Analysis of enterprises in the transport sector

Central Balance Sheet Studies
July | 2017

BANCO DE PORTUGAL
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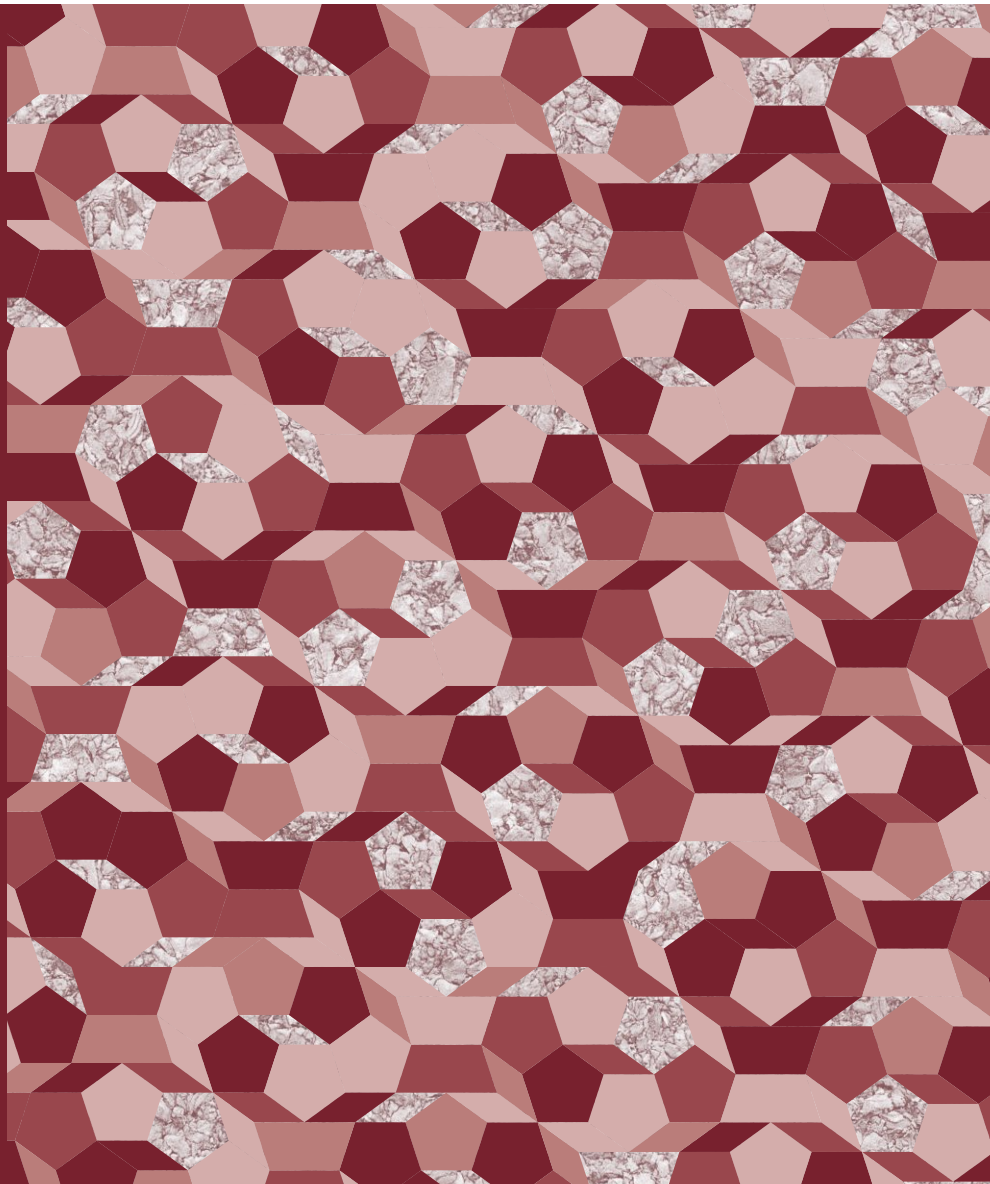

28

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Foreword

This analysis is based on data obtained from *Informação Empresarial Simplificada* – IES (Simplified Corporate Information) and held in the Central Balance Sheet Database of Banco de Portugal. Through IES, enterprises are able to meet their obligation to report their annual accounts simultaneously to the Ministries of Finance and Justice, Banco de Portugal and Portuguese National Statistics Institute (INE).

IES is usually reported within six and a half months from the financial year-end, which, for most enterprises resident in Portugal, corresponds to 15 July of the year following the reference year. This analysis used IES data for 2015, i.e. the most recent as at the date of this publication.

Data reported by enterprises through IES are subject to quality control by Banco de Portugal mainly to ensure that the accounting information for the economic year is coherent and complete and that the main aggregates are consistent throughout the years.

In addition to information obtained through IES, this publication features complementary data on the financing of enterprises in Portugal, available in other databases managed by the Statistics Department of Banco de Portugal, namely the Central Credit Register. This information characterises a significant share of the liabilities of Portuguese enterprises, particularly loans granted by the resident financial sector.

Summary

In this study, Banco de Portugal analyses enterprises operating in land transport, water transport and air transport, corresponding to the transport sector.

In 2015 the transport sector comprised 16,000 enterprises, i.e. 4 per cent of total enterprises in Portugal, 3 per cent of turnover and 4 per cent of the number of employees. Compared with 2011, the sector's weight decreased in terms of the number of enterprises (0.5 p.p.), increased in turnover (0.2 p.p.), and remained unchanged in terms of employees.

In 2015 the sector was mostly comprised of microenterprises (91 per cent). However, SMEs and large enterprises were the most relevant in terms of turnover (42 and 45 per cent respectively) and number of employees (42 and 31 per cent respectively). By economic activity segment, land transport was the most relevant segment, with 98 per cent of the number of enterprises, 60 per cent of turnover and 88 per cent of the number of employees.

Around 45 per cent of enterprises in the sector had their head office in the Lisbon or Porto district. Together, these enterprises accounted for two-thirds of turnover generated by enterprises in the transport sector.

Turnover in the sector was mostly generated by enterprises established for more than 20 years (61 per cent), a situation which was broadly based across the economic activity segments.

In 2015 the export sector accounted for 10 per cent of enterprises, 62 per cent of turnover and 38 per cent of employees in the transport sector, figures above those of total enterprises.

Turnover in the transport sector increased by 1 per cent in 2015. For the first time since 2011, the sector posted a growth rate below that of total enterprises (which increased by 2 per cent in 2015).

Supplies and external services (SES) were the most relevant component in the sector's structure of operating expenses (70 per cent), followed by employee expenses (24 per cent). This allocation was in contrast to that of total enterprises, where the cost of goods sold and materials consumed (CoGS) had the highest share (59 per cent).

EBITDA in the transport sector increased by 5 per cent in 2015, after declining by 12 per cent in 2014. More than half of the enterprises posted a positive rate of change in EBITDA in 2015. The share of enterprises with negative EBITDA in the transport sector (21 per cent) was below that of total enterprises (33 per cent).

Return on equity in the transport sector stood at 9 per cent in 2015, 6 p.p. above that of 2014. The operating and net margins stood at 8 and 1 per cent respectively, 2 p.p. below the figures for total enterprises.

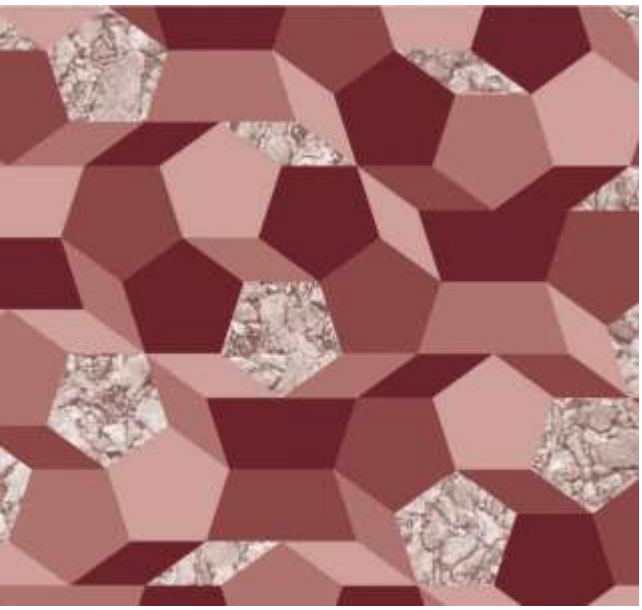
In 2015 the capital ratio of the transport sector was 18 per cent, below the 32 per cent recorded by total enterprises. Interest-bearing debt accounted for 56 per cent of liabilities in the transport sector, in particular bank loans (39 per cent of liabilities).

Liabilities in the transport sector posted a marginally positive change in 2015 (0.1 per cent), compared with 2014, while interest expenses declined by 10 per cent on average. The financial pressure ratio stood at 18 per cent, reflecting a decline of 3 p.p. compared with 2014.

According to information from Banco de Portugal's Central Credit Register, in December 2016, loans granted by the resident financial sector to the transport sector accounted for 4 per cent of loans granted to total enterprises, totalling €2,891 million. The non-performing loans ratio of the transport sector was 9.4 per cent, a figure below that of total enterprises (15.9 per cent).

Trade credits accounted for 16 per cent of liabilities in the transport sector in 2015. However, net trade credit financing was negative, to an amount equivalent to 3 per cent of turnover, showing that the sector did not obtain net financing in this manner.

Contents



Analysis of enterprises in the transport sector

1. Introduction

This study evaluates the economic and financial situation of enterprises[1] operating in the transport sector, based on information from the Central Balance Sheet Database of Banco de Portugal.[2]

For the purposes of this analysis, the transport sector includes non-financial corporations (NFCs) operating in land transport, water transport and air transport. The sector was broken down on the basis of the aggregation of groups or divisions in Section H – Transportation and storage, of the Portuguese Classification of Economic Activities, Revision 3 (CAE-Rev.3):

• **Land transport:** comprised of groups 491 – passenger rail transport, interurban, 492 – freight rail transport, 493 – other passenger land transport and 494 – freight transport by road and removal services;

• **Water transport:** comprises division 50 – water transport;

• **Air transport:** corresponding to division 51 – air transport.

In addition to analysing the transport sector taking into account these economic activity segments, each segment was assessed individually. These analyses are complemented by an additional breakdown according to whether an enterprise's main activity is associated with passenger or freight transport:[3]

• **Passenger transport**: includes groups 491 – passenger rail transport, interurban, 493 – other passenger land transport (within land transport) and groups 501 – sea and coastal passenger water transport and 503 – Inland passenger water transport (within water transport);

• **Freight transport**: comprises the remaining activities in each segment.

Chapter 2 provides a general description of the transport sector as a whole. In chapters 3 to 5 an analysis by type of transport is conducted. The analyses reflect the structure of the different sectors taking into account economic activity, size, geographical location and maturity of included enterprises. Data on market concentration and corporate dynamics are also presented. An analysis is conducted of recent developments in turnover aimed at determining the extent to which these are reflected in profitability, considering the effects of operational and financial components on corporate activity. Information on solvency capacity is also provided. In addition, 'Box 1 | The importance of the export sector in the transport sector' allows for a quantification of the relevance of external markets for the sector's activity.

The analysis focuses chiefly on the 2011-15 period, based on Simplified Corporate Information (*Informação Empresarial Simplificada* – IES). More recent data for 2016, on bank loans and non-performing loans, are also used, obtained from Banco de Portugal's Central Credit Register (CCR) ('Box 2 | Loans granted by the resident financial system').

The transport sector is also compared with a broader transport sector, that includes public transport companies, which, for statistical purposes, are incorporated in the general government institutional sector and not the non-financial corporations sector ('Box 3 | The general government and the transport sector').

The quartiles of the distribution of individual values for a number of indicators are presented, giving the position of most enterprises analysed by measures that are not conditioned by the presence of extreme values. Contributions to aggregate results from the various economic activity segments and size classes are also analysed.

This publication compares the results obtained in each of these activities with total enterprises in Portugal. For greater detail on total enterprises see Central Balance Sheet Study | *26 – Sectoral analysis of non-financial corporations in Portugal 2011-2016*, of November 2016.

The Annex contains a summary table with the main indicators and a methodological summary with the definition of the main concepts used throughout the study. The statistical series (in Excel format) under analysis can be found on Banco de Portugal's website.

2. Analysis of enterprises in the transport sector

2.1. Structure and dynamics

2.1.1. Structure

In 2015 the transport sector comprised 16,000 enterprises, i.e. 4 per cent of total enterprises in Portugal (Table 1). These enterprises were responsible for 3 per cent of turnover and 4 per cent of the number of employees in enterprises in Portugal. Compared with 2011, the weight of the transport sector in total enterprises declined by 0.5 percentage points (p.p.) in terms of the number of enterprises, increased by 0.2 p.p. in turnover, and remained unchanged in terms of the number of employees.

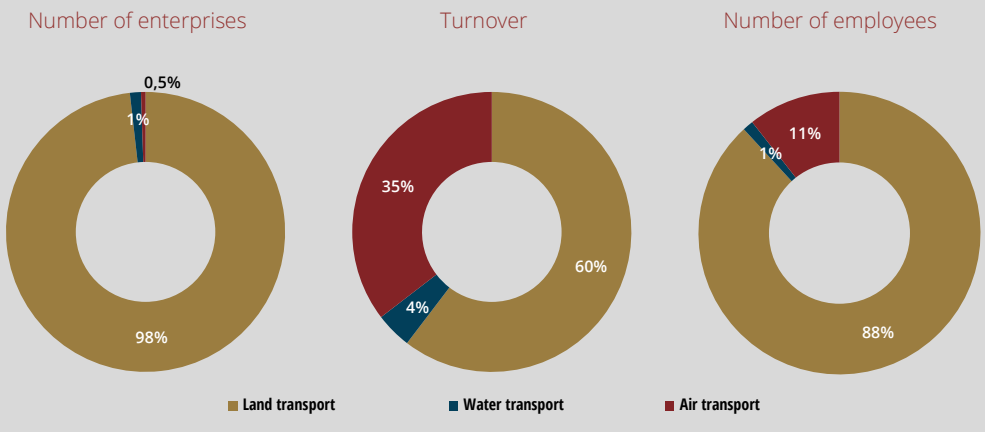
Table 1 • Weight of the transport sector in total enterprises

	Number of enterprises	Turnover	Number of employees
2011	4.5%	3.2%	3.9%
2015	3.9%	3.4%	3.9%

When breaking down the sector by **economic activity segment,** the weight of land transport was particularly relevant: 98 per cent of enterprises in the transport sector belonged to this segment, which accounted for 60 per cent of turnover and 88 per cent of the number of employees in the sector (Chart 1). Air transport, representing 0.5 per cent of enterprises in the sector, accounted for 35 per cent of turnover and 11 per cent of the number of employees in the transport sector. Water transport, with 1 per cent of enterprises, was the least relevant in terms of the number of employees (1 per cent) and turnover (4 per cent).

By **size class**,[5] 91 per cent of enterprises in the sector were microenterprises (Chart 2). Small and medium-sized enterprises (SMEs), accounting for 9 per cent of enterprises in the sector, had the largest share in terms of the number of employees and turnover (42 per cent, in both cases). Large enterprises were responsible for 45 per cent of turnover and

Chart 1 • Structures | By economic activity segment (2015)[4]



31 per cent of the number of employees in the sector, corresponding to 0.3 per cent of enterprises.

In 2015 the average enterprise in the transport sector was very similar to the average enterprise in Portugal in terms of turnover and number of employees (Table 2). Enterprises in land transport, the segment with the largest weight in the sector, largely contributed to this situation. On average, enterprises in this segment had practically the same number of employees and generated half of the turnover of the average enterprise in Portugal. By contrast, the average enterprise in air transport generated 58 times more turnover and had 20 times more employees than the average enterprise in Portugal. In turn, in water transport, the average enterprise generated three times the turnover of the average enterprise in Portugal with the same average number of employees.

Table 2 • Average turnover and average number of employees | Ratio to total enterprises (Total enterprises = 1) (2015)

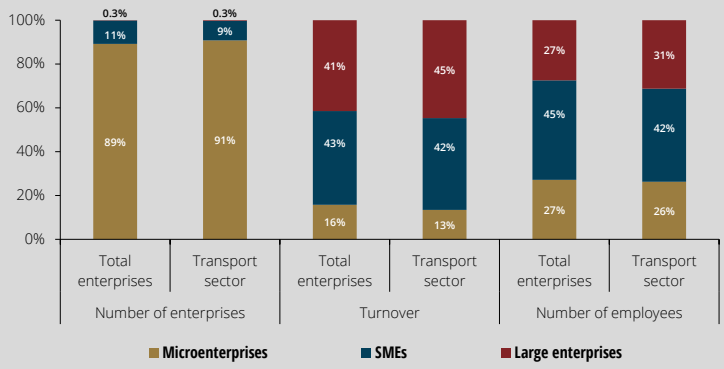
	Total enterprises	Transport sector	Land transport	Water transport	Air transport
Average turnover	1.0	0.9	0.5	2.8	58.4
Average number of employees	1.0	1.0	0.9	1.0	20.3

With regard to **geographical location**,[6] the Lisbon and Porto districts together accounted for 45 per cent of enterprises, 66 per cent of turnover and 52 per cent of employees in the transport sector in 2015 (Table 3). The Lisbon district made the most relevant contribution to this concentration, accounting for 32 per cent of enterprises, 56 per cent of turnover and 39 per cent of employees in the sector.

Compared with the sector as a whole, the Lisbon and Porto districts, despite together accounting for a share similar to that of enterprises in land transport (46 per cent), were less significant in terms of turnover and employees (48 per cent, in both indicators).

In water transport, the Funchal, Faro and Lisbon districts stood out, with 25, 21 and 17 per cent of the number of enterprises respectively. The Lisbon district was relevant in terms of turnover, accounting for 58 per cent of turnover in the segment, followed by the Funchal and Porto districts (with 19 and 12 per cent respectively). In terms of the number of employees, the Funchal district (25 per cent)

Chart 2 • Structures | By size class (2015)



and the Lisbon and Porto districts (18 per cent, in both cases) were particularly relevant. Despite its relevance in terms of the number of enterprises, Faro accounted for only 1 per cent of turnover in water transport (15 per cent of employees).

Air transport was mostly concentrated in the Lisbon district, which accounted for 75 per cent of enterprises, 95 per cent of turnover and 87 per cent of employees in this segment.

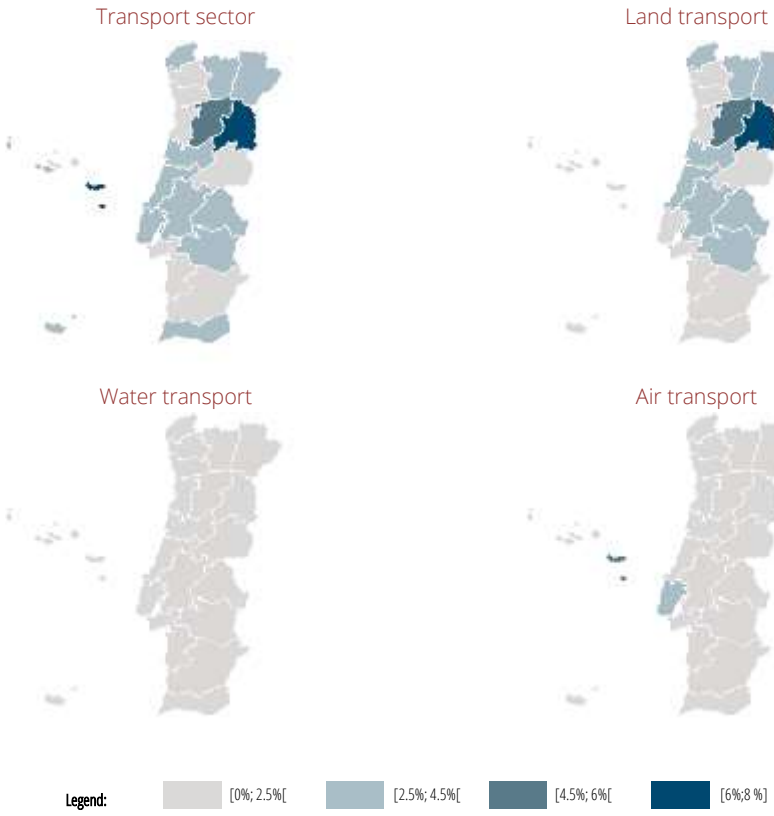
Figure 1 assesses the relative weight of turnover of the transport sector in total enterprises with their head office in each district.

Table 3 • Geographical location | By economic activity segment (2015)

	Number of enterprises		Turnover		Number of employees	
	District (Top 3)	% of the total	District (Top 3)	% of the total	District (Top 3)	% of the total
Total enterprises	Lisbon	28%	Lisbon	43%	Lisbon	35%
	Porto	18%	Porto	16%	Porto	19%
	Braga	8%	Braga	6%	Braga	9%
Transport sector	Lisbon	32%	Lisbon	56%	Lisbon	39%
	Porto	13%	Porto	10%	Porto	13%
	Leiria	6%	Braga	5%	Aveiro	6%
Land transport	Lisbon	32%	Lisbon	32%	Lisbon	33%
	Porto	13%	Porto	15%	Porto	15%
	Leiria	6%	Braga	7%	Aveiro	7%
Water transport	Funchal	25%	Lisbon	58%	Funchal	25%
	Faro	21%	Funchal	19%	Porto	18%
	Lisbon	17%	Porto	12%	Lisbon	18%
Air transport	Lisbon	75%	Lisbon	95%	Lisbon	87%
	Funchal	7%	Ponta Delgada	4%	Ponta Delgada	12%
	Faro	5%	Porto	0%	Faro	1%

In 2015 the transport sector was more relevant in the Ponta Delgada district, where it accounted for 7 per cent of turnover generated by enterprises with their head office in this district. For the most part, turnover in the transport sector in the Ponta Delgada district originated in enterprises active in air transport. The weight of the transport sector was also relevant in the Guarda and Viseu districts (6 and 5 per cent respectively), where land transport was particularly important. In the Lisbon district, air transport was responsible for 3 per cent of turnover generated in the district, compared with 2 per cent in land transport and 0.2 per cent in water transport. The water transport segment had a marginal weight in most districts.

Figure 1 • Geographical location by district | Weight in total enterprises in the district (turnover – 2015)

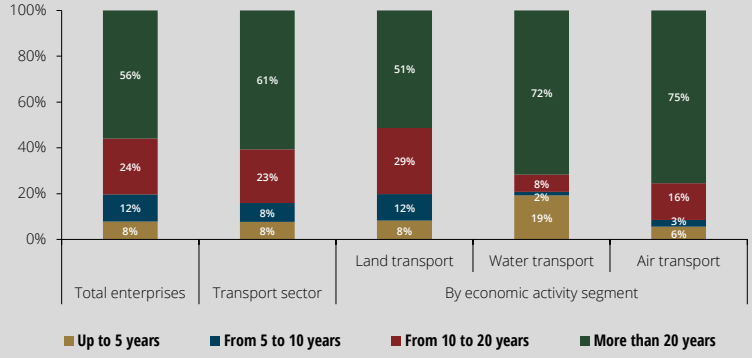


Note: Information on the transport sector reflects the sum of the values computed for its segments, shown individually in the other maps.

The distribution of turnover by **enterprise maturity** class[7] in the transport sector was similar to that seen in total enterprises. In 2015, 61 per cent of turnover in the transport sector was generated by enterprises established for more than 20 years and 23 per cent by enterprises established for 10 to 20 years. Enterprises established for less than 5 years accounted for 8 per cent of turnover in the sector (Chart 3).

The predominance of enterprises established for more than 20 years was broadly-based across the economic activity segments in the transport sector, in particular in air transport (75 per cent of turnover in the segment) and water transport (72 per cent). Water transport was the segment with the highest share of turnover associated with enterprises established for less than 5 years (19 per cent, compared with 8 per cent in land transport and 6 per cent in air transport).

Chart 3 • Structures | By maturity class (turnover – 2015)



2.1.2. Concentration

In 2015 the transport sector had a concentration of turnover similar to that of total enterprises: 10 per cent of enterprises in the sector generated 89 per cent of turnover (88 per cent in total enterprises) and 1 per cent of enterprises were responsible for 65 per cent of turnover (63 per cent in total enterprises) (Table 4).

Table 4 • Distribution of turnover (2015)

	Total enterprises	Transport sector	Land transport	Water transport	Air transport
Percentage of turnover generated by 10% of enterprises	88%	89%	83%	95%	84%
Percentage of turnover generated by 1% of enterprises	63%	65%	48%	55%	N.A.

Note: Figures for the concentration associated with 1% of enterprises in air transport are not shown owing to the small number of enterprises comprising this segment. Given that the concentration is assessed for each aggregate, the most relevant enterprises identified in the economic activity segments might not belong to the set of the most relevant enterprises in the sector under review.

By economic activity segment, water transport had the highest degree of concentration when taking into account 10 per cent of enterprises (generating 95 per cent of turnover). However, in this segment, the share of turnover associated with 1 per cent of enterprises was 55 per cent, a figure below that recorded by the sector's total.

Land transport had figures below those of the sector's total when both thresholds are considered, with 83 and 48 per cent of turnover associated with 10 and 1 per cent of enterprises respectively. In air transport, 10 per cent of enterprises were responsible for 84 per cent of turnover in the segment.

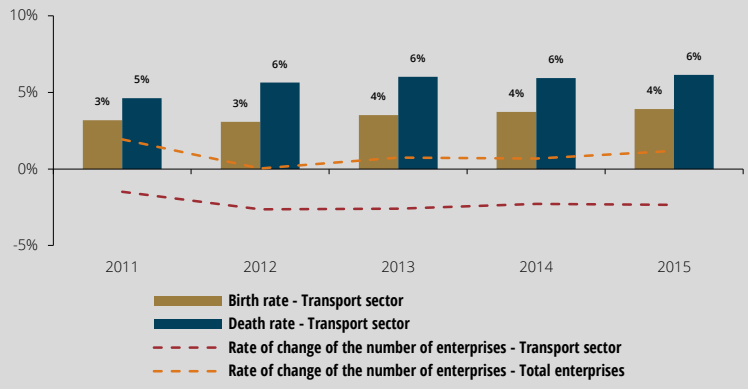
2.1.3. Dynamics

The number of enterprises active in the transport sector decreased by 2 per cent in 2015, continuing the trend reduction observed over the past decade, and in contrast to the increase seen in total enterprises (1 per cent in 2015) (Chart 4).

The birth rate in the transport sector ranged between 3 and 4 per cent over the 2011-15 period. The death rate, in turn, hovered between 5 and 6 per cent over the same period. In 2015, for each enterprise in the sector ceasing activities, 0.6 enterprises were created, i.e. half of the figure seen in total enterprises (a ratio of 1.2) (Chart 5).

Given its weight in the sector's total, land transport determined the dynamics of the sector as a whole. The remaining segments had birth/death ratios above 1 (1.5 and 1.8 in water and air transport, respectively, in 2015), a situation observed since 2012 in water transport and since 2013 in air transport.

Chart 4 • Demographic indicators



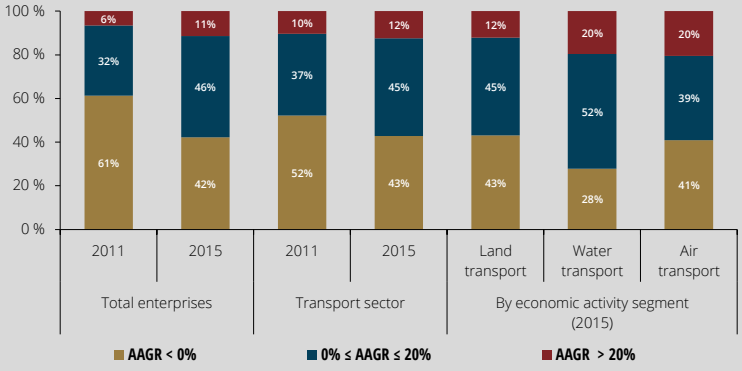
In 2015 the share of high-growth enterprises (HGEs),[8] i.e. enterprises with an annual average growth rate of turnover of more than 20 per cent in a period of three consecutive years, was 12 per cent, 2 p.p. higher than in 2011 (Chart 6). By comparison, the share of HGEs in total enterprises was 11 per cent in 2015, 5 p.p. more than in 2011.

By economic activity segment, water transport and air transport stood out, with 20 per cent of enterprises in each segment classified as HGE in 2015. By contrast, in 2015, 43 per cent of enterprises in the transport sector had a negative annual average growth rate for a period of three consecutive years, a share that was similar in land and air transport (43 and 41 per cent respectively), and lower in water transport (28 per cent). Nevertheless, in the sector as a whole, the share of enterprises with a negative annual average growth rate for three consecutive years declined by 9 p.p. compared with 2011 (total enterprises posted a 19 p.p. decline, to 42 per cent in 2015).

Considering the relevance of the external market for the transport sector, 'Box 1 | The importance of the export sector in the transport sector' presents a specific analysis based on the set of enterprises carrying out transport activities and belonging to the export sector.

Chart 5 • Birth/death ratio

Chart 6 • Potential population of high-growth enterprises | Annual average growth rate – AAGR (over a three-year period)



Box 1 | The importance of the export sector in the transport sector

In 2015 the export sector[9] accounted for 10 per cent of the number of enterprises, 62 per cent of turnover and 38 per cent of the number of employees in the transport sector, figures above those recorded by total enterprises (6 per cent, 37 per cent and 24 per cent respectively) (Chart 7). These figures remained practically unchanged from 2014, both in the transport sector and total enterprises.

In the transport sector, the weight of exporting activities was larger depending on the size class (Chart 8). In 2015 the export sector covered 49 per cent of large enterprises in the transport sector, 85 per cent of turnover and 59 per cent of the number of employees in this size class. In SMEs, the export sector comprised 36 per cent of enterprises, 50 per cent of turnover and 39 per cent of the number of employees. Around 7 per cent of microenterprises in the transport sector were comprised in the export sector, accounting for 23 per cent of turnover and 12 per cent of the number of employees in microenterprises belonging to the transport sector.

In addition to the relative weight of the export sector in each of the size classes in the transport sector, it is relevant to compare how exporting enterprises and the remaining enterprises in the transport sector were broken down by size class and economic activity segment. In 2015 the export sector was mostly comprised of microenterprises (66 per cent), followed by SMEs (33 per cent) and large enterprises (2 per cent) (Chart 9). By comparison, in the remaining enterprises belonging to the transport sector (not included

Chart 7 · Weight of the export sector (2015)

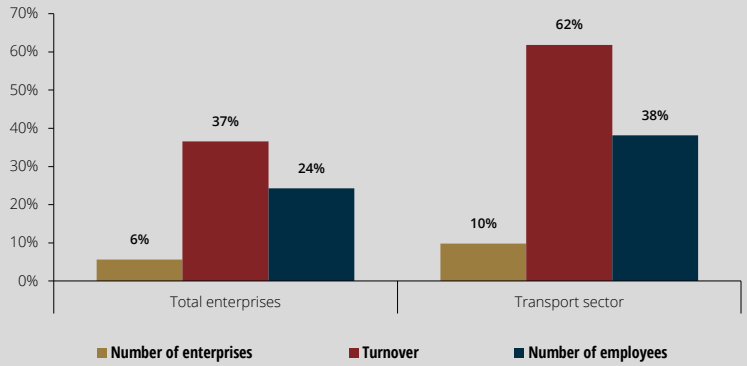
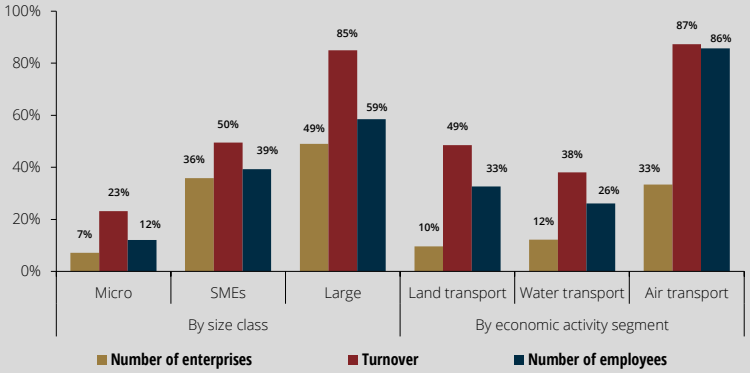


Chart 8 · Weight of the export sector | By economic activity segment and size class (2015)



in the export sector), there was a greater concentration of microenterprises (93 per cent), while SMEs (6 per cent) and large enterprises (0.2 per cent) were less relevant.

Despite the predominance of microenterprises in terms of number, large enterprises were responsible for the largest shares of turnover (61 per cent) and number of employees (48 per cent) in the export sector. For the remaining enterprises in the transport sector as a whole, SMEs were the most relevant, with 55 per cent of turnover and 42 per cent of the number of employees.

Breaking down by economic activity segment, the export sector was particularly relevant for air transport, accounting for 33 per cent of enterprises and 87 per cent of turnover in this segment (Chart 8). It also included 10 per cent of enterprises in land transport and 12 per cent of enterprises in water transport, representing 49 and 38 per cent of turnover for each of these segments respectively.

A comparison of the structure of the export sector with that of the remaining enterprises in the transport sector shows that land transport was the most relevant segment in the export sector in terms of the number of enterprises (97 per cent) and employees (75 per cent) (Chart 10). Air transport was more relevant in terms of turnover and number of employees in the export sector, compared with the remaining enterprises in the transport sector as a whole: air transport had the highest share of turnover of exporting enterprises in the transport sector (50 per cent), followed by land transport, with 47 per cent.

Chart 9 · Structure considering the inclusion in the export sector | By size class (2015)

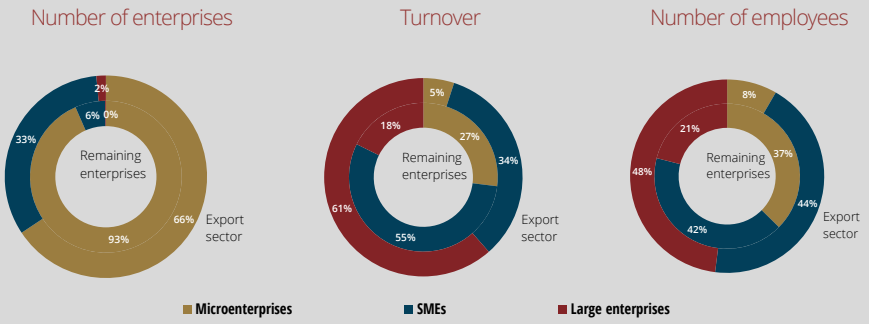
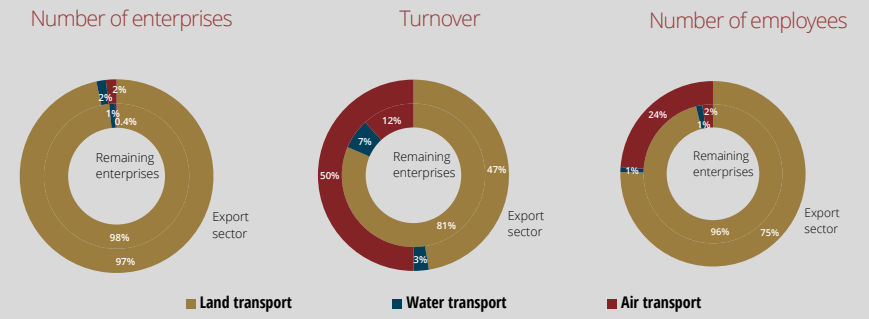


Chart 10 · Structure considering the inclusion in the export sector | By economic activity segment (2015)



2.2. Economic and financial analysis

2.2.1. Economic environment

The Portuguese GDP grew by 1.6 per cent in 2015, 0.7 p.p. above the increase seen in the previous year. All GDP components posted positive changes in 2015 (Table 5).

Private consumption increased more than public consumption (2.6 and 0.7 per cent respectively), which marked a reversal of a series of decreases since 2009. Gross fixed capital formation increased by 4.5 per cent in 2015, above the growth seen in 2014.

Imports grew more than exports (8.2 per cent, compared with 6.1 per cent), although the latter recorded a stronger acceleration compared with the previous year (1.8 p.p., compared with 0.4 p.p. for imports), notwithstanding the deceleration in external demand for Portuguese goods and services (year-on-year rate of change of 4.8 per cent in 2014 and 4.2 per cent in 2015).

Data for 2016 published by the Portuguese National Statistical Institute pointed to GDP growth of 1.4 per cent, compared with the same period in the previous year, with a decline in gross fixed capital formation and growth a deceleration of exports, imports and (private and public) consumption.[10]

Table 5 • GDP and main expenditure components | Real year-on-year rate of change

	2011	2012	2013	2014	2015 (p)	2016 (p)
GDP	-1.8%	-4.0%	-1.1%	0.9%	1.6%	1.4%
Private consumption	-3.6%	-5.5%	-1.2%	2.3%	2.6%	2.3%
Public consumption	-3.8%	-3.3%	-2.0%	-0.5%	0.7%	0.5%
Gross fixed capital formation	-12.5%	-16.6%	-5.1%	2.3%	4.5%	-0.1%
Exports	7.0%	3.4%	7.0%	4.3%	6.1%	4.4%
Imports	-5.8%	-6.3%	4.7%	7.8%	8.2%	4.4%

Sources: Portuguese National Statistical Institute and Banco de Portugal.

Note: (p) – preliminary data.

2.2.2. Activity and profitability

Turnover

Turnover in the transport sector grew by 1 per cent in 2015, 3 p.p. below the increase observed in 2014 (Chart 11). For the first time since 2011, the sector had a growth rate below that of total enterprises (an increase of 2 per cent in 2015).

SMEs were the only class that contributed positively to the change in turnover in the sector (2 p.p., associated with growth of 5 per cent). Microenterprises and large enterprises made negative contributions of 0.4 and 0.6 p.p., associated with negative rates of change in turnover of 3 and 1 per cent respectively.

By economic activity segment, growth in economic activity in the transport sector was determined by land transport, the only segment that saw an increase in turnover in 2015 (3 per cent) and that made a positive contribution to changes in turnover in the sector (2 p.p.). Water transport and air transport posted declines in activity of 9 and 1 per cent respectively, resulting in negative contributions to aggregate developments in the sector (0.4 and 0.5 p.p. respectively).

Despite the decline of 3 p.p. in the sector's growth rate of turnover (from 2014 to 2015), quartile distributions of individual changes do not indicate a broadly-based decrease in the activity of enterprises in the sector in 2015 (Chart 12). In land transport, in line with the transport sector as a whole, changes in these distributions were residual. Water and air transport showed differing developments, with greater dispersion in the results in water transport, and a negative trend in air transport.

In contrast to 2014, in 2015 the weighted average of the sector's growth rate of turnover reached a figure similar to that of the median of the distribution, which indicated less distortion (through the presence of extreme values) in the aggregate figure. Water transport stood out with the greatest differential between the two measures. Although turnover dropped by 9 per cent on average in 2015, half of the enterprises in water transport saw their turnover increase by more than 8 per cent.

The weight of the external market was particularly relevant in the transport sector over the whole period under review. In 2015 exports accounted for 45 per cent of turnover in the transport sector, 1 p.p. more than in 2011. The external market had systematically boosted growth in turnover in the transport sector up to 2014. In 2015, however, the contribution made by the external market to the annual rate of change in turnover was marginally negative (0.1 p.p.). The positive rate of change in the sector's turnover resulted from a positive contribution made by the internal market (1 p.p.) (Chart 13).

The differential between the export component of turnover and the import component of purchases and supplies and external services (SES), as a percentage of turnover, was positive over the whole time horizon under analysis. In

Chart 11 • Turnover | Contributions (p.p.) to the annual growth rate (%)

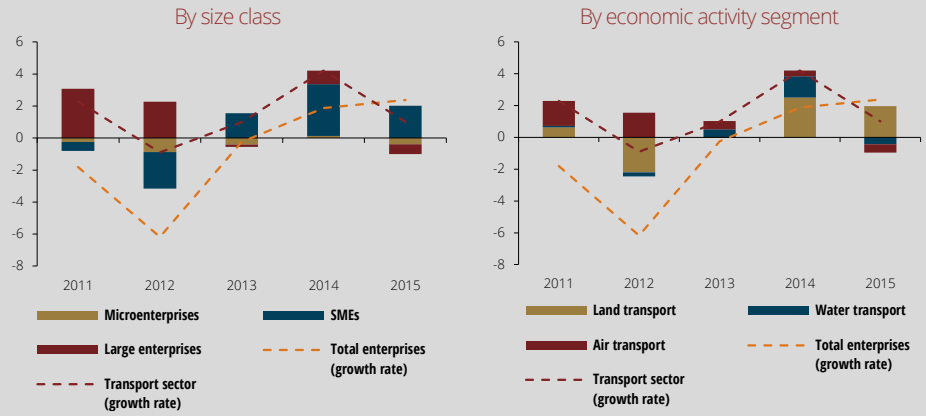
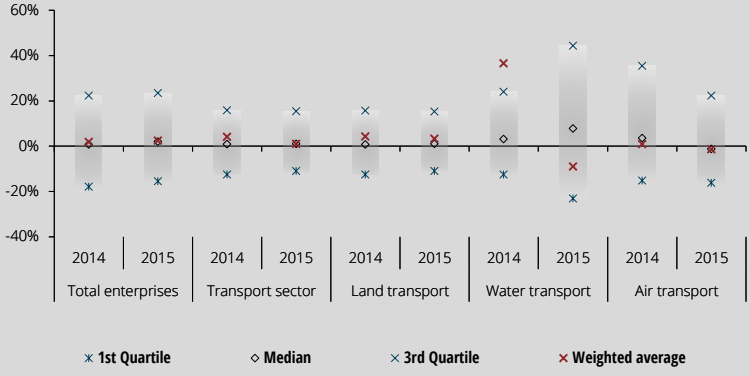


Chart 12 · Turnover | Quartile distribution and weighted average of the annual growth rate



2015 the sector's exports exceeded imports by 22 per cent of turnover, in contrast to total enterprises (a balance of 1 per cent) (Chart 14).

The positive differential between the export component of turnover and the import component of purchases and SES was broadly-based across all size classes. Large enterprises stood out with the most positive balance, corresponding to 38 per cent of turnover (compared with 11 per cent for microenterprises and 9 per cent for SMEs).

In air transport this differential corresponded to 45 per cent of turnover, while in land transport corresponded to 13 per cent. By contrast, water transport had a negative balance equivalent to 36 per cent of turnover.

Operating expenses[11]

In 2015, SES accounted for 70 per cent of operating expenses in the transport sector, above the figure for total enterprises (26 per cent) (Chart 15). Employee expenses comprised 24 per cent of operating expenses in the sector (16 per cent in total enterprises), while the cost of goods sold and materials consumed (CoGS) was responsible for 7 per cent, significantly below the figure for total enterprises (59 per cent).

The structures of operating expenses in the different size classes were similar to the sector's structure as a whole. The predominance of SES was also broadly-based across the economic activity segments (in water transport, SES even accounted for 89 per cent of operating expenses). Employee expenses were more relevant for land transport (28 per cent).

Operating expenses in the transport sector have remained unchanged in 2015 (in total enterprises, these expenses increased by 2 per cent). These developments were the result of a positive contribution from employee expenses (1 p.p., associated with an increase of 5 per

Chart 13 • Turnover | Contributions of the external and internal markets (p.p.) to the annual growth rate (%)

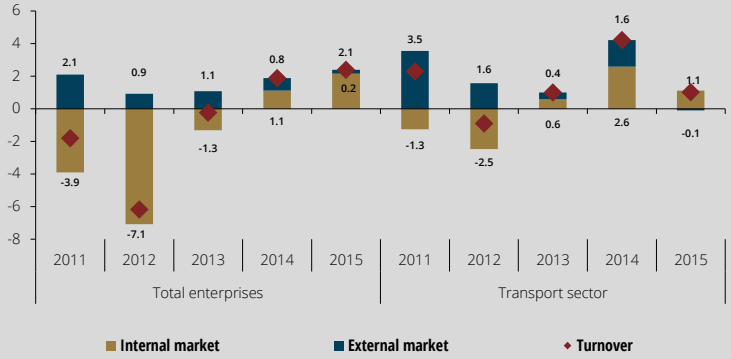
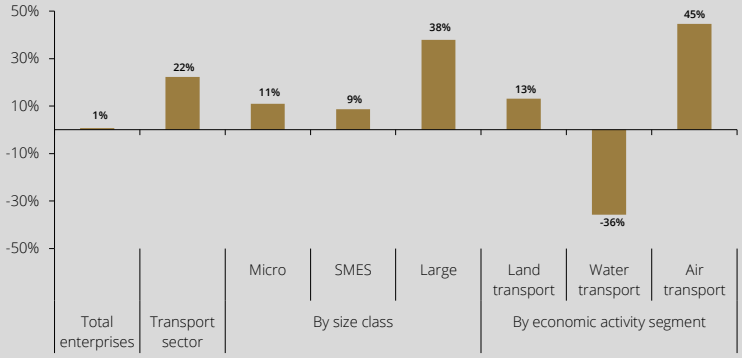


Chart 14 • Differential between the export component of turnover and the import component of purchases and SES | As a percentage of turnover (2015)



cent) and a negative contribution from CoGS (0.7 p.p., as a result of a decline of 9 per cent) and SES (0.5 p.p., resulting from a decline of 1 per cent) (Chart 16).

EBITDA[12]

EBITDA in the transport sector increased by 5 per cent in 2015, after declining by 12 per cent in 2014 (Chart 17). By comparison, EBITDA in total enterprises increased by 25 per cent in 2015, a change above that recorded in the previous year (1 per cent).

SMEs and microenterprises made a positive contribution to growth in EBITDA in the sector in 2015 (10 p.p. and 5 p.p. respectively). In turn, large enterprises made a negative contribution (10 p.p.) to developments in EBITDA in the sector.

By economic activity segment, the positive change in EBITDA in the sector in 2015 was due to a large extent to developments in land transport (a contribution of 18 p.p. to the change in EBITDA in the sector, associated with an increase of 27 per cent). In turn, air transport made a negative contribution (13 p.p., associated with a decline of 45 per cent), while water transport made a marginally positive contribution to developments in EBITDA in the sector.

Similarly to developments in total enterprises, more than half of the enterprises in the transport sector had a positive rate of change in EBITDA in 2015 (Table 6). This situation occurred irrespective of size class or economic activity segment, although SMEs and air transport stood out, with 65 and 59 per cent of enterprises respectively, recording positive EBITDA growth rates in 2015.

Nevertheless, 21 per cent of enterprises in the sector had negative EBITDA in 2015, a share still below the figure for total enterprises (33 per cent). EBITDA was negative in 23 per cent of microenterprises in the sector, while for SMEs and large enterprises this share stood at 8 and 13 per cent respectively.

Chart 15 • Operating expenses | Structure (2015)

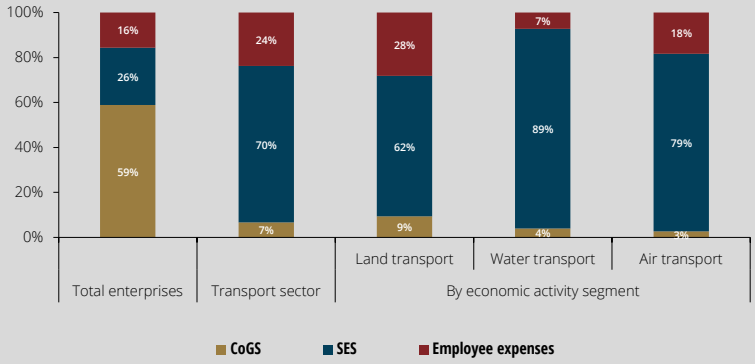
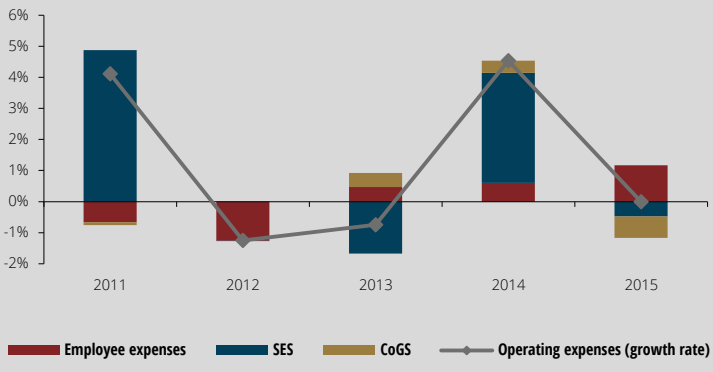


Chart 16 • Operating expenses | Contributions (p.p.) to the annual growth rate (%)



By economic activity segment, water transport was the segment with the highest share of enterprises with negative EBITDA (45 per cent, compared with 33 per cent in air transport and 21 per cent in land transport).

Table 6 • EBITDA | Share of enterprises with positive EBITDA growth rate and negative EBITDA

		Enterprises with positive EBITDA growth rate		Enterprises with negative EBITDA	
		2014	2015	2014	2015
Total enterprises		54.2%	54.4%	35.3%	33.1%
Transport sector		56.0%	56.3%	23.6%	21.3%
By size class	Microenterprises	55.5%	55.2%	24.9%	22.7%
	SMEs	60.2%	65.4%	9.4%	7.5%
	Large enterprises	62.2%	57.4%	8.7%	12.8%
By economic activity segment	Land transport	55.9%	56.3%	23.3%	20.9%
	Water transport	61.7%	54.1%	42.0%	45.0%
	Air transport	53.8%	58.8%	30.3%	32.9%

Profitability

Return on equity in the transport sector stood at 9 per cent in 2015, 6 p.p. above the figure for 2014 (Chart 18). After posting negative returns on equity in 2011 and 2012, the transport sector has shown positive returns since 2013, above those of total enterprises.

In 2015 water transport was the segment with the highest return on equity (21 per cent). Profitability in this segment was positive for the second year in a row and increased by 19 p.p. from 2014. In land transport, return on equity stood at 15 per cent in 2015, 14 p.p. more than in 2014. By contrast, air transport recorded a

Chart 17 • EBITDA | Contributions (p.p.) to the annual growth rate (%)

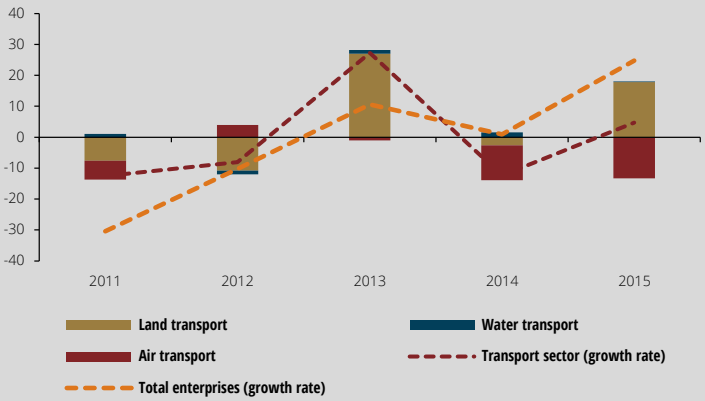
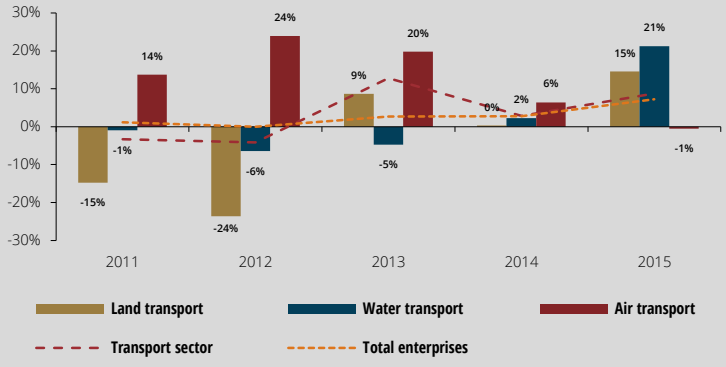


Chart 18 • Return on equity



negative return on equity in 2015 for the first time in the period under review (1 per cent).

Although the transport sector had a return on equity above that of total enterprises in 2015, the operating margin (EBITDA/income)[13] and the net margin (net income for the period (NIP)/income) were lower in this sector compared with total enterprises. In 2015 the transport sector had an operating margin of 8 per cent and a net margin of 1 per cent, 2 p.p. below that of total enterprises (10 per cent and 3 per cent respectively) (Chart 19).

By economic activity segment, land transport showed a higher operating margin (10 per cent), although the highest net margin was recorded in water transport (3 per cent). Air transport had the smallest operating margin (3 per cent) and net margin (-0.1 per cent).

2.2.3. Financial situation

Financial structure

In 2015 the capital ratio in the transport sector was 18 per cent, below that of total enterprises (32 per cent) (Chart 20). The sector's capital ratio increased by 2 p.p. from 2011, a figure similar to that of total enterprises.

The sector's average capital ratio in 2015 did not represent the situation of most of its enterprises, given that half of the enterprises in the sector had a capital ratio equal to or above 61 per cent.

By size class, microenterprises and SMEs recorded capital ratios of 41 and 38 per cent respectively. However, half of the microenterprises had a capital ratio of at least 65 per cent and half of the SMEs posted a figure of at least 33 per cent. For large enterprises, although the average figure for the capital ratio was negative (15 per cent), half of the enterprises had a capital ratio equal to or above 35 per cent.

Chart 19 • Profit | Weight in income (2015)

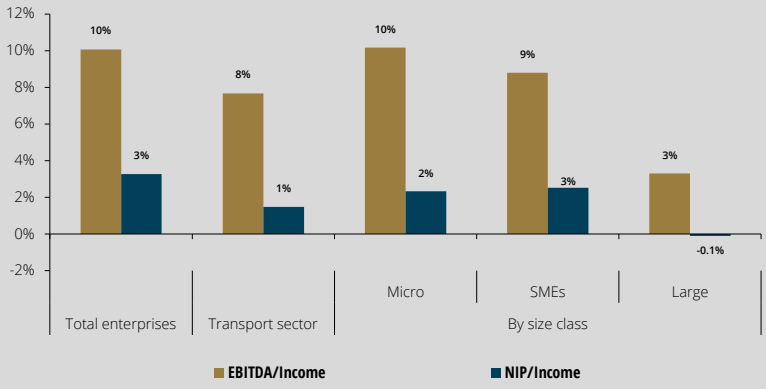
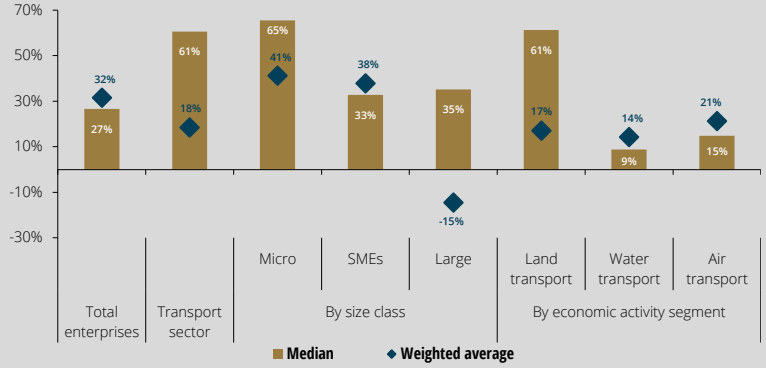


Chart 20 • Capital ratio | Weighted average and distribution median (2015)



By economic activity segment, air transport posted the highest capital ratio (21 per cent), although half of the enterprises had a capital ratio equal to or below 15 per cent. In land transport, the average capital ratio was 17 per cent, below the figure recorded by at least half of the enterprises in the segment (61 per cent). In turn, water transport had the lowest average capital ratio (14 per cent) and a median equal to 9 per cent.

In 2015, 15 per cent of enterprises in the transport sector recorded negative equity (Table 7). This figure was below that of total enterprises (29 per cent), a situation observed over the entire period under review. From 2011 to 2015, the share of enterprises with negative equity increased by 1 p.p. in the transport sector and 2 p.p. in total enterprises.

SMEs were the size class where the share of enterprises with negative equity was lowest (7 per cent). Microenterprises and large enterprises posted figures close to the sector's average (16 and 13 per cent respectively). The share of enterprises with negative equity increased by 2 p.p. for microenterprises, compared with 2011 figures (a decline of 3 p.p. for SMEs and 5 p.p. for large enterprises).

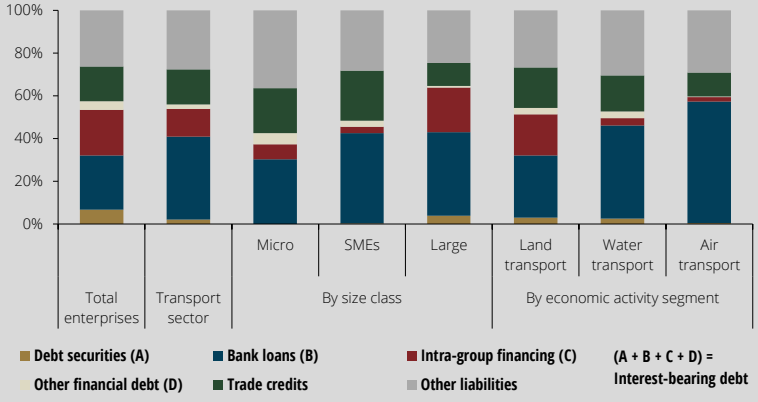
By economic activity segment, 46 per cent of enterprises in water transport had negative equity in 2015, a share that increased by 15 p.p. from 2011. In air transport, 37 per cent of enterprises were in this situation, a decline of 3 p.p. compared with 2011. The share of enterprises with negative equity was lower in land transport (15 per cent in 2015).

Table 7 • Capital ratio | Share of enterprises with negative equity

		2011	2015
Total enterprises		27.3%	29.0%
Transport sector		14.3%	15.4%
By size class	Microenterprises	14.7%	16.3%
	SMEs	9.7%	7.0%
	Large enterprises	17.4%	12.8%
By economic activity segment	Land transport	14.0%	14.9%
	Water transport	30.8%	46.0%
	Air transport	40.0%	36.7%

Debt was a relevant source of financing for enterprises in the transport sector, as is the case for most economic activity sectors in Portugal. In 2015 interest-bearing debt[14] accounted for 56 per cent of total liabilities in the transport sector, a figure similar to that of total enterprises (58 per cent) (Chart 21). Bank loans[15] stood for the greatest share of interest-

Chart 21 • Liabilities structure (2015)



bearing debt in the sector (39 per cent of liabilities), followed by intra-group financing (13 per cent).

The larger the size class, the greater the share of interest-bearing debt: it accounted for 43 per cent of liabilities in microenterprises, 48 per cent in SMEs and 65 per cent in large enterprises, mainly owing to the increasing weight of bank loans (in microenterprises and SMEs), together with the growing relevance of intra-group financing in large enterprises.

The share of interest-bearing debt was similar in land and water transport (54 and 53 per cent respectively), with differences in its structure. Bank loans accounted for 43 per cent of liabilities in water transport and 29 per cent in land transport. Intra-group financing was more relevant in land transport (19 per cent of liabilities, compared with 3 per cent in water transport). In air transport, interest-bearing debt accounted for 60 per cent of liabilities in the segment, a share mainly associated with bank loans (57 per cent of liabilities).

Trade credits accounted for 16 per cent of liabilities in the transport sector, a share similar to that of total enterprises. The relevance of this component was higher in SMEs and microenterprises (23 and 21 per cent of liabilities respectively) and smaller in large enterprises (11 per cent).

By economic activity segment, trade credits represented 19 per cent of liabilities in land transport, 17 per cent in water transport and 11 per cent in air transport.

Liabilities in the transport sector posted a marginally positive change (0.1 per cent) in 2015, compared with 2014, in contrast to the decline of 3 per cent in total enterprises. This change incorporated the effect of developments in the different components, some of which in the opposite direction. In this regard, mention should be made to the negative contribution of intra-group financing (1 p.p.) and the positive contribution of other liabilities (1 p.p.).

Owing to the weight of bank loans in liabilities in the transport sector, 'Box 2 | Loans granted by the resident financial system' presents additional information on this source of financing.

Box 2 | Loans granted by the resident financial system[16]

In 2015 bank loans granted to enterprises in the transport sector accounted for 39 per cent of liabilities in the transport sector.

According to data available in Banco de Portugal's Central Credit Register, in December 2016, loans granted by the resident financial sector in Portugal[17] to the transport sector accounted for 4 per cent of loans granted to total enterprises, totalling €2,891 million. This figure, despite posting a decline of €232 million from December 2011, was slightly higher than in the same period of the previous two years.

In December 2016, land transport, air transport and water transport accounted for 58, 37 and 5 per cent, respectively, of loans granted by the financial sector to the transport sector (Chart 22). Over the period under review, although land transport remained the most relevant segment to indebtedness in the sector, the relative weight of air transport increased, posting an increase of 10 p.p. in its share in December 2016, compared with December 2011.

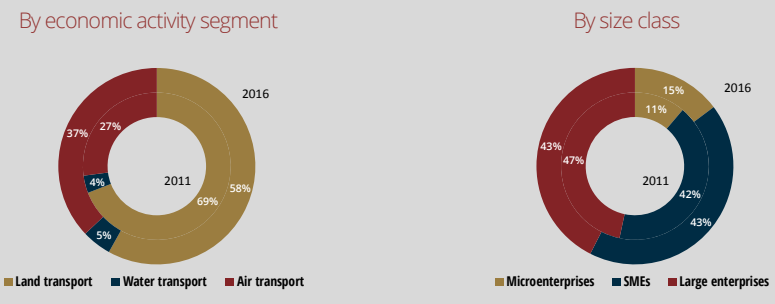
By size class, in December 2016, SMEs and large enterprises held 43 per cent of loans granted by the financial sector to the transport sector, for both cases, while microenterprises had a share of 15 per cent. Despite these shares, 84 per cent of enterprises in the sector with loans granted by the financial sector were microenterprises and only 0.5 per cent were large enterprises.

As regards the indicators on non-performing loans, the non-performing loans ratio[18] of the transport sector was 9.4 per cent in December 2016, compared with a 15.9 per cent ratio for total enterprises. This indicator increased in the transport sector and total enterprises, both compared with December 2015 (0.1 p.p. in both cases) and December 2011 (4.8 p.p. in the transport sector and 8.7 p.p. in total enterprises) (Chart 23).

SMEs contributed the most to non-performing loans in the sector, with 71 per cent of non-performing loans in December 2016, despite accounting for only 16 per cent of enterprises in the sector with loans granted by the financial sector. By contrast, in total enterprises, the largest share of non-performing loans was held by microenterprises (56 per cent). Large enterprises were responsible for the smallest share of non-performing loans, both in the transport sector (3 per cent) and total enterprises (4 per cent).

By economic activity segment, land transport had a non-performing loans ratio (8.7 per cent) below that of the sector, while water and air transport posted higher figures (13.6 per cent and 9.9 per cent respectively).

Chart 22 • Structure of funds obtained by the transport sector from the resident financial system (end-of-period figures)



The share of debtors with non-performing loans stood at 27.1 per cent in the transport sector and 27.5 per cent in total enterprises in December 2016. Land transport had the largest share of debtors with non-performing loans (27.2 per cent), followed by air transport (23.3 per cent) and water transport (20.2 per cent) (Chart 24).

Chart 23 • Non-performing loans ratio (end-of-period figures)

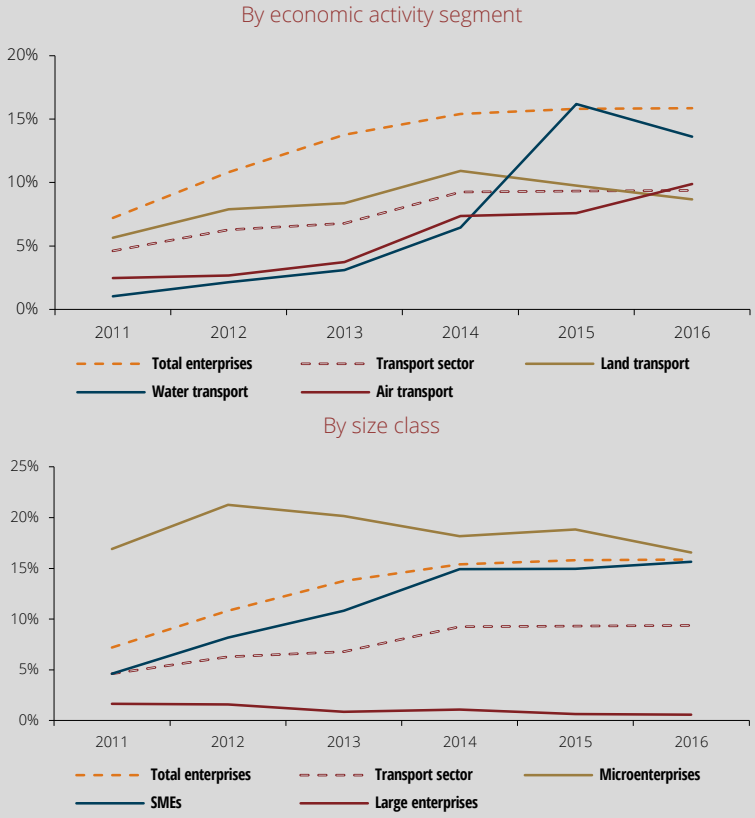
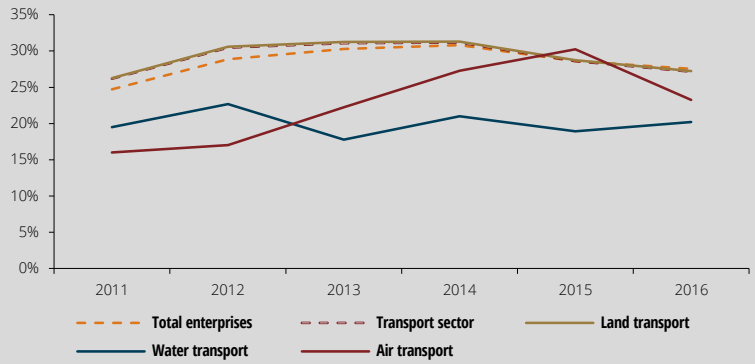


Chart 24 • Percentage of non-performing enterprises (end-of-period figures)



Financial costs and solvency

In 2015 interest expenses in the transport sector declined by 10 per cent, on average, from 2014 (12 per cent in total enterprises) (Chart 25). The average change was not representative of the situation of most enterprises in the sector, given that half of its enterprises recorded a decline in interest expenses equal to or above 21 per cent.

In large enterprises, interest expenses declined by 16 per cent on average, while the decline was less significant in microenterprises (5 per cent). However, half of the microenterprises posted decreases in interest expenses of more than 26 per cent. In SMEs, in turn, although the rate of change in interest expenses was marginally positive (0.4 per cent), half of the enterprises recorded negative rates of change in interest expenses of more than 5 per cent.

By economic activity segment, water transport recorded the steepest decline in interest expenses (60 per cent), followed by land transport (24 per cent). By contrast, interest expenses in air transport increased on average by 20 per cent.

Although the average change in interest expenses in water transport stood at -60 per cent, the median was -25 per cent. In turn, in air transport, although interest expenses increased on average, half of the enterprises in the segment saw a drop in interest expenses equal to or above 9 per cent.

In 2015 the share of interest expenses in EBITDA in the transport sector was 18 per cent, 3 p.p. less than in the previous year (Chart 26). This indicator, which can be interpreted as the degree of financial pressure on enterprises, showed a figure below that of total enterprises (20 per cent), a situation seen throughout the entire period under analysis.

By size class, microenterprises and SMEs recorded figures below the sector's average (8 per cent and 9 per cent respectively). In large enterprises, in turn, 56 per cent of EBITDA generated in 2015 was absorbed by interest expenses. Compared with 2014, financial pressure grew by 12 p.p. for large enterprises. In the remaining size classes, financial pressure decreased in 2015 (4 p.p. in microenterprises and 2 p.p. in SMEs).

Chart 25 • Interest expenses | Weighted average and median of the annual growth rate

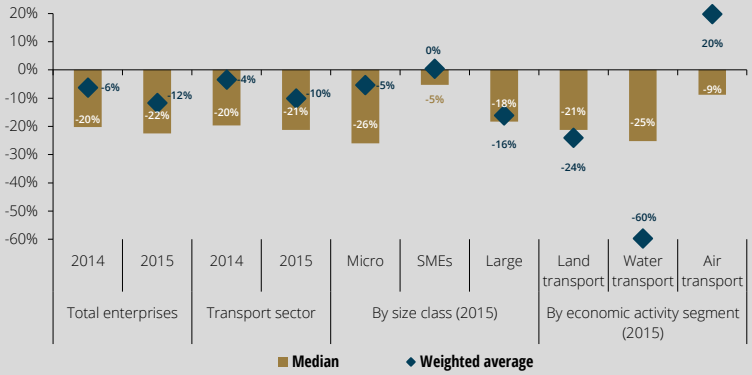
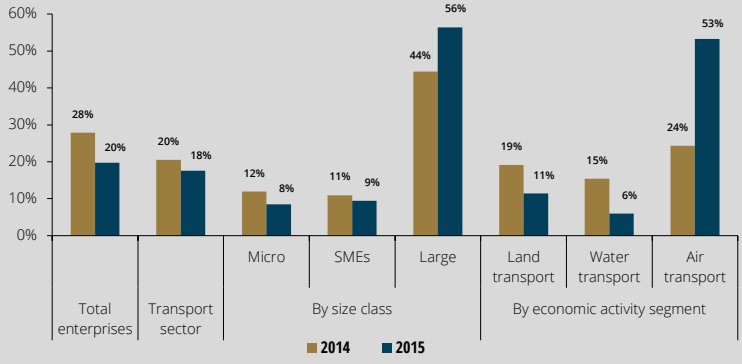


Chart 26 • Weight of interest expenses in EBITDA



By economic activity segment, interest expenses absorbed 53 per cent of EBITDA generated by air transport in 2015, 29 p.p. more than in 2014. Financial pressure declined in the other segments, compared with 2014, standing at 11 per cent in land transport and 6 per cent in water transport in 2015.

In the same year, 19 per cent of enterprises in the transport sector did not generate sufficient EBITDA to cover interest expenses (31 per cent in total enterprises) (Chart 27). This share was higher in microenterprises (21 per cent) and in water transport (31 per cent) and air transport (25 per cent).

By contrast, 79 per cent of enterprises in the sector paid interest below half of EBITDA generated (66 per cent in total enterprises). By size class, 90 per cent of SMEs and 86 per cent of large enterprises in the sector were in this situation.

In land transport, 79 per cent of enterprises showed levels of financial pressure below 50 per cent, a share similar to that of the sector's total and above the share of the remaining segments (69 per cent, in both cases).

Trade credit financing

In 2015 trade credit financing accounted for 16 per cent of liabilities in the transport sector, a share similar to that of total enterprises.

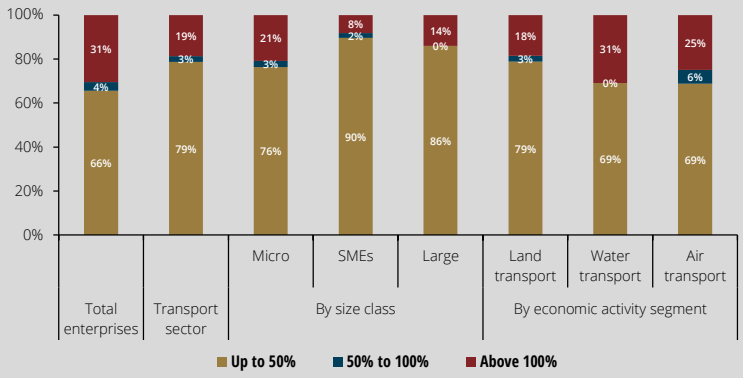
Days payable outstanding in the transport sector were higher than days sales outstanding (63 and 57 days respectively), a situation similar to that of total enterprises (75 and 70 days payable outstanding and days sales outstanding respectively). On average, enterprises in the sector took six more days to pay their suppliers than to receive from their customers.

The net indicator of trade credit financing[19] relates accounts payable and accounts receivable with turnover, helping to understand how enterprises use this type of financing. A positive value implies that the enterprise's accounts payable is above accounts receivable, which means that the enterprise is obtaining financing from its suppliers. A negative value in this indicator implies that accounts receivable is above accounts payable, which means that, overall, the enterprise is financing its customers.

In 2015 net trade credit financing in the transport sector was negative, equivalent to 3 per cent of turnover (Chart 28). In line with developments in total enterprises, this was structural over the period under analysis, which indicates that, in net terms, trade credits were not a financing source for the sector, but rather an investment on the part of the sector's enterprises to finance their customers. Nevertheless, net trade credit financing in the transport sector increased continuously since 2011, in contrast to the relative stability seen in total enterprises.

By size class, large enterprises recorded a positive net trade credit financing (equivalent to 6 per cent of their turnover in 2015). By

Chart 27 • Financial pressure | Distribution of enterprises by performance class (2015)

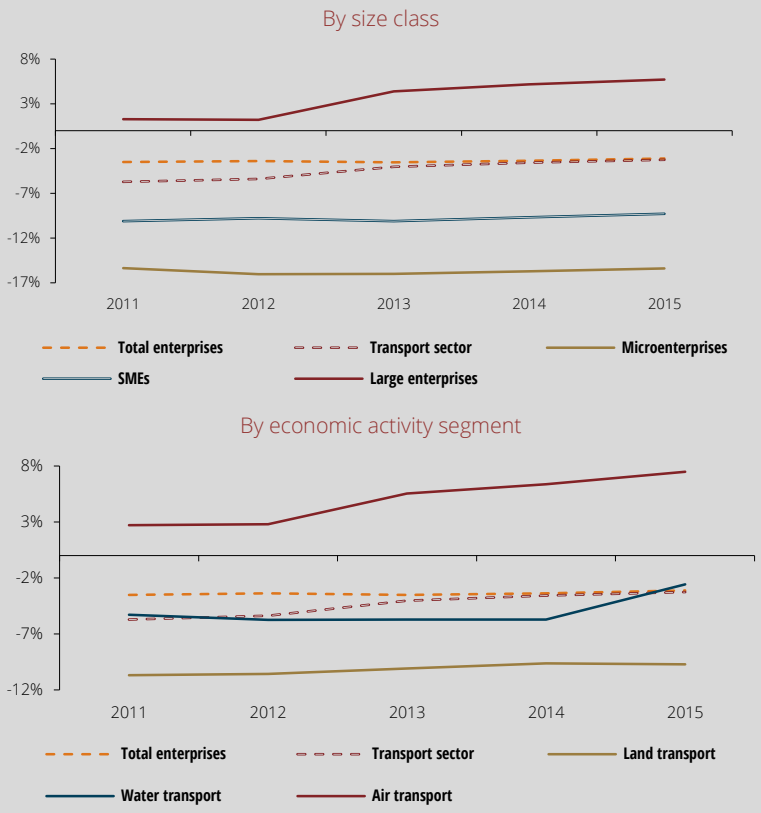


contrast, microenterprises posted a more negative net trade credit financing (15 per cent of turnover in 2015).

By economic activity segment, air transport was the only segment recording positive net trade credit financing (7 per cent of turnover in 2015). By contrast, land transport and water transport recorded negative figures in this indicator (10 and 3 per cent respectively in 2015).

The transport sector may be analysed taking into account the inclusion of a number of public transport companies, which, for statistical purposes, belong to the general government institutional sector and not the non-financial corporations sector. 'Box 3 | The general government and the transport sector' presents an analysis comparing both sets of enterprises.

Chart 28 • Net trade credit financing (as a percentage of turnover)

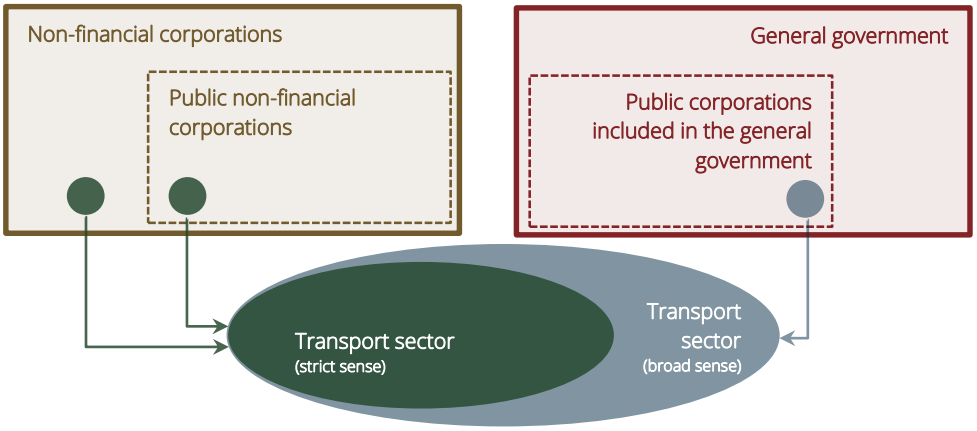


Box 3 | The general government and the transport sector

In addition to enterprises associated with the NFC institutional sector, a number of entities associated with the general government sector carry out their activities in the transport sector, taking into account the institutional sectorisation set out in Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union (ESA 2010).

In accordance with Regulation (EU) No 549/2013, the general government sector includes all non-market public institutional units, whether these entities have a corporate status (a set entitled 'public corporations included in the general government') or not (a set entitled 'general government entities except corporations'). In turn, the public sector comprises all public institutional units included in the general government, NFC and financial corporations institutional sectors. The public sector therefore includes, among other, public market institutional units, classified as NFCs, given that their main activity is the provision of goods and services at economically significant prices[20] ('public non-financial corporations'). Included in this sector are a number of entities which, in accordance with CAE Rev. 3, belong to the transport sector (Figure 2).

Figure 2 • Institutional sectorisation of enterprises in the transport sector



This box analyses the main features of the transport sector in a broad sense, i.e. including enterprises belonging to the general government sector (as the majority of their activity is not financed by the sale of goods or the provision of services at economically significant prices), compared with the transport sector in a strict sense, which only includes non-financial corporations.

Considering the number of enterprises, the share of entities in the transport sector belonging to the general government was residual in 2015. Nevertheless, these entities accounted for 4 per cent of turnover in the sector and 6 per cent of turnover in land and water transport (Chart 29). The weight of these entities was even more significant in the latter segment, when taking into account the number of employees (29 per cent), to the extent that these enterprises represented 5 per cent of the number of employees in the transport sector as a whole (a share similar to that observed in land transport).

When considering the economic and financial indicators associated with each set of enterprises in the transport sector, different levels of performance can be observed, associated with the contribution and the specific features of enterprises in the transport sector which belong to the general government and the impact of their inclusion on the transport sector (Chart 30).

Although the structure of operating expenses was similar when comparing both sets of enterprises in the transport sector, the set of enterprises in the transport sector, in a strict sense, posted an average operating margin of 8 per cent in 2015, above the figure when considering enterprises in the sector associated with the general government (6 per cent). Nevertheless, in 2015, the differential of 1.5 p.p. was below the average differential in the 2011-15 period, when taking into account the operating margins of enterprises in the transport sector with or without including enterprises in the general government (1.8 p.p.).

Chart 29 • Structure | By institutional sector of enterprises belonging to the broad transport sector (2015)

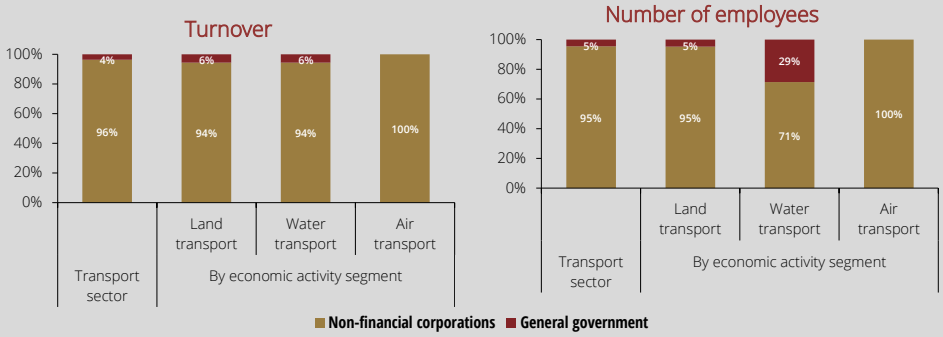
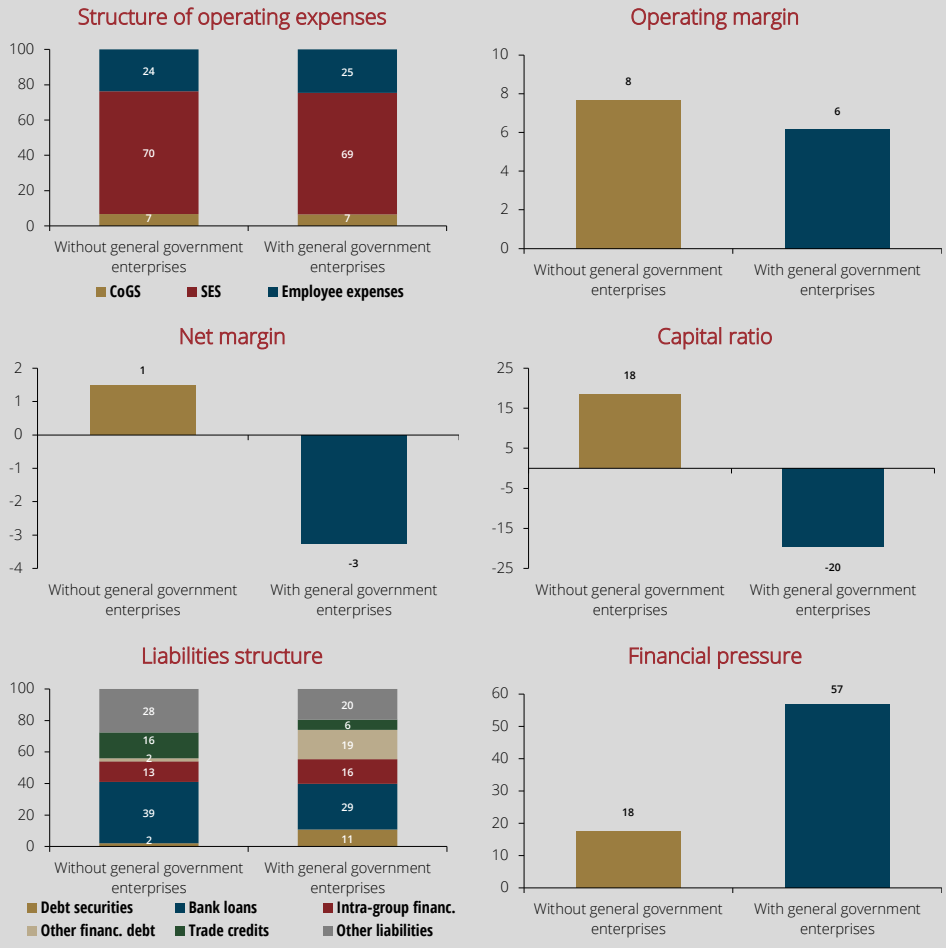


Chart 30 • Economic and financial indicators of enterprises in the transport sector (with or without inclusion of entities belonging to the general government, 2015, %)



The differential between the two sets was more significant when the net margin was taken into account. In 2015 this margin totalled 1 per cent in the transport sector when only taking into account non-financial corporations and recorded a negative figure of 3 per cent when considering enterprises belonging to the general government. The 5 p.p. differential recorded in this indicator indicates that components such as depreciation and amortisation, but also interest expenses, are more relevant in the set of enterprises belonging to the general government associated with the transport sector.

The positive average capital ratio of enterprises in the transport sector (18 per cent) was significantly smaller when considering enterprises in the transport sector belonging to the general government. The broad set of enterprises in the transport sector recorded negative equity in aggregate terms in 2015 (as in every year in the 2011-15 period). The average capital ratio of the transport sector when including this set of enterprises recorded a negative figure of 20 per cent in 2015, which indicates that these enterprises were highly leveraged.

In 2015 there were also relevant differences in the liabilities structure of the two sets of enterprises. Interest-bearing debt had a more predominant role in the set that includes enterprises associated with the general government (74 per cent of liabilities, compared with 56 per cent in the set of enterprises in the transport sector limited to non-financial corporations). In contrast, trade credits and other liabilities recorded a lower share (by 10 and 8 p.p. respectively). Interest-bearing debt was also broken down differently: in the set that includes enterprises associated with the general government, intra-group financing was more relevant (16 per cent of liabilities in this set of enterprises; 13 per cent in the set of non-financial corporations in the transport sector), debt securities (11 per cent of liabilities; 2 per cent in the strict set of enterprises in the transport sector) and other financial debt (19 per cent of liabilities, 16 p.p. more than in the strict set of enterprises in the transport sector). Bank loans were the most relevant liabilities component for both sets of enterprises (29 per cent of liabilities in the broad set of enterprises in the transport sector and 39 per cent in the transport sector only including non-financial corporations).

A greater share of interest-bearing debt and lower operating profitability led to higher levels of financial pressure when taking into account the broad set of enterprises in the transport sector. When the transport sector including the set of enterprises in the general government is taken into account, 57 per cent of EBITDA was absorbed by interest expenses in 2015, a share 39 p.p. above the figure of the set of enterprises in the transport sector that only includes non-financial corporations.

To sum up, enterprises in the transport sector belonging to the general government had a relatively small weight, but a very distinctive profile compared with the remaining enterprises in the transport sector. The differences in profile were more significant in terms of financial situation (more highly leveraged and greater financial pressure) and lower profitability levels.

3. Analysis of enterprises in land transport

3.1. Structure and dynamics

3.1.1. Structure

In 2015 around 15,800 enterprises belonged to land transport. These enterprises generated 2.1 per cent of turnover and employed 3.5 per cent of employees in total enterprises in Portugal (Table 8). Land transport accounted for around 60 per cent of turnover, 88 per cent of employees and 98 per cent of enterprises in the transport sector. Compared with 2011, the importance of land transport in total enterprises posted marginal changes in terms of turnover and number of employees, despite the 0.5 p.p. decline when taking into account the number of enterprises. The share of land transport in total transports declined by 1 p.p. when taking into account turnover and the number of employees.

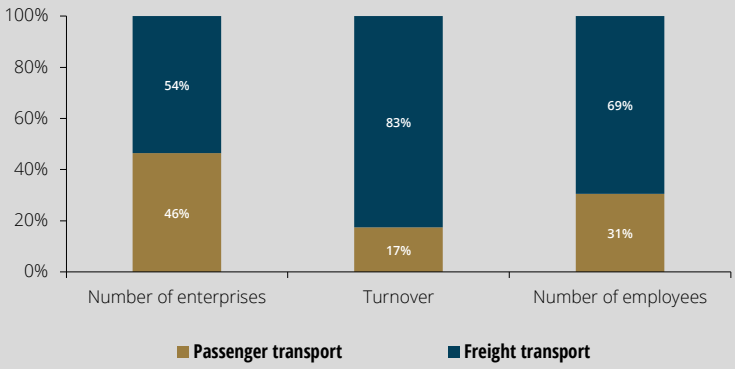
Table 8 • Weight of land transport in total enterprises and in the transport sector

		Number of enterprises	Turnover	Number of employees
Total enterprises	2011	4.4%	1.9%	3.5%
	2015	3.9%	2.1%	3.5%
Transport sector	2011	98.5%	61.6%	88.9%
	2015	98.2%	60.4%	88.1%

Around half of the enterprises in the sector carried out their activities in freight transport (54 per cent in 2015) (Chart 31). Broken down by freight and passenger transport, the sector was less equally distributed when considering turnover and number of employees, to the extent that freight transport was responsible for 83 per cent of turnover and 69 per cent of employees in the sector.

The sector was mostly composed of microenterprises[5] (91 per cent of enterprises) (Chart 32). SMEs, accounting for 9 per cent of enterprises, were responsible for the largest share of turnover (55 per cent) and number of employees (46 per cent). In turn, large enterprises, although less relevant in terms of the number of enterprises (0.3 per cent), generated close to a quarter of turnover and employed a similar share of employees in the sector. By size class, enterprises were distributed in a similar manner to that of total enterprises, although large enterprises generated a lower share of turnover in the sector.

Chart 31 • Structures | By economic activity segment (2015)



Microenterprises accounted for an even more relevant share of enterprises in passenger transport (98 per cent) and were also responsible for the largest share of employees (38 per cent) (Chart 33). SMEs and large enterprises, accounting for 2 and 0.2 per cent of enterprises in this segment respectively, had the most significant shares of turnover (40 and 39 per cent respectively). In turn, the structure by size class of enterprises associated with freight transport was similar to that of the sector as a whole: greater relevance of microenterprises in terms of the number of enterprises (85 per cent) and SMEs in terms of turnover (58 per cent) and employees (54 per cent).

In 2015 enterprises in land transport generated, on average, half of the turnover of the average enterprise in Portugal, while having practically the same number of employees (Table 9). Both economic activity segments had an average turnover below that of the average enterprise in Portugal. Turnover was lower in passenger transport. In 2015 the average enterprise in this segment generated an average turnover equivalent to 20 per cent of turnover generated by the average enterprise in Portugal.

Table 9 • Average turnover and average number of employees | Ratio to total enterprises (Total enterprises = 1) (2015)

	Total enterprises	Transport sector	Land transport	Passenger transport	Freight transport
Average turnover	1.0	0.9	0.5	0.2	0.8
Average number of employees	1.0	1.0	0.9	0.6	1.2

Chart 32 • Structures | By size class (2015)

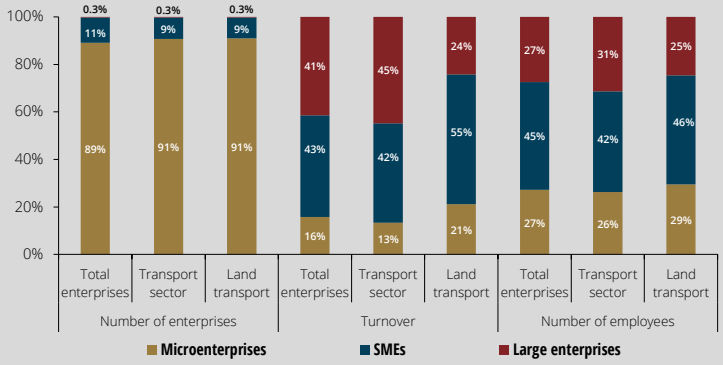
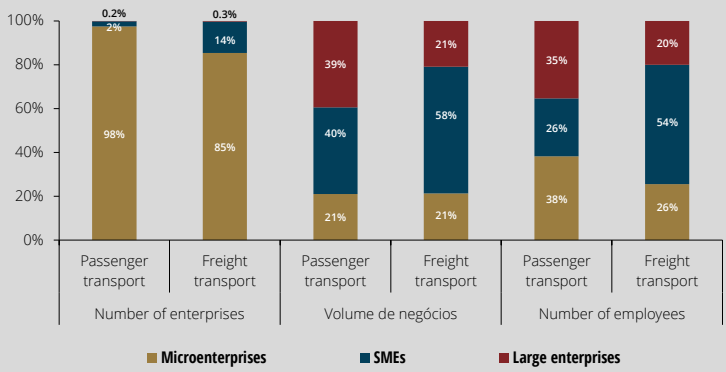


Chart 33 • Structures | By size class and economic activity segment (2015)



The number of employees in the average enterprise in freight transport was 1.2 times higher than in the average enterprise in Portugal. In passenger transport, the number of employees accounted for 60 per cent, on average, of the number of employees in the average enterprise in Portugal.

With regard to geographical location,[6] the Lisbon and Porto districts together accounted for 46 per cent of enterprises, 48 per cent of turnover and 48 per cent of employees in land transport. The Lisbon district made the greatest contribution to this concentration, as it accounted for around one-third of enterprises, turnover and number of employees in the sector (Table 10).

The Lisbon and Porto districts also had a greater relevance by economic activity segment. Around half of turnover and employees in each segment were associated with enterprises with their head office in these districts. This concentration was less clear in freight transport, taking into account the number of enterprises (38 per cent of enterprises in this segment had their head office in Lisbon or Porto, compared with 55 per cent in passenger transport).

Table 10 • Geographical location | By economic activity segment (2015)

	Number of enterprises		Turnover		Number of employees	
	District (Top 3)	% of the total	District (Top 3)	% of the total	District (Top 3)	% of the total
Total enterprises	Lisbon	28%	Lisbon	43%	Lisbon	35%
	Porto	18%	Porto	16%	Porto	19%
	Braga	8%	Braga	6%	Braga	9%
Transport sector	Lisbon	32%	Lisbon	56%	Lisbon	39%
	Porto	13%	Porto	10%	Porto	13%
	Leiria	6%	Braga	5%	Aveiro	6%
Land transport	Lisbon	32%	Lisbon	32%	Lisbon	33%
	Porto	13%	Porto	15%	Porto	15%
	Leiria	6%	Braga	7%	Aveiro	7%
Passenger transport	Lisbon	44%	Lisbon	34%	Lisbon	36%
	Porto	11%	Porto	15%	Porto	15%
	Funchal	7%	Setúbal	9%	Setúbal	8%
Freight transport	Lisbon	22%	Lisbon	32%	Lisbon	32%
	Porto	16%	Porto	15%	Porto	15%
	Leiria	9%	Aveiro	8%	Aveiro	8%

Land transport was more relevant in the Guarda and Viseu districts, where it accounted for 6 and 5 per cent, respectively, of turnover generated by enterprises with their head office in these districts. Turnover in the sector in these districts was mostly associated with enterprises in freight transport. This segment also had a considerable weight in turnover of enterprises with their head office in the Leiria district (4 per cent of turnover of enterprises with their head office in this district). By contrast, passenger transport accounted for less than 1 per cent of turnover generated in each of the districts in Portugal.

Considering enterprise maturity,[7] in 2015 the distribution of turnover in land transport was similar to that of total enterprises: 51 per cent of turnover in the sector was generated by enterprises established for more than 20 years, 29 per cent by enterprises established for 10 to 20 years and 8 per cent by enterprises established for less than 5 years (Chart 34).

The greater relevance of enterprises established for more than 20 years (in both economic activity segments) was more marked in passenger transport (74 per cent of turnover in the segment, compared with 46 per cent in freight transport). As a consequence, the remaining maturity classes had a smaller share in passenger transport (18 per cent of turnover was generated by enterprises established for 10 to 20 years and 8 per cent by enterprises established for less than 10 years). In turn, in freight transport, the breakdown was similar to that of the sector as a whole.

3.1.2. Concentration

In 2015, 10 per cent of the largest enterprises in land transport generated 83 per cent of turnover. This concentration was lower than that of total enterprises: 10 per cent of enterprises in Portugal represented 88 per cent of turnover (Table 11).

When 1 per cent of the largest enterprises is taken into account, land transport showed a concentration below that of total enterprises: 1 per cent of enterprises generated 48 per cent of turnover (63 per cent in total enterprises). By economic activity segment, passenger transport had a higher concentration, with 72 per cent of turnover associated with 1 per cent of its largest enterprises. In freight transport, in turn, the concentration of turnover was smaller, with 1 per cent of enterprises generating 40 per cent of turnover.

Table 11 • Distribution of turnover (2015)

	Total enterprises	Transport sector	Land transport	Passenger transport	Freight transport
Percentage of turnover generated by 10% of enterprises	88%	89%	83%	87%	76%
Percentage of turnover generated by 1% of enterprises	63%	65%	48%	72%	40%

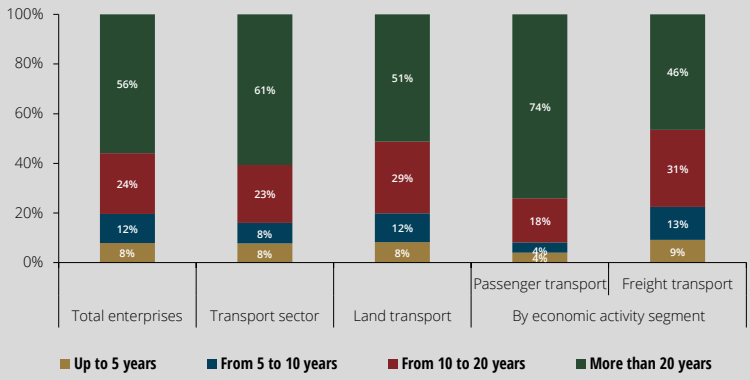
Note: As concentration is assessed in each aggregate, the most relevant enterprises identified in the economic activity segments might not belong to the set of the most relevant enterprises in the sector under analysis.

3.1.3. Dynamics

The number of enterprises active in land transport declined by 2 per cent in 2015 from 2014. The downward trend in the number of enterprises active in the sector was observed over the entire period under review (Chart 35).

For each enterprise in the sector ceasing activities, 0.6 new enterprises were created in 2015, half the figure recorded by total

Chart 34 • Structures | By maturity class (turnover – 2015)



enterprises. Both economic activity segments had ratios below 1 throughout the entire period under review; in 2015 these ratios stood at 0.5 and 0.6 in passenger and freight transport respectively.

In 2015 the share of high-growth enterprises[8] (i.e. enterprises with an annual average growth rate of turnover of more than 20 per cent in a period of three consecutive years) stood at 12 per cent in land transport, a share similar to that of total enterprises (11 per cent) (Chart 36).

Passenger transport had the smallest share of high-growth enterprises (8 per cent, compared with 13 per cent in freight transport).

In the same year, 43 per cent of enterprises in land transport had a negative annual average growth rate over a period of three consecutive years, a share also similar to that of total enterprises (42 per cent), and in both economic activity segments (41 per cent in passenger transport and 43 per cent in freight transport).

3.2. Economic and financial analysis

3.2.1. Activity and profitability

Turnover

Turnover in land transport increased by 3 per cent in 2015, compared with 2014, a change 1 p.p. above that of total enterprises (Chart 37).

Developments in turnover in the sector in 2015 were determined by positive contributions from SMEs and large enterprises (2 p.p., in both cases), associated with growth in turnover of 3 and 9 per cent respectively. Turnover in microenterprises in the sector declined by 3 per cent in the same period. This aggregate made a negative contribution of 1 p.p. to the change observed in the sector.

Turnover in both economic activity segments increased in 2015 (4 per cent in freight transport and 1 per cent in passenger transport). Owing to its larger relative weight in turnover in land transport, as a rule, freight

Chart 35 • Demographic indicators

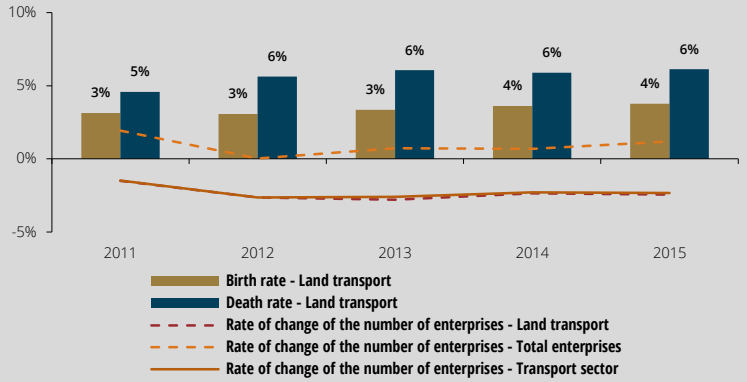
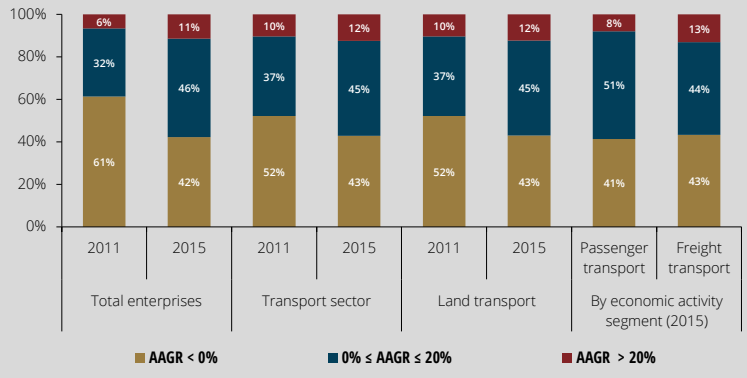


Chart 36 • Potential population of high-growth enterprises | Annual average growth rate – AAGR (over a three-year period)



transport influenced developments in the sector more significantly in the period under analysis (a contribution of 3 p.p. in 2015).

In 2015 exports accounted for 26 per cent of turnover in land transport, a figure above that of total enterprises (22 per cent). In this year, contributions from the internal and external markets to developments in turnover in the sector recorded positive figures of 1.7 and 1.6 p.p. respectively (Chart 38). Indeed, the contribution from the external market was positive overall over the 2011-15 period (with the exception of a contraction observed in 2012), even during periods when the internal market contributed to a decline in turnover in the sector.

The differential between the export component of turnover and the import component of purchases and SES in the transport sector, as a percentage of turnover, was positive throughout the entire period under analysis. In 2015 exports in the sector exceeded imports by 13 per cent of turnover (a marginally positive balance in total enterprises) (Chart 39).

The differential between the export component of turnover and the import component of purchases and SES, as a percentage of turnover, was positive in all size classes in the sector, totalling 12 per cent in microenterprises and large enterprises and 14 per cent in SMEs. By economic activity segment, freight transport had the most positive balance (16 per cent of its turnover), while in passenger transport this balance was marginally positive (1 per cent of turnover).

Operating expenses[11]

In 2015 SES were the main component of operating expenses in the sector (62 per cent), followed by employee expenses (28 per cent) and CoGS (9 per cent) (Chart 40). By contrast, in total enterprises, CoGS was the component with the largest share of operating expenses (59 per cent); SES and employee expenses accounted for

Chart 37 • Turnover | Contributions (p.p.) to the annual growth rate (%)

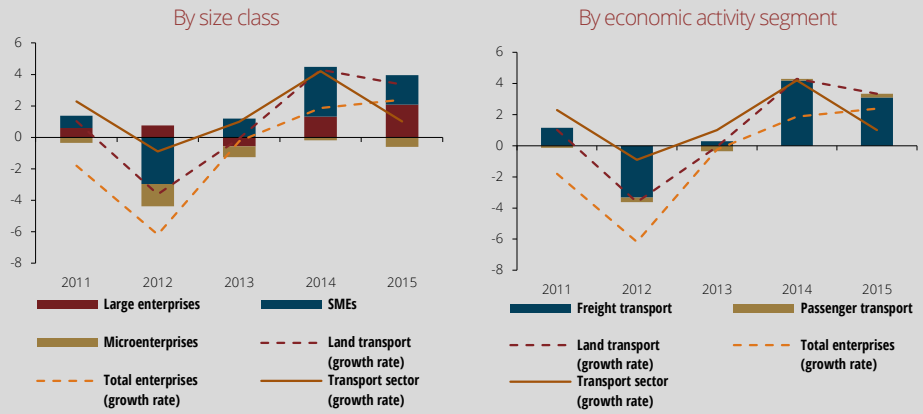
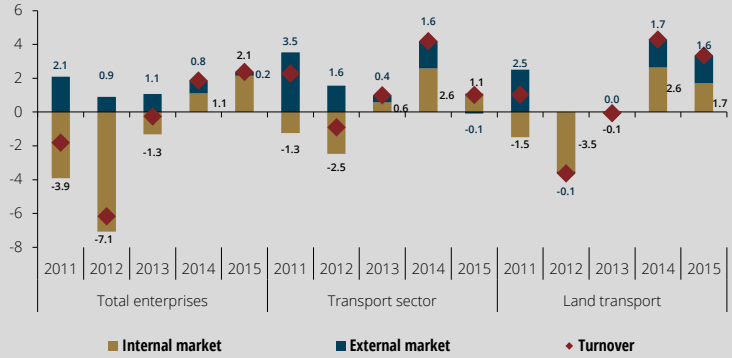


Chart 38 • Turnover | Contributions of the external and internal markets (p.p.) to the annual growth rate (%)



26 and 16 per cent of these expenses respectively.

The greater relevance of SES in the structure of operating expenses was broadly-based across the various size classes and both economic activity segments, albeit less so in large enterprises and passenger transport (51 and 43 per cent of operating expenses respectively). Employee expenses were more important in passenger transport (42 per cent of operating expenses, compared with 25 per cent in freight transport).

In 2015 operating expenses in land transport increased by 2 per cent from 2014 (Chart 41). These developments were greatly determined by employee expenses (a contribution of 2 p.p., associated with an increase of 8 per cent in 2015). The decline in CoGS (6 per cent, compared with 2014) was reflected in a -0.6 p.p. contribution to changes in operating expenses in the sector (due to this component's lower relative weight).

Chart 39 • Differential between the export component of turnover and the import component of purchases and SES | As a percentage of turnover (2015)

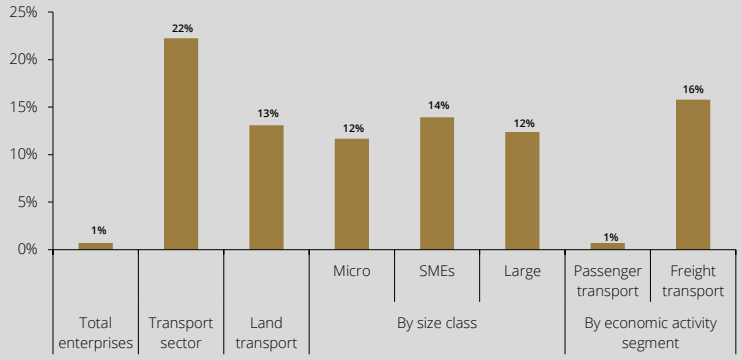


Chart 40 • Operating expenses | Structure (2015)

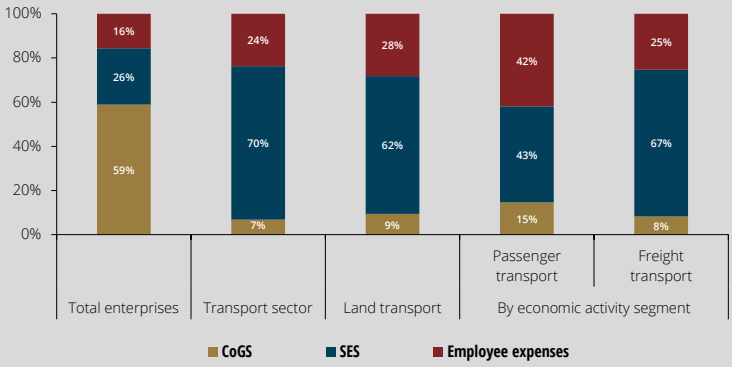
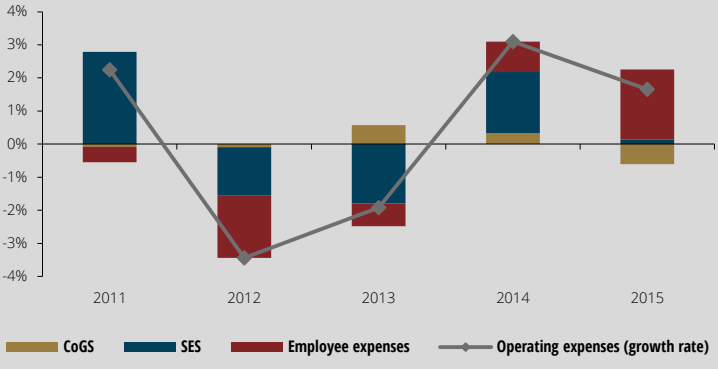


Chart 41 • Operating expenses | Contributions (p.p.) to the annual growth rate (%)



EBITDA[12]

EBITDA in land transport increased by 27 per cent in 2015, after dropping by 4 per cent in 2014 (increase of 25 per cent in total enterprises in 2015, representing a change 24 p.p. above that recorded in the previous year) (Chart 42).

The increase in EBITDA occurred in all size classes and economic activity segments. SMEs and passenger transport contributed more significantly to the change in EBITDA in the sector (15 p.p., in both cases, taking into account a breakdown by size and economic activity respectively). Developments in EBITDA in both economic activity segments were in contrast to the negative changes seen in both segments in 2011 and 2012. Since 2013, EBIDTA has increased consecutively in freight transport. In passenger transport, developments in this indicator have been more mixed.

In 2015, similarly to the previous year, 56 per cent of enterprises in land transport had a positive rate of change in EBITDA (54 per cent in total enterprises) (Table 12). The share of enterprises with growth in EBITDA was higher in the sector's SMEs (66 per cent), compared with microenterprises and large enterprises (55 per cent in both cases). By economic activity segment, 59 per cent of enterprises in freight transport had a positive growth rate in EBITDA (53 per cent in passenger transport).

Despite the increase observed in the sector's EBITDA in 2015, 21 per cent of enterprises in land transport had negative EBITDA (33 per cent in total enterprises).

The share of enterprises in the sector with negative EBITDA was smaller in SMEs (7 per cent) and large enterprises (11 per cent), compared with microenterprises (22 per cent). By economic activity segment, this share was higher in passenger transport (22 per cent, compared with 20 per cent in freight transport).

Table 12 • EBITDA | Share of enterprises with positive EBITDA growth rate and negative EBITDA

		Enterprises with positive EBITDA growth rate		Enterprises with negative EBITDA	
		2014	2015	2014	2015
Total enterprises		54.2%	54.4%	35.3%	33.1%
Transport sector		56.0%	56.3%	23.6%	21.3%
Land transport		55.9%	56.3%	23.3%	20.9%
By size class	Microenterprises	55.5%	55.3%	24.6%	22.3%
	SMEs	59.6%	65.7%	9.4%	7.0%
	Large enterprises	62.9%	55.3%	8.6%	10.5%
By economic activity segment	Passenger transport	56.7%	53.1%	22.3%	21.7%
	Freight transport	55.2%	59.4%	24.3%	20.3%

Profitability

In 2015 return on equity in land transport stood at 15 per cent, above the figures seen in the previous year (by 14 p.p.) and in total enterprises (7 per cent) (Chart 43). Profitability in the sector exceeded that of total enterprises only for the second time in the 2011-15 period.

Return on equity was 12 per cent in SMEs and 4 per cent in microenterprises, while standing at 6 per cent in freight transport. Owing to the fact that the aggregate for large enterprises and passenger transport posted negative equity in the period under review, return on equity could not be assessed in these aggregates. Consequently, average return on equity in the sector was not representative of

the situation of most of its enterprises. The fact that a relevant set of enterprises in the sector recorded negative equity resulted in average profitability being positively influenced by their amounts being aggregated in the calculation of average profitability in the sector. In addition, half of the enterprises in the sector had a return on equity equal to or below 4 per cent in 2015.

The sector's operating margin (EBITDA/income)[13] totalled 10 per cent in 2015, a figure similar to that of total enterprises. In turn, the net margin (net income for the period (NIP)/income) stood at 2 per cent, 1 p.p. below that of total enterprises (Chart 44). Enterprises in passenger transport had the best performance in the sector, with an operating margin of 16 per cent (compared with 9 per cent in freight transport) and a net margin of 5 per cent (compared with 2 per cent in freight transport).

3.2.2. Financial situation

Financial structure

The capital ratio of land transport was 17 per cent in 2015, below a capital ratio of 32 per cent in total enterprises (Chart 45). The sector's capital ratio increased by 2 p.p. from 2011, similarly to developments in total enterprises.

This aggregate figure did not reflect the situation of most enterprises in the sector, to the extent that, as it is the result of an average weighted by the weight of each enterprise in the aggregate, it does not capture disparate situations recorded at individual level. Half of the enterprises in the sector had a capital ratio equal to or above 61 per cent in 2015, a threshold similar to that of 2011 for the same share of enterprises (60 per cent). In total enterprises, half of the enterprises had a capital ratio of at least 27 per cent.

Chart 42 • EBITDA | Contributions (p.p.) to the annual growth rate (%)

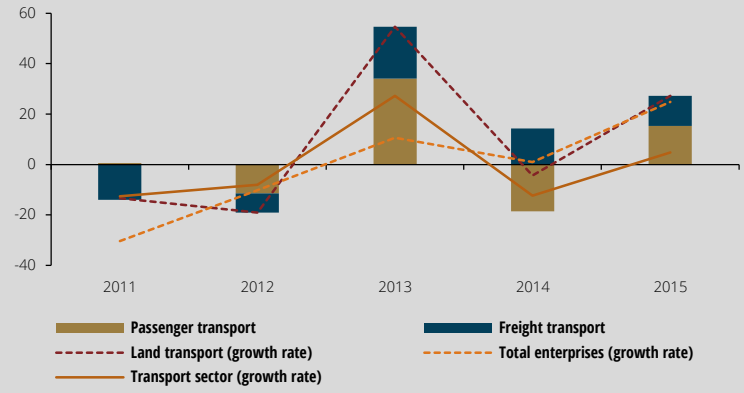
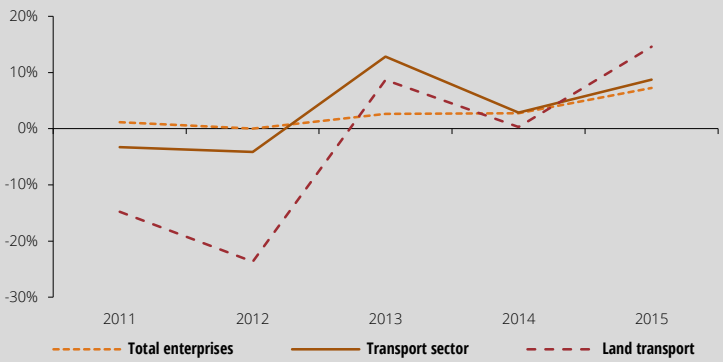


Chart 43 • Return on equity



Note: Return on equity is not shown by economic activity segment, as it could not be assessed in passenger transport (an aggregate with negative equity).

Microenterprises in the sector posted an average capital ratio of 50 per cent, with at least half of the enterprises recording a capital ratio of more than 66 per cent. The average capital ratio of SMEs was 34 per cent, similar to the median of the distribution of individual values (33 per cent). In turn, large enterprises had a negative average capital ratio of 54 per cent, although half of the enterprises had a capital ratio equal to or above 40 per cent.

In passenger transport, although the average capital ratio recorded a negative figure of 24 per cent, half of the enterprises had a capital ratio equal to or above 68 per cent. In freight transport, the average capital ratio was higher (35 per cent), although its median of the distribution of individual values (58 per cent) stood below that recorded by passenger transport.

The share of enterprises with negative equity in land transport stood at 15 per cent in 2015 (Table 13), a figure below that of total enterprises (29 per cent), as has been the case over the entire period under analysis. The share of enterprises with negative equity was also lower among SMEs and large enterprises in the sector (7 and 11 per cent respectively). In 2015, 16 per cent of microenterprises had negative equity. Compared with 2011, the share of enterprises with negative equity declined in SMEs (3 p.p.) and large enterprises (9 p.p.) and increased in microenterprises (1 p.p.).

Around one-fifth of enterprises in passenger transport had negative equity in 2015 (a share 3 p.p. above that recorded in 2011). In freight transport, this share was 11 per cent (1 p.p. below the figure in 2011).

Chart 44 • Profit | Weight in income (2015)

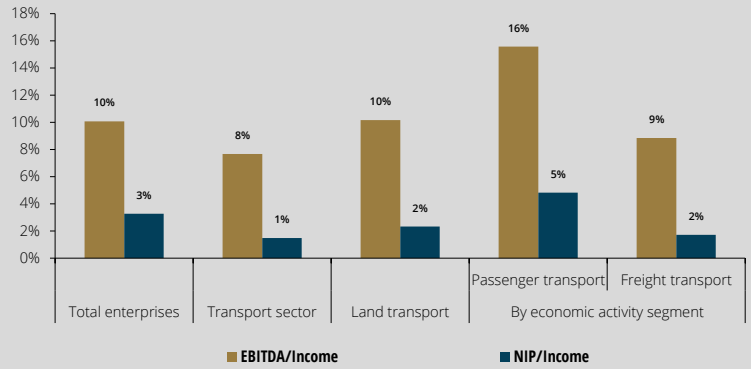


Chart 45 • Capital ratio | Weighted average and distribution median (2015)

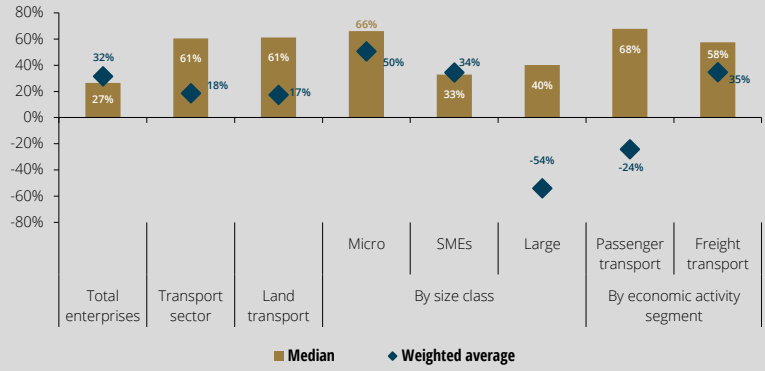


Table 13 • Capital ratio | Share of enterprises with negative equity

		2011	2015
Total enterprises		27.3%	29.0%
Transport sector		14.3%	15.4%
Land transport		14.0%	14.9%
By size class	Microenterprises	14.3%	15.7%
	SMEs	9.6%	6.5%
	Large enterprises	19.4%	10.5%
By economic activity segment	Passenger transport	16.4%	19.1%
	Freight transport	11.9%	11.2%

Interest-bearing debt[14] accounted for 54 per cent of liabilities in land transport, a share 3 p.p. lower than that of total enterprises. Bank loans were the most relevant component of interest-bearing debt in the sector (29 per cent of liabilities), followed by intra-group financing (19 per cent) (Chart 46).

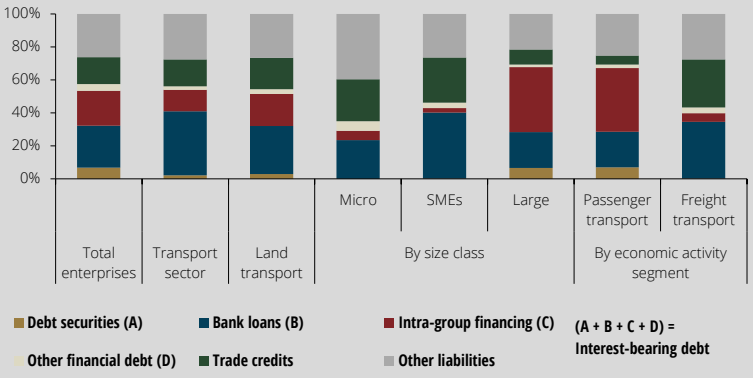
By size class, interest-bearing debt was particularly relevant in large enterprises, representing 69 per cent of liabilities (the shares of intra-group financing and bank loans were particularly relevant, accounting for 39 and 22 per cent of liabilities respectively). In microenterprises and SMEs, interest-bearing debt corresponded to 35 and 46 per cent of liabilities respectively (23 and 40 per cent, associated with bank loans, respectively).

Interest-bearing debt was more relevant in passenger transport (69 per cent of liabilities), as opposed to freight transport (43 per cent of liabilities). Intra-group financing was relevant in passenger transport (39 per cent of liabilities). Bank loans, in turn, stood out in freight transport (34 per cent of liabilities in the segment).

Trade credits represented 19 per cent of liabilities in land transport, a share higher than that of total enterprises (16 per cent). This component was more relevant in SMEs (27 per cent) and microenterprises (25 per cent) and, by economic activity segment, in freight transport (29 per cent of liabilities). By contrast, in large enterprises and passenger transport, trade credits corresponded to 9 and 5 per cent of liabilities respectively.

Liabilities in the sector posted a marginally negative change in 2015, compared with 2014 (0.3 per cent), in contrast to a decline of 3 per cent in total enterprises and a marginally positive change in liabilities in the transport sector as a whole (0.1 per cent). Developments in liabilities in land transport were the result, to

Chart 46 • Liabilities structure (2015)



a large extent, of developments in the various components offsetting each other, in particular opposite contributions from other liabilities (1.5 p.p., resulting from an increase of 6 per cent) and intra-group financing (-1.1 p.p., associated with a decline of 6 per cent).

Financial costs and solvency

Interest expenses in land transport declined by 24 per cent on average in 2015, compared with 2014. This decline was higher than in total enterprises (12 per cent) (Chart 47) and broadly-based across all size classes and economic activity segments. Interest expenses decreased by 7 per cent, on average, in microenterprises, 9 per cent in SMEs and 38 per cent in large enterprises. The decline in interest expenses was more marked in passenger transport (36 per cent), compared with freight transport (13 per cent).

In 2015 the financial pressure ratio in land transport, assessed by the weight of interest expenses in EBITDA, stood at 11 per cent, 8 p.p. less than in 2014 (Chart 48) and below the figure recorded by total enterprises in the whole period under review (20 per cent in 2015).

The decline in financial pressure in the sector was broadly-based across all size classes and economic activity segments, in particular large enterprises and passenger transport, aggregates which, although posting the most significant declines in this indicator in 2015 (42 p.p. and 24 p.p. respectively), recorded the highest levels of financial pressure (27 and 15 per cent respectively).

In 2015, 18 per cent of enterprises in land transport did not generate sufficient EBITDA to cover interest expenses (31 per cent in total enterprises) (Chart 49). By contrast, interest consumed less than half of EBITDA in 79 per cent of enterprises in the sector (66 per cent in total enterprises). This distribution, similar in both economic activity segments, differed by size class, considering that around 90 per cent of SMEs and large enterprises had levels of financial pressure below 50 per cent.

Chart 47 • Interest expenses | Weighted average and median of the annual growth rate

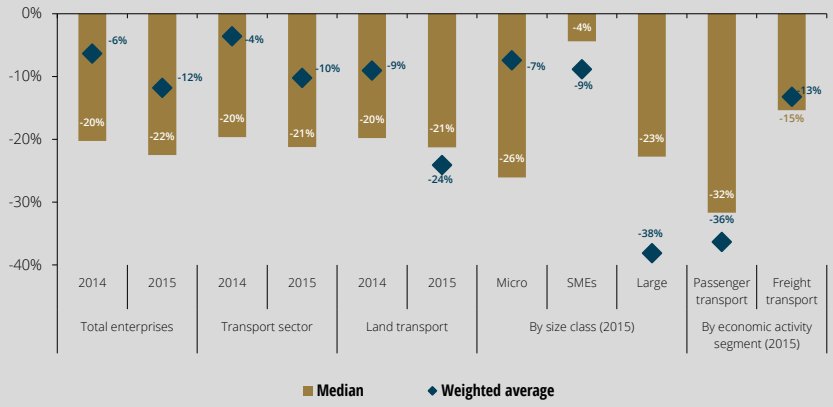
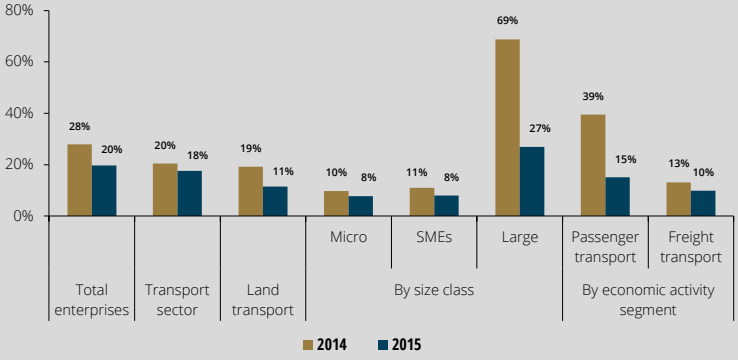


Chart 48 • Weight of interest expenses in EBITDA



Trade credit financing

In 2015 trade credit financing accounted for 19 per cent of liabilities in land transport, 3 p.p. more than in total enterprises.

The net indicator of trade credit financing,[19] which relates accounts payable and accounts receivable with turnover, helps to understand how enterprises use this type of financing. A positive value implies that accounts payable are above accounts receivable, i.e. the enterprise is obtaining financing from its suppliers. A negative value in this indicator implies that accounts receivable are above accounts payable, which means that, overall, the enterprise is financing its customers.

Net trade credit financing in the sector was negative in the entire period under review, corresponding to 10 per cent of turnover in the sector in the last year. This means that, similarly to total enterprises, in net terms, trade credits were not a financing source for the sector (Chart 50).

This situation occurred, irrespective of size class or economic activity segment, in particular in microenterprises and freight transport, which recorded the most negative figures for net trade credit financing (17 and 12 per cent of their turnover respectively).

Chart 49 • Financial pressure | Distribution of enterprises by performance class (2015)

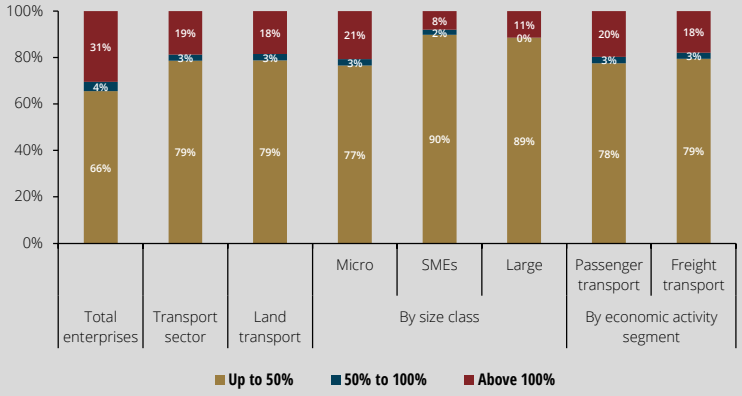
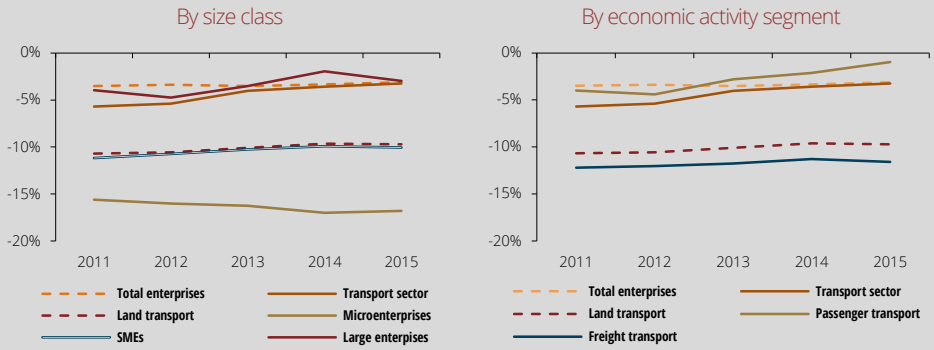


Chart 50 • Net trade credit financing (as a percentage of turnover)



4. Analysis of enterprises in water transport

4.1. Structure and dynamics

4.1.1. Structure

In 2015 water transport comprised around 200 enterprises, accounting for 1.3 per cent of enterprises in the transport sector as a whole (Table 14). These enterprises were responsible for 4.2 per cent of turnover and 1.2 per cent of the number of employees in enterprises in the transport sector. Compared with 2011, the relevance of water transport in the transport sector increased by 0.3 and 0.8 p.p., taking into account the number of enterprises and turnover respectively. The change was marginal in terms of the number of employees.

Table 14 • Weight of water transport in total enterprises and in the transport sector

		Number of enterprises	Turnover	Number of employees
Total enterprises	2011	0.04%	0.11%	0.05%
	2015	0.05%	0.14%	0.05%
Transport sector	2011	1.0%	3.4%	1.2%
	2015	1.3%	4.2%	1.2%

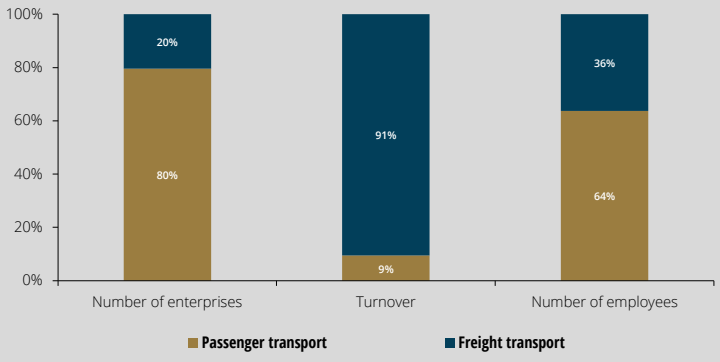
By economic activity segment, 80 per cent of enterprises in water transport were associated with passenger transport in 2015, accounting for 64 per cent of the number of employees in the sector as a whole. Freight transport, despite only comprising 20 per cent of enterprises in the sector, was responsible for 91 per cent of turnover in water transport (Chart 51).

By size class,[5] water transport was mostly comprised of microenterprises (82 per cent). SMEs, accounting for 17 per cent of enterprises, were responsible for 82 per cent of turnover and 69 per cent of the number of employees in the sector, shares above those observed in total enterprises.[21]

In 2015 the average enterprise in water transport generated a turnover 2.8 times higher than turnover generated by the average enterprise in Portugal, with a similar number of employees (Table 15).

Freight transport stood out, generating, on average, a turnover 12.5 times higher than that of the average enterprise in Portugal, with

Chart 51 • Structures | By economic activity segment (2015)



1.7 times more employees. Passenger transport was in the opposite situation, with the average enterprise having fewer employees and generating less turnover than the average enterprise in Portugal.

Table 15 • Average turnover and average number of employees | Ratio to total enterprises (Total enterprises = 1) (2015)

	Total enterprises	Transport sector	Water transport	Passenger transport	Freight transport
Average turnover	1.0	0.9	2.8	0.3	12.5
Average number of employees	1.0	1.0	1.0	0.8	1.7

As regards geographical location,[6] the Funchal, Faro and Lisbon districts accounted for 25, 21 and 17 per cent of enterprises in water transport respectively (Table 16). The Lisbon district was the most relevant in terms of turnover, representing 58 per cent of turnover in the sector, followed by the Funchal and Porto districts (19 and 12 per cent of turnover respectively). In terms of the number of employees, the Funchal district (25 per cent) and the Lisbon and Porto districts (18 per cent, in both cases) stood out. Despite its relevance in terms of the number of enterprises, Faro represented only 1 per cent of turnover in water transport (15 per cent of employees).

In passenger transport, Faro and Funchal had the largest number of enterprises in the segment (26 and 23 per cent respectively), also recording significant shares in terms of turnover (14 and 17 per cent respectively) and number of employees (23 and 21 per cent respectively). The Porto district concentrated the largest share of turnover (32 per cent) and number of employees in this segment (25 per cent), although only accounting for 7 per cent of enterprises.

Table 16 • Geographical location | By economic activity segment (2015)

	Number of enterprises		Turnover		Number of employees	
	District (Top 3)	% of the total	District (Top 3)	% of the total	District (Top 3)	% of the total
Total enterprises	Lisbon	28%	Lisbon	43%	Lisbon	35%
	Porto	18%	Porto	16%	Porto	19%
	Braga	8%	Braga	6%	Braga	9%
Transport sector	Lisbon	32%	Lisbon	56%	Lisbon	39%
	Porto	13%	Porto	10%	Porto	13%
	Leiria	6%	Braga	5%	Aveiro	6%
Water transport	Funchal	25%	Lisbon	58%	Funchal	25%
	Faro	21%	Funchal	19%	Porto	18%
	Lisbon	17%	Porto	12%	Lisbon	18%
Passenger transport	Faro	26%	Porto	32%	Porto	25%
	Funchal	23%	Setúbal	18%	Faro	23%
	Lisbon	10%	Funchal	17%	Funchal	21%
Freight transport	Lisbon	40%	Lisbon	63%	Lisbon	41%
	Funchal	33%	Funchal	19%	Funchal	33%
	Porto	12%	Porto	10%	Angra do Heroísmo	8%

Freight transport was highly concentrated in Lisbon and Funchal: these districts together accounted for 74 per cent of enterprises, 82 per cent of turnover and 74 per cent of employees in this segment. Lisbon made a more significant contribution to this aggregate figure, representing 40 per cent of enterprises in the segment, 63 per cent of turnover and 41 per cent of employees.

In 2015, as regards enterprise maturity,[7] 72 per cent of turnover in water transport was generated by enterprises established for more than 20 years, a share higher than that of total enterprises (56 per cent) (Chart 52). Enterprises established for less than 5 years were the second most relevant class, representing 19 per cent of total turnover in the sector (8 per cent in total enterprises).

By economic activity segment, freight transport had a structure similar to that of the sector as a whole: 78 per cent of turnover associated with enterprises established for more than 20 years and 20 per cent with enterprises established for less than 5 years.

In turn, in passenger transport, enterprises established for more than 20 years were less relevant, representing 12 per cent of turnover in the segment. By contrast, enterprises established for 10 to 20 years were responsible for 63 per cent of turnover in the segment.

4.1.2. Concentration

In 2015, 10 per cent of the largest enterprises in water transport generated 95 per cent of turnover in the sector, a concentration higher than that recorded in total enterprises (88 per cent) (Table 17).

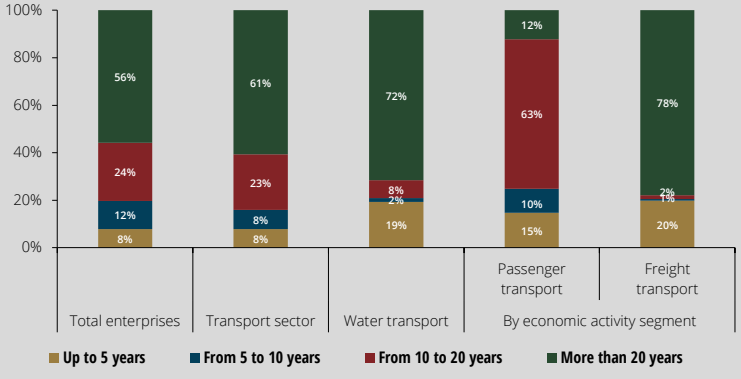
However, economic activity segments had a concentration of turnover below that of the sector as a whole. One-tenth of enterprises in passenger transport accounted for 77 per cent of turnover in the segment. In freight transport, 10 per cent of enterprises represented 78 per cent of turnover.

Table 17 • Distribution of turnover (2015)

	Total enterprises	Transport sector	Water transport	Passenger transport	Freight transport
Percentage of turnover generated by 10% of enterprises	88%	89%	95%	77%	78%
Percentage of turnover generated by 1% of enterprises	63%	65%	55%	N.A.	N.A.

Note: Figures for the concentration associated with 1% of enterprises in the economic activity segments are not shown owing to the small number of enterprises comprising these segments. Given that the concentration is assessed for each aggregate, the most relevant enterprises identified in the economic activity segments might not belong to the set of the most relevant enterprises in the sector under review.

Chart 52 • Structures | By maturity class (turnover – 2015)



4.1.3. Dynamics

The number of enterprises active in water transport increased by 5 per cent in 2015 from 2014, 3 p.p. above the figure for total enterprises (Chart 53).

In 2015, for each enterprise in the sector that ceased activities, 1.5 enterprises were created (1.2 in total enterprises) (Chart 54). Both economic activity segments had birth/death ratios above 1 (a ratio of 1.4 in passenger transport and 2.3 in freight transport).

In the 2011-15 period, the birth/death ratio in water transport reached a minimum in 2011 (ratio of 0.5) and a maximum in 2013 (ratio of 6.2).

In 2015 the share of enterprises classified as HGE,[8] i.e. enterprises with an annual average growth rate of turnover of more than 20 per cent in a period of three consecutive years, reached 20 per cent in water transport, 13 p.p. more than in 2011 (Chart 55). This share was more significant in the set of enterprises associated with passenger transport (24 per cent, while the share of HGE in total enterprises

Chart 53 • Demographic indicators

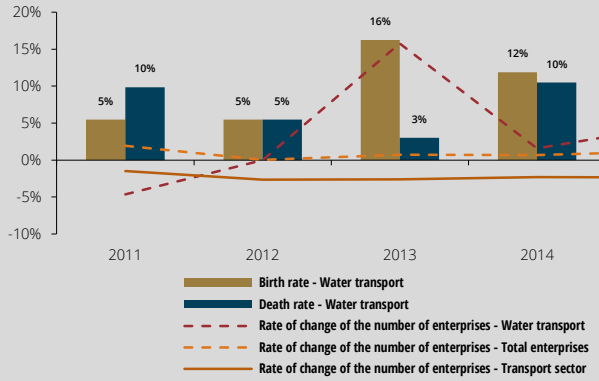


Chart 54 • Birth/death ratio

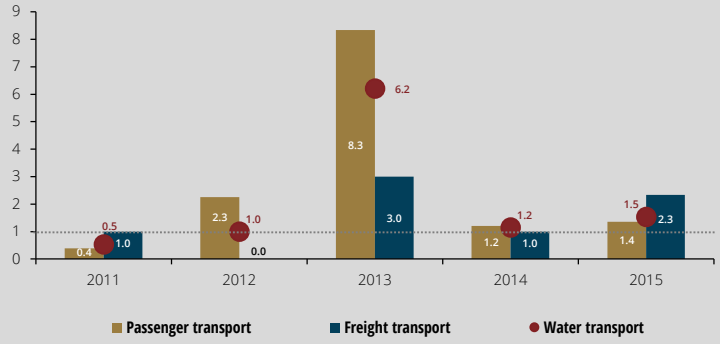
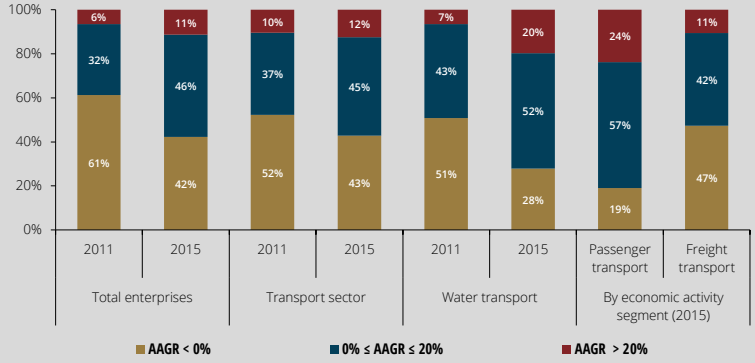


Chart 55 • Potential population of high-growth enterprises | Annual average growth rate – AAGR (over a three-year period)



was 11 per cent in 2015, 5 p.p. more than in 2011).

The share in the sector of enterprises with a negative annual average growth rate in the same period of three consecutive years decreased by 23 p.p. from 2011 to 2015, standing at 28 per cent in 2015. In total enterprises, the share of enterprises with a negative annual average growth rate in a period of three consecutive years decreased by 19 p.p. in the same period, standing at 42 per cent in 2015. Enterprises with a negative annual average growth rate were more relevant in freight transport (47 per cent in 2015).

4.2. Economic and financial analysis

4.2.1. Activity and profitability

Turnover

Turnover in water transport decreased by 9 per cent in 2015 (an increase of 2 per cent in total enterprises). This decline followed increases in the previous two years (16 and 37 per cent in 2013 and 2014 respectively) (Chart 56).

In 2015, compared with the previous year, turnover declined in both economic activity segments. Turnover in freight transport decreased by 5 per cent from 2014, resulting in a negative contribution of 4.3 p.p. to developments in the sector. The decline in turnover was more marked in passenger transport (35 per cent). However, the smaller relative weight of this segment in turnover in water transport resulted in a contribution of 4.7 p.p. to the negative change in the sector, only 0.4 p.p. above the contribution made by freight transport.

Although, on average, the sector saw a decline of 9 per cent in turnover in 2015, half of its enterprises posted increases in their turnover equal to or above 8 per cent in the same period (Chart 57). The decline in turnover in passenger transport and freight transport (35 and 5 per cent respectively) was associated with a small set of enterprises with a greater weight in each

Chart 56 • Turnover | Contributions (p.p.) to the annual growth rate (%)

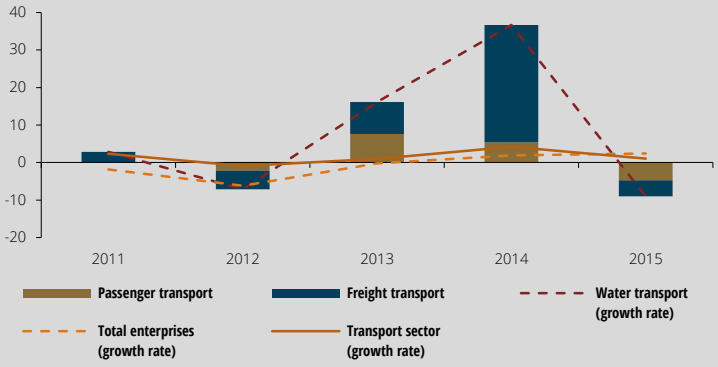
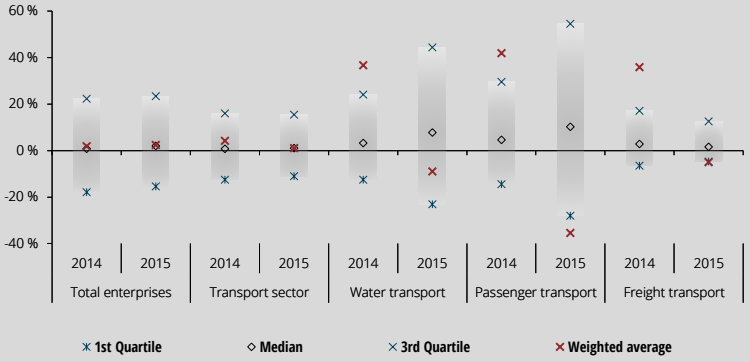


Chart 57 · Turnover | Quartile distribution and weighted average of the annual growth rate



of the segments and, as such, is not representative of the situation of most enterprises. Turnover increased by at least 10 per cent in half of the enterprises in passenger transport. In freight transport, in turn, half of the enterprises saw an increase in turnover of at least 2 per cent.

In 2015, 14 per cent of turnover in the sector originated in the external market, a share below that of total enterprises (22 per cent). The internal and external markets made a negative contribution of 5 and 4 p.p., respectively, to developments in turnover in the sector in 2015, in contrast to 2014 (positive contributions of 25 and 12 p.p. respectively) (Chart 58). The reversal of the contribution of the external market to developments in turnover in passenger transport stood out (a negative contribution of 40 p.p. in 2015). In freight transport, developments in 2015 were, in turn, associated with a reversal of the contribution of the internal market (a negative figure of 6 p.p. in 2015, after a positive figure of 31 p.p. in 2014).

The differential between the export component of turnover and the import component of purchases and SES, as a percentage of turnover, recorded negative figures over the whole horizon under analysis. In 2015 imports in the sector exceeded exports by 36 per cent of turnover, in contrast to developments in total enterprises, which had a marginally positive balance (Chart 59).

Both economic activity segments recorded negative figures in this differential, in particular freight transport. In this segment, imports exceeded exports by 39 per cent of their turnover, while the differential corresponded to 4 per cent in passenger transport.

Chart 58 · Turnover | Contributions of the external and internal markets (p.p.) to the annual growth rate (%)

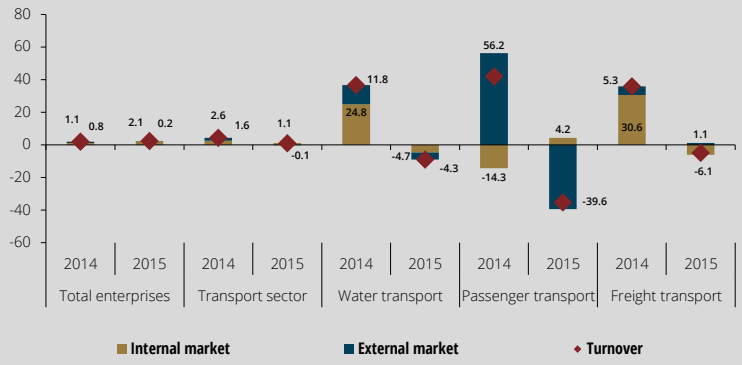
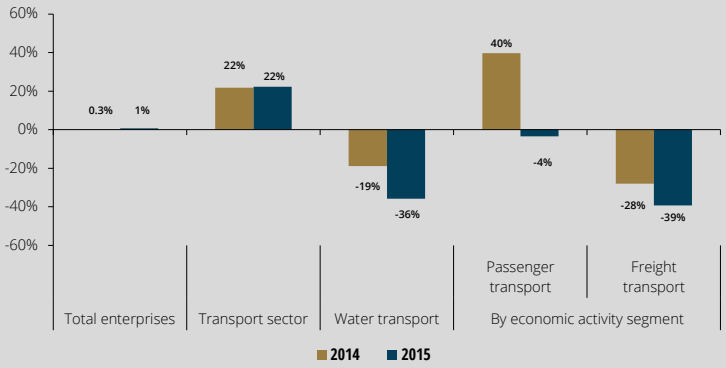


Chart 59 • Differential between the export component of turnover and the import component of purchases and SES | As a percentage of turnover



Operating expenses[11]

In 2015, 89 per cent of operating expenses in water transport were associated with SES, a share higher than that of total enterprises (26 per cent) (Chart 60). Employee expenses were responsible for 7 per cent of operating expenses in the sector (16 per cent in total enterprises), while CoGS only accounted for 4 per cent, a figure much lower than that of total enterprises (59 per cent).

The greater relevance of SES in the structure of operating expenses, despite being broadly-based across both economic activity segments in the sector, was more marked in freight transport, where this component represented 92 per cent of operating expenses (59 per cent in passenger transport). By contrast, the share of employee expenses was higher in passenger transport (35 per cent, compared with 5 per cent in freight transport).

In 2015 operating expenses in water transport decreased by 6 per cent from 2014 (an increase of 2 per cent in total enterprises) (Chart 61). SES, employee expenses and CoGS contributed equally to the decline in operating expenses in the sector (negative contributions of 2 p.p., in each case, associated with decreases of 3, 21 and 40 per cent respectively).

EBITDA[12]

EBITDA in water transport increased by 4 per cent in 2015, i.e. below the growth observed for total enterprises (25 per cent) (Chart 62). These developments resulted from a slowdown in growth observed in 2013 and 2014 (increases of 52 and 55 per cent, respectively, in EBITDA in the sector).

By economic activity segment, freight transport made a contribution of 25 p.p. to changes in EBITDA in the sector in 2015, while passenger transport made a negative contribution of 21 p.p.

In the same year, 54 per cent of enterprises in water transport had a positive rate of change in EBITDA, compared with 2014, a share identical to that of total enterprises (Table 18). The share

Chart 60 • Operating expenses | Structure (2015)

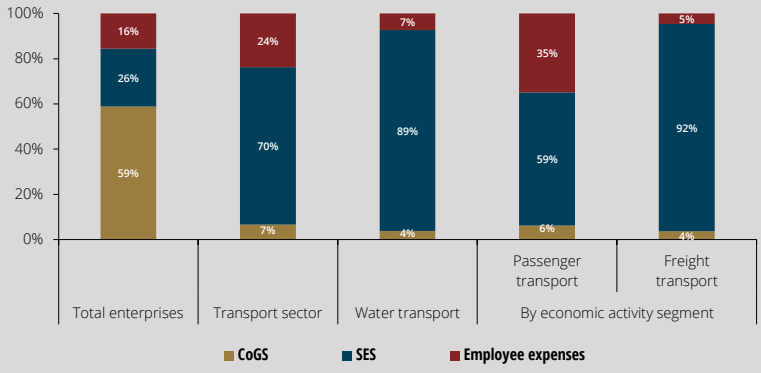
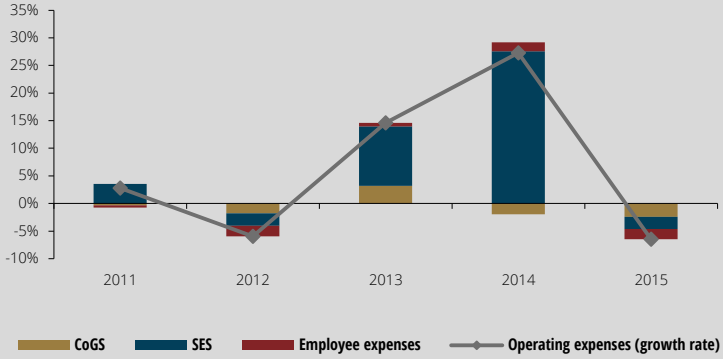


Chart 61 • Operating expenses | Contributions (p.p.) to the annual growth rate (%)



of these enterprises was smaller than in 2014 (by 8 p.p.), despite increasing by 7 p.p., compared with 2011 (9 p.p. increase in total enterprises, compared with 2011).

In passenger transport, more than half of the enterprises had a positive growth rate in EBITDA in 2015 (56 per cent), in contrast to freight transport (45 per cent).

Despite the increase in EBITDA in the sector in 2015, 45 per cent of enterprises had negative EBITDA, above the figure for total enterprises (33 per cent). In the same year, EBITDA recorded a negative figure in 46 per cent of enterprises in passenger transport and 41 per cent of enterprises in freight transport.

Table 18 • EBITDA | Share of enterprises with positive EBITDA growth rate and negative EBITDA

		Enterprises with positive EBITDA growth rate		Enterprises with negative EBITDA	
		2014	2015	2014	2015
Total enterprises		54.2%	54.4%	35.3%	33.1%
Transport sector		56.0%	56.3%	23.6%	21.3%
Water transport		61.7%	54.1%	42.0%	45.0%
By economic activity segment	Passenger transport	61.5%	56.5%	45.0%	46.0%
	Freight transport	62.5%	45.5%	29.7%	41.5%

Profitability

In 2015 return on equity in water transport was positive for the second year in a row, totalling 21 per cent. This reflects an increase of 19 p.p. from 2014, compared with an increase of 4 p.p. in total enterprises (to 7 per cent in 2015) (Chart 63).

In freight transport, return on equity stood at 16 per cent in 2015, 14 p.p. above that of the

Chart 62 • EBITDA | Contributions (p.p.) to the annual growth rate (%)

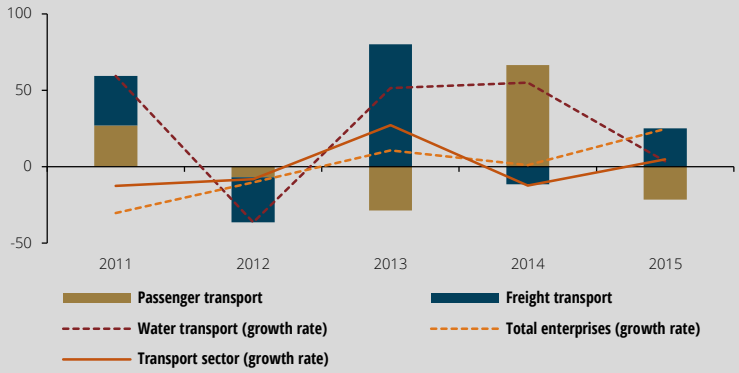
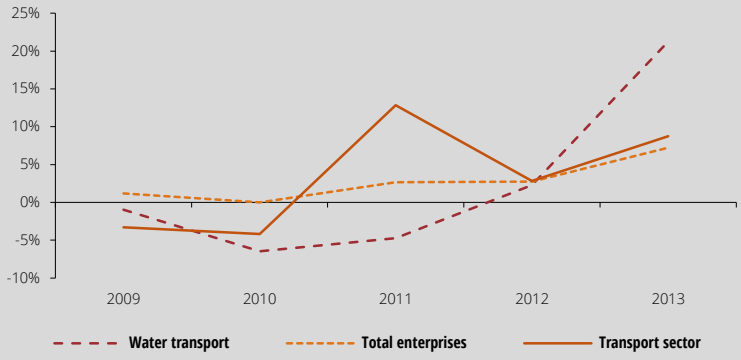


Chart 63 • Return on equity



Note: Figures on economic activity segments are not shown, as passenger transport recorded negative equity in a number of periods.

previous year. As a result of passenger transport posting negative equity in 2015, return on equity may not be calculated in this segment, as was also the case in 2013.

Nevertheless, average return on equity in water transport was not representative of the situation of most enterprises in the sector in 2015, as it stood 16 p.p. above the median of the distribution of individual profitabilities (6 per cent).

The operating margin (EBITDA/income)[13] in the sector totalled 9 per cent in 2015, 1 p.p. below that of total enterprises. In turn, the net margin (net income for the period (NIP)/income) recorded a figure similar to that of total enterprises (3 per cent) (Chart 64). In 2015 both margins in the sector stood above those of 2011, as in total enterprises.

By economic activity segment, passenger transport had the best performance in terms of operating margin (13 per cent). However, the net margin in this segment posted a negative figure of 7 per cent. Freight transport had an operating margin of 8 per cent and a net margin of 3 per cent.

4.2.2. Financial situation

Financial structure

In 2015 the capital ratio of water transport was 14 per cent, a figure below that of total enterprises (32 per cent) (Chart 65).

The capital ratio in the sector declined by 20 p.p. in 2015, compared with 2011, in contrast to developments in total enterprises (an increase of 2 p.p.). Nevertheless, the average figure in the sector was above the median of the distribution of individual capital ratios (9 per cent), owing to the presence of a set of enterprises with higher capital ratios in the sector.

By economic activity segment, freight transport had a positive average capital ratio of 39 per cent. However, half of the enterprises in this segment had a capital ratio equal to or below 17 per cent. In turn, the average capital ratio of passenger transport (posting a negative figure of 23 per cent) was influenced by a relevant set of enterprises with negative equity, given that half of the enterprises recorded a positive capital ratio.

Chart 64 • Profit | Weight in income (2015)

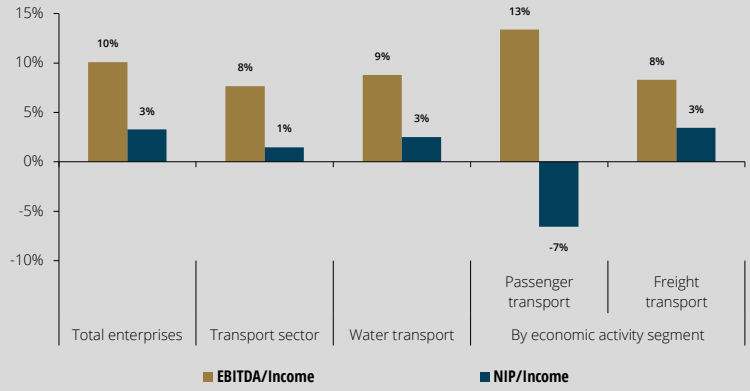
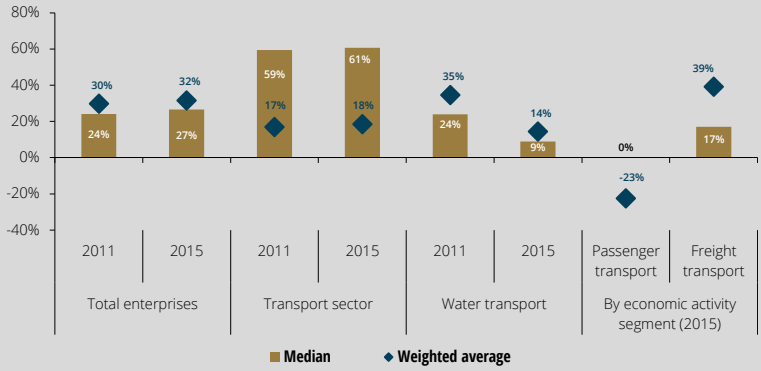


Chart 65 • Capital ratio | Weighted average and distribution median



In 2015, 46 per cent of enterprises in the sector recorded negative equity (Table 19), 15 p.p. more than in 2011. The share of enterprises in the sector in this situation was higher than that recorded by total enterprises in the whole period under review, particularly in passenger transport. Half of the enterprises in this segment had negative equity in 2015, a share which increased by 12 p.p., compared with 2011. In freight transport, 29 per cent of enterprises recorded negative equity in 2015, compared with 8 per cent in 2011.

Table 19 • Capital ratio | Share of enterprises with negative equity

		2011	2015
Total enterprises		27.3%	29.0%
Transport sector		14.3%	15.4%
Water transport		30.8%	46.0%
By economic activity segment	Passengertransport	37.9%	50.3%
	Freighttransport	7.5%	29.3%

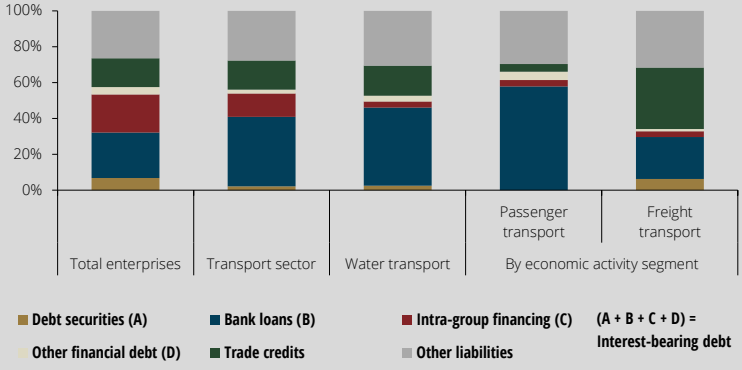
Debt was a relevant source of financing for enterprises in water transport. In 2015 interest-bearing debt[14] represented 53 per cent of total liabilities in the sector, above the figure for total enterprises (58 per cent) (Chart 66). Bank loans, accounting for 43 per cent of liabilities in the sector (25 per cent in total enterprises), were the most relevant share of interest-bearing debt in the sector.

Interest-bearing debt was more significant in passenger transport, representing 66 per cent of its liabilities (58 per cent associated with bank loans). By contrast, in freight transport, interest-bearing debt had a smaller share (34 per cent of liabilities, with 23 per cent of liabilities associated with bank loans and 6 per cent with debt securities).

Trade credits accounted for 17 per cent of liabilities in water transport, a share similar to that of total enterprises (16 per cent). This component was more relevant in freight transport, representing 34 per cent of liabilities in 2015 (4 per cent in passenger transport).

In contrast to total enterprises (a decline of 3 per cent), liabilities in the sector increased by 3 per cent in 2015 from 2014, a change above that of the transport sector (0.1 per cent). Developments in liabilities in the sector were influenced by increases in bank loans (a contribution of 7 p.p., associated with an increase of 19 per cent), other liabilities (2 p.p., associated with an increase of 7 per cent) and trade credits (0.5 p.p., associated with an increase of 3 per cent). By contrast, other financial debt made a contribution of 6 p.p. to a decrease in liabilities in the sector (a decline of 63 per cent from 2014).

Chart 66 • Liabilities structure (2015)



Financial costs and solvency

Interest expenses in water transport declined, on average, by 60 per cent in 2015, after increasing by 52 per cent in 2014. By comparison, in total enterprises, interest declined by 12 per cent in 2015, continuing the downward trend observed since 2013 (Chart 67).

The average change was not representative of the situation of most enterprises in the sector in 2015, as it was significantly below the median of the distribution of individual rates of change (-25 per cent, compared with -22 per cent in total enterprises).

Interest expenses declined in both economic activity segments in the sector. On average, passenger transport posted the largest decline in interest expenses (81 per cent, a change partially associated with enterprises in the segment which began carrying out other activities in 2015, similarly to 2014, in the opposite direction). Nevertheless, the average figure in this segment stood significantly below the median of the distribution of individual rates of change of enterprises in the segment (-26 per cent). In turn, in freight transport, the decline in interest expenses stood at 18 per cent, on average, with the average rate of change in the segment being close to its median of the distribution of individual values (-17 per cent).

The decline in interest expenses in the sector, together with the increase in EBITDA, resulted in the weight of interest expenses in EBITDA in the sector being smaller in 2015 than in 2014 (by 9 p.p.). In 2015 interest expenses consumed 6 per cent of EBITDA in water transport. Similarly to the period under analysis as a whole, this share stood below that of total enterprises (20 per cent in 2015) (Chart 68).

The weight of interest expenses in EBITDA declined in both economic activity segments, although this decrease was more marked in passenger transport. In 2015, 13 per cent of EBITDA generated by passenger transport was absorbed by interest expenses (15 p.p. less than in 2014), while this share reached 5 per cent in freight transport (8 per cent in 2014).

Chart 67 • Interest expenses | Weighted average and median of the annual growth rate

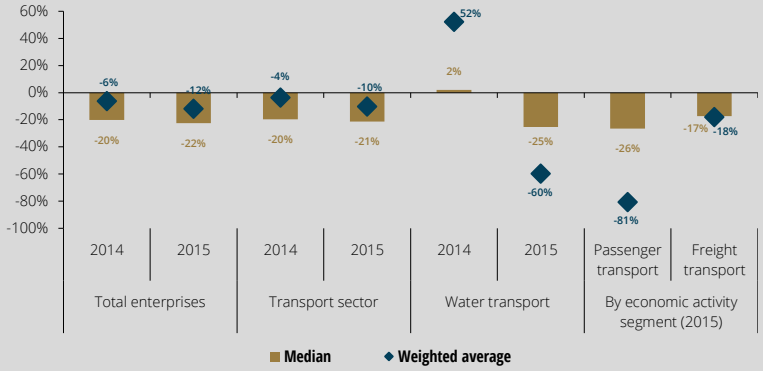
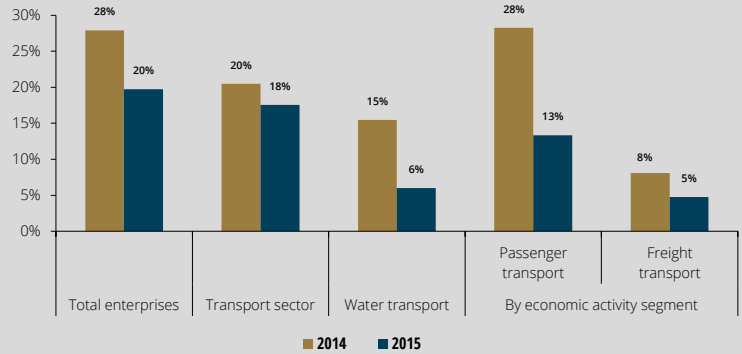


Chart 68 • Weight of interest expenses in EBITDA



In 2015, 31 per cent of enterprises in water transport did not generate sufficient EBITDA to cover interest expenses, a share similar to that of total enterprises (Chart 69). This share stood at 35 per cent in passenger transport and 16 per cent in freight transport.

In 2015 the majority of enterprises in the sector paid interest below half of EBITDA (69 per cent of enterprises, compared with 66 per cent in total enterprises). By activity segment, 84 per cent of enterprises in freight transport and 65 per cent of enterprises in passenger transport were in this situation.

Trade credit financing

In 2015 trade credit financing in water transport corresponded to 17 per cent of liabilities, similarly to the figure for total enterprises (16 per cent).

The net indicator of trade credit financing[19] relates accounts payable and accounts receivable with turnover, helping to understand how enterprises use this type of financing. A positive value implies that accounts payable are above accounts receivable, i.e. the enterprise is obtaining financing from its suppliers. A negative value in this indicator implies that accounts receivable are above accounts payable, which means that, overall, the enterprise is financing its customers.

In 2015 net trade credit financing in water transport, as a percent of turnover, recorded a negative figure of 3 per cent. This means that, similarly to most economic activity sectors, water transport did not obtain net trade credit financing (Chart 70). This situation, in line with developments in total enterprises, was recorded in the entire period under review.

Net trade credit financing in the sector as a percentage of turnover increased by 3 p.p. in 2015, compared with 2014, in contrast to the relative stability of total enterprises. These developments were the result of an increase in this indicator in freight transport. Although it was negative in the whole period under review in this segment, net trade credit financing recorded positive developments in 2015, compared with 2014 (increasing by 4 p.p., to -3 per cent in 2015). In turn, passenger transport recorded in 2015, for the first time in the period under review, a negative net trade credit financing (also equivalent to 3 per cent of its turnover).

Chart 69 • Financial pressure | Distribution of enterprises by performance class (2015)

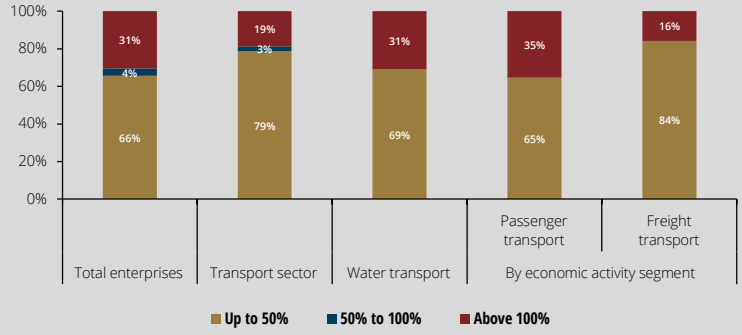
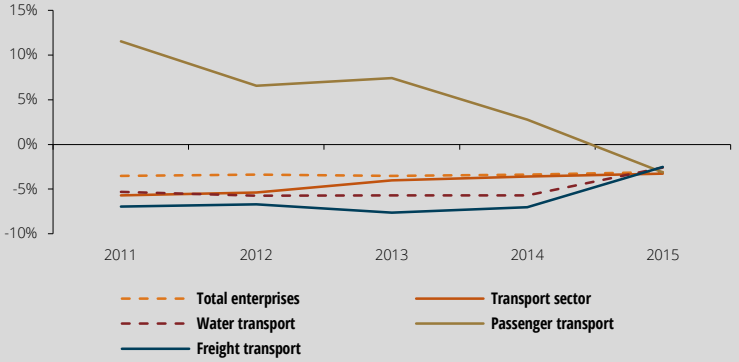


Chart 70 • Net trade credit financing (as a percentage of turnover)



5. Analysis of enterprises in air transport

5.1. Structure and dynamics

5.1.1. Structure

In 2015 air transport comprised around 80 enterprises, representing 0.5 per cent of enterprises in the transport sector as a whole. These enterprises were responsible for 1.2 per cent of turnover and 0.4 per cent of the number of employees in enterprises in Portugal (Table 20). In the transport sector as a whole, the weight of air transport totalled 35 per cent of turnover and 11 per cent of the number of employees. Compared with 2011, the relevance of air transport in total enterprises recorded marginal changes, increasing by 0.8 p.p. in terms of the number of employees within the transport sector as a whole.

Table 20 • Weight of air transport in total enterprises and in the transport sector

		Number of enterprises	Turnover	Number of employees
Total enterprises	2011	0.02%	1.1%	0.4%
	2015	0.02%	1.2%	0.4%
Transport sector	2011	0.5%	35.1%	9.8%
	2015	0.5%	35.4%	10.6%

By size class,[5] 52 per cent of enterprises in air transport were microenterprises, accounting for only 1 per cent of turnover and of the number of employees in the sector (Chart 71). Large enterprises, representing 10 per cent of enterprises, accounted for 89 per cent of the number of employees and 84 per cent of turnover in the sector, shares higher than those observed in total enterprises. Compared with total enterprises, SMEs had a larger share in this sector as regards the number of enterprises (38 per cent in air transport and 11 per cent in total enterprises), but had smaller shares in terms of turnover and number of employees (15 and 10 per cent in air transport, compared with 43 and 45 per cent in total enterprises respectively).

Given the larger relative weight of large enterprises, the average enterprise in air transport generated a turnover 58 times higher than the turnover generated by the average enterprise in Portugal in 2015, while having 20 times more employees (Table 21).

Chart 71 • Structures | By size class (2015)

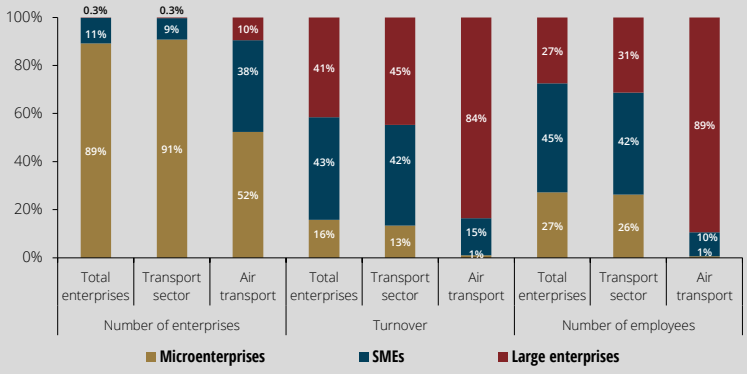


Table 21 • Average turnover and average number of employees | Ratio to total enterprises (Total enterprises = 1) (2015)

	Total enterprises	Transport sector	Air transport
Average turnover	1.0	0.9	58.4
Average number of employees	1.0	1.0	20.3

As regards geographical location,[6] air transport was highly concentrated in the Lisbon district. In 2015 this district comprised 75 per cent of enterprises, 95 per cent of turnover and 87 per cent of employees in the sector (Table 22). The Funchal and Faro districts accounted for 7 and 5 per cent of the number of enterprises in the sector respectively. However, in terms of turnover and number of employees, these districts had shares of less than 1 per cent. By contrast, in the latter two indicators, the Ponta Delgada district stood out, containing the head offices of enterprises generating 4 per cent of turnover in the sector and employing 12 per cent of the number of employees.

Air transport was more relevant in the Ponta Delgada district, accounting for 5 per cent of turnover generated by enterprises with their head office there. In the Lisbon district, air transport represented 3 per cent of turnover of enterprises with their head office in this district, while this share was residual in the remaining districts.

Table 22 • Geographical location | By economic activity segment (2015)

	Number of enterprises		Turnover		Number of employees	
	District (Top 3)	% of the total	District (Top 3)	% of the total	District (Top 3)	% of the total
Total enterprises	Lisbon	28%	Lisbon	43%	Lisbon	35%
	Porto	18%	Porto	16%	Porto	19%
	Braga	8%	Braga	6%	Braga	9%
Transport sector	Lisbon	32%	Lisbon	56%	Lisbon	39%
	Porto	13%	Porto	10%	Porto	13%
	Leiria	6%	Braga	5%	Aveiro	6%
Air transport	Lisbon	75%	Lisbon	95%	Lisbon	87%
	Funchal	7%	Ponta Delgada	4%	Ponta Delgada	12%
	Faro	5%	Porto	0.4%	Faro	1%

In 2015, taking into account enterprise maturity,[7] 75 per cent of turnover in air transport was generated by enterprises established for more than 20 years and 16 per cent by enterprises established for 10 to 20 years (Chart 72). Only 9 per cent of turnover was generated by enterprises established for less than 10 years. By contrast, in total enterprises, enterprises established for less than 10 years represented 20 per cent of turnover.

5.1.2. Concentration

In 2015 air transport had a concentration of turnover similar to that of total enterprises, with 10 per cent of enterprises in the sector generating 84 per cent of turnover (88 per cent in total enterprises) (Table 23).

Table 23 • Distribution of turnover (2015)

	Total enterprises	Transport sector	Air transport
Percentage of turnover generated by 10% of enterprises	88%	89%	84%

5.1.3. Dynamics

The number of enterprises active in air transport increased by 3 per cent in 2015 from 2014, 2 p.p. above the figure recorded in total enterprises (Chart 73).

In 2015, for each enterprise in the sector that ceased activities, 1.8 enterprises were created (1.2 in total enterprises) (Chart 74).

In 2015 the share of enterprises classified as HGE,[8] i.e. enterprises with an annual average

Chart 72 • Structures | By maturity class (turnover – 2015)

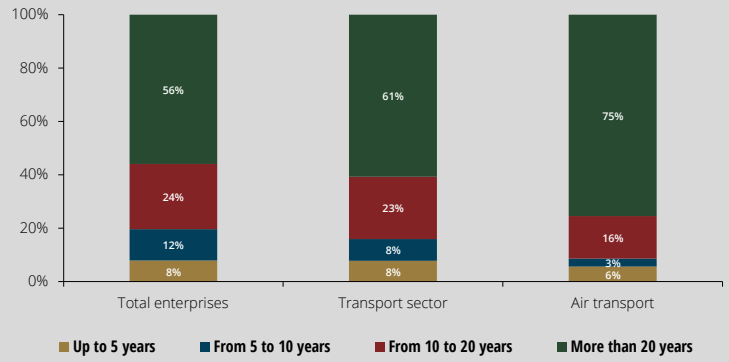


Chart 73 • Demographic indicators

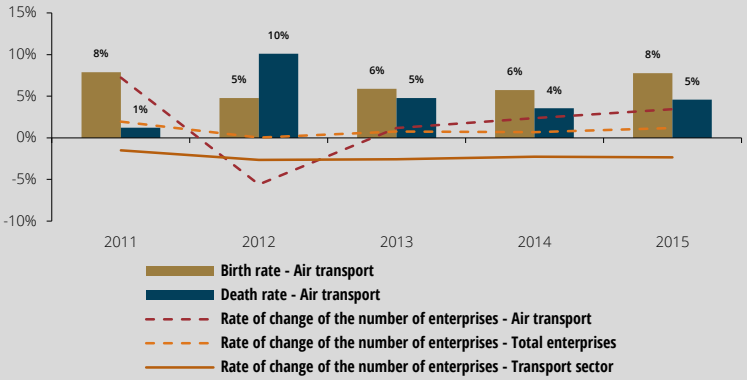
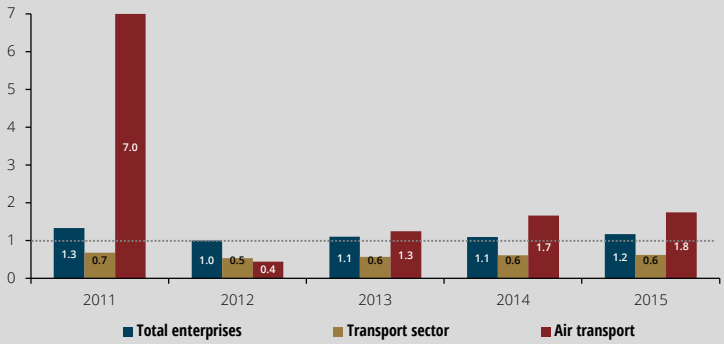


Chart 74 • Birth/death ratio



growth rate of turnover of more than 20 per cent in a period of three consecutive years, stood at 20 per cent in air transport, 5 p.p. above the share recorded in 2011 (Chart 75). By comparison, the share of HGE in total enterprises was 11 per cent in 2015, 5 p.p. more than in 2011.

5.2. Economic and financial analysis

5.2.1. Activity and profitability

Turnover

Turnover in air transport declined by 1 per cent in 2015, in contrast to the 2 per cent increase observed in total enterprises. This was the first time that turnover declined over the period under review (in fact, the first time since 2009) (Chart 76).

Large enterprises made a negative contribution to developments in turnover in the sector in 2015, with a contribution of 4 p.p., associated with a decline in turnover of 5 per cent. By contrast, SMEs made a positive contribution of 3 p.p., associated with a growth of 27 per cent in turnover of enterprises in this size class. The contribution made by microenterprises was marginal (-0.2 p.p., associated with a decline of 15 per cent in turnover).

The external market was relevant for air transport throughout the entire period under review. In 2015 exports accounted for 81 per cent of turnover in the sector. However, the contribution of the external market to developments in turnover in the sector (which was crucial to the increases observed up to 2014) was negative in 2015 (2 p.p.), while the internal market made a positive contribution (1 p.p.) (Chart 77).

The differential between the export component of turnover and the import component of purchases and SES, as a percentage of turnover, posted positive figures over the whole horizon under analysis. In 2015 the sector's exports exceeded imports by 45 per cent of turnover, in contrast to total enterprises (which recorded a marginally positive balance) (Chart 78).

Chart 75 • Potential population of high-growth enterprises | Annual average growth rate – AAGR (over a three-year period)

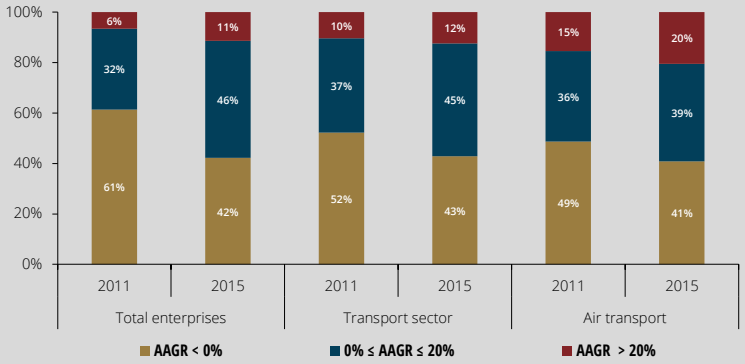
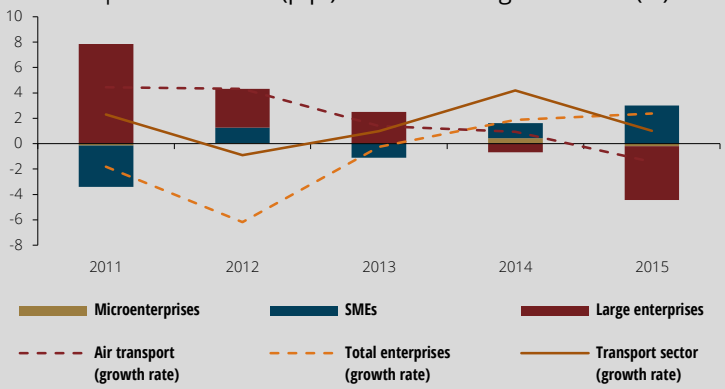


Chart 76 • Turnover | Contributions (p.p.) to the annual growth rate (%)



Large enterprises had the most positive differential, corresponding to 51 per cent of turnover. SMEs recorded a positive differential, corresponding to 10 per cent of turnover. Microenterprises had a negative differential equivalent to 3 per cent of turnover.

Operating expenses[11]

In 2015, SES represented 79 per cent of operating expenses in air transport, a figure higher than that of total enterprises (26 per cent) (Chart 79). Employee expenses accounted for 18 per cent of operating expenses in the sector (16 per cent in total enterprises), while CoGS was responsible for 3 per cent, a figure considerably below that of total enterprises, where this component had the highest share (59 per cent).

The structures of operating expenses in the various size classes were similar to those of the sector as a whole, in particular for large enterprises. The predominance of SES was particularly marked in microenterprises and SMEs, where they accounted for 96 and 85 per cent of operating expenses respectively. In addition, employee expenses were less relevant

Chart 77 • Turnover | Contributions of the external and internal markets (p.p.) to the annual growth rate (%)

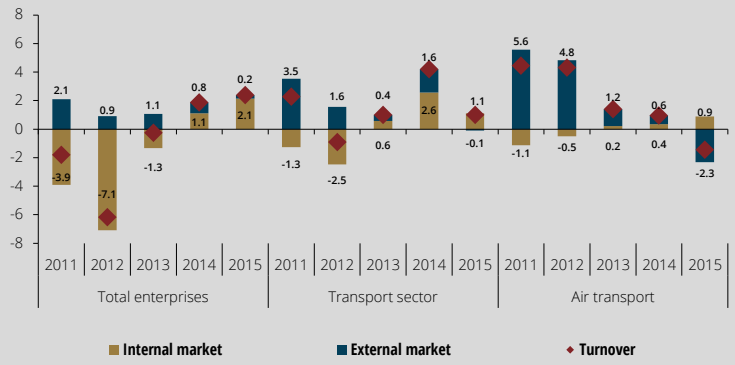


Chart 78 • Differential between the export component of turnover and the import component of purchases and SES | As a percentage of turnover

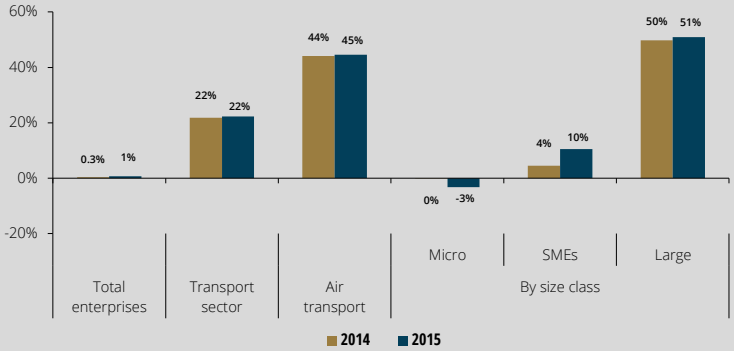
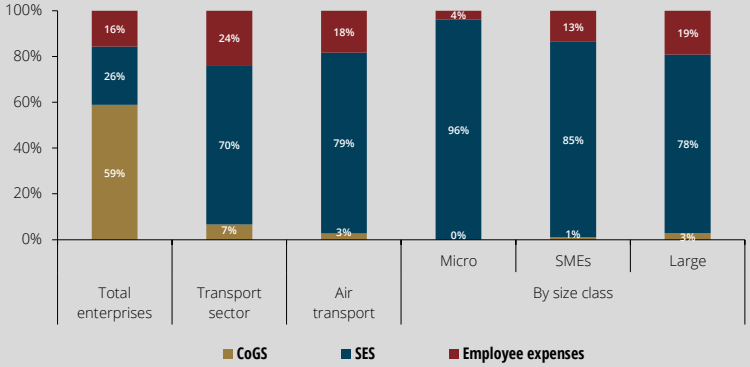


Chart 79 • Operating expenses | Structure (2015)



in microenterprises (4 per cent) and did not post figures associated with CoGS in 2015.

Operating expenses in air transport declined by 2 per cent in 2015 from 2014 (an increase of 2 per cent in total enterprises). SES and CoGS contributed to the decline in operating expenses, with negative contributions of -1.2 and -0.6 p.p., associated with negative changes in these components (2 and 19 per cent respectively). Employee expenses remained unchanged from the previous year (Chart 80).

EBITDA[12]

EBITDA in air transport declined by 45 per cent in 2015, posting a more marked decline than in 2013 and 2014 (when it decreased by 2 and 31 per cent respectively). By comparison, EBITDA in total enterprises increased by 25 per cent in 2015, above the figure recorded the previous year (1 per cent) (Chart 81).

Large enterprises and SMEs contributed to the decline in EBITDA in the sector in 2015 (with 48 p.p., associated with a decline of 89 per cent in EBITDA, and 4 p.p., associated with a decline of 8 per cent, respectively). By contrast, microenterprises made a positive contribution of 7 p.p.

In 2015, 59 per cent of enterprises in air transport had a positive rate of change in EBITDA from 2014, a share that was 5 p.p. higher than that of total enterprises (Table 24).

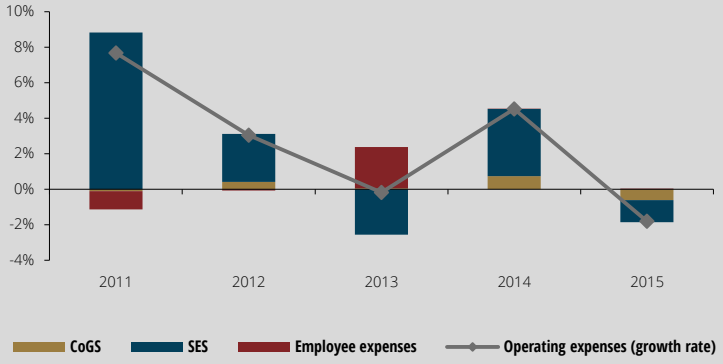
Table 24 • EBITDA | Share of enterprises with positive EBITDA growth rate and negative EBITDA

		Enterprises with positive EBITDA growth rate		Enterprises with negative EBITDA	
		2014	2015	2014	2015
Total enterprises		54.2%	54.4%	35.3%	33.1%
Transport sector		56.0%	56.3%	23.6%	21.3%
Air transport		53.8%	58.8%	30.3%	32.9%
By size class	Microenterprises	37.9%	58.1%	51.3%	45.2%
	SMEs	70.4%	58.6%	7.1%	17.2%
	Large enterprises	55.6%	62.5%	11.1%	25.0%

Considering the different size classes, 63 per cent of large enterprises had a positive rate of change in EBITDA in 2015, compared with 59 and 58 per cent in SMEs and microenterprises respectively.

Nevertheless, 33 per cent of enterprises in the sector had negative EBITDA in 2015, a share similar to that of total enterprises. EBITDA was negative in 45 per cent of microenterprises in the sector, while this share stood at 17 and 25 per cent in SMEs and large enterprises respectively.

Chart 80 • Operating expenses | Contributions (p.p.) to the annual growth rate (%)



Profitability

Continuing the decline seen since 2012, in 2015 average return on equity in air transport was negative for the first time in the period under review (1 per cent) and below the figure posted by total enterprises (7 per cent) (Chart 82).

This was due to the profitability of large enterprises (which recorded a negative figure of 26 per cent), given that the profitability of SMEs in the sector recorded a positive figure of 11 per cent. The contribution made by microenterprises was notworthy, as these had negative net income and equity.

Average return on equity in air transport was not representative of the situation of most of its enterprises. In 2015 half of the enterprises in the sector had a return on equity equal to or above 11 per cent (Chart 83). Despite the negative average posted by large enterprises in the sector, the distribution of individual values indicated that at least three-quarters of large enterprises in the sector had positive returns in

Chart 81 • EBITDA | Contributions (p.p.) to the annual growth rate (%)

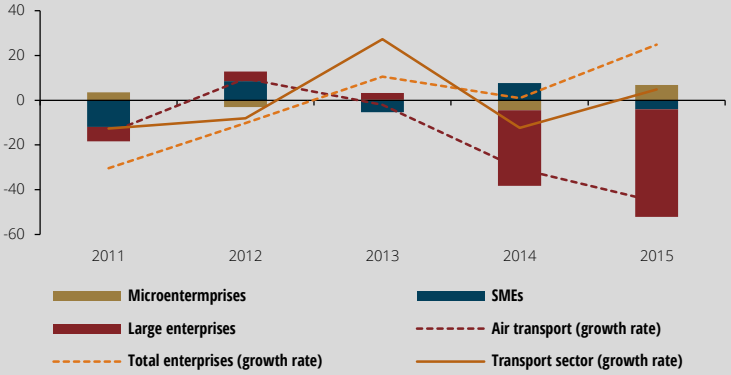
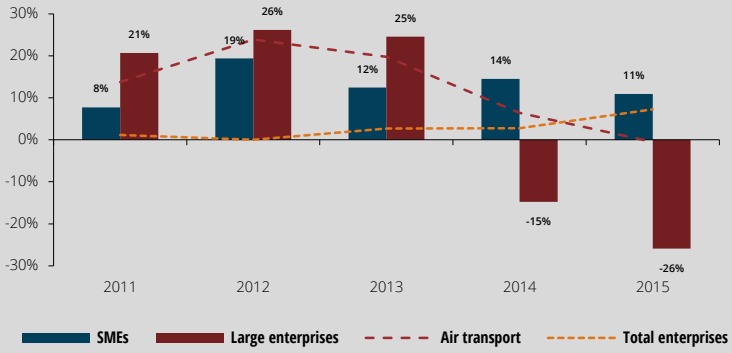
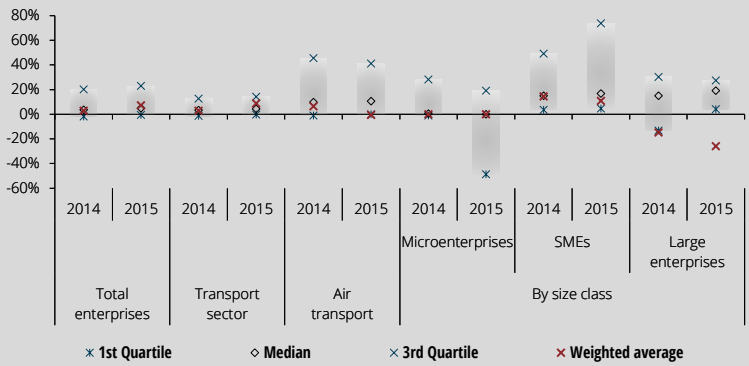


Chart 82 • Return on equity



Note: Figures for microenterprises are not shown, as this aggregate posted negative equity in the period under review.

Chart 83 • Return on equity | Quartile distribution and weighted average



Note: Figures for the weighted average of microenterprises are not shown, as this aggregate posted negative equity in the period under review.

2015, revealing the existence of a small subset of large enterprises with negative returns, which greatly influenced the average return in the aggregate and in the sector.

In 2015 air transport obtained an operating margin (EBITDA/income)[13] of 3 per cent and a negative net margin (net income for the period (NIP)/income) of 0.1 per cent, below the figures for total enterprises (10 per cent and 3 per cent respectively) (Chart 84).

SMEs posted the best performance of the sector, with an operating margin of 20 per cent and a net margin of 10 per cent. Microenterprises, with an operating margin of 8 per cent and a negative net margin of 5 per cent, had the largest differential between the two margins (with operating profitability being consumed, to a large extent, by expenses in addition to those associated with operating activities). By contrast, the smallest differential was observed in large enterprises, with operating and net margins of 0.4 and -2 per cent respectively.

5.2.2. Financial situation

Financial structure

The capital ratio of air transport stood at 21 per cent in 2015, a figure below that of total enterprises (32 per cent) (Chart 85). Compared with 2011, the sector's capital ratio increased by 3 p.p., accompanying developments observed in total enterprises (an increase of 2 p.p.).

In 2015 half of the enterprises in the sector had a capital ratio equal to or above 15 per cent, a threshold above that of 2011 for the same share of enterprises (7 per cent).

By size class, SMEs had an average capital ratio of 48 per cent, a figure above that of at least half of the enterprises of the same size (18 per cent). In microenterprises, although the aggregate value for the capital ratio posted a negative figure of 40 per cent, half of the enterprises had a capital ratio equal to or above 5 per cent.

Chart 84 • Profit | Weight in income (2015)

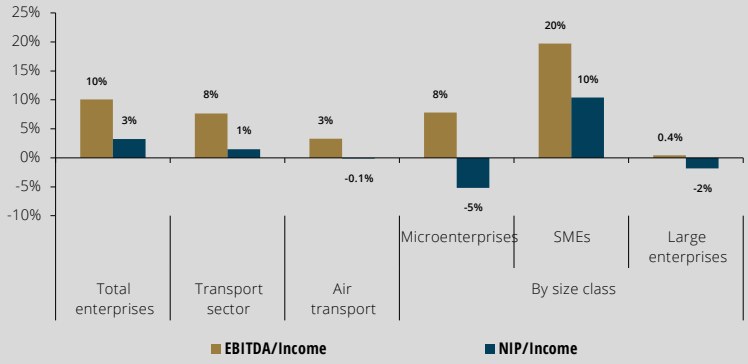
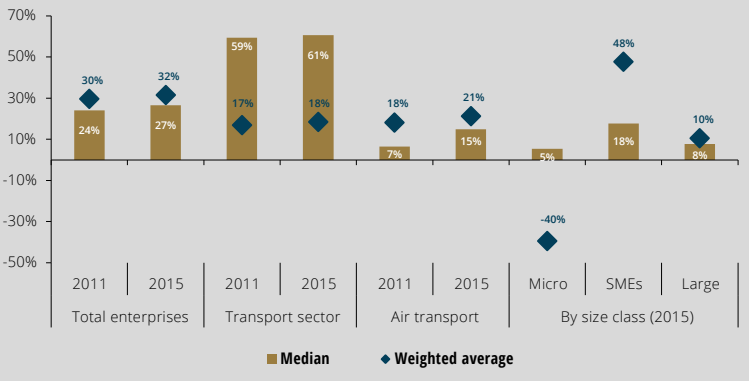


Chart 85 • Capital ratio | Weighted average and distribution median



In large enterprises, the average capital ratio was 10 per cent and the median of the distribution of individual values was 8 per cent.

In 2015, 37 per cent of enterprises in air transport had negative equity (Table 25). This figure was higher than that of total enterprises (29 per cent), a situation observed over the entire period under review. From 2011 to 2015, the share of enterprises with negative equity declined by 3 p.p. in air transport (an increase of 2 p.p. for total enterprises).

In 2015 half of microenterprises and a quarter of large enterprises in the sector had negative equity, while this share was 21 per cent in SMEs. Compared with 2011, the share of enterprises with negative equity declined in microenterprises (7 p.p.) and SMEs (2 p.p.) and increased in large enterprises (14 p.p.).

Table 25 • Capital ratio | Share of enterprises with negative equity

		2011	2015
Total enterprises		27.3%	29.0%
Transport sector		14.3%	15.4%
Air transport		40.0%	36.7%
By size class	Microenterprises	56.8%	50.0%
	SMEs	22.2%	20.7%
	Large enterprises	11.1%	25.0%

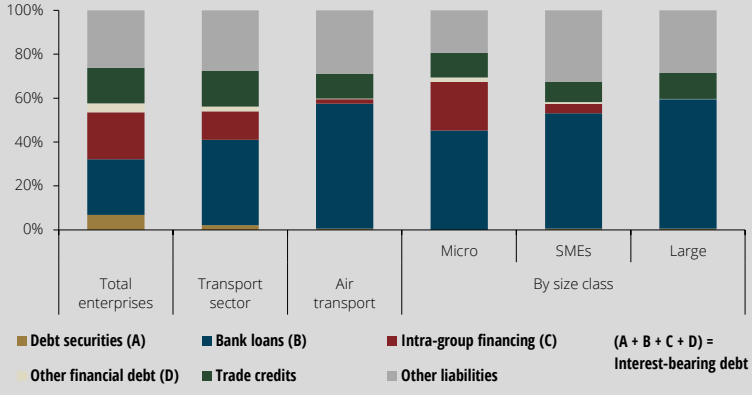
Similarly to most economic activity sectors in Portugal, debt was a relevant source of financing for enterprises in air transport. In 2015 interest-bearing debt[14] represented 60 per cent of total liabilities in the sector (58 per cent in total enterprises), a share mostly associated with bank loans (57 per cent of liabilities) (Chart 86).

Interest-bearing debt corresponded to 60 per cent of liabilities for large enterprises (59 per cent associated with bank loans) and 58 per cent of liabilities for SMEs (53 per cent associated with bank loans). In microenterprises, interest-bearing debt represented 69 per cent of their liabilities, with intra-group financing being more relevant (22 per cent of liabilities), compared with the sector and the remaining size classes.

Trade credits represented 11 per cent of liabilities in air transport, a share below that of total enterprises (16 per cent). Their relevance was similar in microenterprises and large enterprises (representing 11 and 12 per cent of their liabilities respectively), but slightly lower in SMEs (9 per cent of liabilities).

Liabilities in air transport posted a marginally negative change in 2015 from 2014 (0.5 per cent), in contrast to a decline of 3 per cent in total enterprises. All liabilities components

Chart 86 • Liabilities structure (2015)



contributed to developments in liabilities in the sector, with the exception of trade credits, which made a positive contribution of 2 p.p. The contributions of bank loans and debt securities stood out, posting a negative figure of 1 p.p. in both cases.

Financial costs and solvency

In 2015 interest expenses in air transport increased by 20 per cent on average from 2014, in contrast to a 12 per cent decline observed in total enterprises (Chart 87).

The average change was not representative of developments in most enterprises in the sector, to the extent that half of the enterprises posted declines in interest expenses equal to or above 9 per cent.

The increase in interest expenses was broadly-based across all size classes: 19 per cent in microenterprises, 30 per cent in SMEs and 17 per cent in large enterprises. However, in microenterprises and SMEs, half of the enterprises benefited from declines of more than 9 and of 22 per cent in interest expenses respectively. In large enterprises, the median of the distribution of individual values stood at 11 per cent.

In 2015 the share of interest expenses in EBITDA in air transport was 53 per cent, 29 p.p. more than in the previous year (Chart 88). This indicator posted a figure above that recorded by total enterprises (20 per cent) for the first time in the period under review.

The set of large enterprises contributed to a large extent to the level of financial pressure on enterprises in the sector. In 2015 interest expenses of large enterprises in the sector were around 3.5 times higher than their EBITDA, and this share increased by 322 p.p. from 2014. By contrast, microenterprises and SMEs recorded figures below the average for the sector (39 per cent and 16 per cent respectively). For SMEs, this figure was higher than that recorded in 2014 (5 p.p.). Nevertheless, developments in financial pressure were positive for microenterprises in 2015, given that aggregate EBITDA in these enterprises had been negative in 2014.

Chart 87 • Interest expenses | Weighted average and median of the annual growth rate

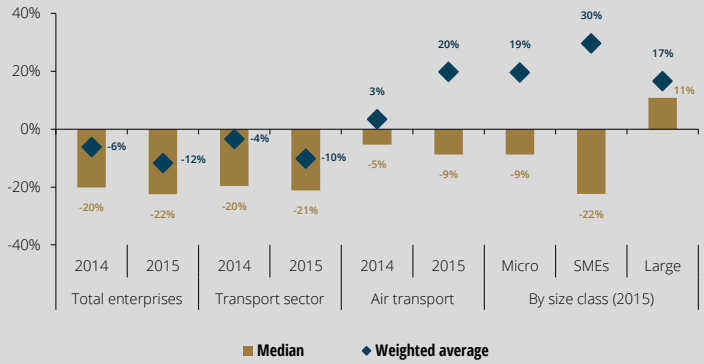
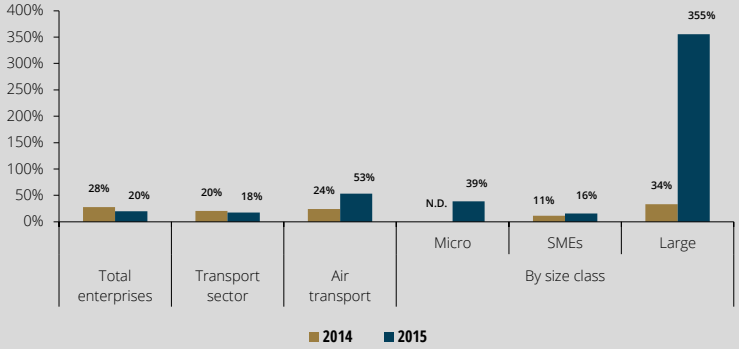


Chart 88 • Weight of interest expenses in EBITDA



Note: Figures for 2014 for microenterprises are not shown, as this aggregate posted negative EBITDA in the period under review.

In 2015, 25 per cent of enterprises in air transport did not generate sufficient EBITDA to cover interest expenses (31 per cent in total enterprises) (Chart 89). This share was higher among microenterprises (40 per cent) and large enterprises (29 per cent). By contrast, for 69 per cent of enterprises in the sector, interest expenses were less than half of EBITDA (66 per cent in total enterprises). By size class, 80 per cent of SMEs, 71 per cent of large enterprises and half of the microenterprises in the sector were in this situation.

Trade credit financing

In 2015 trade credit financing represented 11 per cent of liabilities in air transport, a share below that of total enterprises (16 per cent).

The net indicator of trade credit financing[19] relates accounts payable and accounts receivable with turnover, helping to understand how enterprises use this type of financing. A positive value implies that accounts payable are above accounts receivable, i.e. the enterprise is obtaining financing from its suppliers. A negative value in this indicator implies that accounts receivable are above accounts payable, which means that, overall, the enterprise is financing its customers.

In 2015 net trade credit financing in air transport posted a positive figure, equivalent to 7 per cent of turnover (Chart 90). In contrast to total enterprises, this was structural over the period under review, which indicates that, in net terms, trade credits were a financing source for the sector.

The behaviour of the sector in this indicator was the result of the level recorded by large enterprises, which obtained net trade credit financing over the entire period under analysis (10 per cent of turnover in 2015). Microenterprises also recorded positive figures (27 per cent). By contrast, SMEs in the sector had a negative net trade credit financing, equivalent to 11 per cent of their turnover.

Net trade credit financing in the sector as a percentage of turnover increased by 5 p.p. from 2011 to 2015, in contrast to the relative stability in total enterprises.

Chart 89 • Financial pressure | Distribution of enterprises by performance class (2015)

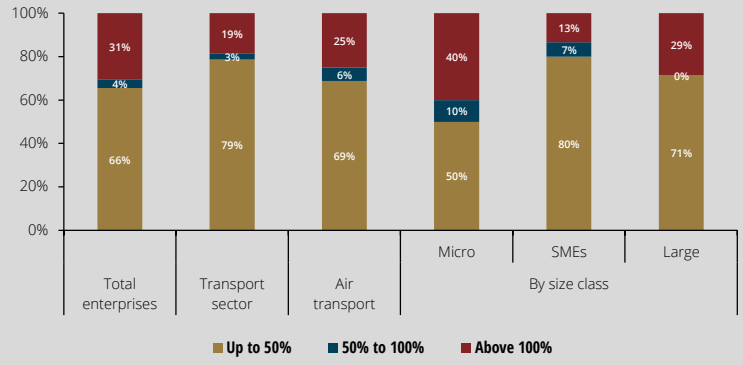
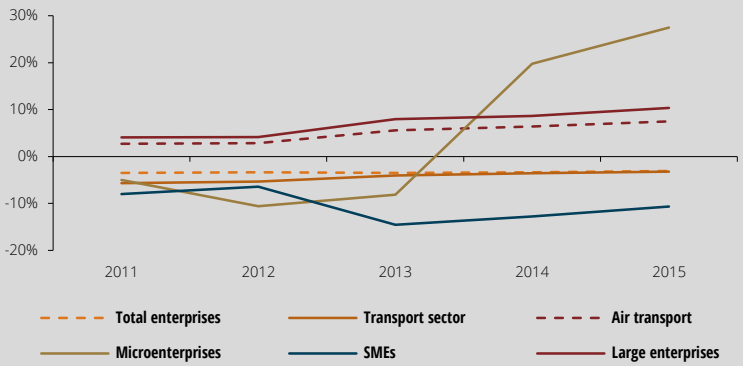


Chart 90 • Net trade credit financing (as a percentage of turnover)



Notes

1. For the sake of simplicity, this study refers to 'enterprise' and 'corporation' interchangeably. Both refer to enterprises that comprise the institutional non-financial corporations (NFCs) sector. The NFC sector is one of the economy's institutional sectors. The institutional sectorisation of economic agents is carried out in accordance with the 2010 European System of National and Regional Accounts (ESA 2010), approved by Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013. ESA 2010 is a harmonised reference on the compilation methodology and deadline for release of the national accounts of EU countries, including statistics under Banco de Portugal's responsibility. Underlying the series under analysis is a definition of the ESA 2010 population. Based on the national accounts standard, sole proprietors are included in the households' institutional sector. Hence, all data on the NFC sector throughout this study exclude sole proprietors (in Portugal these represent around two-thirds of the number of enterprises, but only 5 per cent of the respective turnover).

2. The Central Balance Sheet Database of Banco de Portugal is a database with economic and financial information on NFCs in Portugal. Information is based on annual accounting data reported within the scope of *Informação Empresarial Simplificada* – IES (Simplified Corporate Information) and quarterly accounting data reported by enterprises through the quarterly survey of non-financial corporations. Annual data cover nearly all NFCs and quarterly data cover around 4,000 enterprises, representing 50 per cent of turnover in the sector. For further details on the activities of the Central Balance Sheet Database, see Supplements to the Statistical Bulletin 1/2008 – *Simplified reporting: inclusion of the Simplified Corporate Information in the Statistics on Non-Financial Corporations from the Central Balance Sheet Database*, and 2/2013 – *Statistics on non-financial corporations of the Central Balance Sheet Database: Methodological notes*, as well as Central Balance Sheet Study |19 – *Sector Tables and Enterprise and Sector Tables: Methodological Notes. Long Time Series 1995-2013* of November 2014

3. Owing to the residual number of enterprises whose main activity is associated with freight air transport, this segmentation is only carried out for activities associated with land and water transport.

4. Some totals in the tables and charts may not add up due to rounding.

5. The definition of size classes used in this study is detailed in the Annex.

6. Geographical location refers to the district where the enterprise's head office is located.

7. The enterprise maturity corresponds to the age of the enterprise as at the analysis reference date. Four maturity classes are considered: up to 5 years, over 5 and up to and excluding 10 years; over 10 and up to and excluding 20; and 20 years and over (over 20 years).

8. As defined in Eurostat-OECD Manual on Business Demography Statistics, high-growth enterprises are enterprises whose average annual turnover growth is greater than 20 per cent over a three-year period. Turnover is used as a variable for the calculation of the rate. For more information, see Central Balance Sheet Study No 12 – Structure and dynamics of non-financial corporations in Portugal 2006-2012 of November 2013.

9. Included in the export sector are enterprises which, each year, have at least 50% of turnover from exports of goods and services or at least 10% of turnover from exports of goods and services where these exceed €150,000. For more information on the export sector, see Central Balance Sheet Study| *22 - Analysis of enterprises in the export sector in Portugal*, June 2015.

10. For further information on the evolution of activity in Portugal, please refer to the *Economic Bulletin*, released on a quarterly basis at www.bportugal.pt.

11. The 'operating expenses' aggregate is calculated as the sum of the cost of goods sold and materials consumed (CoGS), supplies and external services (SES) and employee expenses.

12. EBITDA means earnings before interest, taxes, depreciation and amortisation.

13. For the sake of simplicity, this study refers to the term 'income' which corresponds to 'total net income', obtained through the sum of turnover, variation in production, capitalised production, operating subsidies, other income and gains, and interest and other similar income.

14. Interest-bearing debt refers to all liabilities with payable interest. See the Annex for a more detailed definition.

15. 'Box 2 | Loans granted by the resident financial system' provides additional information on this source of funding.

16. Information taken from the Central Credit Register, a database managed by Banco de Portugal, which gathers information provided by participating entities (resident institutions) regarding credit granted. For more information, please refer to Banco de Portugal Booklet No 5, *Central de Responsabilidades de Crédito* (Portuguese version only).

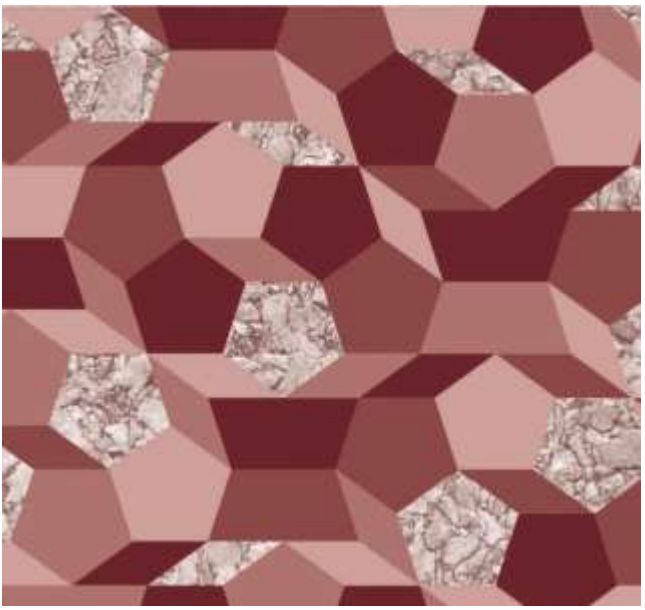
17. These include banks, savings banks and mutual agricultural credit banks, as well as factoring companies, credit-purchase financing companies and financial leasing companies. Over 95 per cent of credit granted by resident credit institutions to NFCs in 2016 came from banks.

18. The non-performing loans ratio, also known as the credit overdue ratio, is based on information on credit granted by resident credit institutions (CIs) in Banco de Portugal's Central Credit Register by calculating the ratio of the amount of credit overdue to total credit obtained. Credit is deemed to be overdue when the respective repayments are not paid on the due payment dates. Credit customers may default as regards principal and/or interest and other expenditure. Credit is deemed to be overdue, in the case of principal, once the maximum period of 30 days after maturity has elapsed without settlement and, in the case of interest and other expenses, once the due date for settlement has passed. This information is based on credit balances recorded in the balance sheets of financial institutions, which may refer to enterprises that have already exited the market, given that part of the debt may yet be repaid, where there are assets and personal guarantees, even after the enterprise has closed. After the enterprise has ceased activities, it very often happens that a significant part of the credit is still recorded as non-performing loans and gradually replaced by loan write-offs. For more information, please refer to the *Economic Bulletin* of May 2015, available at *www.bportugal.pt*.

19. Net trade credit financing was calculated using the difference between accounts payable (net of advances) and accounts receivable (net of advances and adjustments).

20. For more information, see *Supplement to the Statistical Bulletin 2/2016 – General Government Statistics*.

21. For confidentiality reasons, this study does not present results on the breakdown by size class of enterprises in water transport. For more information on the confidentiality rules applied to Central Balance Sheet data, see Central Balance Sheet Study I 6 – New Enterprise and Sector Tables – *Adjustment to the Accounting Standards System*, of December 2011.



Annex

Main indicators of the transport sector

Methodological summary

ANNEX • Main indicators of the transport sector (2015)

	Characterisation of the sector		Activity		Financing							Profitability
	Turnover held by large enterprises	Turnover held by the largest enterprises (TOP 10%)	Growth rates		Capital ratio	Growth rates		Net trade credit financing (% turnover)	Weight of interest expenses in EBITDA	Credit obtained from with resident CIs (end of 2016)		Return on equity
			Turnover	EBITDA		Trade credits	Bank loans			% of non-performing enterprises	Non-performing loans ratio	
Total enterprises	41%	88%	2%	25%	32%	-1%	-6%	-3%	20%	28%	16%	7%
Transport sector	**45%**	**89%**	**1%**	**5%**	**18%**	**3%**	**0%**	**-3%**	**18%**	**27%**	**9%**	**9%**
Land transport	**24%**	**83%**	**3%**	**27%**	**17%**	**-2%**	**1%**	**-10%**	**11%**	**27%**	**9%**	**15%**
Water transport	**14%**	**95%**	**-9%**	**4%**	**14%**	**0%**	**0%**	**-3%**	**6%**	**20%**	**14%**	**21%**
Air transport	**84%**	**84%**	**-1%**	**-45%**	**21%**	**0%**	**0%**	**7%**	**53%**	**23%**	**10%**	**-1%**

	Weight of the transport sector					
	Number of enterprises		Turnover		Number of employees	
	2011	2015	2011	2015	2011	2015
Total enterprises	4.5%	3.9%	3.2%	3.4%	3.9%	3.9%

Methodological summary

Capital ratio: Ratio of equity to total assets.

Economic activity sector: As regards total enterprises, this analysis excludes enterprises classified in Sections K – *Financial and insurance activities*, O – *Public administration and defence*; *Compulsory social security*, T – *Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use* and U – *Activities of extraterritorial organisations and bodies* of CAE-Rev.3, as they are not included in the NFC institutional sector.

Enterprise size: Enterprises were grouped in three classes: micro, small and medium-sized, and large enterprises. The criteria for this classification were taken from the European Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises. According to this Recommendation, microenterprises are defined as enterprises which employ fewer than ten persons and whose annual turnover and/or balance sheet total does not exceed €2 million. For the purposes of this study, SMEs shall not include microenterprises and shall be made up of enterprises which employ fewer than 250 persons and have an annual turnover below €50 million or an annual balance sheet total below €43 million. Large enterprise is any enterprise which is not classified within the above meanings.

Financial pressure: Ratio of interest expenses to EBITDA.

Interest-bearing debt: Refers to the set of interest-bearing debt obtained through debt securities issues, loans granted by credit institutions and financial companies, intra-group financing and other financial debt.

Maturity: The enterprise maturity corresponds to the age of the enterprise as at the analysis reference date. Four maturity classes are considered: up to (but not including) five years; from five to (but not including) ten years; from ten to (but not including) 20 years; and more than 20 years (which comprises enterprises established for 20 years).

Quartile distribution: In order to calculate quartiles, the enterprise values for the indicator under analysis are considered in ascending order. The first quartile corresponds to the value of the enterprise in the position corresponding to 25 per cent of the ordered sample (i.e. where 25 per cent of enterprises show a lower value for that indicator and 75 per cent a higher value). The second quartile (or median) corresponds to 50 per cent, i.e. the indicator value for this enterprise divides the breakdown into two halves, where one-half of the enterprises show a higher value and the other half a lower value. The third quartile corresponds to the 75 per cent position of the ordered sample (75 per cent of enterprises show a lower value for that indicator, and only 25 per cent show a higher value). The interquartile range (obtained as the difference between the third and first quartiles) provides an indication of distribution dispersion. For further details on the calculation of these statistical measures, please refer to Central Balance Sheet Studies | 19 – *Sector tables and enterprise and sector tables – Methodological Notes (Long Time Series 1995-2013)*, November 2014.

Return on equity: Ratio of net income for the year to equity. As both items (numerator and denominator) may be positive or negative, the indicator is only calculated at individual level in situations where equity is positive.

Transport sector: For the purposes of this study, the definition of transport sector comprised enterprises in groups 491, 492, 493 and 494 (land transport), division 50 (water transport) and division 51 (air transport) of CAE Rev. 3. These activities were also broken down by passenger transport (groups 491 and 493, as regards land transport; groups 501 and 503 as regards water transport) or freight transport (including the remaining activities of each sector).

Abbreviations and acronyms

AAGR	annual average growth rate
CAE	Portuguese Classification of Economic Activities
CCR	Central Credit Register
CIs	resident credit institutions
CoGS	cost of goods sold and materials consumed
EBITDA	earnings before interest, taxes, depreciation and amortisation
ESA 2010	European system of national and regional accounts 2010 (Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union)
GDP	gross domestic product
HGE	high-growth enterprises
IES	*Informação Empresarial Simplificada* (Simplified Corporate Information)
INE	Instituto Nacional de Estatística (Portuguese National Statistical Institute)
NFC	non-financial corporations
p.p.	percentage points
SES	supplies and external services
SMEs	small and medium-sized enterprises (excluding microenterprises)

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Central Balance Sheet Studies

1 | Enterprise and sector tables, November 2010
2 | Structure and dynamics of non-financial corporations in Portugal, December 2010
3 | Sectoral analysis of non-financial corporations in Portugal, September 2011
4 | Sectoral analysis of manufacture of food products, November 2011
5 | Sectoral analysis of accommodation and food service activities, November 2011
6 | New enterprise and sector tables: adjustment to the accounting standards system, December 2011
7 | Sectoral analysis of non-financial corporations in Portugal 2010/2011, April 2012
8 | Sectoral analysis of non-financial corporations in Portugal 2011/2012, November 2012
9 | Sectoral analysis of the manufacture of textiles and wearing apparel, November 2012
10 | Sectoral analysis of the manufacture of footwear, November 2012
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14 | Analysis of the automobile industry, December 2013
15 | Sectoral analysis of the construction sector, January 2014
16 | Analysis of the information and communication activities sector, April 2014
17 | Analysis of the tourism sector, October 2014
18 | Sectoral analysis of non-financial corporations in Portugal 2009-2014, November 2014
19 | Sector Tables and Enterprise and Sector Tables: Long Time Series 1995-2013, November 2014
20 | Analysis of the mechanical engineering sector, March 2015
21 | Analysis of enterprises in the maritime sector, May 2015
22 | Analysis of enterprises in the export sector in Portugal, June 2015
23 | Sectoral analysis of non-financial corporations in Portugal 2010-2015, November 2015
24 | Analysis of enterprises in the wood, cork and paper sectors, January 2016
25 | Analysis of enterprises in the pharmaceutical sector, July 2016
26 | Sectoral analysis of non-financial corporations in Portugal 2011-2016, November 2016
27 | Analysis of enterprises in the manufacture of beverages sector, January 2017
28 | Analysis of enterprises in the transport sector, July 2017