ANALYSIS OF THE AUTOMOBILE INDUSTRY

Central Balance Sheet Studies

December 2013

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Banco de Portugal
EUROSYSTEM

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FOREWORD

This analysis is mainly 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 Instituto Nacional de Estatística - INE (Statistics Portugal).

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. At the moment, the most recent IES data refer to 2012.

Data reported by enterprises through IES are subject to quality control by Banco de Portugal mainly to ensure the coherence and integrity of accounting information for the economic year and that the main aggregates are consistent throughout the years. This analysis also involves matching the reported information with the data obtained from other statistical systems available within Banco de Portugal, namely *Central de Responsabilidades de Crédito* (Central Credit Register – CCR), *Sistema Integrado de Estatísticas de Títulos* (Securities Statistics Integrated System – SSIS) and the Balance of Payments.

In addition to information obtained through IES, this Study is complemented with the latest data (for the first half of 2013) on the financial debt of Portuguese enterprises available in other databases of Banco de Portugal's Statistics Department, namely the CCR and SSIS. This information characterises a significant part of the financial liabilities of Portuguese enterprises, namely in what regards loans from the financial sector and securities issued.

Finally, for purposes of comparison with other countries, information from the European database Bank for the Accounts of Companies Harmonised (BACH), managed by the European Committee of Central Balance-Sheet Data Offices (ECCBSO), is used. This information enables the comparison of the situation of enterprises from nine European countries in terms of profitability, indebtedness and productivity, by economic activity sector and size class. The most recent information available in this database refers to 2011.

SUMMARY

The *Automobile Industry*, which includes *Manufacture of motor vehicles* and *Sale of motor vehicles*, accounted in 2012 for approximately 6 % of turnover and 4 % of both the number of enterprises and the number of employees of non-financial corporations (NFC) in Portugal. The weight of this sector in total NFCs has decreased over the past ten years, particularly in terms of turnover, where it fell by 4 percentage points (p.p.).

Similarly to NFCs, the *Automobile Industry* mainly comprises microenterprises, but the largest shares in terms of number of employees and turnover are, respectively, held by SMEs and large enterprises. In this sector, as in most other activities in Portugal, enterprise head offices are strongly concentrated in the Lisbon district. However, the *Automobile Industry* is also particularly relevant among all other activities in the Bragança, Setúbal, Viana do Castelo and Viseu districts.

The *Automobile Industry* is dominated by *Sale of motor vehicles* activities, which in 2012 accounted for 97 % of total enterprises, 70 % of the number of employees and 64 % of turnover. However, the average size of enterprises in *Manufacture of motor vehicles* is larger. Compared with the average NFC enterprise, *Automobile Industry* enterprises generated in 2012, on average, 17 times more in terms of turnover and had ten times more employees. The average enterprise in the *Sale of motor vehicles* segment posted worst results than those of NFCs. With regard to the degree of openness to foreign trade, the *Manufacture of motor vehicles* segment is more dependent on external demand and posts positive external trade balances. Conversely, in the *Sale of motor vehicles* segment, imports are more relevant and external trade balances are negative.

In line with an unfavourable macroeconomic environment, turnover in the *Automobile Industry* fell by 21 % in 2012, this having been the second consecutive year with declines in this sector exceeding those of total NFCs. This fall was also observed in terms of EBITDA (earnings before interest, taxes, depreciation and amortisation) and return on equity across both *Automobile Industry* segments, albeit more markedly in *Sale of motor vehicles*. Return on equity in *Manufacture of motor vehicles* was considerably higher than in total NFCs, while in *Sale of motor vehicles* profitability turned negative in 2011.

Turning to its financial situation, in 2012 the *Automobile Industry*'s average capital ratio was in line with that of total NFCs (30 %), but higher in *Manufacture of motor vehicles* (40 %) than in *Sale of motor vehicles* (26 %). The sector's main sources of financing were financial debt and trade credits, which, as a whole, accounted for 76 % of the total. Compared with total NFCs, trade credits are more relevant for *Automobile Industry* funding.

Bank funding granted to the sector has declined at a faster pace than for total NFCs, with a greater impact on the *Sale of motor vehicles*. However, in the first half of 2013 credit granted to this sector posted more favourable developments. This was due to both a smaller drop in credit to *Sale of motor vehicles* and increased credit to *Manufacture of motor vehicles*. This was also likely due to the higher credit quality of *Manufacture of motor vehicles*, which is reflected in a non-performing loans ratio markedly below that of *Sale of motor vehicles* (5 % and 14 % respectively, at the end of the first half of 2013).

Despite a fall in interest paid, financial pressure (measured by the weight of interest in EBITDA) on the *Automobile Industry* rose in 2012. This was due to a fall in EBITDA and was particularly significant for microenterprises and the *Sale of motor vehicles* segment.

A comparison with other European countries, based on BACH data, shows that, on average, the *Manufacture of motor vehicles* segment in Portugal is in a relatively more favourable position, given its higher profitability and productivity and lower indebtedness. Conversely, in the *Sale of motor vehicles* segment, enterprises in Portugal have, on average, higher indebtedness levels and lower productivity and profitability, compared with the remaining countries under review.

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ACRONYMS

BACH	Bank for the Accounts of Companies Harmonized
CAE	Portuguese Classification of Economic Activities
CIs	Credit institutions
CoGS	Cost of Goods Sold and Materials Consumed
EBITDA	Earnings before interest, taxes, depreciation and amortisation
ESA 95	European System of National and Regional Accounts 1995
GDP	Gross domestic product
GVA	Gross value added
IES	Simplified Corporate Information (*Informação Empresarial Simplificada*)
INE	Statistics Portugal (*Instituto Nacional de Estatística*)
NFCs	Non-financial corporations
POC	Official Chart of Accounts (*Plano Oficial de Contabilidade*)
p.p.	Percentage points
SES	Supplies and External Services
SMEs	Small and medium-sized enterprises (excluding microenterprises)
SNC	Accounting Normalisation System (*Sistema de Normalização Contabilística*)

ANALYSIS OF THE AUTOMOBILE INDUSTRY

1 ANALYSIS OF THE *AUTOMOBILE INDUSTRY*

1 INTRODUCTION

The Study *Analysis of the Automobile Industry* looks into the economic and financial situation of enterprises within the *Automobile Industry*, based on information compiled by the Central Balance-Sheet Database of Banco de Portugal.[1] For the purpose of this analysis, the *Automobile Industry* is comprised not only of the *manufacture of motor vehicles* and their components but also downstream activities, namely concerning the sale and maintenance of motor vehicles.

The results presented in this publication complement aggregate data on non-financial corporations (NFCs),[2] also found in the Central Balance-Sheet Database and released within the scope of Banco de Portugal's statistical publications.[3] The analysis focuses mainly on 2008-12 developments, based on Simplified Corporate Information (IES) data, with some additional detail on 2013 in what regards bank loans and debt securities financing.

This Study characterises the *Automobile Industry*,[4] by analysing a group of selected indicators for its enterprises. For this purpose, some results are shown on the distribution of the aggregate enterprises' data (i.e. quartiles), which allow for an alternative analysis to the one provided by the summary indicator on the sector's average and provide measures unbiased by extreme values. Furthermore, the analysis covers the contributions from different sub-groups of enterprises in order to determine the sector's aggregate results. Therefore, details on the segments of economic activity and size classes are also presented.

This publication also compares the situation in the *Automobile Industry* and the NFC aggregate in Portugal. For further details on the results for the NFC sector, please refer to Banco de Portugal's *Central Balance-Sheet Studies 12* and *13* (both released in November 2013).

The analysis begins with a characterisation of the *Automobile Industry*, particularly regarding the sector's structure in terms of economic activity, size, geographical location, maturity and legal nature of the enterprises it comprises. It also presents data on market concentration and business dynamics. Afterwards, it reviews recent developments in turnover to determine to what extent these developments are reflected in businesses' profitability. This involves breaking down the effects that influence profitability into operational and financial components, while providing some information on the sector's solvency capacity.

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1 The Central Balance-Sheet Database of Banco de Portugal is a database with economic and financial information on NFCs in Portugal. Information used in this *Study* is based on annual accounting data reported within the scope of the IES (*Informação Empresarial Simplificada* – 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 % of turnover in the sector. For further details on the activity of the Central Balance-Sheet Database, please refer to the *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 the publication *Central Balance-Sheet Study | 6 – New enterprise and sector tables: adjustment to the Accounting Normalisation System*, of December 2011.

2 The NFC sector represents one of the economy's five institutional sectors. The institutional sectorisation of economic agents is carried out in accordance with the 1995 European System of National and Regional Accounts (ESA 95), approved by Council Regulation (EC) No 2223/96 of 25 June 1996. ESA 95 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. Based on this regulation, sole proprietors are included in the households' institutional sector. Hence, all data on the NFC sector throughout this document exclude sole proprietors (in Portugal these represent around two-thirds of the number of enterprises, but only 5 % of the respective turnover). This also excludes enterprises classified under Section O – *Public administration and defence; compulsory social security*, Section T – *Activities of households as employers; undifferentiated goods – and services-producing activities of households for their own use*, and Section U – *Activities of extraterritorial organisations and bodies* of CAE-Rev.3, as they are not included in the NFC institutional sector, as well as Section K – *Financial and insurance activities*, that groups together non-financial holding enterprises (with the SGPS denomination) not involved in subsidiary management, which, despite still belonging to the NFC sector (as regulated under ESA 95), were not analysed due to their very specific characteristics that set them apart from the other NFCs.

3 Central Balance-Sheet Database statistics are published in Banco de Portugal's Statistical Bulletin (Chapters A and G) and in Sector Tables, both available on Banco de Portugal's website and BPstat | Statistics Online.

4 For the sake of simplicity, this *Study* refers interchangeably to the expressions 'enterprise' and 'corporation', which refer to NFCs as defined in footnote 2.

Based on additional information available in the Central Credit Register (CCR) and the Securities Statistics Integrated System (SSIS), details are given on the financial debt of *Automobile Industry* enterprises, particularly in what regards loans granted by the financial sector in Portugal and debt securities issued by the sector's enterprises.

Finally, for international comparison purposes, Bank for the Accounts of Companies Harmonised (BACH) data are used to compare the situation of *Automobile Industry* enterprises across nine European countries, namely in terms of profitability, indebtedness and productivity.

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

2 STRUCTURE AND DYNAMICS

2.1 Structure

For the purposes of this *Study*, the *Automobile Industry* is comprised not only of the manufacture of motor vehicles and their components, but also its downstream activities, namely the sale and maintenance of motor vehicles. Therefore, this sector covers enterprises classified under CAE-Rev.3[5] Groups 291, 292, 293, 451, 452 and 453.

Such Groups correspond to a disaggregation of Division 29 – *Manufacture of motor vehicles, trailers and semi-trailers* (included in Section C – *Manufacturing*) and Division 45 – *Wholesale and retail trade and repair of motor vehicles and motorcycles* of CAE-Rev.3 (included in Section G – *Wholesale and retail trade; repair of motor vehicles and motorcycles*). The first set of activities was abbreviated to ***Manufacture of motor vehicles*** and the second to ***Sale of motor vehicles***.

The *Automobile Industry* as described above comprised around 14,000 enterprises in 2012, which accounted for 4 % of the number of enterprises and the number of employees and 6 % of turnover of total NFCs (Table 1). Compared with 2002, the weight of the *Automobile Industry* decreased across all indicators: -0.2 percentage points (p.p.) in terms of number of enterprises, -1 p.p. in number of employees, and -4 p.p. in turnover.

The *Automobile Industry* comprised 14,000 enterprises, which accounted for 4 % of the number of employees and 6 % of turnover of total NFCs

The more negative developments in turnover were chiefly due to the *Sale of motor vehicles*, whose weight in *Trade* (Section G of CAE-Rev.3) dropped from 18 % in 2002 to 10 % in 2012. Over the same period, the *Manufacture of motor vehicles* maintained its weight in *Manufacturing* turnover (Section C of CAE-Rev.3) (8 % in 2012, compared with 9 % in 2002).

Table 1

WEIGHT OF THE AUTOMOBILE INDUSTRY IN NFCS (2012)

	Number of enterprises	Turnover	Number of employees
Automobile Industry	3.8 %	5.6 %	3.9 %
Manufacture of motor vehicles	0.1 %	2.0 %	1.2 %
Sale of motor vehicles	3.7 %	3.6 %	2.7 %

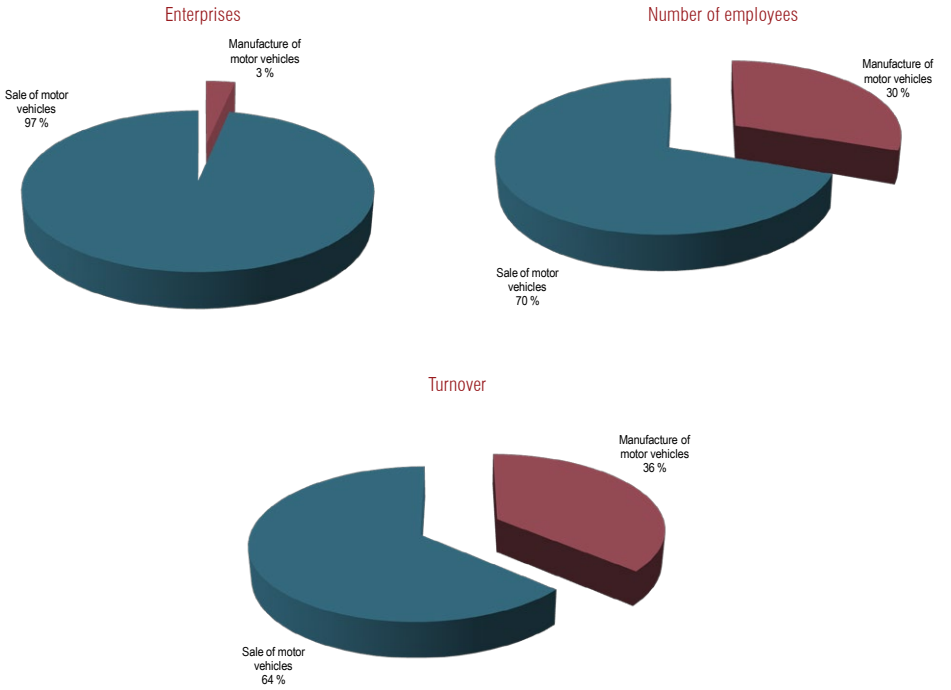
Considering the composition of the *Automobile Industry* by **economic activity segment**, in 2012 the *Sale of motor vehicles* was clearly predominant comprising 97 % of total enterprises. The *Sale of motor vehicles* was also predominant across all other indicators, albeit to a lesser extent: 64 % in terms of turnover and 70 % in the number of employees (Chart 1).

The *Sale of motor vehicles* comprised 97 % of the sector's enterprises, 64 % of its turnover and 70 % of the number of employees…

5 **CAE 291:** *Manufacture of motor vehicles;* **CAE 292***: Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers;* **CAE 293***: Manufacture of parts and accessories for motor vehicles;* **CAE 451***: Sale of motor vehicles;* **CAE 452***: Maintenance and repair of motor vehicles*; and **CAE 453***: Sale of motor vehicle parts and accessories.*

Chart 1

STRUCTURE BY ECONOMIC ACTIVITY SEGMENT (2012)



… particularly due to the weight of CAE 451 – *Sale of motor vehicles* in turnover and of CAE 452 – *Maintenance and repair of motor vehicles* regarding the sector's number of enterprises

Within *Wholesale and retail trade and repair of motor vehicles and motorcycles*, CAE 451 – *Sale of motor vehicles* is predominant, accounting for almost half of the sector's turnover (47 %) and also comprising the largest number of employees (29 %). CAE 452 – *Maintenance and repair of motor vehicles*, in turn, was more relevant in terms of number of enterprises (47 % of the sector's enterprises, which, however, accounted for only 6 % of *Automobile Industry*'s total turnover).

In turn, CAE 291 – *Manufacture of motor vehicles* and CAE 293 – *Manufacture of bodies (coach-work) for motor vehicles; manufacture of trailers and semi-trailers*, within *Manufacture of motor vehicles*, as a whole, comprised only 2 % of the sector's enterprises while accounting for 36 % of total turnover (Table 2).

Table 2

STRUCTURE BY GROUP OF CAE REV.3 (2012)

CAE-Rev.3 Group	Number of enterprises	Turnover	Number of employees
CAE 291	0.2 %	14.2 %	5.6 %
CAE 292	1.2 %	0.9 %	2.4 %
CAE 293	1.8 %	21.3 %	22.5 %
CAE 451	28.4 %	46.5 %	28.6 %
CAE 452	47.1 %	5.8 %	25.3 %
CAE 453	21.3 %	11.2 %	15.6 %

Note: CAE 291: *Manufacture of motor vehicles;* **CAE 292:** *Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers*; **CAE 293:** *Manufacture of parts and accessories for motor vehicles*; **CAE 451:** *Sale of motor vehicles*; **CAE 452:** *Maintenance and repair of motor vehicles*; and **CAE 453:** *Sale of motor vehicle parts and accessories*.

By enterprise **size class**,[6] the *Automobile Industry* roughly reflects the NFC sector's structure: the largest share being that of microenterprises (89 % for both sectors), but its weight in terms of turnover is of only 12 % in the *Automobile Industry* and of 14 % in the case of NFCs; small and medium-sized enterprises (SMEs) are relevant in terms of number of employees (42 % in the *Automobile Industry* and 44 % for NFCs), while the importance of large enterprises is similar in terms of turnover (46 % in the *Automobile Industry* and 45 % for NFCs) (Table 3).

The *Automobile Industry* reflected the NFC sector's size class structure, with microenterprises accounting for 89 % of the sector's enterprises, but with 46 % of turnover being associated with large enterprises

Table 3

INDICATORS BY ENTERPRISE SIZE CLASS (2012)

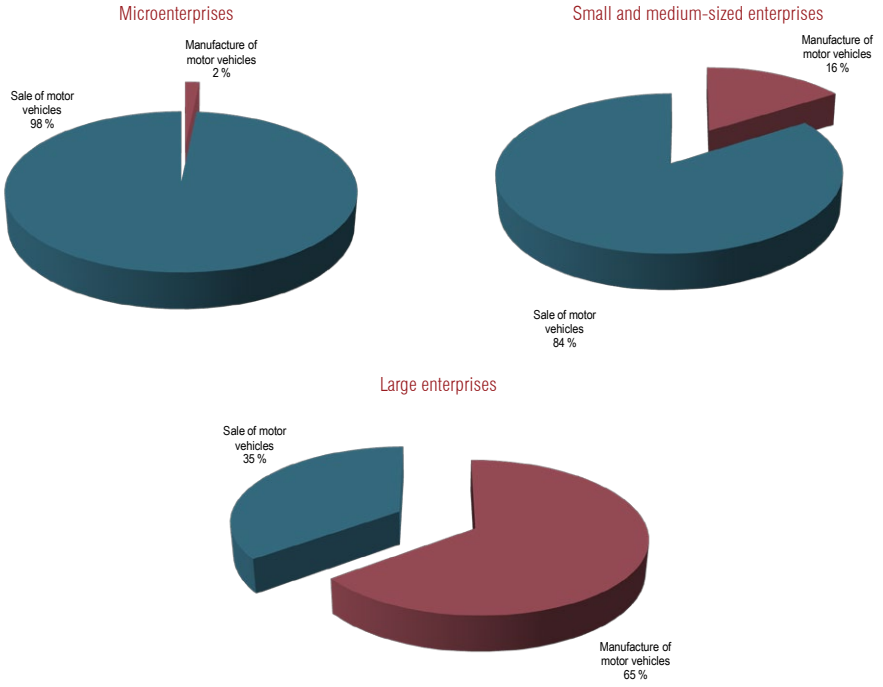
Indicator	Size classes	NFCs	Automobile Industry
Number of enterprises	Microenterprises	**88.8 %**	**89.3 %**
	SMEs	10.9 %	10.3 %
	Large enterprises	0.3 %	0.4 %
Turnover	Microenterprises	14.5 %	12.4 %
	SMEs	40.6 %	41.5 %
	Large enterprises	**45.0 %**	**46.1 %**
Number of employees	Microenterprises	26.8 %	31.6 %
	SMEs	**43.9 %**	**41.6 %**
		29.3 %	26.8 %

Note: Shaded cells identify the most relevant size class in each sector/indicator.

Chart 2 presents the sectoral composition of each size class, based on the turnover generated in 2012 by the activity segments that comprise the *Automobile Industry*.

Chart 2

SECTORAL COMPOSITION OF EACH ENTERPRISE SIZE CLASS (TURNOVER – 2012)



6 A definition of corporate size classes used in this *Study* is detailed in the Annex.

The *Manufacture of motor vehicles* was more relevant among the large enterprises class (65% of its turnover)

In terms of turnover, the weight of *Manufacture of motor vehicles* increases in tandem with the enterprise size class, as opposed what is observed in the *Sale of motor vehicles*. Therefore, in the microenterprises class, the main segment is *Sale of motor vehicles*, accounting in 2012 for 98 % of the turnover of this class (84 % in SMEs and 35 % in large enterprises). Conversely, *Manufacture of motor vehicles* is particularly relevant in the large enterprises class, where it accounted for 65 % of turnover (16 % for SMEs and 2 % for microenterprises).

Enterprises in the *Manufacture of motor vehicles* generated, on average, 17 times more turnover and ten times more employment than the average enterprise in Portugal

Also regarding the average number of employees and average turnover, both *Automobile Industry* segments diverge. On average, enterprises in the *Manufacture of motor vehicles* segment post much higher figures than enterprises in the NFC aggregate: in 2012 they generated 17 more turnover and ten times more employment than the average enterprise in Portugal. Turning to the *Sale of motor vehicles*, the opposite is the case, with the average enterprise in this segment creating fewer jobs and generating a slightly lower turnover than the average enterprise in Portugal (Table 4).

Table 4

AVERAGE TURNOVER AND AVERAGE NUMBER OF EMPLOYEES (2012) | *NFCs=1*

	Automobile Industry	Manufacture of motor vehicles	Sale of motor vehicles
Average number of employees	1.02	9.77	0.73
Average turnover	1.48	17.03	0.97

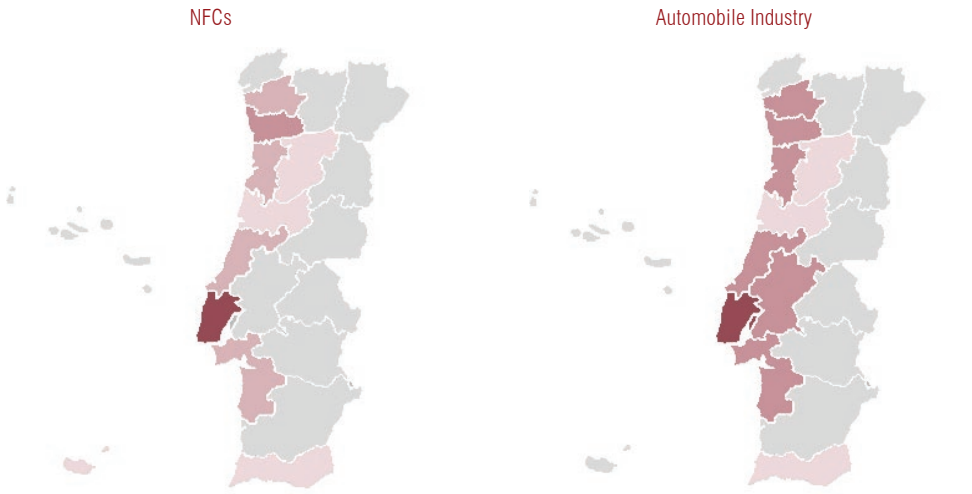
Automobile Industry's head offices were mainly located in coastal areas; in addition to Lisbon and Porto, Setúbal also stood out

Concerning the **geographical location**[7] of enterprises' head offices, the *Automobile Industry* is also highly concentrated in coastal areas (Figure 1). The assessment in terms of turnover also shows that, in the case of the *Automobile Industry*, various coastal districts were of relevance, besides Lisbon and Porto, which in 2012 comprised approximately 46 % of turnover (59 %, in total NFCs). Among the other coastal districts of relevance for the *Automobile Industry*, Setúbal stood out (17 %, compared with 6 % in total NFCs).

Figure 1

GEOGRAPHICAL LOCATION BY DISTRICT (2012)

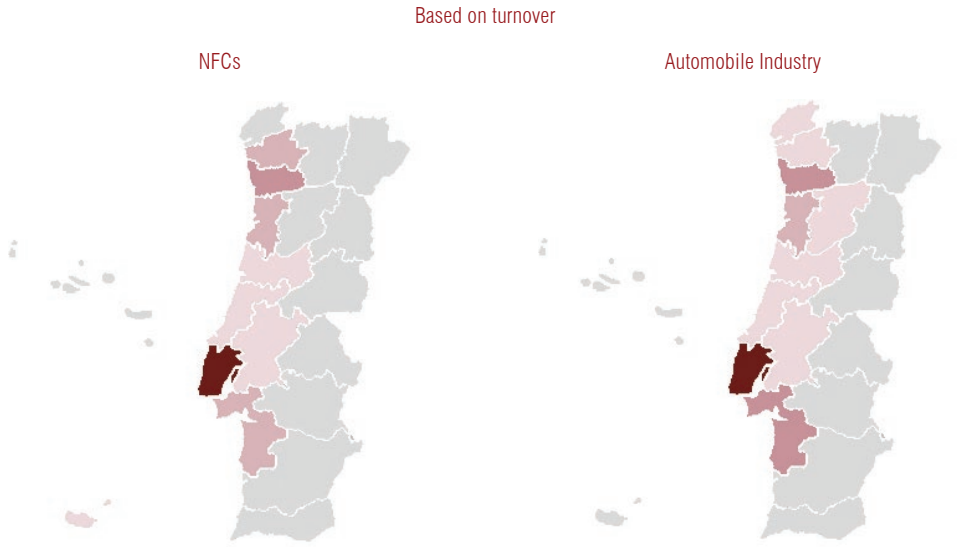
Based on the number of enterprises



7 Geographical location refers to the district where the enterprise head office is located.

GEOGRAPHICAL LOCATION BY DISTRICT (2012)

Based on turnover



Key to the figure:

]30 %; 50 %]]20 %;30 %]]10 %;20 %]]5 %; 10 %]]2.5 %;5 %]]0 %; 2.5 %]

Nonetheless, Lisbon is the most relevant district for the *Automobile Industry*, comprising 22 % of the number of enterprises, 30 % of turnover and 20 % of the number of employees. This is chiefly due to *Sale of motor vehicles* activities (22 %, 43 % and 25 % respectively), which are distributed similarly to the NFCs aggregate (Table 5).

Manufacture of motor vehicles is otherwise distributed, with most enterprises being located in the Porto district (23 %), turnover being concentrated mostly in Setúbal (42 %) and the number of employees being mostly concentrated in Aveiro (23 %).

Manufacture of motor vehicles had a more relevant number of enterprises located in the Porto district (23 %), a larger share of turnover in Setúbal (42 %) and of employees in Aveiro (23 %)

Table 5

GEOGRAPHICAL LOCATION BY ECONOMIC ACTIVITY SEGMENT (2012)

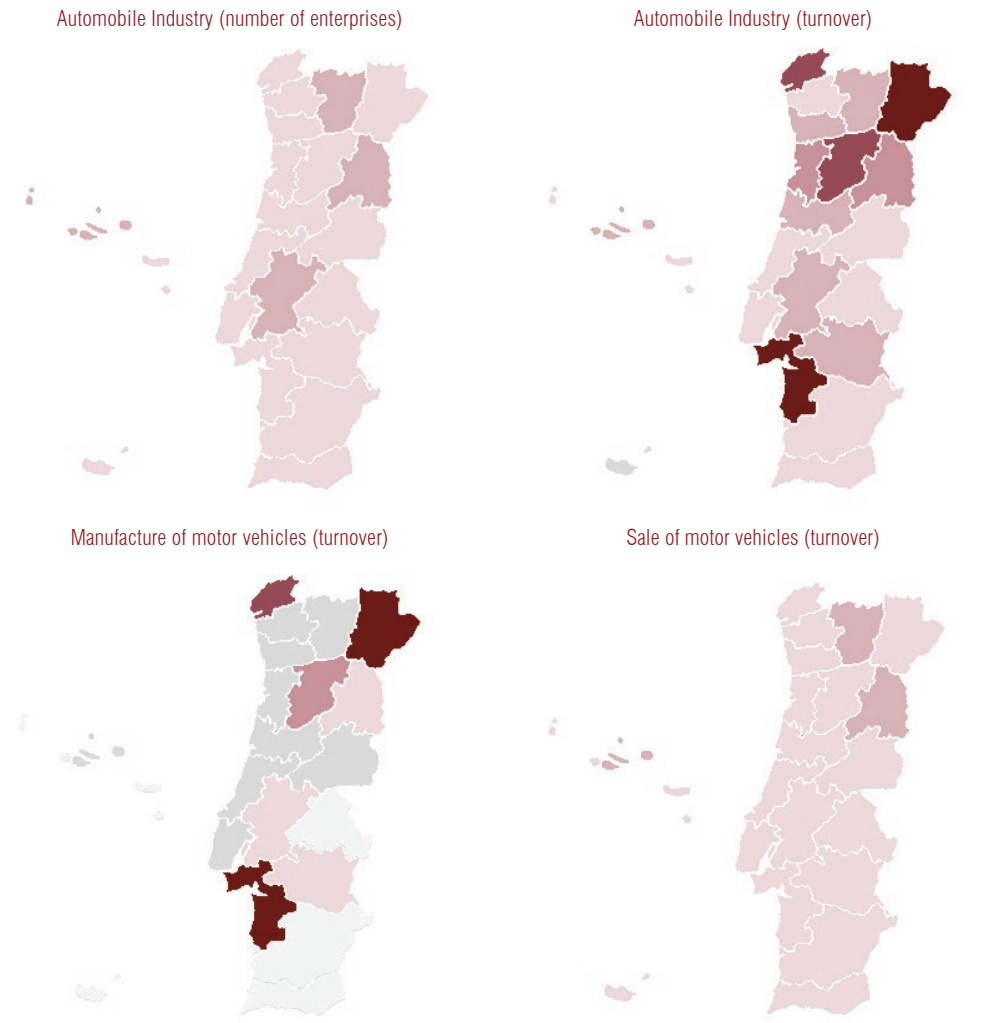
	Number of enterprises		Turnover		Number of employees	
	District (Top3)	% of total	District (Top3)	% of total	District (Top3)	% of total
Manufacture of motor vehicles	Porto	23.1 %	Setúbal	41.6 %	Aveiro	23.0 %
	Aveiro	15.6 %	Aveiro	14.1 %	Setúbal	18.4 %
	Lisbon	11.9 %	Viseu	8.3 %	Porto	15.7 %
Sale of motor vehicles	Lisbon	21.9 %	Lisbon	43.0 %	Lisbon	25.3 %
	Porto	17.6 %	Porto	20.3 %	Porto	22.1 %
	Braga	8.2 %	Braga	5.4 %	Braga	7.5 %

Concerning the relative importance of *Automobile Industry* segments within each district's total NFCs, *Manufacture of motor vehicles* is particularly noteworthy. Regarding this segment, the Bragança, Setúbal, Viana do Castelo and Viseu districts are of particular importance, with turnover in *Manufacture of motor vehicles* accounting for 17 %, 15 %, 10 % and 8 % respectively of turnover generated by enterprises in these districts. The relative importance of *Sale of motor vehicles*, in terms of total turnover, is more balanced across districts (Figure 2).

Manufacture of motor vehicles was more relevant among the activities carried out in the Bragança, Setúbal, Viana do Castelo and Viseu districts

Figure 2

GEOGRAPHICAL LOCATION BY DISTRICT | *Weight in the district's total NFCs (2012)*



Key to the figure:

]15 %; 25 %]]10 %; 15 %]]7.5 %; 10 %]]5 %; 7.5 %]]2 %; 5 %]

[0 %; 2 %] [Confidencial]

Note: For confidentiality purposes, *Manufacture of motor vehicles* figures for the Beja, Faro, Funchal, Horta, Ponta Delgada and Portalegre districts are not shown. For more information on confidentiality rules applied to Central Balance-Sheet Database data, see *Central Balance-Sheet Study I 6 – New enterprise and sector tables: adjustment to the Accounting Standards System*, December 2011.

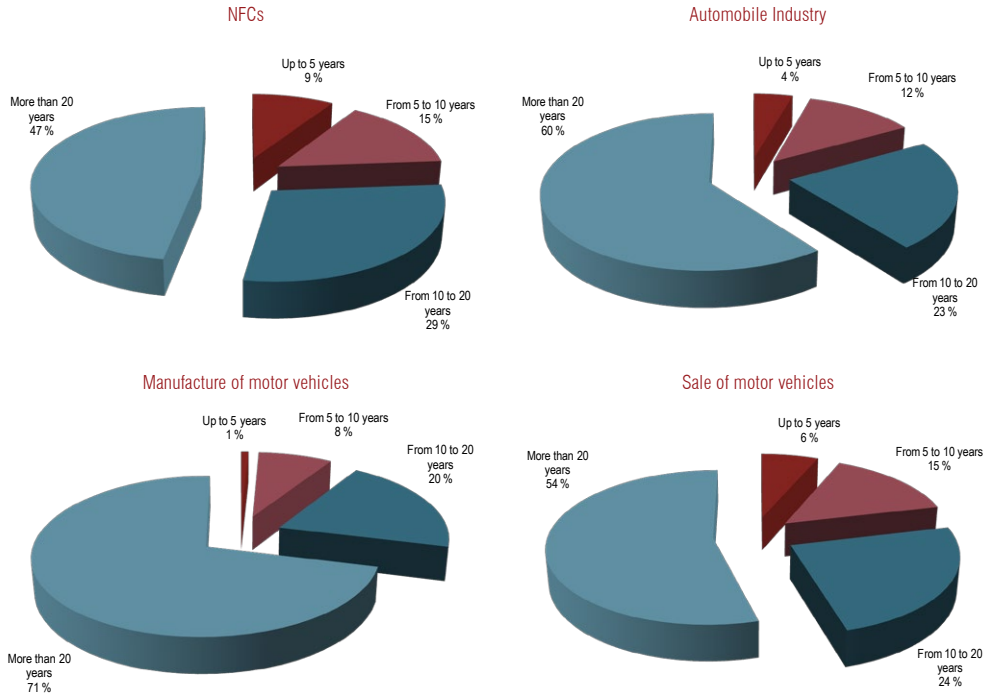
Enterprises established for more than 20 years accounted for 60 % of the sector's turnover

Regarding **enterprise maturity**,[8] 60 % of the *Automobile Industry*'s turnover in 2012 was generated by enterprises established for more than 20 years, compared with 47 % in total NFCs. This divergence was mainly due to the *Manufacture of motor vehicles*, given that in this segment enterprises established for less than five years accounted for only 1 % of turnover, compared with 71 % for enterprises established for more than 20 years (Chart 3).

8 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).

Chart 3

STRUCTURE BY MATURITY CLASS (TURNOVER – 2012)

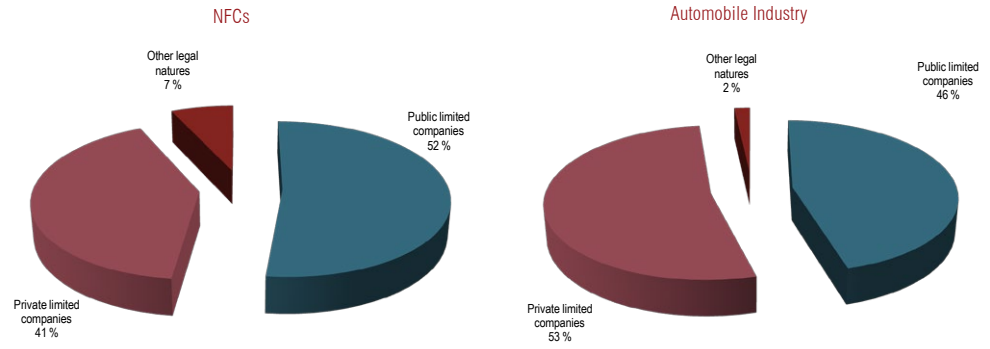


Concerning the **legal nature**[9] of enterprises, the *Automobile Industry* showed, in 2012, distinct characteristics when compared with the NFC sector in Portugal. In the *Automobile Industry*, private limited companies accounted for 53 % of turnover (compared with 41 % for NFCs) while public limited companies accounted for 46 % (compared with 52 % for NFCs). Enterprises with other legal natures accounted for only 2 % of turnover in the *Automobile Industry*, *i.e.* 5 p.p. less than for NFCs in the same year (Chart 4).

Private limited companies held a more substantial share of the sector's turnover (53%, compared with 41% in total NFCs)

Chart 4

STRUCTURE BY LEGAL NATURE (TURNOVER – 2012)



9 Considering the numerous categories included in national regulations for the classification of enterprises by legal nature, we opted for highlighting only public limited companies and private limited companies, whereas the remaining legal natures were aggregated under 'other legal natures'.

2.2 Market concentration

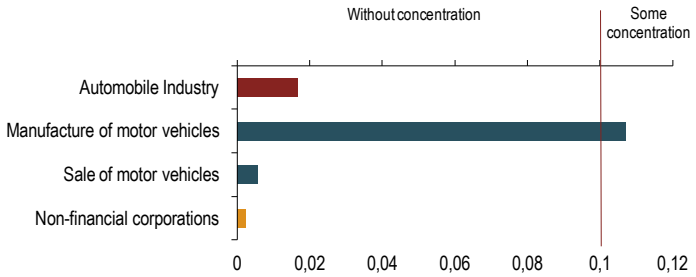
To assess enterprise concentration in the *Automobile Industry*, the Herfindahl-Hirschman Index (HHI)[10] was used, weighing the market share of each enterprise within its economic activity segment.

The *Automobile Industry* did not show evidence of enterprise concentration; however, *Manufacture of motor vehicles* was somewhat concentrated

In 2012 the *Automobile Industry*'s results did not show any evidence of concentration (HHI of 0.02). In terms of both segments, only the *Manufacture of motor vehicles* was somewhat concentrated (HHI of 0.11), in contrast to the *Sale of motor vehicles* (HHI of 0.01) (Chart 5). This seems to be a structural feature of the *Automobile Industry*, given that results for 2012 did not diverge from those of previous years.

Chart 5

HERFINDAHL-HIRSCHMAN INDEX (2012)



10 % of enterprises held 92 % of turnover in *Manufacture of motor vehicles* and 85 % in *Sale of motor vehicles*

However, in 2012 the largest enterprises in terms of market share (10 % of enterprises) accounted for 92 % of turnover in *Manufacture of motor vehicles* and 85 % in *Sale of motor vehicles*. The weight of the 1 % of enterprises with the largest shares drops to 51 % in *Manufacture of motor vehicles* and 55 % in *Sale of motor vehicles* (Table 6).

Table 6

TURNOVER DISTRIBUTION (2012)

	Automobile Industry	Manufacture of motor vehicles	Sale of motor vehicles
Percentage of turnover held by 10 % of enterprises	90 %	92 %	85 %
Percentage of turnover held by 1 % of enterprises	65 %	51 %	55 %

2.3 Dynamics

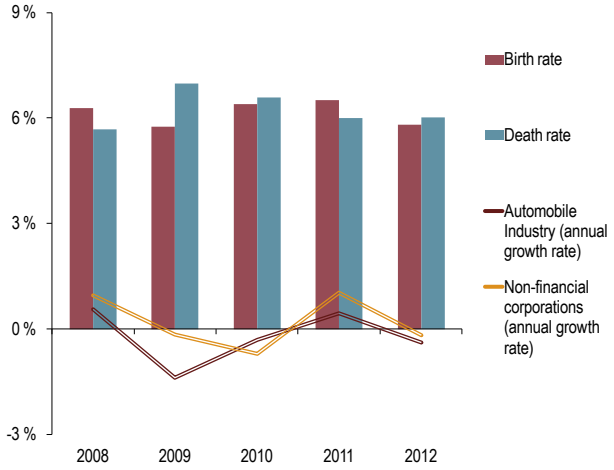
In 2012 the number of enterprises operating in the sector declined by 0.4 % (0.2 % decrease in NFCs)

In the period under review, excluding 2010, the growth rate in the number of enterprises operating in the *Automobile Industry* was lower than that of total enterprises in Portugal (Chart 6). Consequently, the relative weight of the *Automobile Industry* in total NFCs in Portugal has decreased. In 2012 the number of enterprises operating in this sector declined by 0.4 %, more than in total NFCs (0.2 %).

10 The market share s_i was derived from individual turnover y_i while $s_i = y_i / \sum_{i=1}^{n} y_i$, with HHI corresponding to $\sum_{i=1}^{n} s_i$. HHI is between 1/n and 1, with an index between 1/n and 0.1 corresponding to unconcentrated markets, between 0.1 and 0.18 indicating moderately concentrated markets and above 0.18 indicating high corporate concentration. 1 corresponds to a monopoly situation, in which one enterprise holds the entire market share.

Chart 6

DEMOGRAPHIC INDICATORS

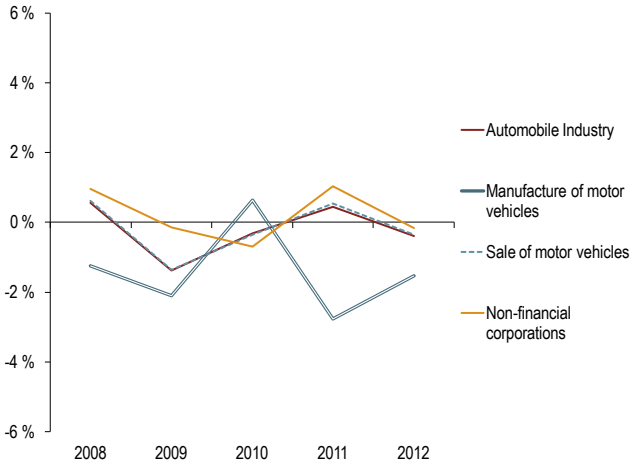


By economic activity segment, developments have been mixed, with changes in the number of enterprises operating in the *Automobile Industry* being chiefly defined by the *Sale of motor vehicles*, which accounted for around 97 % of the total number of enterprises in the sector (Chart 7).

Developments in the number of enterprises operating in the *Automobile Industry* has been chiefly defined by the *Sale of motor vehicles*

Chart 7

ANNUAL CHANGES IN THE NUMBER OF OPERATING ENTERPRISES



In 2012 the number of enterprises operating in the *Sale of motor vehicles* segment dropped by 0.4 %, while in *Manufacture of motor vehicles* it fell by 1.5 %. It should be noted that the erratic developments in the number of enterprises operating in the *Manufacture of motor vehicles* segment are due to its small number of enterprises. Excluding 2010, the number of enterprises in this segment has fallen more substantially than in the *Sale of motor vehicles*.

3 ECONOMIC AND FINANCIAL ANALYSIS

3.1 Economic environment

In 2012 gross domestic product fell and unemployment increased in the Portuguese economy. This was set against an unfavourable external environment, characterised by the euro area recession and a slowdown in global economic growth. On the domestic side, fiscal policy guidelines remained tight and, in spite of a slight improvement, monetary and financial conditions continued to be constrained.

In contrast to the decrease in economic activity, progress was made in the adjustment process of the Portuguese economy, specifically in rebalancing the joint current and capital account balance and reducing the primary and structural deficit.

GDP in Portugal declined by 3.2 % in 2012

In 2012 Portuguese GDP fell by 3.2 %, following a decrease of 1.3 % in 2011. Private consumption and investment worsened the decreases seen in 2011, while public consumption fell slightly less than in the previous year. Foreign trade operations continued to contribute positively to developments in GDP, with exports growing, albeit at a slower pace than in 2011, and imports falling more markedly (Table 7).

At the end of the first half of 2013, GDP had declined by 3.1 %, year-on-year

Data available for the first half of 2013 show a decrease in output of around 3.1 % year-on-year. At the end of 2013, Banco de Portugal's most recent estimates, published in the *Winter Economic Bulletin*, pointed to drop of 1.5 %[11] in GDP.

Table 7

GDP AND MAIN COMPONENTS | *Annual growth rate*

	2009	2010	2011	2012	2013 (1st half-year)
GDP	-2.9 %	1.9 %	-1.3 %	-3.2 %	-3.1 %
Private consumption	-2.3 %	2.5 %	-3.3 %	-5.4 %	-3.3 %
Public consumption	4.7 %	0.1 %	-5.0 %	-4.7 %	-3.3 %
Gross fixed capital formation	-8.6 %	-3.1 %	-10.5 %	-14.4 %	-11.7 %
Exports	-10.9 %	10.2 %	6.9 %	3.2 %	4.0 %
Imports	-10.0 %	8.0 %	-5.3 %	-6.6 %	0.9 %

Sources: *INE* and Banco de Portugal

3.2 Activity and profitability

3.2.1 Turnover

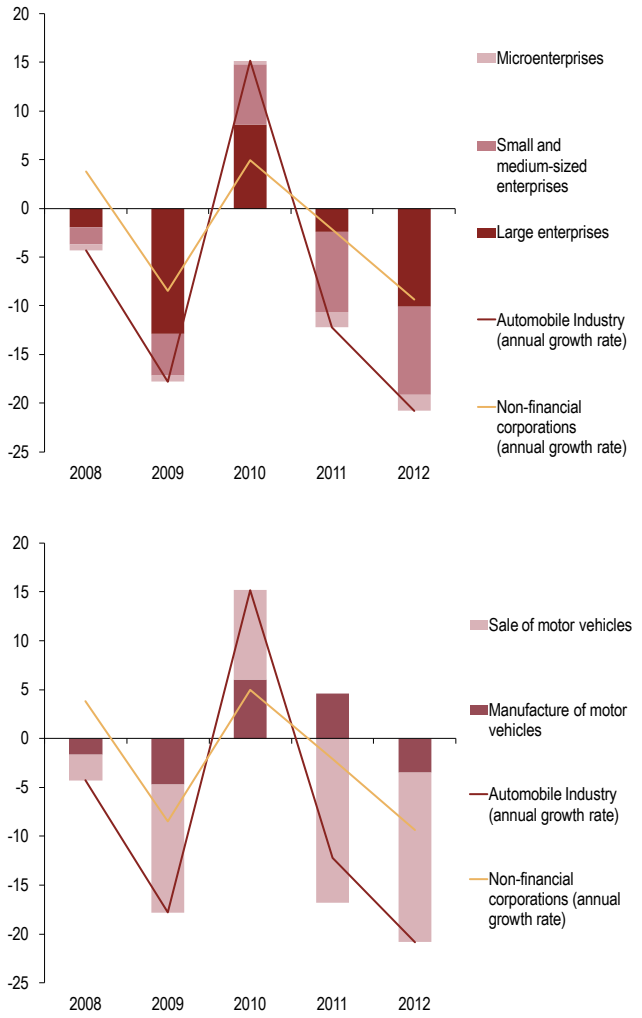
Automobile Industry's turnover fell by 21 % in 2012…

In 2012 the *Automobile Industry*'s turnover continued to follow the trend that started in 2011 (-21 % and -12 % respectively). In both years, the sector's activity fell much more markedly than the NFC aggregate in Portugal (Chart 8).

11 For more information on economic activity developments in Portugal, please refer to *Banco de Portugal's Annual Report* as well as its *Economic Bulletin*, which is published quarterly. Both publications are available at http://www.bportugal.pt.

Chart 8

TURNOVER | *Annual growth rate (%) and contributions (p.p.)*



Regarding *Automobile Industry*'s performance, SMEs and large enterprises were particularly relevant, respectively contributing 9 p.p. and 10 p.p. to the negative change in the sector's turnover (turnover in these size classes dropped by 22 % and 21 % respectively). Furthermore, microenterprises also made a negative contribution to these developments (2 p.p. contribution, associated with a 14 % fall in turnover). In 2011 all size classes in the *Automobile Industry* had already posted negative growth rates in turnover (particularly SMEs, with a 19 % contraction).

…particularly due to SMEs and large enterprises (9 p.p. and 10 p.p. contributions to the decline in the sector's turnover)…

By economic activity segment, negative rates of change in the sector's turnover were chiefly due to a fall in *Sale of motor vehicles* (26 %), although turnover in *Manufacture of motor vehicles* also fell markedly (10 %). Contributions to this contraction in the sector's turnover were 17 p.p. in the case of *Sale of motor vehicles* and 3 p.p. in the case of *Manufacture of motor vehicles*.

…and to the *Sale of motor vehicles* (17 p.p. contribution to negative rates of change in the sector's turnover)

Activity in the *Automobile Industry* depends to a large extent on domestic demand developments, although this sector's degree of openness to foreign trade is higher than that of total NFCs.[12] As such, developments in this sector's turnover have been strongly influenced by the

The external market, which had mitigated a fall in the sector's turnover in 2011, made a negative contribution to its developments in 2012 (1 p.p.)

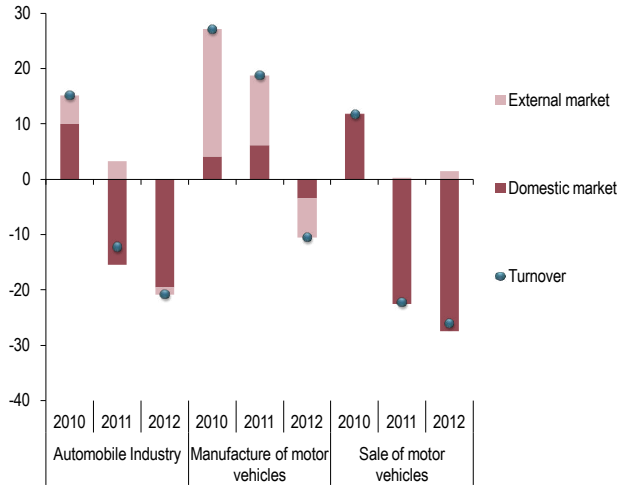
12 "Box 1 Importance of the external market for the operating activity of *Automobile Industry* enterprises" provides additional information on the weight of the external market in the activities of enterprises in the sector.

high contraction in domestic consumption over the past few years. In 2011 the external market dampened the effect of this contraction, with a positive contribution of 3 p.p. (-15 p.p. from the domestic market). In 2012, however, both markets contributed to a fall in *Automobile's Industry* turnover, although the contribution made by the external market was of only 1 p.p. (Chart 9).

Manufacture of motor vehicles is the *Automobile Industry* segment with the highest degree of openness to foreign trade, given that developments in its activity have been chiefly influenced by the external market. In 2012 the external market made negative contributions to activity developments in this segment (-7 p.p.), following a positive contribution in 2011 (13 p.p.). Conversely, in *Sale of motor vehicles*, turnover developments have been determined by the performance of the domestic market, which contributed 27 p.p. to a 26 % decrease in the segment's turnover in 2012. Nonetheless, in this segment, the external market's contribution was positive in 2012 (2 p.p.).

Chart 9

TURNOVER | *Contributions from the external and domestic markets (p.p.) to the annual growth rate (%)*



The more unfavourable developments in turnover in 2012 were broad-based across the *Automobile Industry*...

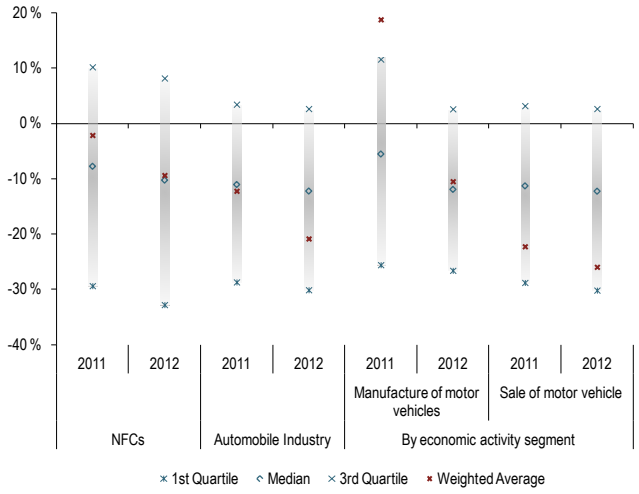
Individual data confirm that developments in the *Automobile Industry*'s turnover in 2012 were more unfavourable than in the previous year for most enterprises, with negative changes across all distribution points for regarding rates of change in enterprises' turnover compared with 2011. The same applies to both activity segments within the sector (Chart 10).

...while in the *Manufacture of motor vehicles*, the more unfavourable developments in turnover in 2012 were due to a small group of enterprises with highly positive rates of change in 2011

However, unfavourable developments in *Automobile Industry*'s turnover were due to a small set of enterprises that posted very high growth in turnover in 2011, only to fall in 2012. In fact, in 2011 average turnover growth in the *Manufacture of motor vehicles* (19 %) was strongly influenced by this small set of enterprises, given that activity developments among most enterprises (over 75 %) within that segment were below the average, with more than 50 % recording negative changes. In 2012 average turnover growth in the *Manufacture of motor vehicles* (-10 %) best represented the situation of that segment's enterprises, given that the turnover growth rate for the average enterprise stood at -12 %.

Chart 10

TURNOVER | *Quartile distribution of the annual growth rate and weighted average*



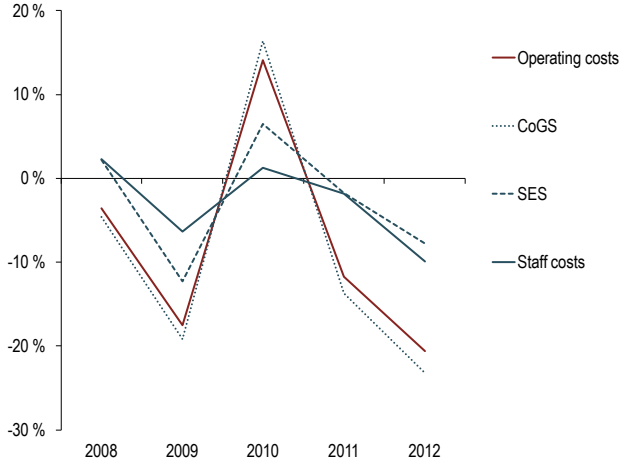
3.2.2 Operating costs[13]

Operating costs in the *Automobile Industry* followed a similar trend to that of turnover, falling by 21 % in 2012. The analysis by cost component shows that these developments were mainly driven by the Cost of Goods Sold and Materials Consumed (CoGS), which decreased by 23 % (Chart 11).

The sector enterprises' operating costs fell by 21 % in 2012, in line with developments in turnover

Chart 11

OPERATING COSTS | *Annual growth rate*



Supplies and External Services (SES) and staff costs fell by 8 % and 10 % respectively, in line with developments seen in the NFC aggregate (-12 % and -9 % respectively). Between 2009 and 2012 all components under review recorded similar changes: positive only in 2010, but negative over the remaining years.

13 The "operating costs" aggregate, calculated on the basis of the sum of Cost of Goods Sold and Materials Consumed (CoGS) and Supplies and External Services (SES) and Staff Costs, roughly corresponds to the concept of "operating costs" of the Official Chart of Accounts (accounting standard for corporate accounts up to 2009).

CoGS largely contributed to the reduction in the sector's operating costs (23 % decline in 2012)

Breaking down *Automobile Industry*'s operating costs reveals the impact of CoGS on the aggregate's developments. In 2012 this component accounted for 79 % of operating costs in the *Automobile Industry*, while SES and staff costs accounted for 11 % each. Compared with NFCs, CoGS weight in the sector under review was higher (+20 p.p.), which was offset by a lower relevance of both SES (-15 p.p.) and staff costs (-5 p.p.) (Table 8).

All enterprise size classes in the *Automobile Industry* had roughly the same operating cost structure. However, microenterprises had larger shares related to staff costs but smaller shares allocated to CoGS (16 % and 71 % respectively), by contrast to large enterprises (8 % and 82 % respectively).

…accounting for the most significant share of these costs, both in *Manufacture of motor vehicles* (78 %) and *Sale of motor vehicles* (79 %)

Considering economic activity segments, cost allocation did not diverge substantially, with both *Manufacture of motor vehicles* and *Sale of motor vehicles* reflecting a greater share of costs allocated to CoGS (78 % and 79 % respectively of their total operating costs).

Similarly to turnover, also in the case of operating costs changes were more negative for SMEs (22 %) and large enterprises (21 %) than for microenterprises (13 %). By economic activity segment, the reduction in operating costs was more marked in *Sale of motor vehicles* (26 %) than in *Manufacture of motor vehicles* (10 %). In both segments, CoGS recorded the most negative changes (-28 % and -12 % respectively).

Table 8

OPERATING COSTS | *Structure and annual growth rate (2012)*

Analysis	Item	NFCs	Automobile Industry	By enterprise size:			By economic activity segment:	
				Microenterprises	SMEs	Large enterprises	Manufacture of motor vehicles	Sale of motor vehicles
Structure	CoGS	58.8 %	78.7 %	70.7 %	77.5 %	81.9 %	78.0 %	79.0 %
	SES	25.7 %	10.8 %	13.0 %	11.0 %	9.9 %	11.5 %	10.4 %
	Staff costs	15.5 %	10.6 %	16.3 %	11.4 %	8.2 %	10.5 %	10.6 %
Annual growth rate	CoGS	-7.6 %	-23.3 %	-15.3 %	-24.0 %	-24.3 %	-12.2 %	-28.3 %
	SES	-12.3 %	-7.8 %	-9.8 %	-12.2 %	-2.1 %	3.7 %	-13.8 %
	Staff costs	-8.6 %	-9.9 %	-7.8 %	-12.4 %	-8.0 %	-4.4 %	-12.8 %
	Operating costs	**-9.0 %**	**-20.6 %**	**-13.4 %**	**-21.7 %**	**-21.4 %**	**-9.8 %**	**-25.6 %**

BOX 1 | EXTERNAL MARKET IMPORTANCE FOR AUTOMOBILE INDUSTRY ENTERPRISES' ACTIVITY

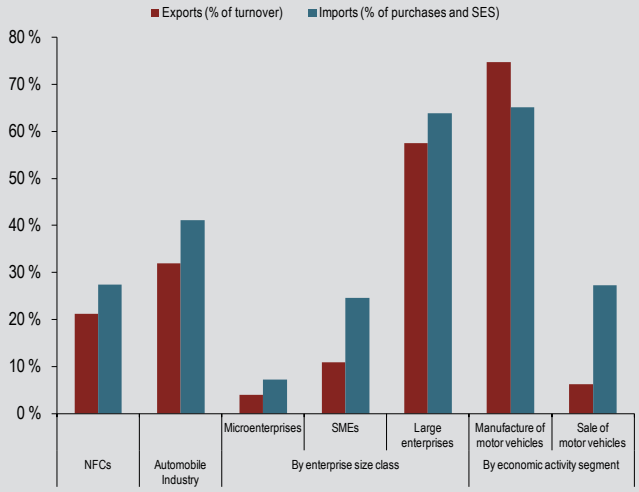
This *Box* assesses the importance of the external market for the operating activity of *Automobile Industry* enterprises, on the basis of data available in Banco de Portugal's Central Balance-Sheet Database.[14]

Exports of goods and services in the *Automobile Industry* declined by 5 % in 2012. However, as a percentage of turnover, exports increased from 27 % in 2011 to 32 % in 2012, as a result of a marked depreciation in the domestic market.

Chart 1.1 shows that in 2012 (similarly to the entire 2008-12 period) exports in the sector were lower, as a percentage of turnover, than imports, as a percentage of purchases and supplies and external services. However, this was not the case for both economic activity segments in the *Automobile Industry*. In *Sale of motor vehicles* the share of purchases and supplies and external services associated with imports (27 %) was higher than that of turnover associated with exports (6 %); in *Manufacture of motor vehicles* the opposite situation was registered (65 % and 75 % respectively), a scenario that spanned across the entire 2008-12 period.

Chart 1.1

EXPORTS AND IMPORTS OF GOODS AND SERVICES (2012)



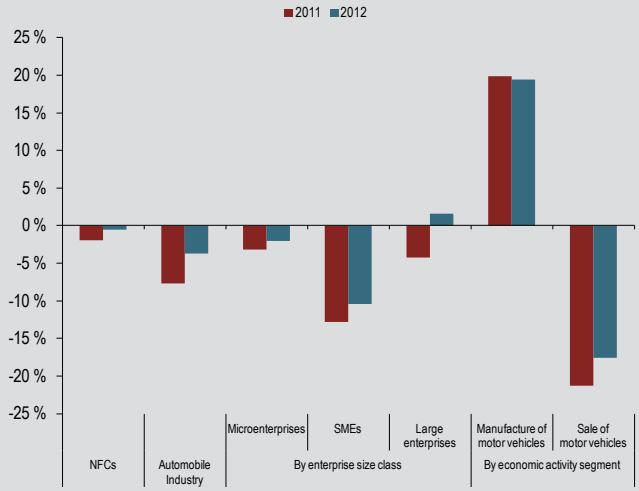
In the *Automobile Industry*, the weight of exports in turnover increased in proportion to the enterprises' size: 4 % for microenterprises, 11 % for SMEs and 57 % for large enterprises; similarly to the weight of imports in purchases and supplies and external services: 7 %; 25 % and 64 % respectively.

In the *Automobile Industry*, the balance of goods and services transactions with the external market, as a percentage of turnover, stood at -4 % in 2012, which corresponds to an improvement compared with -8 % in 2011 (Chart 1.2).

14 Data reported by enterprises within the scope of IES submissions regarding exports and imports of goods and services are subject to quality control by Banco de Portugal, specifically in comparison with balance of payments data reported by the same enterprises. This, however, does not guarantee that final IES data are fully coincident with international trade statistics data.

Chart 1.2

GOODS AND SERVICES TRANSACTIONS WITH EXTERNAL MARKETS (BALANCE IN 2011 AND 2012)



The *Manufacture of motor vehicles* stands out, posting positive balances in its transactions with the external market. However, between 2011 and 2012, this segment's balance declined slightly (-0.4 p.p.). Conversely, *Sale of motor vehicles* invariably posts negative balances, reflecting, however, an improvement in 2012 (+4 p.p.).

By size class, large enterprises were noteworthy in 2012, with their balance turning into positive values (2 %), after being negative in 2011 (-4 %). The remaining size classes also recorded improvements, but their balances remained negative.

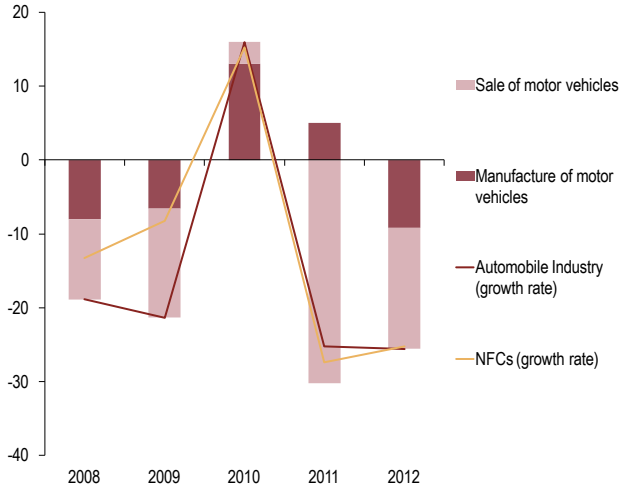
3.2.3 EBITDA[15]

Automobile Industry's EBITDA declined by 26 % in 2012, following a trend that started in 2011. EBITDA developments in the sector under review have been very much in line with developments in the NFC aggregate (Chart 12).

Automobile Industry's EBITDA declined by 26 % in 2012, similarly to 2011…

Chart 12

EBITDA | *Annual growth rate (%) and contributions (p.p.)*



EBITDA's decrease in 2012 was broad-based across all economic activity segments, albeit more significantly in *Sale of motor vehicles* (-47 %). *Sale of motor vehicles* contributed 16 p.p. to a 26 % fall in *Automobile Industry*'s EBITDA in 2012. In *Manufacture of motor vehicles*, however, EBITDA had not declined since 2009 (-14 % in 2012).

… most notably in the *Sale of motor vehicles* segment (-47 %)

In 2012 the share of enterprises with negative EBITDA levels was higher in the *Automobile Industry* than in total NFCs (46 % compared with 39 % respectively), while that share increased for both in 2012 (by around 3 p.p.) (Table 9).

The share of enterprises with negative EBITDA was higher in the *Automobile Industry*, compared with total NFCs (46 %, compared with 39 %)

Both *Manufacture of motor vehicles* and *Sale of motor vehicles* followed a similar path, although the share of enterprises with negative EBITDA levels was lower for the *Manufacture of motor vehicles* segment (33 %, compared with 46 % in *Sale of motor vehicles*).

Table 9

EBITDA | *Weight of enterprises with negative results*

			By enterprise size:			By economic activity segment	
	SNF	Automobile Industry	Microenter-prises	PME	Large enterprises	Manufacture of motor vehicles	Sale of motor vehicles
2011	36.4 %	42.4 %	44.8 %	24.3 %	11.9 %	30.6 %	42.8 %
2012	39.1 %	45.8 %	47.9 %	28.6 %	17.0 %	33.3 %	46.2 %

By enterprise size, data show that the share of enterprises with negative EBITDA levels is smaller in larger size classes. In 2012, 48 % of microenterprises in the *Automobile Industry* had negative EBITDA, while in SMEs and large enterprises that share stood at 29 % and 17 % respectively. Although the number of enterprises with negative EBITDA levels increased across all size classes in 2012, the greatest increase was observed within the sector's large enterprises (5 p.p., compared with 3 p.p. in microenterprises and 4 p.p. in SMEs).

48 % of the sector's microenterprises had negative EBITDA in 2012

15 EBITDA stands for earnings before interest, taxes, depreciation and amortisation. It corresponds to profit and loss for the year plus costs related to interest, taxes, depreciation and amortisation.

3.2.4 Return on equity[16]

Return on equity in the *Automobile Industry* stood at -2 % in 2012 (-3 p.p. from 2011)

In 2012 return on equity in the *Automobile Industry* stood at -2 %, nearly 3 p.p. down from 2011. In the 2008-12 period, this sector's profitability followed a similar trend to that of NFCs, albeit at a lower level. However, profitability in both sectors has been drawing nearer since 2009, when the corresponding differential was above 6 p.p. In 2012 that differential was of only 1 p.p. (Chart 13).

Only large enterprises within the sector had positive profitability levels (7 %)…

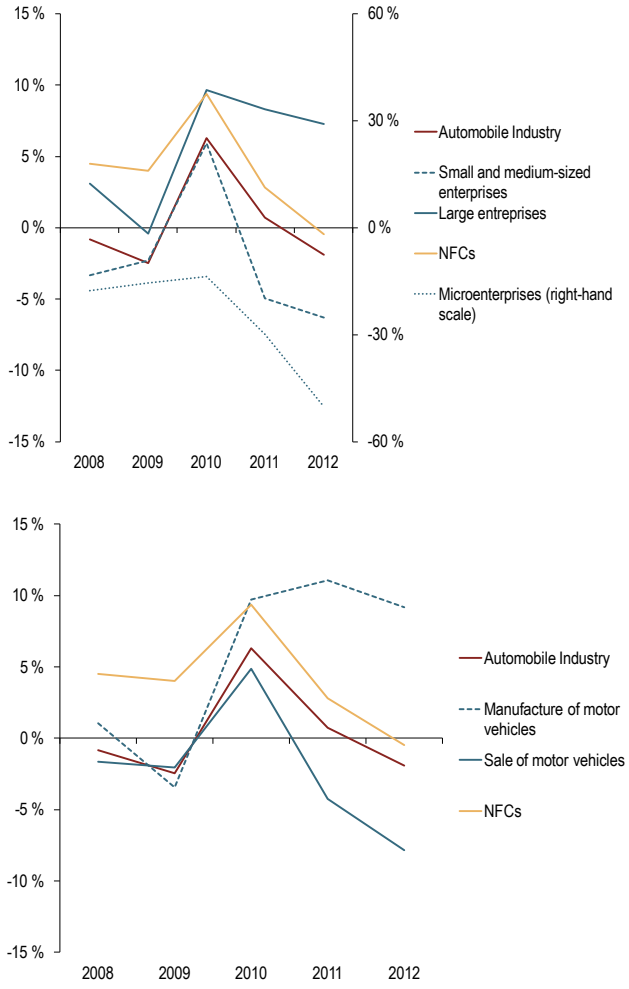
Return on equity in the *Automobile Industry* grows in tandem with the enterprise size class. In 2012 profitability stood at rather negative levels in microenterprises (-50 %), reflecting a sharp decline from the previous year (-30 % profitability in 2011). In SMEs, average profitability was also negative (-6 %), while remaining positive for large enterprises (7 %).

… as well as *Manufacture of motor vehicles* (9 %); *Sale of motor vehicles* had negative average return on equity (-8 %)

By economic activity segment in the *Automobile Industry*, average return on equity in *Sale of motor vehicles* was negative in 2012 (-8 %, which corresponds to a 4 p.p. decline from 2011), while profitability in *Manufacture of motor vehicles* was positive (9 %, i.e. 2 p.p. less than in 2011). Furthermore, return on equity in *Manufacture of motor vehicles* has remained positive since 2010 and considerably above the NFC average. Over the same period, profitability in *Sale of motor vehicles* was positive only in 2010, but remained negative in the following years.

Chart 13

RETURN ON EQUITY



16 Return on equity is calculated as the ratio of net profit for the year to equity and measures return from equity invested by shareholders.

In 2012 over 52 % of *Automobile Industry* enterprises incurred losses, compared with 47 % in NFCs (Table 10). Compared with 2011, the share of enterprises in this situation increased by approximately 4 p.p. in the *Automobile Industry* (3 p.p. in NFCs).

The share of enterprises with negative results increased in 2012, standing at 52 % (47 % in NFCs)

By economic activity segment and size class, the *Sale of motor vehicles* segment (53 %) and microenterprises (54 %) had a similar share of enterprises with negative results.

Table 10

NET PROFIT | *Weight of enterprises with negative results*

Year	NFCs	Automobile Industry	By enterprise size:			By economic activity segment:	
			Microenter-prises	SMEs	Large enterprises	Manufacture of motor vehicles	Sale of motor vehicles
2011	44.5 %	48.6 %	50.4 %	35.2 %	27.1 %	39.2 %	48.9 %
2012	47.4 %	52.2 %	53.6 %	40.5 %	34.0 %	42.7 %	52.5 %

Similarly to NFCs in Portugal, the fall in return on equity[17] affected most enterprises in the *Automobile Industry*. In fact, all profitability distribution quartiles in both sectors declined between 1 p.p. and 4 p.p., pushing both distributions downwards in a very similar way (Chart 14).

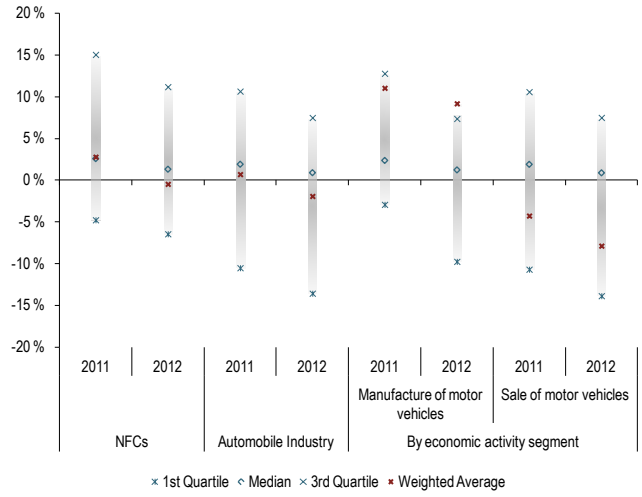
The fall in return on equity in 2012 was broad-based across *Automobile Industry* enterprises…

The quartile distribution of profitability in enterprises in both *Automobile Industry* segments shows that profitability in more than half of enterprises with positive equity levels was above 1 %. However, in the case of the *Manufacture of motor vehicles* segment, the result was biased by enterprises with high profitability, given that 75 % of enterprises in this segment posted below-average return on equity.

… profitability in more than half of the sector's enterprises was over 1 % in 2012

Chart 14

RETURN ON EQUITY | *Quartile distribution and weighted average*



17 Return on equity is calculated, on an individual basis, only for enterprises with positive equity levels, as described in *Central Balance-Sheet Study* | 6, December 2011 – *New enterprise and sector tables: adjustment to the Accounting Normalisation System.*

3.3 Financial situation

3.3.1 Financial structure

Enterprises' average capital ratio stood at 30 % in 2012 (+4 p.p. from 2008)

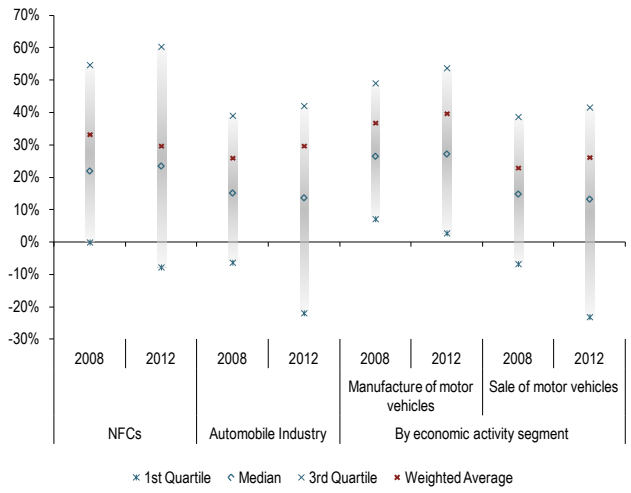
According to Central Balance-Sheet Database data, the *Automobile Industry*'s capital ratio stood at 30 % in 2012, *i.e.* approximately the same as in the NFC aggregate. However, developments since 2008 have been mixed, with capital ratio increasing by 4 p.p. in the *Automobile Industry*, while falling by 4 p.p. in the NFC sector (Chart 15).

In half of the *Automobile Industry*'s enterprises, at least 86 % of assets were financed by debt (76 % in the case of NFCs)

With regard to the capital ratio, heterogeneity was still higher among this sector's enterprises in 2012, compared with 2008. The interquartile range of *Automobile Industry*'s enterprises' capital ratio (difference between the third and first quartiles) rose from 45 p.p. in 2008 to 64 p.p. in 2012, while the median declined by 1 p.p., to 14 %. The median shows that in half of the *Automobile Industry*'s enterprises, at least 86 % of assets were financed by debt, compared with 76 % in the case of NFCs.

Chart 15

CAPITAL RATIO | *Quartile distribution and weighted average*



Manufacture of motor vehicles has, on average, the highest capital ratio (40 %), compared with 26 % in the *Sale of motor vehicles*

By economic activity segment, *Manufacture of motor vehicles* has, on average, the highest capital ratio (40 %, compared with 26 % in *Sale of motor vehicles*). However, average values are, in both cases, above the median, which indicates that results are biased towards a set more capitalised enterprises and with higher weight in such activities. Nonetheless, the quartile distribution shows that, overall, the situation is better for *Manufacture of motor vehicles* enterprises than in *Sale of motor vehicles*.

The set of enterprises with negative equity accounted, in 2012, for 35 % of *Automobile Industry*'s enterprises (+3 p.p. from 2011)

Among enterprises with lower equity levels, some are particularly vulnerable due to the fact that they have a negative capital ratio (negative equity). The set of enterprises with negative equity accounted, in 2012, for 35 % of *Automobile Industry* enterprises, which corresponds to a 3 p.p. decline from 2011. Negative equity was posted by 36 % of enterprises in the *Sale of motor vehicles* segment, while in *Manufacture of motor vehicles* that share stood at 23 %. By comparison, in the NFC aggregate the share of enterprises in this situation was of 29 % (Table 11).

Table 11

CAPITAL RATIO | *Weight of enterprises with negative results*

Year	NFCs	Automobile Industry	By economic activity segment:	
			Manufacture of motor vehicles	Sale of motor vehicles
2011	27.3 %	32.9 %	22.5 %	33.3 %
2012	29.2 %	35.5 %	22.5 %	35.9 %

The relatively low capital ratio level reflects a large dependence on external sources of funding in the sector under review, which warrants a more detailed analysis of underlying sources of financing.

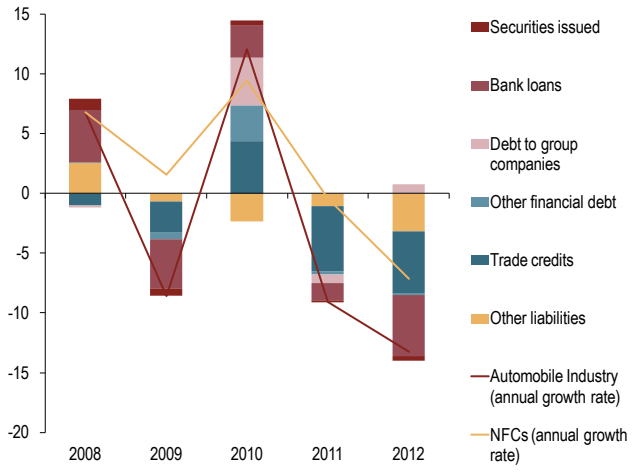
Automobile Industry's liabilities have contracted over the past two years, as a result of negative activity developments (13 % in 2012 and 9 % in 2011)

The *Automobile Industry*'s liabilities have contracted over the past two years, due to negative activity developments. The contraction in liabilities ascended to 13 % in 2012 and 9 % in 2011 (Chart 16). These decreases exceeded those in the NFC aggregate (-0.4 % and -7 % respectively).

Trade credits and bank loans were behind a substantial share of the reduction in *Automobile Industry* liabilities in 2012 (5 p.p. in both cases), while the sole positive contribution was made by intra-group funding (1 p.p.).

Chart 16

LIABILITIES | *Annual growth rate (%) and contributions (p.p.)*



Financial debt and trade credits accounted for 76 % of the *Automobile Industry*'s liabilities, *i.e.* approximately the same share as of NFCs

A more detailed analysis of debt components shows that, in 2012, financial debt and trade credits accounted as a whole for 76 % of *Automobile Industry*'s liabilities, *i.e.* approximately the same share recorded by the NFC aggregate (Chart 17). However, trade credits were more relevant in the *Automobile Industry* (32 %) than in the NFC sector (16 %), as opposed to bank loans[18] (22 %, compared with 29 % in total NFCs). Debt securities[19] accounted for only 3 % of total liabilities in *Automobile Industry*'s enterprises, compared with 7 % in NFCs.

The relative importance of each source of financing varies across size classes and economic activity segments in the *Automobile Industry*. Bank loans had a greater weight in SMEs, accounting

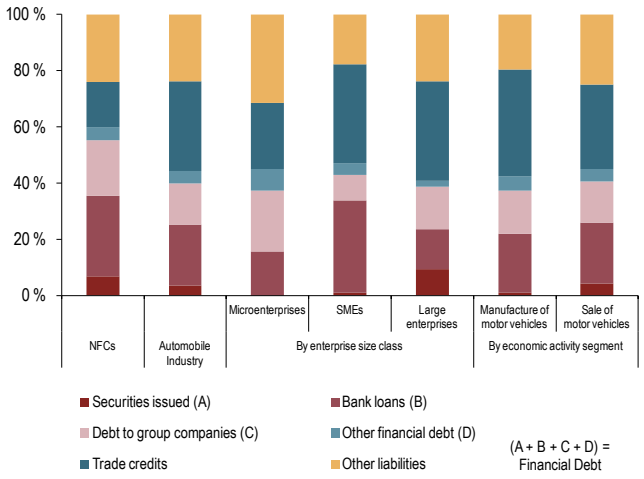
18 "Box 2: *Loans from credit institutions resident in Portugal – characterisation based on the Central Credit Register*" provides further information on this source of financing.

19 "Box 3: *Credit obtained through debt securities issues – characterisation based on the Securities Statistics Integrated System*" provides further information on this source of financing.

for 33 % of the total, compared with 16 % in microenterprises and 14 % in large enterprises. By economic activity segment, the weight of trade credits in *Manufacture of motor vehicles* stood out (38 %) with a higher share than that of bank loans (21 %). In turn, the issue of debt securities was, in 2012, more relevant in the *Sale of motor vehicles*' liabilities structure (4 %, compared with 1 % in *Manufacture of motor vehicles*).

Chart 17

LIABILITY STRUCTURE (2012)



Note: This refers to the set of interest bearing debt obtained through issuing debt securities, debt from banks and other financial institutions, debt from group companies and other loans. The analysis excludes liability components considered eminently related to accounting procedures, such as deferrals and provisions. Thus, 'Other liabilities' includes debt to the Public Administration and other public entities, non-interest bearing debt to shareholders and other current liabilities and accounts payable.

BOX 2 | LOANS FROM CREDIT INSTITUTIONS RESIDENT IN PORTUGAL – CHARACTERISATION BASED ON THE CENTRAL CREDIT REGISTER[20]

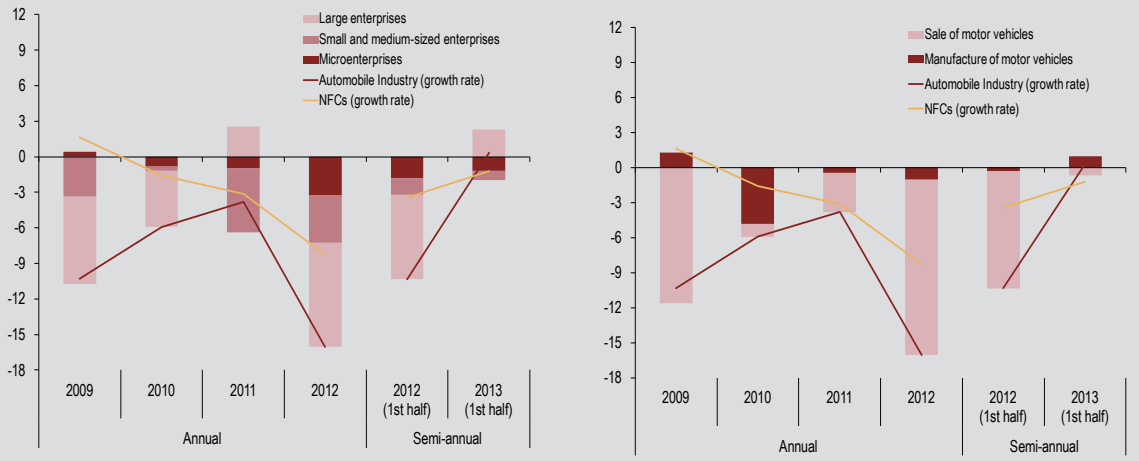
Loans from credit institutions (CIs) were the main financial debt component in the *Automobile Industry* in 2012 (49 %). Based on information available at Banco de Portugal's Central Credit Register, this Box analyses the component related to loans from CIs[21] resident in Portugal.

In 2012 this share accounted for around 94 % of total loans granted by CIs to *Automobile Industry* enterprises (1 p.p. more than in 2011) and involved 65 % of the sector's enterprises (68 % in 2011). Loans granted by resident CIs to *Automobile Industry* enterprises accounted for around 2 % of total credit granted by such institutions to NFCs at the end of 2012.

Developments in credit granted to the *Automobile Industry* have followed, albeit to a larger extent, the contraction trend recorded in credit to total enterprises in Portugal (Chart 2.1). 2012 saw the most negative levels in the entire series under review, with credit to the sector falling by 16 % and credit to NFCs declining by 8 %. In the first half of 2013, credit to NFCs dropped by 1.2 %, while credit to the *Automobile Industry* grew by 0.3 %.

Chart 2.1

CREDIT FROM RESIDENT CIS | *Growth rate (%) and contributions (p.p.) – end of period*



By enterprise size, in 2012 all classes contributed negatively to developments in credit to the *Automobile Industry*. At the end of the first half of 2013, credit granted by resident CIs to large enterprises reversed this trend, increasing by 14 % from the end of 2012 (2 p.p. positive contribution to developments in loans from resident CIs to the *Automobile Industry*).

By economic activity segment, between the end of 2010 and the end of 2012 both activities made negative contributions to developments in bank loans to *Automobile Industry* enterprises. Nonetheless, *Sale of motor vehicles* recorded the largest contraction by the end of 2012 (17 %), accounting for around 15 p.p. of the decline in credit to the *Automobile Industry* during that year. At the end of the first half of 2013 loans obtained by the *Manufacture of motor vehicles* rebounded (7 %), contributing 1 p.p. to a 0.3 % increase in loans by resident CIs to *Automobile Industry* enterprises.

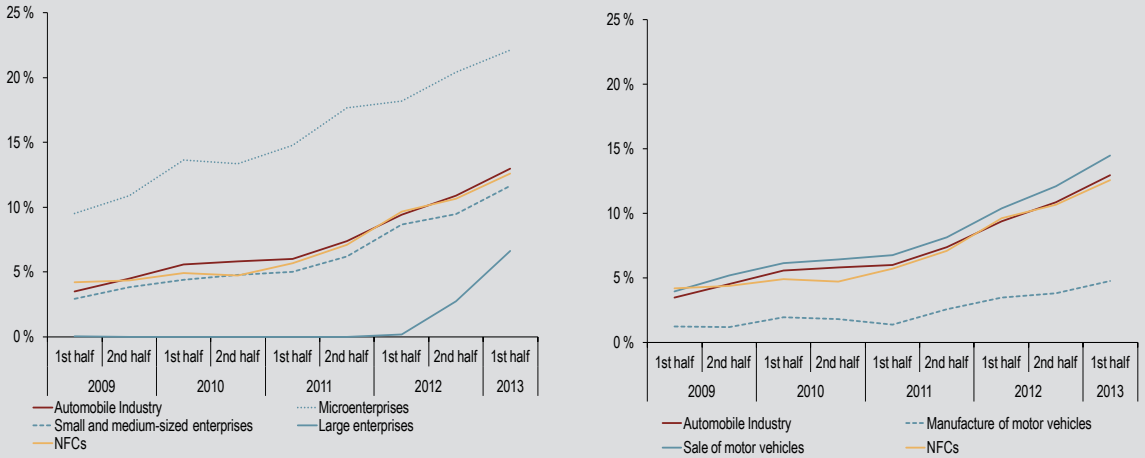
20 The Central Credit Register is a database managed by Banco de Portugal, which gathers information provided by participating entities (credit-granting resident institutions) regarding credit granted. For further information, see *Banco de Portugal Booklet No 5, Central Credit Register*.

21 These include banks, savings banks and mutual agricultural credit banks (generically called 'banks' in this *Study*), as well as credit financial institutions, factoring enterprises, credit-purchase financing companies and leasing companies. Over 95% of credit granted by resident credit institutions to NFCs in 2012 came from banks.

The non-performing loans ratio of *Automobile Industry* enterprises has been in line with that of the NFC aggregate. At the end of the first half of 2013 the non-performing loans ratio[22] for both sectors stood at 13 % (Chart 2.2).

Chart 2.2

NON-PERFORMING LOANS RATIOS *(end of period)*



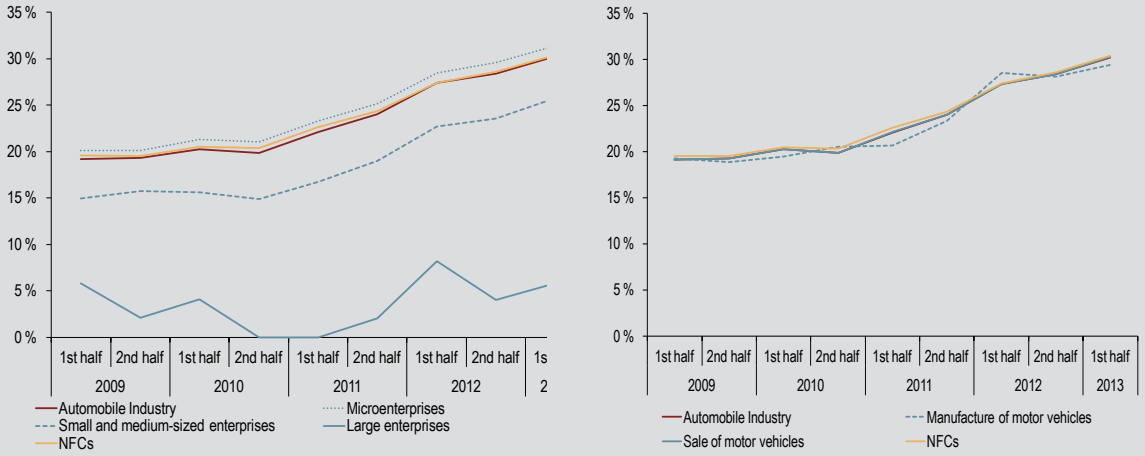
By enterprise size, developments in microenterprises and large enterprises were rather mixed. At the end of the first half of 2013 the non-performing loans ratio was of 22 % for microenterprises and of 7 % for large enterprises.

By economic activity segment, at the end of the first half of 2013 the *Sale of motor vehicles* posted a non-performing loans ratio of 14 %, compared with 5 % in *Manufacture of motor vehicles*. The differential between both segments increased in the period under review, from 3 p.p. at the end of the first half of 2009.

To *Automobile Industry*'s non-performing loans ratio at the end of the first half of 2013 contributed 30 % of the sector's enterprises that borrowed from resident CIs, compared with 28 % at the end of 2012 and only 19 % at the end of 2009 (Chart 2.3). In the NFC aggregate, this share was also of 30 % at the end of the first half of 2013 and of 29 % at the end of 2012.

Chart 2.3

NON-PERFORMING ENTERPRISES *(end of period)*



22 The non-performing loans ratio, on the basis of Central Credit Register data, is calculated as the share of non-performing loans in total credit obtained. 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.

Microenterprises were the class with the highest percentage of non-performing enterprises (31 %, at the end of the first half of 2013), while large enterprises stood at the other end of the spectrum (6 %). Over the period under review, the percentage of non-performing enterprises increased among microenterprises and SMEs. For large enterprises, developments have been less marked.

By economic activity segment, the percentage of non-performing enterprises has been fairly similar across *Manufacture of motor vehicles* and *Sale of motor vehicles* (around 30 %, at the end of the first half of 2013).

3.3.2 Financial costs and solvency

Interest paid by the sector's enterprises fell by 16 % in 2012…

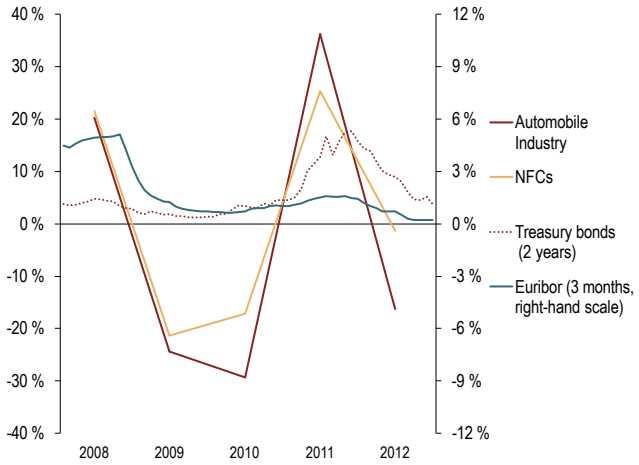
In 2012 interest paid by *Automobile Industry* enterprises fell by 16 % from 2011, *i.e.* 15 p.p. more than in the NFC aggregate. This reflects a reversal of the developments observed in 2011 (increase by 36 % in the *Automobile Industry* and 25 % in the NFC aggregate), which was influenced by effects from the euro area sovereign debt crisis (Chart 18).

…particularly in large enterprises (35 % decline) and in the *Sale of motor vehicles*' enterprises (20 % decrease)

By class size, the decrease in interest paid by the sector was particularly noteworthy in the case of large enterprises (35 %). By economic activity segment, interest paid declined by 20 % in *Sale of motor vehicles*, while increasing by 1 % in *Manufacture of motor vehicles*.

Chart 18

INTEREST PAID | *Annual growth rate and market interest rates*



Financial pressure on the *Automobile Industry* increased in 2012, standing at 38 %

During the entire period under review, financial pressure (weight of interest paid in EBITDA) on the *Automobile Industry* was slightly higher than in the NFC aggregate. In 2012, 38 % of EBITDA generated by the *Automobile Industry* was used in interest payments (37 % in the NFC aggregate). Compared with 2011, financial pressure increased in 2012: 4 p.p. in the *Automobile Industry* and 9 p.p. in the NFC aggregate (Chart 19). This differential is justified by both the smaller decrease in EBITDA and the greater decline in interest paid by the sector under review.

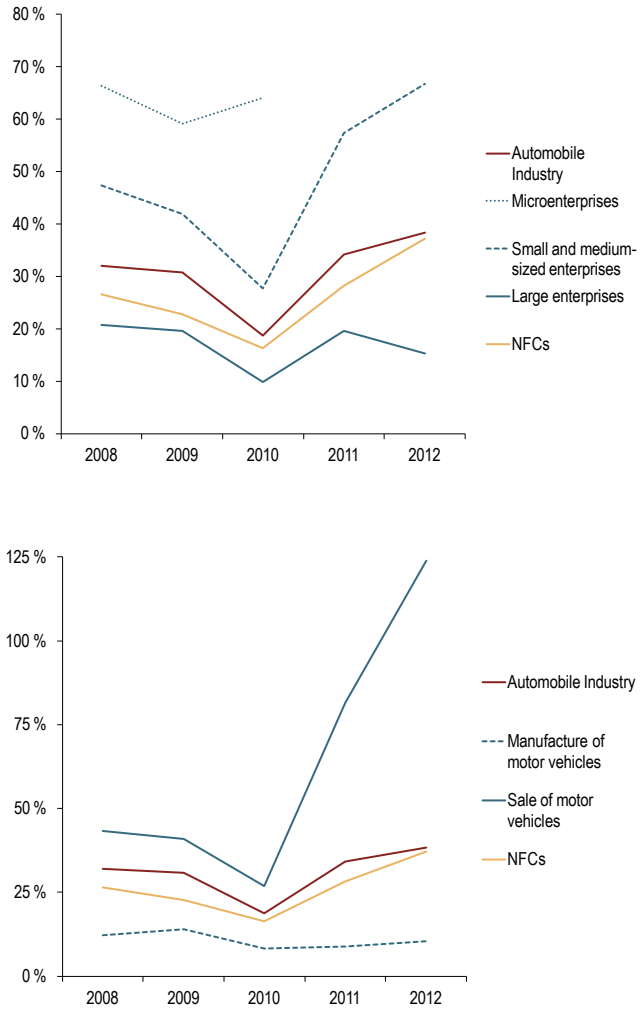
Financial pressure on the *Sale of motor vehicles* was higher than in the *Manufacture of motor vehicles* (124 % and 10 % respectively in 2012)

By economic activity segment, during the entire period under review the *Sale of motor vehicles* segment withstood greater financial pressure than the *Manufacture* of motor vehicles. In turn, in *Manufacture of motor vehicles* financial pressure was somewhat stable (at around 11 % as of 2008), while increasing markedly in the *Sale of motor vehicles* as of 2010. This increase was mostly due to more negative developments in EBITDA rather than to the increase in interest paid.

This was also the case of *Automobile Industry* microenterprises, which, in 2011 and 2012, posted a negative total EBITDA. Financial pressure on SMEs increased markedly, amounting to 67 % in 2012. Conversely, during the entire period under review large enterprises withstood lower financial pressure, which, in 2012, showed an improvement compared with 2011.

Chart 19

WEIGHT OF INTEREST PAID ON EBITDA



Note: Indicator not calculated for the microenterprises aggregate in 2011 and 2012, given that this class posted negative EBITDA in both years.

BOX 3 | CREDIT OBTAINED THROUGHT DEBT SECURITIES ISSUES – CHARACTERISATION BASED ON THE SECURITIES STATISTICS INTEGRATED SYSTEM[23]

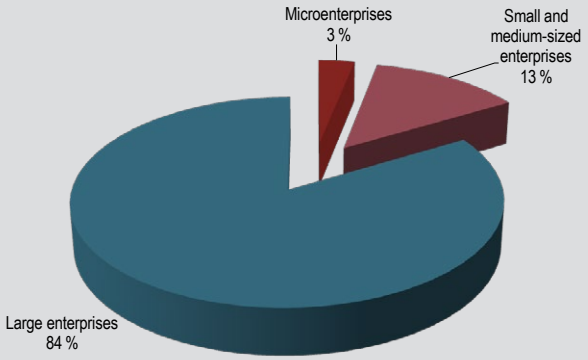
Financing obtained through debt securities issues accounted for 8 % of financial debt and 3 % of total liabilities in the *Automobile Industry* in 2012 (compared with 11 % and 7 % respectively in the NFC aggregate). Based on information available at Banco de Portugal's Securities Statistics Integrated System, this Box presents a brief description of this source of funding, with a focus on the latest information for the first half of 2013.

Debt securities financing obtained by enterprises in the *Automobile Industry* amounted to more than EUR 270 million at the end of June 2013, declining by 8 % from the end of 2012, after a 4 % increase in 2012, from the end of 2011.

The reduction seen at the end of the first half of 2013 was due to large enterprises (-9 %), which, in June 2013, accounted for 84 % of the securities issued by the sector (Chart 3.1). By economic activity segment, credit through debt securities was exclusively obtained by enterprises in the *Sale of motor vehicles* segment.

Chart 3.1

FINANCING THROUGH DEBT SECURITIES *(position at the end of the first half of 2013)*



In terms of maturity of debt securities issued by the *Automobile Industry*, short-term financing is clearly predominant (94 %). In smaller size classes (microenterprises and SMEs) this maturity accounted for the total stock of debt securities at the end of the first half of 2013.

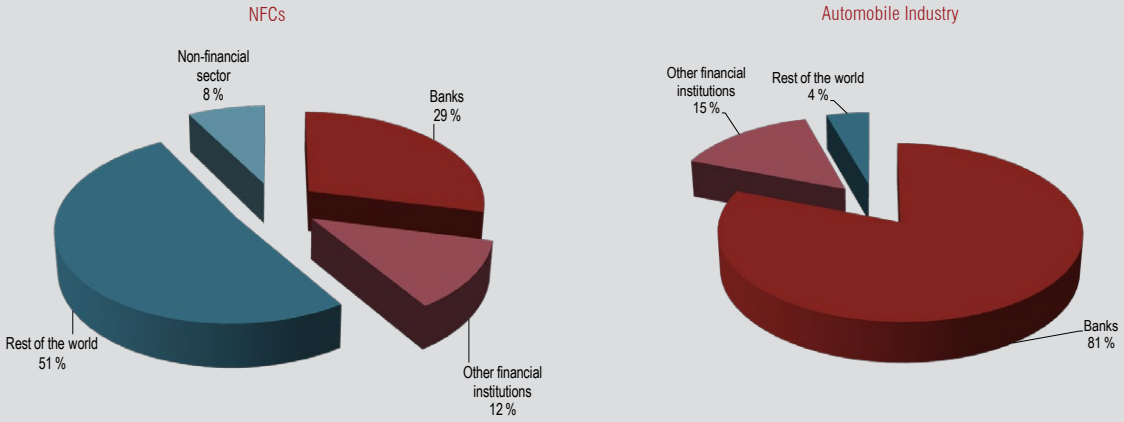
The analysis of debt security holders offers an insight into the sectors that granted this type of financing to *Automobile Industry* enterprises. At the end of June 2013, 81 % of the debt securities issued by the sector's enterprises were held by the resident banking system, while other financial institutions and foreign entities held shares of 15 % and 4 % respectively (Chart 3.2).

It should be noticed that the purchase of *Automobile Industry*'s debt securities by non-residents was only observed very recently, more specifically in the latest half year under review. Regarding the NFC aggregate, foreign countries stood for more than half of the debt securities holders at the end of the first half of 2013.

23 The Securities Statistics Integrated System is an information system managed by Banco de Portugal relating to securities issues and portfolios, on a 'security-by-security' and 'investor-by-investor' basis. For further information, see Supplement 2|2008 to Banco de Portugal's *Statistical Bulletin*, *Securities Statistics: Characterisation of the Integrated System and Main Results*.

Chart 3.2

DEBT SECURITIES HOLDERS *(structure at the end of the first half of 2013)*



Note: Information on holders of debt securities issued by the *Automobile Industry* is an estimate based on the figures reported for each institutional sector's portfolios.

In the 2008-11 period the resident banking system's exposure to issues by *Automobile Industry* enterprises followed an upward trend, being fully integrated in the resident banking system's portfolio at the end of 2011 (87 % in 2008). At the end of the first half of 2013 the weight of other financial institutions increased (to 15 %), which resulted in a decrease in the banking system's exposure to this sector to 81 %. Nevertheless, banks continue to be much more predominant in the *Automobile Industry* in terms of debt securities than in the NFC aggregate (29 %).

3.3.3 Trade credit financing

Trade credit financing fell by 16 %, accounting for 32 % of the sector's liabilities in 2012

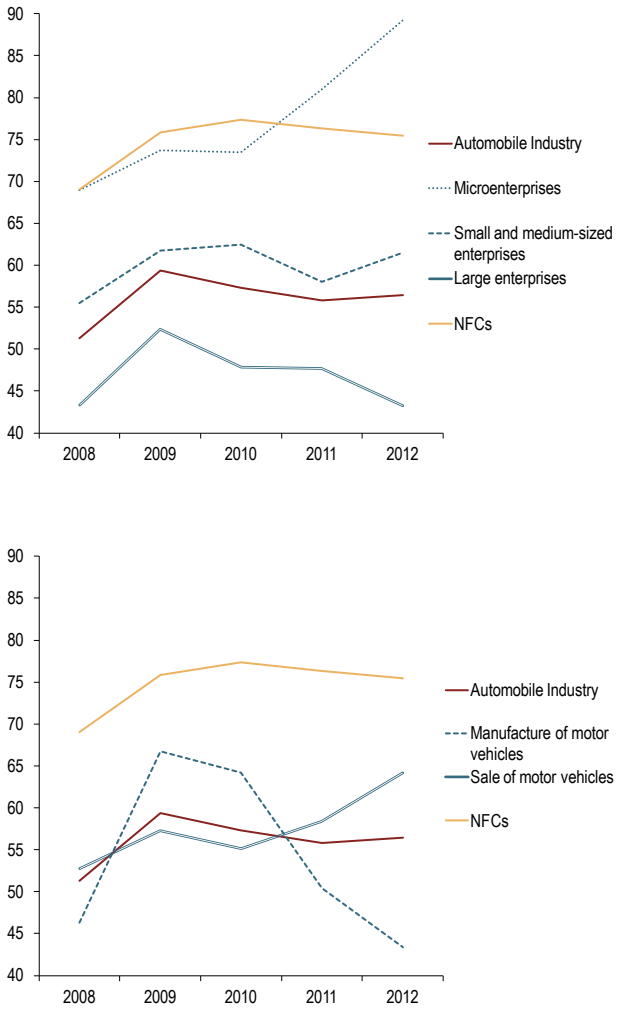
In the *Automobile Industry*, trade credit financing fell by 16 % in 2012. Nevertheless, it accounted for 32 % of the sector's liabilities that year, much higher than what was registered in the NFC aggregate (16 %).

In 2012 average days sales outstanding of the *Automobile Industry* stood at 56 days (unchanged from 2011) and average days payable outstanding at 70 days (seven days more than in the previous year). These maturities were shorter than in total NFCs (by 19 and 12 days respectively) (Charts 20 and 21).

Chart 20

AVERAGE DAYS SALES OUTSTANDING

Average days sales outstanding of the *Automobile Industry* stood at 56 days (unchanged from 2011) and average days payable outstanding at 70 days (seven more than in the previous year)



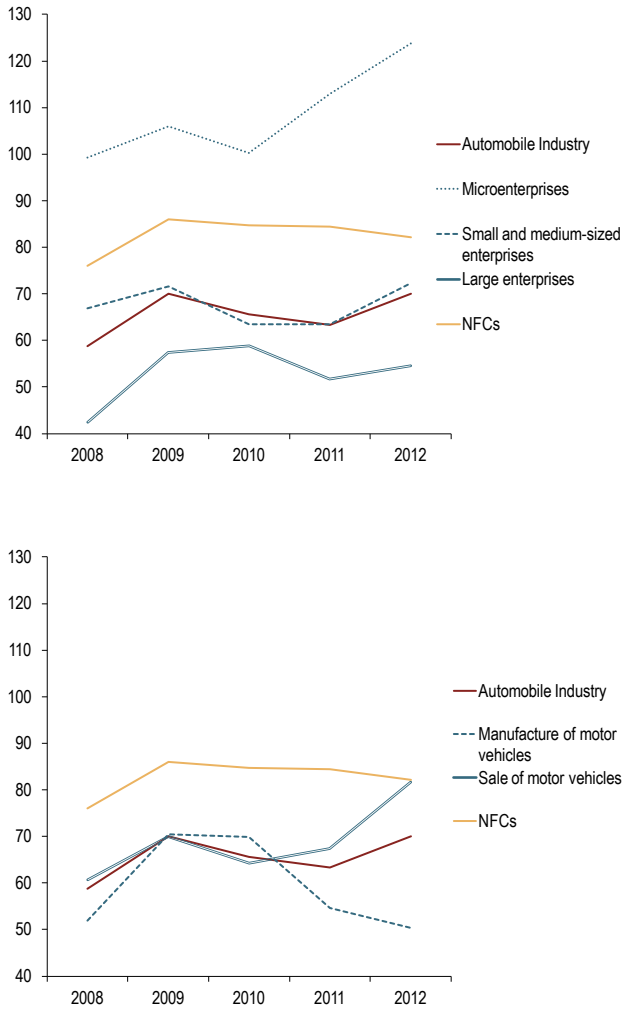
Microenterprises in the *Automobile Industry* maintained the highest average days sales outstanding (89 days in 2012), *i.e.* 33 days above the average value in the *Automobile Industry* and 8 days above that seen in 2011. Large enterprises had the lowest average days sales outstanding (43 days in 2012, i.e. 4 days below that seen in 2011).

Microenterprises maintained the highest average days sales and days payable outstanding within the sector (89 days and 124 days respectively)...

The same was the case of average days payable outstanding, with large enterprises posting the lowest value (55 days in 2012, 3 more than in 2011) and microenterprises the highest (124 days in 2012, 11 days more than in 2011).

Chart 21

AVERAGE DAYS PAYABLE OUTSTANDING



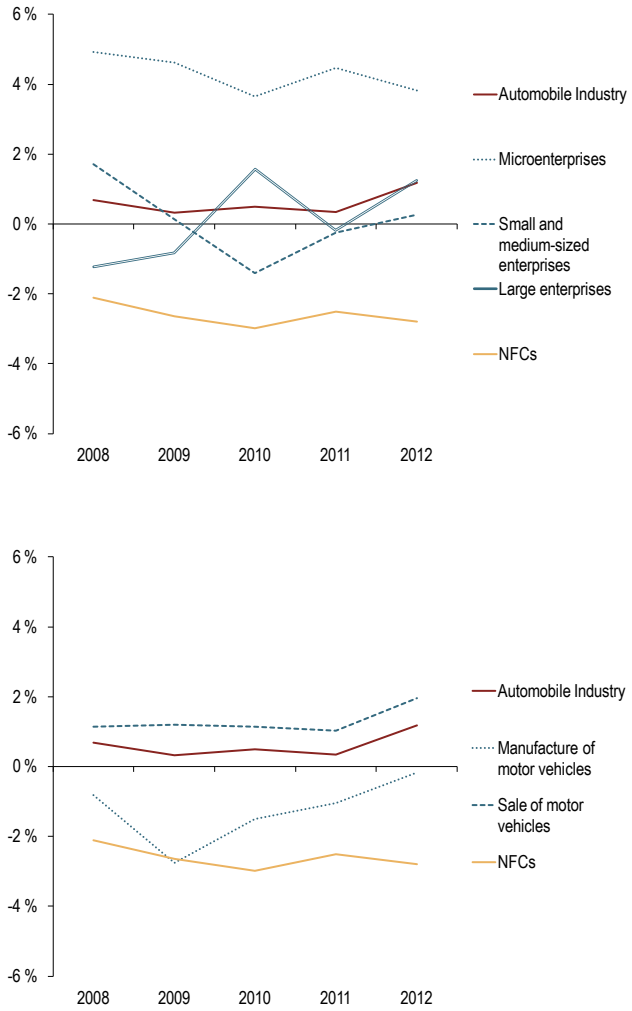
By economic activity segment, the *Sale of motor vehicles* had the highest average days sales (64 days) and days payable outstanding (82 days) in 2012 (compared with 43 and 50 days respectively in *Manufacture of motor vehicles*). Developments in average maturities for both economic activity segments have been mixed since 2010, with an increase in maturities in the *Sale of motor vehicles* and a decrease in *Manufacture of motor vehicles* maturities.

…as well as enterprises in the *Sale of motor vehicles* segment (64 days for days sales and 82 days for days payable outstanding)

To assess whether enterprises finance themselves through trade credit, a net indicator of trade credit financing was calculated, which compares the differential between accounts payable and accounts receivable versus turnover (Chart 22). A negative value in this indicator, which results from accounts receivable being higher than accounts payable, means that the enterprise is not being financed through its suppliers but, instead, is financing its customers; a positive value shows that accounts payable is higher than accounts receivable, i.e. the enterprise is being financed through its suppliers.

Chart 22

NET TRADE CREDIT FINANCING | *% of turnover*



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

The *Automobile Industry* has been financed, in net terms, through trade credit, in contrast to the NFC aggregate in Portugal…

Therefore, based on this net indicator, it can be concluded that the *Automobile Industry* has managed to get financing through trade credit, in contrast to the NFC aggregate in Portugal. In 2012 net trade credit financing, as a percentage of turnover, stood at 1 % in the *Automobile Industry* (compared with -3 % in NFCs), having improved from previous years.

…particularly in microenterprises (4 %) and the *Sale of motor vehicles* (2 %)

By enterprise size class, in 2012 there was a broadly based positive balance: 4 % in microenterprises; 0.3 % in SMEs and 1 % in large enterprises. By economic activity segment, also in *Sale of motor vehicles* there was actual trade credit financing (corresponding to 2 % of turnover in 2012). In *Manufacture of motor vehicles* the balance was negative during the entire period under review, although it has clearly been on a downward path since 2009 (around 3 p.p.), with net financing as a percentage of turnover standing at -0.2 % in 2012.

4 INTERNATIONAL COMPARISON FROM THE BACH DATABASE[24]

The BACH database makes it possible to compare the *Automobile Industry* enterprises' situation in several European countries

This Section presents a comparative analysis of the situation in *Automobile Industry* enterprises[25] in nine European countries based on accounting data for 2011, available at the Bank for the Accounts of Companies Harmonised (BACH)[26] database.

This comparison is made for the sector's enterprises operating in Germany, Austria, Belgium, Spain, France, Italy, Poland, Portugal and the Czech Republic, based on profitability, indebtedness and productivity indicators. Table 12 illustrates average results for the main indicators under review.

Table 12

MAIN INDICATORS | *Automobile Industry (2011)*

Country	Profitability	Indebtedness	Productivity
Germany	6.0 %	257.6 %	155.4 %
Austria	**18.7 %**	219.7 %	141.7 %
Belgium	8.6 %	187.0 %	147.8 %
Spain	**-2.0 %**	212.0 %	133.3 %
France	5.1 %	**349.8 %**	**116.0 %**
Italy	**-4.6 %**	**344.6 %**	**124.0 %**
Poland	13.7 %	**141.2 %**	**183.3 %**
Portugal	0.7 %	238.0 %	138.0 %
Czech Republic	**17.0 %**	**148.9 %**	**223.3 %**
BACH average	**5.8 %**	**256.9 %**	**144.1 %**

Key to the table:

Best relative performance in the indicator

Second best relative performance in the indicator

Worst relative performance in the indicator

Second worst relative performance in the indicator

Note: Performance measured by each indicator is based on the following ratios: net result as a percentage of equity (**Profitability**); total debt as a percentage of equity (**Indebtedness**); gross value added as a percentage of staff costs (**Productivity**).

In terms of **profitability** in the *Automobile Industry*, Austria and the Czech Republic had the highest values, while Italy stood at the other end of the spectrum. Portugal posted 0.7 % profitability, exceeding Spain and Italy, whose average profitability was negative (-2 % and -5 % respectively).

Austria (19 %) and the Czech Republic (17 %) posted the highest return on equity for enterprises of the *Automobile Industry*…

With regard to **indebtedness**, the ratio of debt to equity of enterprises in the *Automobile Industry* shows significant discrepancies across the various countries under review. In 2011 the indebtedness ratio in Portugal was below the average of all countries under review (238 % compared with 257 %, which means that debt was 2.4 times higher than enterprises' equity in that sector). The highest indebtedness ratio was recorded by enterprises in France (350 %) and the lowest in Poland (141 %). Moreover, the three countries with the lowest indebtedness ratio in the *Automobile Industry* (Poland, Czech Republic and Belgium) were also those where the sector's enterprises had some of highest return on equity.

…while France and Italy had the highest indebtedness levels in the sector (350 % and 345 %)

24 All information provided in this section is available at: http://www.bachesd.banque-france.fr/?lang=en. Access to the BACH database is free of charge. The Central Balance-Sheet Database of Banco de Portugal reports information on Portuguese non-financial corporations and manages the BACH database, together with the other participating entities.

25 For this purpose, it corresponds to the series of activities associated with Divisions 29 and 45 of CAE Rev.3, due to the methodological impossibility of excluding CAE 454 – *Sale, maintenance and repair of motorcycles and related parts and accessories*. In 2012 (as in 2011) this activity accounted for 5 % of enterprises in Division 45, aggregating 2 % of turnover and 3 % of the number of employees, which is why Division 45 as a whole largely reflects the situation of enterprises in the *Sale of motor vehicles* segment, as defined in the rest of the *Study*.

26 Nine European countries participate in the BACH database. In the near future, it shall include data from Slovakia, the Netherlands, Luxembourg and Romania.

The Czech Republic had the highest rate of return in terms of GVA by each euro spent on staff (223 %)

In terms of **productivity** (as a share of gross value added – GVA – in staff costs), results also differ across the countries under review. Enterprises in the *Automobile Industry* established in France had the lowest relative productivity (116 %, which means that each euro spent on staff generated € 1.16 of value added), while the sector's enterprises in the Czech Republic had the highest productivity (223 %).

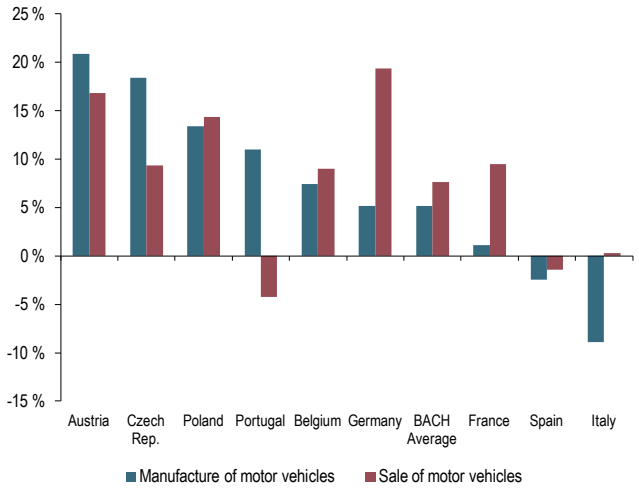
The two countries with the highest productivity levels (Czech Republic and Poland) were amongst the three countries whose enterprises in the sector under review had the highest return on equity (Austria, Czech Republic and Poland). In the case of Portugal, *Automobile Industry* enterprises posted slightly lower figures than the average of the countries under review as a whole (138 %, compared with 144 %).

Enterprises in the Portuguese *Manufacture of motor vehicles* segment had 11 % profitability, lower only than the Austrian, Czech and Polish enterprises

In addition to the *Automobile Industry* as a whole, the BACH database also facilitates the analysis of each **economic activity segment**. In 2011 average profitability was significantly mixed. While enterprises in the Portuguese *Manufacture of motor vehicles* segment had 11 % profitability, lower only than the Austrian, Czech and Polish enterprises in the same segment, enterprises in the Portuguese *Sale of motor vehicles* segment posted negative average profitability, of 4 %, which means that Portugal had the lowest profitability in this segment. In terms of BACH countries, Germany had the highest average profitability in *Sale of motor vehicles* (19 %) and Austria in *Manufacture of motor vehicles* (21 %) (Chart 23).

Chart 23

PROFITABILITY (2011)

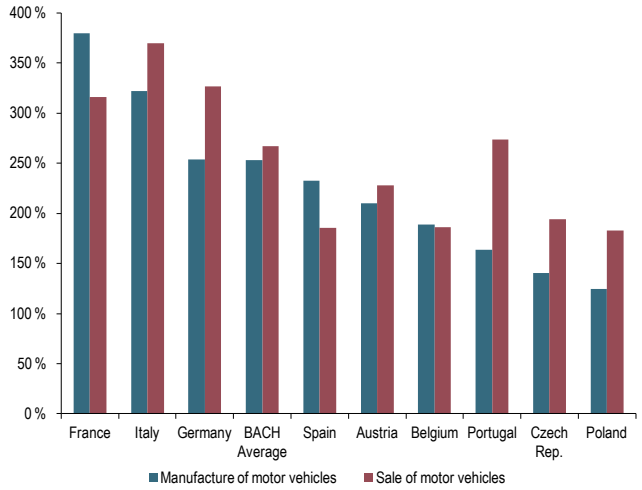


Indebtedness in the *Sale of motor vehicles* segment in Portugal was relatively higher (274 %), exceeded only by Italy, Germany and France

Enterprises in the *Manufacture of motor vehicles* segment in Portugal had relatively low indebtedness levels in 2011 (164 %, i.e. each euro of equity corresponds to €1.64 of debt), only higher than Polish and Czech enterprises. Conversely, indebtedness in the *Sale of motor vehicles* segment in Portugal was relatively higher (274 %), exceeded by Italy, Germany and France, whose ratios stood at 370 %, 327 % and 316 % respectively. In this indicator, Poland is particularly significant given that its *Automobile Industry* enterprises have the lowest indebtedness levels in both segments, with an average value of 125 % in *Manufacture of motor vehicles* and 183 % in *Sale of motor vehicles* (Chart 24).

Chart 24

INDEBTEDNESS (2011)

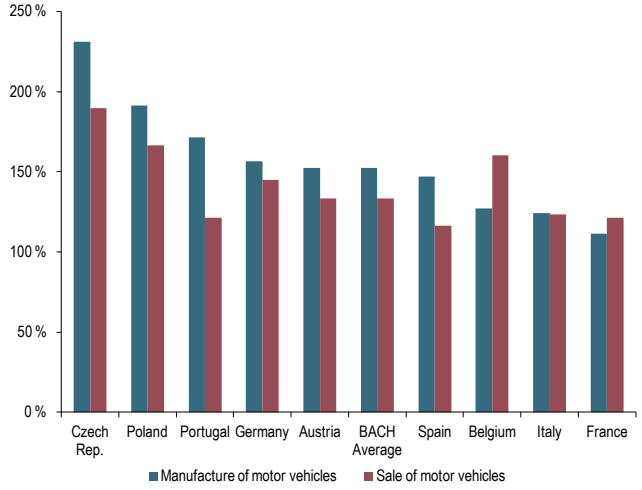


Regarding the productivity indicator, similarly to what was registered when indebtedness was reviewed, enterprises in the *Manufacture of motor vehicles* in Portugal posted relatively better results (171 %), exceeded only by the Czech Republic and Poland (231 % and 191 % respectively). In turn, in *Sale of motor vehicles*, Portugal is among the countries with the lowest levels (121 %), together with France and only slightly above Spain (116 %) (Chart 25).

In terms of productivity, *Manufacture of motor vehicles* in Portugal compares favourably with the remaining European countries, the opposite being the case of the *Sale of motor vehicles*

Chart 25

PRODUCTIVITY (2011)



Overall, the *Automobile Industry* in Portugal is in an intermediate situation compared with the remaining European countries under review, which is due to the relatively more favourable position of *Manufacture of motor vehicles*, which offsets the more negative situation of *Sale of motor vehicles*.

In fact, the *Manufacture of motor vehicles* segment in Portugal stood out in a positive way compared with enterprises in the same segment across the remaining countries under review, due to its higher average profitability, together with lower indebtedness and higher productivity. Conversely, in the *Sale of motor vehicles* segment, Portuguese enterprises had higher indebtedness levels and rather low productivity compared with the remaining countries under review, which made a decisive contribution to the lower profitability levels.

Compared with other European countries, *Automobile Industry* in Portugal is in an intermediate position, which is due to the relatively more favourable position of *Manufacture of motor vehicles*, and the more negative situation of *Sale of motor vehicles*

Annex

MAIN INDICATORS FOR THE AUTOMOBILE INDUSTRY (2012)

	Characterisation of the sector		Activity			Financing						Profitability
			Growth rates			Growth rates				Credit from credit institutions (Jun-2013)		
	Turnover held by large enterprises	Turnover held by the largest enterprises (Top 1%)	Turnover	EBITDA	Capital ratio	Trade credits	Bank loans	Net trade credit financing (% of turnover)	Weight of interest paid on EBITDA	% of non-performing enterprises	Non-performing loans ratio	Return on equity
NFCs	45 %	87 %	-9 %	-25 %	30 %	-12 %	-13 %	-3 %	37 %	30 %	13 %	-0.5 %
Automobile Industry	46 %	90 %	-21 %	-26 %	30 %	-16 %	-21 %	1 %	38 %	30 %	13 %	-2 %
Manufacture of motor vehicles	82 %	92 %	-10 %	-14 %	40 %	-18 %	-23 %	-0.2 %	10 %	29 %	5 %	9 %
Sale of motor vehicles	26 %	85 %	-26 %	-47 %	26 %	-15 %	-21 %	2 %	124 %	30 %	14 %	-8 %

	Weight of the Automobile Industry					
	Number of employees		Turnover		Number of employees	
	2002	2012	2002	2012	2002	2012
NFCs	4 %	4 %	10 %	6 %	5 %	4 %

METHODOLOGICAL SUMMARY

Automobile Industry: For the purposes of this *Study*, the definition of *Automobile Industry* includes enterprises in Groups 291 – *Manufacture of motor vehicles*, 292 – *Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers*, 293 – *Manufacture of parts and accessories for motor vehicles*, associated with Division 29 – *Manufacture of motor vehicles, trailers and semi-trailers* in CAE-Rev.3, and Groups 451 – *Sale of motor vehicles*, 452 – *Maintenance and repair of motor vehicles*, 453 – *Sale of motor vehicle parts and accessories*, associated with Division 45 – *Wholesale and retail trade and repair of motor vehicles and motor-cycles* in CAE-Rev.3.

Capital ratio: Ratio of equity to total assets.

EBITDA (Earnings before interest, taxes, depreciation and amortisation): The new accounting standard (*SNC – Sistema de Normalização Contabilística* – Accounting Normalisation System) ended the concept of extraordinary expenses and revenues, and also stopped allowing unambiguous identification of financial components. Thus the decision was taken to use the EBITDA definition as under the Accounting Normalisation System, adjusting the data reported under the old standard (*POC – Plano Oficial de Contabilidade* – Official Chart of Accounts) where possible, for the 2006-09 period.

Economic activity sector: The enterprises classified in Sections 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 extra-territorial organisations and bodies* in CAE-Rev.3, were excluded from this analysis as they do not fall within the NFC institutional sector. Also excluded were enterprises in Section K – *Financial and insurance activities* that groups together non-financial holding enterprises (with the SGPS denomination) not involved in subsidiary management, which, despite still belonging to the NFC sector (as regulated under ESA 95), were not analysed in this Study due to their very specific characteristics that set them apart from other NFCs.

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 % of the ordered sample (*i.e.* where 25 % of enterprises show a lower value for that indicator and 75 % a higher value). The second quartile (or median) corresponds to 50 %, *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 % position of the ordered sample (75 % of enterprises show a lower value for that indicator, and only 25 % 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 the *Central Balance-Sheet Study* | 6, December 2011 – *New Enterprise and Sector Tables: Adjustment to the Accounting Normalisation System*.

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

Size of the enterprise: Enterprises were grouped into three classes: microenterprises, small and medium-sized enterprises 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 EUR 2 million. For the purpose of this *Study*, small and medium-sized enterprises (SMEs) exclude microenterprises, employ fewer than 250 and more than ten people people and have an annual turnover between EUR 2 million and EUR 50 million and/or an annual balance sheet total between EUR 2 million and EUR 43 million. Large enterprises are any enterprises which are not classified above.

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