A CHARACTERIZATION OF PORTUGUESE SME COMPARING EUROPEAN UNION
CASE STUDY ABOUT SETÚBAL REGION

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ABSTRACT. Considering the European Union definition for Small and Medium Enterprises and their importance in EU economy we refer the most relevant matters of this kind of companies in the European development.

Next step broaches the importance of Portuguese SME for the domestic economy, referring their social and economic role, as well its weight in Gross Domestic Product and employment.

The main goal of this study is to characterize Setúbal region concerning its small and medium enterprises (SME) comparing its performance indicators with the reference indicators of EU’s SME.

The higher education institution where we are lecturing stays in Setúbal. Most of our students come from this region, so we thought it would be interesting to analyse an important stakeholder cluster of our community – the SME.

We work with a significant sample of regional SME trying also to understand if there are activity sectors or companies’ characteristics we can refer as relevant for regional development.

KEYWORDS: SME; EU; Economy; Regional Development; Employment.

JEL: M10; M21; M50.

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2. EU’s SME Typology according with their Dimension
3. SME Relevance in Europe-19
4. Indicators and Ratios
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1. Introduction
All over the world small and medium enterprises are, nowadays, a very important support to economic and social development. In every country the number of SME is always significant and they have a relevant role in day by day business. The

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European Union is not different from this reality and the European Commission has had the preoccupation about studying several questions concerning this theme.

It is important to know the definition of the Commission for SME and the main issues produced about this kind of companies, namely the mean values of relevant ratios or other indicators.

Our work consists on comparing the referred values with those of the region where we are lecturing, implying that previously we characterize the European situation and explains the used indicators.

The relevance of SME in Gross Domestic Product and employment are, among others, some of our concerns in order to frame our investigation, and allowing us to achieve conclusions on deviation between our region and European situation.

In order to realize our work we built a sample based on those companies that often cooperates with our students supporting their school works with data and allowing them to realize their probations. We were able to have information about micro, small and medium enterprises.

We made comparisons with some indicators available for the Europe-19 that includes EU-15 and Iceland, Norway, Liechtenstein and Switzerland.

2. EU’s SME Typology according with their Dimension

Company’s dimension definition is not an elementary operation as someone could think about in a first approach. The concept of dimension, namely when applied to a productive structure, has not a very clear defined sense. Concluding about an enterprise dimension normally leads to two kinds of criteria, meaning two groups of variables: the total of realized operations and the amount of available resources.

The total of realized operations can be quantified by added value or by turnover and the amount of available resources can be quantified, for example, by the number of employees or by investment volume (Maréchal, 1999).

The European Commission tried to go beyond this ambiguity and to find a coherent and efficient frame in order to define small and medium enterprises. The Commission issued the Recommendation 96/280/CE, from 3/Apr/96, being in force until 31/Dec/2004, and then it was substituted by the Commission Recommendation 2003/361/CE, from 06/May/2003, both concerning this theme. Those concepts were there defined and the goal was their use concerning inner community politics and also considering the European Economic Space politics.

In 1996 Recommendation (Table 1), after the relevant considerations, we can read the definition for small and medium enterprises (SME) concept, small enterprise and micro enterprise, according with criteria referred ahead:

- Employees number (main criterion, considered imperative);
- Annual turnover or annual balance sheet (financial criterion, as a needed complement);
- Independence (essential criterion).

The micro enterprises should not be confounded with the so-called incipient enterprises, which are still defined in a national basis, because of their specific characteristics.
Data were collected from singular or consolidated accounting, as we consider an autonomous company or associated companies, and they should be those from last fiscal exercise.

The number of employees matches with the number of persons that worked all the year in the company, just considering those working full-time.

Annual turnover means products or services sales value, naturally not including taxes, and total balance sheet should reflect enterprise global assets.

Turnover and total assets can be exceeded and the enterprise will not lose its qualification, except if the situation continuous over the following year.

Independent enterprises are those that are not owned by one or more companies, which are not SME, at least by 25% or more of their capital stock or vote rights.

### Table 1.

EU enterprises typology according with their dimension

<table>
<thead>
<tr>
<th>TYPE</th>
<th>VARIABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employees</td>
</tr>
<tr>
<td>SME</td>
<td>&lt; 250</td>
</tr>
<tr>
<td>Small enterprise</td>
<td>&lt; 50</td>
</tr>
<tr>
<td>Micro enterprise</td>
<td>&lt; 10</td>
</tr>
</tbody>
</table>

In conclusion we have SME if the number of employees is less than 250 and the turnover or global assets are, respectively, less than 40 millions of euros or 27 millions of euros. Simultaneously they can not be owned by more than 25% of capital stock or votes by non SME companies.

Considering the SME definition and included in this group we have the small enterprises, which are those with less than 50 employees and a turnover or global assets that are, respectively, less than 7 millions of euros or 5 millions of euros. Simultaneously they should be independent.

Out of these criteria the enterprises are considered non SME. However we can still have an autonomous group for those enterprises with more than 250 employees but less than 500 and with very strong market positions and very solid management structures in some or all functional areas.

Enterprises with more than 500 employees are considered large companies with recognized strong management structures and considering they have access to human, financial, technique and other resources not possible to be achieved by SME.

The Recommendation from 2003 (Table 2) aims clarifying the former inserted concepts. The European Communities Court interpreting the articles 48º, 81º and 82º of the Treaty considers an enterprise any entity that, independently of its juridical form, realises an economic activity, including those with a handicraft, personal or familiar, activity as also the associations that realise regularly an economic activity.

This is where the concepts of micro, small and medium enterprises converge. The Recommendation from 2003 defines more precisely the micro enterprise concept and reveals the concepts of autonomous, partners and associated enterprises.
Table 2.
EU enterprises typology according with their dimension (refined)

<table>
<thead>
<tr>
<th>TYPE</th>
<th>VARIABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employees</td>
</tr>
<tr>
<td>Media enterprise</td>
<td>&lt; 250</td>
</tr>
<tr>
<td>Small enterprise</td>
<td>&lt; 50</td>
</tr>
<tr>
<td>Micro enterprise</td>
<td>&lt; 10</td>
</tr>
</tbody>
</table>

Companies are considered autonomous if they are not owned by more than 25% by another enterprise. However we have an exception for this limit if the capital stock ownership belongs to business angels, because new enterprises are welcome and business angels have an important role advising new business men.

Enterprises that are partners among them are those owning stock capital in other ones without having a position of control. They are not associated enterprises but they can have alone or with associated enterprises 25% or more of stock capital or vote rights in other companies.

Associated enterprises have among them a relationship of subordination or relevant influence exercised autonomously by one of them, or settled with other entities. However it is imperative that these entities have their activity in the same market or in contiguous markets. These markets must be immediately before or after the relevant market.

An enterprise is not a SME if has more than 25% of its stock capital or vote rights under a public company control.

According with the Recommendation 2003/361/CE, from 6/May/2003, the medium enterprise has less than 250 employees and its annual turnover is less than 50 millions of euros or its balance sheet is less than 43 millions of euros. A small enterprise has less than 50 employees and its annual turnover or its balance sheet is less than 10 millions euros, in both cases. Micro enterprise is that one with less than 10 employees and its annual turnover or its balance sheet is less than 2 millions euros.

3. SME Relevance in Europe-19
Enterprises’ traditional theory usually says that economic growth was supported in economics scale, meaning static efficacy. Nowadays authors say that knowledge is really important in order to have efficient companies. Consequently the big companies’ relevance, considering economic development, is giving place to small and medium enterprises, with more flexible structures and more dynamics than the formers. The SME act as agents of change and give important contribution for value creation to all the society.

This new concept of evolutionist enterprise points to more dynamic and competitive markets. Value drivers are based on human resources skills and not on equipments and traditional technology.
In Europe-19 we had more than 19 million enterprises providing a job to almost 140 million persons. About 99.8% of those enterprises were SME and within this group over 90% were micro enterprises. It is known that approximately half of the micro enterprises provide employment and income to self employed and family workers. We are speaking about 9 million enterprises.

However labour productivity increases with enterprise size. According with the European Observatory Report the average value-added by employee of a micro enterprise is around 40,000 euros and in large companies this value increases around 3 times, to 120,000 euros. Maybe the explanation is the productivity or the fact that large enterprises are acting in different sectors of the economy, but we can also think about resources organization and optimization, management skills and number of tasks by person.

Another important fact is that most of small and micro enterprises are in retail trade, which has a lower labour productivity when compared with industrial sector. According with the same report when the comparison is made assuming the same industry structure for all size-classes the most part of the differences between small, medium and large enterprises disappear, remaining an important lag to micro enterprises.

Another reference is the weight of labour costs in value added, which is higher in SME and that is consistent with productivity lags.

According with Cabral (2007), we can say that Portugal has a similar situation with Europe-19 and European Union concerning firm size and firm size distribution but this evidence is not extensive to order variables, namely when speaking about productivity, which is lower in our country.

4. Indicators and Ratios

Considering the available information inserted in the 2003 Observatory of European SME we have the following indicators:

- Number of enterprises;
- Employment;
- Occupied persons per enterprise;
- Turnover per enterprise;
- Value added per enterprise;
- Value added per occupied person;
- Share of labour costs in value added;
- Profitability (gross operating surplus as percentage of value added).

Gross operating surplus is the difference between gross value added and labour costs, and it is considered a reasonable measure for profitability.

5. Empiric Study

Setúbal is a district located in the south of Lisbon and covers an area of more than 5000 km2. It is composed by thirteen municipalities and more than 712,000 inhabitants. Setúbal district has specific characteristics: heavy industries were dismantled, shipyards moved away, and the process induced severe changes that affected the quality of life and the cohesion of the social groups. Recently the delocalisation and the disinvestment are reaching the automotive cluster.
The capital of this district is Setúbal, a city in the middle south of Portugal, located at 50 km south of Lisbon, at the margins of river Sado. With a large number of resident populations this city has relevant industrial activity. Only in Setúbal city and its neighbourhood there are several important industries, namely a power plant (CPPE) fuel-oil fired, 1 GWe, a paper mill industry (PORTUCEL), a cement industry (SECIL) and a fertiliser factory (SAPEC).

The aim of our study is to analyse Setúbal’s SME comparing with the European Union ones in order to characterize its performance and propose measures that promote improvement in these enterprises, using the previous explained indicators.

In the year 2003 there were 26,277 enterprises in this region, 1,8% in primary sector, 21,8% in industrial sector and 76,4% in services sector. The whole sales of these companies were 13,748,289 thousand euros.

5.1. Sample Caracterization

A total of 37 micro-sized enterprises, 36 small-sized enterprises, 18 medium-sized enterprises and 4 large-sized enterprises, of Setúbal district, were analysed in our work considering the following variables:

- Occupied persons per enterprise;
- Turnover per enterprise;
- Value added (VA) per enterprise;
- Value added (VA) per occupied person;
- Share of labour costs in value added;
- Gross operating surplus.

These variables were chosen from 2003 Observatory of European SME Report in order to make possible a comparison basis between enterprises of Setúbal district and the European-19 enterprises average. The characterization of this sample according with the variables chosen is presented in Figure 1.
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% Occupied persons per size-class distribution

- Micro: 34%
- Small: 4%
- Medium: 46%
- Large: 16%

% Turnover per size-class distribution

- Micro: 56%
- Small: 2%
- Medium: 11%
- Large: 31%

% Value added per size-class distribution

- Micro: 70%
- Small: 2%
- Medium: 7%
- Large: 21%

% Labour costs per size distribution

- Micro: 57%
- Small: 2%
- Medium: 10%
- Large: 31%
This sample represents a turnover of €869,963,719 that means a share of 6.33% of turnover of Setúbal district. The sample was built considering the enterprises that usually cooperate with our students supplying information for several academic works and accepting them for probation.

5.2. Results and Analyses

Through 2003 financial reports analyses from 95 enterprises of Setúbal district it was possible to get the results presented in Graphics 1, 2, 3, 4 and 5. These results show the average of performance per size-class distribution.
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Considering the analysed indicators we notice that large enterprises show a better performance than SME, matching with the conclusions about European enterprises that we referred before.

Simultaneously we see that performance increases with enterprise size-class, once again as happened in Europe-19. Portugal belongs to old EEC and present EU since 1986, so we should expect these results.

In order to compare the results with European-19 enterprises the data were organized according with Table 3 and Table 4.

Table 3.
Comparing European micro-sized, small-sized and medium-sized enterprises with the ones in Setúbal district

<table>
<thead>
<tr>
<th></th>
<th>European Micro</th>
<th>European Small</th>
<th>European Medium</th>
<th>Setúbal district Micro</th>
<th>Setúbal district Small</th>
<th>Setúbal district Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupied persons per enterprise</td>
<td>3</td>
<td>19</td>
<td>98</td>
<td>5.7</td>
<td>23</td>
<td>127</td>
</tr>
<tr>
<td>Turnover per enterprise</td>
<td>440.000</td>
<td>3.610.000</td>
<td>25.680.000</td>
<td>480.485</td>
<td>2.595.291</td>
<td>14.846.383</td>
</tr>
<tr>
<td>VA per enterprise</td>
<td>120.000</td>
<td>1.180.000</td>
<td>8.860.000</td>
<td>171.992</td>
<td>614.788</td>
<td>3.705.179</td>
</tr>
<tr>
<td>VA per occupied person</td>
<td>40.000</td>
<td>60.000</td>
<td>90.000</td>
<td>28.921</td>
<td>27.650</td>
<td>27.578</td>
</tr>
<tr>
<td>Share of labour costs in VA</td>
<td>57%</td>
<td>57%</td>
<td>55%</td>
<td>46%</td>
<td>57%</td>
<td>59%</td>
</tr>
<tr>
<td>GOS per enterprise</td>
<td>22.5</td>
<td>40%</td>
<td>44%</td>
<td>53.9%</td>
<td>43.5%</td>
<td>10.3%</td>
</tr>
</tbody>
</table>

Table 4.
Comparing European SMEs and large enterprises with the ones in Setúbal district

<table>
<thead>
<tr>
<th></th>
<th>European SME</th>
<th>European Large</th>
<th>European Total</th>
<th>Setúbal district SME</th>
<th>Setúbal district Large</th>
<th>Setúbal district Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupied persons per enterprise</td>
<td>5</td>
<td>1052</td>
<td>7</td>
<td>37</td>
<td>432</td>
<td>53</td>
</tr>
<tr>
<td>Turnover per enterprise</td>
<td>890.000</td>
<td>319.020.000</td>
<td>1.550.000</td>
<td>4.158.718</td>
<td>122.880.101</td>
<td>9.157.513</td>
</tr>
<tr>
<td>VA per enterprise</td>
<td>280.000</td>
<td>126.030.000</td>
<td>540.000</td>
<td>1.046.056</td>
<td>55.651.085</td>
<td>3.345.196</td>
</tr>
<tr>
<td>VA per occupied person</td>
<td>55.000</td>
<td>120.000</td>
<td>75.000</td>
<td>28.508</td>
<td>128.822</td>
<td>62.718</td>
</tr>
<tr>
<td>Share of labour costs in VA</td>
<td>56%</td>
<td>47%</td>
<td>52%</td>
<td>57%</td>
<td>31%</td>
<td>39%</td>
</tr>
<tr>
<td>GOS per enterprise/VA</td>
<td>23.4%</td>
<td>52.5%</td>
<td>23.4%</td>
<td>10.8%</td>
<td>31.1%</td>
<td>22.3%</td>
</tr>
</tbody>
</table>
Referring Table 3 we have the comparison inside the three classes of SME. Here the performance of Setúbal enterprises can be considered good enough for micro enterprises, showing fragilities concerning VA per occupied person, meaning productivity, and weight of labour costs in VA, because we have lower wages.

Considering the small enterprises and medium enterprises the performance of our region is almost always worse than the European average.

We can not forget that a micro enterprise trading heavy equipments can have a good turnover with a low value added, and that happens in one or another case, improving the performance of average turnover. As in Europe we have in Portugal many micro enterprises that consist in self employed and family workers.

The question of value added per occupied person is the Portuguese main problem and it matches with national studies about productivity.

Looking now to Table 4 and considering occupied persons per enterprise we notice that in Europe, even including large enterprises, a company provides employment to 7 persons and in Setúbal district this value rises to 53 persons. If we just consider SME enterprises we have an average of 7 employees in Europe-19 and 37 in Setúbal.

Additionally we see that in Setúbal, according with our sample, SME are responsible for the main bulk of employment creation (66,1%) and large enterprises give employment only to 33,9% of total occupied persons. That means that most jobs in Setúbal are created by SME enterprises.

Concerning turnover the performance of Setúbal district SME is considerably higher than European enterprises, almost 4,7 times more. Regarding large enterprises it is possible to verify the inverse. This means that European large enterprises generate in average 2,6 times more turnover comparing with the ones from Setúbal district. So the Setúbal region advantage is the SME.

We can not forget that our sample has too much medium enterprises and the proportion between the three classes of SME is not translated as Portuguese and European reality. This is an important limitation of our study and it links with the way we built the sample. That is why we have a good value added per enterprise in SME.

However VA per occupied person and profitability are lower in both situations, SME and large enterprises.

6. Conclusions
Considering the information and data we have got, and the limitation of our study, as explained before, we can conclude that:

1. It is relevant the probability that the sample we work with is not really representative of the region and maybe the enterprises available to work with academics are some of the best in the district;

2. Considering this sample the performance of the enterprises, as a whole, is very acceptable comparing with Europe-19 enterprises;

3. The employment role of SME in Setúbal is higher than in Europe, but the human resources are not managed in an optimization perspective, and we have serious problems with productivity;
4. Human resources productivity is a national problem, and our region is not an exception; 
5. It seems that Setúbal SME are essentially based on human resources and not technology.

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