

# SECTORAL ANALYSIS OF THE MANUFACTURE OF TEXTILES AND WEARING APPAREL



Central Balance Sheet Studies  
*November 2012*

9



*Banco de Portugal*

EUROSYSTEM



SECTORAL ANALYSIS  
OF THE MANUFACTURE OF TEXTILES  
AND WEARING APPAREL

Central Balance Sheet Studies

November 2012

9



*Banco de Portugal*  
EUROSYSTEM

**BANCO DE PORTUGAL**

Av. Almirante Reis, 71

1150-012 Lisboa

[www.bportugal.pt](http://www.bportugal.pt)

**Edition**

Statistics Department

**Translation**

International Relations Department

Translation Unit

**Design, printing and finishing**

Administrative Services Department

Documentation, Editing and Museum Division

Editing and Publishing Unit

Lisbon, 2013

**Number of copies**

200

ISBN 978-989-678-221-4 (print)

ISBN 978-989-678-222-1 (online)

ISSN (print) - 2182-1704

ISSN (online) - 2182-1712

Legal Deposit 326546/11

## FOREWORD

This analysis is based on data obtained from Simplified Corporate Information (IES) 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 data are usually reported 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. As regards data for 2011, however, the deadline for submission was extended to the end of July 2012, due to the late availability of the collection application.

For the second consecutive year, the 2011 annual accounts reported through IES comply with Sistema de Normalização Contabilística (SNC – Accounting Standards System). The accounting standards introduced in 2010, which change the procedure for the submission of accounts and confer special relevance on the accounting and financial reporting standards, made the quality control process developed within Banco de Portugal on the information reported by the enterprises even more relevant. This process essentially aims to ensure that accounting information for the economic year is coherent and that the main aggregates are consistent throughout the years. That analysis also involves matching the reported information with the data obtained from other statistical systems available within Banco de Portugal.

In addition to information obtained from IES, the analysis is also complemented with data on the financial debt of Portuguese enterprises available in other databases of the Statistics Department of Banco de Portugal, especially the Central Credit Register and the Securities Statistics Integrated System. This information helps account for a significant share of the financial liabilities of Portuguese enterprises, particularly as regards loans to the financial sector and securitised debt.



## SUMMARY

According to information available from the Central Balance Sheet Database, in 2011 the manufacture of *Textiles and Wearing Apparel* accounted for approximately 2% of the number of enterprises and turnover of non-financial corporations (NFCs). In terms of the number of employees, it amounted to 4%, falling by around 4 p.p. over the last decade. This decline, also across the other variables, reflected the successive reduction of the number of enterprises that are active in this sector of the economy.

The *Textiles and Wearing Apparel* sector has been mainly based in the Braga and Oporto districts and dominated by enterprises twenty or more years old. Although microenterprises were the majority (59%), small and medium-sized enterprises (SMEs) held the largest share of the sector's employment (76%) and turnover (74%). By economic activity, over 65% of the enterprises and employees in the sector were categorised in CAE 14 – *Manufacture of wearing apparel*, while its turnover was spread evenly with CAE 13 – *Manufacture of textiles*.

In contrast to total NFCs in Portugal, *Textiles and Wearing Apparel* turnover expanded further in 2011 (2%), although at a lower rate than in 2010 (6%). This change resulted mainly from SMEs, by size class, and CAE 14 – *Manufacture of wearing apparel*, by economic sector, with 2% and 3% turnover rates respectively.

Over the past year, the *Textiles and Wearing Apparel* sector exported more than 57% of its turnover, i.e. substantially above that of *Manufacturing* and NFCs (40% and 20% respectively).

Despite the higher turnover, the sector's average profitability continued to be negative. In 2011 average return on equity was -4%, which corresponds to a fall from 2010.

Turning to the financial situation, this sector was highly leveraged in 2011, similarly to total NFCs in Portugal. The average value of capital ratio in the manufacture of *Textiles and Wearing Apparel* was 31%, albeit entering into negative territory in terms of microenterprises, given that a large share of enterprises had negative equity.

In 2011, financial debt (bank loans, debt securities and debt to group enterprises) and trade credits accounted for approximately two-thirds of external financing. Compared with 2010, there was a contraction in bank loans (18%) and, at the same time, an increase in the sector's interest burden (30%), as a result of a worsening in borrowing conditions for the Portuguese economy. Consequently, financial pressure on the sector's enterprises increased 12 p.p. from 2010, with the weight of interests in EBITDA standing at 41% in 2011.

With regard to trade credit financing, on average, *Textiles and Wearing Apparel* enterprises paid their suppliers before receiving from their customers, similarly to 2010.

Additional information from the Central Credit Register of Banco de Portugal shows that financing granted by resident credit institutions to the sector's enterprises has been declining. At the end of the first half of 2012, it dropped 3% from the end of 2011, which followed an annual decrease of 16% at the end of 2011. In turn, the non-performing loans ratio has gradually increased. At the end of June 2012, in terms of credit granted by resident credit institutions, around 37% of enterprises were in default and 15% of the amounts of credit were overdue. According to these indicators, the manufacture of *Textiles and Wearing Apparel* compares unfavourably with the NFC aggregate in Portugal, which, over the same period, had a share of 28% of non-performing enterprises and a non-performing loans ratio of 10%.





# CONTENTS

## I SECTORAL ANALYSIS OF THE MANUFACTURE OF TEXTILES AND WEARING APPAREL

<b>3</b>	<b>1 Introduction</b>
<b>5</b>	<b>2 Structure and Dynamics</b>
<b>5</b>	2.1 Structure
<b>9</b>	2.2 Market concentration
<b>10</b>	2.3 Dynamics
<b>12</b>	<b>3 Economic and Financial Analysis</b>
<b>12</b>	3.1 Economic environment
<b>12</b>	3.2 Activity and profitability
<b>12</b>	3.2.1 Turnover
<b>15</b>	3.2.2 Operating costs
<b>16</b>	<i>Box 1   External market importance on the Textiles and Wearing Apparel sector's activity</i>
<b>18</b>	3.2.3 EBITDA
<b>19</b>	3.2.4 Return on equity
<b>21</b>	3.3 Financial situation
<b>21</b>	3.3.1 Financial structure
<b>24</b>	<i>Box 2   Loans from resident credit institutions – characterisation based on the Central Credit Register</i>
<b>27</b>	3.3.2 Financial costs and solvency
<b>29</b>	<i>Box 3   Credit obtained through debt securities issues – characterisation based on the Securities Statistics Integrated System</i>
<b>31</b>	3.3.3 Trade credit financing
<b>34</b>	<b>Annex – Main indicators for the Manufacture of Textiles and Wearing Apparel</b>
<b>35</b>	<b>Methodological Summary</b>
<b>36</b>	<b>References</b>
<b>38</b>	<b>Central Balance Sheet Studies</b>

## CHARTS

- 6** Chart 1 Structure by economic activity sector (2011)
- 7** Chart 2 Sectoral composition of enterprise size classes (turnover - 2011)
- 9** Chart 3 Structure by legal nature (turnover - 2011)
- 9** Chart 4 Structure by maturity class (turnover - 2011)
- 10** Chart 5 Herfindahl-Hirschman Index (2011)
- 11** Chart 6 Demographic indicators
- 11** Chart 7 Churn rate | By economic activity sector and enterprise size class (2002 and 2011)
- 13** Chart 8 Turnover | Annual growth rate
- 14** Chart 9 Turnover | Quartile distribution of the annual growth rate
- 16** *Box 1 - Chart 1.1 Exports and imports of goods and services (2011)*
- 17** *Box 1 - Chart 1.2 Balance of goods and services transactions with the external markets (2010 and 2011)*
- 18** Chart 10 EBITDA | Annual growth rate (2011)
- 19** Chart 11 Return on equity
- 20** Chart 12 Return on equity | Quartile distribution
- 21** Chart 13 Capital ratio | Quartile distribution and weighted average
- 22** Chart 14 Liabilities structure (2011)
- 23** Chart 15 Evolution of financial debt and trade credits | Annual growth rate (in %) and contributions (in p.p.)
- 24** *Box 2 - Chart 2.1 Evolution of credit from resident credit institutions | Annual growth rate (in %) and contributions (in p.p.) – end-of-period figures*
- 25** *Box 2 - Chart 2.2 Non-performing loan ratios (end-of-period)*
- 26** *Box 2 - Chart 2.3 Non-performing enterprises (end-of-period)*
- 27** Chart 16 Interest paid | Annual growth rate and market interest rate
- 28** Chart 17 Weight of interest paid in EBITDA
- 29** *Box 3 - Chart 3.1 Debt securities issued (position at the end of the first half of 2012)*
- 30** *Box 3 - Chart 3.2 Debt securities holders (structure at the end of the first half of 2012)*
- 31** Chart 18 Days sales outstanding | In days
- 32** Chart 19 Days payable outstanding | In days
- 33** Chart 20 Net trade credit financing | As a % of turnover

## TABLES

<b>5</b>	Table 1	Weight of the <i>Textiles and Wearing Apparel</i> sector in NFCs (2001 and 2011)
<b>7</b>	Table 2	Indicators by enterprise size class (2011)
<b>8</b>	Table 3	Geographical location by economic activity sector (2011)
<b>12</b>	Table 4	GDP and key components   Annual growth rate
<b>13</b>	Table 5	Weight of enterprises with turnover growth
<b>15</b>	Table 6	Operating costs   Annual growth rate and structure (in brackets) (2011)
<b>19</b>	Table 7	EBITDA   Weight of enterprises with annual growth
<b>21</b>	Table 8	Weight of enterprises with negative equity

## ACRONYMS

<b>CAE</b>	Portuguese Classification of Economic Activities
<b>CI</b>	Credit institutions
<b>CoGS</b>	Cost of goods sold and materials consumed
<b>EBITDA</b>	Earnings before interest, taxes, depreciation and amortisation
<b>ESA 95</b>	European System of National and Regional Accounts 1995
<b>GDP</b>	Gross domestic product
<b>HHI</b>	Herfindahl-Hirschman Index
<b>IES</b>	<i>Informação Empresarial Simplificada</i> (Simplified Corporate Information)
<b>INE</b>	Instituto Nacional de Estatística – Statistics Portugal
<b>NFCs</b>	Non-financial corporations
<b>p.p.</b>	Percentage points
<b>SES</b>	Supplies and External Services
<b>SMEs</b>	Small and medium-sized enterprises (excluding microenterprises)
<b>SNC</b>	<i>Sistema de Normalização Contabilística</i> (Accounting Standards System)



# SECTORAL ANALYSIS OF THE MANUFACTURE OF TEXTILES AND WEARING APPAREL



INTRODUCTION

1

STRUCTURE AND DYNAMICS

2

ECONOMIC AND FINANCIAL ANALYSIS

3



# I SECTORAL ANALYSIS OF THE MANUFACTURE OF TEXTILE AND WEARING APPAREL

## 1 INTRODUCTION

The *Study Sectoral Analysis of the Manufacture of Textiles and Wearing Apparel* evaluates the economic and financial situation of enterprises operating in the *Textiles and Wearing Apparel* sector, based on information compiled by the Central Balance Sheet Database of Banco de Portugal<sup>1</sup>. For the purposes of this analysis, the *Textiles and Wearing Apparel* sector comprises the enterprises included in *CAE 13 – Manufacture of textiles* and *CAE 14 – Manufacture of wearing apparel*.

The results published in this analysis complement the aggregate data on non-financial corporations (NFCs)<sup>2</sup>, which are equally obtained in the Central Balance Sheet Database, and are released within the scope of Banco de Portugal's statistical publications<sup>3</sup>. The analysis covers the 2007-2011 period, and includes additional details for 2012 as regards financing through bank loans and debt securities.

This *Study* sets out to characterise the *Textiles and Wearing Apparel* sector for a range of selected indicators, as regards the structure of individual results of the enterprises<sup>4</sup> forming the sector. For this purpose, results are presented in terms of their breakdown by quartile, which allows for an alternate analysis to the synthetic indicator on the aggregate average avoiding any distortions triggered by possible extreme observation that may bias analysis of aggregate results. The *Study* also analyses the contributions of different enterprises sub-groups in order to determine the aggregate results for this sector. As such, enterprises are broken down by Division of the Portuguese Classification of Economic Activities – 3<sup>rd</sup> revision (CAE-Rev.3) and also by size class.

This *Study* also compares results for the *Textiles and Wearing Apparel* sector and the NFC aggregate in Portugal for all indicators under analysis. For further details on the results obtained for the NFC aggregate, please see *Studies 2, 3 and 8* of the Central Balance Sheet Database of Banco de Portugal (published in December 2010, September 2011 and November 2012 respectively).

The analysis starts with a brief characterisation of the *Textiles and Wearing Apparel* sector, evaluating the structure in terms of economic activity, business size, geographical location, maturity and legal nature of the enterprises forming it. It also presents data on market concentration and business dynamics. This analysis also assesses the economic and financial situation of the sector.

<sup>1</sup> The Central Balance Sheet Database is a database with economic and financial information on NFCs in Portugal. Information used in this *Study* is based on annual accounting data (from the Annual Central Balance Sheet Database) reported within the scope of IES (Simplified Corporate Information) and quarterly accounting data (from the Quarterly Central Balance Sheet Database) reported by enterprises through the Quarterly Survey of Non-Financial Corporations. Annual data cover nearly all NFCs and quarterly data cover around 3,000 enterprises, representing 40% of turnover in this institutional sector. For further detail on the activity of the Central Balance Sheet Database, please refer to the Supplements to the Statistical Bulletin 5/2005 – *Statistics on Non-Financial Corporations from the Central Balance Sheet Database*, and 1/2008 – *Simplified reporting: Inclusion of the Simplified Corporate Information in the Statistics on Non-Financial Corporations from the Central Balance Sheet Database*, as well as the publication *Central Balance Sheet Study | 6, December 2011 – New Enterprise and Sector Tables: Adjustment to the Accounting Standards System*.

<sup>2</sup> 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).

<sup>3</sup> 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 the Banco de Portugal's website and BPstat | Statistics Online.

<sup>4</sup> For the sake of simplicity, this *Study* refers to the expressions 'enterprise' and 'corporation' interchangeably, but both exclude the sole proprietor aggregate.

Initially, within an operating perspective, information is given on turnover and costs developments over the period under review, in order to determine their impact on business profitability.

The external market importance for its business is also evaluated. Subsequently, and within an financial perspective, the solvency capacity of enterprises and their liabilities are analysed in detail. For that purpose, additional information available from the Central Credit Register and the Securities Statistics Integrated System is used, which provides more details on bank debt and debt securities issued by enterprises.

The Annex provides a table with the main indicators and a methodological summary with the definition of the main concepts used throughout the *Study*. The statistical series analysed in the *Study* are available in Excel files, which can be consulted on the Banco de Portugal's website.



## 2 STRUCTURE AND DYNAMICS

### 2.1 Structure

The *Textiles and Wearing Apparel* sector is part of *Manufacturing* and includes the following activities, which are defined in CAE-Rev.3 as:

- **CAE 13 – Manufacture of textiles:** includes preparation of textile fibres (deseeding, retting, threshing, twisting and carbonising), washing, combing, spinning, cabling, weaving of wool, cotton, flax, jute, hemp, ramie, hair, and artificial or synthetic fibres. It also includes the finishing of textiles (bleaching, dyeing, printing, texturing, etc.), manufacture of household textiles and other made-up textile articles. It does not include: (i) the manufacture of wearing apparel and (ii) the manufacture of synthetic fibres; and,
- **CAE 14 – Manufacture of wearing apparel:** includes all items of clothing for men, women and children, in all materials (fabric, knitted or non-wovens, leather, articles of fur, etc.), and for any purpose (work, city or casual clothing, etc.). It also includes the manufacture of articles of fur and clothing accessories in all materials.

In 2011, the *Textiles and Wearing Apparel* sector included approximately 6,000 enterprises, of which more than 4,000 were part of CAE 14 – *Manufacture of wearing apparel*. In 2011, this sector accounted for 2% of both the number of enterprises and turnover and 4% of the number of employees in total NFCs. Over the past ten years, the weight of the sector in total NFCs decreased across all variables analysed, particularly as regards the number of employees (-4 p.p.).

The *Textiles and Wearing Apparel* sector accounted for 2% of both the number of enterprises and turnover and 4% of the number of employees in total NFCs in Portugal

**Table 1**

WEIGHT OF THE TEXTILES AND WEARING APPAREL SECTOR IN NFCs (2001 AND 2011)		
	2001	2011
Number of enterprises	2.8%	1.7%
Number of employees	8.3%	4.4%
Turnover	3.1%	1.8%

By **economic activity**, CAE 14 – *Manufacture of wearing apparel* stood out in the number of enterprises and the number of employees. This CAE represented 69% of the enterprises and 66% of the number of employees in the *Textiles and Wearing Apparel* sector. With regard to turnover, each activity accounted for around half of the sector's overall value (Chart 1). This balanced contribution to overall turnover has been observed since 2001, as has the greater relative importance of CAE 14 – *Manufacture of wearing apparel* across other variables.

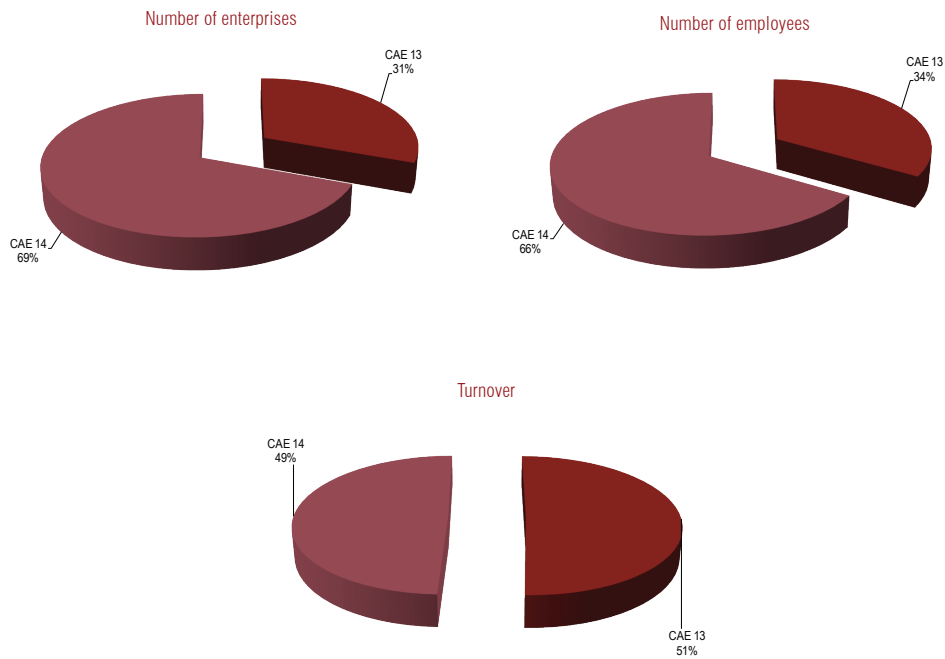
More than 69% of enterprises and 66% of employment in the sector were concentrated in CAE 14...

Under CAE 14 – *Manufacture of wearing apparel*, the main class was CAE 141 – *Manufacture of wearing apparel, except fur apparel*, which accounted for 63% of the number of enterprises, 60% of the number of employees and 43% of turnover of the *Textiles and Wearing Apparel* sector. In turn, under CAE 13 – *Manufacture of textiles*, the main class was CAE 139 – *Manufacture of other textiles*, accounting for 22% of the number of enterprises, 18% of the number of employees and 29% of turnover of the *Textiles and Wearing Apparel* sector.

... and the main classes were CAE 139 – *Manufacture of other textiles* and CAE 141 – *Manufacture of wearing apparel, except fur apparel*

Chart 1

## STRUCTURE BY ECONOMIC ACTIVITY SECTOR (2011)



Note: CAE 13 – Manufacture of textiles; CAE 14 – Manufacture of wearing apparel

Microenterprises lead in terms of number of enterprises (59%), but SMEs had the highest number of employees (76%) and turnover (73%)

By **size class**<sup>5</sup>, there were some peculiarities in the *Textiles and Wearing Apparel* sector as regards the structure of NFCs in Portugal, particularly the importance of small and medium-sized enterprises (SMEs). Although microenterprises accounted for the largest sectoral share in terms of the number of enterprises (59%) in 2011, SMEs, accounting for 40% of the enterprises, represented three quarters of the sector's number of employees (76%) and turnover (73%). By comparison, in the NFC aggregate, SMEs accounted for 12% of the enterprises, 44% of the number of employees and 40% of turnover (Table 2). As a result of this greater share, the *Textiles and Wearing Apparel* sector's situation and developments were largely influenced by SME behaviour.

<sup>5</sup> The definition of the enterprise size classes used in this *Study* is detailed in the Annex.

Table 2

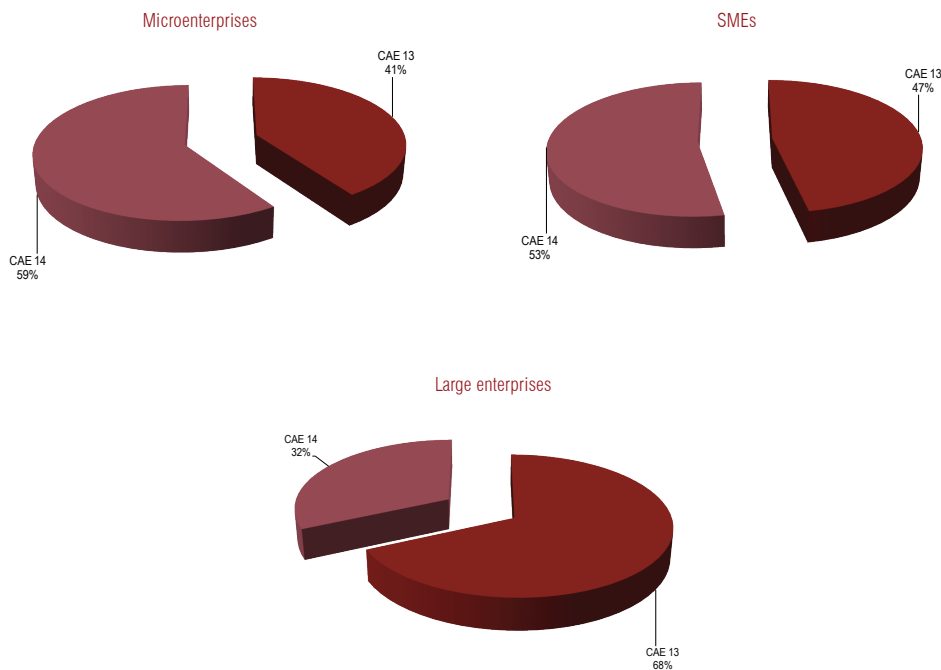
INDICATORS BY ENTERPRISE SIZE CLASS (2011)			
Analysis dimension	Enterprise size	NFCs	Textiles and Wearing Apparel
Number of enterprises	Microenterprises	88.1%	59.1%
	SMEs	11.6%	40.3%
	Large enterprises	0.3%	0.6%
Number of employees	Microenterprises	26.3%	9.9%
	SMEs	43.6%	76.1%
	Large enterprises	30.0%	14.1%
Turnover	Microenterprises	14.5%	7.3%
	SMEs	40.3%	73.5%
	Large enterprises	45.2%	19.2%

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

Chart 2 illustrates the composition of each size class, based on turnover generated in 2011 by the activities comprising the sector, and shows that the share of CAE 13 – *Manufacture of textiles* increased with the size of the enterprise.

Chart 2

#### SECTORAL COMPOSITION OF ENTERPRISE SIZE CLASSES (TURNOVER - 2011)



**Note:** CAE 13 – Manufacture of textiles; CAE 14 – Manufacture of wearing apparel

Around 80% of enterprises, employment and turnover in the sector were located in the Braga and Oporto districts

As regards the **geographical location**<sup>6</sup>, special mention should be made of Portugal's northern coast, particularly the Braga and Oporto districts (Table 3). Indeed, around 80% of the sector's enterprises, number of employees and turnover are located in these two districts, where:

- More than half of the enterprises in *CAE 13 – Manufacture of textiles* and *CAE 14 – Manufacture of wearing apparel* were located in the Braga district. In terms of employment and turnover, this was clearly the leading district, particularly as regards *CAE 13 – Manufacture of textiles*, which accounted for more than 56% of the number of employees and 58% of turnover.
- 30% of the enterprises in *CAE 14 – Manufacture of wearing apparel* and 26% of the enterprises in *CAE 13 – Manufacture of textiles* were located in the Oporto district. Concerning turnover, 28% of *CAE 14 – Manufacture of wearing apparel* and 19% of *CAE 13 – Manufacture of textiles* were aggregated in enterprises located in Oporto, reflecting the greater relative importance of this district in *CAE 14 – Manufacture of wearing apparel*.

**Table 3**

GEOGRAPHICAL LOCATION BY ECONOMIC ACTIVITY SECTOR (2011)							
CAE-Rev.3		Number of enterprises		Number of employees		Turnover	
		District (TOP 3)	% of total	District (TOP 3)	% of total	District (TOP 3)	% of total
13	Manufacture of textiles	Braga	51.0%	Braga	56.6%	Braga	58.5%
		Oporto	25.8%	Oporto	21.5%	Oporto	19.1%
		Aveiro	6.0%	Aveiro	8.4%	Aveiro	11.7%
14	Manufacture of wearing apparel	Braga	52.3%	Braga	45.9%	Braga	56.8%
		Oporto	29.9%	Oporto	34.6%	Oporto	27.6%
		Lisboa	5.0%	Aveiro	3.1%	Lisboa	3.8%

51% of the sector's turnover was generated by private limited companies and 48% by public limited companies

As regards the **legal nature**<sup>7</sup> of the enterprises, the *Textiles and Wearing Apparel* sector differs from the NFC aggregate in Portugal, to the extent that private limited companies accounted for more than 51% of this sector's turnover in 2011 (42% in NFC population). In turn, public limited companies accounted for 48% of the sector's turnover, compared with 51% in NFC aggregate (Chart 3).

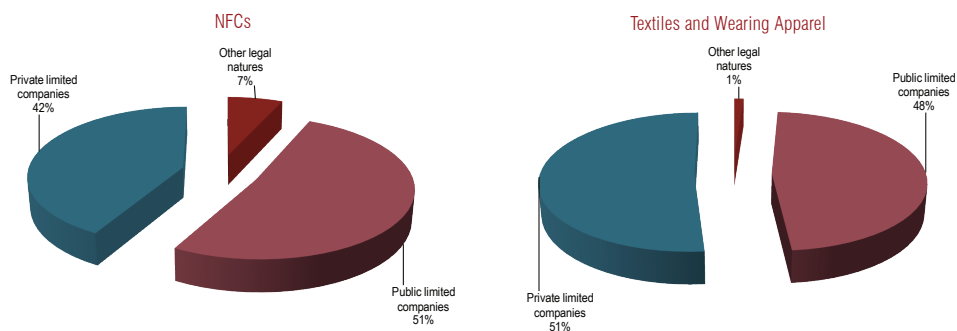
By economic activity, some differences are visible: 59% of turnover generated by *CAE 13 – Manufacture of textiles* came from public limited companies, while the share generated by private limited companies represented 40%; in *CAE 14 – Manufacture of wearing apparel* the opposite was observed, with private limited companies accounting for 63% of turnover, while the contribution of public limited companies stood at 35%.

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

<sup>7</sup> Considering the numerous categories included in national regulations for the classification of enterprises by legal nature, this study highlights only public limited companies and private limited companies, whereas the remaining legal nature is aggregated under 'other legal nature'.

Chart 3

## STRUCTURE BY LEGAL NATURE (TURNOVER - 2011)

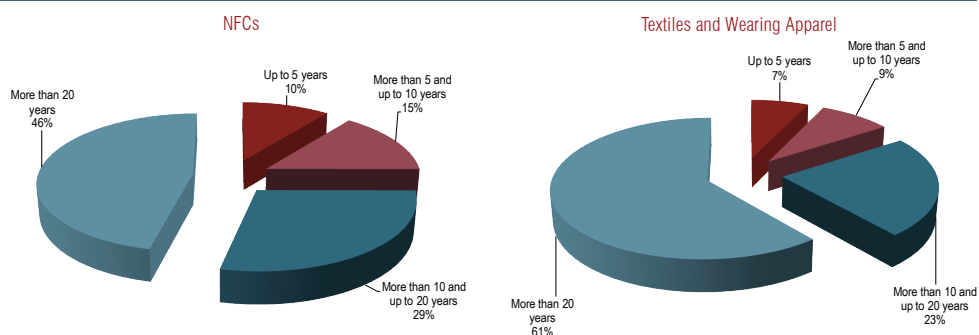


In terms of **enterprise maturity**<sup>8</sup>, the *Textiles and Wearing Apparel* sector does not differ substantially from NFCs and exhibits as well a direct connection between the share in turnover and the enterprise age (Chart 4). However, a note should be made to the enterprises established for 20 years or more, which represented the greatest share in the *Textiles and Wearing Apparel* sector, accounting for 61% of turnover in 2011, i.e. 15 p.p. higher than for total NFCs.

Older enterprises contributed the most to turnover in the sector

Chart 4

## STRUCTURE BY MATURITY CLASS (TURNOVER - 2011)



## 2.2 Market concentration

With the purpose of characterising the *Textiles and Wearing Apparel* sector in terms of business concentration, the Herfindahl-Hirschman Index (HHI) was calculated, based on the market share of each enterprise in its activity sector (Chart 5)<sup>9</sup>.

The results show that the *Textiles and Wearing Apparel* sector revealed no signs of market concentration, as its HHI was merely 0.0026. Nonetheless, there was some level of market concentration in CAE 142 – *Manufacture of articles of fur* (an HHI of 0.1760), which can be due to the small number of enterprises that comprise it (a little more than ten). This activity, however,

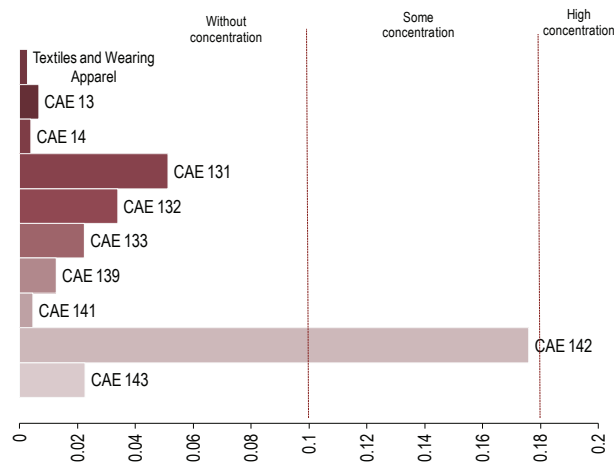
The *Textiles and Wearing Apparel* sector revealed no signs of market concentration

<sup>8</sup> The enterprise maturity corresponds to the age of the enterprise as at the analysis reference date. In order to establish relatively homogenous groups that are meaningful at produced information level, four maturity classes were built: up to (but not including) five years, from five to (but not including) ten years, from ten to (but not including) 20 years, 20 or more years.

<sup>9</sup> The market share  $S_i$  was computed on the basis of individual turnover  $Y_i$  where  $s_i = Y_i / \sum_{i=1}^n Y_i$ , and the HHI is given by  $\sum_{i=1}^n s_i^2$ . The HHI assumes values between  $1/n$  and 1, with values between  $1/n$  and 0.1 denoting a market with no indication of business concentration, between 0.1 and 0.18 representing markets with some concentration and above 0.18 denoting high business concentration. The value 1 is assumed in a monopoly situation where an enterprise holds the whole market share.

Chart 5

## HERFINDAHL-HIRSCHMAN INDEX (2011)



**Note:** CAE 13 – Manufacture of textiles; CAE 14 – Manufacture of wearing apparel; CAE 131 – Preparation and spinning of textile fibres; CAE 132 – Weaving of textiles; CAE 133 – Finishing of textiles; CAE 139 – Manufacture of other textiles; CAE 141 – Manufacture of wearing apparel, except fur apparel; CAE 142 – Manufacture of articles of fur; and CAE 143 – Manufacture of knitted and crocheted apparel.

accounted for less than 1% of the *Textiles and Wearing Apparel* sector's turnover.

In 2011, 1% of the enterprises with the largest market share dominated 28% of the CAE 13 – *Manufacture of textiles* market, while in CAE 14 – *Manufacture of wearing apparel* that share was 31%.

From a time perspective, the situation in 2011 had not changed much from ten years before. In 2001, the *Textiles and Wearing Apparel* sector's HHI was 0.0019, where 1% of the enterprises with the largest market shares accounted, respectively, for 28% and 27% of turnover in CAE 13 – *Manufacture of textiles* and CAE 14 – *Manufacture of wearing apparel*.

### 2.3 Dynamics

The churn rate<sup>10</sup> in the *Textiles and Wearing Apparel* sector has hovered around 15%, with the death rate repeatedly exceeding the birth rate. As such, the number of active enterprises in this sector has been decreasing (28% since 2004). In 2011, the contraction vis-à-vis 2010 was higher than 4% (Chart 6).

The number of active enterprises in the sector has been decreasing

Compared with the NFC aggregate over the past ten years, the *Textiles and Wearing Apparel* sector has recorded a more negative natural balance, which explains the reduction of this sector's share in total Portuguese enterprises.

<sup>10</sup>The churn rate makes it possible to assess the dynamics regarding the birth and death of enterprises in an economy. It is calculated from the sum of the enterprise birth rate (calculated from the ratio of enterprises starting their activity to the number of active enterprises in the reference period) and the respective death rate (resulting from the ratio of enterprises ceasing their activity to the number of active enterprises in the reference period).

Chart 6

## DEMOGRAPHIC INDICATORS

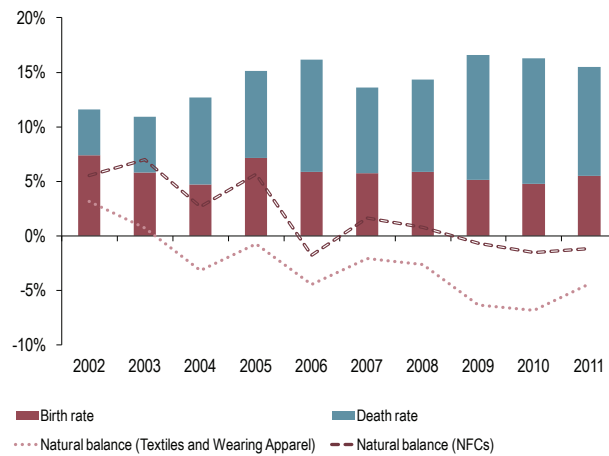
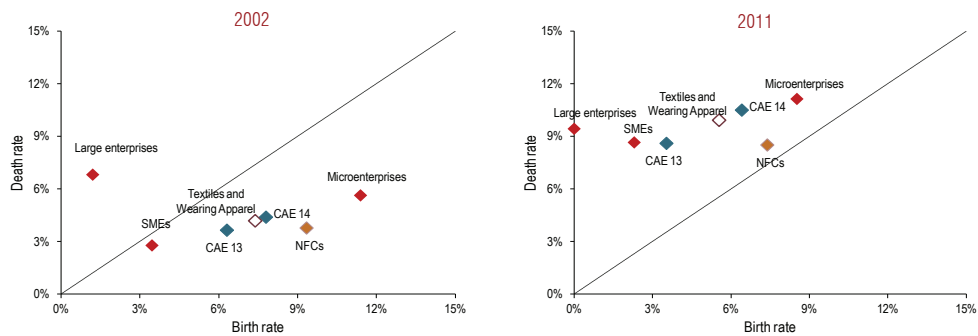


Chart 7 complements the previous chart and illustrates the churn rate broken down into enterprise activity and size, making it clear that the decrease in the number of enterprises over the past decade has affected all size classes and economic activity sectors. Nevertheless, as regards size,

Chart 7

## CHURN RATE | By economic activity sector and enterprise size class (2002 and 2011)



Note: CAE 13 – Manufacture of textiles; CAE 14 – Manufacture of wearing apparel

there was a substantial decrease in the number of large enterprises, while by activity CAE 14 – *Manufacture of wearing apparel* recorded the largest reduction.

### 3 ECONOMIC AND FINANCIAL ANALYSIS

#### 3.1 Economic environment

The growing pressure of international financial markets on Portuguese sovereign debt, due both to the widespread sovereign debt crisis in the euro area and international investors' fears as to the sustainability of Portuguese public finances and external debt, led to a formal request for economic and financial assistance to the European Union, euro area member countries and the International Monetary Fund in April 2011.

2011 was therefore marked by the first adoption of a range of measures to adjust macroeconomic and structural imbalances in the Portuguese economy, in the context of a wide economic and financial assistance programme drawn up with a view to returning the economy to the conditions necessary for its sustained growth and promoting its financing by international investors in the near future. As a result of the implementation of these measures, the Portuguese economy could be expected to contract in the near term. Therefore, in 2011, economic activity in Portugal receded by 1.7%, after 1.4% growth in 2010. The strong declines in public and private consumption and investment were dampened by the dynamics of the external trade balance, with countercyclical favourable developments that contributed to a decline in the Portuguese economy's external borrowing requirements (Table 4).

In 2012, data pointed to a fall in output in the first half of the year, in year-on-year terms, of around 2.8%. The most recent Banco de Portugal estimates point to a decline of 3% in GDP in 2012<sup>11</sup>.

Portuguese GDP declined 1.7% in 2011

At the end of the first half of 2012, GDP had declined 2.8% in year-on-year terms

**Table 4**

GDP AND KEY COMPONENTS   Annual growth rate					
	2008	2009	2010	2011	2012 (1 <sup>st</sup> half year)
GDP	0.0%	-2.9%	1.4%	-1.7%	-2.8%
Private consumption	1.3%	-2.3%	2.1%	-4.0%	-5.7%
Public consumption	0.3%	4.7%	0.9%	-3.8%	-2.9%
Gross fixed capital formation	-0.3%	-8.6%	-4.1%	-11.3%	-14.3%
Exports	-0.1%	-10.9%	8.8%	7.5%	6.1%
Imports	2.3%	-10.0%	5.4%	-5.3%	-5.9%

Sources: Statistics Portugal and Banco de Portugal

#### 3.2 Activity and profitability

##### 3.2.1 Turnover<sup>12</sup>

Notwithstanding the unfavourable macroeconomic environment, according to annual data from the Central Balance Sheet Database, the *Textiles and Wearing Apparel* sector's turnover grew 2% in 2011 and 6% in 2010 (Chart 8). Over the past two years, this sector overperformed the NFC aggregate, which recorded a 5% decrease in turnover in 2011, following a 4% growth in 2010. By contrast, in the period before 2010, growth rates in the *Textiles and Wearing Apparel* sector were systematically lower than in NFCs.

Turnover in *Textiles and Wearing Apparel* rose by 2% in 2011, in contrast to the NFC aggregate

<sup>11</sup> For further information on economic activity developments in Portugal, please refer to Banco de Portugal's *Annual Report*, as well as the *Economic Bulletin* (published on a quarterly basis). Both publications are available at <http://www.bportugal.pt>.

<sup>12</sup> Box 1 "The importance of the external market for the Textiles and Wearing Apparel sector" provides additional information on the share of the external market in the activity of resident NFCs in Portugal.

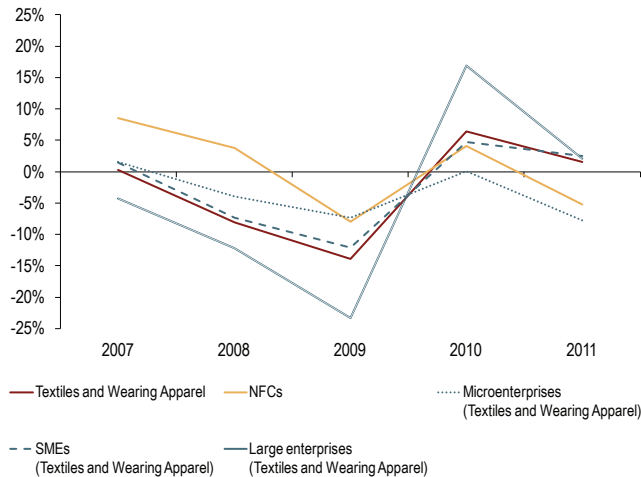


Developments in SME turnover largely determined developments in turnover of *Textiles and Wearing Apparel* enterprises as a result of the share of this size class in the sector. In 2011, turnover of both SMEs and large enterprises in the *Textiles and Wearing Apparel* sector grew 2%. Microenterprises, however, saw their turnover contract by 8%.

This growth has been mainly determined by developments in SMEs...

Chart 8

TURNOVER | Annual growth rate



By economic activity, each CAE-Rev.3 division in the *Textiles and Wearing Apparel* sector contributed differently over the past two years. Therefore, in 2011 more than 80% of turnover growth in the sector resulted from CAE 14 – *Manufacture of wearing apparel*. However, in 2010, CAE 13 – *Manufacture of textiles* underpinned turnover growth in the sector.

... and in CAE 14

Although the *Textiles and Wearing Apparel* sector turnover grew, on average, in 2011, at enterprise level the analysis shows that only 45% of enterprises recorded an increase, which reflects a 13 p.p. decline from 2010 (Table 5). Nevertheless, compared with the NFC aggregate, developments in this sector continued to be more favourable, given that only 37% of all Portuguese NFCs saw their turnover increase in 2011.

Despite an increase in turnover, the percentage of enterprises with turnover growth declined...

By size class, large enterprises recorded the largest share of turnover growth (60%) in 2011, although they also saw the largest fall compared with 2010 (20 p.p.). Microenterprises were at the opposite end (38%).

By economic activity, the share of enterprises with turnover growth was very similar for both CAE-Rev.3 divisions in the *Textiles and Wearing Apparel* sector. In both cases that share declined in 2011 compared with 2010.

Table 5

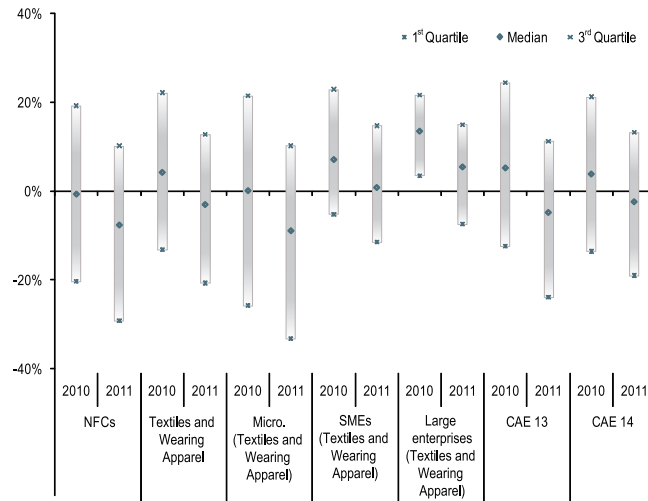
Year	WEIGHT OF ENTERPRISES WITH TURNOVER GROWTH						
	NFCs	Textiles and Wearing Apparel	By enterprise size (Textiles and Wearing Apparel)			By economic activity	
			Micro	SMEs	Large	CAE 13	CAE 14
2010	48.3%	57.5%	50.1%	65.5%	80.0%	58.5%	57.0%
2011	37.2%	44.7%	37.9%	52.1%	60.0%	42.6%	45.6%

... which was reflected in all size classes and economic activities comprising the *Textiles and Wearing Apparel* sector.

Chart 9 complements this analysis with the quartile distribution of turnover growth rates of enterprises in the sector under review, showing that the decline in turnover growth in 2011 was widespread across the sector. Indeed, the results illustrated in Chart 9 for the 1<sup>st</sup> and 3<sup>rd</sup> quartiles in the *Textiles and Wearing Apparel* sector fell 8 p.p. and 9 p.p., respectively, between 2010 and 2011. Nevertheless, the sector's situation was more favourable than in the NFC aggregate.

**Chart 9**

**TURNOVER** | *Quartile distribution of the annual growth rate*



**Note:** CAE 13 – Manufacture of textiles; CAE 14 – Manufacture of wearing apparel

### 3.2.2 Operating costs<sup>13</sup>

Operating costs developments in the *Textiles and Wearing Apparel* sector (2% growth) matched developments in turnover. However, the analysis by operating costs component shows diverging paths.

Therefore, the Cost of goods sold and materials consumed (CoGS) increased 7% in 2011 from 2010, while Supplies and External Services (SES) and Employee costs fell 0.4% and 5%, respectively (Table 6). In turn, employee costs were the component with the most pronounced decline over the past two years (2011 and 2010), reflecting a deviation from its previously somewhat rigid behaviour. In fact, these developments resulted in a fall in the share of the employee costs component in operating costs of the *Textiles and Wearing Apparel* sector. In 2011, employee costs accounted for 25% of operating charges, while in 2010 that share was 27% and, in 2009, 29%. However, in the sector under review, the employee costs represented a larger share than in the NFC aggregate (15%).

Operating costs grew 2% in 2011

CoGS grew 7%, Supplies and External Services declined 0.4% and employee costs fell 5% from 2010

**Table 6**

OPERATING COSTS   Annual growth rate and structure (in brackets) (2011)							
Item	NFCs	Textiles and Wearing Apparel	By enterprise size (Textiles and Wearing Apparel)			By economic activity	
			Micro	SMEs	Large	CAE 13	CAE 14
CoGS	-1.3% (59%)	7.0% (48%)	-7.6% (41%)	8.4% (48%)	7.3% (53%)	6.8% (58%)	7.2% (38%)
Supplies and External Services	-8.5% (26%)	-0.4% (27%)	-7.0% (32%)	-0.1% (27%)	2.3% (25%)	-3.2% (22%)	1.7% (32%)
Employee costs	-6.3% (15%)	-5.1% (25%)	-4.4% (27%)	-5.3% (25%)	-4.3% (22%)	-7.5% (20%)	-3.3% (30%)
Operating costs	-4.0% (100%)	1.7% (100%)	-6.6% (100%)	2.3% (100%)	3.3% (100%)	1.4% (100%)	2.1% (100%)

By size class, in 2011 the growth rate of operating costs increased with the size of the enterprise, ranging between -7% in microenterprises and 3% in large enterprises within the sector. By economic activity sector, operating costs grew in *CAE 13 – Manufacture of textiles* (1%) and *CAE 14 – Manufacture of wearing apparel* (2%).

Finally, employee costs were the only operating costs component that fell across all size classes and economic activity sectors. CoGS, in turn, grew across all aggregates with the exception of microenterprises.

<sup>13</sup> The “operating costs” aggregate aims to draw a parallel with its counterpart defined in the Official Chart of Accounts, aggregating only the most relevant items of the previously established concept: Cost of Goods Sold and Materials Consumed (CoGS), Supplies and External Services and Employee costs..

## BOX 1: EXTERNAL MARKET IMPORTANCE ON THE TEXTILES AND WEARING APPAREL SECTOR'S ACTIVITY

This box assesses the importance of the external market for the operating activity of enterprises in the *Textiles and Wearing Apparel* sector, based on data available from the Central Balance Sheet Database of Banco de Portugal<sup>14</sup>.

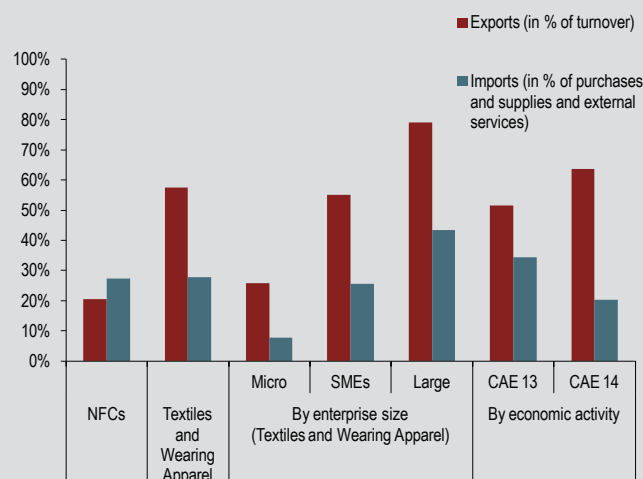
In 2011, the sector's exports of goods and services grew 7% from the previous year, i.e. slightly more than the NFC aggregate (6%).

Therefore, the share of exports in turnover rose to 58% in 2011, which helped the *Textiles and Wearing Apparel* sector maintain a leading position in exporting sectors (assessed as a percentage of exports in the corresponding turnover). When comparing CAE-Rev.3 divisions in *Manufacturing*, CAE 14 – *Manufacture of wearing apparel* exported 64% of its turnover in 2011, and was only outdone by CAE 29 – *Manufacture of motor vehicles, trailers and semi-trailers*, with 74%. CAE 13 – *Manufacture of textiles* exported 51% of its turnover.

Chart 1.1 shows that, in relative terms, the sector's exports were higher, as a percentage of turnover, than its imports, as a percentage of purchases and supplies and external services, as opposed to NFCs. The difference was mostly noticeable in terms of exports, whose share in turnover was higher in the *Textiles and Wearing Apparel* sector (58%, compared with 20% in NFCs). The share of goods and services purchases abroad in total goods and services purchases was somewhat similar in the sector (28%) and in NFCs (27%).

Chart 1.1

### EXPORTS AND IMPORTS OF GOODS AND SERVICES (2011)



Note: CAE 13 – Manufacture of textiles; CAE 14 – Manufacture of wearing apparel

Similarly to developments in the NFC aggregate, also in the sector under review economic relations with other countries increased in proportion to enterprise size. In fact, 79% of sales and services provided by the sector's large enterprises were aimed at the external market, while in microenterprises that share was below 26%.

With regard to imports, large enterprises received 43% of their purchases and supplies and external services from non-resident entities, while microenterprises turned almost exclusively to the domestic market, given that only 8% of their purchases and supplies and external services had their origin abroad.

<sup>14</sup>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, especially through comparison with balance of payments data. Nevertheless, this control does not guarantee that final data from each enterprise in IES are fully coincident with corresponding data in international trade statistics.

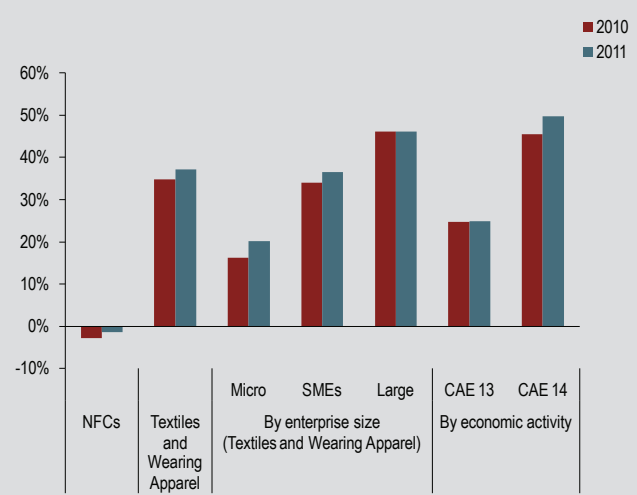
By activity sector, CAE 14 – *Manufacture of wearing apparel* exported more in relative terms than CAE 13 – *Manufacture of textiles*, while the latter imported more in relative terms than CAE 14.

The balance of goods and services transactions with the external markets, as a percentage of turnover, confirms that the manufacture of *Textiles and Wearing Apparel* was in a relatively more favourable situation than the NFC aggregate in 2010 and 2011 (Chart 1.2). In fact, in 2011 the sector's exports exceeded imports by more than 37% of turnover, i.e. an improvement compared with the previous year. In NFCs, following a year where imports exceeded exports by 3% of turnover, that percentage dropped to 1% in 2011.

The sector's balance of goods and services transactions with the external markets also grew in proportion to the size of its enterprises. In large enterprises, exports were higher than imports to an amount of 46% of turnover, compared with 37% in SMEs and 20% in microenterprises. Nevertheless, compared with developments in 2010, the balances of microenterprises and SMEs grew more significantly (4 p.p. and 3 p.p. respectively).

**Chart 1.2**

**BALANCE OF GOODS AND SERVICES TRANSACTIONS WITH THE EXTERNAL MARKETS (2010 AND 2011)**



**Note:** CAE 13 – Manufacture of textiles; CAE 14 – Manufacture of wearing apparel

By activity sector, CAE 14 – *Manufacture of wearing apparel* had a larger surplus, with exports exceeding imports by half of turnover, which corresponds to a 4 p.p. increase from the previous year.

EBITDA in the sector fell from 2010, albeit increasing 7% in SMEs and 55% in CAE 14

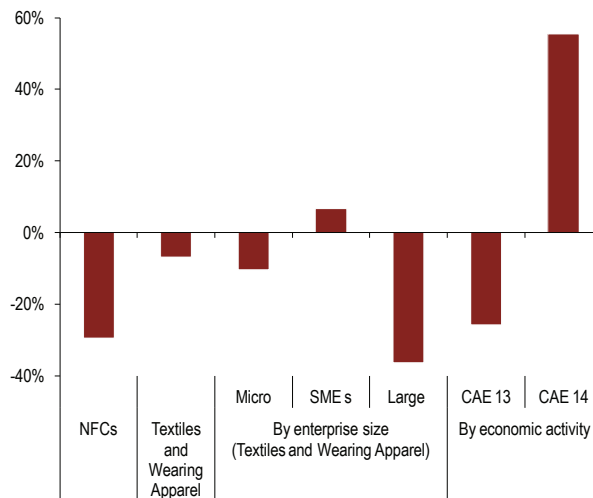
### 3.2.3 EBITDA<sup>15</sup>

The *Textiles and Wearing Apparel* sector's EBITDA declined 7% in 2011 compared with 2010, while NFCs' EBITDA dropped 29%<sup>16</sup> (Chart 10). This was mainly due to the sector's microenterprises and large enterprises with annual growth rates of -10% and -36%, respectively. Only SMEs saw their EBITDA improve from the previous year, growing 7%.

In terms of the economic activities composing the *Textiles and Wearing Apparel* sector, EBITDA behaved in opposite ways: in CAE 13 – *Manufacture of textiles* it fell 26%, while in CAE 14 – *Manufacture of wearing apparel* it grew 55%.

Chart 10

EBITDA | Annual growth rate (2011)



Note: CAE 13 – Manufacture of textiles; CAE 14 – Manufacture of wearing apparel

The percentage of enterprises with EBITDA growth in 2011, however, was equal to or lower than the level seen in the previous year in all aggregates considered

EBITDA fell across most enterprises in the sector, which contributed substantially to the decline in the average value of the aggregate. In 2011, only 46% of enterprises in *Textiles and Wearing Apparel* saw their EBITDA grow, compared with 51% in 2010 (Table 7). These developments were more negative in this sector than in NFCs. Nevertheless, in 2011 the share of enterprises in the *Textiles and Wearing Apparel* sector with EBITDA growth was slightly higher (46% versus 45% in NFCs).

The reduction in the share of enterprises with EBITDA growth was more marked, by size class, in microenterprises (-7 p.p.) and, by economic activity segment, in CAE 13 – *Manufacture of textiles* (-6 p.p.). In 2011, special mention should be made of the sector's large enterprises class, where most enterprises saw their EBITDA grow (53%, unchanged from 2010).

<sup>15</sup> 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.

<sup>16</sup> The 29% decline in 2011 reflects not only the worse operational performance of NFCs over the past year, but also the strong growth of EBITDA in 2010 (14%), greatly influenced by the revenue from the sale of *Portugal Telecom's* stake in *Vivo*.

**Table 7**

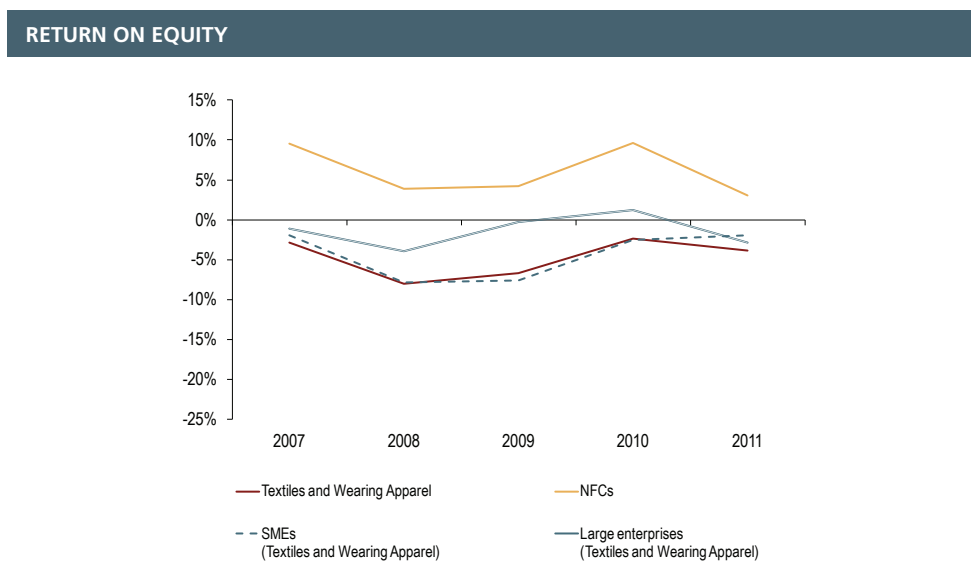
EBITDA   Weight of enterprises with annual growth							
Year	NFCs	Textiles and Wearing Apparel	By enterprise size (Textiles and Wearing Apparel)			By economic activity	
			Micro	SMEs	Large	CAE 13	CAE 14
2010	46.4%	51.1%	53.0%	48.6%	52.5%	50.4%	51.4%
2011	45.4%	46.1%	46.1%	46.0%	52.5%	44.1%	47.1%

### 3.2.4 Return on equity<sup>17</sup>

The *Textiles and Wearing Apparel* sector's return on equity was negative over the period under review and has followed the trend observed in the NFC aggregate, albeit at a lower level. In 2011, however, these levels converged somewhat as a consequence of a fall in the sector's average return by only 1 p.p. and by 7 p.p. in that of NFC (Chart 11).

Return on equity in the sector stood, on average, at -4% in 2011

**Chart 11**



**Note:** In 2010 and 2011, microenterprises recorded negative equity, in aggregate terms, making it impossible to calculate the average return on equity for this size class.

In 2011, all size classes as well as economic activity in the *Textiles and Wearing Apparel* sector had negative average return levels. Nevertheless, SMEs and CAE 14 – *Manufacture of wearing apparel*, despite their negative return, improved in 2011 compared with the previous year. Average profitability of SMEs rose slightly, from -3% in 2010 to -2% in 2011, while in CAE 14 – *Manufacture of wearing apparel* it increased from -8% in 2010 to -4% in 2011.

All size classes and economic activities in the *Textiles and Wearing Apparel* sector had negative average return levels

The quartile distribution of enterprises' return in the *Textiles and Wearing Apparel* sector shows that there is an 8 p.p. difference between the central value (median) of the distribution (4%)

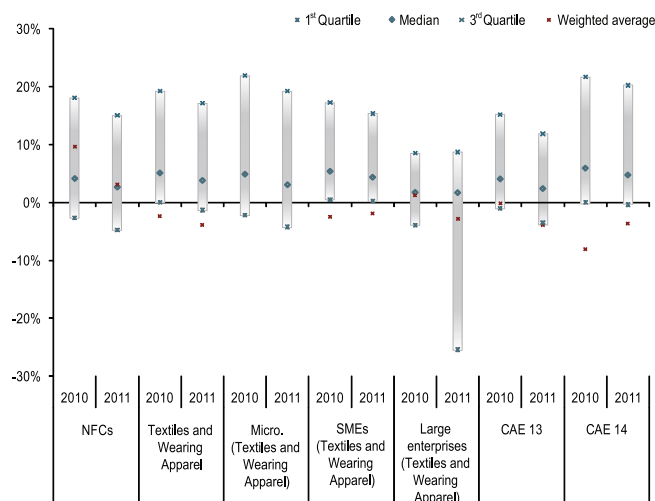
<sup>17</sup> Return on equity was calculated as the year's total profit to equity ratio, and measures return on equity invested by shareholders. Note that return on equity calculated on an individual basis, as mentioned in *Central Balance Sheet Database Study | 6, December 2011 – New Enterprise and Sector Tables: Adjustment to the Accounting Standards System*, is only carried out in enterprises with positive equity levels.

Large enterprises had the highest dispersion of results

and the weighted average of the observations (-4%), which was due to the fact that a number of enterprises had significant negative return (Chart 12). This was particularly the case with large enterprises, a quarter of which had return levels of below -25%. Indeed, this size class had the highest dispersion (the interquartile range was 34 p.p.), reflecting the fact that enterprises with rather varied return levels co-exist in this class. It should be noted, however, that the “large enterprises” size class included a very small number of enterprises.

Chart 12

RETURN ON EQUITY | *Quartile distribution*



**Note:** In 2010 and 2011, microenterprises recorded negative equity, in aggregate terms, making it impossible to calculate the average return on equity for this size class. **CAE 13** – Manufacture of textiles; **CAE 14** – Manufacture of wearing apparel.

Still in this sector, the 3<sup>rd</sup> quartile declined in proportion to the enterprise size class, reflecting that the lowest size classes included the enterprises with the highest return. Therefore, the group comprising 25% of the most profitable microenterprises had return on equity levels above 19%, compared with 15% in SMEs and 9% in large enterprises.

More than half of the enterprises in CAE 13 and CAE 14 posted positive return levels

By economic activity, more than half of the enterprises in *CAE 14 – Manufacture of wearing apparel* had return levels above 5%, while the median level in *CAE 13 – Manufacture of textiles* was 2%. Return on equity for a quarter of the enterprises in *CAE 14 – Manufacture of wearing apparel* was above 20% in 2011 (12% in *CAE 13 – Manufacture of textiles*).

In 2011, 30% of the enterprises in the sector had negative equity

It is worth mentioning, nonetheless, that only enterprises with positive equity are analysed, which, in the case of the *Textiles and Wearing Apparel* sector, meant that 30% of the enterprises were excluded in 2011. This share increased 2 p.p. compared with 2010, exceeding by 3 p.p. the NFC aggregate in Portugal (Table 8).

By size class, more than one-third of the microenterprises (35%) had capital shortage. In this context, and taking into account the negative return posted by several enterprises, it should be noted that all large enterprises had positive equity in 2011.



**Table 8**

WEIGHT OF ENTERPRISES WITH NEGATIVE EQUITY							
Year	NFCs	Textiles and Wearing Apparel	By enterprise size (Textiles and Wearing Apparel)			By economic activity	
			Micro	SMEs	Large	CAE 13	CAE 14
2010	25.4%	28.2%	33.0%	21.8%	5.0%	23.8%	30.2%
2011	27.2%	29.9%	34.8%	23.3%	0.0%	26.1%	31.6%

By economic activity, 32% of the enterprises in CAE 14 – *Manufacture of wearing apparel* had capital shortage, while in CAE 13 – *Manufacture of textiles* it stood at 26%.

### 3.3 Financial situation

#### 3.3.1 Financial structure

According to Central Balance Sheet Database data, the *Textiles and Wearing Apparel* sector's capital ratio was 31% in 2011 (1 p.p. more than in 2010), i.e. somewhat lower than 33% in the NFC aggregate. Chart 13 shows that the distribution measures for results of this sector's enterprises did not vary significantly between 2010 and 2011, although values associated with the 1<sup>st</sup> quartile fell somewhat. This means that the sector's interquartile range moved from 51 p.p. in 2010 to 57 p.p. in 2011, reflecting the higher dispersion in terms of capital ratio among enterprises in 2011.

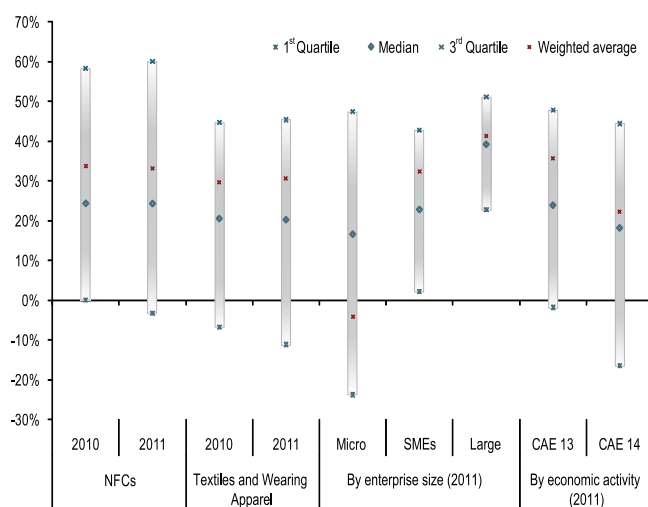
In this respect, microenterprises were the size class with the least homogeneous results. Indeed, on average, the capital ratio for this class was 4%, with 25% of the enterprises recording levels below -23%, while a similar share of enterprises posted values above 47%. In SMEs the average capital ratio amounted to 32% and in large enterprises it reached 41%. The increased capital ratio in large enterprises is clearly illustrated in the chart, which shows that 75% of large enterprises (i.e. above the 1<sup>st</sup> quartile) posted values even above the median of microenterprises and in line with the SME median.

The capital ratio in the *Textiles and Wearing Apparel* sector stood at 31% in 2011, below the 33% observed in the NFC aggregate

The capital ratio in microenterprises was negative, while in SMEs and large enterprises it stood at 32% and 41%, respectively

**Chart 13**

**CAPITAL RATIO | Quartile distribution and weighted average**



**Note:** CAE 13– Manufacture of textiles; CAE 14– Manufacture of wearing apparel

The average capital ratio was 36% in CAE 13 and 22% in CAE 14

By economic activity, CAE 14 – *Manufacture of wearing apparel* saw the highest dispersion of results, with a capital ratio below -16% in 25% of the enterprises and above 44% also in 25% of the enterprises. The average for this CAE-Rev.3 division stood at 22%. In CAE 13 – *Manufacture of textiles* the interquartile range was lower (50 p.p.). Half of the enterprises in this CAE-Rev.3 division had a capital ratio above 24% and a weighted average of 36%.

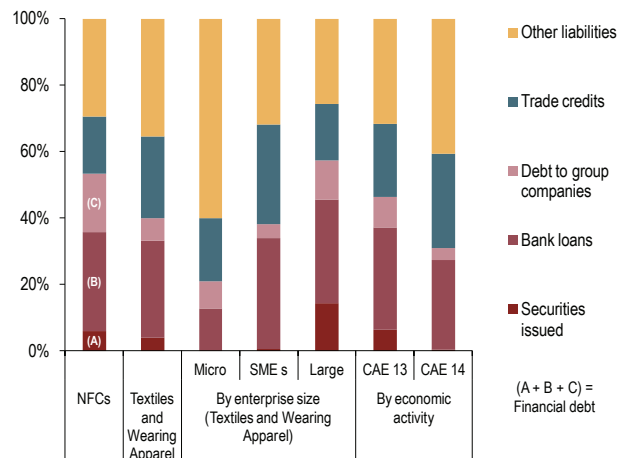
Taking into account the capital ratio level (31% in 2011), it can be concluded that debt played an important role in financing the *Textiles and Wearing Apparel* sector in Portugal, requiring a detailed analysis of its characteristics.

Financial debt and trade credits amounted to 65% of external financing in the *Textiles and Wearing Apparel* sector

Chart 14 sets out the sources of external financing in 2011, and shows that financial debt and trade credits amounted to approximately two-thirds (65%) of the *Textiles and Wearing Apparel* sector's liabilities, i.e. slightly below the NFC aggregate, where the share of these items stood at 71%. By component, bank loans represented 29% of the *Textiles and Wearing Apparel* sector's liabilities (compared with 30% in NFCs). Trade credits, in turn, funded 25% of the sector's liabilities. The relative importance of each financing source varies somewhat across size classes and economic activity sectors.

Chart 14

#### LIABILITIES STRUCTURE (2011)



**Note:** Financial debt refers to the set of remunerated financing taken by the enterprise through the issuance of debt securities, or debt from credit institutions and financial corporations, or debt from enterprises in the same group. The analysis excludes liabilities components considered accountable, such as deferrals and provisions. Thus, 'Other liabilities' includes debt to the State and other public entities, debt to shareholders/partners, other current liabilities and accounts payable. CAE 13 – *Manufacture of textiles*; CAE 14 – *Manufacture of wearing apparel*.

In microenterprises, 'other liabilities' was the main component of external financing (60% of liabilities)...

In microenterprises there was a substantial share of 'other liabilities' in total debt (60%), which includes debt to the State and other public entities and debt to shareholders/partners. The second most commonly used financing component by this size class was trade credits, accounting for nearly 20% of the sector's liabilities. Finally, bank loans were only the third most used financing source, having funded 13% of liabilities.

...whereas in SMEs and large enterprises bank loans were the main items under liabilities

In SMEs and large enterprises, similarly to NFCs, bank loans were the main source of external financing, accounting for 33% and 31% respectively of total liabilities. Trade credits were also relevant for both size classes, particularly SMEs, where they accounted for 30% of liabilities (13 p.p. more than in large enterprises).

By economic activity, 31% of CAE 13 – *Manufacture of textiles* liabilities were funded by bank loans and 22% by trade credits. Turning to CAE 14 – *Manufacture of wearing apparel*, financing by these two items was more balanced (27% for bank loans and 28% for trade credits), while other liabilities played a more prominent role (41%).

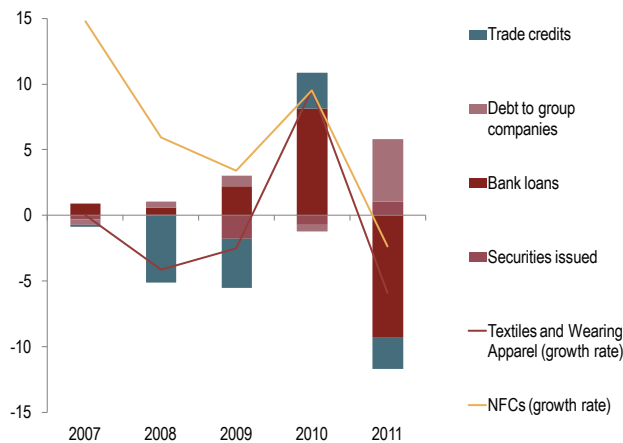
Analysis of financial debt and trade credits as a whole (Chart 15) shows that the external financing growth rate developments in the *Textiles and Wearing Apparel* sector was in line with that of total NFCs. In 2011, this form of financing declined, more markedly in this sector (-6%) than in the NFC aggregate (-2%).

The main item behind this fall was bank loans, with a contribution of -9 p.p. Debt from enterprises in the same group helped to ease this negative contribution, with a positive contribution of around 5 p.p. The fall in bank loans is particularly noteworthy, given that in previous years this component had always given positive contributions to joint developments in financial debt and trade credits in the sector under review.

Financial debt and trade credits declined 6% in 2011, chiefly due to bank loans

**Chart 15**

**EVOLUTION OF FINANCIAL DEBT AND TRADE CREDITS | Annual growth rate (in %) and contributions (in p.p.)**



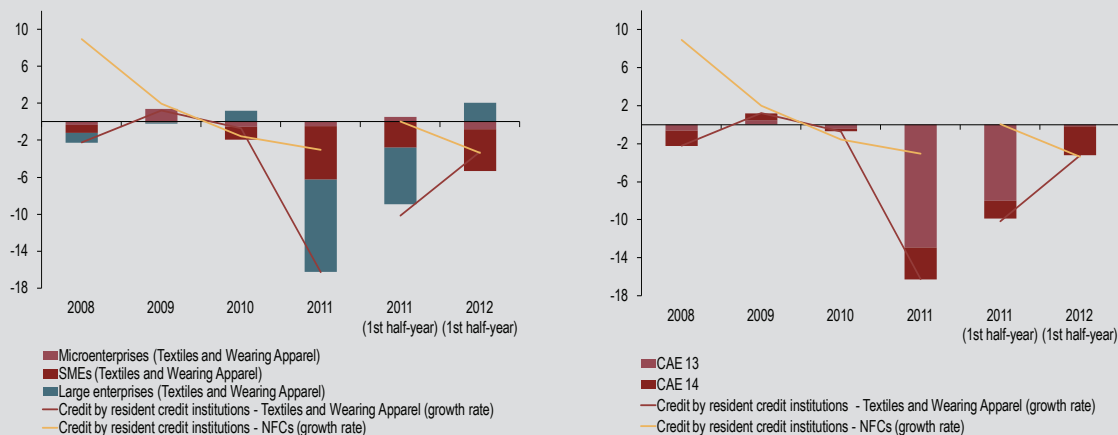
## BOX 2 - LOANS FROM RESIDENT CREDIT INSTITUTIONS – CHARACTERISATION BASED ON THE CENTRAL CREDIT REGISTER<sup>18</sup>

Loans from credit institutions (CI)<sup>19</sup> were the main financial debt component in the *Textiles and Wearing Apparel* sector (73%) in 2011. Based on information available in the Central Credit Register of Banco de Portugal, this box presents an analysis of the component related to loans from CI resident in Portugal. In 2011, around 81% of the sector's enterprises had obtained bank loans from resident CI.

At the end of the first half of 2012, loans obtained by enterprises in the *Textiles and Wearing Apparel* sector from resident CI decreased 3% compared with the end of 2011. This followed an annual decline of 16% at the end of 2011. The trend followed by the sector in the first half of 2012 was consistent with that in the NFC aggregate. However, compared with 2011, the decline in credit granted to the sector under review was much more substantial (Chart 2.1).

Chart 2.1

**EVOLUTION OF CREDIT FROM RESIDENT CREDIT INSTITUTIONS** | Annual growth rate (in %) and contributions (in p.p.) – end-of-period figures



Note: CAE 13 – Manufacture of textiles; CAE 14 – Manufacture of wearing apparel

By size class, the main contribution to the decline in credit in 2011 was made by large enterprises, which recorded an annual rate of change of -37%, thus accounting for more than 60% of the decline in loans obtained by the *Textiles and Wearing Apparel* sector. In SMEs, credit dropped by 9% and in microenterprises by 6%. Looking at data for the first half of 2012, the decline in the credit granted to the sector mainly affected SMEs, while credit granted to large enterprises increased.

By economic activity, CAE 13 – *Manufacture of textiles* recorded the highest credit retrenchment (21%) at the end of 2011, compared with the end of 2010. This, together with the fact that this activity represented around 60% of credit obtained by the *Textiles and Wearing Apparel* sector at the end of 2011, made it responsible for nearly 80% of the decline in credit granted to the sector. In CAE 14 – *Manufacture of wearing apparel*, loans obtained from resident CI dropped 9% at the end of 2011. At the end of the first half of 2012, the decrease in credit from resident CI was higher in this activity.

<sup>18</sup> 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, please refer to Supplement 1|2005 to Banco de Portugal's Statistical Bulletin, *A New Source for Monetary and Financial Statistics: the Central Credit Register*.

<sup>19</sup> Credit institutions are the set of enterprises whose activity consists in receiving deposits and other repayable funds from the public, to be invested on their own account by granting credit. These include banks, savings banks and mutual agricultural credit banks (generally called 'banks' in this *Study*), as well as factoring enterprises, credit-purchasing financial companies and leasing companies. Over 95% of credit granted by resident credit institutions to NFCs in 2011 came from banks.

The non-performing ratio<sup>20</sup> of the *Textiles and Wearing Apparel* sector was higher than in NFCs (Chart 2.2). Indeed, in the period under review, the NFCs non-performing ratio ranged between 2% and 10% and the *Textiles and Wearing Apparel* sector's between 7% and 15%, from the end of 2007 to the end of the first half of 2012.

**Chart 2.2**

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



**Note:** CAE 13 – Manufacture of textiles; CAE 14 – Manufacture of wearing apparel

By enterprise size, the sector's microenterprises recorded the highest non-performing ratio (37%) at the end of the first half of 2012. In SMEs, the non-performing ratio was 17%, while only 1% of large enterprises were in default at that date.

By economic activity, CAE 14 – *Manufacture of wearing apparel*, albeit less indebted, recorded the highest non-performing ratio (19% at the end of the first half of 2012).

At the end of the first half of 2012, approximately 37% of the enterprises that had obtained credit from resident CI contributed to the non-performing ratio of the *Textiles and Wearing Apparel* sector, compared with 34% at the end of 2011 and 24% at the end of 2007 (Chart 2.3).

<sup>20</sup> The non-performing ratio, also known as the credit overdue ratio, is based on information on credit granted by resident credit institutions in the Central Credit Register of Banco de Portugal, by calculating the ratio of the amount of credit overdue to total credit obtained. Credit is deemed to be overdue when the respective repayments are not paid on the due payment dates. Credit customers may be in default as regards the principal and/or interest and other expenditure. In the case of principal this is deemed to have taken place 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.

Chart 2.3

NON-PERFORMING ENTERPRISES (*end-of-period*)

**Note:** CAE 13 – Manufacture of textiles; CAE 14 – Manufacture of wearing apparel

Once again, microenterprises represented the highest share of enterprises in default (40% at the end of the first half of 2012), while large enterprises stood at the opposite end (15%). It should be noted that the share of enterprises in default in both the microenterprises and SMEs classes has been gradually increasing. By contrast, among large enterprises this share has declined markedly since the end of 2009 (when its level was very close to that of microenterprises). This was largely due to debt restructuring by large enterprises and to credit write-offs/write-downs by resident CI.

By economic activity, 38% of the enterprises in CAE 14 – *Manufacture of wearing apparel* were in default at the end of the first half of 2012, while in CAE 13 – *Manufacture of textiles* that percentage was 34%.

### 3.3.2 Financial costs and solvency

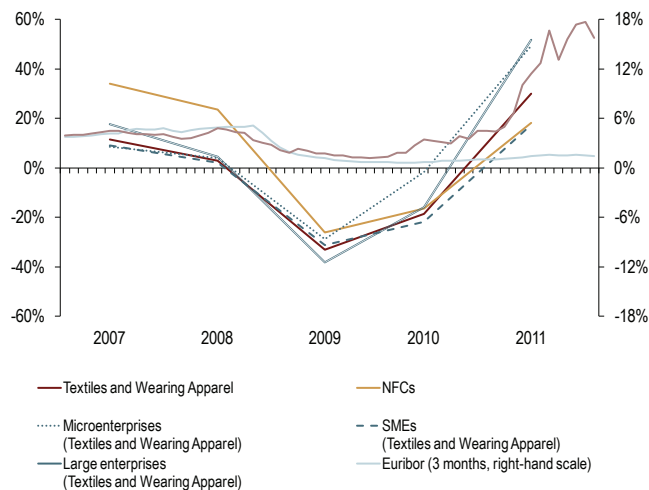
In 2011, enterprise financing costs reflected the effects of the sovereign debt crisis in the euro area, particularly in the *Textiles and Wearing Apparel* sector, where interest paid grew 30%, compared with 18% in the NFC aggregate (Chart 16).

By size class, microenterprises and large enterprises played a prominent role, with annual rates of change in interest paid of 49% and 52%, respectively. In SMEs, the increase was more subdued (17%).

By economic activity, CAE 13 – *Manufacture of textiles*, with a 40% growth rate, was more penalised than CAE 14 – *Manufacture of wearing apparel*, where interest paid increased 12% from 2010. This may have resulted from the greater share of financial debt in the financing of CAE 13 – *Manufacture of textiles*.

**Chart 16**

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



Interest paid by enterprises in the *Textiles and Wearing Apparel* sector grew 30% from 2010

This deterioration was more marked in microenterprises and large enterprises, as well as in CAE 13

Over the period under review, the share of interest paid on EBITDA was higher in the *Textiles and Wearing Apparel* sector than in the NFC aggregate (Chart 17). In 2011, around 41% of EBITDA generated by the sector was used to pay interest, while in NFCs that share was 28%, while both increased approximately 11 p.p. compared with 2010.

By enterprise size, financial pressure was particularly noteworthy for microenterprises in the *Textiles and Wearing Apparel* sector, with interest paid in 2011 exceeding EBITDA by almost six times. This was due not only to an increase in interest, but also to the low EBITDA value generated by this size class. This mainly reflects microenterprises' inability to generate sufficient income to service financial debt. In SMEs and large enterprises, the share of EBITDA absorbed by interest also grew in 2011, to 30% and 64%, respectively. In this context, there was a substantial increase in this indicator for large enterprises (+37 p.p.), which was due to the combined effect of an increase in interest paid (annual rate of change of 52%) and a decline in EBITDA (annual rate of change of -36%) in this class.

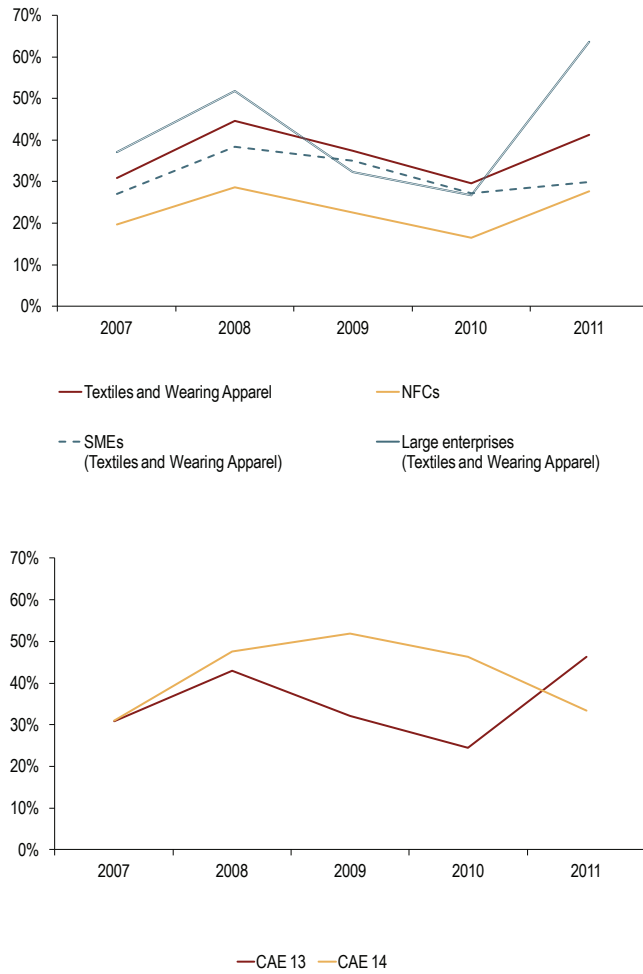
Interest paid by microenterprises in the *Textiles and Wearing Apparel* sector exceeded EBITDA by almost six times

The share of interest paid in EBITDA stood at 46% and 33% in CAE 13 and CAE 14, respectively. It increased in CAE 13 and declined in CAE 14, chiefly reflecting diverging developments in EBITDA

By economic activity, in CAE 13 – *Manufacture of textiles* interest absorbed 46% of EBITDA generated in 2011, which accounted for a 22 p.p. increase from the previous year. In turn, in CAE 14 – *Manufacture of wearing apparel* the share of interest in EBITDA fell 13 p.p., to 33%. Instrumental to this fall were developments in EBITDA for enterprises in this activity, which grew 55% compared with 2010.

Chart 17

## WEIGHT OF INTEREST PAID IN EBITDA



**Note:** For microenterprises the share of interest in EBITDA is not given, due to the fact that in some periods EBITDA for this class is negative, which makes the ratio less relevant in economic terms. CAE 13 – *Manufacture of textiles*; CAE 14 – *Manufacture of wearing apparel*.



### BOX 3 - CREDIT OBTAINED THROUGH DEBT SECURITIES ISSUES – CHARACTERISATION BASED ON THE SECURITIES STATISTICS INTEGRATED SYSTEM<sup>21</sup>

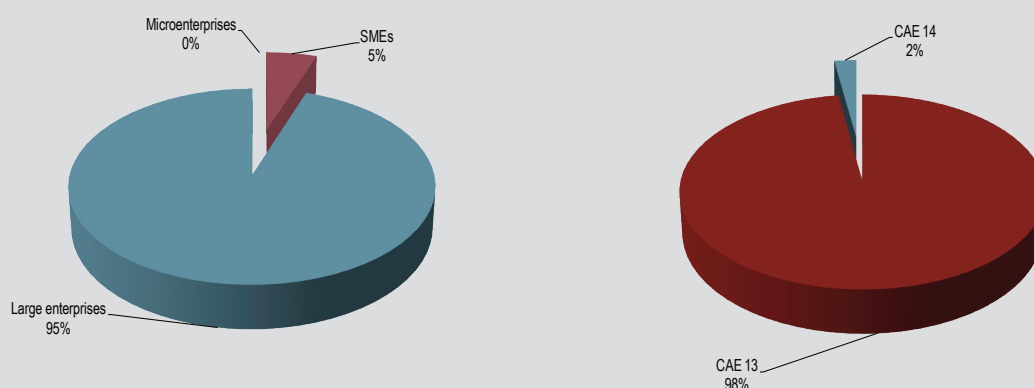
Financing obtained through the issuance of debt securities represented 10% of the *Textiles and Wearing Apparel* sector's financial debt in 2011 (4% of total liabilities), compared with 11% of NFCs' financial debt (6% of total liabilities). Based on information from Banco de Portugal's Securities Statistics Integrated System, this box features a brief description of this source of financing, with a focus on the most recent information for the first half of 2012.

The total amount of financing through debt securities obtained by the enterprises in the *Textiles and Wearing Apparel* sector amounted to over €158 million at the end of June 2012, having increased 16% compared with the end of 2010. This increase was due to large enterprises, which in June 2012 accounted for 95% of securities issued by the sector (Chart 3.1). By contrast, smaller-sized enterprises have not regularly used this kind of financing, while microenterprises in this sector did not use it at all.

By economic activity, financing through debt securities was almost exclusively obtained by enterprises in CAE 13 – *Manufacture of textiles* (98%).

Chart 3.1

DEBT SECURITIES ISSUED (position at the end of the first half of 2012)



Note: CAE 13 – Manufacture of textiles; CAE 14 – Manufacture of wearing apparel

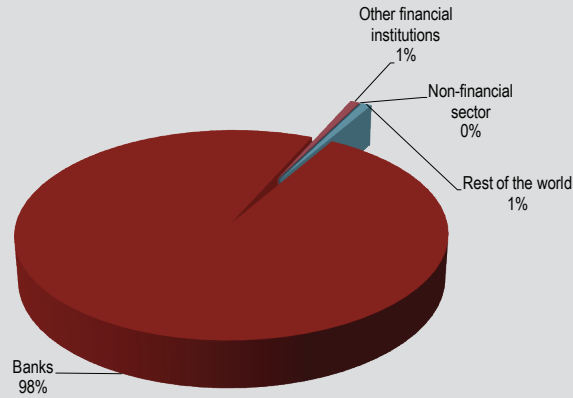
<sup>21</sup> The Securities Statistics Integrated System is an information system managed by Banco de Portugal relating to securities issues and portfolios, on a 'security-by-security' and 'investor-by-investor' basis. For further information, please refer to Supplement 2|2008 to Banco de Portugal's Statistical Bulletin, *Securities Statistics: Integrated System Features and Main Results*.

By maturity of debt securities issued by enterprises in the *Textiles and Wearing Apparel* sector, short-term issues are clearly predominant (97%), a trend that has been picking up over the past few years.

The analysis of debt securities holders, which offers an insight into which sectors granted financing to these enterprises through this means, shows that at the end of June 2012 almost all securities issued by enterprises in the *Textiles and Wearing Apparel* sector (98%) were held by the resident banking system (Chart 3.2).

### Chart 3.2

**DEBT SECURITIES HOLDERS** (structure at the end of the first half of 2012)



### 3.3.3 Trade credit financing

Trade credit financing in the *Textiles and Wearing Apparel* sector decreased 6% in 2011, accounting nevertheless for 25% of the sector's liabilities. This was above the level for the NFC aggregate, where trade credits funded 17% of liabilities.

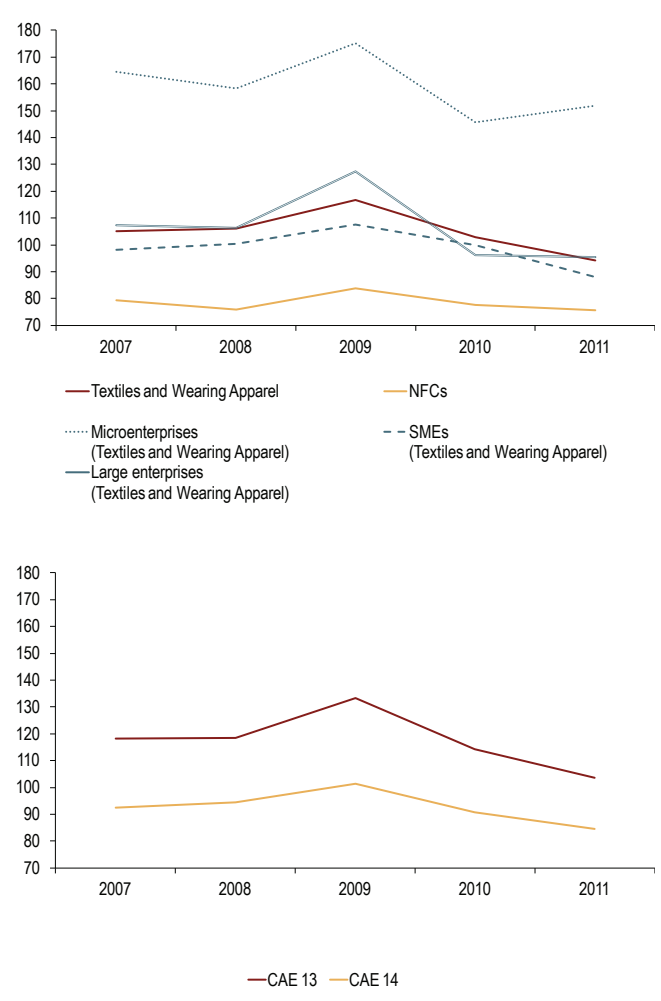
Average days sales outstanding and average days payable outstanding, both in the *Textiles and Wearing Apparel* sector and among NFCs, declined further in 2011. That year, average days sales outstanding in the *Textiles and Wearing Apparel* sector was 94 days (9 days less than in 2010) and average days payable outstanding reached 93 days (9 days less than in 2010). Compared with the NFC aggregate, the periods were longer by 19 days in average days sales outstanding and by 10 days in average days payable outstanding (Charts 18 and 19).

Trade credits represented a quarter of enterprise liabilities in the *Textiles and Wearing Apparel* sector in 2011

Average days sales outstanding and average days payable outstanding in the *Textiles and Wearing Apparel* sector declined further in 2011

**Chart 18**

**DAYS SALES OUTSTANDING | In days**



**Note:** CAE 13 – Manufacture of textiles; CAE 14 – Manufacture of wearing apparel

In terms of enterprise size, SMEs in the *Textiles and Wearing Apparel* sector maintained the lowest average days sales outstanding, although over the past few years large enterprises have come nearer to these levels. Microenterprises recorded higher levels, with average days sales outstanding reaching 152 days in 2011.

By enterprise aggregate, average days sales outstanding were lower in SMEs and in CAE 14...

... while average days payable outstanding were lower in large enterprises and CAE 13.

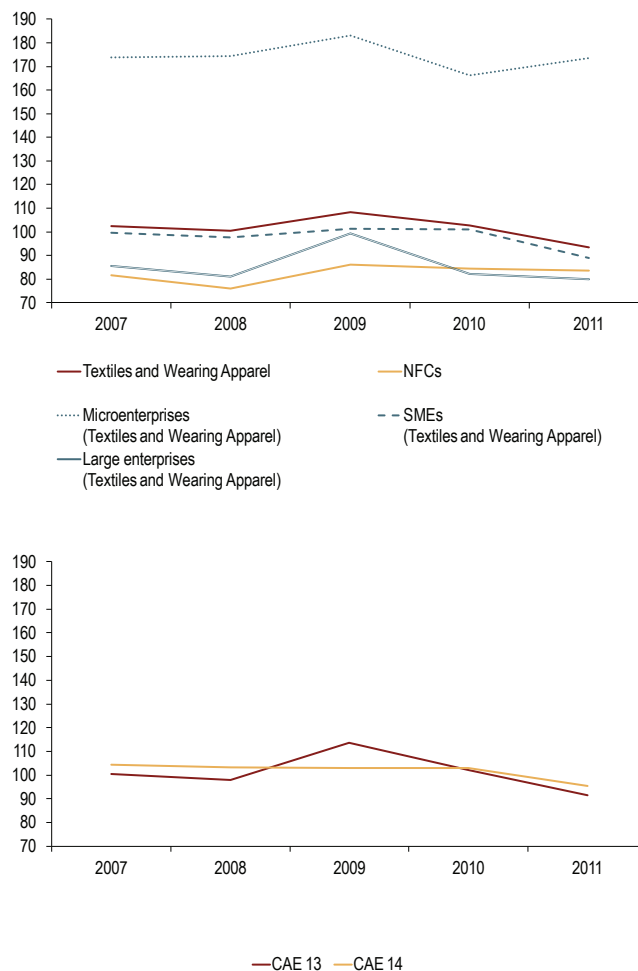
By economic activity, *CAE 14 – Manufacture of wearing apparel* has the lowest average days sales outstanding (85 days in 2011, 6 days less than in 2010). In 2011, average days sales outstanding for *CAE 13 – Manufacture of textiles* came to 104 days, compared with 114 days in 2010.

Turning to average days payable outstanding, by size class, large enterprises were the class that paid suppliers on shorter terms (80 days in 2011). Average days payable outstanding for SMEs and microenterprises amounted in 2011 to 89 and 174 days, respectively, which means that average days payable outstanding for these classes were higher than their average days sales outstanding.

By economic activity, average days payable outstanding are rather similar between *CAE 13 – Manufacture of textiles* (92 days) and *CAE 14 – Manufacture of wearing apparel* (96 days). However, average days payable outstanding in *CAE 13* were below its average days payable outstanding, while the opposite was true for *CAE 14*.

Chart 19

DAYS PAYABLE OUTSTANDING | In days



Note: CAE 13– Manufacture of textiles; CAE 14– Manufacture of wearing apparel

The average days are an important indicator as they shed light on the time delay associated with receivables and payables in the enterprises' trade credits. However, in order to evaluate whether enterprises finance themselves through this type of credit, a net indicator of trade credit financing must be calculated. For the purpose of this *Study*, the calculated indicator compares

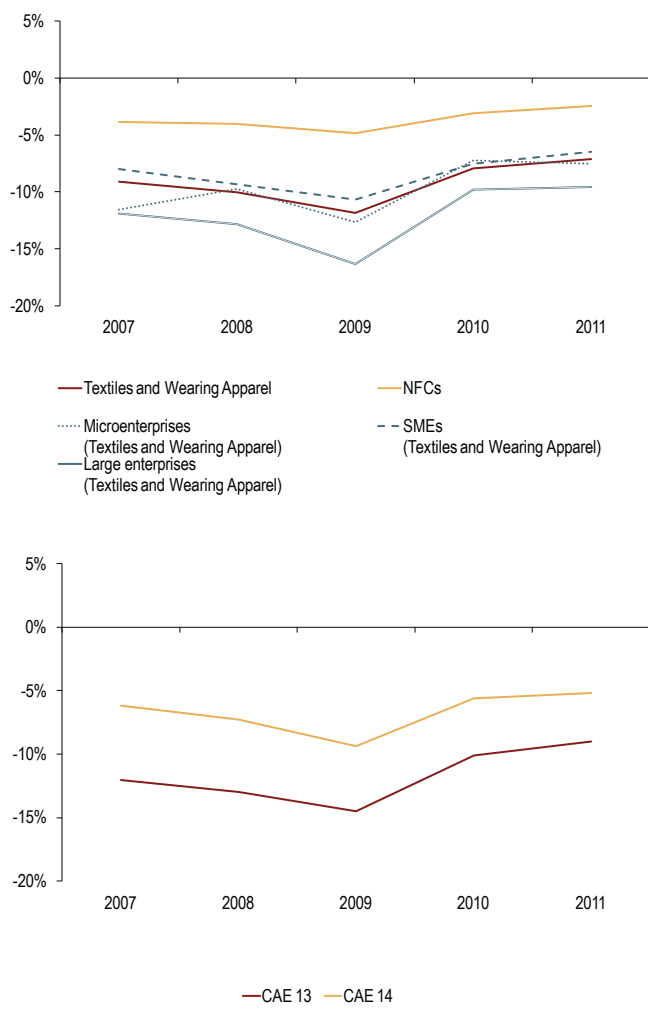
the differential between accounts payable and accounts receivable versus turnover (Chart 20). A negative value implies that accounts receivables are higher than accounts payable, meaning that overall the enterprise is financing its clients; a positive value implies that accounts payable are higher than accounts receivable and thus the enterprise is obtaining financing through its suppliers.

Therefore, Chart 20 confirms some of the previous findings. First, in net terms, the sector under review did not finance itself through trade credits, in line with the NFC aggregate. Nevertheless, the situation in the *Textiles and Wearing Apparel* was more negative. Over the past year, trade credit financing, as a percentage of turnover, was -2% for NFCs and -7% for the *Textiles and Wearing Apparel* sector, but was less negative for the sector's SMEs (-6% in 2011). At the opposite end were large enterprises, with net financing as a percentage of turnover standing at -10%.

In net terms, the sector under review did not finance itself through trade credits, nor did any of its size classes or economic sectors

**Chart 20**

**NET TRADE CREDIT FINANCING | As a % of turnover**



**Note:** Net trade credit financing was calculated using the difference between accounts payable and accounts receivable (accounts payable less accounts receivable). **CAE 13** – Manufacture of textiles; **CAE 14** – Manufacture of wearing apparel.

Similarly, none of the activities comprising the *Textiles and Wearing Apparel* sector financed themselves in net terms using this means. However, in *CAE 14 – Manufacture of wearing apparel* the situation was less negative (-5%). Nevertheless, in terms of net trade credit financing, the situation has improved over the past two years for both activities.

## Annex

## MAIN INDICATORS FOR THE MANUFACTURE OF TEXTILES AND WEARING APPAREL (2011)

	Characterisation of the sector		Activity		Financing			Profitability		
	Turnover held by large enterprises	Business concentration (HHI)	Growth rates		Capital ratio	Growth rates		Loans obtained from resident CI (June 2012)	Return on equity	
			Turnover	EBITDA		Trade credits	Bank loans			
NFCs	45%	0.0017	-5%	-29%	33%	-5%	-8%	28%	10%	3%
Manufacturing	51%	0.0128	4%	-9%	36%	-5%	-4%	18%	30%	5%
<i>Textiles and Wearing Apparel</i>	19%	0.0026	2%	-7%	31%	-6%	-18%	41%	37%	-4%
CAE 13	51%	0.0065	1%	-26%	36%	-8%	-23%	46%	34%	-4%
CAE 14	49%	0.0038	3%	55%	22%	-4%	-9%	33%	38%	-4%

**Nota: CAE 13** - Manufacture of textiles; **CAE 14** - Manufacture of wearing apparel. HHI <0.1, i.e., market with no indication of business concentration; 0.1 < HHI < 0.18, i.e., market with some business concentration; HHI > 0.18, i.e., market with high business concentration

<i>Weight of the Textiles and Wearing Apparel sector</i>					
	Number of enterprises		Number of employees		Turnover
	2001	2011	2001	2011	
Manufacturing	20%	16%	26%	20%	7%
NFCs	3%	2%	8%	4%	2%

## METHODOLOGICAL SUMMARY

**Capital ratio:** Ratio between equity and total assets.

**EBITDA:** Earnings before interest, taxes, depreciation and amortisation. The new accounting standard (SNC - *Sistema de Normalização Contabilística*, Accounting Standards 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 Standards System, adjusting the data reported under the old standard (POC - *Plano Oficial de Contabilidade*, Official Chart of Accounts) where possible, for the 2006-2009 period.

**Economic sector:** As regards the NFC aggregate, 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 extraterritorial 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 encompasses the 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 Standards System*.

**Return on equity:** Ratio between net income for the year and 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 enterprise:** Enterprises were grouped into three classes: microenterprises, small and medium-sized enterprises (SMEs) 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, and are defined as those enterprises which employ fewer than 250 persons and have an annual turnover that does not exceed EUR 50 million and/or an annual balance sheet total that does not exceed EUR 43 million. Large enterprises are any enterprises which are not classified above.

## REFERENCES

[1] **Banco de Portugal (2005)**, *A New Source for Monetary and Financial Statistics: the Central Credit Register*, Supplement 1/2005 to the Statistical Bulletin, April 2005.

<http://www.bportugal.pt/en-US/Estatisticas/PublicacoesEstatisticas/Tumbnails%20List%20Template/sup-be-1-2005-en.pdf>

[2] **Banco de Portugal (2005)**, *Statistics on Non-Financial Corporations from the Central Balance Sheet Database*, Supplement 5/2005 to the Statistical Bulletin, December 2005.

<http://www.bportugal.pt/en-US/Estatisticas/PublicacoesEstatisticas/Tumbnails%20List%20Template/sup-be-5-2005-en.pdf>

[3] **Banco de Portugal (2008)**, *Simplified reporting: Inclusion of Simplified Corporate Information in the Statistics on Non-Financial Corporations from the Central Balance Sheet Database*, Supplement 1/2008 to the Statistical Bulletin, May 2008.

<http://www.bportugal.pt/en-US/Estatisticas/PublicacoesEstatisticas/Tumbnails%20List%20Template/sup-be-1-2008-en.pdf>

[4] **Banco de Portugal (2008)**, *Securities Statistics: Integrated System Features and Main Results*, Supplement 2/2008 to the Statistical Bulletin, June 2008.

<http://www.bportugal.pt/en-US/Estatisticas/PublicacoesEstatisticas/Tumbnails%20List%20Template/Sup-be-2-2008-en.pdf>

[5] **Banco de Portugal (2010)**, *Structure and dynamics of non-financial corporations in Portugal*, Central Balance Sheet Studies | 2, December 2010.

<http://www.bportugal.pt/en-US/ServicosaoPublico/CentraldeBalancos/Publicacoes/Tumbnails%20List%20Template/Structure%20and%20dynamics%20of%20non-financial%20corporations%20in%20Portugal.pdf>

[6] **Banco de Portugal (2010)**, *Sectoral analysis of non-financial corporations in Portugal*, Central Balance Sheet Studies | 3, September 2011.

<http://www.bportugal.pt/en-US/ServicosaoPublico/CentraldeBalancos/Publicacoes/Tumbnails%20List%20Template/Sectoral%20analysis%20of%20non-financial%20corporations%20in%20Portugal.pdf>

[7] **Banco de Portugal (2011)**, *New enterprise and sector tables: Adjustment to the Accounting Standards System*, Central Balance Sheet Studies | 6, December 2011.

<http://www.bportugal.pt/en-US/ServicosaoPublico/CentraldeBalancos/Publicacoes/Tumbnails%20List%20Template/New%20enterprise%20and%20sector%20tables.pdf>

[8] **Banco de Portugal (2012)**, *Sectoral analysis of non-financial corporations in Portugal 2010/2011*, Central Balance Sheet Studies | 7, April 2012.

[http://www.bportugal.pt/en-US/ServicosaoPublico/CentraldeBalancos/Publicacoes/Tumbnails%20List%20Template/Sectoral%20analysis%20of%20non-financial%20corporations%20in%20Portugal%202010\\_2011.pdf](http://www.bportugal.pt/en-US/ServicosaoPublico/CentraldeBalancos/Publicacoes/Tumbnails%20List%20Template/Sectoral%20analysis%20of%20non-financial%20corporations%20in%20Portugal%202010_2011.pdf)

[9] **Banco de Portugal (2012)**, *Financial Stability Report*, May 2012.

[http://www.bportugal.pt/en-US/EstudosEconomicos/Publicacoes/RelatorioEstabilidadeFinanceira/REFAnteriores/Documents/ref\\_maio12\\_e.pdf](http://www.bportugal.pt/en-US/EstudosEconomicos/Publicacoes/RelatorioEstabilidadeFinanceira/REFAnteriores/Documents/ref_maio12_e.pdf)



[10] Banco de Portugal (2012), *Annual Report – The Portuguese economy in 2011*, May 2012.

[http://www.bportugal.pt/en-US/EstudosEconomicos/Publicacoes/RelatorioAnual/RelAnuaisAnteriores/Documents/ra\\_11\\_e.pdf](http://www.bportugal.pt/en-US/EstudosEconomicos/Publicacoes/RelatorioAnual/RelAnuaisAnteriores/Documents/ra_11_e.pdf)

[11] Banco de Portugal (2012), *Economic Bulletin – Summer | 2012*, July 2012.

[http://www.bportugal.pt/en-US/EstudosEconomicos/Publicacoes/BoletimEconomico/BEAnteriores/Documents/bol\\_summer\\_e.pdf](http://www.bportugal.pt/en-US/EstudosEconomicos/Publicacoes/BoletimEconomico/BEAnteriores/Documents/bol_summer_e.pdf)

[12] Banco de Portugal (2012), *Sectoral analysis of non-financial corporations in Portugal 2011/2012*, Central Balance Sheet Studies | 8, November 2012. (Only Portuguese-language version available)

[http://www.bportugal.pt/pt-PT/ServicosaoPublico/CentraldeBalancos/Publicacoes/Biblioteca%20de%20Tumbnails/Estudos%20da%20CB%208\\_2012.pdf](http://www.bportugal.pt/pt-PT/ServicosaoPublico/CentraldeBalancos/Publicacoes/Biblioteca%20de%20Tumbnails/Estudos%20da%20CB%208_2012.pdf)

[13] Decree-Law No 381/2007 of 14 November 2007. (Only Portuguese-language version available)

<http://dre.pt/pdf1sdip/2007/11/21900/0844008464.pdf>

[14] INE (2012), *Enterprises in Portugal – 2010*. (Only Portuguese-language version available)

[http://www.ine.pt/ngt\\_server/attachfileu.jsp?look\\_parentBoui=143261306&att\\_display=n&att\\_download=y](http://www.ine.pt/ngt_server/attachfileu.jsp?look_parentBoui=143261306&att_display=n&att_download=y)

[15] Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (2003/361/EC).

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:124:0036:0041:en:PDF>

[16] Council Regulation (EC) No 2223/96 of 25 June 1996 on the European system of national and regional accounts in the Community.

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1996R2223:20020320:EN:PDF>

## CENTRAL BALANCE SHEET STUDIES

- 1 | ENTERPRISE AND SECTOR TABLES, November 2010
- 2 | STRUCTURE AND DYNAMICS OF NON-FINANCIAL CORPORATIONS IN PORTUGAL, December 2010
- 3 | SECTORAL ANALYSIS OF NON-FINANCIAL CORPORATIONS IN PORTUGAL, September 2011
- 4 | SECTORAL ANALYSIS OF MANUFACTURE OF FOOD PRODUCTS, November 2011
- 5 | SECTORAL ANALYSIS OF ACCOMMODATION AND FOOD SERVICE ACTIVITIES, November 2011
- 6 | NEW ENTERPRISE AND SECTOR TABLES: ADJUSTMENT TO THE ACCOUNTING  
STANDARDS SYSTEM, December 2011
- 7 | SECTORAL ANALYSIS OF NON-FINANCIAL CORPORATIONS IN PORTUGAL 2010/2011, April 2012
- 8 | SECTORAL ANALYSIS OF NON-FINANCIAL CORPORATIONS IN PORTUGAL 2011/2012, November 2012
- 9 | SECTORAL ANALYSIS OF THE MANUFACTURE OF TEXTILES AND WEARING APPAREL, November 2012