1. ABSTRACT.

The economic globalisation process has modified the productive activity, increasing the level of rivalry among firms. In order to respond successfully to this new situation, firms must maintain a high level of competitiveness. The expression *competitiveness* is the done thing, with the implicit meaning of progress and improvement, even though it is not easy to find an agreed definition of this term.

Many authors have discussed this issue in detail. According to Pérez (2001), there are four factors that determine a firm’s success: the region where it is located, its sector, the cluster and its own resources. However, other authors think that the determining factors of a firm’s success or failure are its resources, capabilities and strategies.

After considering the two main approaches, microeconomic and macroeconomic, this research has focused on the second one, distinguishing, at the same time, between internal and external approach. Some of the models proposed within the external approach are the most widely accepted by the scientific community. The analysis of the geographical variable – as basis of the synergic performance of firms and established organizations in a determined environment, *the cluster*, - has been considered as part and development of the competitive strategy.

Finally, both approaches are contrasted, and a preliminary theoretical model -based on the suitability of the two main tendencies at the moment- is proposed. This initial model will be contrasted in future researches.
2. APPROACH AND BACKGROUND

Several authors state competitiveness is a very localized process, based on groups of firms organized around one or several related industries that converge (Porter, 1985, 1998, Grant, 1996b, Mintzberg and Lampel, 1999). Others state that a firm’s strategy should be based on its resources and internal capabilities, and that these factors prevail over the market (Grant, 1996b).

In accordance with Grant (1996b), firms should be competitive basing their strategy on endogenous factors. A firm’s capability of response requires deep knowledge about the environment; but also about the management’s function and up to which degree the organization’s culture affects the firm’s profitability and return.

The resources and capabilities approach (Wernerfelt, 1984, Peteraf, 1993, Hamel y Prahalad, 1994) arises as a reinterpretation of the firm’s environment, introducing the firm’s internal organizational system, as aspects to take into account when considering the causes of a firm’s profitability.

Even though these two approaches, the external or environmental and the internal one have been focused as different alternatives for the study of an industrial sector, other authors think they complement each other (Henderson, 2000). The first one focuses on the sector’s structure, while the second one focuses on the fact that a firm’s capabilities (abilities, investment, knowledge, etc) allow its right performance, constituting the basis of its competitive advantage.

Figure 1 describes the outline of the review of the state of art of the arose question, although this paper will only focus on the microeconomic approach.
Figure 1.- Theoretical Frame Structure

COMPETITIVENESS
Concept & Definitions

Macroeconomic Approach

Microeconómico Approach

Exogenous Variables

Endogenous Variables

SWOT
5 FORCES

Geographical concentration

Resources / Capabilities

APPROACHES CONTRAST

PRELIMINARY THEORETICAL MODEL

Source: Our own.
3. THEORETICAL FRAME REVIEW.
3.1. COMPETITIVENESS, CONCEPT AND DEFINITIONS.

According to Cuervo (1993), there are three levels of analysis in a firm’s competitiveness research: the general economic frame, the industry, and the firm.

A firm’s competitiveness is determined, firstly, by external variables – depending on the country and on the industry – and, secondly, by the firm’s performance in the resource and capabilities constitution process; finally, firms’ heterogeneity would be also another cause of each firm’s sustainable competitive advantages and results.

The definition of competitiveness has been evolving along time. Cohen, Teece, Tyson y Zysman (1984) affirm international competitiveness is based on productivity and, therefore, on an economy’s ability to move products towards activities with a higher productivity.

According to Scott (1985), a country’s competitiveness consists of its ability to produce and distribute goods and services in an open international market. By these means, the country’s level of life should be increased. On the one hand, this definition refers to internationalization, to the setting-up of competitors’ limits in an open and international market; on the other, it refers to growth, to how competitiveness is determined by the improvement in the level of life.

Porter (1990, 1991) states competitiveness consists of producing goods and services with a higher quality and at a lower cost than national and international competitors. This implies higher benefits for a nation because the real income is kept and increased. This author introduces quality and price as basic differentiating factors to produce goods and services in the international market. The way to increase competitiveness is by means of productivity (basic determining factor of a country’s level of life in the long run).

Bueno (1995) thinks the term competitiveness derives from competence, with the meaning of “possibility to match two things in their perfection or in their properties” or “grade of economic rivalry in a market or the competitors’ performance in the market”. Therefore, according to this author, competitiveness is an economic agent’s ability to compete.

Hatzichronoglou (1996) defines competitiveness as the ability of firms, industries, regions or supranational areas to generate high levels of income and employment. All this with a solid base and exposed to the international competence.
3.2. MICROECONOMIC APPROACH.

The researches carried out tried to determine why some industries had more profits than others, and considered the structure of the firm’s industry as the main factor that determines profitability, according to Claver, Molina and Quer (2000). These researches studied in depth aspects such as industrial concentration in order to explain why some industries had more profits than others (Powell, 1996).

According to Cuervo (1993) and Fernández (1993), when firms’ successful performance and the specific characteristics of their industry were related, the concepts of strategic groups (McGee and Thomas, 1986), entry barriers, mobility, grade of rivalry, and power of negotiation with clients and suppliers (Caves and Porter, 1977; Porter, 1980) were introduced to explain satisfactory results.

Porter’s competitive analysis in his several works is a translation of the models proposed by industrial economics (Fernández, 1993), although, in some aspects, it moves away from traditional industrial economics. Porter thinks an industry’s characteristics are not stable, but depend on the performance of the firms belonging to the industry. While the structure of the industry is still in a privileged position in his model of analysis (which reflects the previous theories about industrial economics), Porter also thinks the activities developed by the firm, and the decisions it takes regarding the strategic line to follow are really important. Thus, he develops a dynamic theory (Porter, 1991) to analyse the basic factors that sustain an industry’s competitiveness.

3.2.1. THEORY OF RESOURCES AND CAPABILITIES.

The “Theory of resources and capabilities” focuses on the existing heterogeneity among firms belonging to the same industry. Firms are pools of unique resources and capabilities, which are the basis of competitive advantages (Penrose, 1959, Wernerfelt, 1984, Barney, 1991, Peterfaf, 1993).

Wernerfelt (1984) defines resources as “anything that can be considered as a firm’s strength or weakness” and as “those tangible and intangible assets semi-permanently related to the firm”. Amit and Schoemaker (1993), Black and Boal (1994), Grant (1991, 1993, 1996) define them as inputs or available factors by means of which firms carry
out their activities and tasks; even though not all resources confer a competitive advantage, but only the ones that fulfil some specific conditions (Barney, 1991).

Taking into account resources’ generic meaning and these characteristics, Barney (1991) defines resources as the tangible and intangible assets that a firm chooses in order to implement its strategy. Several authors have classified them:

According to Suárez (1994), resources are classified as tangible and intangible. The first ones include physical and financial resources, and the second ones are related to information. See table 1.

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<th>RESOURCE</th>
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<td>FINANCIAL</td>
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<tr>
<td>RELATED TO INFORMATION</td>
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### Table 1: Classification of resources according to Suárez (1994)

According to Hall (1993), intangible resources can also be classified as defined and protected (that can be materialised or regulated), like for example, licenses, patents, or brand names; and non-defined or positional, like the firm’s culture, knowledge, skills and capabilities, data basis, etc. See table 2.

<table>
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<th>RESOURCE</th>
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<td>REGULATED</td>
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<tr>
<td>NO REGULATED</td>
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</tbody>
</table>

### Table 2: Classification of resources according to Hall (1993)

Hamel and Prahalad (1990) think that a firm’s basic competencies are produced by its capabilities and skills. Capability refers to an aptitude or talent for a good performance and skill refers to the ability to performance or to carry out an activity.

Bueno (1995) proposes to associate the capabilities with the organisation, and the skills with people. In the same line, Prahalad and Hamel (1990) indicated that a firm’s basic competencies “result from the organisation’s collective learning, especially those related to the way in which the different production techniques are co-ordinated, and to the way in which the different technological currents are integrated”.

According to Amit and Schoemaker (1993), capability is the way in which a firm deploys its resources. Capabilities are based on the development, flow, and interchange of information among the members of the firm (Amit and Schoemaker, 1993). They are complex sets of organizative routines, hierarchically organised, that determine what to do and how it should be done (Nelson and Winter, 1982). They are characterised by their intangible and collective nature.

Vargas (2000) believes there has been a considerable improvement in determining why certain resources, once they have been acquired, can be the source of a sustainable competitive advantage. However, he thinks the identification of how firms acquire those resources for the first time has not improved until quite recently. The accumulated knowledge along a firm’s history influences on its ability to calculate, in the right way, the value of its new resources and capabilities (Teece and Pisano, 1994; Cohen and Levinthal, 1990) and/or to reconfigure the existing ones (Teece et al, 1997) in order to face a turbulent or uncertain environment. In this dynamic approach, aspects such as the acquisition of skills, knowledge, learning and the accumulation of “invisible” assets (Itami, 1994; Teece, Pisano and Shuen 1990, 1997) become relevant strategic aspects.

Teece, Pisano and Shuen (1997) state - taking into account Prahalad and Hamel (1990), Majoney (1995) and Nelson’s (1994) previous ideas - that the approach about dynamic capabilities expounds that firms compete according to their product’s quality and design, to their processes’ efficiency, or to their organizative innovation. These firms develop new combination of resources, while competitors try to improve their capabilities or try to imitate the best competitors (Teece, Pisano, Shuen, 1997).

Capabilities are, in essence, knowledge. Organizations are, like people, limited to what they know how to do well. The firm’s existing knowledge about physical capital and about human capital is basic.
3.2.2. EXTERNAL ANALYSIS

Porter (1990, 1991) affirms that the only significant concept of competitiveness, at an international level, is productivity (Porter, 1990), which is a fundamental determinant in a country’s level of life in the long run, the fundamental cause of a country’s income, a *determinant* in the employees’ salaries and in a firm’s *performance*.

According to Michael Porter’s defined model (1990, 1991) there are four factors that directly influence on the sectors’ competitiveness. Figure 2 represents Porter’s Diamond or the Poker of Aces model:

*Figure 2- Porter’s Diamond model.*

These four factors are interrelated, each one affects the others, comprising a performance dynamic system. Table 3 describes these factors:
Table 3. The national Diamond

<table>
<thead>
<tr>
<th>THE NATIONAL DIAMOND</th>
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</thead>
<tbody>
<tr>
<td>Factors’ conditions</td>
</tr>
<tr>
<td>Existing or created factors’ validity, specialisation, and quality; specialised human resources, research centres, appropriated financing systems, etc.</td>
</tr>
<tr>
<td>Demand’s conditions</td>
</tr>
<tr>
<td>Clients’ needs define demand, regarding quality, innovation, service, grade of knowledge about the product, etc.</td>
</tr>
<tr>
<td>Interrelated and auxiliary sectors</td>
</tr>
<tr>
<td>Specialised suppliers, competitors, firms and institutions that follow complementary research lines.</td>
</tr>
<tr>
<td>Strategy, structure and rivalry</td>
</tr>
<tr>
<td>The firm’s organizative system, the adopted management system, the organization’s innovating or exporting orientation, the firm’s culture, the competitive environment.</td>
</tr>
</tbody>
</table>

Source: Porter (1991)

On the other hand, the SWOT analysis, *Strengths, Weaknesses, Opportunities, and Threats*, (Ansoff, 1965, Weihrich, 1982, Andrews, 1987), was used at first to formulate the firms’ strategies, although later on it was used as a conceptual frame for the competitive analysis of firms, sectors and even countries.

According to this model, the development of a strategy requires a systematic analysis of the *Strengths and Weaknesses* of the studied system, which operates in a wide external environment with *Opportunities and Threats* for the system. These four factors are represented in the SWOT Matrix, in Table 4.
### Table 4. SWOT Matrix

<table>
<thead>
<tr>
<th>INTERNAL FACTORS</th>
<th>INTERNAL STRENGTHS (S)</th>
<th>INTERNAL WEAKNESSES (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTERNAL FACTORS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXTERNAL OPPORTUNITIES (O)</td>
<td>S-O Maxi-Maxi</td>
<td>W-O Mini-Maxi</td>
</tr>
<tr>
<td>EXTERNAL THREATS (T)</td>
<td>S-T Maxi-Mini</td>
<td>W-T Mini-Mini</td>
</tr>
</tbody>
</table>


### 3.2.2.1. GEOGRAPHICAL CONCENTRATION

Porter (1980, 1985, 1990, 1998) has been the contemporary author that has paid more attention to the influence of firms and industry’s external aspects on firms’ competitiveness.

This author (1985) highlights the importance of obtaining a *competitive advantage* as the basis to successfully overcome the changing conditions of the environment. The author raises the question of how competitive advantages should be obtained and kept. Porter (1990) describes the role played by the environment, by the institutions, and by a country’s economic policies in the competitive success of some industries. He introduces a model of research widely used, later on, by the scientific community: *the diamond* (figure 2). From this point, he starts to pay more attention to what he calls *cluster* (1998).

Porter (1990) and Krugman (1991a, 1991b) have develop the essence of contemporary economic literature about *clusters*. They are the first ones to consider geographical concentration as the key question for competitiveness and market research, although many authors had already written about geographical localization (Marsall, 1890, Brusco, 1982).
Porter (1998) defines cluster as the geographical concentration of interrelated firms and institutions. This includes competitors, suppliers, clients and associations, which combine competitive and cooperative behaviours.

According to Krugman (1991a, 1991b) there are three regional factors that influence on a firm’s performance:

- That firms’ basic resources and capabilities, in order to be competitive at the international and interregional level, can be found in the region.
- That other regional clusters develop activities that can be shared by firms belonging to the cluster.
- That firms’ strategic options can be influenced by information transfer and by the combination of competence and cooperation that can be found in regional clusters.

Baptista (1998), too, thinks geographical concentration is a very important factor. Concentration facilitates interchange and cooperation among research centres, clients and suppliers from the region, and promotes research within the industry. On the other hand, the concentration of specific activities in a specific area attracts specialised knowledge.


Krugman’s work (1991a, 1991b) focus on the interaction between market structure and economic geography. According to this author, “geographic concentration is a fact that most evidences economic activity” (Krugman 1991a). Krugman’s ideas reconsider Marshall’s (1890) statements. According to Marshall, there are three reasons for industrial concentration:

- **Labour force;** the concentration of an important number of firms belonging to the same industry in the same area gathers workers with the same skills and knowledge. This situation benefits both sides, workers and firms,
facilitating the occupation of vacant jobs, and minimizing the effects of the economic-productive cycles. Krugman (1991a, 1991b) demonstrated that this situation is very positive, independently of the way in which this “labour force” is organised (Baptista, 1998).

- **Intermediate factors;** a located industry can include a greater number of specialised local suppliers, both regarding specific goods as well as services, which results in a greater variety at a lower cost.

- **Technological externalities;** if the information about new technologies, products and processes flows easily in a local area, the firms located in that industrial pole benefit themselves from the positive externalities. This would be more difficult if the firm was not located in that specific area.

Besides the advantages of geographical proximity, such as reduction of good and transport costs (Marshall, 1890) and concentration of qualified workers and a variety of suppliers (Krugman, 1991), some of the most important advantages are produced because the members are integrated in a strong social net.

Porter (1998) states many advantages of a cluster depend on physical proximity, on personal contacts, on the relationships within the cluster, and on the accessible information.

Proximity and the informal social net facilitates the transfer of specific; technological knowledge (Aufdretsch y Feldman, 1996, Baptista y Swan, 1998), knowledge about the clients’ preferences (Von Hippel, 1988), and about the processes (Helper, 1990, Saxennian, 1996).

### 3.3. APPROACHES CONTRASTING

Several authors have tried to contrast both theories with the main goal of determining a firm’s influence on an industry or vice versa.

Rumelt (1991), determines that the firm’s or business’s influence is more significant than the industry’s. Claver, Molina and Quer (2000) also stress that there are more differences among the firms belonging to the same sector than among sectors themselves.

and Vecino (1997), Claver, Molina and Quer (2000) have written about this issue. These researches empirically justify the evidence that firms belonging to the same industry may differ in their performance regarding profitability and competitiveness, taking into account the theory about resources and capabilities. The sector's factors will influence, too (Claver et al., 2000, McGahan and Porter, 1997, Hansen and Wernerfelt, 1989, Mauri and Michaels, 1998); but in a lower degree than each firm’s resources.

Priem and Butler (2001a and 2001b), Henderson (2000), Foss (1997a, 1997b), Bueno (1995) and Schoemaker and Amit (1994), among others, consider the Theory about resources and capabilities and the environment research models, like Porter’s Diamond (1991), or the SWOT model (Strengths, Weaknesses, Opportunities, and Threats) as complementary approaches to understand, create and maintain competitive advantages that allow firms to obtain extraordinary profits. However, these authors also recognise this field of research is still developing.

3.4. PRELIMINARY THEORETICAL MODEL

Figure 3 represents the model of the proposed competitive analysis. Our model of analysis of competitiveness would be based on the ideas about an industry’s competitiveness proposed by the theory of resources and capabilities, applied to a specific context – an industry. However, taking into account several researches’ recommendations about entrepreneurial competitiveness, we propose an hybrid model, complemented by the external approach, and analysing, concretely, the synergic industrial performance.
Figure 3: Preliminary model of the competitive analysis
4. CONCLUSIONS.

This model has been contrasted in the home furniture industry of the Valencian Community in Spain. We intend to use it as a development tool for the regional growing of our Community-

5. REFERENCES.


