

## THE ORGANIZATIONAL CULTURE OF FAMILY FIRMS AS A KEY FACTOR OF COMPETITIVENESS

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**Abstract.** In the current research work we build and test a model for the analysis and management of the organizational culture of family firms based on the main arguments of neo-institutional theory and transformational leadership theory. The model we have built allows us to test for the existence of positive relations between the values defining the second level of organizational culture (commitment, harmony, long term orientation and customer service and performance, measured through variables, such as profitability, survival and group cohesion. The model will prove to be useful tool to exploit the competitive potential that the organizational culture represents for this type of firms.

**Keywords:** family firm, values, organizational culture, institutionalism.

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### 1. Introduction

Although considered somewhat superfluous and of dubious value for many years, the formation, molding and reinforcement of organizational culture has since become one of the central concerns of firms in their search for effective management (Peters and Waterman 1982; Sorensen 2002; Lee and Chen 2005 ). Indeed, the culture of organizations continues to be an important topic, for managers as well as researchers (Ogbonna and Harris 2002; Ravasi and Schultz 2006).

In this sense, Schein (1996) argues that culture is one of the most powerful and stable forces at work in organizations. Culture presumably influences in the financial performance of firms (Denison 1984), in their internal development (Cox *et al.* 1991) and in strategic success (Bluedorn and Lundgren 1993). Any firms about to merge must clearly adapt their cultures to suit each other (Fairclough 1998).

But the scientific community has made relatively few contributions to the study of culture in family firms, with perhaps the work of Gallo (1993, 1995); Dyer (1986); Ainsworth and Wolfram (2003); Aronoff (2004) and Denison *et al.* (2004) standing out.

The current research work is a necessary contribution to the literature on the family firm and is based on the important role of organizational culture in the generation of competitive advantages that authors such as Barney (1991); Ogbonna (1993) and Ogbonna and Harris (2000) pointed out. The study represents the empirical test of a model to analyze the impact of culture of family firm through its values on specific performance-related variables, such as profitability, survival and group cohesion.

The proposed model is built based on the main arguments of two important theories, institutional and transformational leadership. Specifically, the institutional theory, through its regulative, normative and cognitive pillars, allows us to understand why the values and other elements flow from the family culture to that of the firm. In turn, transformational leadership theory provides the theoretical support to help us understand how the transmission or diffusion of these cultural elements occur, in fact, leaders play an important role in defining organizational culture (Pettigrew 1979; Dyer 1985).

Some specific and distinctive values, such as commitment, harmony, long-term orientation and customer service, provide family firms with a stronger culture (Vallejo 2008). On this basis, we examine the positive effects that its appropriate use and management can have on variables such as performance, survival and group cohesion. Our intention is not to estimate parameters, but instead verify possible causal relations relying on Partial Least Squared (PLS) approach for its usefulness in a theory development situation (Wold 1982) such as this research (Chin 1998a).

The use of values as independent variables in the model proposed is valid because of the significance the scientific community awards them compared to other elements of the culture. Authors such as Zammuto and O'Connor (1992) have postulated links between cultural values and technology, the structure and strategy (Williams 2002), evolution (Bigelow *et al.* 1993), group decision-making and efficacy (Dunn *et al.* 1994), ethics (Akaad and Lund 1994), organizational commitment (Finegan 2000) and, of course, organizational performance (Flaherty *et al.* 1999; Kwon *et al.* 2000).

We have structured the paper in four sections, following on from the present introduction. In Section two we describe the theoretical framework, in the third section the methodology, while in the fourth we comment on the results of the research. Finally, in the fifth we discuss our findings and outline the most important limitations of the work.

## **2. Theoretical background**

### **2.1. Origin of flow of values and attitudes from owning family to firm under institutional perspective**

This theory states that the engine driving the activity in organizations is simply their desire to adjust to their external institutional environment in accordance with other organizations' responses to institutional pressures (Oliver 1991; Martínez and Dacin 1999), since organizations that adapt to the institutional pressures they face are more likely to be able to obtain the scarce resources and opportunities they need to survive (DiMaggio and Powell 1991; Meyer and Rowan 1977), and to respond to their most significant competitive challenges and threats (Baum and Oliver 1991).

Most authors understand institutions as systems presenting diverse aspects, which incorporate systems of symbols (cognitive structures and normative rules) and regulatory processes that firms carry out and that determine their social behavior. The systems of meaning, systems of control and actions are all interrelated. Institutions employ various methods and operate at levels that go from the worldwide to that of the organization (Scott 1995a). Individual agents build organizations, either through a conscious and rational process of social construction or in a way which is relatively unelaborate but systematic (North 1990; DiMaggio and Powell 1991; Powell 1991).

The family, taking into account the above definition of institution generally accepted by institutionalists, as well as the important role played by individual agents in institutional creation (North 1990; DiMaggio and Powell 1991; Powell 1991), can be considered as an external institution of the type “stakeholder” (Oliver 1991). This institution is created by the agents that make it up, with a significant presence and pressure in the firms, but only in those in which the “family institution” has a clearly and perfectly demarcated presence and influence. Once the individual agents identify the institutions that can generate socially desirable outcomes, these agents may work to reproduce these institutions (Scott 1995b) and formalize them (Ahlstrom and Bruton 2001; Lawrence 1999). This is precisely what occurs in family firms, so that the members of the owning family themselves, in their guise as agents, provoke the expansion of the family in the firm as a legitimizing institution.

Social theorists have identified the regulative, cognitive and normative systems as the pillars of institutions. Corresponding to this, therefore, a regulative pillar, a normative pillar and a cognitive pillar exist (Scott 1995a). The normative and cognitive pillars constitute a consistent theoretical argument for why the values and other elements of the family culture transmit, and why the individuals linked by employment to the firm assume them, even when they have no family relationship with the owning family. The idea behind this assertion comes from institutional theory (Zucker 1977; Scott 1995a): institutional elements enter into organizations via the individuals who work in them.

In case of family firms, Hall *et al.* (2001) observed that the dominant culture in a family firm is a result of values, beliefs and goals rooted in the family, its history, and present social relationships. The strong ties – or social networks – allow for these perceptions of values to be shared among the members of the family because of the frequent and intense contacts (Chrisman *et al.* 2002).

Arregle *et al.* (2007) asserts that family social capital influences the development of family firm’s organizational social capital through isomorphic pressures (normative, mimetic and coercive). This proposal is based the ideas pointed out by DiMaggio and Powell (1983) about that the greater the dependence of an organization on another organization, the more similar it will become to that organization in structure, climate and behavioral focus, especially in case of dependence on critical resources. Family firms are dependent on the owned family for critical resources such as cultural elements like values.

All this converts institutional theory into an important element of the theoretical framework of our research in order to explain the origin of flow of values and attitudes from owning family to firm.

Taking into account that one of the starting premises of this current research is its consideration of organizational culture as the key factor in the family firm's competitiveness and survival, the culture of a family should contain some well defined values that all its members share, providing it with a cultural strength.

The extent of the definition and joint assumption of these values, starting from Stinnet's (1992) idea, is what will allow us to define the strength of the family unit. Moreover, this same author sustains that the strength of the families of any economy condition this institution's chances of survival as such, as well as its level of well-being and development.

The strength of the family becomes *a priori*, an essential condition for a firm to achieve a strong culture that can help it become more profitable. In this sense, Stinnet (1983, 1986), carried out a research project over more than a decade, in which he worked with more than 3,000 families in the US and a further 20 countries in Africa, Europe and Latin America. This led him to conclude that the main qualities of strong families were as follows: appreciation, spend time together, commitment, communication, high level of religiosity, ability to resolve crises positively.

Starting from these qualities we define the values used to build our model for the analysis of culture in family firms. The values of our cultural model are as follows:

**1. Commitment:** We shall define this value starting from the qualities "commitment" and "spend time together". Authors such as Ward and Aronoff (1991); Poza (1995); Lyman (1991); Leach (1993); Gallo (1995); Aronoff and Ward (1994) and Lee (2006) have highlighted the importance and greater weight of this value in family firms compared to non-family firms.

The study of organizational commitment has been approached in the scientific literature from three distinct perspectives, such that we can speak of three distinct types of commitment: affective or attitudinal, calculative or continuance and normative (Meyer and Allen 1997).

For Bayona *et al.* (2000) and De Quijano *et al.* (2000) affective or attitudinal commitment entails aspects such as affection or fondness for the organization. In addition, according to Meyer and Allen's three-component model of organizational commitment (Allen and Meyer 1990; Meyer and Allen 1984, 1991), affective commitment refers to identification with and emotional attachment to the organization. Thus affective commitment can be defined as the extent to which the employee identifies with the firm (identification).

With regards the type of commitment known as calculative or continuance, Meyer and Allen (1997) point out that this represents aspects such as the costs – not only economic but also emotional – perceived by the worker of leaving the organization. According to Meyer and Allen (1991), because continued employment is a matter of necessity for the employee with high continuance commitment, the nature of the link between commitment and on-the-job behavior is likely to be dependent upon the implications of that behavior for employment. An individual whose primary tie to the organization is a high continuance commitment may exert a considerable effort on behalf of the organization

if he or she believes continued employment requires such behavior. Thus the process by which continuance commitment is translated into behavior may involve the employee's evaluation of the behavior-employment link. For this reason, continuance commitment could be identified with the employee's involvement in their organization.

Finally, with regard to the third aspect or type of organizational commitment known as "normative", Meyer and Allen (1991) pointed out that entails aspects relating to the obligation to remain in the organization, experienced by the employees because they believe this to be the right thing to do. This feeling of loyalty toward the organization may be triggered by family or cultural socialization pressures or processes (Morrow 1993). The family is one of the most important agents of socialization that transmit norms, values and attitudes during the socialization process (Bush *et al.* 1999). Loyalty tends to be an important value transmitted by families because it strengthens the ties between members and hence contributes to family survival. For these reasons, normative commitment could be identified with the employee's loyalty to his organization.

There are no contributions about these three different dimensions of organizational commitment in family firms. However, some contributions exist about the three values we connected with the three distinct aspects of organizational commitment (identification, involvement and loyalty). So, starting from these contributions and a for a better measure and analysis of this value we should break it down into three parts:

*Identification*: Moscatello (1990); Adams, Taschian and Shore (1996); Kets de Vries (1993) reveal that employees working in family firms identify more with the cultural values of their firm.

*Involvement*: Again, Moscatello (1990) finds that in family firms the employees are usually more involved.

*Loyalty*: With regards this variable, Ward and Aronoff (1991); Ward (1988) and Neubauer and Lank (1998) highlight the high degree of loyalty in family firms compared to non-family firms. In this sense, Tagiuri and Davis (1996) also stress that family firms can develop high indices of loyalty as a consequence of the strong emotional involvement that exists in them.

**2. Harmony:** The definition of this value comprises the qualities "appreciation", "spend time together" and "communication". Also, some researchers point to the existence of greater harmony, evident in better human relationships within the business as well as a better working atmosphere, as one of the characteristic values of the family firm. Proof of this can be found in the work on this issue of Trostel and Nichols (1982); Ward (1988) and Vallejo (2008).

The Human Relations School first stressed the concept, as well as the importance of achieving a certain level of harmony from the human resources perspective, since this can improve the way organizations operate.

In order to achieve this, McGregor (1960) maintains that one of the principal conditions of human nature must be respected: the search for autonomy and control over one's life. From the organizational perspective, firms can achieve this by encouraging active participation in the decision-making process, such that employees become involved in

the management and personally assume corporate objectives. In the same way, managers must construe and design the organizational structure to generate a working environment that stimulates human resources to fully develop their labor potential, at the same time as allowing them to realize themselves through their work. Finally, McGregor also maintains that the organizational structure must abandon the classical patterns informed by the principles of hierarchy and authority, and replace them by a structure that is much more group-oriented, with group members assuming common objectives. The structure must be based on cooperation and mutual support; this helps to eliminate hostility.

To sum up, the Human Relations School indicates that the participation in the decision-making process (participation), the existence of a stimulant working atmosphere (working atmosphere) and of a structure based on cooperation, trust and mutual support (trust) are necessary to improve harmony in organizations.

We observe harmony through these three elements in order to optimize its measure. In addition, we took into account the extant literature on the presence of these three theoretical constructs in family firms:

*Working environment / atmosphere:* Scase and Goffe (1980); Tagiuri and Davis (1992) and Vallejo (2008) stress that family firms have better working atmospheres, pointing out that they tend to be good places in which to work.

*Participation:* Goffee and Scase (1985); Daily and Dollinger (1992) and Poza *et al.* (1997) find that family firms have much more flexible structures, which makes them more participative. In addition, Pervin (1997) finds that the personal involvement of the family members makes family firms more creative.

*Trust:* Authors generally find that those organizations whose leader builds a system of relations based on trust are more effective and more successful in the long run (Bennis and Goldsmith 1997; and Shaw 1997). We shall consider trust as another of the characteristics that contributes to achieving greater levels of harmony in family firms, specifically, the greater level of trust that exists between the individuals that work in family firms (Ward and Aronoff 1991; Tagiuri and Davis 1996; Adams *et al.* 1996 and Lee 2006). In this sense, Steier (2001) regards trust as an important source of competitive advantage for the family firm, since it contributes to cutting transaction costs. For their part, LaChapelle and Barnes (1998) find that achieving a high degree of trust in relationships with non-family member employees is a very important requisite for the family firm's performance and survival.

**3. Long-term orientation:** For the definition of this value we used the qualities "ability to resolve crises positively" and "high level of religious orientation". Authors such as Danco (1975); De Visser *et al.* (1995); Anderson and Reeb (2003) and Vallejo (2008) have noted the tendency of family firms to orient their activities to the long term, in contrast to what tends to happen in non-family firms.

As we have been doing with the previous values, we shall make use of others to be able to study its presence in the culture of the family firm more precisely.

The reason for this consideration is simply businessmen and entrepreneurs' desire to

maintain and continue their businesses (long-term orientation) in a series of goals that they hope to accomplish and that can be grouped into two large categories: extrinsic and intrinsic (Kuratko *et al.* 1997).

Family firms tend to have an objective with a strongly intrinsic character – family security – which along with the view of the firm as a legacy to pass down to future generations leads, according to Davis (1990, cited in Leach 1993: 29), to a management that is highly long-term oriented, notably influenced by the following aspects: risk aversion, clear guidelines on profit utilization and the level of indebtedness.

We observe long term orientation through the three dimensions (reinvestment of profits, level of indebtedness and attitude towards risk), a choice supported by contributions from the literature on them in relation to family firms:

*Reinvestment of profits:* Authors such as Vilaseca (1996); Gallo and Vilaseca (1996); McConaughy *et al.* (1995) and Poutziouris (2001) note the tendency of family firms to reinvest a higher proportion of their profits in the firm.

*Level of indebtedness:* The research of authors such as Dreux (1990); Donckels and Fröhlich (1991); McConaughy and Philips (1999) and Gallo *et al.* (2004) demonstrates that family firms are less indebted, measured in terms of the relative levels of long-term debt and equity.

*Attitude towards risk:* Donckels and Fröhlich (1991); Gallo *et al.* (2004) and Vallejo (2008) find that family firms are in general highly risk averse, tending to identify innovation as a high element of risk. This is why these firms consider that the CEO should not undertake innovations that entail excessive risk for the firm.

**4. Customer service:** Authors such as Lyman (1991); Aronoff and Ward (1994, 1995) and Poza (1995) stress the importance of customer service in family firms. These firms regard dedication and concern for customers as one of the key elements in their competitive strategy.

Family firm executives understand that their customer service policy should be oriented towards personal interaction, in which the emotional reaction is much more important than the behavior the firm wishes to provoke in the customer. Flexibility is implicit in any situation when dealing with customers, in view of the inexistence or scarcity of written rules; hence firms personalize employees and give them freedom to serve customer needs at any moment. The managers, therefore, have great trust in their employees, and the former often consider the effects of their customer service policy as a reflection of their position as owners. Family or personal values have primacy over corporate ones in the satisfaction of customer demands (Lyman 1991).

## **2.2. Diffusion and modification of family culture's values and other elements: transformational leadership theory**

The new leadership theories, both the charismatic and the transformational, represent a clear advance on the earlier theoretical models of leadership. Most theoretical models developed prior to transformational leadership theory approach the exercise of leader-

ship in organizations as a process of interchanges aimed at achieving each party's own objectives; Burns (1978) calls this transactional leadership. The transactional leader rewards followers when they achieve the agreed objectives; and the leader guides them so that they can accomplish their goals, monitors their performance and applies the appropriate corrective measures when they do not meet established standards (Bass 1999; Bass and Steidlmeier 1999).

Transformational leaders motivate their followers to work to achieve significant objectives, rather than selfish short-term goals. In this case the reward for the followers is internal. Explaining his or her vision, the transformational leader convinces followers to work hard and accomplish the goals that they have in their (the leader's) minds. This vision provides the followers with a motivation for their work that turns out to be self-compensatory (Bass 1985, 1999).

The theoretical proposals of this new paradigm have served to demonstrate that leaders described as charismatic, transformational or visionary have positive effects on their organizations and on their followers, both in terms of firm performance and levels of satisfaction, commitment and identification (Fiol *et al.* 1999).

In addition, Vallejo (2009) demonstrated that leadership in family firms is more transformational than in non family firms. All this scientific thinking around the concept of transformational leadership allow us to argue that the greater solidity and strength of the culture of family firms compared to non-family firms may be due to the fact that the leadership of this type of firm is more transformational. It can therefore disseminate and modify the values and other elements of the family culture more effectively, at the same time as getting its followers to commit themselves firmly to the mission and objectives of the organization, as Bandura (1986); Hater and Bass (1988) and Shamir *et al.* (1993) point out. Likewise, the followers have a greater confidence in their own possibilities, because their leaders have stimulated their intellects and taken into consideration the existing differences between them, as Yammarino and Bass (1990) suggest.

This is the case because transformational leaders transform the needs, values, preferences and aspirations of their followers, leading them from their own interests to collective ones (Bass 1997; Sparks and Schenk 2001; Kark *et al.* 2003), achieving more effort and a greater clarity of roles, along with lower levels of conflict among the followers (Viator 2001). So, starting from the values of our model (commitment, harmony, long term orientation and customer service) and the above demonstrated positive influence of transformational leadership on cultural values, we formulate the following hypothesis:

**H<sub>m1</sub>**: *There is a positive relation between transformational leadership and commitment.*

**H<sub>m2</sub>**: *There is a positive relation between transformational leadership and harmony.*

On the other hand, Martin and Epitropaki (2001); Walumbwa *et al.* (2004) stress the existence of a positive relation between transformational leadership and satisfaction levels among employees; while Sosik *et al.* (1997); Masi and Cooke (2000); Sosik *et al.* (2002) find a positive relation between this type of leadership and performance at work. In addition, if we consider that the social groups with which a person identifies are



key determinants of many aspects of their thinking, feeling and behaving (Hogg 2001; Jiatao-Li and Pilluta 2002), as well as aspects such as the degree of group cohesion (Smith *et al.* 1999), everything seems to point to the existence of a relation between the transformational leadership exercised by the owning family and the level of cohesion in the firm and, indirectly, among the cultural values and group cohesion due to the influence of transformational leadership on values. This is because this type of leadership brings about an identification with the culture values of the owning family.

Sorenson's (2000) research, based on a study of culture and organizational change in the family firm by Dyer (1986), which shows empirical evidence of the relation between the type of leadership exercised in the family firm and some efficiency measures, serves to endorse the previous reasoning to a certain extent. Based on this reasoning we propose the following hypothesis:

**H<sub>m3</sub>**: *There is a positive relation between transformational leadership and group cohesion.*

**H<sub>m4</sub>**: *There is a positive relation between commitment and group cohesion.*

**H<sub>m5</sub>**: *There is a positive relation between harmony and group cohesion.*

The most important objective of this model is to demonstrate that the values of the culture of the family firm are directly and positively related with its profitability and survival. Clearly, we are taking up once more the approach of authors such as Denison (1984); Argote (1989); Gordon and DiTomaso (1992); Kotter and Heskett (1995); Ogbonna and Harris (2000) and Sorensen (2002). These authors believed firmly in the existence of a direct relation between certain types of organizational culture and profitability and consequently firm survival itself – but they never obtained conclusive results demonstrating such a relation, especially when the culture object of study was that of the family firm (see the work of Collins and Porras 1996; Simon 1997), this lack of contributions in the family firm literature about this topic reinforce the importance of the potential results of this model. Based on this reasoning we formulate the following hypothesis of our model:

**H<sub>m6</sub>**: *There is a positive relation between commitment and survival.*

**H<sub>m7</sub>**: *There is a positive relation between commitment and profitability.*

**H<sub>m8</sub>**: *There is a positive relation between harmony and survival.*

**H<sub>m9</sub>**: *There is a positive relation between harmony and profitability.*

**H<sub>m10</sub>**: *There is a positive relation between long-term orientation and survival.*

**H<sub>m11</sub>**: *There is a positive relation between long-term orientation and profitability.*

**H<sub>m12</sub>**: *There is a positive relation between customer service and survival.*

**H<sub>m13</sub>**: *There is a positive relation between customer service and profitability.*

The entire theoretical approach that we have developed in the present section, with a view to using it as theoretical argument to study the culture of family firms, can be summarized and integrated into a theoretical framework that we shall call the “cultural model of the family firm”. In Figure 1 we show a graphical representation of the research model that we propose with the 13 research hypotheses proposed integrated on it:

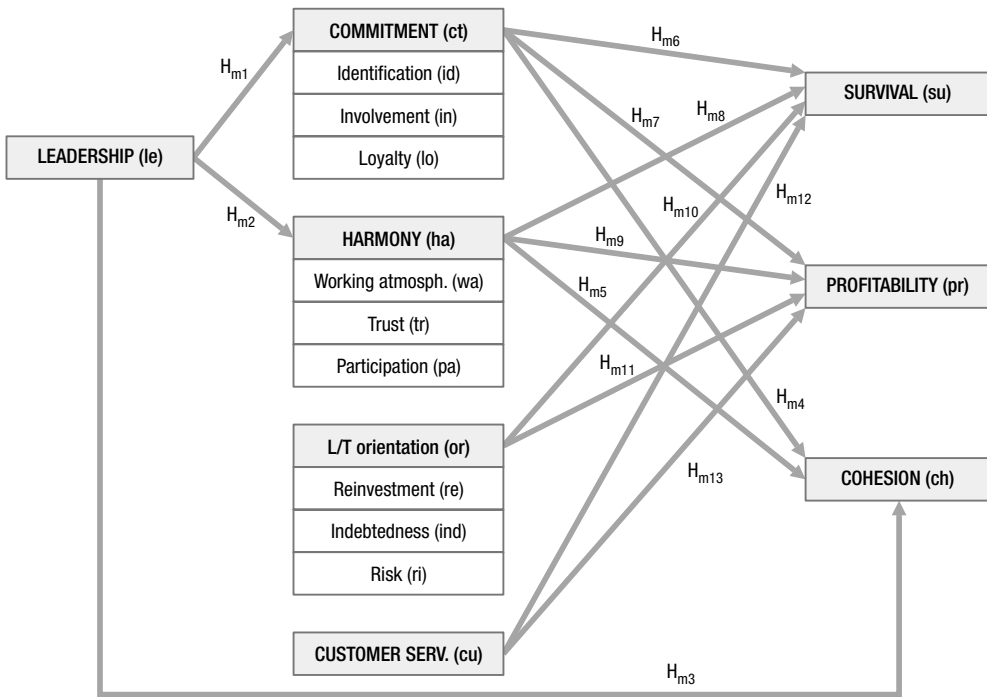


Fig. 1. Model and hypothesis

### 3. Methodology

#### 3.1. Questionnaire design

To design the questionnaire, we had to take into account the following aspects:

1. The questionnaire needed to be structured in two parts, since when measuring the institutional pressure of the owning family, observing the variables loyalty, involvement, identification, trust, working atmosphere and participation in family members was illogical; we needed to observe these variables in employees not belonging to the family. Analogously, we opted to observe the variables indebtedness, risk aversion, reinvestment of profits and customer service in family members – or failing this, in executives who enjoyed the maximum trust of the owning family – given that these were more likely to be able to respond appropriately, with informed responses. Hence, we designed two questionnaires: one for employees and the other for executives or owners.

The different variables were to be based on scales used in the literature: first we observed them, and then made the appropriate modifications until arriving at the definitive version, a valid and reliable instrument of data collection. We started out from the following scales: Buchanan’s (1972) scale, which consists of 6 and 11 items and Cronbach alphas of 0.86 and 0.92, for the variables identification and loyalty, respectively; González-Roma *et al.* (1994) scale, which consists of 6 items too and a Cronbach alpha of 0.80, to measure involvement; Fiedler’s (1967) scale, with a Cronbach alpha of 0.86

initially, rising in later research to 0.89 and 0.93, and a total of 10 items, to measure working atmosphere; for trust we started from Cook and Wall's (1980) scale, which has a total of 12 items and Cronbach alphas of 0.85 and 0.80; Vroom's (1960) scale, with 4 items and a Cronbach alpha of 0.85, to observe participation; for customer service, we used Escrig's (2001) scale, consisting of 8 items and a Cronbach alpha of 0.74; Beehr's (1976) 5-item scale, initially, to measure group cohesion; for leadership, Carless *et al.* (2000) 7-item scale, which has a Cronbach alpha of 0.93; we measured risk aversion and profitability using the scales of Galán and Leal (1988) of 3 and 5 items and Cronbach alphas of 0.87 and 0.91, respectively. For indebtedness and profit reinvestment we used one item each, where we requested the respondent to indicate the approximate percentage of debt over the total capital of the firm, for the first, and the proportion of profits reinvested in the firm, for the second. Finally, longevity was measured as a single item in which we asked respondents about the number of years the firm had been operating.

We have still not answered a very significant question for the objectives of the current work, which is: what do we understand by the term “family firm”? For the purposes of the current work, we consider a family firm to be “a firm in which the members of a single family have a sufficient stockholding to dominate the decisions taken by the owners' representative body, whether this has a formal or legal character or in contrast is informal, and in which moreover there is a desire or intention to maintain the business in the hands of the following family generation” (Vallejo 2007). According to this concept, there two key dimensions for any firm to classify as a family firm: formal or informal single family control of the ownership, formal or informal, (ownership dimension) and desire or determination to maintain the business in the owned family hands (legacy dimension).

### **3.2. Sample selection and data collection**

In the process of selecting the sample and collecting the information, we had to take into account that in order to consider each sample firm as an object of study we needed to interview an owner, or failing this a top manager fully trusted by the owner, and if possible various employees as well (three would be a reasonable number of interviews). The aim was to obtain a more objective and real evaluation of the different variables under observation that define the organizational culture.

We determined the population from which we would collect the information we required, at all times seeking options that would, in some way, favor an appropriate response rate. Initially, in order to avoid as far as possible the incidence of exogenous variables that might influence the measures of interest as well as the relations between variables – and more importantly, that might do so heterogeneously among the various firms – we decided to undertake our fieldwork in the automobile distribution sector, specifically in the automobile dealers subsector, for the following reasons:

1. Similar size. Various authors (Gordon 1985, 1991; Chatman and Jehn 1994; Cartwright and Gale 1995) have noted the influence of firm size on organizational culture, so we needed to limit the influence of this variable as far as possible.
2. Homogeneous influence of the environment. Normally, another highly significant variable is the sector of activity, since the intensity of institutional pressures dif-

fers depending on the sector in which the firm operates (Meyer and Rowan 1977). Moreover, this variable is one of those that has most influence on the organizational culture (Gordon 1991; Chatman and Jehn 1994; Christensen and Gordon 1999).

We collected the information we required from dealerships linked to FACONAUTO (Spanish Federation of Automobile Dealers Associations). Specifically, we include only those firms registered in the annual congress of the federation in the survey (611 firms). This choice would help to limit the influence of the size variable even more, since most of the dealers who attend the congress are the largest firms that are also the most involved in the evolution and problems of the sector. We received a total of 295 valid questionnaires from 90 different family firms. In Table 1 in appendix we present the distribution of the final sample.

We used Partial Least Squares (PLS) to assess the research model. This is a regression-based technique that can analyze structural models with multiple-item constructs and direct and indirect paths<sup>1</sup>.

A PLS model is analyzed and interpreted in two stages: (1) the researcher assesses the reliability and validity of the measurement model; and (2) he/she assesses the structural model. The model has a total of 17 latent variables and 47 observed variables or indicators. Table 2 in appendix presents their most significant characteristics.

However, in our case, because of the existence of second-order latent variables, both the measurement model and the structural model have been estimated using a two-stage process, following Venaik's (1999, 2004, 2005) approach.

## **4. Results**

### **4.1. Measurement model**

In order to evaluate the measurement model, we need to analyze the following aspects: individual item reliability, construct reliability, convergent validity and discriminant validity.

However, we shall only evaluate the internal consistency and reliability of the latent variables observed through reflective indicators, not those resulting from the addition of formative variables. This is because it is senseless to evaluate these aspects in causal indicators, since these variables serve to measure distinct and independent dimensions of a particular latent variable, which turns out to be more an effect of the observed variables than a cause (Bagozzi 1994; Bollen 1989). For this reason, we need to find an alternative means of determining the measurement quality of the formative variables (Diamantopoulos and Winklhofer 2001).

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<sup>1</sup> We have used the PLS approach because our model is not a confirmatory one, and this method is primarily intended for causal-predictive analysis in which the explored problems are complex and the theoretical Knowledge is scarce, In addition, PLS is a recommended technique to analyze small samples that don't have a normal multivariate distribution necessarily (Chin 1998a; Barclay *et al.* 1995; Gefen *et al.* 2000). PLS allows to incorporate reflective and formative variables at the same time (Gefen *et al.* 2000).

We analyze the individual item reliability, the construct reliability and the convergent and discriminant validity of all the reflective latent variables intervening in the proposed model

#### *Individual item reliability*

Individual item reliability is considered adequate when an item has a factor loading “ $\lambda$ ” that is greater than 0.7 (Carmines and Zeller 1979). In Table 3 in appendix, we show the results from the individual item reliability test.

#### *Construct reliability and convergent validity*

In order to evaluate the construct reliability, we used two indicators of internal consistency: Cronbach’s alpha and Fornell and Lacker’s (1981) composite reliability indicator. We have followed the criterion proposed by Nunnally (1987), who considers 0.7 to be the minimum acceptable reliability value for research in its early stages or research of an exploratory nature.

As far as convergent validity is concerned, we have examined the average variance extracted (AVE), created by Fornell and Lacker (1981). In order for convergent validity to exist, this indicator should take on values greater than 0.5. In Table 4 in appendix, we report the Cronbach’s alpha, composite reliability and AVE values.

#### *Discriminant validity*

To assess discriminant validity AVE should be greater than the variance shared between the construct and others construct in the model (i.e. the squared correlation between two constructs). For adequate discriminant validity, the diagonal elements should be significantly greater than the off-diagonal elements in the corresponding rows and columns (Barclay *et al.* 1995). In Table 5 in appendix, we show the values resulting from these calculations.

#### *Evaluation of measurement quality of latent variables determined by formative indicators*

The evaluation of measurement quality of latent variables determined by formative indicators must be based on aspects such as an adequate theoretical specification of the content and of the indicators, the analysis of multicollinearity and the external validity (Diamantopoulus and Winklhofer 2001). We shall now analyze each of these aspects except for the external validity, since the literature is not sufficiently clear or unanimous about how this should be calculated.

In the specific case of leadership, including this variable in the model as a formative variable is justified since Carless *et al.* (2000) designed the scale that we used for its observation in order to reduce other already existing ones, which were not very operative because of their size and complexity. We conceived the scale such that each of its 7 items serves to measure a distinct aspect of leadership. For this reason, and considering that we did not specify the distinct dimensions of the content ourselves but simply adopted these authors’ proposals, we shall only justify the formative nature of the remaining variables.

#### *Theoretical specification of content and indicators of formative variables*

Almost certainly the most important aspect to take into account when using formative indicators is determining the “breadth of definition” (Nunnally and Bernstein 1994). Defining the appropriate breadth of the concept in question is an essential first step to

establishing the indicators for its observation, in order to ensure we do not ignore any important dimensions. The breadth of definition of the different formative indicators of the commitment, harmony and long-term orientation variables, has been set out and explained clearly in Section 2 of this paper.

*Analysis of multicollinearity of formative variables*

To detect the presence of serious multicollinearity between the indicators of the variables “commitment”, “harmony” and “long-term orientation”, we have followed the procedure suggested by Gujarati (1999). From the information contained in Table 6 in appendix, we can see that no serious multicollinearity exists between the indicators of each variable, since all the indicators are within the established limits.

**4.2. Structural model**

Figure 2 shows the variance explained ( $R^2$ ) in the dependent constructs and the path coefficients ( $\beta$ ) for the model. Consistent with Chin (1998b) we use bootstrapping (500 resamples) to generate standard errors and t-statistics.

Looking at this figure, we can see that of the 13 hypotheses formulated, we can confirm 7:  $H_{m1}$ ,  $H_{m2}$ ,  $H_{m3}$ ,  $H_{m4}$ ,  $H_{m5}$ ,  $H_{m11}$  and  $H_{m13}$ .

The confirmation of these hypotheses means that the more transformational-type leadership exercised in family firms positively and significantly influences the degree of commitment (variable caused by the three formative variables involvement, identification and loyalty), organizational harmony (variable caused by climate, participation and trust) and the level of cohesion of the organizations’ members.

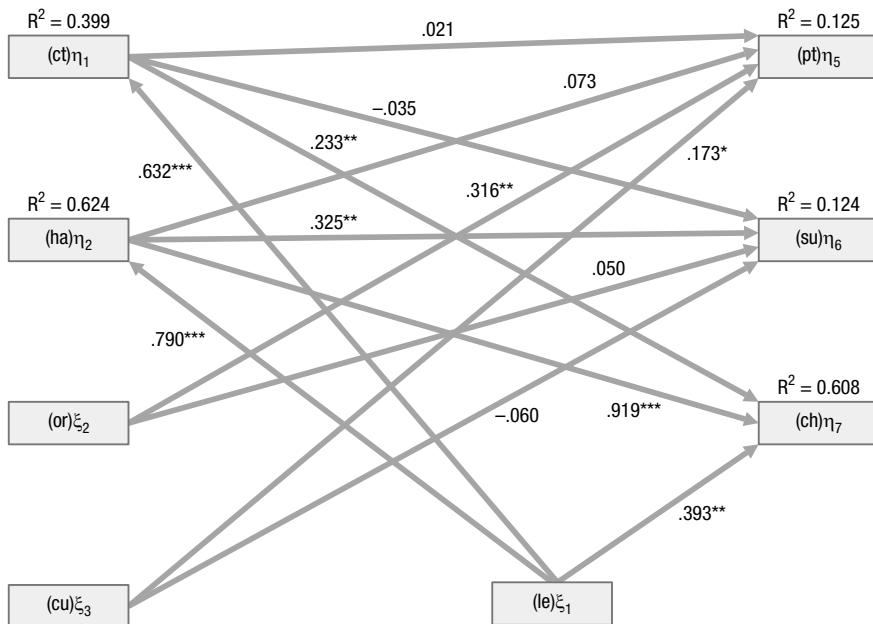


Fig. 2. Structural model

Moreover, it implies that the degree of commitment and organizational harmony exert, in turn, a significant positive influence on the level of cohesion among organization members. Likewise, that the long-term orientation of the management and the attention or concern for the customers positively and significantly influences profitability.

However, we have not found a significant positive link between degree of commitment and profitability ( $H_{m7}$ ), or between degree of commitment and survival ( $H_{m6}$ ). We do not verify a significant positive link between organizational harmony and profitability either ( $H_{m9}$ ), although we do find a link between harmony and survival ( $H_{m8}$ ). Finally, the variables long-term orientation and customer service do not exert a significant positive influence on survival either ( $H_{m10}$ ,  $H_{m12}$ ).

Except in the case of the variables profitability and survival, the model presents an adequate predictive capacity for the rest of its dependent variables, since the average variance explained of these variables is around 54.3%.

## **5. Discussion**

The results from the structural equation model proposed, confirming 7 of the 13 hypotheses originally postulated, support the potential validity of our model as a tool for analyzing the culture of the family firm and for measuring its impact on profitability, survival and group cohesion. The proposed model is a predictive one based on generally accepted theories from Business Administration and Social Psychology, applied to the specific case of family firms.

The model verifies the hypotheses postulating leadership as the variable influencing the others. As the theory predicts, transformational leaders transform the needs, values, preferences and aspirations of their followers, leading them from their own interests to the common interests (Bass 1997; Sparks and Schenk 2001; Kark *et al.* 2003). Hence this type of leadership positively influences both firm performance and employee values and attitudes.

Our model is consistent with that established by the transformational leadership theory, insofar as it confirms that this type of leadership exerts a significant positive influence on commitment and harmony in family firms. Moreover, its influence on group cohesion is also positive and significant, which is consistent with the work of Fiol *et al.* (1999). These authors find that this type of leader generates a greater degree of identification among employees, which in turn leads to greater group cohesion (Smith *et al.* 1999). The leader's effect on cohesion has also been demonstrated indirectly through the variables commitment and harmony, since both exert a significant positive influence on group cohesion.

With regards profitability, the model reveals that the variables long-term orientation and customer service exert a significant positive influence on this dependent variable, while this does not occur in the case of harmony and commitment. We believe that this could be due to the fact that commitment and harmony may influence profitability indirectly through intermediate variables. Indeed, researchers frequently use the variables that the model confirms as influencing profitability – long-term orientation and customer service – as direct and objective indicators of current and future profitability in companies

(see Miller and Leiblein 1996; Chatterjee *et al.* 1999; Ferson and Harvey 1999; Fama and French 2002). In this respect, one should remember that long-term orientation is caused by variables such as profit reinvestment levels, indebtedness and risk aversion. Moreover, the Likert scale used to measure profitability may have prevented this hypothesis from being verified, since we did not use an exact measure of this variable based on real indicators, but an approximate measure, in order to overcome the firms' reluctance to provide this type of information.

The model also confirms that the influence of harmony on survival is significant. This positive relation between harmony and survival is especially important in case of family firms. When harmony doesn't exist or there is low level of it in the family firm, problems and conflicts arising in personal relationships worsen from generation to generation, as growing numbers of people from different generations or family branches work together in the firm (Gersik *et al.* 1997; Lansberg 2000) are more likely to occur as the family company ages.

In principle, we believe that our failure to confirm the hypotheses concerning the positive relations between commitment, long-term orientation and customer service and the variable survival may be due to the same reasons as in the case of profitability. Thus, intermediate variables not considered by the model probably exist, and commitment, long-term orientation and customer service probably exert their presumed influence on survival through these unidentified intermediate variables. Furthermore, the variable used to measure survival may have had an influence, since as we mentioned earlier, we measured it by the number of years the company has been operating.

According to Dikoklli *et al.* (2009) Managers typically use a set of performance measures to evaluate the effectiveness and efficiency of their business operations. These measures include both financial and non financial measures and typically relate to one another in a way that reflects a firm's business model. Kaplan and Norton (1996, 2001) define this approach as a balanced scorecard and claim that benefits exist for firms that better understand the links between key performance measures and managers' ability to influence the realization of these measures. Concept of balanced scorecard was introduced to complement financial measures with those related to: customers; internal business processes; and learning.

So, the proposed model of family firm culture may be a useful tool for the managers of this kind of firms to help them achieve higher levels of performance in their firms, in terms of profitability (financial measure), survival (non financial measure) and group cohesion (non financial measure)<sup>2</sup>.

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<sup>2</sup> According to Kaplan and Norton (1996, 2001) focus, group cohesion could be used as a complementary non financial profitability measure related to "learning and growth". From this learning and growth perspective, indicators about team work are necessary to measure the performance of a firm because more and more organizations are using teams to develop new products and processes and to customers service. Besides, for authors such as Mullen and Copper (1994); Wech *et al.* (1998); Chang and Bordia (2001); Jung and Sosik (2002) group cohesion is positively linked to the level of group performance.



The positive relationships tested in the model between the more transformational leadership the scientific literature attributes to family firms, and values such as commitment and harmony, between these two values and group cohesion, and between the own transformational leadership and group cohesion, confirm the existence of links between the key performance measures and manager's ability to influence the realization of these measures pointed out by Kaplan and Norton (1996, 2001).

In addition, the model shows the usefulness of transformational leadership for achieving the higher levels of these three values that the literature regards as strong points or advantages of the family firms.

On the other hand, the advisability for family firms of adopting a management based on values is another important conclusion. Concretely, we have taken into account values such as commitment, harmony, long-term orientation and customer service, testing the positive influence of a suitable management of them on the performance of the family firm. In this sense, the model shows that commitment and harmony positively affect the level of group cohesion, and also that customer service and long-term orientation positively affect profitability.

To sum up, the results point to the advisability and usefulness for family firms of a management based on values, instead of traditional management. This will provide them with a clear opportunity of achieving competitive advantages in terms of performance. An important question to address is how this study is transferred to practice. Transferability is the understanding of how the findings of this work are useful to family business practice.

The main contribution of the results of this research for family firms is they can use the proposed model of organizational culture as a tool to implement Value-Based Management (VBM) and take advantage of the positive points that this business philosophy can bring them.

From a management point of view, by moving from an autocratic to a more participatory, value-based mode, a company's leadership can spread around some of management's typical operational problems. This gives managers more time to focus on the company's long-range, strategic needs, rather than spending most of their time putting out brush fires.

From the perspective of the employees, a workplace that operates according to the principles of Value-Based Management empowers employees as workers and as owners. VBM creates a corporate culture where work can be more satisfying and economically rewarding.

Experience within a growing number of companies indicates that the more that people's self interests are unified within a management system reflecting the principles of Value-Based Management, the greater will be customer and employee satisfaction. From this can flow increased cost savings, increased sales, and increased profits.

By offering solid principles and a logic for building an ongoing ownership culture, Value-Based Management helps to create an environment which respects the dignity of

all forms of productive work. VBM recognizes that, regardless of a person's function or role in the company, we are all workers. The success of Value-Based Management comes when each person—from the CEO and supervisor to the machine operator and receptionist—feels that they own and benefit from the VBM process and share in the results as full participants in their company and its culture.

By means of this cultural model, family firms will be able to implement value-based management by:

- a) Creating structures of corporate governance and management based on shared values (Commitment, harmony and long term orientation, customer service in the proposed model).
- b) Maximizing value for the customer (our cultural model contemplates a variable to measure the importance of customer service for family firms).
- c) Structuring the company's compensation and reward system to enable every person in the company to be rewarded for the value of their contributions to the company. (transformational family firms leaders play an important role in our model as agents of value diffusion).

All of this may lead family firms to get competitive advantages over non family firms (in our model the variables profitability and survival would let us measure the level of success or failure).

## **6. Conclusions, future research and limitations**

This work represents a small contribution to scientific knowledge on the family firm, and in particular on the organizational culture of this type of firms. It builds a theoretical framework founded on theories of general acceptance and application in the field of business administration, such as neoinstitutionalism. It operates through the pressures of its normative, cognitive and regulative pillars and the isomorphism of the family firm regarding the owned family, and transformational leadership.

This theoretical framework has allowed us to approach the study of the organizational culture of the family firm from the perspective we have termed "utilitarian", analyzing and measuring the positive effects of organizational culture on specific performance-related variables (financial and non financial), such as profitability, survival and group cohesion. However, this model should be understood as an incipient theoretical development about this topic of family firms, so it needs further generalization, increasing the sample size and replicating it in other sectors of activity and in family firms of different sizes, to see if the results are consistent with those of our study.

With the above considerations in mind, the tested model of organizational culture family firms allows us to affirm:

- The more transformational leadership exercised in family firms positively and significantly influences the degree of commitment, organizational harmony and the level of cohesion of the organizations' members.
- The degree of commitment and organizational harmony exert, in turn, a significant positive influence on the level of cohesion among organization members.

- The long-term orientation of the management and the attention or concern for the customers positively and significantly influences profitability.
- The degree of organizational harmony exerts a significant influence on survival of this kind of firms.
- This model can be used as a tool to implement Value-Based Management (VBM) and take advantage of the positive points that this business philosophy mentioned can bring them in terms of creating structures of corporate governance and management or maximizing the value for customers.

With regards possible directions for future research, we now mention some implications which in our opinion derive from the current research work.

Thus, first, we feel it would be useful to study the legitimization processes, as well as the possible differences in these processes between family and non-family firms. We could then determine to what extent the organizational culture of the family firm reflects the culture of the community within which it operates by means of the owning family's values.

Second, we would like to stress the need to investigate the possible existence of intermediate variables in the relations between, on the one hand, commitment, long-term orientation and customer service, and on the other, survival, in order to include them in the model and thereby attempt to improve it.

Third, and also with the aim of improving our model of family firm culture, researchers need to investigate the possible existence of intermediate variables in the relations of commitment and harmony with profitability.

Fourth, we would recommend analyzing the influence that age and size may have on the different cultural variables analyzed in this model, in view of the significant negative relation found between harmony and organizational age.

And finally, as we pointed out above, the analytical model of family firm culture that we have presented here needs further generalization, increasing the sample size and replicating it in other sectors of activity, to see if the results are consistent with those of our study.

Having discussed the results and outlined the main implications for the future, we should now outline the most important limitations of this current work.

First, the small size of many of the scales used to measure the different variables. The aim was to produce a questionnaire that was as brief as possible, despite the large number of variables to observe, but this surely contributed to an increased measuring error in their evaluation.

Second, it has been necessary to get information from the employees. They might have felt insecure from the labor perspective, with their superiors having handed them the questionnaires. This may have led to a bias towards high scores in the various scales, thereby diminishing authenticity and hence the meaning of the results obtained.

Third, the need to eliminate the demonstrated influence of the sector of activity and size on values. Hence the findings of this research are only representative of the largest firms

of the automobile distribution sector, and therefore only extrapolable to other industries and firms with different sizes with due caution.

Fourth, the measurement scales of the variables profitability and survival. These scales only allowed us to obtain an approximate evaluation of these factors.

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## APPENDIX

**Table 1.** Sample Characteristics

Composition of questionnaires	Family firms	
	Questionnaires	Cases
• 1 Employee, 1 executive	46	23
• 2 Employees, 1 executive	97	29
• 3 Employees, 1 executive	152	38
<b>TOTAL VALID</b>	295	90
<b>TOTAL INVALID</b>	5	4
<b>Period of scales validation</b>	November 2005–September 2006	
<b>Period of data collection</b>	December 2006–January 2008	
<b>Reinforcement measures</b>	Telephone contact and re-send questionnaires	
<b>Response rate</b>	20,62%	

**Table 2.** Description of the model variables

Latent variables	Consideration	Nature	Indicators
Commitment (ct)	Endogen, 2 <sup>nd</sup> order	Formative	Latent V. 1 <sup>st</sup> order: involvement (in) Latent V. 1 <sup>st</sup> order: identification (id) Latent V. 1 <sup>st</sup> order: loyalty (lo)
Harmony (ha)	Endogen, 2 <sup>nd</sup> order	Formative	Latent V. 1 <sup>st</sup> order: work atmosphere (wa) Latent V. 1 <sup>st</sup> order: trust (tr) Latent V. 1 <sup>st</sup> order: participation (pa)
Long term orientation (or)	Exogen, 2 <sup>nd</sup> order	Formative	Latent V. 1 <sup>st</sup> order: reinvestment (re) Latent V. 1 <sup>st</sup> order: indebtedness (ind) Latent V. 1 <sup>st</sup> order: risk (ri)
Customer service (cu)	Exogen, 1 <sup>st</sup> order	Reflective	4 observed variables
Profitability (pr)	Endogen, 1 <sup>st</sup> order	Reflective	3 observed variables
Survival (su)	Endogen, 1 <sup>st</sup> order	Reflective	1observed variable
Cohesion (ch)	Endogen, 1 <sup>st</sup> order	Reflective	3 observed variables
Leadership (le)	Exogen, 1 <sup>st</sup> order	Formative	7 observed variables

End of Table 2

Latent variables	Consideration	Nature	Indicators
Involvement (in)	1 <sup>st</sup> order	Reflective	3 observed variables
Identification (id)	1 <sup>st</sup> order	Reflective	3 observed variables
Loyalty (lo)	1 <sup>st</sup> order	Reflective	3 observed variables
Work atmosphere (wa)	1 <sup>st</sup> order	Reflective	10 observed variables
Trust (tr)	1 <sup>st</sup> order	Reflective	3 observed variables
Participation (pa)	1 <sup>st</sup> order	Reflective	3 observed variables
Indebtedness (ind)	1 <sup>st</sup> order	Reflective	1 observed variable
Reinvestment (re)	1 <sup>st</sup> order	Reflective	1 observed variable
Risk (ri)	1 <sup>st</sup> order	Reflective	3 observed variables

**Table 3.** Individual item reliability

Loyalty (lo)		Identification (id)		Cohesion (ch)		Trust (tr)		Participation (pa)	
Items	$\lambda$	Items	$\lambda$	Items	$\lambda$	Items	$\lambda$	Items	$\lambda$
lo <sub>1</sub>	0.8681	id <sub>1</sub>	0.7724	ch <sub>1</sub>	0.8292	tr <sub>1</sub>	0.8600	pa <sub>1</sub>	0.8931
lo <sub>2</sub>	0.8867	id <sub>2</sub>	0.8393	ch <sub>2</sub>	0.9144	tr <sub>2</sub>	0.9143	pa <sub>2</sub>	0.9339
lo <sub>3</sub>	0.7829	id <sub>3</sub>	0.7856	ch <sub>3</sub>	0.8606	tr <sub>3</sub>	0.9152	pa <sub>3</sub>	0.8540
Work atmos. (wa)		Leadership (le)		Involvement (in)		Customer ser. (cu)		Profitability (pr)	
Items	$\lambda$	Items	$\lambda$	Items	$\lambda$	Items	$\lambda$	Items	$\lambda$
wa <sub>1</sub>	0.7882	le <sub>1</sub>	0.8202	In <sub>1</sub>	0.8606	cu <sub>1</sub>	0.7714	pr <sub>1</sub>	0.8145
wa <sub>2</sub>	0.8795	le <sub>2</sub>	0.9594	In <sub>2</sub>	0.8822	cu <sub>2</sub>	0.6971	pr <sub>2</sub>	0.8420
wa <sub>3</sub>	0.8216	le <sub>3</sub>	0.8784	In <sub>5</sub>	0.6536	cu <sub>5</sub>	0.7160	pr <sub>5</sub>	0.7459
wa <sub>4</sub>	0.8578	le <sub>4</sub>	0.9126			cu <sub>8</sub>	0.7036		
wa <sub>5</sub>	0.8819	le <sub>5</sub>	0.8446						
wa <sub>6</sub>	0.9038	le <sub>5</sub>	0.8370						
wa <sub>7</sub>	0.9107	le <sub>7</sub>	0.8633						
wa <sub>8</sub>	0.9025								
wa <sub>9</sub>	0.9012								
wa <sub>10</sub>	0.8085								
Risk (ri)		Reinvestment (re)		Indebtedness (ind)		Survival (su)			
Items	$\lambda$	Items	$\lambda$	Items	$\lambda$	Items	$\lambda$		
ri <sub>1</sub>	0.7949	Re <sub>1</sub>	1	ind <sub>1</sub>	1	su <sub>1</sub>	1		
ri <sub>2</sub>	0.7887								
ri <sub>3</sub>	0.7382								

**Note:** All the items have values of at least 0.7, and that only im<sub>5</sub> and cl<sub>2</sub> fail to achieve a sufficient coefficient “ $\lambda$ ”. Nevertheless, these two items, with values of 0.6536 and 0.6971 respectively, are very close to the recommended minimum value, so we decided to maintain them as measurement items of their respective variables

**Table 4.** Construct reliability and convergent validity

Constructs	Cronbach $\alpha$	Composite reliability	AVE*
1. Trust (tr)	0.7100	0.9250	0.8044
2. Involvement (in)	0.7547	0.8449	0.6487
3. Loyalty (lo)	0.7361	0.8837	0.7176
4. Identification (id)	0.7100	0.8416	0.6394
5. Participation pa)	0.8716	0.9229	0.7997
6. Working Atmosphere (wa)	0.9571	0.9678	0.7510
7. Customer Service (cu)	0.6810	0.8136	0.5221
8. Indebtedness (ind)	1	1	1
9. Reinvestment (re)	1	1	1
10. Risk (ri)	0.7100	0.8178	0.5996
11. Profitability (pr)	0.7296	0.8434	0.6429
12. Survival (su)	1	1	1
13. Leadership (le)	0.9564	0.9559	0.7564
14. Group cohesion (ch)	0.7880	0.9021	0.7547

Notes: \*Average Variance Extracted AVE)

All the Scales comply with the requisites of construct reliability and convergent validity. A scale has construct reliability when the composite reliability coefficient has a value of at least 0.7, and convergent validity when de AVE has a value of at least 0.5

**Table 5.** Divergent validity

	CU	LE	PR	CH	SU	ID	IN	LO	TR	PA	CM	RE	IND	RI
<b>CU</b>	<b>0.722</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>LE</b>	0.143	<b>0.869</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>PR</b>	0.140	0.103	<b>0.802</b>	-	-	-	-	-	-	-	-	-	-	-
<b>CH</b>	0.032	0.471	0.043	<b>0.868</b>	-	-	-	-	-	-	-	-	-	-
<b>SU</b>	-0.081	-0.269	0.033	-0.276	<b>1</b>	-	-	-	-	-	-	-	-	-
<b>ID</b>	0.146	0.648	0.203	0.501	-0.303	<b>0.799</b>	-	-	-	-	-	-	-	-
<b>IN</b>	0.219	0.409	0.192	0.275	0.035	0.437	<b>0.805</b>	-	-	-	-	-	-	-
<b>LO</b>	0.127	0.625	0.085	0.465	-0.252	0.689	0.402	<b>0.847</b>	-	-	-	-	-	-
<b>TR</b>	0.018	0.426	0.049	0.739	-0.170	0.410	0.240	0.206	<b>0.896</b>	-	-	-	-	-
<b>PA</b>	0.086	0.800	0.072	0.499	-0.303	0.574	0.439	0.518	0.435	<b>0.894</b>	-	-	-	-
<b>WA</b>	-0.050	0.680	0.138	0.627	-0.350	0.546	0.348	0.527	0.563	0.572	<b>0.866</b>	-	-	-
<b>RE</b>	0.124	0.172	0.112	0.155	-0.002	0.240	0.015	0.201	0.118	0.012	0.087	<b>1</b>	-	-
<b>IND</b>	-0.192	0.033	0.301	0.031	0.041	0.182	0.002	0.080	-0.026	0.046	0.155	-0.072	<b>1</b>	-
<b>RI</b>	-0.097	-0.317	-0.088	-0.042	0.172	-0.160	-0.120	-0.291	0.058	-0.234	-0.187	-0.057	-0.085	<b>0.774</b>

**Note:** All the scales comply with the requisite of divergent validity, following the criterion specified by Barclay *et al.* (1995) for whom a scale has divergent validity if once all the coefficients of the main diagonal are substituted by the root squared of the AVE values in the correlation matrix, these ones are higher than any other values of their same files or columns.

**Table 6.** Multicolliniarity analysis

<b>Auxiliary regressions</b>	<b>R<sup>2</sup></b>	<b>FAV</b>	<b>TOL</b>
<b>Commitment</b>			
• Identification-involvement, loyalty	0.503	2.01	0.497
• Involvement-identification, loyalty	0.214	1.27	0.786
• Loyalty-involvement, identification	0.481	1.92	0.519
<b>Harmony</b>			
• Work atmosphere-participation, trust	0.467	1.87	0.533
• Participation-work atmosphere, trust	0.354	1.54	0.646
• Trust-work atmosphere, participation	0.334	1.50	0.666
<b>Long term orientation</b>			
• Risk-reinvestment, indebtedness	0.034	1.03	0.966
• Reinvestment-risk, indebtedness	0.005	1.00	0.995
• Indebtedness-risk, reinvestment	0.032	1.03	0.968

**Note:** A value for the coefficient of determination of at least 0.75, values exceeding 4 for the coefficient VIF and values very close to 0 for the coefficient TOL, denote the existence of serious multicollinearity (Gujarati 1999)

## **PAGRINDINIS ŠEIMOS ĮMONIŲ KONKURENCINGUMO VEIKSNYS – ORGANIZACINĖ KULTŪRA**

**M. C. Vallejo-Martos**

Santrauka

Šiame straipsnyje, atsižvelgiant į dabartinę mokslinių tyrimų kryptį, analizuojama organizacinė šeimos įmonių kultūra, kuri grindžiama neoinstitucine teorija ir transformacinio vadovavimo teorijos modeliu. Modelyje pateikiamos teigiamos santykių vertės, nustatančios organizacinę kultūrą (išipareigojimus, darną, ilgalaikę orientaciją ir klientų aptarnavimą) bei veiklos rezultatus, išmatuotus naudojant tokius kintamuosius kaip pelningumas, išlikimas ir grupės egzistavimo sanglauda. Modelis rodo, kokios priemonės būtų naudingos siekiant išnaudoti konkurencinį tokio tipo įmonių potencialą.

**Reikšminiai žodžiai:** šeima, įmonė, vertybės, organizacinė kultūra.

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