

Determining Factors Of Long-Term Orientation Of Firm-Supplier Relationships: An Empirical Analysis In The Context Of The Spanish Agro-Food Sector

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ABSTRACT

In an increasingly competitive and dynamic economic environment, the establishment, development and maintenance of enduring relationships between suppliers and customers is critical for both agents, and represents an important source of competitive advantages for those companies able to manage them adequately. Taking as reference the perspective of the customer, we consider that it is important for them to always work with a group of suppliers that have demonstrated an ability to adapt to their specific needs and thereby to reduce the level of uncertainty associated with their supply function. The current work, which takes the Spanish agro-food sector as framework of reference, analyzes the importance of certain factors in the long-term orientation of these relationships.

INTRODUCTION

The long-term orientation of commercial relationships – both with suppliers and with customers – has become a basic element for many company managers. The intention of these economic agents is to create and deliver satisfaction so that all the parties involved have an interest in maintaining and strengthening the existing relationship ties. Thus, their objective is to establish, develop and maintain stable and lasting relationships between buyers and sellers, such that both parties benefit (Grönroos, 2000; Kothandaraman and Wilson, 2001; Sharma *et al.*, 2001; Walter *et al.*, 2001; Leek *et al.*, 2003). The buyer's satisfaction and loyalty become the key element for the suppliers, and together with their own profitability, guarantee mutual interest in the relationship and its continuity over time. In parallel, firms have an interest in maintaining lasting supply relationships with suppliers that have demonstrated the ability to adapt to their needs.

In this way the relationships become a source of mutually beneficial competitive advantages (Walter *et al.*, 2003), which are sustainable and defensible (Turnbull and Wilson, 1989), for companies able to manage them adequately, either internally or externally. The long-term orientation of these exchange relationships represents the best means of attracting the other party and keeping them satisfied, and it is more important the greater the value generated for both agents (Grönroos, 1996). Relationship marketing tries to orient firms towards the employment of their resources and capabilities to create and deliver greater value to their co-participants, through the establishment of long-term relationships with them (Grönroos, 2000; Rexha, 2000; Van der Haar, Kemp and Omta, 2001).

Taking the current reality of industrial markets as reference (Brennan and Turnbull, 1999; Leek *et al.*, 2003), we see that in this context relationship marketing, and by extension the long-term orientation of the relationships, becomes even more important. From the perspective of the supplier the aim is to reap the benefits of all the efforts, in terms of financial resources and time, previously exerted to win the customer, while this latter is interested in working with a group of suppliers that have previously demonstrated their capability.

Some of the most relevant work in the discipline considers that satisfaction (Anderson and Narus, 1990; Siguaw *et al.*, 1998; Cannon and Perrault, 1999; Walter *et al.*, 2003) and commitment (Dwyer *et al.*, 1987; Moorman *et al.*, 1992; Kim and Frazier, 1997; Jap and Ganesan, 2000) represent the fundamental concepts that determine the long-term orientation of the relationship. In other words, the result achieved (Mohr *et al.*, 1994) and the intention to maintain the relationship (Morgan and Hunt, 1994; Garbarino and Johnson, 1999).

Thus, the main objective of our study is to analyze, from the customer's perspective, the significance of these two factors – satisfaction and commitment – in the temporal orientation of industrial customers' supply relationships. Furthermore, we consider the influence of a set of elements as antecedents of the level of satisfaction and/or commitment: trust; level of cooperation; and communication.

With this purpose, we present an empirical study in the Spanish agro-food sector, analyzing the relational orientation of the supply function in a random sample of companies. The heterogeneity of these companies in terms of their size, ownership structure, managers' educational background and experience, among other elements, along with the socio-economic importance of the sector in the Spanish economy, reinforce the value of this research.

Finally, we highlight the implications that can be drawn from our study, and suggest possible lines of research for the future.

THEORETICAL FRAMEWORK AND HYPOTHESIS OF EMPIRICAL RESEARCH

The basic framework of reference for this study is the so-called relationship marketing. In this respect, and in order to deepen our understanding of the main concepts, we have referred to some of the most relevant studies in the area.

The commercial relationships established between a firm and its suppliers are more or less closed (Hunt *et al.*, 1989; Leuthesser, 1997; Rexha, 2000) and complex, and they are determined by a large number of factors that interact and determine their conditions and outcomes (Morgan and Hunt, 1994; Grönroos, 2000). Furthermore, these relationships are dynamic, develop and evolve over time (Ford, 1980; Kohli and Leuthesser, 1995; Wilson, 1995; Leuthesser, 1997; Johnson, 1999; Tuten and Urban, 2001; Lemon *et al.*, 2002).

Companies that develop more closed relationships can benefit from cost reductions and/or raised revenues, and their exchanges are less risky and uncertain (Ford, 1980).

Supplier and customer interrelate as two active parties and they adapt to each other to a certain extent. Hence interactive relationships emerge (Gummesson, 1987; Grönroos, 2000). Moreover, if high potential benefits are perceived to result from the relationship, specific investments will be made in order to consolidate it and achieve a greater adaptation (Hallen *et al.*, 1991; Morgan and Hunt, 1994; Donney and Cannon, 1997). This fact will also be regarded as an indicator of the level of relationship commitment (Morgan and Hunt, 1994).

The relationship process evolves from identifying potential suppliers to establishing and maintaining the relationship. The firm's ability to administer and manage the elements determining a relationship (Heide, 1994; Grönroos, 2000), and the satisfaction that the agents obtain or expect to obtain (Hogan, 2001; Walter *et al.*, 2003), become critical elements that determine the long-term orientation of the relationship.

The objective of this work is to analyze how satisfaction and commitment affect the long-term orientation of commercial relationships, and also to examine the indirect effects of trust, collaboration, and communication.

Communication

This variable can be understood as the degree to which partners of a relationship exchange meaningful and timely information (Anderson and Narus, 1990; Anderson and Weitz, 1992). It is composed of aspects such as the

frequency, mode, direction, quality, and participation (Mohr and Nevin, 1990; Mohr and Spekman, 1994; Mohr and Sohi, 1995).

There are sometimes high levels of uncertainty (Achrol and Stern, 1988) generated by the complexity and heterogeneity of the products or environment, and by the rate of change in the market and in the demand (Geykens *et al.*, 1998). There can also be problems of asymmetric information. Thus, the exchange of personal or impersonal information and its degree of formalization represents a key element in the dynamics of commercial relationships (Anderson *et al.*, 1994; Kalafatis, 2002).

The exchange of information influences the fluidity of the relationship, making both the customer's needs and the supplier's capabilities known (Dwyer *et al.*, 1987; Anderson and Narus, 1990; Geykens *et al.*, 1998). It is also a necessary tool to resolve any doubts or conflicts that may arise in the course of the relationship (Anderson *et al.*, 1994; Kalafatis, 2002), bringing agents' expectations and subsequent perceptions closer together (Hogan, 2001; Lemon *et al.*, 2002), and strengthening mutual knowledge and therefore increasing trust (Wilson, 1995; Jap and Ganesan, 2000). For Mohr and Nevin (1990), communication is the key variable for achieving positive results in a relationship.

Hypothesis 1: The customer's level of trust is positively and directly influenced by the level of communication with its supplier.

Hypothesis 2: The level of satisfaction perceived by the customer is positively and directly influenced by the level of communication with its supplier.

Customer Trust As Antecedent Of Cooperation, Level Of Perceived Satisfaction And Degree Of Relationship Commitment

We can say that trust exists when one party has faith in the other – i.e., it accepts the word and signals of the other participant in the relationship (Moorman *et al.*, 1992; Morgan and Hunt, 1994; Donney and Cannon, 1997; Atuahene-Gima and Li, 2002). Trust is associated with the consistency of the suppliers' past actions and image that form its reputation.

When an agent trusts the other party, it does not undertake actions or make decisions that negatively affect them (Anderson and Narus, 1990; Atuahene-Gima and Li, 2002). The agents do not behave opportunistically, and moreover desire that the other party perceives this to be the case (Ganesan, 1994). When both agents trust in the relationship they can invest resources and efforts in committing themselves mutually and they will cooperate (Morgan and Hunt, 1994). Thus, trust facilitates more effective and efficient relationships, directly affecting the outcomes and hence the satisfaction achieved (Dalhlstrom and Nygaard, 1995; Sigauw *et al.*, 1998; Handfield and Bechtel, 2002), as well as the customer's degree of commitment to the relationship.

The uncertainty that can be generated by ignorance of the supplier can negatively affect the customer's level of trust (Ford, 1980; Sharland, 2001). When mutual ignorance is acute (Hansen *et al.*, 1996) trust plays a much more important role in the customer's perceived satisfaction and degree of commitment to its supplier. In this way, trust also reinforces cooperation (Morgan and Hunt, 1994).

Hypothesis 3: The level of cooperation is positively and directly influenced by the level of trust in its supplier.

Hypothesis 4: The level of satisfaction perceived by the customer is positively and directly influenced by the level of trust in its supplier.

Hypothesis 5: The level of relationship commitment is positively and directly influenced by the customer's level of trust in its supplier.

Influence Of Collaboration On Level Of Perceived Satisfaction

In the relationship marketing literature collaboration is regarded as a basic variable of reference (Anderson and Narus, 1990; Dabholkar *et al.*, 1994; Morgan and Hunt, 1994; Wilson, 1995), especially if we consider the group

of direct antecedents of the level of satisfaction perceived by the customer (Geykens *et al.*, 1998; Cannon and Perrault, 1999). This variable refers to the mutual cooperation that exists between supplier and customer (Anderson and Narus, 1990; Crosby *et al.*, 1990). Thus, in a context of corporation the agents resolve together problems caused by the evolution of the relationship itself, or develop common projects (Anderson and Narus, 1990; Crosby *et al.*, 1990; Andaleeb, 1995; Hewett *et al.*, 2001), strengthening the relationship and raising the level of mutual satisfaction (Geykens *et al.*, 1998), both in economic and psychological terms.

Hypothesis 6: The level of satisfaction perceived by the customer is positively and directly influenced by the level of cooperation with its supplier.

Level Of Satisfaction Perceived By Customer

The success of a long-term relationship is a multi-dimensional concept made up of an objective facet of the results obtained and another affective dimension (Mohr and Spekman, 1994), referring to the perception of the degree to which the expectations created have been met. Li (1998) proposes that the result obtained can be measured in function of the degree to which a channel member perceives the relationship to be effective, productive and satisfactory, and furthermore, influences the long-term orientation of the relationship. If we look at the work of Wilson (1995), Tikkanen *et al.* (2000) and Lemon *et al.* (2002), for a firm to orient its supply relationships towards the long-term, the perceived real value should be positive, so that the switching costs rise. The relationship must be useful and help the firm achieve its objectives. Once the customer has verified the supplier's real capability of satisfying its needs, it will consider the risk and uncertainty that any change in the supply decision would imply, a fact that decisively shifts the balance from a transactional-type orientation to a relational one.

Hypothesis 7: The long-term orientation of the relationship is positively and directly influenced by the degree of satisfaction obtained by the customer.

Hypothesis 8: The level of relationship commitment is positively and directly influenced by the degree of satisfaction obtained by the customer.

Effect Of Relationship Commitment

Relationship commitment is considered within the marketing literature as a critically important element for the success of long-term relationships and their long-term orientation. This is reflected in the work of Gundlach *et al.* (1995), Geykens *et al.* (1998) and Jap and Ganesan (2000), among others. In this respect, commitment is one of the most widely-used variables in research into buyer-seller relationships (Dwyer *et al.*, 1987; Moorman *et al.*, 1992; Kim and Frazier, 1997; Jap and Ganesan, 2000). The concept of commitment represents the enduring desire to maintain a relationship, and reflects an attitude and behavior with respect to the long-term orientation of the relationship (Morman *et al.*, 1992; Morgan and Hunt, 1994).

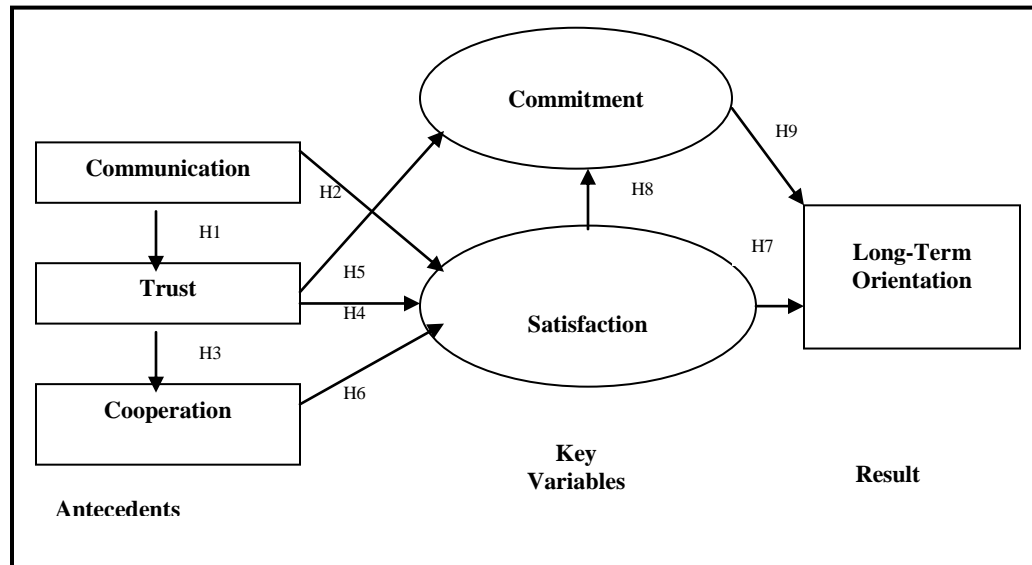
Commitment has a dual attitudinal and behavioral dimension. On the one hand, it reflects an attitude, belief, desire or promise of continuity (attitude) (Moorman *et al.*, 1992), in which the agent is prepared to exert a particular effort (behavior) (Wilson, 1995; Andaleeb, 1996) to orient the relationship towards the long-term (Moorman *et al.*, 1992; Morgan and Hunt, 1994; Wilson, 1995; Andaleeb, 1996).

For Gundlach *et al.* (1995) and Geykens *et al.* (1998) commitment is the enduring intention to develop and maintain a long-term relationship. Kumar *et al.* (1995a, b) analyze commitment from the perspective of one of the relationship partners, considering their intention to continue the relationship. Jap and Ganesan (2000) propose that given that both parties – supplier and customer – act in the interests of the relationship, it will be easier to achieve mutual objectives and that the relationship be oriented towards the long-term, developing and maintaining a stable and enduring relationship.

Hypothesis 9: The long-term orientation of the relationship is positively and directly influenced by the level of commitment shown by the customer.

Therefore, our model proposes analyzing the long-term orientation of supply relationships taking as reference the previously explained hypothesis. This model is shown in figure 1.

Figure 1: Conceptual model



METHODOLOGY

Data Collection

The information was obtained by means of a postal survey of managers responsible for the supply function from a random sample(1) of Spanish agro-food companies, specifically wine producers. The reason for approaching these professionals was to obtain responses from individuals directly in contact with the firm’s suppliers, and who negotiate the purchasing agreements.

Of the total of 650 questionnaires sent, 159 were returned, of which we eliminated 5 for having missing data and 1 for duplicated responses in various items. The 153 questionnaires finally obtained represents 23.53% of the total number of questionnaires distributed, for which we can consider our sample to be representative of the population object of study(2). Table 1 presents the technical specifications of the study. Data were analyzed using the EQS software (5.7b).

Table 1: Technical Specifications Of Study

Universe	Winery managers responsible for supply function
Geographical Scope	National – Spain
Sample	153 winery-supplier relationships
Sampling Method	Simple random
Sample Error	8,06%
Confidence Level	95%; p=q=0.5 (if z= 1.96%)
Data Collection	Postal survey
Fieldwork	November 2003– May 2004

Measurement Scales

The questionnaires were fundamentally made up of questions inquiring about the demographic characteristics of the wineries, the type of input and supplier analyzed, and aspects relating to the level of trust in this supplier, cooperation, communication, degree of perceived satisfaction, level of commitment to the relationship, and finally the degree of long-term orientation of the relationship (Appendix 1).

Therefore we considered various multi-item scales adapted from other previous works, which are described in Appendix 1. The items finally used are the result of a previous exploratory study carried out through five personal interviews with managers from some of these companies and a small pre-test, aimed at quantifying the size of the questionnaire and clarifying the terms employed. Therefore, although these previous scales were our main reference we can consider our scales as new ones.

With regards the communication, we wished to measure its quality, taking into consideration its frequency, nature, degree of formalization, direction, and relevance. The scale proposed was adapted from the ones built by Mohr *et al.* (1996) and Cannon and Homburg (2001).

The trust scale reflects the level of trust the customer has in its supplier. Starting from the proposals by Ganesan (1994), Siguaw *et al.* (1998), Sharland (2001), and Walter *et al.* (2003), adapted to the specific characteristics defining our sector of reference, we used five items capturing the firm's perception of its supplier's image, sincerity, and concern, as well as its trust in the supplier strictly speaking. Although some relevant previous works recognize trust as a multidimensional concept we bit for an one-dimensional scale that contains only the concepts we needed. The recommendations of Baumgartner and Homburg (1996) have been followed.

The scale for cooperation is composed of only two items analyzing the type and level of collaboration existing between the wineries and their suppliers. We used the scale proposed by Cannon and Perrault (1999) as reference, which simultaneously considers the concepts of collaboration and joint resolution of potential conflicts to measure the level of relational collaboration. Although Nunnally and Bernstein (1994) argue that considering only 2 items could reduce the explicative power of the scales, Baumgartner and Homburg (1996) accept scales with at least 2 items if reliability is achieved. Our pre-test recommended this scale and it is reliable (see table 3).

With regards the scale proposed to measure the level of perceived satisfaction, we did not distinguish between economic and psychological satisfaction, but instead measure the relationship in global terms and with respect to the expectations formed in its initial stage. After reviewing the most relevant literature we developed a scale mixing new indicators with other measures proposed in the work of Anderson and Narus (1990) and Walter *et al.* (2003).

The 4 items used in the commitment scale were adapted from the scales proposed by Siguaw *et al.* (1998), Jap and Ganesan (2000), De Wulf *et al.* (2001), Sharland (2001), and Walter *et al.* (2003). This is a scale capturing diverse dimensions of commitment: readiness to invest in the relationship; expectations of continuity, maintaining or increasing the volume purchased from the supplier; and attitude towards the terms agreed with the other party, either verbally or in writing.

Finally, to measure the long-term orientation of the relationship we took the scales proposed by Heide and Johnson (1990), Ganesan (1994), and Johnson (1999) as reference. This scale measures the utility of the long-term relationship for the customer and its expectations of continuity in the future, and consists of three items: benefits; importance; and objectives.

Table 2: Measuring Scales; Validity Of Content

Measuring Scales	Sources
Trust	Ganesan (1994), Siguaw <i>et al.</i> (1998), Sharland (2001), Walter <i>et al.</i> (2003)
Cooperation	Cannon y Perrault (1999)
Communication	Mohr <i>et al.</i> (1996), Cannon y Homburg (2001)
Satisfaction	Anderson y Narus (1990), Walter <i>et al.</i> (2003)
Commitment	Jap y Ganesan (2000), De Wulf <i>et al.</i> (2001), Sharland (2001), Walter <i>et al.</i> (2003)
Long-Term Orientation	Ganesan (1994), Johnson (1999)

Validation Of Measurement Scales

We first established one model to measure the relations between the constructs (structural model), and another to measure the relations between these constructs and the observable variables (measurement model). In the estimation of the model we opted to use the robust maximum likelihood method (Bentler, 1995), which allows the model to violate univariate normality. This is moreover an appropriate method of estimation for samples between 100 and 150 cases (Hair *et al.*, 1999).

Once the data was tabulated, we refined and validated the measurement scales proposed. Thus, we followed the methodology proposed by Churchill (1979) and Anderson and Gerbing (1988), evaluating the psychometric properties of these scales: unidimensionality; validity; and reliability.

We first verified that all the scales were unidimensional. Then, to evaluate the internal consistency we used the item-to-total correlation (Anderson and Gerbing, 1988), and simultaneously ran a principal components exploratory factor analysis (Bentler and Wu, 1995). The refinement process consisted of eliminating indicators presenting a low item-to-total correlation (Bagozzi, 1981), as well as those with very low factor loadings. In the commitment scale we eliminated factor CM4, which has a factor loading of 0.2, and an item-to-total correlation of 0.1018.

Subsequently, we ran a confirmatory factor analysis using structural equations (Anderson and Gerbing, 1988) with the EQS program (Bentler, 1995), applying the maximum likelihood method. The results obtained are highly satisfactory: $\chi^2_{\text{Sat.}} = 48,592$ ($p < 0,01$); RMR = 0,53; RMSEA = 0,039; NFI = 0,948; NNFI = 0,951; AGFI = 0,927; CFI = 0,967; IFI = 0,959; Normed $\chi^2 = 1,59$. Table 3 reports the factor loadings. Following the recommendation of Baumgartner and Homburg (1996), in order to test the model identification, we include the variance and co-variances matrix (See appendix 2).

Measurement scale reliability was evaluated using the statistics Cronbach alpha ($> 0,8$) (Nunnally, 1979), composite reliability index ($> 0,7$), and variance extracted ($> 0,5$) (Hair *et al.*, 1999). As can be seen in Table 3, the scales are reliable for all the statistics, insofar as they exceed the optimal values recommended.

Each indicator's estimated pattern coefficient on its posited underlying construct is significant, which suggests the convergent validity of each factor (Anderson and Gerbing, 1988; Iglesias and Vázquez, 2001). In order to assess the discriminant validity we calculated the test of χ^2 differences. For every pair of factors, the χ^2 value for the model that constrained the correlation to equal 1 was significantly greater ($p < 0,01$) than the χ^2 value for the model that did not place such constraint (Table 5). This is enough evidence of discriminant validity (Anderson and Gerbing, 1988; Hair *et al.*, 1999).

Table 3: Confirmatory Factor Analysis

Construct (F _x)		Non-Std. Factor Loadings	T-Values	Std. Factor Loadings	Individual Reliability Coefficient
Trust (F1)	T1	0,690	5,802	0,569	0,537
	T2	0,574	4,876	0,584	0,541
	T3	0,989	14,452	0,981	0,963
	T4	0,620	10,080	0,819	0,671
Cooperation (F2)	Cp1	0,623	6,972	0,752	0,565
	CP2	0,692	11,353	0,971	0,942
Communication (F3)	Inf1	0,860	7,513	0,712	0,517
	INF2	0,904	4,958	0,888	0,788
	INF3	0,896	6,736	0,684	0,586
Satisfaction (F4)	S1	0,561	9,186	0,842	0,710
	S2	0,670	5,651	0,753	0,568
	S3	0,582	8,433	0,763	0,582
	S4	0,689	4,784	0,595	0,547
Commitment (F5)	Cm1	1,024	10,284	0,924	0,854
	CM2	0,541	4,790	0,676	0,649
	CM3	0,636	8,214	0,693	0,580
Long-Term Orientation (F6)	Or1	0,927	12,161	0,982	0,964
	OR2	1,097	10,484	0,923	0,851
	OR3	0,750	6,230	0,594	0,575

Table 4: Reliability Of Measuring Scales

Estimator	Trust	Cooperation	Communication	Satisfaction	Commitment	Long-Term Orientation
Cronbach α	0,8827	0,9321	0,8765	0,909	0,9167	0,9383
Composite Reliability	0,8015	0,8422	0,7976	0,8378	0,8574	0,8623
Average Variance Extracted	0,559	0,572	0,553	0,5721	0,5637	0,6548

Table 5: Analysis Of Discriminant Validity; Test Of χ^2 Differences

Pares	χ^2 Difference Test (D.F.=1)	P-Value
F1, F2	122,7973	0,000
F1, F3	395,7593	0,000
F1, F4	81,4753	0,000
F1, F5	60,7783	0,000
F1, F6	341,2433	0,000
F2, F3	123,9093	0,000
F2, F4	52,1963	0,000
F2, F5	30,0043	0,000
F2, F6	100,9963	0,000
F3, F4	84,0273	0,000
F3, F5	54,4673	0,000
F3, F6	228,6323	0,000
F4, F5	37,5313	0,000
F4, F6	89,2873	0,000
F5, F6	48,8023	0,000

RESULTS

After validating our measuring scales the hypothesis included in our model were tested. Our data show that all the causal relations proposed are significant, at a 1% level of significance, were standard deviations fluctuate between 0,449 and 0,605. Results are shown in Table 6.

Therefore, these data reflect that, as we predicted in our hypothesis, there is a significant relation between communication and trust (H1) ($\lambda_{est}=0,531$; $p<0,01$). When communication is present, satisfaction arises (H2) ($\lambda_{est}=0,651$; $p<0,01$). Respect to trust, analyzing our data we are able to demonstrate that it could be considered as significant antecedent of cooperation (H3) ($\lambda_{est}=0,476$; $p<0,01$), satisfaction (H4) ($\lambda_{est}=0,595$; $p<0,01$) and commitment (H5). ($\lambda_{est}=0,664$; $p<0,01$ When firms and suppliers cooperate, satisfaction higher (H6) ($\lambda_{est}=0,627$; $p<0,01$). If customers are satisfied by suppliers, they will orientate relationships to the long-term (H7) ($\lambda_{est}=0,701$; $p<0,01$) and they will be more committed to these suppliers (H8) ($\lambda_{est}=0,449$; $p<0,01$). Finally, our model proposed a direct relation between commitment and long-term orientation of supply relationships (H9) ($\lambda_{est}=0,597$; $p<0,01$). We can observe that it is also significant.

Table 6: Test Of Hypothesis

Model	Standardized Parameters	T-Value	Hypothesis
Communication-Trust	0,531 ^A	3,142	H1: Yes
Communication-Satisfaction	0,651 ^A	5,743	H2: Yes
Trust-Cooperation	0,476 ^A	2,781	H3: Yes
Trust-Satisfaction	0,595 ^A	4,214	H4: Yes
Trust-Commitment	0,664 ^A	5,954	H5: Yes
Cooperation-Satisfaction	0,627 ^A	4,433	H6: Yes
Satisfaction-Long Term Orientation	0,701 ^A	6,712	H7: Yes
Satisfaction-Commitment	0,449 ^A	4,386	H8: Yes
Commitment-Long Term Orientation	0,597 ^A	4,478	H9: Yes

A.-Significant for a 99% level

The data for the long-term orientation of supply relationships result in a $R^2= 0,723$. More than 70% of its variance could be explained by the direct effect of satisfaction and commitment plus the indirect effect of communication, trust and cooperation. Thus, the model is capable of explaining the long-term orientation of companies' supply relations, on the basis of the direct effects of satisfaction and commitment, added to the indirect effects of communication, trust and cooperation.

With regards the goodness of fit of the model, the results show a reasonable fit between the multi-sample model and the data: GFI=0,936; RMR=0,041; RMSEA= 0,047; NNFI= 0,946; CFI= 0,960; IFI= 0,963; Normed $\chi^2= 1,86$.

CONCLUSIONS: IMPLICATIONS FOR MANAGEMENT

Our model shows that in the context of the Spanish agro-food sector, satisfaction and commitment are fundamental factors when we analyze the possible long-term orientation of the relationships that companies establish with their suppliers. In addition, as immediate antecedents we find that trust in the supplier, mutual cooperation and communication explain a large part of the level of satisfaction perceived by the customer and their commitment to the relationship. For this reason, companies interested in establishing and maintaining enduring relationships with their customers should pay close attention to the management of these elements as generating factors of satisfaction. They should always be able to differentiate themselves with respect to their competitors, showing an interest in the continuity of the relationship. In this way these elements will become fundamental factors in the administration of customer portfolios in firms committed to a relationship orientation.

These conclusions have some implications for managers responsible for customer relationships, in the context of industrial markets in general, and the agro-food sector in particular. First, firms positively value the relational orientation of their supply function, since it also reduces the level of uncertainty associated with their choice of supplier. In addition, it leads to an important saving in resources that can be dedicated to other tasks.

For this, a fluid exchange of information between both supplier and customer is fundamental. We recognize then that there is a bi-directional process in which the supplier is perhaps the agent that must exert most effort. Thus, the objective of companies should be to design a system guaranteeing a frequent and effective personal level of contact with their customers, which is capable of adapting to possible changes in the environment that define the relationship. If there is a fluid exchange of meaningful information in both directions, we can expect the customer to trust its supplier, and its perceived satisfaction will grow.

With regards trust, this generally depends on the perceived behavior and not only on the promises made. The image that the customer has of its supplier is fundamental at the beginning of the relationship, while the behavior observed during the course of the relationship then gradually replaces this image over time. Aspects such as the exchange of information, a sincere concern for the customer's problems, and complying with the promises made, are issues to which suppliers should pay strict attention. Making promises that are impossible to keep is not a recommendable practice.

Cooperation can take many forms. Developing common research projects or promotion campaigns is a good option. Although collaboration can also be limited to the internal context of the relationship: when the customer has problems in its production process and the supplier shows an interest or offers advice to help overcome them, companies will appreciate this help very much, and their level of perceived satisfaction will rise considerably as a consequence.

Finally, commitment demonstrates the desire to keep the relationship alive. We understand that from the customer's point of view, when the supplier meets its expectations the customer's commitment to the relationship will grow. The supplier can demonstrate commitment by collaborating, dedicating time and staff to attend to the customer, or investing in specific assets, among other factors. In any case, these signals must be perceived by the other party for them to decide to orient their supply relationship towards the long-term.

However, the management of all these elements should consider the criterion of that customer's profitability, since from our point of view the relationship effort is not always justified. In cases where the customer is not attractive to the supplier, either currently or potentially, the relational orientation will be more suitable. Then, the effort will be concentrated on the firm's most attractive customers. The objective will be differentiation with respect to the competitors, demonstrating the supplier's interest in continuing the relationship by means of, for example, some of the measures described in this section.

As far as possible limitations of the study are concerned, we could perhaps mention the size of the sample. However, we are within the recommended limits (Hair *et al.*, 1999) for applying the estimation method used here. Furthermore, our response rate of 23,53% allows us to be confident that the conclusions of this study are representative of the sector under analysis.

With regards the sector analyzed here, the agro-food sector presents a significant challenge to researchers for various reasons: the lack of previous work analyzing the relationships of these companies with their suppliers, the great heterogeneity in the characteristics defining the firms (size, ownership structure, managers' education and experience, and geographic markets), etc.

We should be cautious before generalizing our conclusions, and first analyze the degree of similarity of the sector of interest to the one analyzed in this work.

SUGGESTIONS FOR FUTURE RESEARCH

Finally, one possible direction for future research would be to expand the study, analyzing other economic sectors and including new variables to increase the explanatory power of the model. We also suggest analyzing the moderating effects of size, experience, or economic sector, among others, in the hypotheses defining our model. Another line opened up by this work involves studying the long-term orientation of commercial relationships from the perspective of the supplier, or from that of both agents simultaneously. In this way, a complete dyadic perspective will be obtained.

END NOTES

1. There is not a complete sample that contains all Spanish wineries. Therefore, taking as reference data from the Spanish Agricultural, Fishing and Food Minister web and from the Regulatory Quality –Wines Boards we are creating a wide-random sample. We have started including the most relevant winery areas from Spain: Rioja, Navarra, Aragón, Cataluña, La Mancha... Both, production and geographical criteria have been followed in order to assure representativeness of this sample. But our research is already open. We would like to include all Spanish wineries in our database, but we recognize this is an arduous and slow work.
2. Moreover, the result of the non-parametric chi-square test produces a value 5,918 (3), associated with a p-value of 0.116, confirming that the sample is representative of the population object of study.
3. This indicator reflects the correlation of the item with the score of the scale, such that we eliminate those indicators with a total correlation under the minimum generally accepted value of 0,3 (Nurosis, 1993), or whose elimination significantly raises the Cronbach alpha. In any case, since empirical practice suggests a higher value (Hair *et al.*, 1999), we use the threshold of 0,4.

APPENDIX 1: MEASURING SCALES

They have been translated from the Spanish version. All the scales ranges from 1 (the firm do not agree respect to our sentence) to 7 (the firm agree wit the sentence)

I. TRUST

- T1. The supplier cares about my firm.
- T2. The supplier has always been sincere with my firm.
- T3. This supplier always keeps its promises.
- T4. I can confide in this supplier when I share important information with it.

II. COOPERATION

- C1. This supplier and I collaborate on certain points.
- C2. Potential problems that arise are resolved cooperatively.

III. COMMUNICATION/ INTERCHANGE OF INFORMATION

- INF1. My supplier and I share information.
- INF2. Both parties are expected to keep the other informed about events or changes that may affect them.
- INF3. The interchange of information is frequent and informal.

IV. SATISFACTION

- S1. Compared to our expectations, we are satisfied with this relationship.
- S2. Compared to the ideal relationship, we are satisfied with this relationship.
- S3. The supplier has fulfilled the promises it made at the beginning of the relationship.
- S4. The relationship with this supplier is positive.

VI. COMMITMENT

- CM1. I am willing to invest time and resources in the relationship with this supplier.
- CM2. I will probably maintain or increase the business I give to this supplier.
- CM3. I am willing to comply with the terms agreed with this supplier.
- CM4. We have all conditions of the agreement clear. **(Suppressed)**

VI. LONG-TERM ORIENTATION

- OR1. I think that in the long term this relationship will be beneficial to my firm.
- OR2. It is important for my firm to maintain this relationship in the future.
- OR3. I am focusing on the long-term objectives of this relationship.

Appendix 2: Variance – Co-Variances Matrix (N= 153)

	T1	T2	T3	T4	CP1	CP2	INF1	INF2	INF3	S1	S2	S3	S4	CM1	CM2	CM3	OR1	OR2	OR3
T1	1.23																		
T2	0.74	1.32																	
T3	0.67	0.81	1.17																
T4	0.60	0.87	0.62	1.26															
CP1	0.30	0.41	0.56	0.55	0.98														
CP2	0.38	0.47	0.59	0.54	0.62	0.89													
INF1	0.49	0.69	0.60	0.68	0.50	0.62	1.77												
INF2	0.45	0.61	0.58	0.69	0.56	0.51	0.88	1.34											
INF3	0.52	0.69	0.62	0.65	0.55	0.64	0.87	0.72	2.03										
S1	0.36	0.57	0.51	0.48	0.65	0.46	0.49	0.60	0.49	1.14									
S2	0.39	0.61	0.53	0.44	0.48	0.48	0.58	0.57	0.45	0.69	1.09								
S3	0.41	0.59	0.51	0.48	0.43	0.50	0.46	0.55	0.58	0.62	0.69	0.98							
S4	0.26	0.34	0.34	0.39	0.45	0.41	0.45	0.43	0.45	0.48	0.54	0.41	1.04						
CM1	0.32	0.31	0.26	0.44	0.41	0.38	0.38	0.40	0.35	0.41	0.43	0.36	0.45	1.53					
CM2	0.33	0.29	0.27	0.31	0.32	0.25	0.33	0.37	0.36	0.26	0.35	0.38	0.34	0.65	1.06				
CM3	0.37	0.26	0.24	0.29	0.26	0.22	0.36	0.32	0.30	0.34	0.28	0.38	0.28	0.47	0.66	0.99			
OR1	0.28	0.24	0.31	0.54	0.31	0.32	0.42	0.34	0.52	0.33	0.30	0.35	0.25	0.50	0.57	0.42	1.26		
OR2	0.26	0.17	0.25	0.43	0.31	0.27	0.42	0.33	0.59	0.35	0.29	0.32	0.22	0.51	0.44	0.47	0.96	1.65	
OR3	0.31	0.28	0.27	0.45	0.29	0.22	0.40	0.44	0.53	0.24	0.25	0.27	0.20	0.46	0.45	0.51	0.95	1.06	1.86
N	153	153	153	153	153	153	153	153	153	153	153	153	153	153	153	153	153	153	153

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