# TOP MANAGEMENT TEAMS IN THE SPANISH GLOBAL BUSINESS ENVIRONMENT: AN EMPIRICAL STUDY

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**Abstract:**
The use of top management teams is expanding in response to the turbulence and complexity of the global business environment (Cohen and Bailey, 1997). To perform well among growing competition greater efficiency is required and top management teams bring not only more resources into the organization but also different kinds of skills and knowledge to success it.
Top management teams are very common and crucial subject of study in North American researches. Nerveless, in the Spain context exist a big empty in the literature. This absence is the main motivation for the current study.

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## INTRODUCTION

Firms today are facing an increasingly competitive and changeable environment due to economic instability, globalization, and troublesome technologies. The use of top management teams (TMTs) is expanding in response to this turbulence and complexity of the global business environment (Cohen and Bailey, 1997).

It is more common today that instead of one manager (managing director) there may be a group of managers in organizations (Nadler, 1998; Belbin, 1996; Murray, 1989). Running an enterprise today requires more resources than one person can offer. Be in impossible to deal with all rapidly increasing amounts of data and the complexity of the global economy, top managers are forced to deal differently the management of a firm.

Top executives have a significant effect on their firms. Management teams bring not only more resources into the organization but also different kinds of skills and knowledge.

Management teams run great numbers of firms and almost all institutions (Belbin, 1996). Nerveless, most common they are in large firms, where the size of the firm requires several managers, and where the firm's performance demands multiple skills, judgments, and experiences.

A great deal of organizational theory and literature support the significance of management teams and perceives them crucial in firms. Successful firms are often a result of effective teamwork, share among individuals representing diversity of skills and experiences. At the top of the firm, the management teams establish the firm's strategic

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direction and manage its performance (Cohen and Bailey, 1997). A management team not only performs the strategic management function of maintenance, but also can look to the future with a vision of new opportunities (Lester et al, 2002).

By the before reasons, we consider that the study of TMTs is an important phenomenon to research. Moreover, our research is the first that study it in our country.

Top management teams are very common and crucial subject of study in North American studies. Nerveless, in the Spain context exist a big empty in the literature. The scholars studies the relations between top managers and other enterprises variables (performance, growth, innovation…) but only a few studies have studied the composition, the reality of the top management team since inside. This absence of previous empirical research about top management team in the Spain environment is the main motivation for the current study.

Our research has been done across two big phases. In the first phase, we are served an analysis factorial. The intention of the same one is the summary and the reduction of the information of our sample. A reduction through factors that it us will be of great usefulness in the second phase of the investigation. In this one, taking as a reference the results reached in the previous steps, we analyze the top management teams (TMTs) of 157 big companies of different countries of our environment with business in Spain, using for it the analysis cluster. We will add in this respect that, if at beginning of this research the top management teams are analyzed depending on the managerial demographic heterogeneity, nevertheless, later, this analysis is completed from the study of the same ones taking other not demographic magnitudes as a reference. We believe with it contributes a more faithful vision of our question object of study.

## TOP MANAGEMENT TEAMS (TMTs): CONCEPT, BACKGROUND AND RELEVANT LITERATURE

A term “top management team” is typically used when talking about big firms where operate many management teams at different level, and when it is considered the highest level of management team. There are very definitions that try to narrow that firm reality. So, for example, Katzenbach and Smith´s (1993: 45) well-known definition of team describes it as “a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they

hold themselves mutually accountable". By the other hand, Tosi et al (2000: 223) establish that: "Team is a special form of a group that has highly defined tasks and roles and demonstrates high group commitment". Cohen and Bailey (1997: 240) define team as "a collection of individuals who are interdependent in their tasks, who share responsibility for outcomes, who see themselves and who are seen by others as an intact social entity embedded in one or more larger social systems, and who manage their relationships across organizational boundaries". Longenecker et al (1994: 215), Van Egeren (1984: 18) are agree in that the top management team is a team of managers and other key persons who give a firm its general direction and specialize in running the business. Clark and Smith (2002) believe that management team is a relatively small number of managers who are involved in the key decision making of the firm. McIntyre (1998) and Cohen and Bailey (1997) suppose that top management team as a synonym for executive team. George and Jones (1999: 10) agree that "top management team is a management team on the top, which is responsible for giving an entire firm and coordinating all major functions so that the firm can archive its goals".

Precious studies widely have considered the high importance of these top management teams for the firms. "At the top of the firm, the top management team establishes the firm's strategic direction and future success, manages its performance and affect people both inside and outside firm" (….). Further, since Chester Barnard´s (1938) there are a lot of works that they study the behaviour of these groups of executives. A management's behaviour that, frequently, is analyzed in relation with the firm's results, directly or indirectly though the use of strategic variables. So, in this sense, Lohrke et al. (2004: 63) establish that: "it is generally recognized that a firm's top management team takes on particular importance during periods of declining performance. To be successful in such situations, a top management team must quickly and accurately determine the cause of a firm's performance lapse and implement decisions necessary for its prompt recovery (i.e. turnaround)". Alderson and Kakabadse (1993) manifest that top team is crucial because it is the key forum for strategic dialogue. Adner and Helfat (2003: 1012) consider that, TMT´s sources refer to the skills and abilities that managers employ to 'build, integrate, and reconfigure organizational resources and competencies'. Lohrke et al (2004: 79) suggests that the degree of environmental change may be critical in determining whether a TMT´s skill-set is sufficient to reverse a firm's decline. "Specifically, whereas less radical change may preserve the value of

current TMT resource, major environmental changes may make the same resources obsolete".

The research centred on the top management teams finds its maximum reference in the works assigned to the Upper Echelon Theory. This perspective has become increasingly popular in the years since Hambrick and Mason´s (1984) work. An important issue in the study of TMTs is the effect of compositional diversity. Work in the areas of group composition and relational demography has shown that dissimilarly among team members can affect team processes and outcomes (Wagner et al, 1984; Smith et al, 1994). Some such effects are desirable. For instance, diversity is thought to enhance creativity (Bantel and Jackson, 1989; Wiersema and Bantel, 1992), to obtain the better the long-term performance (Murray, 1989), to innovation (Bantel and Jackson, 1989) or to improved overall decision making effectiveness (Amason, 1996; Jehn, 1995). At the same time, other effects are undesirable: less communication and less share information (Priem, 1990; Zenger and Lawrence, 1989), more conflict, diversification posture and fewer consensuses in decision making (Michel and Hambrick, 1992).

This importance of the top management teams´ demographic characteristics on the organizational results leads us to realizing a first analysis of the top management teams of our sample depending on their demographic diversity. By the other hand, there are too others identifiable effects of TMTs on the organization magnitudes, specially on the strategic variables, that they has been discussed by many authors, for example: strategy, firm growth, strategic change, executive turnover, firm size, strategic planning or decision making (i.e. Ensley et al, 2002, Glunk et al, 2001; Amanson et al, 1995, Smith et al, 1994; Finkelstein and Hambrick, 1996). By this reason we consider that it's very important to complete this study of the TMTs analyzing them though another non-demographic magnitudes.

## EMPIRICAL STUDY

## METHOD

### Sample

Our sample is constituted by 157 top management teams from big firms with business in Spain. The choice of this universe is considered fundamentally appropriated for two reasons. It is enough wide to obtain an acceptable comprehension of our object of study: the TMTs. Also, is the major number of the complete top management teams

that we have get obtain attending to the limitations of this research: principally the absence of base of dates solidly established about demographic characteristics and the presence of the LORTAD (Organic Law 5/1992 of 29th October of regulation of the automated treatment of the information of personal character). To obtain data for this study, a survey was carried out. The survey method is consistent with similar studies reported in the literature. Moreover, we used meanly secondary sources. So, by one hand, in relation with the demographic indicator we used many resources, for example specializing magazines, pages webs of the analyzed companies or yearbooks, between other. By the other hand, in relation with non demographic indicator we obtain information from two powerful bases of information consolidated enough: System of analysis of Iberian Balances (SABI) and the National Commission of the Stock Market (CNMV).

**Data analysis**

Factor analysis and cluster analysis were used to analyze the data. The use of these statistical techniques is consistent with Black and Porter (1996). The variable used in this study as demographic indicators and no demographic indicators are consistent with the literature existent (i.e. Kimberly and Evanisko, 1981; Finkelstein y Hambrick, 1990; Wiersema y Bantel, 1992; Pegels et al, 2000; Carpenter y Fredrickson, 2001).

**Demographic indicators**

▪ Age heterogeneity, it manifests the diversity in the age that there presents the member of top management teams and was calculated from the employment of the Coefficient of Variation of Allison (1978).

▪ Educational background heterogeneity tries to gather the educational diversity that the TMTs have. We have used in order to reach a major comprehension of the same one tree indicators. First, Educational level heterogeneity, reflects the diversity that TMTs presents in relation with the educational level of its top managers. Second, Educational speciality heterogeneity = show the diversity that TMTs presents in relation with the educational speciality (i.e. Arts and Humanities, Business, Mathematics …). Third, Educational international heterogeneity, manifests the diversity of the TMTs in relation with the international character of the studies delayed by the top managers.
In the measurement and later analysis of all of them there has been used the Coefficient of Variation of Allison (1978).

▪ Tenure firm heterogeneity was calculated in function of the antiquity in the firm of the top managers. This indicator exhibits the diversity that TMTs show at this sense. We have applied the Coefficient of Variation of Allison (1978).

▪ International experience heterogeneity shows the diversity of the professional functions of the TMTs across three indicators. First International experience heterogeneity. In relation with this indicator we will add that for its calculation we have applied the Index of Blau (1977) on the added value of a categorical indicator in which from nine categories there are gathered the different degrees of international experience that each members of the TMTs present. Second, Top management team international work experience, an indicator used by Carpenter and Fredrickson (2001), by others. Third, number of years of international experience heterogeneity, an indicator studied across the CV Allison (1978) who evaluates the international diversity of the TMTs depending on the difference that their members present attending to the number of years during which they have exercised managerial functions of international character.

▪ Functional Background heterogeneity tries to reflect the diversity that TMTs have in relation with the tasks, functions that top managers play in the company. In this case we have been served of four indicators. First, Professional background heterogeneity, in that from the employment of Blau's Index on the value added of a dichocotomy variable try to gather the diversity of the TMTs in function of the professional experience of the top managers in different sectors of activity. It was calculated from Blau´s Index (1977). Second, Specialization in the firm's area heterogeneity, study of the diversity of TMTs in relation with the degree of the specialization in the firm tasks that top managers play in the firm and was calculated though Blau´s Index (1977). Third, Professional trajectory heterogeneity, once again it was calculated from the Index of Blau (1977) and we try to gather the diversity of the TMTs in relation with the degree of ascent or promotion that top managers have experienced during their professional path in the firm. Fourth, Tenure post heterogeneity reflects the diversity of the top managers in relation with the antiquity in the job. Unlike other indicators used to analyze functional background heterogeneity, this indicator was constructed using the CV of Allison (1978).

**Non Demographic indicators**

▪ Industrial Sector, were ascertained for the four-digit SIC industry representing each firm's dominant line of business realized by Commission National Enterprise Activities (CNAE).

▪ Character international of the firm, was measured attending to a dichotomical indicator builds in function the firm's nationality.

▪ TMTs´ composition was calculated though the Carpenter y Fredrickson´s (2001) indicator: top management turnover from 1999 to 2001 (our period of research).

▪ Size Firms was analyzed following to Daily and Dalton (1995) though two indicators: the variation in the investment and the variation in the number of employees from 1999 to 2001.

▪ Strategic change's dimensions as Finkelstein and Hambrick (1989) this indicator was calculated by Strategic variation index 99/01 and Strategic deviation index 99/01.

▪ Firm Performance was measured, following with Denis and Denis (1995), between others, through three indicators: as the average return on assets (ROA), return on sales (ROS) and variation on sales from 1999 to 2001.

## RESULTS

### Results of factor analysis

The factor analysis using the varimax method and eigenvalues greater than one criterion resulted in the extraction of five factors (see table I and II). These factors explained 68.577 percent of the total variance. Some finds enough satisfactory following Hair et al (1999) to Science Social.

**Table I: Results´ Varimax Method**

| Factors | | Eigenvalues | Variance | |
|---|---|---|---|---|
| | | | % | Accumulated % |
| **F1** | **FHEDUCATION** | 2,708 | 20,833 | 20,833 |
| **F2** | **FHINTERNATIONALEXP** | 2,096 | 16,123 | 36,956 |
| **F3** | **FHFUNTIONALBACKGROUND** | 1,883 | 14,487 | 51,443 |
| **F4** | **FHTENURE** | 1,215 | 9,350 | 60,793 |
| **F5** | **FHTRAJPROFAGE** | 1,012 | 7,784 | 68,577 |

**Table II: FACTOR ANALYSIS RESULTS**

| Factors | Loading | Comunanimity |
|---|---|---|

| | | |
|---|---|---|
| **FACTOR 1 (FHEDUCATION):**<br><br>• Educational level heterogeneity<br>• Educational international heterogeneity | <br><br>0,784<br>0,926 | <br><br>0,649<br>0,862 |
| **FACTOR 2 (FHINTERNATIONALEXP):**<br><br>• International experience heterogeneity<br>• Number of years of international experience heterogeneity<br>• Top management team international work experience | <br><br>0,925<br>0,962<br>0,685 | <br><br>0,883<br>0,940<br>0,555 |
| **FACTOR 3 (FHFUNTIONALBACKGROUND):**<br><br>• Professional background heterogeneity<br>• Specialization in the firm's area heterogeneity | <br><br>0,844<br>0,760 | <br><br>0,726<br>0,600 |
| **FACTOR 4 (FHTENURE):**<br><br>• Tenure firm heterogeneity<br>• Tenure post heterogeneity | <br><br>0,838<br>0,775 | <br><br>0,731<br>0,708 |
| **FACTOR 5 (FHTRAJPROFAGE):**<br><br>• Age heterogeneity<br>• Professional trajectory heterogeneity | <br><br>0,667<br>0,696 | <br><br>0,576<br>0,613 |

**■ Factor 1: FHEDUCATION**

We have named it FHEDUCATION because variables relative to the formation heterogeneity of top managers formed part of the same one. Concretely, level and international educational heterogeneity of this top managers.

An a bit more exhaustive analysis of the significant loading of this factor to common variance allows us to see how increases in the educational level heterogeneity of top managers are according with increases in their educational international heterogeneity.

**■ Factor 2: FHINTERNATIONALEXP**

As can be seen from the results in table II, this factor loads significantly on three demographic variables: international experience heterogeneity, heterogeneity in the number of years of international experience of the top manager and work international experience heterogeneity. This loadings show too that these previous demographic variables move themselves in the same sense.

■ **Factor 3: FHFUNTIONALBACKGROUND**

This factor consists of two significant variables: Professional background heterogeneity and specialization in the firm's area heterogeneity. These demographic variables behave, once again, following the same trend of growth.

■ **Factor 4: FHTENURE**

The demographic variables that constitute it: firm tenure heterogeneity and functional firm tenure heterogeneity, they move in the same sense. By them, increases in the heterogeneity of the functional firm tenure of the top managers are corresponded by increases in the tenure heterogeneity in the company of these managers.

■ **Factor 5: FHTRAJPROFAGE**

Factor 5 is characterized, unlike the previous ones, by two demographic variables non similar: age heterogeneity and professional background heterogeneity of top managers.

The analysis of the loading it allow us to establishing that the heterogeneity in the age and in the professional path of the members of TMTs following the same trend of growth or decrease.

**Results of Clusters Analysis**

"Probably the most disconcerting matter for the investigator who uses the analysis of conglomerates (cluster) is the determination of the final number of conglomerates to forming (also known as rule of stop). There isn't, unfortunately, an objective or standard procedure" (Hair et to, 1999: 515). To save this difficulty, in this work we have considered to be opportune, coinciding with Milligan (1980) or Hair et al (1999), to use a combination of hierarchic and not hierarchic procedures. We manage of this form to take advantage of the benefits of each one of these statistical methods.

After realizing the analyses described before, we think that, inside the range of possible options that was suggesting us the hierarchic cluster (from 3 to 5 conglomerates), the option of 4 clusters proposed by the analysis cluster not hierarchically, it was the ideal one. Our election comes determined for: 1) Matrix of distances among final conglomerates, 2) Kruskal-Wallis H Test and 3) Matrix of distances of every individual to the gravity's centre of your group.

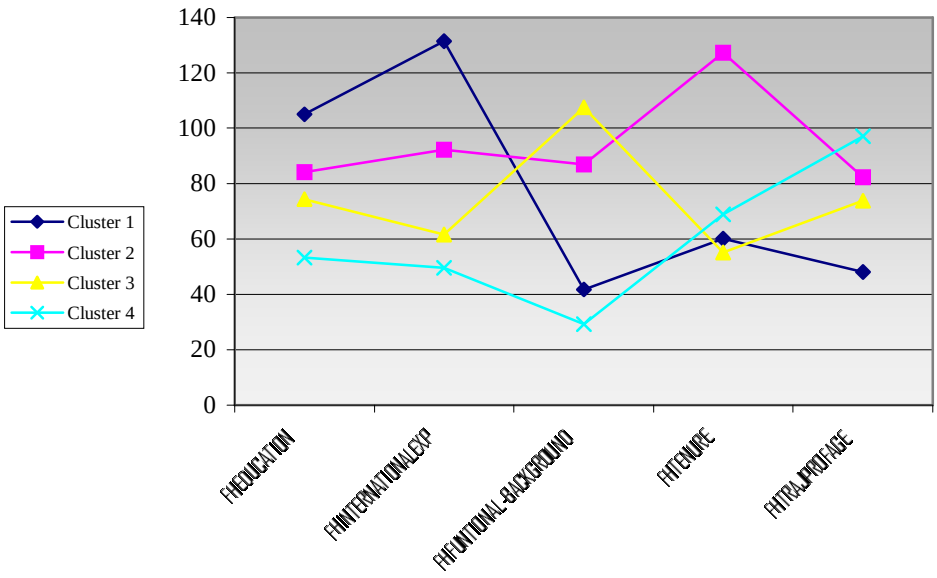
- 1) Matrix of distances among final conglomerates. We can see in the table III that the groups 3 and 4 are the most similar, and the most different groups are the group 2 and the group 4.

| Tabla III: Distance among final conglomerates'centres | | | | | |
|---|---|---|---|---|---|
| | | **1** | **2** | **3** | **4** |
| **Conglomerates** | **1** | | 2,333 | 2,383 | 2,351 |
| | **2** | 2,333 | | 1,831 | 2,251 |
| | **3** | 2,383 | 1,831 | | 1,890 |
| | **4** | 2,351 | 2,251 | 1,890 | |

- 2) Kruskal-Wallis H Test. The results obtained after the application of this test demonstrate us both the suitability of these factors and the differences that exist between the different clusters of firms (see table IV and figure 1). Cluster of companies that are characterized, besides, because in each of them stands out a demographic different variable.

| Table IV: Kruskal-Wallis H Test (I) | | | | | |
|---|---|---|---|---|---|
| | **FACTOR** | | | | |
| | **FHEDUCA-TION** | **FHINTERNA-TIONALEXP** | **FHFUN-TIONAL-BACKGROUND** | **FHTENURE** | **FHTRA-JPROFAGE** |
| **Chi-Square** | 18,859 | 57,040 | 80,870 | 69,164 | 16,523 |
| **df** | 3 | 3 | 3 | 3 | 3 |
| **Asymp. Sig.** | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 |

**Figure 1: Clusters´Profile Average in Spain´s Business Environment(I)**




- 3) Matrix of distances of every individual to the gravity's centre of your group. Coinciding with Araujo and García (1999)´s line of work, the analysis of this matrix together with the study of the punctuations of the individuals in each of the final clusters, it allowed us to obtain a more complete vision of the profile that already we had of every cluster (see tables V and VI).

**Table V: Final conglomerate's centres of TMTs of sample in every cluster**

| FACTOR | CLÚSTER 1 | CLÚSTER 2 | CLÚSTER 3 | CLÚSTER 4 | AVERAGE |
|---|---|---|---|---|---|
| **FHEDUCATION** | 2,5570 | 0,04222 | -0,10971 | -0,49635 | 0,49829 |
| **FHINTERNATIONALEXP** | 1,35526 | 0,30823 | -0,32217 | -0,60798 | 0,18333 |
| **FHFUNTIONALBACKGROUND** | -0,87198 | 0,35113 | 0,68187 | -1,05355 | -0,22231 |
| **FHTENURE** | -0,34738 | 1,15447 | -0,51295 | -0,21759 | 0,01913 |
| **FHTRAJPROFAGE** | -0,63858 | 0,10404 | -0,10073 | 0,38965 | -0,06140 |
| **TOTAL FIRMS IN EVERY CLUSTER (% on total sample)** | **22** (14,37%) | **39** (25,49%) | **61** (39,86%) | **31** (20,26%) | **153** (100%) |

| Table VI: Matrix of distances of every individual to the gravity's centre of your group | | | |
|---|---|---|---|
| | **Distance to gravity's centre of every TMT in cluster (intervals)** | **% *TMTs* on the totality of cluster** | **Distances (D)** |
| **CLÚSTER 1** | 0-1 | 9,09% | **D maximum – D minimum** = 1,99645<br>**D Mean** = 1,634905 |
| | 1-2 | 50% | |
| | 2-3 | 40,91 | |
| ***Total cluster 1*** | | ***22 (100%)*** | |
| **CLÚSTER 2** | 0-1 | 12,82% | **D maximum – D minimum** = 2,44377<br>**D Mean** = 1,901185 |
| | 1-2 | 74,36% | |
| | 2-3 | 10,26% | |
| | 3-4 | 2,56% | |
| ***Total cluster 2*** | | ***39 (100%)*** | |
| **CLÚSTER 3** | 0-1 | 11,48% | **D maximum – D minimum** = 2,95402<br>**D Mean** = 1,87809 |
| | 1-2 | 73,77% | |
| | 2-3 | 13,11% | |
| | 3-4 | 1,64% | |
| ***Total cluster 3*** | | ***61 (100%)*** | |
| **CLÚSTER 4** | 0-1 | 9,68% | **D maximum – D minimum** = 2,44701<br>**D Mean** = 2,013325 |
| | 1-2 | 61,29% | |
| | 2-3 | 25,81% | |
| | 3-4 | 3,23% | |
| ***Total cluster 4*** | | ***31 (100%)*** | |

## ■ Cluster 1

It is integrated by twenty-two companies with a high heterogeneity, superior to average of our sample, in the international experience and in the formation (both in the level and in the international character) of their TMTs.

In this group of firms, becomes notable a few levels of heterogeneity far below to the average of our total sample, as for diversity in the functional background, in the tenure post and in the company, as well as in the age and in the professional trajectory of the top managers (see table V).

The analysis of the table VI get to estimate to us that this first cluster of firms is characterized for being the group with minor cohesion between their members, beside being the one that it presents "demographic models" more similar between the same ones.

## ■ Cluster 2

Except regarding the heterogeneity in the formation of the top managers, this second cluster, for the rest of demographic analyzed variables, presents levels that, unlike the rest of clusters, are all over the average and, they are not negative. It more well-known characteristic is the major heterogeneity in the tenure firm and in the post of its 39 TMTs (very superior to the one that presents the rest of clusters, in fact, it is the only group in which this heterogeneity becomes palpable of well-known form). In this

corporate deprives, besides, though in minor measurement that in the cluster 1, the international experience of its TMTs (see table V), and with regard to the degree of internal homogeneity the analysis of the table the VI allows us to estimate that this cluster is the one that presents the major internal cohesion of four groups.

■ **Cluster 3**

The TMTs of 61 big companies that constitute the same one are characterized for presenting, opposite to the rest of clusters, a high heterogeneity in the functional experience of its top managers and, with relation to the rest of demographic variables, very low levels of heterogeneity. These values are majority of negative character and they are below the average.

■ **Cluster 4**

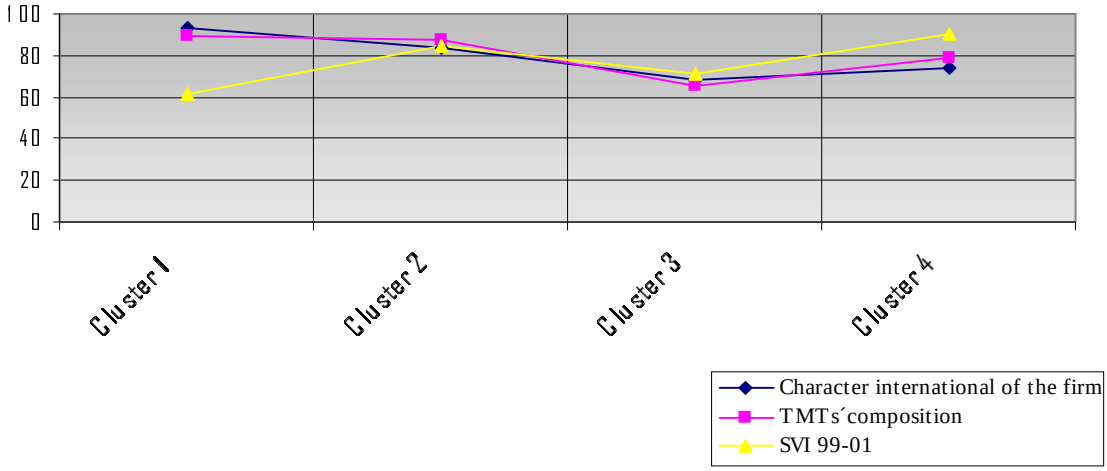
As the cluster 3, this group of 35 big companies is characterized for presenting, in most of the demographic analyzed variables, negative values. But unlike this one, and in relation also with the rest of groups and with the average, the values that this cluster presents are the lowest of all (see table V). The results show that it is the most homogeneous corporate group of our sample.

On the other hand, it is prominent also, opposite to this "homogeneity" that presents this group of big companies, for the majority of demographic variables, the high degree of heterogeneity that shows in relation with the professional path and the age of the top managers. A level that is very superior to the average and to the one that presents the rest of groups.

In order to make concrete a bit more the profile of every cluster, we decide to determine if there were significant differences between same ones when we consider other variables different to the demographic variables. So, after determining, through Kruskal-Wallis H Test, the magnitudes that were showing the principal differences between the different cluster (see table VII), we believed opportunely to penetrate a bit more into the study of the same ones and, on the base of these finds, to realize an analysis of multiple comparisons. The most significant differences found between the corporate groups, after the application of the tests of Scheffé, Bonferroni, Sidak and R-E-G-W-F (F de Ryan-Einot-Gabriel-Welsch), are presented in table VIII and figure 2.

| Table VII: Kruskal-Wallis H Test (II) | | | | | |
|---|---|---|---|---|---|
| **Variables** | | **Chi-Square** | **df** | **Asymp. Sig.** | **Significant differs among clusters** |
| Industrial Sector | | 1,189 | 3 | 0,756 | NO |
| Character international of the firm | | 9,723 | 3 | 0,021 | SI |
| TMTs´composition | TMT turnover 99/01 | 8,292 | 3 | 0,040 | SI |
| Size firms | Variation in invest-ment 99/01 | 0,896 | 3 | 0,826 | N0 |
| | Variation in number employees 99/01 | 4,493 | 3 | 0,213 | N0 |
| Strategic chan-ge´s dimensions | Strategic variation index 99/01 | 7,910 | 3 | 0,048 | SI |
| | Strategic deviation index 99/01 | 2,135 | 3 | 0,545 | NO |
| Firm Performance | Variation sales 99/01 | 0,280 | 3 | 0,964 | N0 |
| | Variation ROS 99/01 | 3,030 | 3 | 0,387 | N0 |
| | Variation ROA 99/01 | 4,238 | 3 | 0,237 | N0 |

**Figure 2: Clusters´Profile Average in Spain´s Business Environment (II)**




| Tabla VIII: Analysis of Multiple Comparing | | | | |
|---|---|---|---|---|
| | **Cluster 1** | **Cluster 2** | **Cluster 3** | **Cluster 4** |
| **Character international of the firm** | * | | * | |
| **TMTs´composition** | | * | * | |
| **Strategic variation index 99/01** | * | | | * |

* Diferencia significativa al nivel 0,05

## CONCLUDING REMARKS

The purpose of this research is to get new information and profound understanding about top management teams in big firms in the context European, concretely in Spanish global business environment. We consider, as Hambrick and Mason (1984) that the results of a great organization do not come determined only by the changes and events of the environment, the organizational inertia, in these the top managers recover an important role that is at the head of the same ones. Moreover, this importance of the knowledge of the totality of TMT in opposite to the knowledge of a concrete individual is reinforced, between other reasons, by "the increasing importance that today, in the business, is acquiring the capture of decisions in group" (Knight et al, 2001: 326), and because in the actually environment, it is almost improbable that in the big and complex organizations the managerial responsibilities are an exclusive authority of an individual only one (Drucker, 1974).

The limitations with which we have run up in the course of this investigation lead us to centring our study in TMTs of 157 big firms with lines of business on our country: Spain. A context and a sample of companies that we try to be extending in future investigations in order to be able to be penetrating into the knowledge already acquired across new finds.

This study of TMTs is decomposed in two phases. The first one is centred on the managerial demography of their members, and the second complete this previous vision across the analysis of certain strategic magnitudes.

The main finds get it allows us to conclude this investigation with the following general considerations:

- Most of the big companies with business in our country are characterized for having TMTs with low levels of demographic heterogeneity. For average term, the major levels of heterogeneity are reached in the formation of the top managers whereas the minor levels, almost negatives, they appear in relation with the heterogeneity in the functional experience, the professional trajectory and the age of these executives.
- The cluster of firms that presents a high heterogeneity in the demographic characteristics of their TMTs manifests too a similarity profiles demographic between theirs TMTs rather high besides of the major degree of internal cohesion.
- The cluster of firms with major number of foreign subsidiaries has experience a major rotation in their TMTs that cluster of firms with major number of national firms.

- Finally, we will stand out that the major variations in the strategies adopted by the TMTs in the Spanish global business environment are experienced in those big companies that present a major rotation in their TMTs.

## REFERENCES


- Adner, R. and Helfat, C. (2003). 'Corporate effects and dynamic managerial capabilities'. *Strategic Management Journal,* 19, 1011-1025.
- Alderson, S. and Kakabadse, A. (1993). 'Top teams and strategic change'. *Management Development Review,* 6(2), 3-5.
- Amason, A.C; Thompson, K.R; Hochwarter, W.A. and Harrison, A.W.(1995). 'Conflict: an important dimension in successful management teams',*Organizational Dynamics,* 23(2),20-35.
- Amason, A. C. (1996). 'Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: resolving a paradox for top management teams', *Academy of Management Journal,* 39(1), 123-148.
- Araujo Cabrera, Y. and García Falcón, J. M. (1999). *Factores diferenciadores en el ejercicio de roles directivos: Una aplicación empírica en PYMEs comerciales e industriales*. Fundación FYDE – Caja Canarias, Ed.
- Bantel, K.A. and Jackson, S.E.(1989). 'Top management and innovation in banking: Does the composition of the top team make a difference?' *Strategic Management Journal*, 10, 107-124.
- Belbin, R.M. (1996). *Management teams. Why they succeed of fail*. Oxford, Butterworth-Heinemann.
- Black, S. A. and Porter, L. J. (1996). 'Identification of the critical factors of TQM', *Decision Sciences,* 27(1), 1-21.
- Carpenter, M.A. and Fredrickson, J.W.(2001). 'Top management teams, global strategic posture, and the moderating role of uncertainty', *Academy of Management Journal,* 44(3),533-545.
- Cohen, S.G. and Bailey, D. E. (1997). 'What makes teams work: group effectiveness research from the shop floor to the executive suite', *Journal of Management,* 23(3), 239-290.
- Díaz Fernández, M. C. (2004): *Las características demográficas de los equipos de alta dirección: Un análisis en las empresas españolas*, Tesis doctoral no publicada.

- Ensley, M. D.; Pearson, A. W. and Amason, A. C. (2002) 'Understanding the dynamics of new venture top management teams. Cohesion, conflict, and new venture performance', *Journal of Business Venturing,* 17, 365-386.
- Finkelstein, S. and Hambrick, D.C. (1990). 'Top management team tenure and organizational outcomes: the moderating role of managerial discretion'. *Administrative Science Quarterly*, 35, 484-504.
- Finkelstein, S. y Hambrick, D. C. (1996). *Strategic leadership: top executives and their effects on organizations*. St. Paul: West.
- George, J. M. and Jones, G. R. (1999). *Understanding and managing: organizational beha-viour*. Addison-Wesley Publishing Company Inc.
- Glunk, U.; Heijltjes, M. and Olie, R. (2001). 'Design characteristics and functioning of top management teams in Europe'. *European Management Journal,* 19(3), 291-300.
- Hambrick, D. C. and Mason, P. A. (1984). 'Upper Echelons: The organization as a reflection of its top managers'. *Academy of Management Review*, 9(2), 193-206.
- Jehn, K. A. (1995). 'A multimethod examination of the benefits and detriments of intragroup conflict'. *Administrative Science Quarterly,* 42, 530-557.
- Katzenbach, J. R. and Smith, D. K. (1993). *The Wisdom of Teams. Creating the high-Performance Organization*. Harvard Business Scholl Press, Boston.
- Kimberly, J. and Evanisko, M. (1981). 'Organizational innovation: the influence of the individual organizational and contextual factors on hospital adoption of technological and administrative innovations'. *Academy of Management Journal,* 24, 689-713.
- Lester, S. W; Meglino, B. M; Korsgaard, M. A. (2002). 'The antecedents and consequences of group potency: A longitudinal investigation of newly formed work groups'. *Academy of Management Journal,* 45(2), 352-370.
- Longenecker, G; Moore, C. W. and Petty, W.J. (1994). *Small Business Management and Entrepreneurial Emphasis*. 9th Ed. International Thomson Publishing, Cincinnati.
- Lohrke, F.T.; Bedeian, A.G. and Palmer, T. B. (2004). 'The role of top management teams in formulating and implementing turnaround strategies: a review and research agenda'. *International Journal of Management Reviews,* 5(2), 63-90.
- McIntyre, M.G. (1998). *The Management Team Handbook. Five Key Strategies for maximizing Group Performance*. Jossey-Bass Publishing, San Francisco.
- Michel, J. G. and Hambrick, D. C. (1992). 'Diversification posture and top management team characteristics'. *Academy of Management Journal*, 35(1), 9-37.

- Murray, A. I. (1989). ‘Top management group heterogeneity and firm performance’. *Strategic Management Journal*, 10, 125-141.
- Nadler, D. A. (eds) (1998). *Executive teams*. Jossey-Bass, San Francisco.
- Pegels, C. C.; Song, Y. I. and Yang, B. (2000). ‘Management heterogeneity, competitive interaction groups and firm performance’. *Strategic Management Journal*, 21, 911-923.
- Priem, R. L. (1990). ‘Top management group factors, consensus and firm performance’. *Strategic Management Journal*, 11(6), 469-479.
- Smith, K. G.; Smith, K. A.; Olian, J. D; Sims, H. P. Jr.; O’Bannon, D. P. and Scully, J. A. (1994). ‘Top management team demography and process: The role of social integration and communication’. *Administrative Science Quarterly*, 39, 412-438.
- Wagner, W.; Pfeffer, G. J. and O´Reilly, C. A. (1984). ‘Organizational demography and tur-nover in top management groups’. *Administrative Science Quarterly*, 29, 74-92.
- Wiersema, M. F. and Bantel, K. A. (1992). ‘Top management team demography and corporate strategic change’. *Academy of Management Journal*, 35(1), 9-121.
- Zenger, T. R. and Lawrence, B. S. (1989). ‘Organizational demography: the differential effects of age and tenure distributions on technical communications’. *Academy of Management Journal*, 32(2), 353-376.