ by the introduction of IFRS 16, and coverage figures show that this sector is – in relative terms – best represented in the Greek sample. Given the limited weight of services groups in the Austrian sample (cf. section IV.1), the increase in this country's median net indebtedness was also less than that in other countries. Spanish groups posted the strongest rise in the median ratio.

CHART 15 MEDIAN NET INDEBTEDNESS BY COUNTRY 2015-2019



Source: ERICA 2019 fixed sample.

CHART 16 MEDIAN NET INDEBTEDNESS BY BRANCH OF ACTIVITY 2015-2019



Source: ERICA 2019 fixed samples.

Chart 16 clearly demonstrates that the impact of the introduction of IFRS 16 differs significantly from sector to sector. In some sectors, the recognition of additional lease debts entirely wipes out the

¹⁴ Based on the four broad sectors construction, energy, industry and services.

deleveraging efforts of recent years. The modified rules for the recognition of leasing contracts had only a limited impact on real estate groups and groups active in metal manufacturing, electronic and electrical equipment. For metals, electronic and electrical equipment, this observation is not confirmed by the weighted average figures¹⁵, which means that some bigger groups did recognise a substantial amount of additional lease debts. The most marked breaks in the time series were noted in retail trade, other manufacturing, transportation and storage and wholesale. In retail trade, only three groups out of 28 managed to reduce their net indebtedness in 2019. Similarly, in other manufacturing, transportation and storage and wholesale, only a minority of the groups deleveraged during the last year; this concerns approximately one quarter (other manufacturing) and one third of the groups respectively. As a result of this development in the trade sectors, machinery and equipment and metals, electronic and electrical equipment became the least indebted branches of activity, in both median and weighted average terms.

¹⁵ A chart showing weighted average net indebtedness per branch of activity is provided in Annex C.4.

V. FINANCIAL DEBT: FINANCIAL INSTITUTIONS CONTINUED TO BE THE MOST COMMON SOURCE OF FINANCING BUT LEASES ARE NOW LARGER IN AMOUNT DUE TO ADOPTION OF THE IFRS 16

In 2019, there were 915¹⁶ non-financial European listed groups available in the ERICA database. Nearly all of them had financial debt in their liabilities (99.9 %). This chapter provides an analysis of financial debt through the decomposition of its components: (1) financial institutions, (2) bonds issues, (3) leases and the cost of debt.

TABLE 4 ERICA: OVERVIEW OF FINANCIAL DEBT AGGREGATE VARIABLES IN 2019

In € billion	Number	of which financial debt	Financial debt	Financial institutions	Bonds issued	Leases	Interest expense
By country.....							
Austria	38	38	38.75	14.70	15.12	4.68	1.10
Belgium.....	73	72	137.36	16.95	104.74	6.85	5.10
France	297	297	903.93	169.93	489.60	108.05	18.68
Germany.....	168	168	928.08	167.31	524.76	91.59	16.98
Greece.....	50	50	22.06	10.57	8.99	1.84	0.88
Italy	151	151	346.09	138.45	152.46	28.36	10.41
Portugal.....	33	33	43.24	9.38	24.53	7.49	1.49
Spain	105	105	298.46	96.37	123.23	45.80	9.15
Total.....	915	914	2,717.97	623.67	1,443.42	294.66	63.77
By sector.....							
Chemistry.....	90	90	208.17	45.38	132.78	15.77	6.12
Construction.....	49	48	114.49	41.44	54.76	6.28	3.19
Energy	54	54	522.92	107.04	330.57	42.46	14.30
Food products	43	43	132.09	12.03	112.41	3.57	4.76
Information and communication.....	127	127	352.94	61.24	212.26	46.98	10.32
Machinery and equipment ..	59	59	61.39	11.18	37.04	5.39	1.80
Metals, electronic & electrical eq.	95	95	69.88	23.43	36.08	4.42	2.02
Other manufacturing	67	67	109.62	21.34	41.71	42.04	2.40
Other services.....	110	110	90.70	22.66	28.78	26.04	2.74
Real estate.....	48	48	99.15	33.73	58.58	2.50	2.01
Retail trade	40	40	83.13	17.63	24.19	28.66	2.19
Transportation and storage	34	34	233.22	106.40	56.23	38.21	5.59
Vehicle manufacturing.....	39	39	596.77	108.09	304.68	21.97	4.91
Wholesale.....	55	55	27.25	7.43	10.03	8.25	0.83
Total.....	910	909	2,701.70	619.03	1,440.10	292.56	63.19
By size (revenue).....							
Small groups (<250mln).....	348	347	33.08	17.09	9.12	3.58	0.91
Medium-sized (250mln-1.5bn)	274	274	160.92	76.67	53.85	17.78	4.27
Large groups (>1.5bn).....	288	288	2,507.69	525.27	1,377.13	271.20	58.01
Total.....	910	909	2,701.70	619.03	1,440.10	292.56	63.19

Source: ERICA 2019 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 2019 (filter used to avoid double-counting for each sector, size category and country), data in € billion.

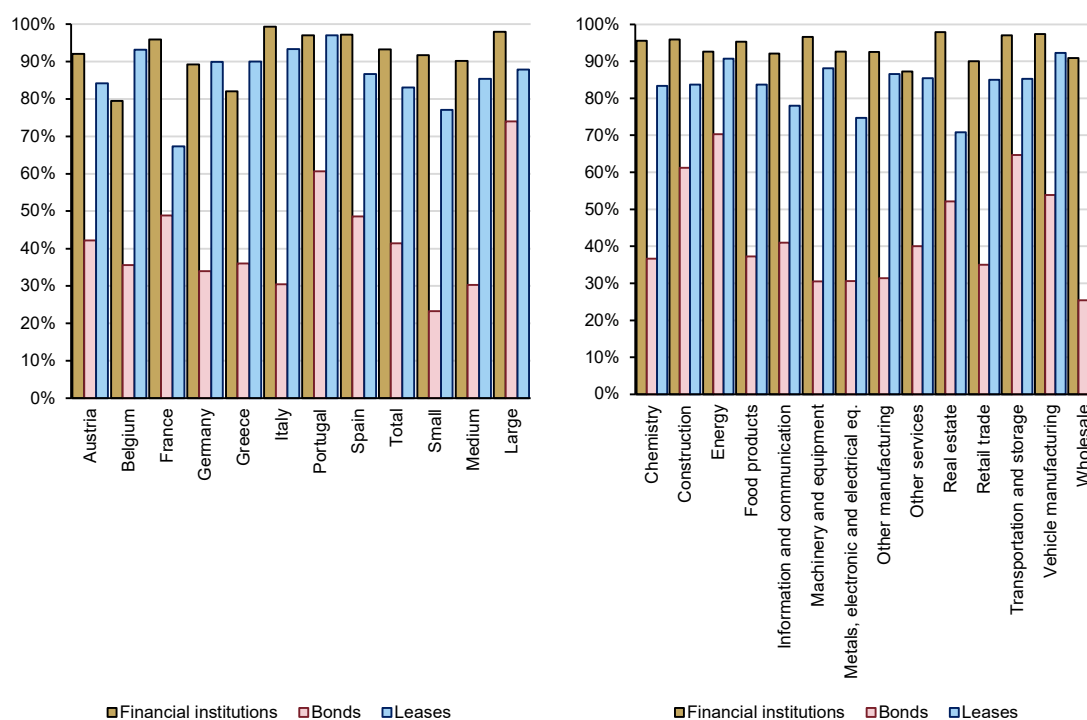
¹⁶ In this chapter, Turkish data has been disregarded, due to the unavailability of interest expenses figures.

V.1 FINANCIAL DEBT STRUCTURE: INCREASED WEIGHT OF LEASES DUE TO IFRS 16 IMPACT

Non-financial European listed groups kept their financial debt structure. Borrowings from financial institutions were an option for almost all groups across countries, sectors and sizes (Chart 17). The lowest observation of the series concerns Belgian groups (79 %) which in absolute terms is still quite expressive and by itself reveals the huge reliance on banking system funding of non-financial European listed groups.

Leasing funding increased in all countries, sectors and sizes due to the adoption of IFRS 16. That leveraged the financial statement position of a group as it introduced a new way of measuring lessees' lease transactions. A group had to start to record the right-of-use of a rented asset and a financial liability pegged to that lease agreement. Leases were an alternative funding option for 83 % of non-financial European listed groups overall, and within the range of 67 % (French groups) to 97 % (Portuguese groups) by country and 71 % (real estate groups) to 92 % (vehicle manufacturing groups) by sector. For Belgian, Greek and German groups, funding through leases becomes more relevant than bank funding in terms of the number of groups with access to it.

CHART 17 FINANCIAL DEBT STRUCTURE IN 2019 (number of groups)

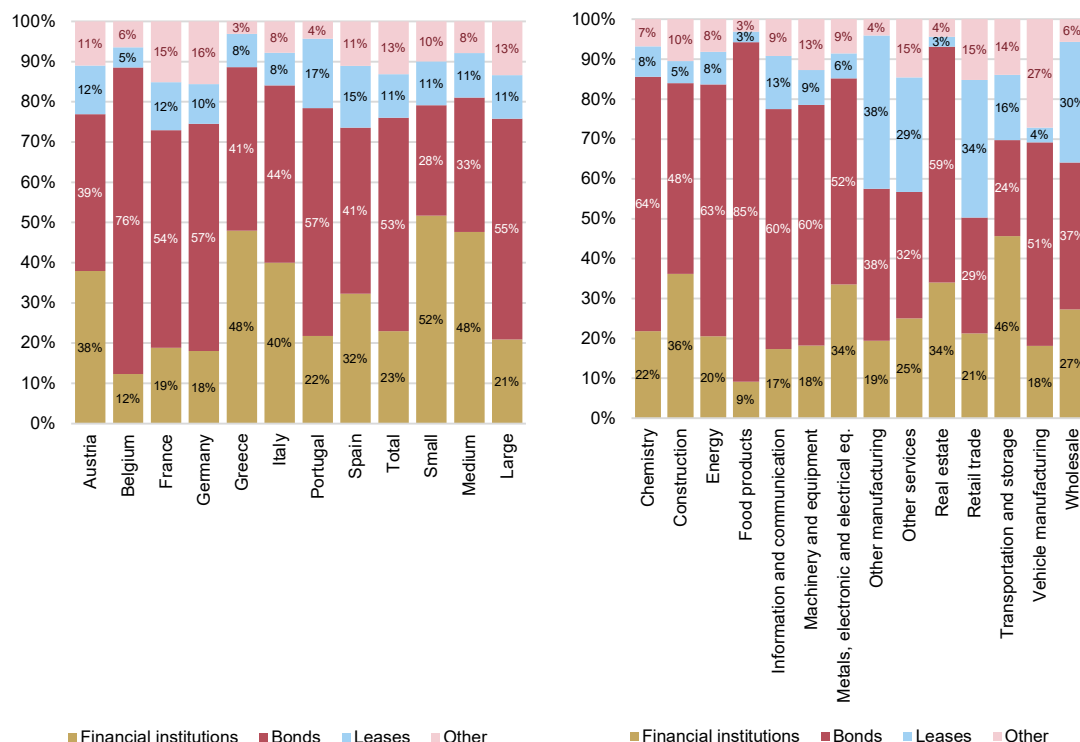


Source: ERICA 2019 static sample.

However, in terms of the amount raised, financial markets continued to be the principal way of accessing external interest-bearing funds (Chart 18). By country, only Greek groups diverge as they continue to obtain the majority of their funding from financial institutions. Overall, the financial markets covered 53 % of the funding needs of non-financial European listed groups. The highest figure was for Belgian groups (76 %) and the lowest for Austrian, Spanish and Greek groups (between 39 % and 41 %).

The distribution by sector reveals a heterogeneous picture regarding the amounts borrowed by source. Transportation and storage groups rely on financial institutions for the majority of their funding needs, whereas in other manufacturing, funding is obtained equally from either bond issuance or leasing. The remaining sectors follow the general pattern, obtaining most of their borrowing from the financial markets. In the case of food producing groups, that amounts to an impressive 85 %.

CHART 18 FINANCIAL DEBT STRUCTURE IN 2019 (total amounts)



Source: ERICA 2019 static sample.

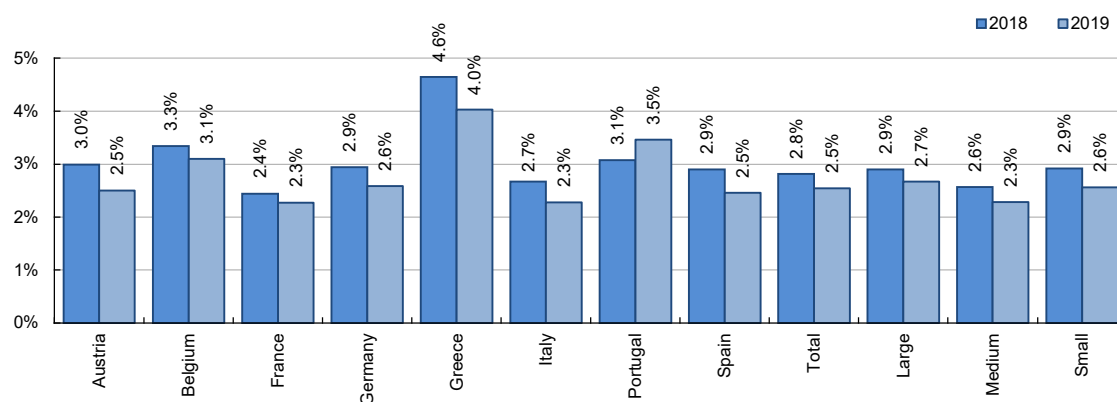
Lease funding is also relevant for retail trade, wholesale and other services groups besides the aforesaid other manufacturing sector. In all of these sectors, at least 29 % of funding came from this source. Regarding size, only large groups followed the general pattern. Small and medium-sized groups obtain most of their funding from the banking system.

V.2 DECREASING TREND IN COST OF DEBT BY COUNTRY, APART FROM PORTUGUESE GROUPS

In 2019, the median cost of debt of the European non-financial listed groups decreased by 0.3 pp (Chart 19). The decline was observed in each country with the single exception of Portuguese groups, which recorded an increase. The reasons are that Portugal has the largest proportion of small and medium-sized groups, and the cost of debt in the case of the new lease component is greater in the Portuguese groups.

The 2019 results confirmed previous years' findings, with French groups again having the lowest ratio of all and Greek groups the highest. The spread between them narrowed again as the Greek groups posted the biggest drop of all (- 0.6 pp). Italian groups also caught up with French groups' cost of debt. All group sizes recorded a slight decrease of 0.2 to 0.3 pp, with the medium-sized groups continuing to achieve the lowest value of all.

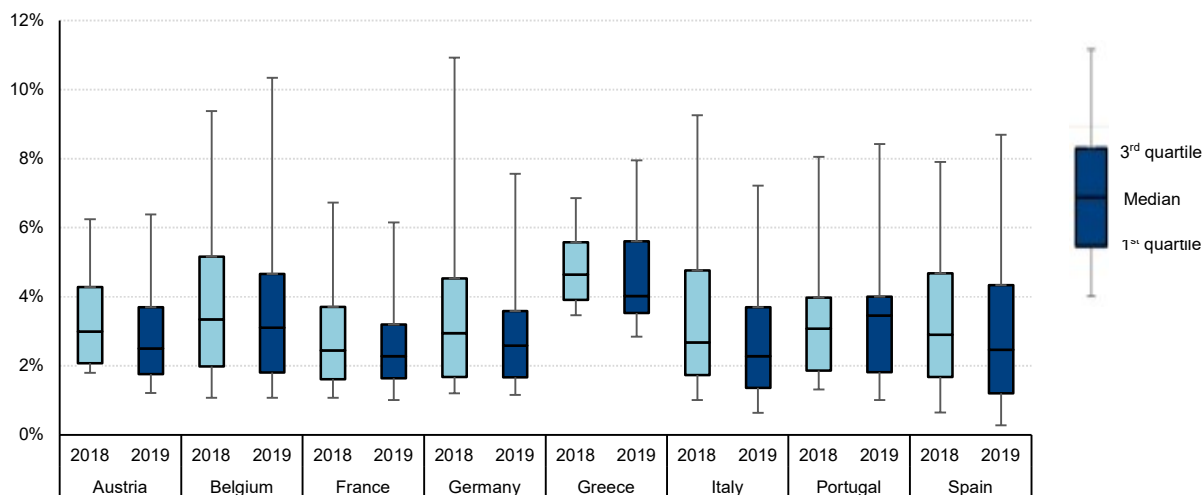
CHART 19 MEDIAN COST OF DEBT BY COUNTRY AND SIZE 2018-2019 (in %)



Source: ERICA 2018-2019 sliding sample.

Chart 20 tells a slightly different story. Although the median of cost of debt rose for Portuguese groups in 2019, the 1st and 3rd quartiles remained unchanged. The 1st quartile is roughly the same for all countries apart from Greek groups. It ranges from 1.2 % for Spanish groups to 1.8 % for Austrian, Portuguese and Belgian groups. The cost of debt of Greek groups is higher for all quartiles despite the catching up progress of previous years. The Greek group which is in the 1st quartile has a higher cost of debt than the French group which falls within the 3rd quartile and has a cost of debt similar to that of German and Italian groups in the 3rd quartile. The differences across groups within countries are higher for Spain and Belgium and lower for France and Germany, as interquartile ranges are between 3.1 % and 2.9 % for the former and between 1.6 % and 1.9 % for the latter. The interquartile range dropped by almost 1 pp for German and Italian groups.

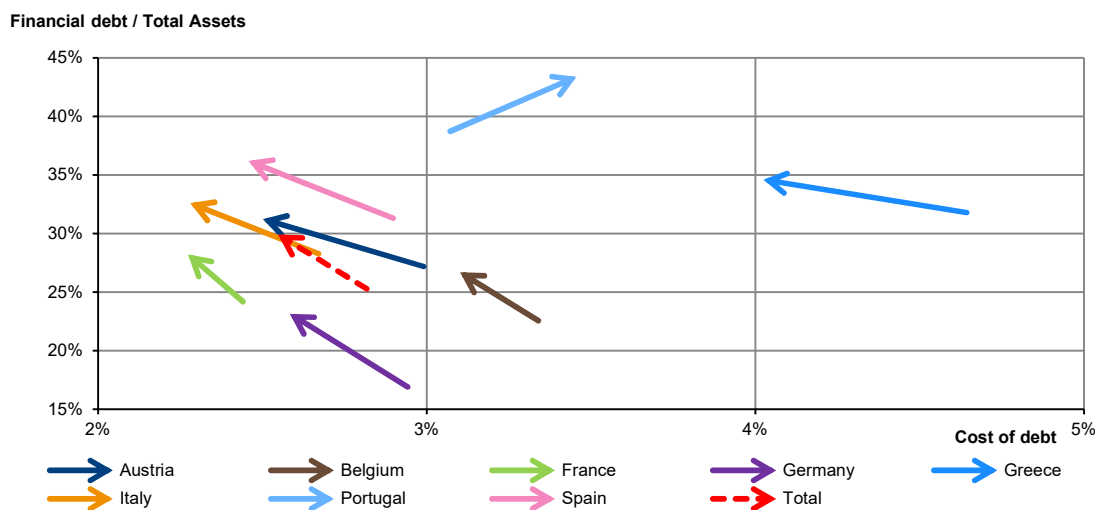
CHART 20 COST OF DEBT BOX PLOT BY COUNTRY 2018-2019



Source: ERICA 2018-2019 sliding sample.

The ratio of financial debt to total assets increased for all countries (Chart 21). That was mainly driven by the adoption of IFRS 16, which affected financial debt and balance sheet totals equally. In 2019, non-financial European listed groups had more assets financed by debt rather than equity compared with the previous year. German groups, which are the least leveraged groups of all, continue to have a higher cost of debt than their French, Italian, Spanish and Austrian counterparts. Indeed, in terms of the cost of debt, they were overtaken by the Austrian groups in the period. The Spanish groups have almost the same ratio of financial debt to total assets as the Greek groups but their cost of debt is 1.5 pp lower. It is also notable that the positive correlation between the ratio of financial debt to total assets and the cost of debt was only seen for the Portuguese groups, the most indebted ones in the sample.

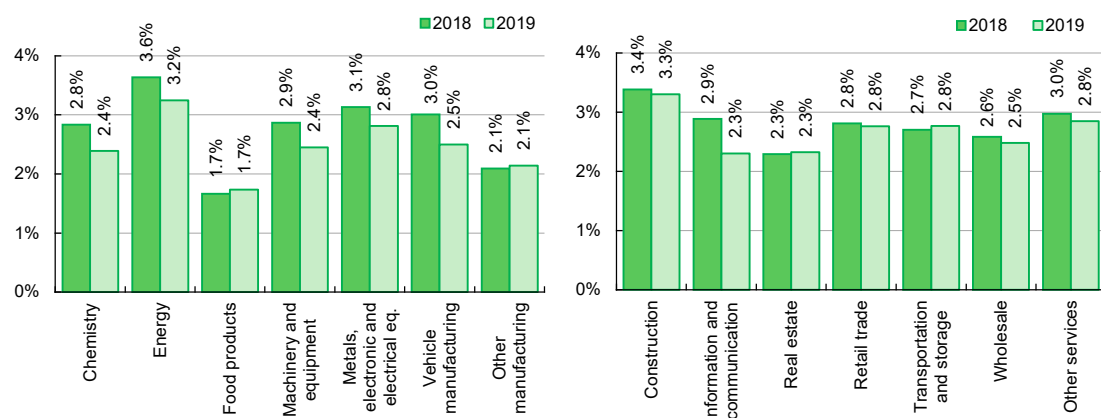
CHART 21 COST OF DEBT AND FINANCIAL DEBT TO TOTAL ASSETS BY COUNTRY IN 2019



Source: ERICA 2018-2019 sliding sample.

V.3 DOWNWARD TREND IN COST OF DEBT ACROSS ALMOST ALL BRANCHES OF ACTIVITY IN 2019

CHART 22 MEDIAN COST OF DEBT BY BRANCH OF ACTIVITY 2018-2019 (in %)



Source: ERICA 2018-2019 sliding sample.

The cost of debt according to branches of activity reveals a drop in almost all branches. Only food products, which still have the lowest level of all, and transportation and storage registered a marginal increase against the previous year. The biggest decline was recorded by a services branch, namely information and communication (- 0.6 pp), while several other branches of industry posted a less significant decrease in value, but with wide variations in the number of groups concerned. Chemistry, energy, machinery and equipment, vehicle manufacturing and metals, electronic and electrical equipment reduced their cost of debt by between 0.3 and 0.5 pp. Construction groups rank highest in regard to cost of debt in 2019, at the expense of energy groups which held that position in previous years.

VI. THE IMPACT OF COVID-19 ON EUROPEAN NON-FINANCIAL LISTED GROUPS

In order to assess the impact of Covid-19 on European non-financial listed groups, an additional analysis was carried out. For this purpose, data from the 2020 half-yearly reports of the principal groups in each country except Turkey was retrieved to compare the financial figures for the first semester of 2020 with those for the first and second semester of 2019¹⁷. The sample consists of 239 groups (Table 5). The number of observations per country amounts to around 30 and most of the groups considered are large, providing a representative sample on aggregate. 150 of the 239 groups analysed are large, 56 are medium-sized groups and only 33 are small. The sectors most represented in the sample are industry (105) and services (84), whereas the numbers of observations for energy (31) and construction (19) is lower. Nevertheless, this distribution is consistent with the ERICA database that covers yearly data for more than 1,000 European non-financial listed groups.

TABLE 5 PROFITABILITY INDICATORS RATE OF CHANGE IN 2019H1-2020H1 (in %)

	Number	EBIT	P/(L)	Revenue
By country				
Austria	30	-66.4	-73.2	-14.1
Belgium	33	-65.6	-102.8	-6.1
France	27	-67.9	-108.1	-17.3
Germany.....	29	-92.8	-133.2	-11.5
Greece.....	30	-91.1	-186.7	-23.0
Italy.....	30	-81.0	-159.4	-23.6
Portugal.....	31	-120.7	-86.0	-10.9
Spain	29	-79.2	-115.6	-19.4
Total	239	-78.5	-120.1	-15.2
By sector				
1. Industry.....	105	-77.6	-111.7	-17.4
2. Energy	31	-88.7	-140.2	-17.5
3. Construction.....	19	-63.3	-97.2	-9.8
4. Services.....	84	-69.7	-121.1	-8.9
Total	239	-78.5	-120.1	-15.2
By size (revenue)				
1. Small groups (<250mln).....	33	-44.4	-82.7	-17.1
2. Medium-sized (250mln-1,5bn).....	56	-42.4	-63.0	-11.0
3. Large groups (>1,5bn)	150	-79.3	-121.0	-15.3
Total	239	-78.5	-120.1	-15.2

Source: ERICA 2020H1 sample.

Besides the number of groups, Table 5 presents the rate of change of profitability indicators between 2020H1 and 2019H1. The profitability indicators addressed are EBIT, profit (loss), revenue and the cash-flow from operating activities. All countries covered show negative rates of change for most of these indicators. On aggregate, the rate of change of EBIT corresponds to - 78.5 %. Nevertheless, for

¹⁷ Data for the profitability analysis is gathered for 2019H1 and 2020H1 while data from the balance sheets (analysis on financial structure) is compared for 2019H2 and 2020H1.

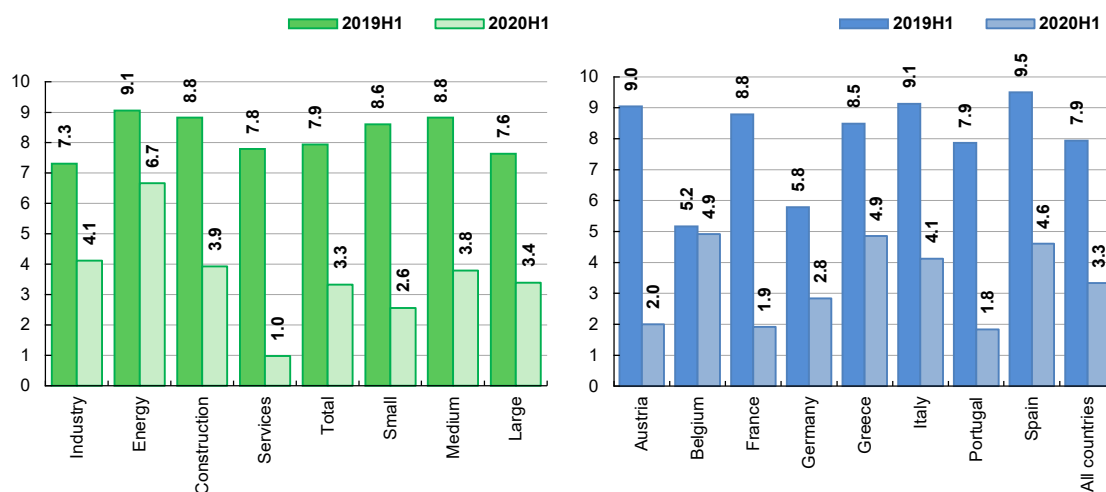
Portuguese groups the decrease in the EBIT came to 120.7 %. At the sector level, energy (- 88.7 %) and industry (- 77.6 %) were the most affected.

When it comes to profit (loss), the aggregate rate of change is - 120.1 %. Six of the eight countries show rates of change that exceeded - 100.00 %, namely, Belgium, France, Germany, Greece, Italy and Spain. The impact of the Covid-19 crisis on revenue is weaker, showing a decrease of 15.2 % overall. Energy (- 17.5 %) and industry (- 17.4 %) are the sectors which saw the greatest impact on revenue.

Chart 23 discloses the median EBIT margin for 2019H1 and 2020H1. Overall, the EBIT margin decreased from 7.9 % to 3.3 %. All countries display this dynamic, since all countries record a decline in the EBIT margin from 2019H1 to 2020H1, signalling the generalised impact of the Covid-19 crisis. Spanish, Italian and Austrian groups showed the highest margins in 2019H1 (9.5 %, 9.1 % and 9.0 %, respectively). In 2020H1, the margins plummeted to 4.6 %, 4.1 % and 2.0 % respectively. In fact, the Austrian sample shows the sharpest decrease in the EBIT margin out of all the countries in the analysis, followed by the French sample, whose EBIT margin fell from 8.8 % to 1.9 %. The smallest decrease can be seen for Belgian groups, whose EBIT margin diminished by 0.3 pp to 4.9 % in 2020H1. Out of 33 Belgian groups, twelve managed to raise their EBIT margin. Another five limited the decline to below 1 %. This is due to the composition of the sample. Telecom operators and pharma groups clearly suffered less during the first half of 2020. In addition, many other Belgian groups achieved a good performance for various reasons, among which a producer of critical components to many of the equipment to overcome the pandemic, a producer of basic chemicals for the production of drinking water and groups that successfully launched cost saving programs.

All sectors registered a decrease in the EBIT margin. It fell from 7.8 % to 1 % in services, from 8.8 % to 3.9 % in construction, from 9.1 % to 6.7 % in energy and from 7.3 % to 4.1 % in industry. The services sector is the most affected in terms of EBIT margin, but there is considerable heterogeneity within the sector. For instance, other services suffer a greater loss in terms of EBIT margin when compared with retail trade. At the level of group size, a similar picture emerges, since all group sizes show a decrease in the EBIT margin, and the reduction is similar across the board.

CHART 23 MEDIAN EBIT MARGIN – EBIT / REVENUE 2019H1-2020H1 (in %)



Source: ERICA 2020H1 sample.

Table 6 summarises some key indicators for the financial position and strength of the non-financial groups analysed. These selected indicators are financial debt, equity, cash and cash equivalents and total assets. Chart 24 displays the corresponding rate of change from 2019H2 to 2020H1 for the single components of the financial position indicators, including current and non-current interest-bearing borrowings. 236 groups for which data has been retrieved from their 2020 half-yearly reports record financial debt. Three groups were excluded from the analysis, as they do not report financial debt in 2020. Table 6 reveals that the financial indicators are predominantly based on major groups from Germany and France, which make up almost three quarters (approx. 70 %) of the total assets in the sample.

Overall, total financial debt increased by 10.3 % between 2019H2 and 2020H1 (Chart 24). The financial debt has risen in every country, ranging from 0.1 % in Spain to 14.9 % in France. An increase in financial debt is also apparent across all sectors. The groups in the services sector experienced the largest increase in financial debt with 15.1 %, followed by energy with 10.7 %, industry with 8.2 %, while construction saw the lowest increase, at 7.2 %.

TABLE 6 OVERVIEW OF AGGREGATE FINANCIAL STRUCTURE POSITIONS IN 2020H1

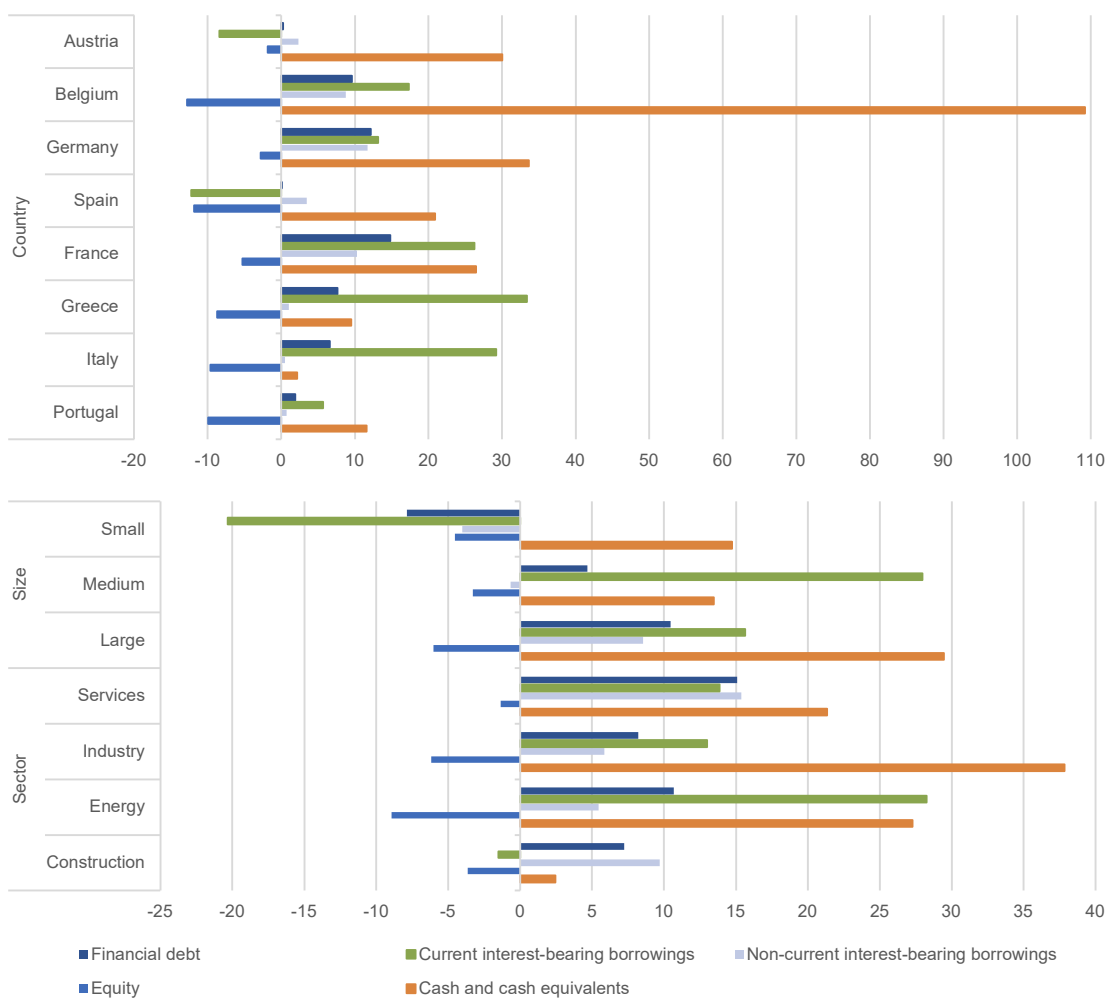
In billion EUR	Number	Total assets	Financial debt	Cash & cash equivalents	Equity
By country					
Austria	28	117.41	16.65	13.33	47.01
Belgium	33	328.24	143.73	37.48	107.53
France	27	1,914.31	610.52	196.96	623.03
Germany.....	29	2,336.68	951.37	161.43	629.99
Greece.....	30	56.76	22.31	8.43	15.48
Italy	30	591.71	241.00	37.35	159.96
Portugal	30	103.49	41.76	7.47	29.47
Spain	29	314.91	247.64	57.95	162.57
Total	236	5,763.50	2,274.98	520.40	1,775.04
By sector					
5. Industry.....	105	2,858.76	1,107.49	266.16	918.87
6. Energy	31	1,527.20	539.02	115.84	467.24
7. Construction.....	18	253.11	92.53	35.36	52.21
8. Services.....	82	1,124.43	535.93	103.04	336.72
Total	236	5,763.50	2,274.98	520.40	1,775.04
By size (revenue)					
4. Small groups (<250mln).....	32	12.19	4.34	1.94	5.65
5. Medium-sized (250mln-1,5bn).....	56	88.51	37.21	12.71	32.90
6. Large groups (>1,5bn)	148	5,662.79	2,233.42	505.75	1,736.49
Total	236	5,763.50	2,274.98	520.40	1,775.04

Source: ERICA 2020H1 sample.

The aggregate equity decreased overall by about 6 %, while liquidity as measured by cash and cash equivalents increased by almost one third and total assets remained fairly stable with a slight rise of less than 1 % from 2019H2 to 2020H1.

As shown in the profitability analysis, the analysed groups were not able to generate sufficient liquidity from their operating activity. Chart 24 indicates that the groups still built up massive stocks of cash across all countries, sectors and size classes in 2020. The Belgian groups exhibited by far the biggest rise¹⁸ in liquid funds, up by more than 100 %. Austrian and German groups secured their liquidity by accumulating an extra 30 % in cash. The lowest increase in cash is observed for the Italian groups, with a rise of 2.2 %.

CHART 24 FINANCIAL STRUCTURE INDICATORS RATE OF CHANGE IN 2019H1-2020H1 (in %)



Source: ERICA 2020H1 sample.

The shortfall in self-financing capacity (decreasing operating cash flows) was made good by incurring additional financial debt. Financial debt increased by 10.3 %, its non-current component grew by 7.7 % and its current element increased by 13.6 %. The Greek and Italian groups were among the groups that

¹⁸ The cash hoarding of an outlier group is the main factor behind the exceptional figure for Belgium. This specific group exhibits a highly positive cash flow from financing activity as well as a tremendously positive cash flow from investing activities. The remarkable increase in cash could be due to both new borrowings and massive divestment.

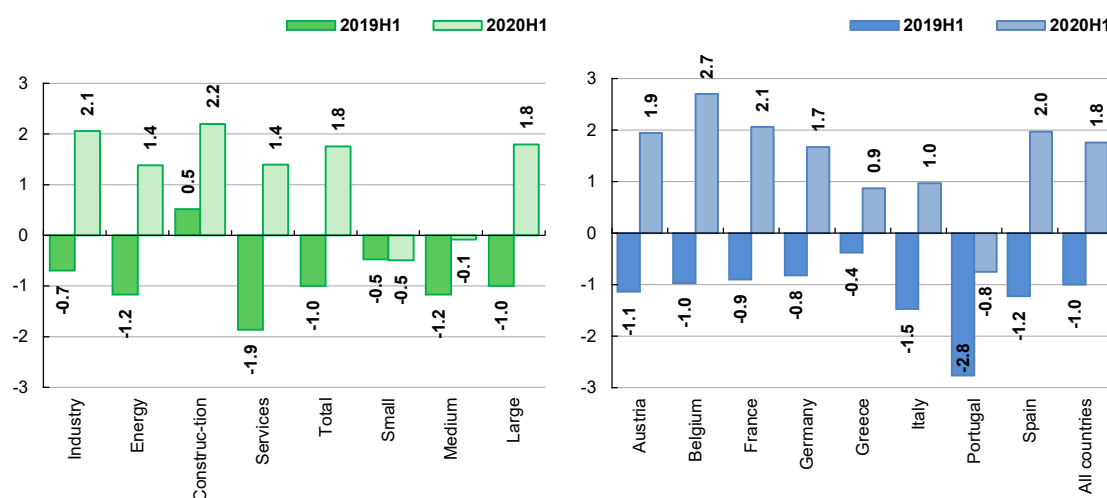
escalated their current borrowings the most, by approx. 30 %. In contrast, small groups reduced their financial debt and interest-bearing borrowings by 7.9 % from 2019H2 to 2020H1.

Chart 25 discloses the median cash flow from financing activities scaled by assets for 2019H1 and 2020H1. A positive value suggests that inflows of cash related to borrowings are higher than payments associated with the amortisation of borrowings and dividends paid. In 2019H1, all countries show a negative cash flow from financing activities. This implies that European groups were primarily repaying borrowings or distributing dividends. This dynamic is almost completely reversed in 2020H1, with most countries showing positive cash flows from financing activities. This is consistent with the increases in financial debt displayed in Chart 24.

On aggregate, the cash flow from financing activities scaled by assets went from - 1.0 % to 1.8 %. The greatest change occurred in Belgium (+ 3.7 pp) and Spain (+ 3.2 pp). Portugal is the only country that still shows negative cash flows from financing activities in 2020H1, but nevertheless also shows a significant increase from - 2.8 % to - 0.8 %. One explanation might be that Portugal is the country with the largest share of small and medium-sized groups (approx. 73 %) in the sample selected for this analysis. Small and medium-sized groups also exhibit negative cash flows from financing activities in 2020, and small groups in the underlying sub sample reduced their interest-bearing borrowings significantly in 2020 (Chart 24).

All sectors show an increase in the cash flows from financing activities. Industry, energy and services record negative cash flows in 2019H1, which become positive in 2020H1. Construction already had positive cash flows in 2019H1, yet these groups still had to increase cash flows from financing activities from 0.5 % to 2.2 %. The biggest increase is seen in services (+ 3.3 pp); in 2020H1, these groups' cash flow from financing activities stands at 1.4 % of total assets.

CHART 25 MEDIAN FINANCING CASH FLOW TO ASSETS 2019H1-2020H1 (in %)

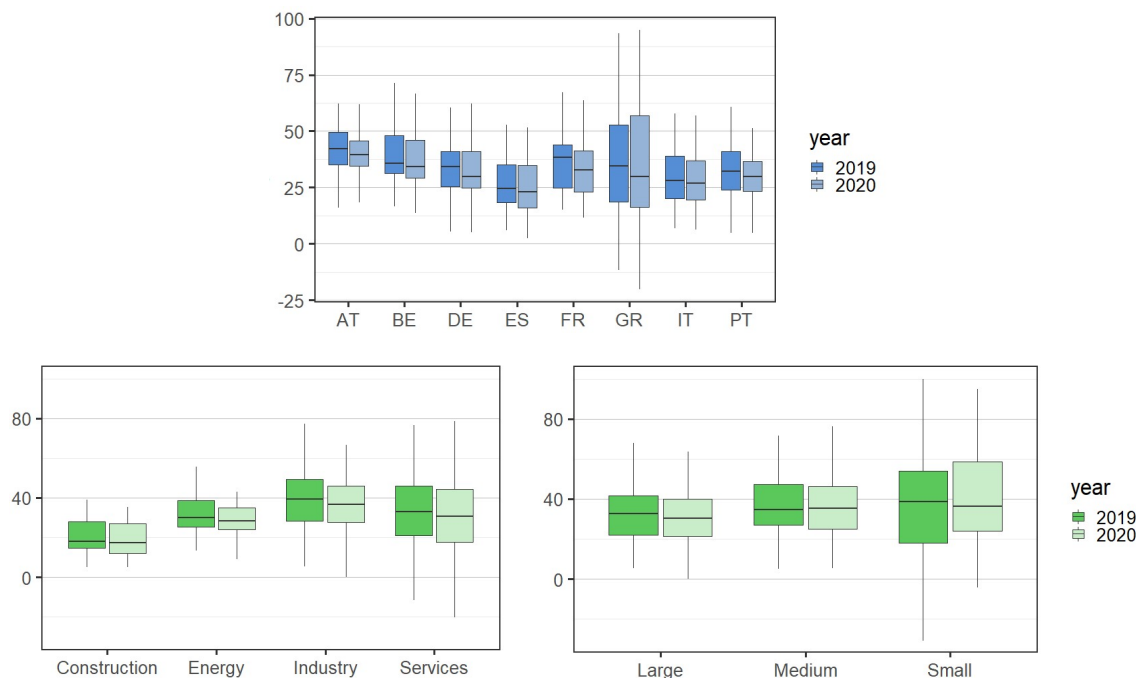


Source: ERICA 2020H1 sample.

Chart 26 gives an overview of change in the groups' equity as a share in total assets between 2019H2 and 2020H1. In line with the significant increases in financial debt, the median equity ratio decreased across all countries. The sharpest decline in the median equity ratio is apparent for the French, German

and Greek groups. The absolute total equity was down across all countries, sectors and size classes from 2019H2 to 2020H1 (Chart 24). However, the amount of total assets also decreased in the majority of countries (with the exception of the German and Austrian groups). The groups in the manufacturing and energy sectors reduced their total assets while the services sector built up assets by more than 6 %. While assets remained fairly stable for medium-sized and large groups, small firms saw their total assets reduced by almost 6 %. For small firms, the decrease in total assets exceeded the reduction in equity, which in turn caused an upward movement in the distribution of the equity ratio, particularly in the case of small groups.

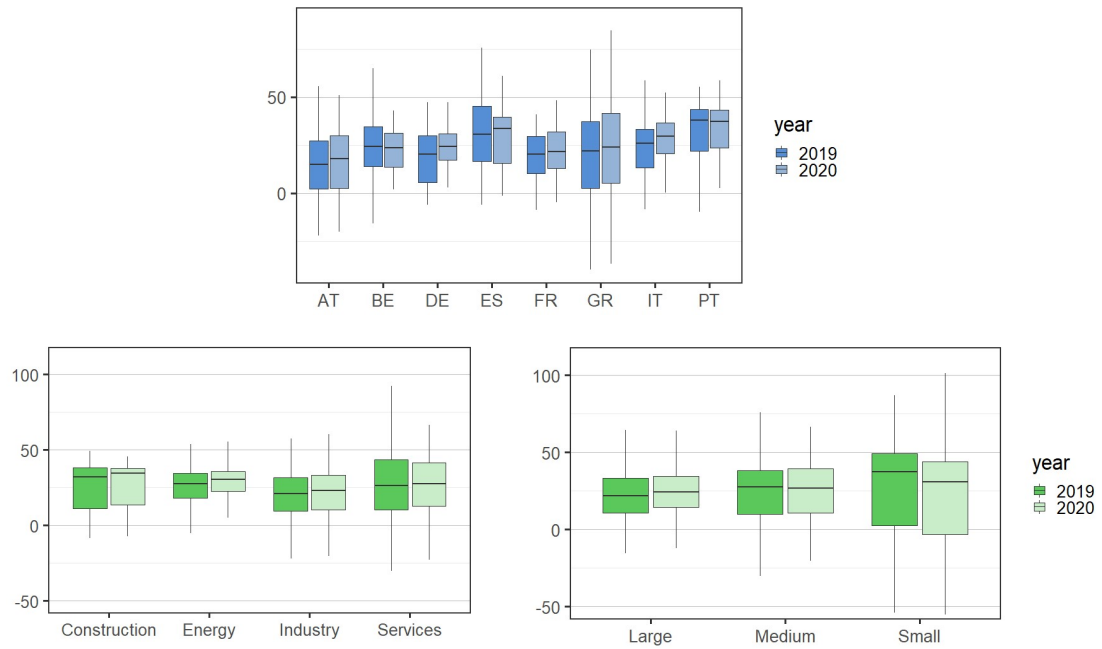
CHART 26 EQUITY RATIO BY COUNTRY, SECTOR AND SIZE 2019H2-2020H1



Source: ERICA 2020H1 sample.

The financing of total assets has likewise become more dependent on external financing sources, as the net indebtedness ratio increased slightly in almost all countries and sectors from 2019 to 2020. Chart 27 depicts the net indebtedness ratio per country, sector and size category. Looking at the country breakdown, the Spanish and Italian groups experienced the biggest increase in median net indebtedness in the crisis year. The Austrian groups were among those with the lowest dependence on external lending before the pandemic and in 2020. The Portuguese groups actually experienced a slight decrease in their median net indebtedness ratio, mainly as a result of their sample composition. The majority of the Portuguese sample consist of small and medium-sized groups, which reduced their indebtedness in 2020. Consistent with the change in the equity ratio and the financial debt, net indebtedness decreased for small firms in the year of the pandemic. However, the spread and variability of the indebtedness also increased in 2020.

CHART 27 NET INDEBTEDNESS BY COUNTRY, SECTOR AND SIZE 2019H2-2020H1



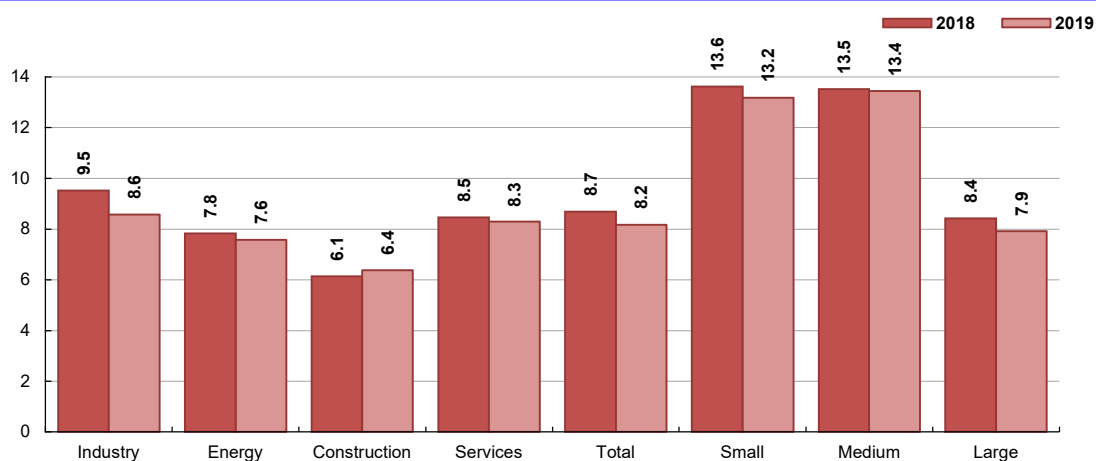
Source: ERICA 2020H1 sample.

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

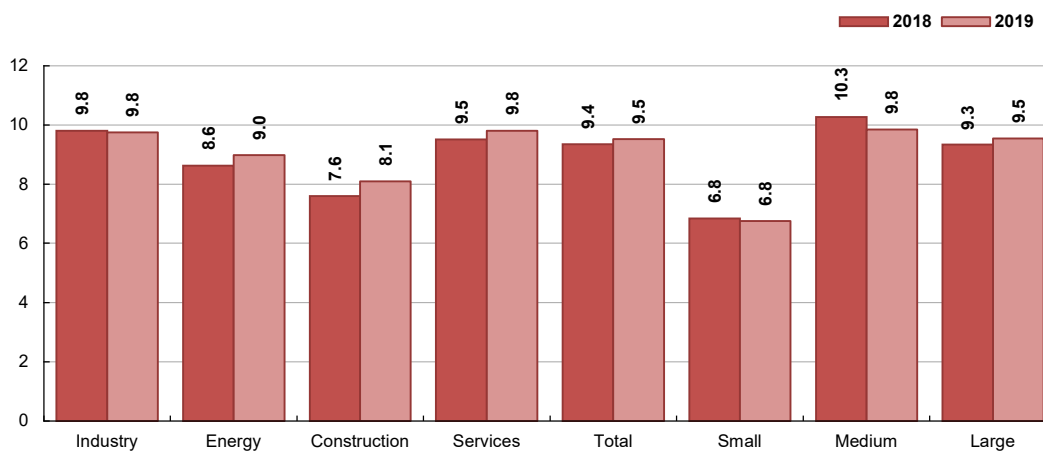
ANNEX B: PROFITABILITY RATIOS – WEIGHTED AVERAGE BY SECTOR AND BY SIZE

1. WEIGHTED AVERAGE EBIT MARGIN: EBIT / REVENUE 2018-2019 (in %)



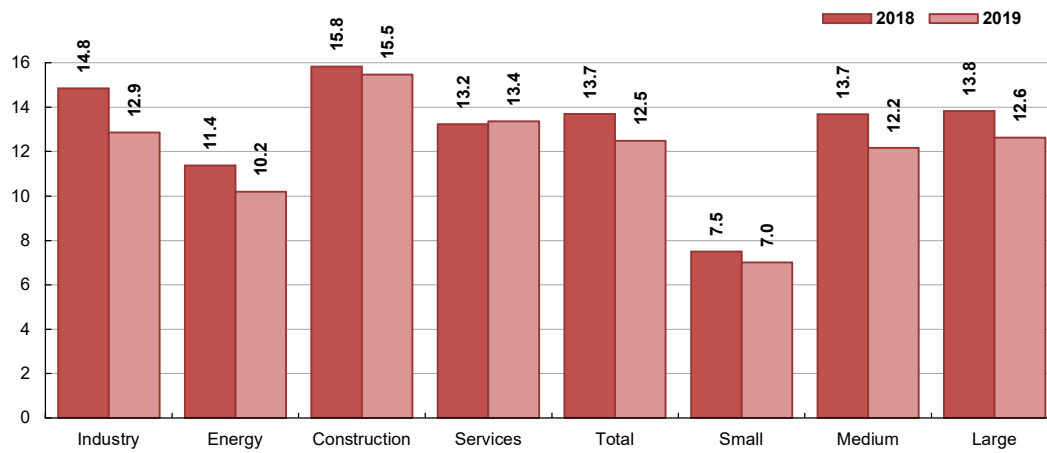
Source: ERICA 2019 sliding sample.

2. WEIGHTED AVERAGE EBITDA-TO-ASSETS RATIO 2018-2019 (in %)



Source: ERICA 2019 sliding sample.

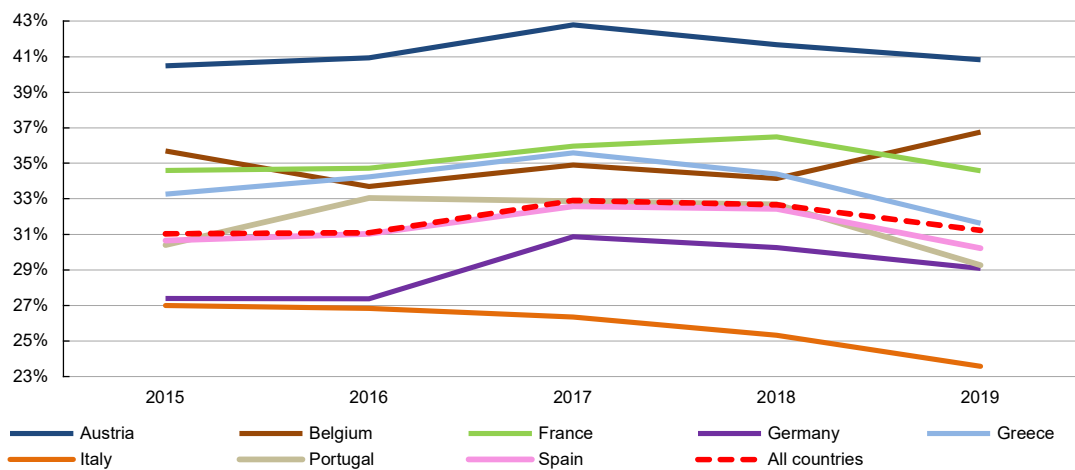
3. WEIGHTED AVERAGE RETURN ON EQUITY 2018-2019 (in %)



Source: ERICA 2019 sliding sample.

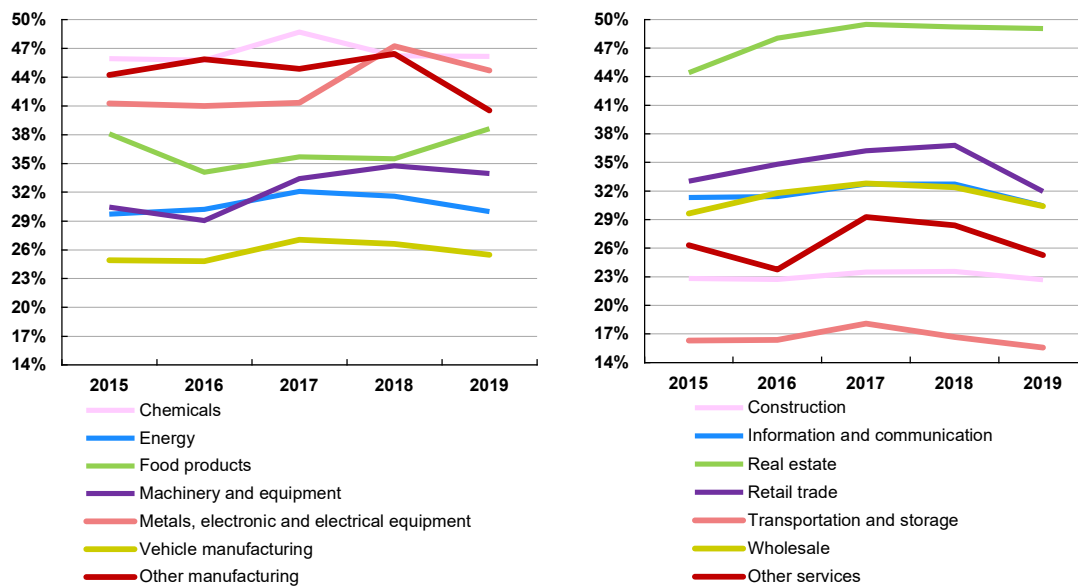
ANNEX C: EQUITY RATIO AND NET INDEBTEDNESS – WEIGHTED AVERAGE PER COUNTRY AND BRANCH OF ACTIVITY

1. WEIGHTED AVERAGE EQUITY RATIO BY COUNTRY 2015-2019



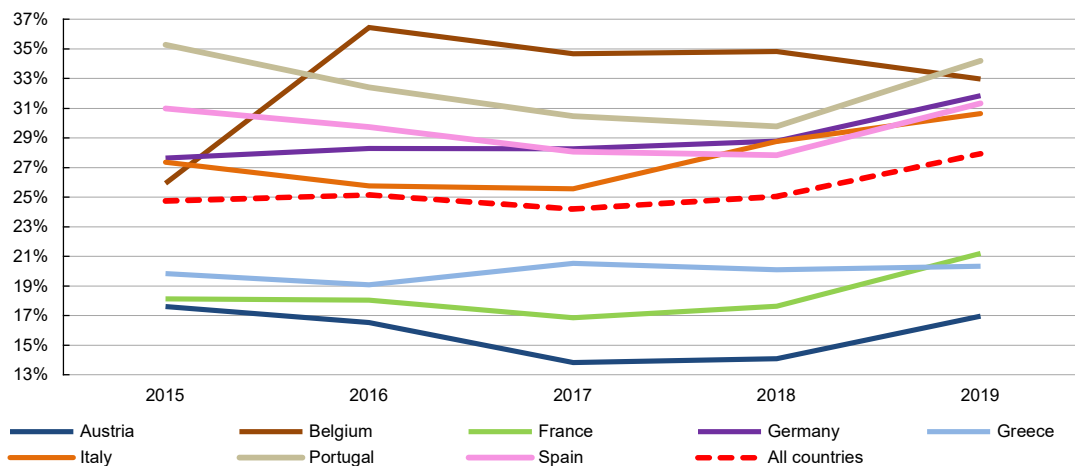
Source: ERICA 2019 fixed samples.

2. WEIGHTED AVERAGE EQUITY RATIO BY BRANCH OF ACTIVITY 2015-2019



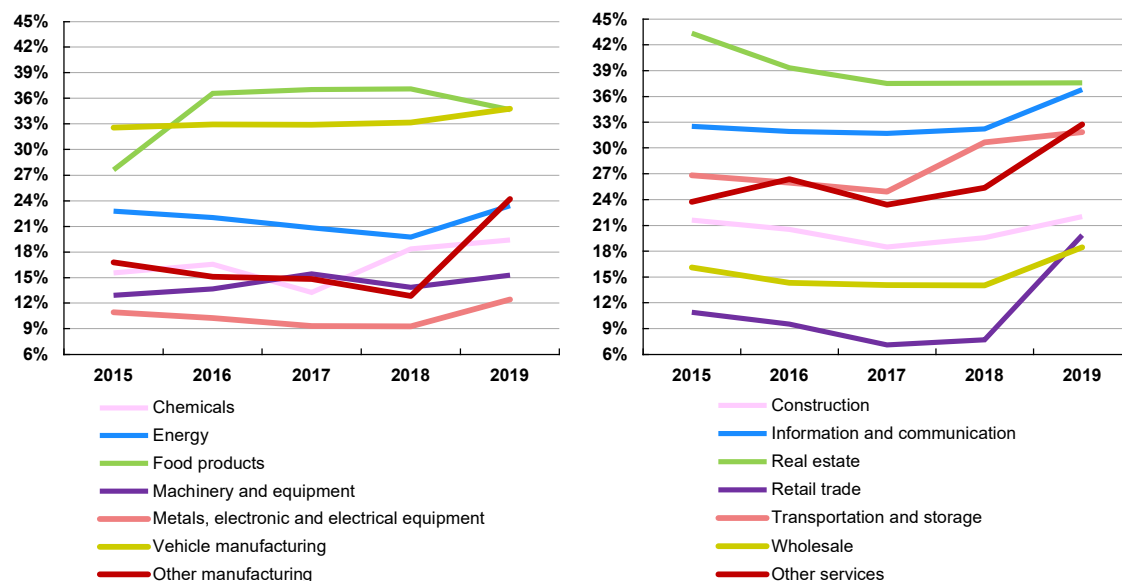
Source: ERICA 2019 fixed samples.

3. WEIGHTED AVERAGE NET INDEBTEDNESS BY COUNTRY 2015-2019



Source: ERICA 2019 fixed samples.

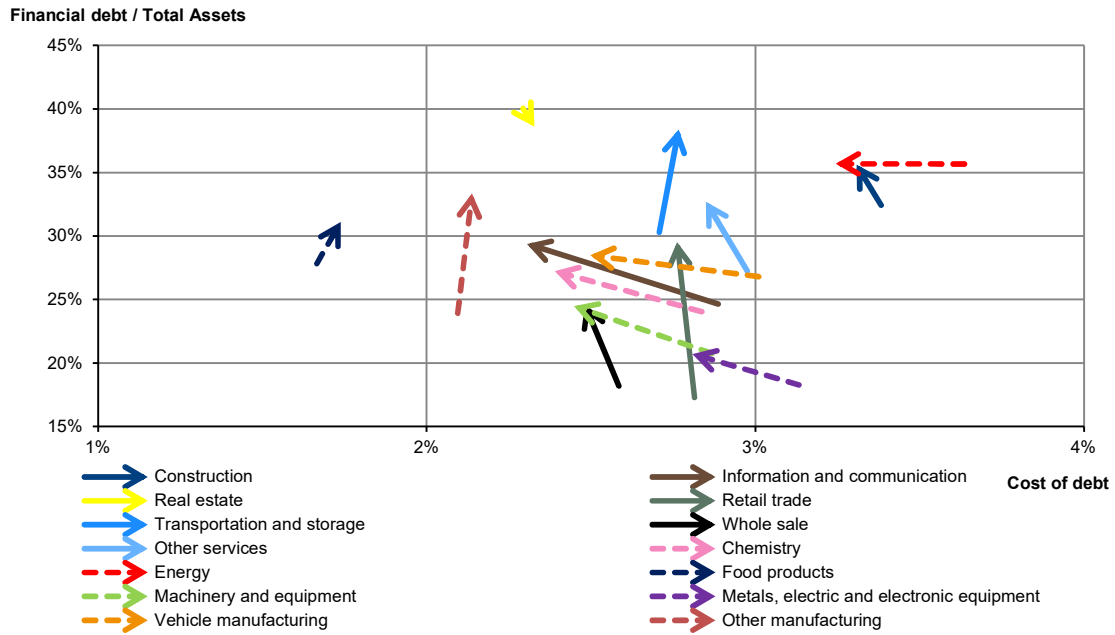
4. WEIGHTED AVERAGE NET INDEBTEDNESS BY BRANCH OF ACTIVITY 2015-2019



Source: ERICA 2019 fixed samples.

ANNEX D: COST OF DEBT AND FINANCIAL DEBT TO TOTAL ASSETS

COST OF DEBT AND FINANCIAL DEBT TO TOTAL ASSETS BY BRANCH OF ACTIVITY IN 2019



Source: ERICA 2018-2019 sliding sample.

ANNEX E: 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