

**FUNCTIONS OF INDEPENDENT DISTRIBUTORS USED BY SPANISH  
CHEMICAL COMPANIES AND THEIR DETERMINANTS**

**Topics: *Core Competencies in a Globalizing Economy: Impact on Management  
Business Strategy and Globalization of Competition***

**M<sup>a</sup> JOSÉ SANZO PÉREZ**

Lecturer of Marketing  
University of Oviedo  
Avda. del Cristo s/n 33071 Oviedo Asturias  
Telf.: (98) 510 28 24  
Fax: (98) 510 37 08

E-mail: ¡Error!No se encuentra el origen de la referencia.

**RODOLFO VÁZQUEZ CASIELLES**

Professor of Marketing  
Universidad de Oviedo  
Avda. del Cristo s/n 33071 Oviedo Asturias  
Telf: (98) 510 36 91  
Fax: (98) 510 37 08

E-mail: ¡Error!No se encuentra el origen de la referencia.

**LETICIA SANTOS VIJANDE**

Lecturer of Marketing  
University of Oviedo  
Avda. del Cristo s/n 33071 Oviedo Asturias  
Telf: (98) 510 28 23  
Fax: (98) 510 37 08

E-mail: ¡Error!No se encuentra el origen de la referencia.

# FUNCTIONS OF INDEPENDENT DISTRIBUTORS USED BY SPANISH CHEMICAL COMPANIES AND THEIR DETERMINANTS

**M<sup>a</sup> José Sanzo Pérez**  
Lecturer of Marketing  
**Rodolfo Vázquez Casielles**  
Professor of Marketing  
**M<sup>a</sup> Leticia Santos Vijande**  
Lecturer of Marketing

UNIVERSITY OF OVIEDO

## 1. Functions of the independent industrial distributors.

The functions independent distributors may perform consist of a wide set of services aimed at both the manufacturer and final customers which are related to the distributors' proximity to the latter. They therefore play an essential role in the service strategy adopted by the manufacturing company and are therefore highly valued by customers.

Some time ago WEBSTER (1975, 1976) established that independent distributors and their functions were changing (although slowly). In this sense, the author noted the manufacturer's tendency to increasingly rely on the distributor to obtain a greater percentage of the total sales volume and perform a wider variety of marketing functions, a fact which other authors also pointed out at a later date. In accordance with Webster's research, the distributor's role varies in terms of a whole series of interrelated factors: (1) the manufacturer's bases for competitive advantage, (2) the manufacturer's market position strength, (3) the product's technical characteristics, basically the existence of marked differences between brands and the need to make technical judgements on the best response to customer needs, and 4) importance of immediate product availability for the customer. This author also identified a set of functions which characterize the role of the industrial distributor: **market coverage and product availability, market development, technical evaluation and customer service** as well as providing **market information**.

Continuing to specify the above functions, we could point out as potential responsibilities of the independent distributors the following<sup>1</sup>: taking title of the goods, visiting and/or selling the product to the existing company clients, maintaining stock levels, providing information on the market or setting, product and market knowledge, identifying and securing new customers, product promotion, planning the local distribution strategy, processing orders, providing customer service, breaking down bulk orders, providing financing and credit, reassembling smaller assortments, grading and standardizing products and taking on large orders from the manufacturer.

It is also interesting to note the possible contribution of these middlemen concerning, on the one hand, **new small high technology companies** (organizations in which there are traditionally problems of marketing orientation, one of which is precisely connected to inappropriate distribution strategies) and on the other hand, the **manufacturers competing in international markets**. In the

---

<sup>1</sup> SHIPLEY and PRINJA (1988), ROSENBLOOM and WARSHAW (1989), REEDER, BRIERTY and REEDER (1991), STERN and EL-ANSARY (1992), WEBSTER (1975, 1976, 1994), BROWN and HERRING (1995).

case of export markets, the use of industrial distributors is very frequent. They have many advantages (MOORE,1987) which basically lie in market coverage and knowledge, customer contacts, specialization, sales skills and the services they provide, especially interesting for small companies or for those lacking in international experience or which have scarce resources. Nevertheless, there are also disadvantages: the manufacturers' difficulty in acquiring market knowledge or developing export skills, insufficient contact with buyers, problems in controlling the distributors (especially at long distance) and the very characteristics of these distributors (small size, absence of innovation, lack of professionalism, little initiative, resistance to control).

## **2. Objectives and hypotheses of the empirical research.**

Based on the recognition of the importance attained by the distribution strategy and the independent distributors themselves in the industrial markets, we proceeded to conduct a wide-reaching empirical study, focused on manufacturing and distributing companies in the chemical sector, in order to make an in-depth study of distribution channel design and management. One of the specific aims was, precisely, to identify the functions performed by the manufacturer's sales force, independent distributors and agents, as well as the factors which significantly influence the likelihood that they perform these functions to a greater or lesser extent. The present paper relates the results for independent distributors. The choice of the chemical sector was due to the importance this has in the Spanish economy as a whole, its influence on the rest of the manufacturing activities, the variety of clients and products it entails, the importance international sales are attaining for these companies, and the fact that it is an industry undergoing a process of transformation and competitive renovation.

The first hypothesis proposed is that there exist significant differences between the scores given by the manufacturers and those given by the distributors themselves to the set of possible functions to be performed by the latter. In fact, it is foreseeable that the distributors consider themselves to control or perform a wider range of tasks compared to those the manufacturers think these distributors carry out. A potential intrachannel cause of conflict emerges here.

**H1: There exist significant differences between the functions of independent distributors recognized by chemical manufacturers and those which the distributors themselves assure they perform.**

Nevertheless, the fact that the manufacturing company uses distributors due to the importance of being close to the customers in order to be able to provide them with a continuous service is certainly going to imply that these middlemen see to a wider number of tasks, assuming the responsibility for adapting to the offer and managing the relationships with buyers. In the same way, if the products have various applications, and an in-depth knowledge of each of these is essential, it is more likely that the manufacturers delegate many of the distribution functions to the distributors, since it is the middlemen who control the appropriate knowledge. The distributor's superiority over the manufacturer is also revealed when the latter lacks knowledge or contact in the area or market or runs up greater costs. Many of these reasons take on great importance in international markets. Without dismissing the fact that each of the tasks may be explained by variables which are specific to each particular function, the above ideas lead us to put forward a second hypothesis.

**H2: The need for a strong local support service, the existence of varied product applications, the difficulty entailed in market entry, or the lower costs of middlemen as reasons for using them, make it more likely that the distributors perform a higher number of tasks.**

### 3. Research methodology.

The study consisted of a first phase of preliminary research in which we conducted a review of the literature and a series of in-depth interviews with the management of nine industrial companies in a Spanish region (between October 1994 and January 1995). The aim was to obtain a wide knowledge of the characteristics of industrial markets and, in particular, of industrial channels of distribution. The results of this first phase were used as a starting point to carry out a **postal survey** aimed at manufacturers and distributors in the chemical sector. The list or census of these was obtained by means of the "DUNS 250,000 Spanish Companies" database, compiled by DUNS & BRADSTREET INTERNATIONAL. This database classifies the companies according to the SIC codes ("Standard Industrial Classification"), which were used to select the specific subsectors under study. For these codes the geographic scope covers the companies situated throughout the **national territory**. Table 1 shows those corresponding to manufacturers. The resulting census of chemical manufacturers was 1,968 companies.

*Table 1. SIC Codes Used in the Research.*

CODES	DESCRIPTION	CODES	DESCRIPTION
SIC 2812	Alkalis and chlorines	SIC 2861	Distilled resin and wood chemical products
SIC 2813	Industrial gases	SIC 2865	Chemical products, dyes and pigments
SIC 2816	Inorganic pigments	SIC 2869	Unclassified industrial organic chemical products
SIC 2819	Unclassified inorganic chemical products	SIC 2873	Nitrogenous fertilizers
SIC 2821	Plastic materials, synthetic resins	SIC 2874	Phosphated fertilizers
SIC 2822	Synthetic rubber	SIC 2875	Mixed fertilizers
SIC 2823	Cellulose synthetic fibres for textiles	SIC 2879	Pesticides, unclassified agricultural chemical products
SIC 2824	Organic synthetic fibres for textiles	SIC 2891	Glues and gums
SIC 2831	Biological products (serums, vaccines)	SIC 2892	Explosives
SIC 2843	Products for surface finishes	SIC 2893	Dyes for graphic arts
SIC 2851	Paints, varnishes, lacquers and enamels	SIC 2895	Charcoal
		SIC 2899	Unclassified chemical products

To delimit the distributors' sample we referred to code 5161 (chemical wholesalers). It should be pointed out, however, that this code does not include all the possible types of distributors as there also exist other codes, such as 5191 (organic and inorganic fertilizers and insecticides) and 5198 (paints and varnishes). Even so, the total census of wholesalers included 1,632 companies. Of the returned questionnaires, all identified themselves as distributors (not agents).

The questionnaire was mailed to all the companies in the lists provided. An important decision was that of determining the person or persons to whom the questionnaire should be addressed. In this sense, throughout the in-depth interviews we were able to observe a reluctance to the same survey being answered by various executives. The additional fact that the survey was mailed made us fear a massive negative response if various posts were asked to contribute, more so taking into account the length of the questionnaire. On the other hand, the dimension of the majority of Spanish manufacturing and distributing chemical companies is small and so perhaps it does not make sense to interview more than one key person. The final decision, for all of these reasons was to address the questionnaire to the **President, General Manager** or, otherwise, to the **Marketing**

**Manager** of the company in question as a person with a general perspective of the organizations's aims and strategies was needed.

The samples which were finally obtained and to which the corresponding analyses were applied were from **142 manufacturing companies** and **120 independent distributors**. It must be said, however, that in each case the **medium-sized companies** (between 50 and 500 workers/between 1,000 and 10,000 million pesetas in sales) and **large** (over 500 workers/over 10,000 million pesetas in sales) have a greater share than that corresponding to the universe percentages. The response rates of these two groups of companies approximate or exceed 20%. This more pronounced importance brings it about that an important part of the industry's sales is represented in these samples. Furthermore, the tendency towards an increase the size of the companies makes the results obtained especially useful.

The main aspects of the design and characteristics of the research work are summarized in table 2. Information was collected by means of two questionnaires adapted to each of the populations under study. The statistical packages SPSS PC+, Version 6.0.1 and LIMDEP 7.0 were used to process and analyse the data obtained. The **profile description** of the sample of manufacturers reveals that these companies, compared to the study universe, are of greater average size, wide coverage, experienced in the sector and established internationally (57.7 % operate internationally, with 54.2 % obtaining between 10-50 % of their total sales in overseas markets). As for the sample of distributors, the companies are characterized by these same features although with less geographical coverage than the manufacturers (20.8 work at an internationally level) and with fewer years' experience in the market.

*Table 2. Research Data.*

CHARACTERISTICS	SURVEY
UNIVERSE	Manufacturers and wholesalers belonging to the Spanish chemical sector
SELECTED SIC CODES	SIC Manufacturers: 2812, 2813, 2816, 2819, 2821, 2822, 2823, 2824, 2831, 2843, 2851, 2861, 2865, 2869, 2873, 2874, 2875, 2879, 2891, 2892, 2893, 2895 y 2899 SIC Wholesalers: 5161
GEOGRAPHICAL SCOPE	National territory
SAMPLE CENSUS	1,968 Manufacturers (132 returned unopened) 1,632 Wholesalers (142 returned unopened)
INFORMATION COLLECTION METHOD	Postal survey to managers of chemical manufacturing and distributing companies
SAMPLING PROCEDURE	The questionnaire was mailed to the total number of companies in the population census
SAMPLE SIZE	142 manufacturers and 120 wholesalers
DEGREE OF RELIABILITY	95 % $Z = 1.96$ $p = q = 50 \%$ for both samples
SAMPLE ERROR	+/- 8.06 % (Manufacturers' sample) +/- 8.76 % (Wholesalers' sample)
DATE OF FIELD WORK	The questionnaires corresponding to the manufacturers were mailed at the beginning of October 1996 and the wholesalers' questionnaires at the beginning of November of the same year. They were received, basically, from that time until February 1997

Regarding the types of products present in the manufacturers sample, it is worth noting the presence in the sample of all the categories selected, with the exception of industrial gases, synthetic cellulose fibres for textiles and organic synthetic fibres for textiles. This heterogeneity

makes it possible to control the effect of the varied nature of the products on the distribution strategy. The importance in the sample is to be noted of the companies of inorganic pigments (SIC 2816), products for surface finishes (SIC 2843) and dyes and pigments (2865), as well as the lower percentage represented by "Other Products" (SIC 2819, 2869 and 2899). Concerning the activities represented in the distributors' sample, companies belonging to all the SIC categories initially chosen are also present.

#### 4. Analysis and results.

Independent distributors make up the second distribution channel used by the manufacturing companies of the sample at both the national and international level. It is found that 61.7% use them at a national level, thus obtaining 22.7% of the national sales as an average. Of the companies operating internationally, 51.9% have overseas distributors, with which they obtain 26.3% of sales in this market.

The manufacturers were asked to indicate how frequently their distributors performed 16 tasks (measured on a 7-point Likert scale). The resulting **average scores** and **standard deviations** are detailed in table 3. The main functions for chemical distributors correspond, as was to be expected, to the closeness to customers. Their role consists in carrying out the traditional functions which provide **market access for the manufacturers' products**. On the other hand, the tasks of providing information (especially on customers), offering added services or developing new product applications, among others, are not regularly performed by these middlemen.

*Table 3: Average Values and Standard Deviations of the Independent Distributors' Tasks (Manufacturers' Perspective).*

VARIABLE*	DESCRIPTION	MEAN	DEVIATION
DITAREA1	Provide market coverage and assure product availability for customers	5.703	1.321
DITAREA4	Market knowledge (customers, production processes, tendencies)	5.365	1.467
DITAREA5	Identify and secure new customers for the company	5.000	1.588
DITARE15	Break down bulk orders (selling to small customers)	5.000	1.909
DITAREA3	Product knowledge (technical characteristics, applications, complementary products)	4.905	1.463
DITAREA7	Promote products	4.649	1.625
DITAREA9	Provide information on competition and environment	4.230	1.626
DITAREA2	Stocking	3.757	1.999
DITARE10	Provide customers with technical service	3.757	2.157
DITARE13	Take on large orders from the manufacturer	3.622	2.018
DITAREA8	Provide the company with customer information	3.270	1.853
DITARE11	Offer other services to the customer (training, guarantees, financing)	3.164	2.055
DITARE12	Adapt the product to final customer needs	2.939	2.141
DITAREA6	Develop new applications for the products they acquire	2.811	1.833
DITARE16	Reassemble smaller assortments	2.770	1.927
DITARE14	Grade and standardize products	2.622	1.619

\* In this column appears the term assigned to each of the 16 functions in the database.

From the perspective of the distributors' sample, table 4 summarizes the **average scores** and **standard deviations** of each of the 16 tasks. If we calculate the possible existence of the mean differences between the two samples, applying the t test for independent samples (parametrical) or the Mann-Whitney U test (non-parametrical), in overall terms it is observed that these mean differences occur in a wide number of functions, and always favouring the distributors. That is to

say, the **distributors perceive that they are performing many of these functions for the manufacturer to a greater extent** than that considered by the manufacturers themselves, thus **confirming Hypothesis H1**. It is only in the following functions that discrepancies do not exist: providing market coverage, taking on bulk orders from the manufacturer, breaking down these bulk orders and reassigning smaller assortments from various manufacturers.

The differences which stand out are those concerning **product knowledge, product promotion** and especially, **providing technical and other services and adapting the product to the final customer needs**. The conclusion to be drawn is that the distributors seem to perceive themselves as customer service organizations who are independent, specialized in the products they distribute and as companies which conduct a wider range of functions than those recognized by the manufacturers. The differing respective perceptions concerning these functions are the sources of possible intrachannel conflicts. Hence, it may be recommendable for the companies in the sector under study to encourage communication between the channel participants in order to reduce these differences, just as an explicit definition of their corresponding roles may be beneficial.

If we calculate the existence of significant mean differences between manufacturers and distributors according to each product category, the results confirmed more homogeneous perceptions within the same category. However, some exceptions are recorded, the most notable being the following types of companies: **organic pigment companies** (significant differences in three tasks: developing new product applications, taking on bulk orders and reassembling smaller assortments), **plastics companies** (differences in five functions: product knowledge, developing new applications, customer information, providing a technical service and product adaptation) and **glue companies** (significant differences in eight of the tasks: product knowledge, market knowledge, providing information on the setting and competitors, providing technical service, offering other services, product adaptation, breaking down bulk orders and reassembling into smaller assortments -in the latter two functions the average score was greater for manufacturers-).

*Table 4. Average Values and Standard Deviations of the Tasks of Independent Distributor (Distributors' Perspective).*

VARIABLE*	DESCRIPTION	MEAN	DEVIATION
DITAREA1	Provide market coverage and assure product availability for customers	5.860	1.545
DITAREA4	Market knowledge (customers, production processes, tendencies)	5.658	1.682
DITAREA3	Product knowledge	5.509	1.598
DITAREA5	Identify and secure new customers for the company	5.447	1.887
DITAREA7	Promote products	5.316	1.762
DITARE10	Provide customers with technical service	5.246	1.875
DITAREA9	Provide information on competition and environment	4.912	1.875
DITARE15	Break down bulk orders (selling to small customers)	4.886	2.056
DITARE11	Offer other services to the customers (training, guarantees, financing)	4.456	1.887
DITARE12	Adapt the product to final customer needs	4.395	2.093
DITAREA2	Stocking	4.342	2.245
DITAREA8	Provide the company with customer information	3.965	2.082
DITAREA6	Develop new applications of the products they acquire	3.956	2.050
DITARE13	Take on large orders from the manufacturer	3.807	1.881
DITARE14	Grade and standardize products	3.509	2.113
DITARE16	Reassemble smaller assortments	2.763	1.975

\* In this column appears the term assigned to each of the 16 functions in the database.

Once we have determined the functions which characterize the distributors' role, the following step was to identify the variables which significantly influence the probability that the distributors perform each of these tasks to a greater or lesser degree (from the manufacturers' perspective). To this end, an **ordered multi-nomial probit model** has been estimated for each of the 16 functions. As the dependent variable in each case we take the task in question. This methodology was chosen taking into account that each dependent variable was a discrete variable which adopted various values which implied a hierarchical ordering. Not requiring the relations to be lineal and isolating the effects of each of the independent variables was, in our opinion, an interesting technique to study many of the aspects of the channels of distribution. To consult the bases of these models ALDRICH and NELSON (1988) and GREENE (1993) may be referred to.

The independent variables considered were the percentage of national and international sales obtained directly (NPVENTAD and IPVENTAD, respectively), competing or not in international markets (IVENTAS), company size (VENTAS), the importance assigned to distribution channel design and management measured on a 7-point Likert scale (CANALES), eleven possible reasons for using distributors measured on a 7-point Likert scale (DIRAZON), fifteen tendencies included in the questionnaire measured on a 7-point Likert scale<sup>2</sup> (TENDEN), the age of the manufacturing company (FECHA), years of international experience (EXPINTER), the degree to which manufacturers use exclusive territories to motivate distributors measured on a 7-point Likert scale (DIMOTI1), the fact that the distribution agreements are exclusive or not (DIEXCLUS) and the variable related to the companies' recognizing their close cooperation or otherwise with their distributors (DICOOP1). The results obtained are shown in tables 5 to 20.

**1. Promote market coverage and assure product availability for customers.**

*Table 5. Task 1: Promote Market Coverage and Assure Product Availability for Customers.*

NUMBER OF OBSERVATIONS	67
LOG LIKELIHOOD FUNCTION	- 76.64087
RESTRICTED LOG LIKELIHOOD	- 99.24943
CHI-SQUARED	45.21711
DEGREES OF FREEDOM	19
SIGNIFICANCE LEVEL	0.000639012

Variable	Coefficient	Significance	Variable	Coefficient	Significance
Constant	-0.71439	0.61035	DIRAZON6	-0.016423	0.93821
NPVENTAD	-0.73159	0.32871	DIRAZON7	-0.19647	0.32074
IVENTAS	0.39937	0.63313	DIRAZON8	0.022415	0.87165
IPVENTAD	-1.4629	0.05773	DIRAZON9	-0.086837	0.45507
VENTAS	0.37906	0.38965	DIRAZO10	0.099215	0.54086
CANALES	0.10282	0.50511	DIRAZO11	0.12906	0.30324
DIRAZON1	-0.059282	0.63444	DIMOTI1	0.066147	0.59806
DIRAZON2	-0.23451	0.10826	EXPINTER	-0.46891	0.28553
DIRAZON3	0.31576	0.05865	DICOOP1	1.4993	0.02405
DIRAZON4	-0.17702	0.18132	MU (1)	0.54046	0.04883
DIRAZON5	0.071176	0.55644	MU (2)	1.4727	0.00089
			MU (3)	2.5684	0.00000

This is the function which the distributors, on average, perform to a greater degree. Even so, the more the manufacturers consider the existence of a **large number of customers, acquiring**

<sup>2</sup> We considered it advisable to control the influence these future expectations could have on the distributors' existing roles. Due to the low number of valid cases, in order to improve the estimation, we eliminated those tendencies which had no clear effect on the degree of performance of the task under study. Hence, the following tables do not show the total number of tendencies



**small volumes of products** (DIRAZON3), ceteris paribus, as a reason for using distributors, the higher the probability that the distributors see more frequently to assuring product availability for the customers. On the other hand, it seems that the **limited sales potential of the area** (DIRAZON2) has the inverse effect on this probability: if the sales volume of a certain market area is low the distributors will have to provide them with coverage to a lesser degree. There is a significant inverse effect for the **percentage of direct distribution in overseas markets** (IPVENTAD). In international markets, the performance of this task is fundamental when the company relies more strongly on the distributors, perhaps due to the distance of these markets. Finally, the **close cooperation** (DICOOP1) between manufacturers and distributors (in the opinion of the former) has a positive effect on performing this function.

## 2. Maintaining stock levels.

Table 6. Task 2. Maintaining stock levels.

NUMBER OF OBSERVATIONS	65
LOG LIKELIHOOD FUNCTION	- 91.50955
RESTRICTED LOG LIKELIHOOD	- 114.7678
CHI-SQUARED	46.51652
DEGREES OF FREEDOM	26
SIGNIFICANCE LEVEL	0.007981574

Variable	Coefficient	Significance	Variable	Coefficient	Significance
Constant	-2.0360	0.30986	DIRAZO10	-0.21630	0.26169
NPVENTAD	-0.23013	0.76114	DIRAZO11	0.10825	0.43521
IVENTAS	-0.77654	0.51821	TENDEN7	0.21470	0.19366
IPVENTAD	0.32118	0.76619	TENDEN9	0.44134	0.01809
VENTAS	0.50358	0.39191	TENDEN11	-0.35523	0.07509
CANALES	0.22048	0.32154	TENDEN12	-0.25407	0.11506
DIRAZON1	-0.047259	0.72874	TENDEN14	0.42023	0.06416
DIRAZON2	-0.12759	0.29343	DIMOTI1	-0.092508	0.51329
DIRAZON3	-0.067824	0.70756	FECHA	-0.50254	0.10821
DIRAZON4	0.18373	0.30415	EXPINTER	0.14414	0.75941
DIRAZON5	0.21841	0.09126	DIEXCLUS	1.1123	0.12118
DIRAZON6	0.13733	0.38592	DICOOP1	0.14274	0.81392
DIRAZON7	-0.20715	0.32420	MU (1)	0.57269	0.04139
DIRAZON8	0.14328	0.36716	MU (2)	1.1505	0.00075
DIRAZON9	0.15307	0.27426	MU (3)	1.6454	0.00001
			MU (4)	2.3898	0.00000

As for the reasons for using distributors, the only reason which has a significant effect on the dependent variable is the fact that, normally, the **purchase of the company's products is linked to that of other products not manufactured by this company** (DIRAZON5). The more important this reason becomes, the distributors take on responsibility more frequently for maintaining stock levels (thus providing utility of form by means of creating assortment). Concerning tendencies, the companies which give a high score to the belief related to the **greater future use of new information technologies as a means of increasing sales force productivity** (TENDEN9) employ the distributors who are more concerned about stock maintenance.

## 3. Product knowledge (technical characteristics, applications).

The analysis results reveal that the greater the importance attached by the manufacturers to the **products being relatively simple, of slight added value and/or very well-known in the**

**market** (DIRAZON1) when they use distributors, the lower the probability that the latter need an in-depth product knowledge. On the other hand, the need for an **intensive distribution and a strong local support service** (DIRAZON6) has a positive influence on the dependent variable, just like the importance of **avoiding visiting all the customers and leaving the company unattended** (DIRAZO11). In these two cases it is important for the distributors to have an exhaustive knowledge of the product for which they have to provide services or for which they have to replace the company.

#### 4. Market knowledge (customers, production processes, tendencies).

Market knowledge is another of the fundamental functions of distributors, and so there are no significant differences in many of the independent variables. It is observed, however, that when the **percentage of international sales obtained directly** (IPVENTAD) increases, the probability that the distributors perform this function decreases. On the other hand, when in these markets the manufacturer relies strongly on distributors it is very important that the distributors have knowledge of this type. The distance of the overseas markets implies greater difficulties in gaining access to information, unlike the national market.

*Table 7. Task 3: Product Knowledge (Technical Characteristics, Applications, Complementary Products).*

NUMBER OF OBSERVATIONS	65
LOG LIKELIHOOD FUNCTION	- 74.30621
RESTRICTED LOG LIKELIHOOD	- 104.0893
CHI-SQUARED	59.566227
DEGREES OF FREEDOM	23
SIGNIFICANCE LEVEL	0.0000441277

Variable	Coefficient	Significance	Variable	Coefficient	Significance
Constant	-0.11806	0.93932	DIRAZON8	-0.079277	0.62309
NPVENTAD	-0.85162	0.23769	DIRAZON9	-0.095088	0.42981
IVENTAS	-0.32170	0.70594	DIRAZO10	0.086086	0.56324
IPVENTAD	0.51130	0.59622	DIRAZO11	0.26825	0.01267
VENTAS	-0.088222	0.84016	TENDEN6	0.29515	0.17516
CANALES	-0.22691	0.14856	TENDEN7	-0.18941	0.09498
DIRAZON1	-0.1743	0.08806	TENDEN14	-0.17195	0.28003
DIRAZON2	-0.13886	0.26351	TENDEN15	0.30080	0.09111
DIRAZON3	-0.030526	0.83165	FECHA	0.38730	0.23809
DIRAZON4	-0.25668	0.15488	EXPINTER	-0.31191	0.55212
DIRAZON5	-0.029522	0.80486	DICOOP1	0.56983	0.22091
DIRAZON6	0.29570	0.04306	MU (1)	0.93162	0.00442
DIRAZON7	0.19271	0.19581	MU (2)	1.8213	0.00011
			MU (3)	2.7826	0.00001

*Table 8. Task 4: Market Knowledge (Customers, Production Processes, Tendencies).*

NUMBER OF OBSERVATIONS	64
LOG LIKELIHOOD FUNCTION	- 77.67129
RESTRICTED LOG LIKELIHOOD	- 98.52441
CHI-SQUARED	41.70623
DEGREES OF FREEDOM	22
SIGNIFICANCE LEVEL	0.006783027

Variable	Coefficient	Significance	Variable	Coefficient	Significance
Constant	0.084270	0.96337	DIRAZON8	-0.10874	0.46350
NPVENTAD	-0.24800	0.76589	DIRAZON9	0.15612	0.16214
IVENTAS	0.25954	0.78378	DIRAZO10	-0.13704	0.37950
IPVENTAD	-1.8229	0.02160	DIRAZO11	0.17883	0.15823
VENTAS	0.36002	0.44313	TENDEN3	0.15622	0.22068
CANALES	0.10366	0.54213	FECHA	-0.026890	0.92997

DIRAZON1	-0.13980	0.35711	EXPINTER	-0.38084	0.42637
DIRAZON2	-0.13325	0.23972	DIMOTI1	-0.13248	0.39066
DIRAZON3	-0.056326	0.70687	DIEXCLUS	0.92656	0.08180
DIRAZON4	0.11237	0.45375	DICOOP1	0.62036	0.34966
DIRAZON5	-0.038593	0.74003	MU (1)	0.73245	0.01907
DIRAZON6	0.12242	0.49143	MU (2)	1.1743	0.00154
DIRAZON7	-0.000061863	0.99971	MU (3)	2.3679	0.00000

### 5. Identify and secure new customers/accounts for the company.

Identifying new customers or developing the market is one of the important functions of the distributors. For this reason it is possible that there do not exist many variables for which the differences are significant. It appears, however, that the more important the need for an **intensive distribution and a strong local support service** (DIRAZON6), the greater the likelihood that the distributors perform this task frequently. The importance in these cases of being close to the customer, can place the distributors in a better position to develop the market.

*Table 9. Task 5: Identify and Secure New Customers/Accounts for the Company.*

NUMBER OF OBSERVATIONS	64
LOG LIKELIHOOD FUNCTION	- 82.87509
RESTRICTED LOG LIKELIHOOD	- 108.9268
CHI-SQUARED	52.10343
DEGREES OF FREEDOM	23
SIGNIFICANCE LEVEL	0.0004842895

Variable	Coefficient	Significance	Variable	Coefficient	Significance
Constant	-0.64593	0.72975	DIRAZON9	0.14014	0.24265
NPVENTAD	-0.10543	0.88944	DIRAZO10	-0.11006	0.52606
IVENTAS	-0.74211	0.46257	DIRAZO11	0.21464	0.15372
IPVENTAD	-0.57627	0.55578	TENDEN4	0.26003	0.12394
VENTAS	-0.0037022	0.99251	TENDEN12	0.21932	0.18857
CANALES	-0.33368	0.08827	FECHA	-0.20378	0.48340
DIRAZON1	-0.11657	0.39851	EXPINTER	0.30467	0.57008
DIRAZON2	0.0057451	0.95940	DIMOTI1	-0.075997	0.55267
DIRAZON3	0.18786	0.26978	DIEXCLUS	0.75662	0.11924
DIRAZON4	-0.090088	0.48717	DICOOP1	0.61101	0.30292
DIRAZON5	-0.15766	0.23366	MU (1)	0.59518	0.14548
DIRAZON6	0.23318	0.09000	MU (2)	1.5565	0.00475
DIRAZON7	0.073478	0.70702	MU (3)	2.2355	0.00038
DIRAZON8	-0.17174	0.24225	MU (4)	3.3057	0.00004

### 6. Developing new applications of the products they acquire.

From table 10 we can deduce that the independent variables used are not enough to significantly explain the differences in the performance of the task consisting in identifying new product applications. In actual fact, this is a function which the distributors, in general, hardly perform, and so this explains the lack of differences. Furthermore, there may also exist other determining variables.

*Table 10. Task 6: Developing New Applications for the Products they Acquire.*

NUMBER OF OBSERVATIONS	64
LOG LIKELIHOOD FUNCTION	- 95.80366
RESTRICTED LOG LIKELIHOOD	- 109.7454
CHI-SQUARED	27.88357
DEGREES OF FREEDOM	22
SIGNIFICANCE LEVEL	0.1795719

## 7. Product promotion.

It is only observed that in those cases in which the manufacturer declares **close cooperation with the distributor** (DICOOP1), the probability of the distributor promoting the products increases. Additionally, the more companies believe that in the future **distribution channel participants will be increasingly specialized and that there will be less vertical integration** (TENDEN15), the likelihood that the distributors frequently promote the products also increases. Nevertheless, the tendency related to **lowering stock levels within the global distribution chain** has an inverse effect (TENDEN13).

Table 11. Task 7: Product Promotion.

NUMBER OF OBSERVATIONS	62
LOG LIKELIHOOD FUNCTION	- 71.53283
RESTRICTED LOG LIKELIHOOD	- 97.64103
CHI-SQUARED	52.21641
DEGREES OF FREEDOM	23
SIGNIFICANCE LEVEL	0.0004676446

Variable	Coefficient	Significance	Variable	Coefficient	Significance
Constant	-3.9564	0.06440	DIRAZON8	-0.035828	0.82045
NPVENTAD	0.21991	0.81131	DIRAZON9	0.058732	0.68729
IVENTAS	-0.36515	0.76009	DIRAZO10	0.25200	0.25725
IPVENTAD	-1.0531	0.44023	DIRAZO11	0.11929	0.33666
VENTAS	-0.22288	0.69255	TENDEN13	-0.27004	0.07640
CANALES	0.038304	0.82448	TENDEN15	0.30888	0.08881
DIRAZON1	0.054822	0.73025	FECHA	0.51150	0.33362
DIRAZON2	-0.13934	0.38152	EXPINTER	0.12005	0.86342
DIRAZON3	0.036801	0.81367	DIMOTII	-0.0095422	0.94876
DIRAZON4	-0.11789	0.50794	DIEXCLUS	0.57086	0.20193
DIRAZON5	0.012022	0.92287	DICOOP1	1.2978	0.07703
DIRAZON6	0.087477	0.65240	MU (1)	1.1216	0.02238
DIRAZON7	0.13999	0.36942	MU (2)	2.2427	0.00014
			MU (3)	3.3800	0.00000

## 8. Provide the company with customer information.

Table 12. Provide the Company with Customer Information.

NUMBER OF OBSERVATIONS	64
LOG LIKELIHOOD FUNCTION	- 90.16661
RESTRICTED LOG LIKELIHOOD	- 116.6828
CHI-SQUARED	53.03233
DEGREES OF FREEDOM	22
SIGNIFICANCE LEVEL	0.000224771

Variable	Coefficient	Significance	Variable	Coefficient	Significance
Constant	-0.33753	0.85404	DIRAZON9	-0.13001	0.24557
NPVENTAD	0.28364	0.76259	DIRAZO10	0.23225	0.08515
IVENTAS	1.8414	0.07310	DIRAZO11	0.071378	0.49828
IPVENTAD	0.66991	0.42293	TENDEN3	0.26738	0.03350
VENTAS	0.48989	0.17249	FECHA	-0.029545	0.92017
CANALES	-0.34594	0.08875	EXPINTER	-0.86064	0.06535
DIRAZON1	-0.041370	0.72003	DIMOTII	-0.0024578	0.98456
DIRAZON2	-0.059740	0.56685	DIEXCLUS	0.40992	0.35795
DIRAZON3	0.17739	0.23131	DICOOP1	0.57897	0.43405
DIRAZON4	-0.24571	0.08883	MU (1)	1.2472	0.00190
DIRAZON5	-0.00019980	0.99844	MU (2)	1.9021	0.00019

DIRAZON6	0.27685	0.10915	MU (3)	2.3632	0.00001
DIRAZON7	0.12854	0.46935	MU (4)	3.1077	0.00000
DIRAZON8	-0.39957	0.00608	MU (5)	3.5494	0.00000

Analysing table 12 reveals that the companies which **compete internationally** (IVENTAS) rely on distributors who are more likely to be concerned about obtaining information on final customers. Perhaps this is due to the fact that these companies find greater difficulties in obtaining information on the customers of overseas markets. However, the greater the **international experience in years** (EXPINTER), the lower this probability, as the manufacturer has more knowledge about the buyers.

As for the different reasons for using distributors, it is noted that the more important the need to have an **intensive distribution and a strong local support service** (DIRAZON6), the greater the probability that the distributors regularly obtain information, which is possibly related to these service requirements, for the company. Furthermore, the fact that the distributor operates with **lower costs** (DIRAZO10) also has a positive effect. Nevertheless, **customer dispersity** (DIRAZON4) and, more so, the use of distributors as a result of their having the **power to avoid the company selling the products directly** (DIRAZON8) have an inverse effect on the performance of the task in question. Customer dispersity (and distributor dispersity) may make information transmission difficult. As for the manufacturers, if they are forced to use distributors, this will complicate intrachannel harmony.

### 9. Provide the company with information on competitors and the environment.

Table 13. Task 9. Provide the Company with Information on Competitors and the Environment.

NUMBER OF OBSERVATIONS	64
LOG LIKELIHOOD FUNCTION	- 92.59904
RESTRICTED LOG LIKELIHOOD	- 111.6850
CHI-SQUARED	38.17185
DEGREES OF FREEDOM	22
SIGNIFICANCE LEVEL	0.01752478

Variable	Coefficient	Significance	Variable	Coefficient	Significance
Constant	0.61333	0.79319	DIRAZON8	-0.35163	0.01648
NPVENTAD	0.16227	0.85895	DIRAZON9	-0.096689	0.45637
IVENTAS	0.41780	0.71582	DIRAZO10	0.21728	0.08713
IPVENTAD	-0.58030	0.56557	DIRAZO11	0.20860	0.06736
VENTAS	0.28426	0.51666	TENDEN14	-0.33937	0.03817
CANALES	0.058444	0.75381	FECHA	0.36462	0.32172
DIRAZON1	-0.060465	0.64875	EXPINTER	-0.38772	0.49338
DIRAZON2	-0.017965	0.89673	DIMOTI1	0.10502	0.45190
DIRAZON3	0.018636	0.88608	DIEXCLUS	0.30385	0.57189
DIRAZON4	-0.18092	0.13184	DICOOP1	0.36438	0.50220
DIRAZON5	-0.059783	0.49858	MU (1)	0.96629	0.00346
DIRAZON6	0.22212	0.19034	MU (2)	1.6805	0.00000
DIRAZON7	-0.022276	0.89426	MU (3)	2.4451	0.00000
			MU (4)	3.3210	0.00000

The function of obtaining information on competitors and the environment has less significant variables compared to the previous task (it must be remembered that this is a function performed less frequently by the distributors). It is noted that DIRAZON8 (**distributors having the power to avoid the company selling directly**) again appears with a negative influence, and the reason linked to the **distributor's lower costs** (DIRAZO10) has a positive effect. The more important the reason related to **avoiding visiting all the customers and leaving the company unattended**

(DIRAZO11), the greater the probability that the distributors obtain information on competitors and the setting.

**10. Provide the customer with technical service.**

It is again observed that the need to have an **intensive distribution with a strong local support service** (DIRAZON6) has a positive influence on the performance of a task, in this case providing technical service. Also, the existence of a **large number of small customers** (DIRAZON3) positively effects the dependent variable. Upon deciding whether or not to use distributors, the more important the providing of services and being close to the customer, as well as the company's inability to serve all of the customers directly due to their dispersity is, the more likely the distributors are to provide technical service. **Customer dispersity** (DIRAZON4) has the opposite effect. Just as occurred with other functions, customer dispersity can lower the frequency with which the suppliers, whether manufacturers or distributors, provide a service or are able to visit them.

*Table 14. Task 10. Provide the Customer With Technical Service.*

NUMBER OF OBSERVATIONS	59
LOG LIKELIHOOD FUNCTION	- 67.94446
RESTRICTED LOG LIKELIHOOD	- 101.6902
CHI-SQUARED	67.49150
DEGREES OF FREEDOM	25
SIGNIFICANCE LEVEL	0.0000090106

Variable	Coefficient	Significance	Variable	Coefficient	Significance
Constant	0.87852	0.68335	DIRAZO10	0.27049	0.23142
NPVENTAD	0.44925	0.72333	DIRAZO11	-0.019135	0.91869
IVENTAS	0.76697	0.61429	TENDEN8	-0.51700	0.11904
IPVENTAD	-1.3249	0.33751	TENDEN10	-0.75039	0.01564
VENTAS	0.036814	0.94981	TENDEN13	0.41854	0.08649
CANALES	-0.22188	0.31465	TENDEN15	0.38292	0.17288
DIRAZON1	0.019467	0.91208	FECHA	-0.18570	0.66675
DIRAZON2	-0.14749	0.46103	EXPINTER	-0.19658	0.80909
DIRAZON3	0.47454	0.09728	DIMOTII	0.28825	0.32532
DIRAZON4	-0.55850	0.02670	DIEXCLUS	-0.59083	0.36333
DIRAZON5	-0.24413	0.11001	DICOOP1	1.3875	0.21979
DIRAZON6	0.61213	0.02389	MU (1)	1.2517	0.00209
DIRAZON7	0.15339	0.58429	MU (2)	2.0077	0.00060
DIRAZON8	0.094891	0.68895	MU (3)	2.7084	0.00006
DIRAZON9	-0.46579	0.09032	MU (4)	3.7206	0.00000

**11. Provide the customer with other services (training, guarantees, financing).**

*Table 15. Task 11: Provide the Customer with Other Services (Training, Guarantees, Financing).*

NUMBER OF OBSERVATIONS	63
LOG LIKELIHOOD FUNCTION	- 86.54962
RESTRICTED LOG LIKELIHOOD	- 114.6270
CHI-SQUARED	56.15470
DEGREES OF FREEDOM	23
SIGNIFICANCE LEVEL	0.000134664

Variable	Coefficient	Significance	Variable	Coefficient	Significance
Constant	-1.5286	0.53910	DIRAZON9	0.10235	0.41043
NPVENTAD	-0.97334	0.43479	DIRAZO10	0.37411	0.06729
IVENTAS	0.31227	0.75876	DIRAZO11	-0.17683	0.19165
IPVENTAD	0.21972	0.84692	TENDEN3	0.35948	0.00850
VENTAS	0.12616	0.76461	TENDEN12	0.31932	0.06246

CANALES	-0.093839	0.69476	FECHA	0.064223	0.79480
DIRAZON1	-0.21537	0.10959	EXPINTER	-0.25993	0.54036
DIRAZON2	-0.25571	0.09305	DIMOTI1	0.21280	0.20728
DIRAZON3	-0.055218	0.73275	DIEXCLUS	-0.075148	0.89342
DIRAZON4	-0.058637	0.68366	DICOOP1	-0.12036	0.87510
DIRAZON5	-0.044242	0.72837	MU (1)	0.80637	0.00023
DIRAZON6	0.15617	0.37566	MU (2)	1.2669	0.00003
DIRAZON7	0.055412	0.72848	MU (3)	1.9385	0.00007
DIRAZON8	-0.14829	0.33345	MU (4)	2.4379	0.00001
			MU (5)	3.2029	0.00003

The fact that there are relatively **simple products of slight added value and/or very well-known in the market** (DIRAZON1) as well as the **limited sales potential of an area** (DIRAZON2) have a negative influence on the provision of other services by the distributor. In these cases, either it is not necessary to provide those services or it is not profitable for the distributor providing the service. The reason for using distributors based on the **distributor's lower costs** (DIRAZO10) has the opposite effect as occurred with previous functions. Among the tendencies, worthy of note is the highly significant positive effect that the belief that **distributor size will increase via mergers** (TENDEN3) seems to have, which will certainly allow them to be more efficient and increase their ability to provide service.

## 12. Adapt the product to final customer needs.

Table 16. Task 12: Adapt the Product to Final Customer Needs.

NUMBER OF OBSERVATIONS	64
LOG LIKELIHOOD FUNCTION	- 62.40073
RESTRICTED LOG LIKELIHOOD	- 91.15098
CHI-SQUARED	57.50049
DEGREES OF FREEDOM	23
SIGNIFICANCE LEVEL	0.000087057

Variable	Coefficient	Significance	Variable	Coefficient	Significance
Constant	-1.4568	0.58888	DIRAZON8	0.30848	0.12386
NPVENTAD	0.0150562	0.95001	DIRAZON9	-0.20719	0.16617
IVENTAS	-0.60364	0.64542	DIRAZO10	0.041719	0.84202
IPVENTAD	0.54688	0.75960	DIRAZO11	-0.18028	0.29633
VENTAS	-1.5876	0.04387	TENDEN8	-0.46917	0.09142
CANALES	0.44829	0.09698	TENDEN12	0.39856	0.03201
DIRAZON1	0.071801	0.64686	FECHA	0.19643	0.66792
DIRAZON2	0.084905	0.74107	EXPINTER	0.55264	0.45587
DIRAZON3	-0.47303	0.06272	DIMOTI1	0.65432	0.03445
DIRAZON4	0.15965	0.36117	DIEXCLUS	-1.3681	0.15605
DIRAZON5	-0.12807	0.38005	DICOOP1	-1.0550	0.29989
DIRAZON6	0.38059	0.13362	MU (1)	0.87719	0.00192
DIRAZON7	0.29081	0.15772	MU (2)	1.5678	0.00099
			MU (3)	2.6133	0.00003

It is seen that the **size** of the manufacturing company (VENTAS) has a negative effect. The greater the size of the manufacturing company using distributors, the lower the probability of the distributors' performing this task. Probably as a result of greater resources, the manufacturer is able to take direct charge of these adaptations.

On the other hand, the **importance given to distribution channel design and management** (CANALES) has a positive influence on the performance of this task by the distributors. A possible explanation lies in the fact (reported in another section of the broader research framework) that the companies who concede greater importance to this decision area are those which consider the

suppliers' geographical proximity to customers to be important, as well as those companies which use distributors basically for one of the following reasons: existence of a high number of small customers, need for a strong distribution together with a strong local support service, and a variety of product applications. All of this leads to the fact that being close to the customer in order to provide the service or adapting the product according to a specific application constitute a key utility. When the manufacturing company is unable to provide this utility the distributors have to do so.

If we consider the influence of the various reasons for using the distributors, we observe that the existence of a **high number of small customers** (DIRAZON3) has the inverse effect on this function. The manufacturers who concede greater importance to the belief that in the future **various distribution channels will be combined** (TENDEN12) are those which have distributors who see to product adaptation to a greater extent, just as happened with the other previous functions. The same can be said of those manufacturers who use **exclusive territories** (DIMOTI1) to a greater extent in order to motivate the distributors: by conceding exclusive territories they attempt to compensate for and encourage the greater effort and investments required by the sale of adapted products.

### 13. Taking on large orders from the manufacturer.

Table 17. Task 13: Taking on Large Orders From the Manufacturer.

NUMBER OF OBSERVATIONS	62
LOG LIKELIHOOD FUNCTION	- 106.3639
RESTRICTED LOG LIKELIHOOD	- 119.3978
CHI-SQUARED	26.06784
DEGREES OF FREEDOM	22
SIGNIFICANCE LEVEL	0.2487808

As seen in the above table, the set of independent variables considered is not able to give a global explanation of the variation of the dependent variable. There must exist other variables not considered here which are able to do so.

### 14. Grading and standardizing products.

Table 18. Task 14: Grading and Standardizing the Products.

NUMBER OF OBSERVATIONS	64
LOG LIKELIHOOD FUNCTION	- 84.15528
RESTRICTED LOG LIKELIHOOD	- 110.5060
CHI-SQUARED	52.70144
DEGREES OF FREEDOM	23
SIGNIFICANCE LEVEL	0.000402247

Variable	Coefficient	Significance	Variable	Coefficient	Significance
Constant	-1.2519	0.57543	DIRAZON9	-0.11749	0.44836
NPVENTAD	-0.0063156	0.99415	DIRAZO10	0.14261	0.46265
IVENTAS	-0.41788	0.70556	DIRAZO11	-0.064791	0.66315
IPVENTAD	0.14106	0.88704	TENDEN3	0.23406	0.14649
VENTAS	-0.78336	0.08193	TENDEN12	0.19432	0.10696
CANALES	0.21397	0.30427	FECHA	0.38724	0.37165
DIRAZON1	0.0056023	0.97226	EXPINTER	0.25920	0.64951
DIRAZON2	-0.24868	0.04582	DIMOTI1	0.10048	0.66234
DIRAZON3	-0.064007	0.72745	DIEXCLUS	-0.51742	0.38194
DIRAZON4	0.15987	0.28171	DICOOP1	-1.0719	0.24888
DIRAZON5	0.071514	0.66316	MU (1)	0.85796	0.00079



DIRAZON6	0.063771	0.71713	MU (2)	1.6863	0.00000
DIRAZON7	0.22776	0.24510	MU (3)	2.2974	0.00000
DIRAZON8	0.044967	0.76731	MU (4)	3.3301	0.00011
			MU (5)	4.0681	0.00157

The **larger companies** (VENTAS) using middlemen work with those distributors which are less likely to see to grading and standardizing orders. Furthermore, the greater the importance of the **limited sales potential of the area** (DIRAZON2), the lower the probability that the distributors carry out these tasks.

### 15. Break Down Bulk Orders (selling to small customers).

We can point out the negative effect on the performance of the function being considered produced by the fact that the **products have highly varied applications, an in-depth knowledge of each of these being essential** (DIRAZON7). When this occurs, the distributor's function is not to sell to small customers but rather to adapt the product to these specific requirements and applications. The **importance given to the distribution channel design and management** as a source of competitive advantage (CANALES), the existence of a **high number of small customers** (DIRAZON3) and the fact that the **distributors themselves have the power to avoid the company selling the products directly** (DIRAZON8) all have a positive effect.

Table 19. Task 15: Break Down Bulk Orders (Selling to Small Customers).

NUMBER OF OBSERVATIONS	64
LOG LIKELIHOOD FUNCTION	- 79.70234
RESTRICTED LOG LIKELIHOOD	- 108.9884
CHI-SQUARED	58.57210
DEGREES OF FREEDOM	22
SIGNIFICANCE LEVEL	0.000036256

Variable	Coefficient	Significance	Variable	Coefficient	Significance
Constant	-0.42073	0.84586	DIRAZON9	-0.055162	0.70359
NPVENTAD	-0.57256	0.57206	DIRAZO10	-0.069933	0.65692
IVENTAS	1.2955	0.28728	DIRAZO11	0.15289	0.28555
IPVENTAD	-1.3567	0.26122	TENDEN13	0.23066	0.21619
VENTAS	0.70559	0.17154	FECHA	0.58263	0.17041
CANALES	0.27628	0.09084	EXPINTER	-0.43483	0.55144
DIRAZON1	-0.15267	0.34642	DIMOTI	-0.024976	0.88165
DIRAZON2	-0.0019671	0.99164	DIEXCLUS	0.63809	0.24344
DIRAZON3	0.22577	0.09184	DICOOP1	-0.40494	0.59746
DIRAZON4	-0.16377	0.23408	MU (1)	1.0552	0.07427
DIRAZON5	0.052228	0.68513	MU (2)	1.2560	0.04556
DIRAZON6	0.18608	0.27078	MU (3)	1.7610	0.01204
DIRAZON7	-0.52988	0.00016	MU (4)	2.5262	0.00082
DIRAZON8	0.25232	0.08597	MU (5)	3.8383	0.00001

### 16. Reassembling smaller assortments from various manufacturers.

Table 20. Task 16: Reassembling Smaller Assortments from Various Manufacturers.

NUMBER OF OBSERVATIONS	62
LOG LIKELIHOOD FUNCTION	- 49.89843
RESTRICTED LOG LIKELIHOOD	- 107.4844
CHI-SQUARED	115.1719
DEGREES OF FREEDOM	29
SIGNIFICANCE LEVEL	0.0000000

Variable	Coefficient	Significance	Variable	Coefficient	Significance
----------	-------------	--------------	----------	-------------	--------------

Constant	-8.0421	0.14405	TENDEN1	-0.66138	0.04119
NPVENTAD	1.2822	0.30474	TENDEN3	0.47319	0.18565
IVENTAS	4.8659	0.05066	TENDEN4	-1.1271	0.06478
IPVENTAD	0.88457	0.70437	TENDEN5	-0.79383	0.04589
VENTAS	-0.46820	0.59697	TENDEN6	2.5573	0.02112
CANALES	-0.095310	0.73104	TENDEN7	1.2400	0.03488
DIRAZON1	0.0050451	0.97878	TENDEN14	-0.37604	0.14193
DIRAZON2	-0.089780	0.64599	TENDEN15	-2.1688	0.02426
DIRAZON3	0.21734	0.55587	FECHA	0.94377	0.09492
DIRAZON4	1.1663	0.00989	EXPINTER	-1.3230	0.21820
DIRAZON5	-0.24106	0.31024	DIMOTI1	-0.57481	0.15355
DIRAZON6	-0.70856	0.07427	DIEXCLUS	2.8609	0.08969
DIRAZON7	0.31385	0.30711	DICOOP1	-0.010590	0.99219
DIRAZON8	0.31604	0.17276	MU (1)	1.6310	0.11325
DIRAZON9	-0.51791	0.04570	MU (2)	2.0547	0.04734
DIRAZO10	2.5139	0.01718	MU (3)	3.5263	0.01484
DIRAZO11	0.024274	0.92756	MU (4)	5.3742	0.01782
			MU (5)	8.5082	0.00668

The companies which use distributors, and which besides, operate in **overseas markets** (IVENTAS) have a greater probability of their distributors frequently seeing to reassembling smaller assortments. Similarly, the fact that the **final customers are geographically dispersed** (DIRAZON4) has a considerable positive influence on the performance of this activity (buyer dispersity may imply grouping products together in order to create assortment). The **distributor's lower costs** (DIRAZO10) once again positively affect the performance of a task: combining products from various manufacturers will enable costs to be shared among all of them. Just as is seen, therefore, factors related to market demography or the distributors' lower costs govern the degree to which this task is performed.

The **difficulty entailed in market entry** (DIRAZON9) has a negative effect on the dependent variable. The basic aim of the distributors in these cases will be connected to their market knowledge and contacts. The companies which believe there will be an increase in the **use of distributors** (TENDEN1), their **specialization** (TENDEN4), and **functions** (TENDEN5) or that there will be **less vertical integration** in the distribution channel (TENDEN15) are associated to the distributors which are less likely to perform the task being considered. The opposite happens with those companies believing that the distributors are **better managed and trained** (TENDEN6) or that **intrachannel relations will change** (TENDEN7).

From the analysis of all the previous models, we can state that the reasons leading to the distributors assuming responsibility for a wider set of functions are **the need for an intensive distribution and a strong local support service** (for those basically related to the functions of product knowledge, market expansion, providing information and product adaptation), these **middlemen's lower costs** and the existence of **dispersed markets**. The **lower sales potential of the market area** on the other hand frequently has the inverse effect. **The second hypothesis is partially supported by these results**, it being confirmed that the importance of service and being close to customers has a positive effect on the distributor being assigned a greater number of functions, just as occurs if the distributing company runs up lower costs.

## 5. Conclusions.

From the manufacturers' perspective, the independent distributors assume responsibility, basically, for the traditional tasks related to **guaranteeing market access for the products**. **The distributors' global point of view, however, differs significantly**, in the sense that they perceive that they perform many of the potential functions considered to a significantly greater degree. Even

taking into account that within each product category the perceptions are more homogeneous, the conclusion which seems to arise is that the distributors tend to consider themselves as customer service organizations with a wider role than that recognized by the manufacturers. The possible emergence of conflicts originating in these differences make it advisable to encourage communication and the explicit definition of the participants' corresponding tasks.

The individual analysis of the factors explaining the degree in which the distributors perform each of the sixteen tasks proposed has enabled us to affirm that, the greater the importance of **having an intensive distribution together with a strong local support service**, as well as the **distributors' lower costs** and the **existence of dispersed markets** (a high number of small customers), the greater the probability that these middlemen are responsible for a higher number of functions. Finally, it has been confirmed that the fact that the **company competes internationally** or the **importance of the indirect channels in these markets** has a significant positive influence on the probability of the distributor performing basic functions such as providing market coverage, market knowledge, providing the company with customer information and reassembling smaller assortments from various manufacturers.

To conclude, it only remains to point out two of the limitations the research is subject to. Hence, firstly, the samples of manufacturers and distributors cannot be considered totally representative of the total universe, since both are made up of large companies. Secondly, as happens with most of these studies it is impossible to guarantee that the individual manufacturers and distributors have evaluated each other reciprocally in their working relationship (although the similar characteristics of both samples seem to support this fact).

## 6. References.

- ALDRICH, J. H. y NELSON, F. D. (1988): *Lineal Probability, Logit, and Probit Models*, SAGE Publications, 5ª Edición.
- ALLUEVA, C. (1990): *Marketing Internacional de Productos Industriales*, Ediciones Gestión 2000, S.A., Barcelona.
- ANDERSON, E. y COUGHLAN, A. T. (1987): "International Market Entry and Expansion via Independent or Integrated Channels of Distribution", *Journal of Marketing*, Vol. 51, Enero, págs. 71-82.
- ANDERSON, J. C. y NARUS, J. A. (1990): "A Model of Distributor Firm and Manufacturer Firm Working Partnerships", *Journal of Marketing*, Vol. 54, Enero, págs. 42-58.
- BELLO, D. C. y LOHTIA, R. (1995): "Export Channel Design: The Use of Foreign Distributors and Agents", *Journal of the Academy of Marketing Science*, Vol. 23, Nº 2, págs. 83-93.
- BELLO, D. C. y VERHAGE, B. J. (1989): "Performing Export Tasks in Industrial Channels of Distribution", *European Journal of Marketing*, Vol. 23, Nº 2, págs. 68-78.
- BROWN, R. B. y HERRING, R. (1995): "The Role of the Manufacturer's Distributor. The Case of Champion Chemicals", *Industrial Marketing Management*, 24, págs. 285-295.
- COREY, E. R. (1991): *Industrial Marketing. Cases and Concepts*, Prentice-Hall International.
- COREY, E. R.; CESPEDES, F. V. y RANGAN, V. K. (1991): *Cómo Entrar en el Mercado. Sistemas de Distribución de los Productos Industriales*, McGraw-Hill.
- COVIELLO, N.; DART, J. y BOAG, D. A. (1989): "Managing Industrial Middlemen in the Small Technology-based Firm", *European Journal of Marketing*, Vol. 23, Nº 2, págs. 163-171.
- DOWST, S. (1983): "Buyers' View. What Buyers Want from Distributors", *Purchasing*, 13, Octubre, págs. 67-71.
- GREENE, W. (1993): *Econometric Analysis*, 2ª Edición, MacMillan, New York.
- HERBIG, P. y O'HARA, S. (1994): "Industrial Distributors in the Twenty-First Century", *Industrial Marketing Management*, 23, págs. 199-203.

- HILL, S. M. y BLOIS, K. J. (1989): *"Industrial Distributors and Small Manufacturers"*, European Journal of Marketing, Vol. 23, Nº 2, págs. 154-162.
- HLAVACEK, J. D. y McCUISTION (1983): *"Industrial Distributors - When, Who, and How?"*, Harvard Business Review, Marzo-Abril, págs. 96-101.
- JACKSON, D. M. y D'AMICO, M. F. (1989): *"Products and Markets Served by Distributors and Agents"*, Industrial Marketing Management, 18, págs. 27-33.
- JOSEPH, W. B.; GARDNER, J. T.; THACH, S. y VERNON, F. (1995): *"How Industrial Distributors View Distributor-Supplier Partnership Arrangements"*, Industrial Marketing Management, 24, págs. 27-36.
- McDANIEL, S.; ORMSBY, J. G. y GRESHAM, A. B. (1992): *"The effect of JIT on Distributors"*, Industrial Marketing Management, Vol 21, Mayo, págs. 145-149.
- MOORE, R. A. (1987): *"The Selection of Agents and Distributors: A Descriptive Model"*, The Quarterly Review of Marketing, Vol. 13, Otoño, págs. 12-16.
- NARUS, J. A. y ANDERSON, J. C. (1986): *"Turn Your Industrial Distributors into Partners"*, Harvard Business Review, Marzo-Abril, págs. 66-71.
- NARUS, J. A. y ANDERSON, J. C. (1987): *"Distributor Contributions to Partnerships with Manufacturers"*, Business Horizons, Vol. 30, Nº 5, Septiembre-October, págs. 34-42.
- NARUS, J. A.; REDDY, N. M. y PINCHAK, G. L. (1984): *"Key Problems Facing Industrial Distributors"*, Industrial Marketing Management, 13, págs. 139-147.
- NICKOLAUS, N. (1990): *"Marketing New Products with Industrial Distributions"*, Industrial Marketing Management, 19, págs. 287-299.
- O'CONNOR, J. F. (1983): *"Who Needs Distributors?"*, Purchasing, Octubre, 13, pág. 46.
- PANGRAZIO, J. (1984): *"How to Sell Through Independent Distributors and Improve Channel Strategy"*, Business Horizons, Septiembre, págs. 118-126.
- PRICE, M. (1983): *"Distributors: No Endangered Species"*, Industry Week, 24 de Enero, págs. 47-52.
- REEDER, R. R.; BRIERTY, E. G. y REEDER, B. H. (1991): *Industrial Marketing Analysis, Planning and Control*, Prentice-Hall International.
- ROSENBLOOM, B. y WARSHAW, P. R. (1989): *"Perceptions of Wholesaler Functional Role Prescriptions in Marketing Channels"*, European Journal of Marketing, Vol. 23, Nº 2, págs. 31-46.
- ROSSON, P. J. y FORD, I. D. (1982): *"Manufacturer-Overseas Distributor Relations and Export Performance"*, Journal of International Business Studies, Vol. 13, Otoño, págs. 57-72.
- SHIPLEY, D. y PRINJA, S. (1988): *"The Services and Supplier Choice Influences of Industrial Distributors"*, The Services Industries Journal, Vol. 8, págs. 176-187.
- STERN, L. W. Y EL-ANSARY, A. I. (1992): *Marketing Channels*, 4ª Edición, Prentice Hall.
- WEBSTER, F. E. (1975): *"Perceptions of the Industrial Distributor"*, Industrial Marketing Management, Vol. 4, págs. 257-264.
- WEBSTER, F. E. (1976): *"The Role of the Industrial Distributor in Marketing Strategy"*, Journal of Marketing, Vol. 40, Julio, págs. 10-16.
- WEBSTER, F. E. (1994): *Estrategia de Marketing Industrial*, Díaz de Santos.