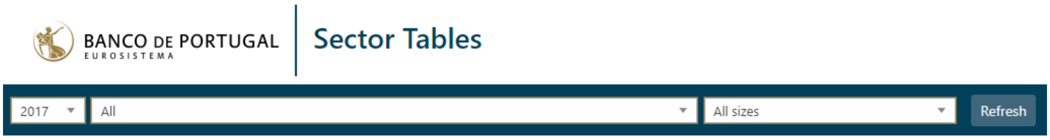
2.2 Browsing the dashboards

When opening the STs, the user is positioned in the 'Highlights' dashboard, where the information for the last available year and for all economic activities and size classes (total NFCs[1]) is displayed.

In the drop down menus at the top of the screen, the user can select another reference period, economic sector and size class combination for analysis (Figure I.2.10). This selection is available in all the dashboards and, when changed, applies to all of them when the user clicks on the refresh button.

There are over five thousand combinations available for each year, with different levels of detail of economic activity, according to the Classification of Economic Activities (CAE Rev.3) and corporation size class (micro, small, medium or large enterprises).[2] Some combinations of economic sector and size class have no data available due to statistical confidentiality or to the absence of corporations that fit that combination.

Figure I.2.10 • Year, sector and size class selection for the STs



When opening the ESTs, the user starts on the dashboard 'Positioning of the Corporation', which displays, by default, the corporation's sector of economic activity and size class. Sometimes it is necessary to go up one tier in terms of economic sector or size class for confidentiality reasons. However, the user may select another activity sector and/or size class with which to compare the corporation.[3]

The dashboards available in the STs and ESTs are organised as set out in Table I.2.1.

[1] The population of non-financial corporations included in the sector tables is set out in detail in Subsection I3.2 2.

[2] The classification criteria underlying the tables are provided in Subsection I3.2.4.

[3] Where the sector or size class selected by the user for comparison does not include the corporation's sector or size class, the size class is not included in the indicators calculated for the selected aggregate.

Table I.2.1 • Dashboards on the Sector Tables and Enterprise and Sector Tables

Dashboard	Sector Tables	Enterprise and sector tables
Highlights	X	
Positioning of the corporation		X
Sector overview	X	X
Activity and profitability[4]	X	X
Liquidity and cash	X	X
Cash flows	X	X
Funding structure	X	X
Risk	X	X
Balance sheet (structure)	X	X
Quartiles	X	X
International comparison	X	X

Each dashboard is detailed below, including context so as to make it easier to interpret them. To this end, the examples given are the combination of "All activities" and "All sizes", corresponding to the total non-financial corporations in the STs.

2.2.2 Highlights

The highlights dashboard (available in the STs) provides background information on the aggregate for the year under review, such as the economic activity sector and size class, the number of corporations in operation and variation vis-à-vis the previous year, the number of new enterprises that were created and how many ceased to operate. Some balance sheet summary indicators are also presented, compared with the previous year, together with two charts summarising the relevance of the domestic and external markets for purchases and turnover. Finally, the evolution of four economic and financial ratios over time: capital ratio; financial debt as a percentage of assets; cost of financial debt; and return on assets.

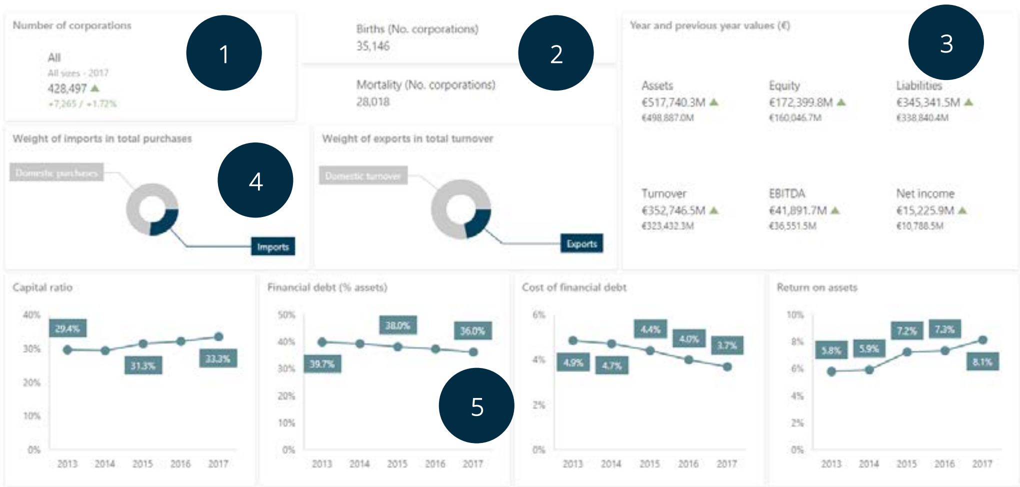
The capital ratio is measured through equity as a percentage of total assets. This indicator is connected with the level of indebtedness as its complement identifies the proportion of assets financed by liabilities. Financial debt, which corresponds to interest-bearing liabilities, is one of the sources of financing using debt. Bank loans or group loans are examples of such liabilities. The second ratio presented identifies this component's share of assets. Additionally, the cost of financial debt measures its relative annual cost, i.e. financing expenses as a percentage of financial debt.

[4] This dashboard is divided into two dashboards in the ESTs, as described in Annex II3.

Finally, the profitability ratio presented in this dashboard is a performance measure of the sector and corresponds to operating income, which is generated before interest, depreciation and taxes (EBITDA) as a percentage of assets.

In the example shown (Figure I.2.11), around 428 thousand non-financial corporations were active in 2017, in all sectors of economic activity and size classes (1).

Figure I.2.11 • Highlights dashboard



In 2017, 35,146 corporations were born and 28,018 ceased to operate (2). In addition to “births” and “deaths” of corporations, other events may alter the number of corporations in an aggregate, such as classification changes in terms of economic activity sector or size class, or even changes in institutional sectors. For example, if a corporation ceases to belong to the non-financial corporations sector, there will be a reduction in the number of corporations operating in the sector, the rest remaining a constant, which does not stem from a cessation of activity.

The main items of the balance sheet and profit and loss account increased over the previous year, with corporations’ assets or total balance sheet at €517,740 million in 2017. Turnover (sales and services rendered) posted over €352,747 million (3).

Turnover can be generated in the domestic market or, alternatively, by exports to external markets. Almost 22% of turnover generated in 2017 was exports. By comparison, the share of imports in total purchases of goods and services from the corporations in the sector was 27% (4).[5]

Portuguese corporations have shown an upward trend in terms of capital ratio and profitability for the last 5 years, against a backdrop of reduction in the share of financial debt in assets, as well as in the cost of debt (5).

2.2.3 Positioning of the corporation

The dashboard on the positioning of the corporation (available exclusively in the ESTs) allows corporations to compare their values, for a set of available indicators, with the averages and

[5] Along the various dashboards, when you move the mouse across each chart, the underlying figures are displayed.

quartiles for the sector and size chosen for comparison in a given year. In addition, each of the indicators can be analysed over time in this dashboard, i.e. for a greater number of years.

First, the position of the corporation is presented using the capital ratio. However, the indicator displayed on the dashboard may be changed by the user, from a predefined list, covering liquidity ratios, financial structure and financing, profitability and activity, including the following:

- Capital ratio;
- Cost of financial debt;
- Financial debt as a percentage of assets;
- Current ratio;
- Gross profit as a percentage of income;
- Weight of purchases of goods and services abroad in total purchases;
- Share of non-domestic turnover in total turnover;
- EBITDA over invested capital;
- EBITDA over assets;
- Return on equity.

When the indicator is changed, the two charts shown are updated to that same indicator.

The first chart, on the left, shows the indicator selected on a straight line which orders and shows, for a given year, the value of the corporation and the average value and quartiles of the sector under review. Quartiles give corporations a better understanding of how they rank against the sector. For example, if the corporation's value is below Q1 (1st quartile), this means that at least 75% of enterprises post a value above it for this indicator. On the other hand, if the value of the enterprise is above Q3 (3rd quartile), this means that for this indicator at least 75% of enterprises have a lower value than the enterprise.[6] The value of the sector presents the value of the ratio calculated for all the corporations belonging to the aggregate under analysis.

The second chart, on the right, comprises the time series, for the last five years, the most recent year being the year selected.

Figure I.2.12 • Corporation positioning dashboard

[6] The statistical measurements presented are described in more detail in Subsection I3 2 5.

In the example (Figure I.2.12), for the capital ratio, which identifies the percentage of equity-funded assets (1), it is observed that in the selected year the value of the enterprise (29.4%) was higher than the average value of the sector (25.0%). This indicates that equity in the corporation was higher than in the sector average.

In addition, it is also noted that the corporation presented a higher value than the median for the sector (2Q), which means that at least 50% of the enterprises in the aggregate had a lower capital ratio than the corporation. The quartiles also indicate that one in four corporations in the sector had a capital ratio below or equal to 3.8% while one in four financed more than half of its assets using equity, with a capital ratio of 52.8% or higher (2).

The time chart allows us to observe that for the last five years, the average corporation in the sector has moved slightly away from the value of the corporation from 2014, which marked a more favourable development of capital ratio, presenting in 2017 a value greater than that observed at the beginning of the series (3).[7]

2.2.4 Sector overview

The overview dashboard (available in the STs and ESTs) provides a profile of the sector in terms of its degree of concentration and distribution by age and size. The degree of concentration is measured by the percentage of turnover recorded by the corporations in the top 20%.[8] The distribution of enterprises by age and corporation size (micro, small, medium and large enterprises) is presented graphically on the basis of two separate indicators: the number of enterprises and the sales and services provided.

Finally, it frames the distribution of turnover, the number of corporations and the number of persons employed according to the corporations' head office location in Portugal (NUTS III classification).

Figure I.2.13 • Sector overview dashboard

[7] Along the various dashboards, when you move the mouse across each chart, the underlying figures are displayed.
[8] Corporations are ranked by turnover in descending order.

In the example shown (Figure I.2.13), the corporations in the top 20% in Portugal, around 86,000, concentrated 94% of the turnover of Portuguese corporations in 2017 (1).

Despite not being the majority, corporations with over 20 years of activity have contributed the most to total turnover (2). In the same way, large enterprises, although a minority, generated the largest share of turnover (3).

By location of the head office, 32% of the corporations were located in the Lisbon metropolitan area and almost 18% in the Porto metropolitan area; followed by the Algarve region, which had 5% of enterprises (4). The first two regions also accounted for the majority of the turnover and employees in the sector.

2.2.5 Activity and profitability

The activity and profitability dashboard (available in the STs and ESTs) brings together a set of indicators relating to the corporation's capacity to generate earnings. In the STs various levels of earnings are broken down from the gross profit to the net income, focusing on the main components of expenditure that determine them. In the ESTs this information is divided into two dashboards, as follows: activity and profitability, and earnings breakdown.[9]

This area includes the outward orientation of the sector's activity, with turnover being provided, segmented between domestic and external markets, as well as the weight of imports in the total purchases of goods and services of the corporations. There are also two profitability indicators: return on assets and return on equity.

Return on assets corresponds to earnings generated before interest, depreciation and taxes (EBITDA) as a percentage of assets. This indicator measures the sector's performance.

Return on equity, calculated as the net income to equity ratio, measures the profitability of the capital invested by shareholders/partners.

Finally, the different accounting results[10], as a percentage of earnings, are presented as well as the most relevant expenditure components determining them.

[9] The dashboards of the ESTs, which in some cases were slightly adjusted vis-à-vis the STs, can be found in Annex II3.
[10] The underlying concepts for this dashboard are detailed in Subsection I3.1 2, regarding profit and loss account.

Figure I.2.14 • Activity and profitability dashboard

In the example shown (Figure I.2.14), the turnover of Portuguese corporations grew in 2017, mainly representing domestic turnover (1); in the same year, exports accounted for around 22% of turnover and imports weighed 27% on purchases of goods and services (2). The increase in sales was accompanied by the increase in return on assets and equity (8.1% and 8.8% in 2017, respectively) (3).

In 2017, the gross profit accounted for 21% of the earnings generated and net income accounted for 4%. Employee expenses and depreciations consumed the largest portions of corporations' gross profit. (4).

2.2.6 Liquidity and cash

The liquidity and cash dashboard (available in the STs and the ESTs)[11] brings together indicators to assess the extent to which enterprises are able to meet their short-term liabilities. This category includes current ratio and quick ratio indicators, average number of days outstanding for sales and payments, and working capital indicators.

In cases where the current ratio, given by current assets over current liabilities, is higher than 1, short-term liabilities are covered by the most liquid assets. The quick ratio differs from the previous one because it does not consider inventories as short-term assets and is therefore a more restrictive liquidity measurement.

Indicators for days payable outstanding and days sales outstanding record the number of days it takes for corporations to pay their suppliers and to be paid by their customers, respectively.

Finally, the net cash indicator is assessed as follows:

- Net working capital corresponds to the difference between short-term assets and short-term liabilities;

[11] The ESTs dashboard, with the only difference being that it does not present the quick ratio indicator, can be found in Annex II3.

- Net working capital requirements (+) or resources (-) correspond to the estimate of the amounts that the corporations need throughout their normal operating cycle;
- If the net working capital requirements are higher than the working capital available, the net cash position is negative; if the working capital is sufficient to cover the net working capital requirements, the net cash position is positive.

In short, net cash is the difference between net working capital and net working capital requirements.[12]

Figure I.2.15 • Liquidity and cash dashboard

In 2017 (Figure I.2.15), non-financial corporations as a whole posted current ratio above 1, meaning that short-term liabilities (current liabilities) were covered by the most liquid assets (current assets) (1).

Portuguese corporations received and paid, on average, three and four days earlier, respectively, than in the previous year (2). Average deadlines in 2017 were 60 days for receivables and 65 for payments.

As a result of working capital requirements higher than the working capital available, the corporations recorded a negative net cash (3).

2.2.7 Cash flows

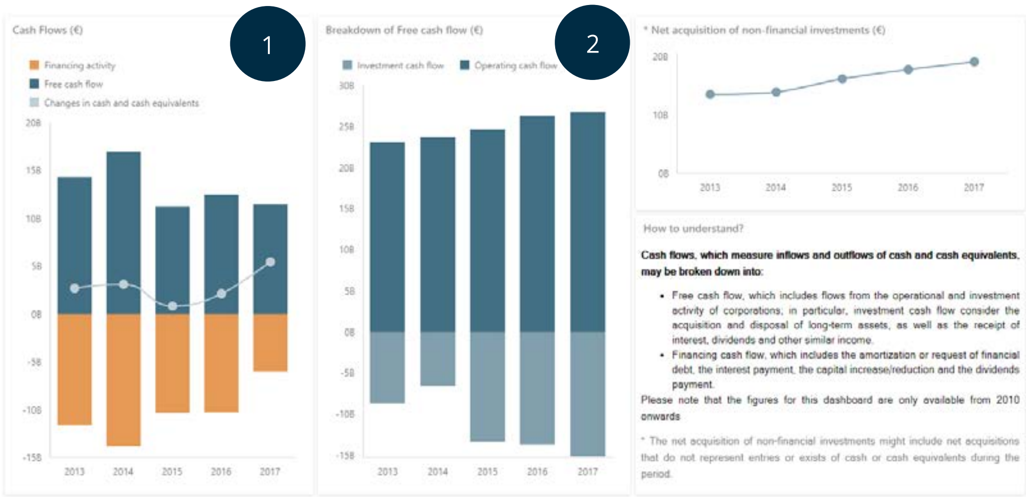
The cash flows dashboard[13] (available in the STs and ESTs[14]) aims to capture the cash flows and their equivalents, which can be broken down in general terms into the following components:

[12] The concepts of cash and working capital are detailed in Subsection I3.1 3.
[13] This dashboard has been available from 2010. The underlying concepts are detailed in Subsection I3.1 3.
[14] The EST dashboard, which is slightly different from the STs, can be found in Annex II3.

- Free cash flow, which includes flows from the operational and investment activity of corporations; in particular, investment cash flows consider the acquisition and disposal of long-term assets as well as interest, dividends and other similar income;
- Financing cash flows, which include amortisation or request for financial debt, payment of interest, capital increases or reductions, and payment of dividends.

In addition, the net acquisition of non-financial investments is an investment measure. Note that, unlike cash flows, net acquisition of non-financial investments could include net acquisitions that did not represent cash inflows or outflows and equivalent for the period, for example where these assets are purchased on credit.

Figure I.2.16 • Cash flows dashboard



Non-financial corporations generated in 2017 (Figure I.2.16) a total of €11.4 billion of free cash flow. Part of this amount was used in the amortisation of debt, which showed a net reduction of €6 billion **(1)**. The positive amount of free cash flow is the result of the cash flow created by operating activities, while investment activities consumed around €15 billion (€13.8 billion in 2016) **(2)**.

2.2.8 Funding structure

The funding structure dashboard (available in the STs and ESTs) relates to indebtedness and details the composition of the financial debt, its cost and how it relates to earnings generated by the sector.

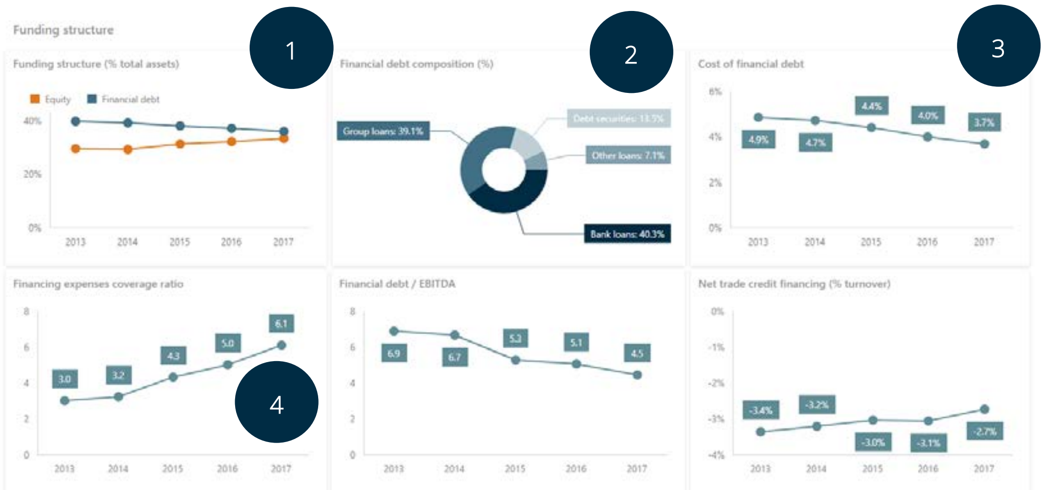
The capital ratio is measured through equity as a percentage of total assets. The complement of this ratio indicates the indebtedness of the corporation, that is, the proportion of assets financed by liabilities. A funding source for the sector's activity is the financial debt (interest-bearing liabilities) and can be composed of the following components: bank loans; group loans; debt securities; or other types of loans, which involve financing expenses. The 'cost of financial debt' indicator measures the implicit annual cost of the financial debt and is calculated using financing expenses as a percentage of the financial debt.

The financing expenses coverage ratio is given by the ratio of EBITDA over financing expenses and assesses the extent to which financing expenses are covered by earnings before interest, depreciation and taxes. When the EBITDA is lower than the financing expenses, corporations are not generating sufficient earnings to cover the costs of their businesses' financial debt and are in a situation of high financial pressure.

In addition, the indicator given by the ratio of financial debt to EBITDA gives an indication of the number of years, on average, that would be necessary to generate enough earnings to repay the financial debt (provided all other conditions remain the same).

The net trade credit financing indicator is also shown. It is calculated on the basis of the difference between the credits obtained (suppliers) and the credit granted (customers) by the corporation as a percentage of turnover.

Figure I.2.17 • Funding structure dashboard



In 2017 Portuguese corporations were financed, for the most part, through financial debt (36% of assets). However, over time this percentage decreased as opposed to equity, which has increased its share to 33% in 2017, increasing the corporations' capital ratio (Figure I.2.17) (1).

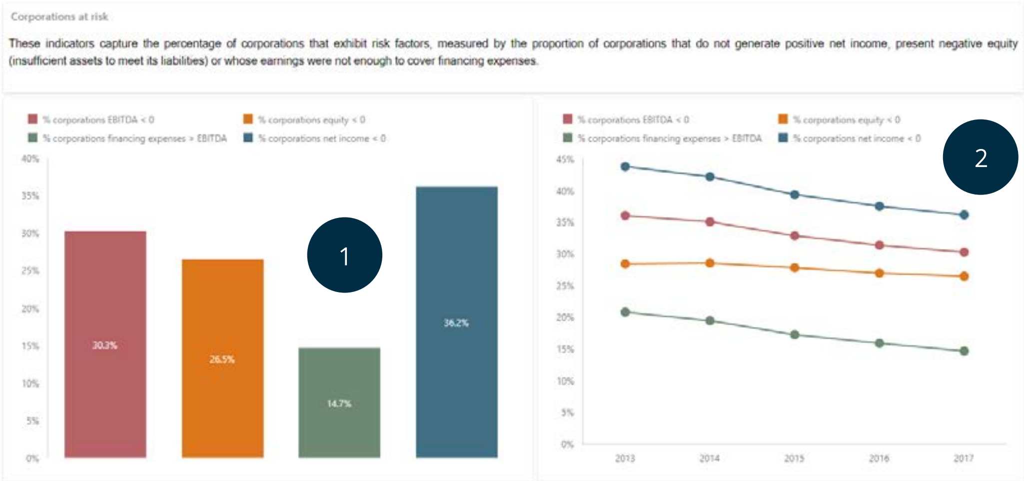
Financial debt consisted mainly of bank loans (over 40% of the financial debt in 2017) (2). The cost of financial debt has shown a downward trend since 2013 (3). The increase in activity and profitability and the reduction in financing expenses benefited the financing expenses coverage ratio, which increased over the same period (4).

2.2.9 Risk

The risk dashboard (available in the STs and ESTs[15]) presents a set of indicators capturing some risk factors, measured by the proportion of corporations that posted losses, presented negative equity (insufficient assets to meet liabilities) or whose earnings were not enough to cover financing expenses.

[15] The ESTs dashboard, which is slightly different from the STs, can be found in Annex II3.

Figure I.2.18 • Risk dashboard



In 2017, 26.5% of the corporations posted negative equity and 36.2% did not generate sufficient income to cover all expenses (losses) (Figure I.2.18) (1). Despite this, in the last 5 years, between 2013 and 2017, there was a general reduction in risk indicators for total corporations (2).

2.2.10 Balance sheet (structure)

The balance sheet (structure) dashboard (available in the STs and ESTs) presents the assets and liabilities structure. The assets side details the components of the corporation's assets, i.e. the share of inventories, cash and deposits, financial and non-financial investments and trade receivables in the corporation's assets. The liabilities side details equity, trade payables, financial debt and other liabilities as a share of assets.[16]

Figure I.2.19 • Balance sheet (structure) dashboard

[16] The underlying concepts for this dashboard are described in Subsection I3.1.1.

Trade receivables accounted for almost 13% of the corporations' assets in 2017 (Figure I.2.19), more than trade payables (10.8%) (1). These items remained relatively stable between 2013 and 2017 (2).

On the funding side, equity (33%) and financial debt (36%) were the most relevant items as a percentage of assets (3). However, equity has benefited from an increase in the most recent periods, while the share of financial debt in assets posted a reduction (4).

2.2.11 Quartiles

The quartiles dashboard (available in the STs and ESTs) enables making a graphical analysis of the mean value of the indicator for a set of predefined indicators (Figure I.2.20), as well as of three measures of location and distribution: 1st quartile, median (2nd quartile) and 3rd quartile.[17]

In ratios, the sector's average is the value obtained from the total values of the sector (in the numerator and in the denominator); therefore, it is an indicator more influenced by the corporations in the aggregate with higher values.

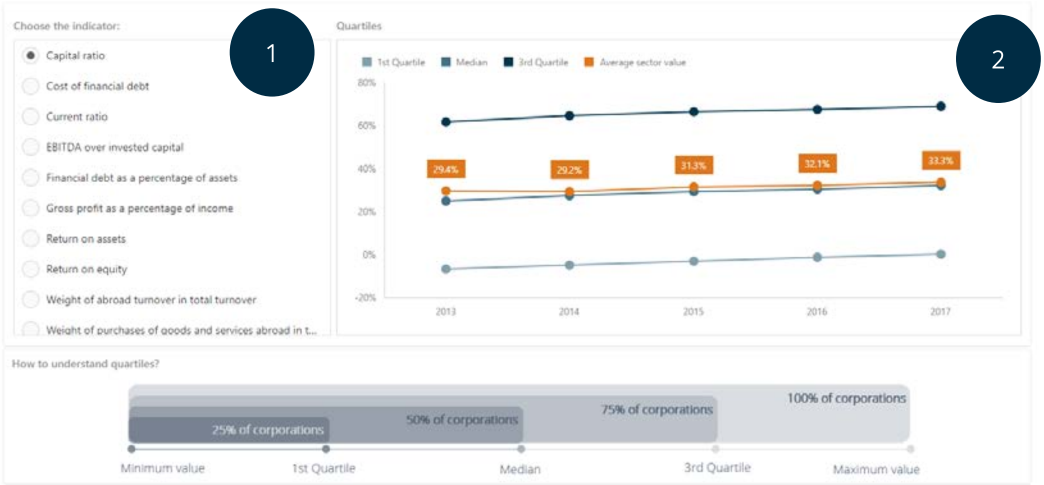
The measures of location and distribution (Table I.2.2) identify the most common set of profiles within the sector. In addition, they are robust in the presence of outliers, i.e. they are not very affected by the possible existence of corporations with extreme values. For each indicator, its calculation assumes that the individual values of the enterprises in the aggregate were previously sorted in increasing order.

Table I.2.2 • Definitions of measures of location and distribution

1st quartile	25% of enterprises of the sector have ratios equal to or below the first quartile (Q1)
Median	50% of enterprises of the sector have ratios equal to or below the second quartile (Q2) or median
3rd quartile	25% of enterprises of the sector have ratios equal to or above the third quartile (Q3)

17 The statistical measurements used in the sector tables are detailed in Subsection I3 2 5.

Figure I.2.20 • Quartile dashboards



Looking at the capital ratio for total economic activities in 2017, the average value (33%) was quite close to the median (32%) and had increased since 2014 (Figure I.2.20) **(1)**. However, there were groups of corporations with different profiles. Between 2013 and 2016, the first 25% of the corporations ranked by capital ratio (1st quartile, i.e. the lowest capital ratio) recorded a negative capital ratio (2). Conversely, one in four corporations had a capital ratio of more than 60% (3rd quartile).

2.2.12 International comparison

The international comparison dashboard (available in the STs and ESTs) makes it possible to compare a sector of economic activity in Portugal with the same sector in other European countries, for a selected set of economic and financial indicators. The data on the corporations from other European countries comes from the BACH database (Bank for the Accounts of Companies Harmonized). When analysing this information, possible methodological deviations in the information of individual countries should be taken into account, in particular with regard to different levels of coverage of the respective samples. Further information on the BACH database is available from the supporting information available at https://www.bach.banque-france.fr/?lang=en.

This dashboard has some restrictions as regards the detail by sector of economic activity and the size of the corporation, in view of the previous dashboards, arising from limitations of the BACH database. In particular, the sector of economic activity presents a maximum detail at the two-digit level of NACE. Regarding size class, only the aggregate 'all sizes' is made available, since the enterprise size criteria in the BACH database differs from the one used in Portugal. In addition, there will be times when the most recent year in the STs will not have data available in the international component, as the BACH database's update calendar differs from that of the Central Balance Sheet Database. The calendar for the various countries belonging to BACH does not coincide with the reporting period for Portugal.

To compare different countries, the user must choose the indicator and the countries for analysis (1). Please note that to select several countries at the same time it is possible to click on the 'multi-select' button (Figure I.2.21).

Figure I.2.21 • Multiple selection in the international comparison dashboard

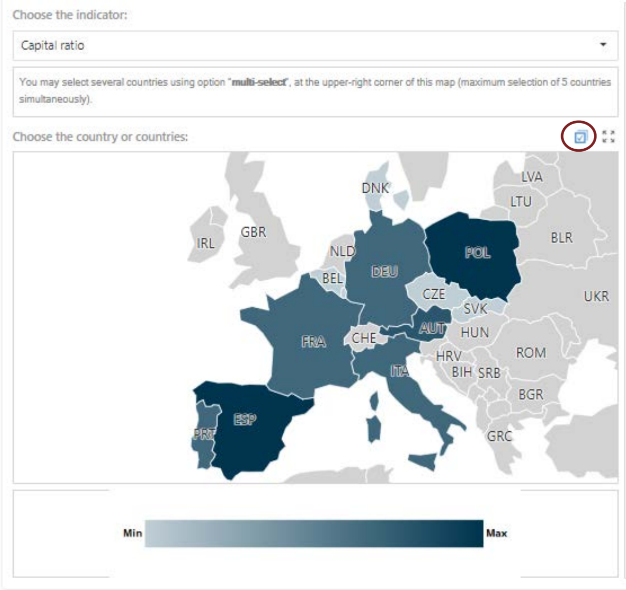
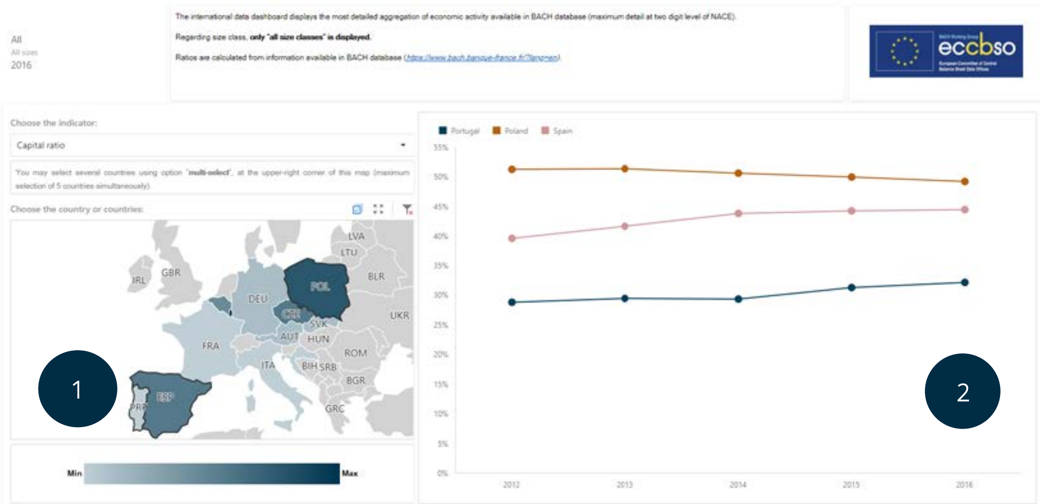


Figure I.2.22 • International comparison dashboard



In the capital ratio indicator, Spain and Poland recorded the highest figures in 2016 (44% and 49% respectively); while in Portugal the capital ratio was 32% (Figure I.2.22) (1). Of the three countries, Portugal recorded the most significant increase (+0.8 p.p.) compared to the previous year, while the capital ratio in Poland decreased (2).