

#### Biographical Notes

The authors can be contacted at the Universidad de Valladolid, Departamento de Economía y, Administración de Empresas, Avenida Valle Esgueva, 6, E-47011 – Valladolid, Spain

## Recapitulation of the Knowledge of Strategic Management.

### A North America-Europe comparative description

by *García, M<sup>a</sup> T., Rodríguez, J. and Santos, M<sup>a</sup> V.*

#### Abstract

In the present paper, a mixed (quantitative and qualitative) and comparative (Europe vs. North America) analysis is accomplished for the assessment of the production and diffusion of strategy knowledge. With such an analysis we have attempted to identify which countries have the most consolidated and prestigious means for the diffusion of Strategic Management investigation at international level, and what is the character of its scientific production in the field. We have also tried to ascertain whether international or local cooperation plays a substantive and increasing role in the production and dissemination of knowledge on Strategic Management, specially nowadays, when, in despite of the strong existing competition, an ever greater attention is paid to the role played by cooperation.

**Keywords:** strategic management, production and diffusion of knowledge, comparative analyses.

#### 1. Introduction

In a scientific field such as Strategic Management, which, nevertheless young, is experiencing a great development from the *seventies* and has reached a consolidation stage, it emerges the need for the accomplishment of a balance and an assessment of the degree of knowledge attained. The purpose is to ascertain, for instance, which subjects have been studied the most and to which ones both teachers and researchers will pay more attention in the future. Thus business scholars and professionals will have access to some orientation concerning the development of the research on strategy. However, such a balance must be periodic and not occasional, re-evaluating with certain frequency the progress in the knowledge of Strategic Management.

For the assessment of knowledge of Management -therefore of Strategic Management as well-, the production, training and diffusion of such knowledge must be taken into consideration. However, since the attention to all the three aspects in this paper would be extremely difficult, we have decided to focus our work on the production and diffusion of strategy knowledge. This is because, as Franke *et al.* (1990:252) and Rumelt *et al.* (1994: 12-13) point out, both concepts are essential to delineate the paradigmatic development experienced by Strategic Management.

But, which kind of production and diffusion are we referring to? We have already tackled them for the Spanish case (García *et al.* 1999; Santos *et al.* 1999b). Therefore, given the enormous lack of international comparative analyses in this area<sup>1</sup> -especially nowadays, when it is clear the internationalization of business and the growth of competition-, we have decided to carry out such analysis. Consequently, we shall consider the production and diffusion of knowledge of strategy in Europe and North America.

At this point, it results convenient to explain some necessary aspects to describe the analysis. We must, for instance, specify its main stages, the methodology employed and, finally, the countries studied.

Our research consists of two stages: First, the characterization of the means of diffusion employed in the field of strategy, especially focusing on the periodical publications, and second, the evaluation of the characteristics and progress of the production of researchers in Strategic Management. Regarding the methodology, we contemplate a mixed analysis -quantitative and qualitative- of comparative character to assess, within an international framework, the production and diffusion of knowledge on strategy. We may qualify the analysis as mixed given that we make a scrutiny of, among other aspects, the number of journals that publish papers of strategy and the number of (individual or team) contributions to the field made by authors from diverse research centers and countries. We shall do this through the examination of the *Strategic Management Journal* (hereinafter *SMJ*). Due to its specialization in strategy and the rigorousness of its paper selection process, *SMJ* is situated among the top positions of the worldwide recognized *forum* of appreciated publications for business policy<sup>2</sup>, and it continues its upward progression, as it can be observed in MacMillan (1991: 162). With the consideration of a publication with quality and impact on strategy, the study gains a qualitative perspective. Finally, our survey aims at the comparison of the production and diffusion of knowledge of strategy in Europe and North America. We have therefore to determine the countries object of our analysis, which are U.S.A. and Canada in North America, and France, Holland, U.K., Spain and Sweden in Europe.

Once we have introduced the subject and defined our objective, it is suitable to outline the contents of the present work. We shall commence in the second subsection by a brief reference to the elements that take part in the development and the historical evolution of Strategic Management. Following, in subsection three, we study the periodical journals that disseminate the results of strategy investigation through a Europe-North America comparative analysis. In subsection four we appraise, in a comparative manner as well and with the base of the *SMJ*, the production in the domain of strategy. Finally, we indicate some of the conclusions and most relevant limitations of our study.

## **2. Elements in the development of Strategic Management and historical evolution**

According to Franke *et al.* (1990) and Rumelt *et al.* (1994), the paradigmatic development of Strategic Management is fostered by the research on strategy itself and the role of the means that make its diffusion possible (i.e. congresses, workshops and other meetings, books and periodical publications). In the following subsections we shall try to ascertain to what extent European and North American media and scholar production have contributed to such development. Previously, a brief review of the progress experienced by both, the field of inquiry and the means of diffusion, is carried out.

In Santos *et al.* (1999a) a thorough revision of the historical evolution of Strategic Management was accomplished. Such revision (summarized in annex I - figure 1) allows us the identification of three broad stages: birth (*sixties*), development (*seventies* and *eighties*), and consolidation (*nineties*). As shown in figure 1, Business Policy is a recognized and respected academic discipline (Snow and Thomas, 1994: 474). It has received contributions from both, 'academic' and 'practitioners'. These contributions have a plural character, given that there is no dominant paradigm but three complementary ones (Mathé, 1995: 40-41; Teece *et al.*, 1997: 510) and that the research methods are diverse<sup>3</sup>. Such pluralism, though enriching, presents some inconveniences: there is no unanimity in some concepts employed<sup>4</sup>, it is difficult to delimit the field of analysis (Castagnos *et al.*, 1997: 39-42) and, obviously, the analysis of the research activity is complex.

A short revision of the historical evolution of the means of diffusion at international level is also accomplished in Santos *et al.* (1999a). Without going in further details, we would like to mark the steps generally undertaken by scholars nowadays in order to communicate the results of their investigation. Thus, according to Guerras *et al.* (1999: 303), two major steps can be underlined: the presentation and discussion of these results in Congresses, Workshops or other type of meetings, and their evaluation and publication in more or less specialized journals.

The first stage, faster but more limited and volatile, is aimed at the advertisement of the yields of the investigative effort targeting a restricted (but closer to the researcher) group. In this way, almost immediate signals of the reactions to the work, its principal problems, and its possible improvements can be obtained. Once this first stage is reached, in the second one, a widespread and more stable dissemination is sought. Thus, once the corrections and necessary improvements are done, taking into account possible suggestions received in the previous stage, the work is submitted to some journal. Here, the diffusion takes a longer period of time because of the evaluation process. If the journal offers certain guarantees, it will have the Board of Editors filter and various anonymous evaluators -more or less prestigious-. These evaluators are asked to assess and comment the works received in or-

der to determine if they are suitable for publication and, in such case, if the author must introduce any correction.

The analysis of the production of knowledge in a field through the sole study of some of its periodical publications with blind assessment is, therefore, justifiable. Furthermore, it guarantees a certain degree of quality, given that it can be easily assumed that the works published in these journals have overcome the diverse filters considered (i.e. the selection process in Congresses or Workshops; the own presentation and discussion in such events, and, finally, the multiple-stage paper selection process of the journal). However, a blind evaluation process is not always realized under the same requirements. It must be truly rigorous to assure quality. Therefore, our proposal for the analysis of the research production on strategy (through the examination of the production published in one or various journals that take part of the worldwide recognized forum for strategy) involves the incorporation of a qualitative view of rigor and quality.

### **3. A Europe-North America comparative analysis of periodical publications with papers on strategy**

In Santos *et al.* (1999a) we have attempted to determine the place held in the international arena by Spanish periodical publications on strategy. It should be therefore enough to refer the readers to the mentioned work in order to know the sources of information utilized, the process followed for selecting publications and the criteria employed for the analysis. However, it seems helpful to make a short reference to these aspects, emphasizing only the most relevant ones or those that might have changed for the present survey. We shall comment with a greater extent the results yielded from the comparative analysis between the studied European countries and the ones from North America.

#### *3.1. Analysis process description*

A database for the analysis was elaborated mainly based upon the bibliographic database ULRICH'S Plus (using the 1998 version), as well as ECONLIT, ABI Inform and, for the Spanish case, ARIADNA databases. The electronic catalogues of periodical journals from some Spanish University libraries were also considered<sup>5</sup>. The result was the collection of data of 347 periodical publications concerning strategy from Canada, France, Holland, Spain, Sweden, United Kingdom and U.S.A. The criteria considered for selecting the journals to be included in the database were the name of the publication, the keywords assigned by the different sources inspected to characterize it (in the case of ULRICH'S Plus, we studied the journals labeled as *Business and Economics*, with or without the specification of *Management*), and its content, occasionally expressed in a brief summary.

The variables contemplated for the analysis of publications were the following: year of release and, if applicable, of cease; character (whether the

journals are regarded as academic-scientific or not) and affiliation (whether it can be considered part of the forum for Strategic Management or not). In respect to the character of the publications, ULRICH'S Plus explicitly determines which of them are categorized as *academic-scientific* and which are not<sup>6</sup>. Since ULRICH'S Plus was not the only database employed, such categorization had to be completed with the information collected from ECONLIT, ABI Inform, as well as the work of Castagnos *et al.* (1997). For the Spanish case, given the obvious inadequacy of the databases considered, we decided to use the existence of an anonymous evaluation process of the works received as a criterion to state if the publication has the academic-scientific character. However, we are aware of the fragility of such criterion because, neither its correlation with the academic-scientific character is clear, nor the evaluation processes are all equally rigorous. Furthermore, the reviewers belong to a narrow scientific community (Gómez and Gutiérrez, 1996: 19). The inadequacy of the information provided by the employed databases is not exclusive for Spain; the same doubts arise regarding, at least, France and Sweden. However, our scarce knowledge of the publications in these countries prevented us from applying a corrective element similar to the one used for Spain.

Finally, in relation to the affiliation or not of the studied publications to the previously mentioned forum for strategy, in the present work we only consider U.S.A, Canadian and U.K. journals. The evident development of such journals and, over all, the enormous importance of British and North American scholars in the field of strategy (as can be seen in the subsection 4) are arguments in support of our decision, as well as it is the lack of adequate and clear indicators of the existence of a similar forum in the rest of the countries. Thus, as can be seen in Santos *et al.* (1999a)<sup>7</sup>, we are going to utilize two different versions of the internationally recognized forum for strategy. The first one (see annex II - table 1) has been elaborated taking into account the propositions of MacMillan (1989 and 1991) and Park and Gordon (1996), as well as the publications included in the *Business and Management* category of the SSCI<sup>8</sup> for 1987 and 1995. The second version (annex II - table 2) shows the international forum resulting of a questionnaire sent to Business Organization Professors in Spanish universities with certain proximity to the research in the field of strategy. In this second version two groups of journals were identified according to their prestige.

### *3.2. Results of the analysis of periodical publications*

To present the results yielded from the mentioned analysis we shall observe the following outline: evolution in the development and actual position held by the European and North American countries studied. To determine this position the ensuing criteria are considered: total number of current journals that may give space for strategy research in every studied country; the number of those with an academic-scientific character, and, finally, the

number of those included in the internationally acknowledged forum for strategy.

Regarding the development of the means for strategy knowledge diffusion -periodical publications, particularly-, figure 2 (annex I) shows that such development has experienced a similar evolution to the one experienced by the field of inquiry itself (figure 1 – annex I). Thus it is clear that it is in the *seventies* when the appearance of journals with some strategy content begins its development, which continues in the *eighties*. The *nineties*, although it is a still prolific decade, reflects the inception of a certain consolidation. If we now consider the comparison Europe vs. North America, it can be observed the mentioned evolution, with both groups presenting a similar pattern. There is, however, a significant difference between them. While in Europe the emergence of periodical journals can be labeled as an authentic boom, in North America such evolution is also noticeable but more moderated. The justification seems clear, the European boom reflects the (idiomatic, cultural, etc.) diversity of Europe and its still-reduced unity.

The cease of journals (annex I - figure 2), though it is not excessive, occurs to greater extent in the final phase of the development stage and in the consolidation stage of the Strategic Management field. The European and North American countries regarded do not present significant differences relative to such aspect. It should only be noticed the advancement of North America in the publication selection process.

Our periodical publications database contains 312 current journals, 206 from the scrutinized European countries (France, Holland, Spain, Sweden and U.K.) and 106 from U.S.A. and Canada. Thus Europe seems to be ahead with a 66% of the total number of journals (annex I - figure 3). However, considering the countries individually, it is U.S.A. who leads with a 25%, closely followed by Holland (22.75%), and with the U.K. coming in third place (17.6%) (annex I - figure 4). The rest of the countries show lower figures. This allows us to confirm, regarding the number of publications with some content on strategy, the clear leadership of U.S.A. in North America, and the leadership of Holland in Europe, contested by the progression of U.K.<sup>9</sup>.

Let us approach the same comparison but concerning the academic-scientific status of their publications and their position in the forum of worldwide appreciated strategy journals. From the total number of publications, 183, that is, almost 59%, present an academic-scientific character (annex I - figure 3). The forum, obviously, is formed by a lower number of journals: 29 (9.3%) or 19 (6.1%) depending on the version employed (subsection 3.1.).

The analysis of journal character deserves some comments quite similar (though not identical) to the previous ones. Thus Europe is superior to North America regarding the percentage of academic-scientific publica-

## Recapitulation of the Knowledge of Strategic Management

## **Recapitulation of the Knowledge of Strategic Management**

tions (64%). However, once more, it is U.S.A. the country that ranks the top position with near a 30% (annex I - figure 4). It is followed by U.K. (24%), that this time is ahead of Holland (23.5%). The rest of the countries comes quite distantly.

In reference to the internationally acknowledged forum for strategy, as stated in subsection 3.1., only three of the studied countries -U.S.A., U.K. and Canada- have been considered. The yielded result differs significantly from the results previously observed. North America presents in this side a very clear leadership (75.86% or 73.68% depending on the consulted version of the forum), while U.K., representing Europe, only has a 24.13% (26.31% with the second version). The use of one version or the other one apparently does not influence significantly the results, although, for example, it involves the consideration or not of Canada (it appears in the first version of the forum but not in the second one).

Consequently, it seems clear the contribution of the means of diffusion -periodical publications- in the development of Strategic Management in both, Europe and North America. It is also evident the enormous dispersion of European publications, as well as the leadership of U.S.A. and Holland, and the outstanding position of U.K. The effort to impart an academic scientific character to a significant part of the European and North American strategy publications must be underlined too. Finally, it is undoubtedly noticeable the advantage of U.S.A. in procuring rigor to their publications and in delimiting a group of reference journals, not only at local level but worldwide.

At the sight of these comments, we think necessary to express the following reflection. It would be convenient to palliate the existing dispersion in periodical publications disseminating the results of research on strategy in Europe, thus clearing the obstacles hindering the progress in such field of inquiry. It would be interesting to join efforts to ascertain which publications conform the appreciated forum for strategy in each country, which of them would conform such forum at European level, and what actions should be undertaken in order to foster the creation and development in Europe of one or various rigorous journals specialized in strategy. In this way, the possibilities of international diffusion of the knowledge generated by European scholars would be increased.

### **4. A Europe-North America comparative analysis of the scientific production on strategy**

The second relevant element in the development of a scientific field (we have already studied the first one -the means of diffusion-) is the investigative production. In order to assess such production on strategy at international level, the simplest way is to appeal to the defined forum. Particularly, it seems logical to survey the first group of the second version of the forum

(annex II - table 2), that is, the group of publications that, according to the opinion of academic experts in Spain, have the greatest prestige in the field of Strategic Management<sup>10</sup>.

However, for several reasons we finally have opted to limit our analysis to one of the six publications forming the mentioned group: the *Strategic Management Journal*. The reasons for such a choice are the following ones: its clear upward progression in the forum (MacMillan, 1989: 392 y 1991:162); SMJ's excellent position within it, as shown in table 2 (annex II) or in MacMillan (1989: 393 y 1991:163), Park and Gordon (1996:114), Cuervo (1999: 53) or Santos *et al.* (1999a); the rigorousness of SMJ's paper evaluation process and its strictness in the fulfillment of its temporal commitment with readers; its evident specialization in strategy, as proves not only the title<sup>11</sup> of the journal but also, in general, the type of works it publishes; and, finally, the availability for the authors of the present paper during an ample period of time (the rest of the journals of the group either they were not available, or they were but for a short period).

Once accounted for this choice, let us introduce the database realized with the totality of papers published in the journal between 1989 and 1998<sup>12</sup>. To build the database it was necessary, for each work, to fill out a form with the following fields (Annex IV): title, article or *research note*, authors, their working center and country of origin, keywords –according to a previously defined index<sup>13</sup>–, theoretical or empirical status, the period of acceptance for publication and the number of bibliographic references employed by authors, distinguishing by language. Thus we got a database formed by 456 papers –365 empirical and 91 theoretical- and 1117 *associated quotes*<sup>14</sup> (annex II - table 3).

Given that one of our goals in the present paper is to accomplish a comparative descriptive analysis of the scientific production on strategy in Europe and North America, it seems logical to approach the study of the described database maintaining this view. We thus commence with the consideration of, according to the available information, the geographical origin of the papers<sup>15</sup>.

#### 4.1. Paper geographical origin

Concerning this issue, authors' working center and the country where this center is located must be taken into account. In reference to the latter, it is remarkable the uncontested leadership of the United States (72%) in relation to all the countries represented in the database and its distance in relation to the ones with a relatively significant participation (annex I - figure 5). Among them we may include U.K., Canada, France and Holland. This is not but a signal of the dominion of the Anglo-Saxon world in general, and of U.S.A. in particular, in the prestigious research in the field of strategy. Regarding the most relevant research centers, the available data stress the superiority of Anglo-Saxon world and of North America, and, over all, the



## Recapitulation of the Knowledge of Strategic Management

great dispersion in the location of investigative production on strategy occurring nowadays, which reflects the development and consolidation reached by the research activity in this field. Thus, in the 24 countries with some participation during the surveyed period, there are 258 centers, with 173 settled in U.S.A., 22 in U.K. and 13 in Canada. The superiority of U.S.A. can also be observed in the location of the research centers with the greatest weight. We therefore conclude that North America leads the production of knowledge on strategy and that U.S.A. is the country that serves as a model in this process, according to both, the number of works and their content or character. Europe is clearly at the rear, at least concerning its participation in the *Strategic Management Journal*.

Once the relative position in SMJ of Europe and North America has been stated, our attention turns to the study of the character of the papers, the subject profile of the journal and the relative weight of teamwork versus individual contributions. Nevertheless, we shall try to keep bearing in mind the comparison between Europe and North America regarding these aspects.

### 4.2. Character of the works

The information in table 3 (annex II), summarized in figure 6 (annex I), shows the great preponderance of empirical papers in relation to the theoretical ones, as well as the notable weight of articles in relation to the *research notes and communications*. We also record the existence of a divergence between them. In respect to the empirical works, apparently they need an average period for publication substantially longer than theoretical studies. Similarly, the articles need an average period of acceptance longer than the *research notes*. The combination "theoretical-research note" shows the greatest discordance concerning this issue. Thus, while they do not need more than half a year before they are accepted, for the rest of the categories the lapse between reception of the work and its acceptance lasts on average 15 to 18 months. If we now take notice of the number of bibliographic references, we can conclude the clear superiority of articles against research notes. Furthermore, the average number of references is higher for theoretical works than for the empirical ones, as long as they are articles, not research notes. Finally, and as a summary, we may state that theoretical research notes are the works that need the shortest period of time for publication and that use the briefest bibliographic support.

The comparison between Europe and North America is not worthy of any further comment due to the lack of particularities significant enough (annex II - table 4). It could only be noticeable that, while North America presents a similar distribution to the one shown in figure 6 (annex I), Europe's distribution is slightly different. In Europe the combinations "empirical research notes" and "theoretical research notes" interchange positions in the distribution.

### 4.3. Subject profile

The paper assignment, according to their content, to the previously defined keyword index (Annex III) is the base for characterizing the subject profile of the *Strategic Management Journal*.

Table 5 (annex II) shows the evident imbalance in the attention paid by authors to subjects included in the field of Strategic Management. Among them, the primary issue focused by researchers is *corporate objectives and results* capturing a 16.3% of the total number of quotes. It is followed by the *research paradigms*, with a 10%. *Strategy and strategic process, strategy and human resources, cooperative development, diversification, resources and capabilities, general environment and market development* are the keywords that rank the next positions with a participation that vary between the 3.6% of the last one and the 7.7% of the first one. In the rest of keywords dispersion and atomization are the most distinguishable features, given that, although all of them are considered in at least one work, their overall weight is very low.

If we now adopt a more global perspective and turn our attention to the weight of thematic blocks (table 5 in annex II and figure 7 in annex I), the data also show significant imbalances among them. Particularly, Block IV is the principal subject treated during the period with a 38% of the quotes. Block I, with a 20% follows it, although at a considerable distance. On the contrary, Blocks 0 and V, that is, research in the field of strategy and strategic implementation respectively, have the lowest rates. The attention paid to subjects such as objectives, cooperation, diversification and market development justify Block IV's leadership. Likewise, the interest in the Strategic Management paradigms and in the strategic process explains the position of Block I. A special mention must be made for Block VI, appointed for works covering topics in other areas, because, although globally does not weight excessively -13%-, it reveals the close relationship between Strategic Management and the different functional areas of the firm. In addition, it can be observed that human resource matters are frequently considered, even acquiring a relevant position within the whole of the subject profile of the *Strategic Management Journal*.

Let us concern about the particularities of such subject profile when considering papers' character -theoretical or empirical, articles or research notes-. Empirical works and articles present a profile similar to the one previously identified, what, on the other hand, seems logical given their weight in the whole. Consequently, the study of objectives and results, research paradigms, strategic process, human resources, cooperation, diversification, environment, firm's resources and capabilities and market development command the scholars' attention. The outstanding position of research paradigms among empirical works reflects the strong theoretical support of papers in SMJ that face the empirical treatment of the different subjects ana-

lyzed. In the case of theoretical papers, the dominant keywords are those integrated in Block I, particularly research paradigms and strategic process. Jointly, corporate objectives and results -leader for the whole of the papers- also reaches a notable although distant position. Regarding the research notes and communications, the main subject covered is again corporate objectives and results, with strategic process, human resources and research paradigms coming next. The apparent particularities of theoretical works and of research notes may be due to their limited weight in the whole of the papers surveyed.

Finally, it is necessary to make a brief reference to the subject profile that, globally and individually, is shown by the European and North American countries that were considered. Globally, Europe and North America's profile is coincident with the overall subject profile and both are truly similar (annex I - figure 8), although they reflect the different weight of these continents in the total number of analyzed works. The most notable feature is, nevertheless, the outstanding concentration around some topics in the North American investigative production on strategy, while Europe's strategy research seems scattered. In addition, and concerning the individual subject profile, it can be noticed that USA's one -we remind that U.S.A. it is at the top position in the ranking of strategy research- basically coincide with the general profile. U.K. and Canada reproduce, though at a lower scale, such a profile, with the exception of the scarce attention paid to human resource matters. Among the rest of the countries, subject dispersion and a relative interest in objectives, paradigms and cooperation are the most important features.

#### *4.4. Team works vs. individual works. Analysis of the cooperation in scientific production*

To conclude, let us analyze the nature of works according to their individual or team status (annex I - figure 9). Undoubtedly, teamwork dominates in the papers published in the journal given that this type of work represents a 67% of the total number of surveyed papers, and this despite the longer average period of acceptance they have in comparison with the overall average -521 days against 488-. 90 papers out of 307 -29%- were written by teams formed by individuals from the same research center. In the rest -217 works-, the authors are affiliated to different working centers, with a 27%, that is, 59 papers, having a plural nationality. We can therefore conclude the dominion of team works elaborated by scholars affiliated to different research centers but in the same country.

What is the particular picture for the comparison between Europe and North America? In this regard we have opted to consider the countries individually (annex II - table 6). Once more, U.S.A., and as a consequence of its leader position, dominates the participation in team works. U.K., France, Canada and Holland follow it at a certain distance. It is necessary however to

remark that, when we consider the proportion of team works in the whole, it is France that leads the ranking, because all of the papers are presented in group, with U.S.A., Canada and Holland coming next. Closing the ranking comes U.K. with only a 54% of team works, a significantly different rate in relation to the rest of the countries and to the overall average -67%-.

In the face of the teamwork importance, it would be interesting to make a reference to some surrounding aspects. We thus shall contemplate the character, the subject profile and the local or international composition of these works.

In relation to the *character of team works*, and similarly to the whole of the works, they are mainly empirical works and presented in the form of article (annex I - figure 10). It is noticeable the higher average period for publication and the higher average number of references of theoretical works in comparison to the whole of the works. Some complementary information is shown in table 7 (annex II).

The *subject profile of team works* is coincident with the overall profile previously described. As a consequence, once more, the questions related to objectives, paradigms in strategy, strategic process, human resources, market development and cooperation are the issues with the greatest interest. This profile is similar to the one presented in individual papers, which however pay less attention towards human resources, diversification and general environment matters, in favor of the study of competitive advantage.

To complete this teamwork characterization, it would be necessary to analyze the *local or international status* and the *existence or not of intra-center or inter-center cooperation within a country*<sup>16</sup>, and this in relation to the surveyed countries (annex II - table 8).

Concerning the local or international character of team works, table 8 (annex II) shows a little international look, of which we made a previous mention. It also shows that, in this occasion, Canada and France lead the ranking with a 100% and a 95%, respectively, of works with an international status. U.K. and Holland come next but quite distantly -50%- . U.S.A. comes considerably behind, given that international cooperation only affects a 19.7% of its works. The most frequent couples in such cooperation are: Canada-U.S.A., France-U.S.A., and U.K.-U.S.A.; although only the first one is the most frequent for both members of the couple. Nevertheless, for France and U.K. we can also assert that U.S.A. is their favorite partner. Finally, we would like to remark that, with the exception of the three cited countries, the reduced international cooperation observed in U.S.A. is characterized by certain dispersion.

To conclude, and concerning the cooperation within each country, U.S.A. again recovers its leadership - 98.5% of its team works show this kind of cooperation-, followed by Holland -83%- and by U.K. -60%-.

France and Canada hold the last positions in this ranking. However, which kind of cooperation is this? Is it essentially a cooperation among different research centers in the same country, or rather a cooperation among members of the same institution? In all the five countries mentioned before, both forms of local cooperation are undertaken, although not always with the same significance. Consequently, while Canada and U.K. seem to pay equal attention to both intra- and inter-center cooperation within the country, France and Holland are clearly inclined towards intra-center cooperation and U.S.A. towards the inter-center one (although in this case such inclination is weaker).

## **5. Conclusions**

To what extent has strategy knowledge progressed? How scientific production and the means of diffusion have contributed to this progress? And, concerning this, what role do European and North American countries play? These were the questions raised at the beginning of the present paper. Stimulated by curiosity, and with the desire for procuring some kind of answer, although it was limited, we commenced the now concluding analysis. We opened it with the aim of recapitulating the knowledge achieved about strategy in diverse fronts: its production and its means of diffusion, analyzing both at international level in a comparative manner. For this aim we planned the consideration of an ample period of time and the need for procuring a mixed character for such an analysis, that is, it must include both qualitative and quantitative attributes.

After a brief review of the historical evolution of the principal elements involved in Strategic Management development, we tackled the assessment of both of them -periodical publications and investigative production- for Europe (represented by France, Holland, Spain, Sweden and U.K.) and North America (U.S.A. and Canada).

The analysis of the means of diffusion is supported by a database with 347 periodical journals elaborated recurring to different sources of information. The bibliographic database ULRICH'S Plus was one of them. Once that such evolution in the development of publications has been surveyed, and that the position these journals have nowadays in the referred countries has been determined, we can deduce, for instance, the clear contribution of such means of diffusion in the development of Strategic Management in both, Europe and North America. We can also assert the enormous dispersion of European journals in relation to North American ones. The strong leadership of U.S.A. and Holland in this regard, and the relevance of U.K. are also noticeable. In relation to publication rigorousness and the need for the delimitation of a group of journals appointed for serving as a valuable reference for strategy scholars worldwide -i.e. a forum-, U.S.A. is remarkably ahead. It might be partly due to the scarce unity of Europe.

For the evaluation of investigative production we resorted to one of the publications of the mentioned forum for strategy. It is the one that, being strategy specialized, is characterized by an unquestionable rigor and a clear upward progression within the forum, reaching the top position. We refer to the publication *Strategic Management Journal*. In this way, we gave entrance to a qualitative perspective in the analysis. Also in this case a database was elaborated collecting information on the 456 papers published in the journal during the period 1989-1998. We interested in issues such as the geographical origin of the works, their character, SMJ's subject profile, or the cooperation existing in the scientific production. Let us remark some of the most relevant conclusions deduced regarding these aspects. With them we invite the reader to discover different ones along the paper.

We conclude, for instance, that North America outperforms the rest of the countries, not only in the production of strategy knowledge, but in its diffusion through specialized means that constitute a reference for scholars in this field of inquiry. Particularly, U.S.A. is the country that serves as model in both, the number of works and the content and character of such works. Europe is thus at the rear. We can also confirm the unequivocal tendency towards empirical studies, which does not impede, however, that these type of works have a strong theoretical support, as can be deduced from the subject profile of the journal. Such a profile presents as well certain imbalances -both in Europe and North America, although they are more noticeable in the latter case- in the treatment of the different inquiries that conform the Strategic Management framework. From the analysis of SMJ's subject profile we deduce the greater concentration of North American investigative production compared to the one in Europe, clearly more dispersed. Equally remarkable is the dominion of team works, with an international cooperation in some cases -France and Canada- or more local in some others -U.S.A., Holland and U.K.-. Regarding the way that local cooperation is carried out, there are significant differences as well because, while Holland clearly opts for cooperation within the same working center (intra-center cooperation), U.S.A. resorts more frequently to cooperation among centers (inter-center cooperation), and U.K. pays a similar attention to both.

Despite the interest of the different conclusions raised in the paper, we are aware of the limitations it presents. Thus, for instance, we should mention the unequal information provided -in terms of the country it is about- by the bibliographic databases accessed, as well as our ignorance of periodical publications in, at least, some of the countries. Such inequality and ignorance may have certainly influenced the attained results and conclusions in this respect. Regarding the scientific production, it appears advisable the employment of more than one journal of the forum. The unavailability for the authors of some of them or the availability for only a short period of time of the rest have certainly weighted in our decision. In addition, not all the European countries have been considered for the survey. Nevertheless, such

---

**Recapitulation of  
the Knowledge  
of Strategic  
Management**

limitations are, with more or less difficulty, overcoming. Consequently, we hope that in the future we shall be able of improving the present paper. It would be very pleasant for us to rely on your help to do so.

## Endnotes

1. See as an illustration, though referred to the field of general management, the paper of Macharzina and Oesterle (1994).
2. Such a forum has been identified by MacMillan (1989: 393 and 1991:163), Park and Gordon (1996: 114), Cuervo (1999: 53) and Santos *et al.* (1999a). We recall also that it is defined as the set of publications considered by specialist researchers as a valuable reference and in which they aspire to present their works because, once being accepted, such works should be deemed scholarly (MacMillan, 1989: 391).
3. See Snow and Thomas (1994).
4. A clear example is the notion of strategy itself, as Mathé (1995: 45-48), Hax and Majluf (1996: 2-6) or Cuervo (1999: 52) point out.
5. The universities mainly examined were: Universidad de Valladolid, Universidad Complutense de Madrid and Universidad Carlos III de Madrid.
6. As noted in Santos *et al.* (1999a), we have included among the *scientific-academic* category those publications labeled as *Monographic Series*.
7. This work shows a detailed explanation of the steps followed to define the mentioned international forum. Furthermore, our closeness to Spanish publications allowed us to develop a similar forum of appreciated Spanish journals on strategy, which appears in García *et al.* (1999). To achieve this goal, we have had access to the opinion of academic experts in Strategic Management in Spain.
8. The SSCI (Social Science Citation Index) is a bibliographic instrument that serves for the assessment of periodical publication quality and impact. Curiously, only two journals from the rest of the studied countries appear in the SSCI95, and both are Dutch: *European Journal of Operational Research* and *Journal of Business Ethics*.
9. It would be appropriate, nevertheless, to express the information in relative terms, according to, for instance, the population of each of the considered countries, the number of students at the university, or the number of University Centers.
10. It is necessary to indicate the complete coincidence of the journals of this group with the ones included by MacMillan (1989: 393 and 1991: 163) in the group of journals of 'outstanding quality' in the forum he determines. He has identified, according to their prestige, three categories of publications.
11. It is remarkable the low number of publications (28 out of 347) including the term strategy or a derivative in the title.

## Recapitulation of the Knowledge of Strategic Management



---

**Recapitulation of  
the Knowledge  
of Strategic  
Management**

12. The fifteen SMJ's *special issues* edited during the mentioned period have not been taken into account.

13. The elaboration process of such index, described in García *et al.* (1999), basically consisted of the delimitation of a proposal, subsequently ratified and improved with the suggestions of the Spanish Professors in Business Organization that were pooled. The index has five blocks of themes and 42 keywords (see Annex III).

14. This is the term used to referring us to the keyword assignation to each work.

15. The number of entries regarding the origin (519) is higher the number of works because of the existence of team works with authors affiliated to different research centers.

16. It should be noticed that such forms of cooperation are not mutually excluding.

## Bibliography

ARIADNA. Catálogo colectivo de publicaciones periódicas: Biblioteca Nacional, Ministerio de Educación y Cultura, Madrid.

CASTAGNOS J.C., BOISSIN, J.P. and GUIEU, G. "Revue francophones et recherche en stratégie". *Économies et Sociétés, Sciences de Gestion*, n. 7-8, (1997), pp. 37-73.

CUERVO, A. "La dirección estratégica de la empresa. Reflexiones desde la economía de la empresa". *Papeles de Economía Española*, n. 78-79, (1999), pp.34-55.

ECONLIT, 1969-1998. American Economic Association: Silverplatter, (1998), winSPIRS.

FRANKE, R.H., EDLUN, T.W. and OSTER F. "The Development of Strategic Management: Journal Quality and Article Impact". *Strategic Management Journal*, vol. 11, (1990), pp. 243-253.

GARCÍA, M<sup>a</sup> T.; RODRÍGUEZ, J. and SANTOS, M<sup>a</sup> V. "Una aproximación al estado de la investigación estratégica en España". Paper defended during the *II International Workshop "La organización del futuro en la sociedad de la información: gestión del cambio, recursos humanos y estructura"*, Cádiz, 25-28 May (1999).

GÓMEZ MEJÍA, L. and GUTIÉRREZ CALDERON, I. "La dirección de empresas como disciplina académica". *Revista Europea de Dirección y Economía de la Empresa*, vol. 5, n. 3, (1996), pp. 11-22.

GUERRAS, L.A.; RUIZ, F.J. and RUIZ, A.V. "El estado actual de la investigación empírica sobre economía de la empresa: análisis de las publicaciones españolas". *Papeles de Economía Española*, n. 78-79, (1999), pp.302-317.

HAX, A. and MAJLUF, N. *The strategy concept and process*: Prentice Hall, New York (1996).

MACHARZINA, K. and OESTERLE, M.J. "International comparative evaluation of North-American and German research output in business and management". *Management International Review*, vol. 34, n. 3, (1994), pp.255-265.

MACMILLAN, I.C. "Delineating a Forum for Business Policy Scholars". *Strategic Management Journal*, vol. 10, (1989), pp. 391-395.

MACMILLAN, I.C. "The emerging forum for business policy scholars". *Strategic Management Journal*, vol. 12, n. 2, (1991), pp.161-165.

## Recapitulation of the Knowledge of Strategic Management

**Recapitulation of  
the Knowledge  
of Strategic  
Management**

MATHÉ, J.C. "Rétrospectives et Perspectives en Stratégie de l'Entreprise". *Économies et Sociétés, Sciences de Gestion*, n°21, (1995), pp. 31-50.

PARK, S.H. and GORDON, M.E. "Publication records and tenure decisions in the field of strategic management". *Strategic Management Journal*, vol. 17, (1996), pp. 109-128.

RUMELT, R.P., SCHENDEL, D.E. and TEECE, D.J. "Fundamental Issues in Strategy". In Rumelt, R., Schendel, D. and Teece, D. (editors.): *Fundamental Issues in Strategy. A Research Agenda*: Harvard Business School Press, Boston, Mass., (1994), pp. 9-47.

SANTOS, M<sup>a</sup> V., GARCÍA, M<sup>a</sup> T. and RODRÍGUEZ, J. "Comparative international analysis of strategic management journals: the character of Spanish journals". In Kantarelis, D. (editor): *Business & Economics for the 21<sup>st</sup> Century – volume III: Business & Economics Society International*, Worcester, Ma., (1999a), pp. 197-211.

SANTOS, M<sup>a</sup> V., RODRÍGUEZ, J. y GARCÍA, M<sup>a</sup> T. "Evolución de la investigación española sobre estrategia en el foro de publicaciones periódicas". *IX Congreso Nacional de ACEDE (Asociación Científica de Economía y Dirección de la Empresa)*, Burgos, 12-14 September (1999b).

SNOW, C. and THOMAS, J. "Field research methods in strategic management: contributions to theory building and testing". *Journal of Management Studies*, 31, 4, (1994), pp. 457-480.

TEECE, D., PISANO G, and SHUEN, A. "Dynamic Capabilities and Strategic Management". *Strategic Management Journal*, vol. 18, 7, (1997), pp. 509-533.

ULRICH'S Plus. Bibliographic database: R.R. Bowker, Reed Reference Publishing Group, New Providence, NJ, (1998).

UMI. ABI Inform Research & Business Periodicals<sup>TM</sup> Research: A Bell & Howell Company, USA(1997).

ANNEX I

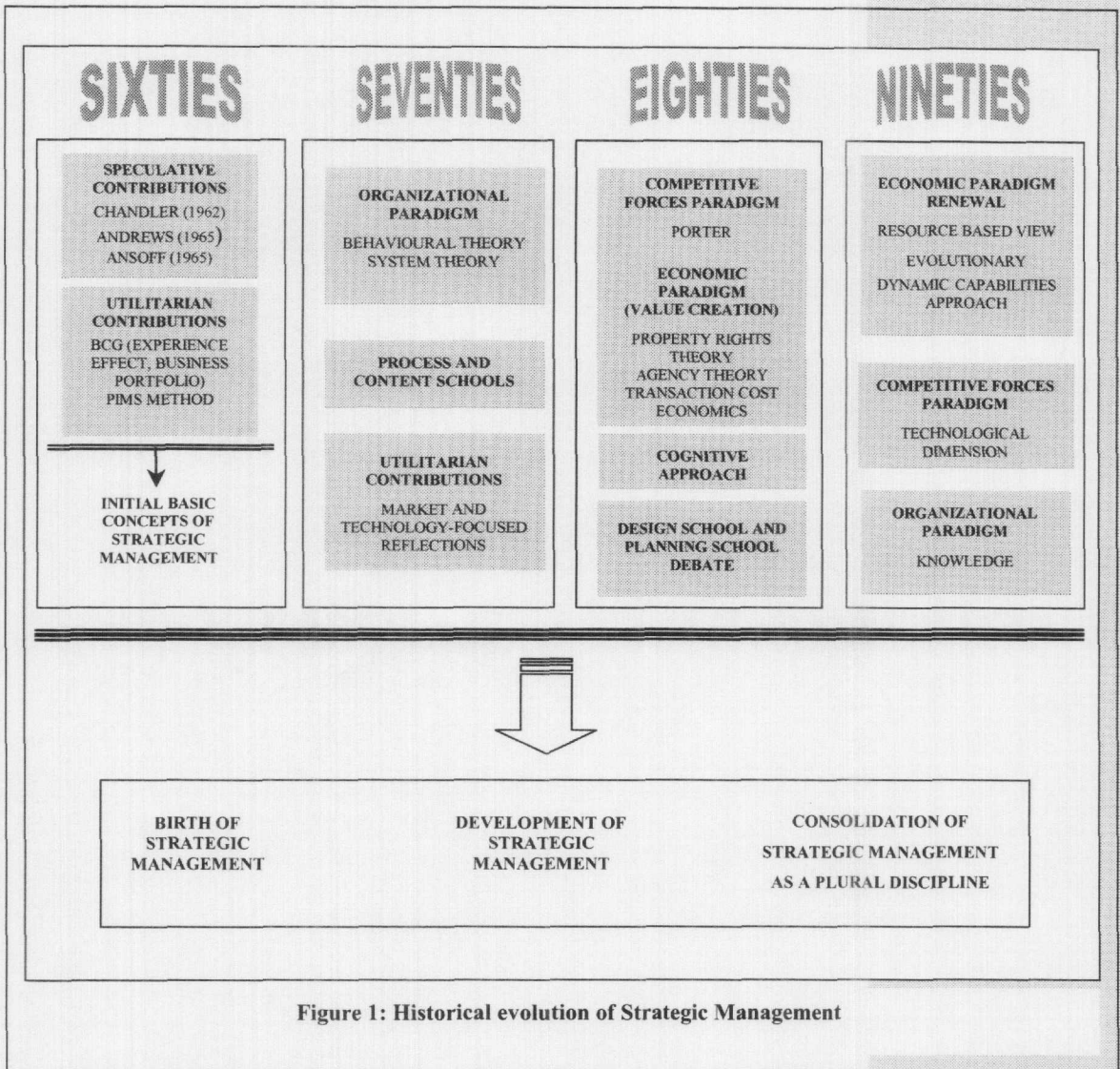
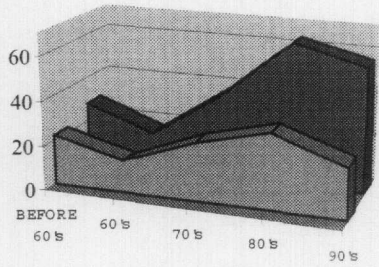
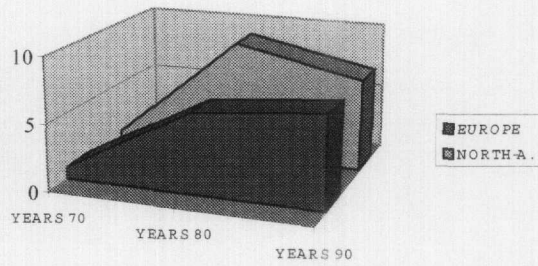


Figure 1: Historical evolution of Strategic Management

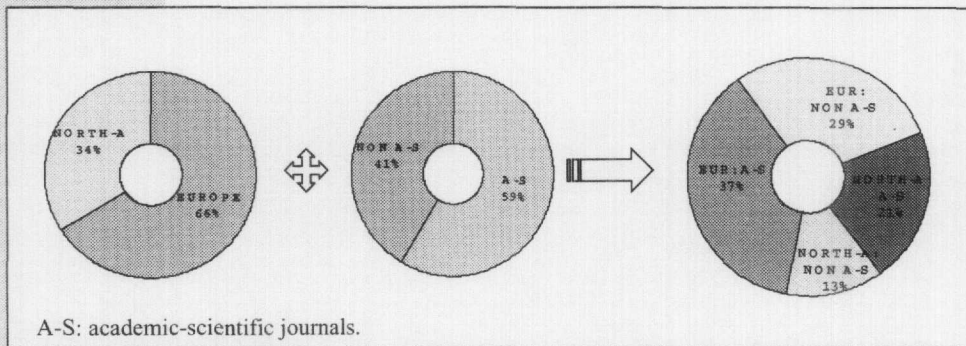
**JOURNAL RELEASE**



**JOURNAL CESSATION**



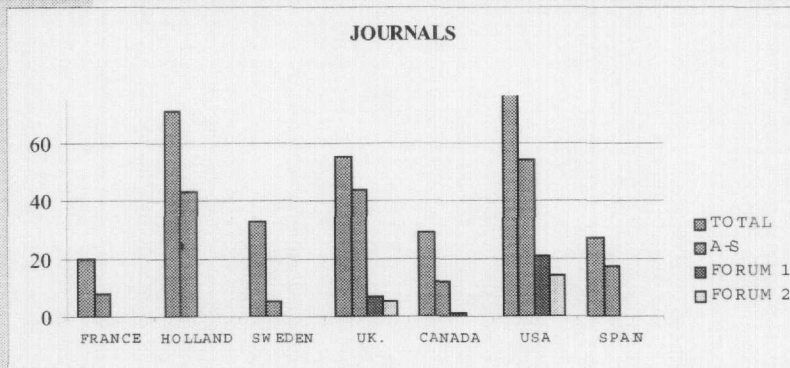
**Figure 2**



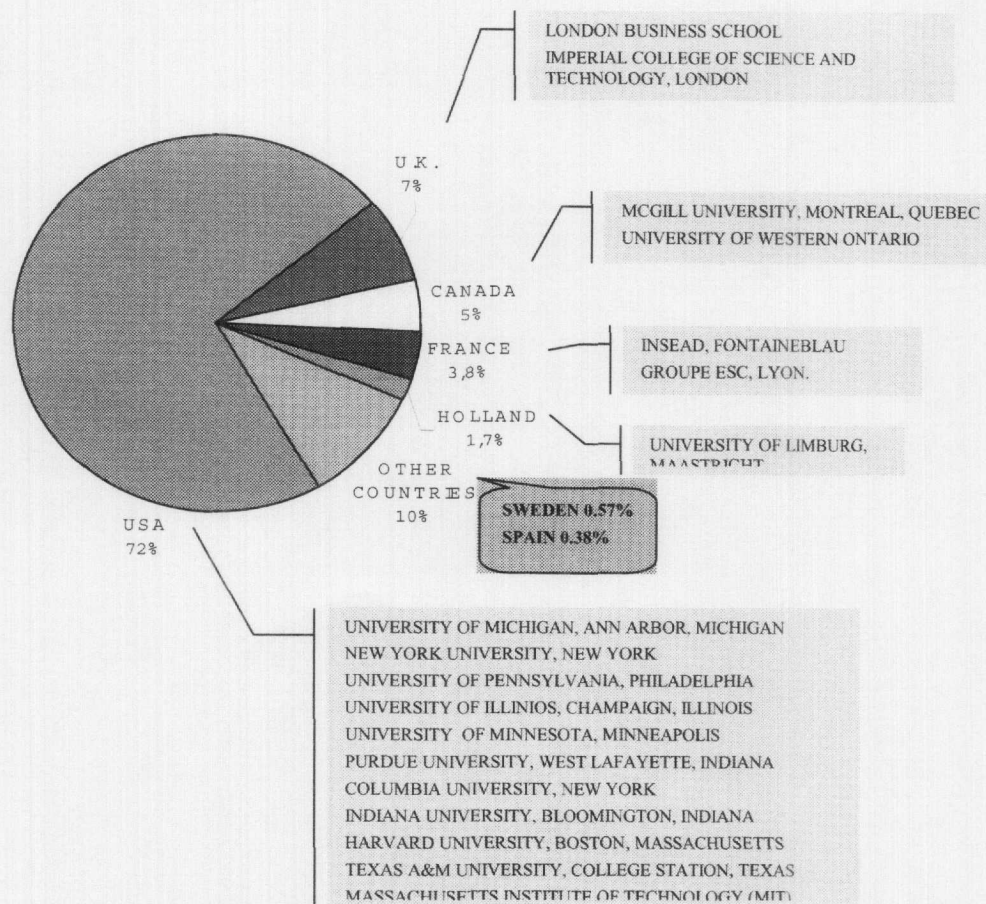
A-S: academic-scientific journals.

**Figure 3: Journal character and origin**

**JOURNALS**



**Figure 4: Journal character by countries**



**Figure 5:**  
Countries and research centers with the most significant participation in the *Strategic Management Journal*.

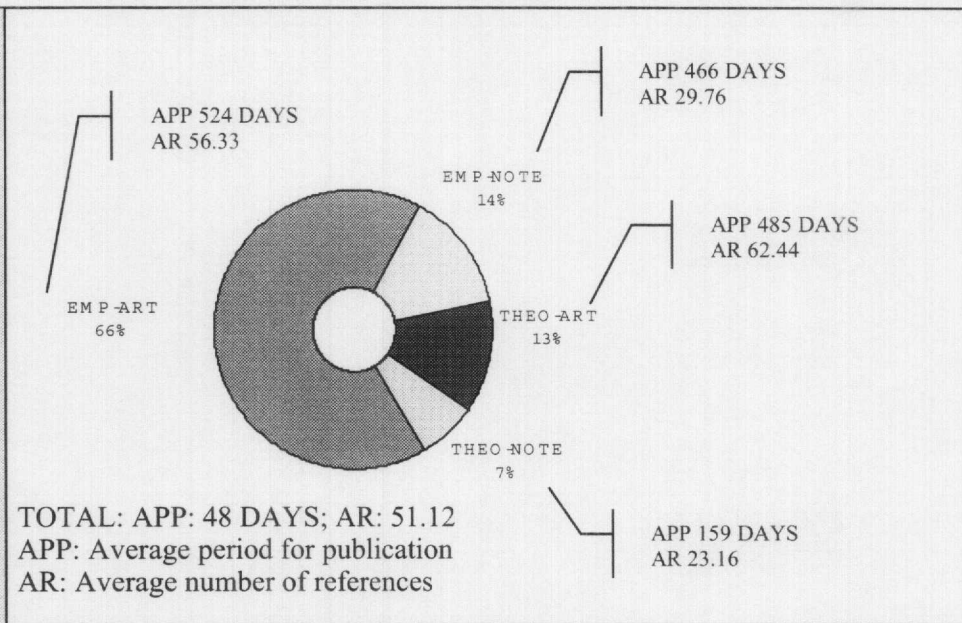


Figure 6.- Paper Distribution according to their character.

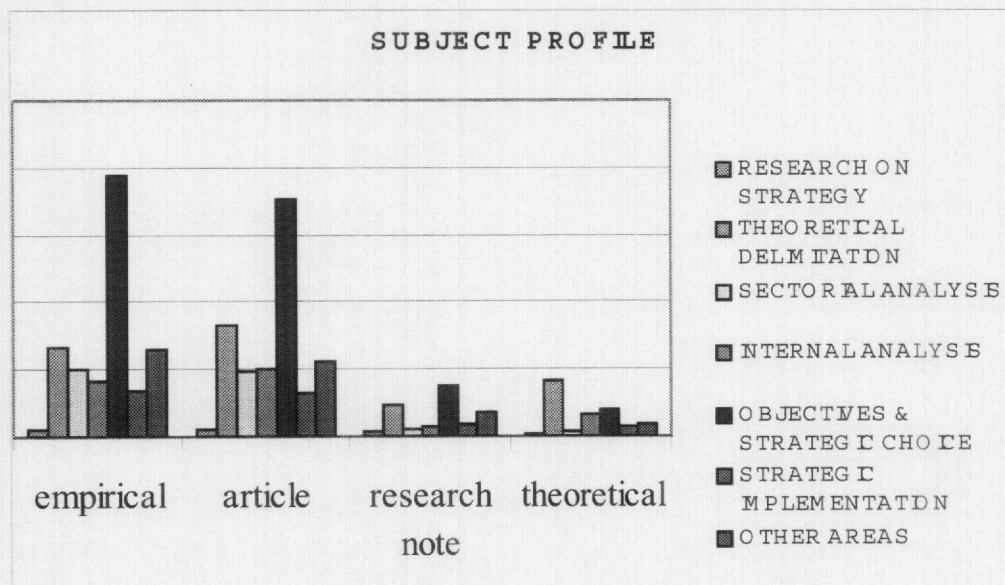


Figure 7. Quote distribution by thematic blocks and paper character

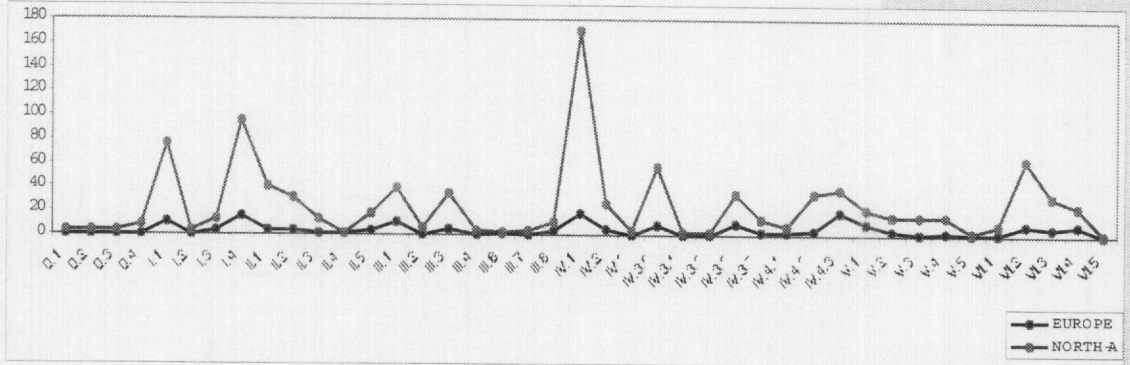
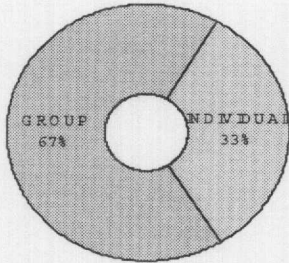
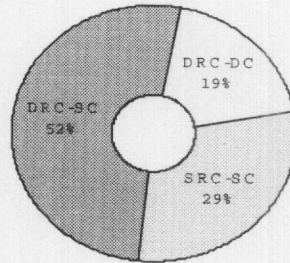


Figure 8: Subject profile for Europe and North America

TOTAL NUMBER OF WORKS



TOTAL NUMBER OF TEAM WORKS



DRC: Different Research Center  
 DC: Different Country  
 SRC: Same Research Center  
 SC: Same Country

Figure 9



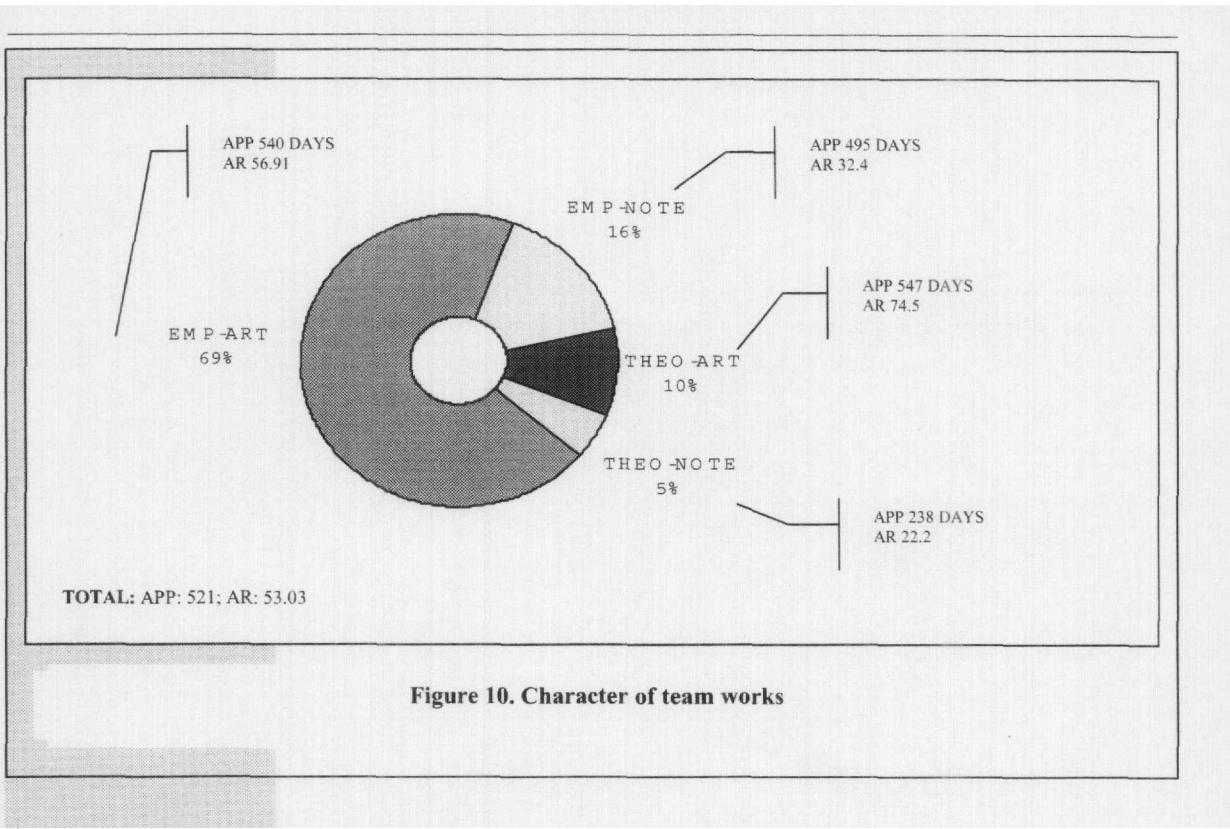


Figure 10. Character of team works

## ANNEX II

### Recapitulation of the Knowledge of Strategic Management

**Table 1: Journals that form part of the Strategic Management international forum  
(1<sup>st</sup> version)**

INTERNATIONAL FORUM (1 <sup>st</sup> VERSION)	<p>ACADEMY OF MANAGEMENT REVIEW            ACADEMY OF MANAGEMENT JOURNAL            ADMINISTRATIVE SCIENCE QUARTERLY            BUSINESS HORIZONS            CALIFORNIA MANAGEMENT REVIEW            DECISION SCIENCES            HARVARD BUSINESS REVIEW            INTERFACES            JOURNAL OF BUSINESS RESEARCH            JOURNAL OF BUSINESS STRATEGY            JOURNAL OF BUSINESS VENTURING            JOURNAL OF GENERAL MANAGEMENT            JOURNAL OF INTERNATIONAL BUSINESS STUDIES            JOURNAL OF MANAGEMENT            JOURNAL OF MANAGEMENT            JOURNAL OF MANAGEMENT STUDIES            JOURNAL OF PRODUCT INNOVATION MANAGEMENT            JOURNAL OF SYSTEMS MANAGEMENT            LONG RANGE PLANNING            MANAGEMENT SCIENCE            MANAGERIAL AND DECISION ECONOMICS            OMEGA            ORGANIZATION SCIENCE            ORGANIZATIONAL BEHAVIOR AND HUMAN DECISION PROCESSES            ORGANIZATIONAL DYNAMICS            RESEARCH TECHNOLOGY MANAGEMENT            SLOAN MANAGEMENT REVIEW            SOCIETY OF RESEARCH ADMINISTRATORS. JOURNAL            STRATEGIC MANAGEMENT JOURNAL</p>
---	--

**Recapitulation of the Knowledge of Strategic Management**

**Table 2: Journals that form part of the Strategic Management international forum (2<sup>nd</sup> version).**

<b>GROUP I</b>	<p>ACADEMY OF MANAGEMENT REVIEW          STRATEGIC MANAGEMENT JOURNAL          ACADEMY OF MANAGEMENT JOURNAL          ADMINISTRATIVE SCIENCE QUARTERLY          MANAGEMENT SCIENCE          HARVARD BUSINESS REVIEW</p>
<b>GROUP II</b>	<p>ORGANIZATION SCIENCE          CALIFORNIA MANAGEMENT REVIEW          SLOAN MANAGEMENT REVIEW          JOURNAL OF MANAGEMENT          JOURNAL OF BUSINESS STRATEGY          JOURNAL OF MANAGEMENT STUDIES          LONG RANGE PLANNING          ORGANIZATIONAL DYNAMICS          JOURNAL OF MANAGEMENT          DECISION SCIENCES          JOURNAL OF BUSINESS RESEARCH          JOURNAL OF GENERAL MANAGEMENT          ORGANIZATIONAL BEHAVIOR AND HUMAN DECISION PROCESSES</p>

**Table 3: Work distribution by character.**

	Articles	Research Notes	Total
Empirical	302	63	365
Theoretical	59	32	91
<b>Total</b>	<b>361</b>	<b>95</b>	<b>456</b>

**Table 4. Work distribution by character and origin.**

	EUROPE		NORTH-A	
	Articles	Research Notes	Articles	Research Notes
Empirical	49	6	272	56
Theoretical	7	9	49	24
<b>Total</b>	<b>56</b>	<b>15</b>	<b>321</b>	<b>80</b>

**Table 5.- Quote distribution according to keywords and paper character.**

Keyword <sup>(*)</sup>	Total	Empirical	Theoretical	Article	Research note
<b>0</b>	<b>18</b>	<b>13</b>	<b>5</b>	<b>11</b>	<b>7</b>
0.1.	4	1	3	3	1
0.2.	4	4		1	3
0.3.	3	2	1	2	1
0.4.	7	6	1	5	2
<b>I</b>	<b>214</b>	<b>132</b>	<b>82</b>	<b>166</b>	<b>48</b>
I.1.	86	54	32	64	22
I.2.	3	2	1	3	
I.3.	16	4	12	7	9
I.4.	109	72	37	92	17
<b>II</b>	<b>107</b>	<b>100</b>	<b>7</b>	<b>96</b>	<b>11</b>
II.1.	41	39	2	35	6
II.2.	31	31		29	2
II.3.	13	12	1	13	
II.4.	4	3	1	4	

**Recapitulation of  
the Knowledge  
of Strategic  
Management**

II.5.	18	15	3	15	3
<b>III</b>	<b>116</b>	<b>84</b>	<b>32</b>	<b>101</b>	<b>15</b>
III.1.	46	36	10	42	4
III.2.	6	3	3	4	2
III.3.	37	28	9	34	3
III.4.	5	2	3	5	
III.6.	3	1	2	2	1
III.7.	5	4	1	2	3
III.8.	14	10	4	12	2
<b>IV</b>	<b>430</b>	<b>390</b>	<b>40</b>	<b>355</b>	<b>75</b>
IV.1.	183	170	13	149	34
IV.2.	29	26	3	26	3
IV.3.	3	3		3	
IV.3.0.	50	45	5	41	9
IV.3.1.	1	1		1	
IV.3.2.	2	2		2	
IV.3.3.	41	36	5	33	8
IV.3.4.	1		1		1
IV.3.5.	9	6	3	8	1
IV.3.6.	1		1		1
IV.3.7.	16	15	1	12	4
IV.4.1.	8	7	1	7	1
IV.4.2.	34	32	2	29	5
IV.4.3.	52	47	5	44	8
<b>V</b>	<b>86</b>	<b>69</b>	<b>17</b>	<b>68</b>	<b>18</b>
V.1.	31	23	8	25	6
V.2.	17	13	4	14	3
V.3.	17	14	3	14	3
V.4.	18	17	1	13	5
V.5.	3	2	1	2	1
<b>VI</b>	<b>146</b>	<b>128</b>	<b>18</b>	<b>111</b>	<b>35</b>

VI.1.	10	7	3	8	2
VI.2.	68	60	8	46	22
VI.3.	36	33	3	28	8
VI.4.	31	28	3	28	3
VI.5.	1		1	1	
<b>TOTAL</b>	<b>1117</b>	<b>916</b>	<b>201</b>	<b>908</b>	<b>209</b>

(\*) The corresponding keywords appear in Annex III.

**Table 6.- Individual and team work distribution by countries.**

Countries	Number of Works		
	Individuals	Team	Total
U.S.A.	108	269	377
CANADA	7	17	24
FRANCE	0	20	20
HOLLAND	3	6	9
U.K.	17	20	37
SPAIN	0	2	2
SWEDEN	1	2	3

**Table 7.- Character of team works.**

	Articles	Research Notes	Total
Empirical	213	49	262
Theoretical	30	15	45
<b>Total</b>	<b>243</b>	<b>64</b>	<b>307</b>

**COMPLEMENTARY INFORMATION:**

Average number of authors: 2.34;  
Average number of research centers: 1.86;  
Average number of countries: 1.2

<b>Keyword relation</b>	
<b>Number</b>	<b>Keyword</b>
0	RESEARCH ON STRATEGY
0.1.	State of the art
0.2.	Publications development
0.3.	Sources of information
0.4.	Analysis techniques and process
I	THEORETICAL DELIMITATION
I.1.	Strategy and strategic process: Delimitation
I.2.	Strategy levels
I.3.	Strategic Management evolution (Main Schools)
I.4.	Paradigms in the Strategic Management development (Contributions)
II	SECTORIAL ANALYSIS
II.1.	General environment. Scenarios
II.2.	Industry or Business characteristics (product-market-technology)
II.3.	Competitors analysis
II.4.	Benchmarking
II.5.	Strategic groups (segmentation; mobility barriers)
II.6.	Business portfolio
II.7.	Threats and opportunities
III	INTERNAL ANALYSIS
III.1.	Resources and capabilities. Competences. Routines
III.2.	Reputation; Legitimacy
III.3.	Competitive advantage
III.4.	Imitation
III.5.	Power, authority and influence. Leadership

**Recapitulation of  
the Knowledge  
of Strategic  
Management**

III.6.	Value Chain
III.7.	Stakeholder
III.8.	Corporate learning
III.9.	Strengths and weaknesses
IV	<b>OBJECTIVES AND STRATEGIC CHOICE</b>
IV.1.	Objectives determination. Conflict of objectives. Value creation
IV.2.	Generic strategies (cost leadership; differentiation; focus)
IV.3.	Strategic options (directions for strategy development)
IV.3.0.	Diversification
IV.3.1.	Penetration; Expansion
IV.3.2.	Product development
IV.3.3.	Market development
IV.3.4.	Horizontal related diversification
IV.3.5.	Vertical related diversification; Vertical integration
IV.3.6.	Unrelated diversification
IV.3.7.	Disintegration; Divestment
IV.4.	Methods of strategy development
IV.4.1.	Methods of development: Internal development
IV.4.2.	Methods of development: External development (mergers and acquisitions)
IV.4.3.	Methods of development: Joint development
IV.5.	Strategy valorization and evaluation
IV.6.	Choice of strategy
V	<b>STRATEGIC IMPLEMENTATION</b>
V.1.	Strategic planning and control
V.2.	Structure-strategy
V.3.	Strategic change
V.4.	Corporate change. Inertia
V.5.	Corporate culture



**Recapitulation of the Knowledge of Strategic Management**

VI	OTHER AREAS
VI.1.	Marketing
VI.2.	Human Resource
VI.3.	Finance
VI.4.	Innovation
VI.5.	Unclassifiable

**Table 8.- Type of cooperation in team works.**

		USA	Canada	France	Holland	UK.	Spain	Sweden
<b>DIFFERENT CENTER AND DIFFERENT COUNTRY</b>	USA							
	Canada	16						
	France	14	1					
	Holland	1	—	—				
	UK.	6	—	2	—			
	Spain	—	—	—	—	—		
	Sweden	—	—	—	—	1	—	
	Other Countries	16	—	2	2	1	—	—
	Different Center and Country	158	3	1	1	6	1	—
	Same Centre and Same Country	107	3	8	4	6	1	1

# Annex IV

Microsoft Access - [Información sobre trabajos revisados : Formulario]

**DATOS IDENTIFICATIVOS**

Id:  Título:

Volumen:  Número:  Páginas:  Año:  Artículo/Nota:  Artículo:

**AUTORES**

Anteriores	Autor	Centro de trabajo	País
	Geringer, J.M.	University of Western Ontario, London, Ontario	Canada
	DaCosta, R.C.	Government of Ontario, Toronto, Ontario	Canada
	Beamish, P.W.	University of Western Ontario, London, Ontario	Canada

**TIPO DE TRABAJO**

Tipo trabajo:

**NÚMERO DE REFERENCIAS**

Referencias:  Referencias:  Referencias:  Referencias:  Referencias:

Total referencias:

**PALABRAS CLAVES**

Palabra clave	Número
V.3.0.	
V.4.3.	
V.1.	

**TÉRMINOS DE ACEPTACIÓN**

Fecha recepción:  Fecha 1ª revisión:  Fecha 2ª revisión:  Fecha 3ª revisión:

Fecha admisión:

Página:  NUM

Preparado