THE EFFECT OF CORPORATE GOVERNANCE AND OWNERSHIP ON THE DEGREE OF MARKET ORIENTATION: EMPIRICAL EVIDENCE CASE CHILE.

ANALYTICAL SUMMARY

ABSTRACT

This article investigates whether the corporate governance and ownership, act as determining of the degree of market orientation in a group of companies in Chile. The sample included data from 101 Chilean companies registered in the Santiago Stock Exchange in 2016, these were processed by correlation analysis and multiple regression. Empirical results showed that the coefficients of the variables of concentration and presence of independent directors are not significant; the coefficient regarding the size of the board has a significant role to play in driving market orientation, suggesting that the marginal effect of the degree of market orientation is higher when the number of directors on the board increases.

Keywords: Market Orientation, Corporate Governance, Board of Directors, Ownership structure.

Classification: JEL: M31-G3

A. INTRODUCTION

Market orientation has received considerable attention in the word of academics and professionals. This is demonstrated in the existing research framework that supports the importance of this variable. Since the early 1990s, progress has been made in its conceptualization and measurement, for example, the contributions made by Bernard, Jaworski, & Kohli, (1993) and Narver & Slater, (1990), have been framework for multiple studies focused on the impact of market orientation on the performance of the company, and its importance as a means for competitive success, (Dawes, 2000; McNaughton & Osborne, 2001; Rapp, Schillewaert, & Hao, 2008). On the contrary, despite the importance of knowing the determinants of market orientation development, the paucity of research focused on this field in emerging countries is evident. In the Chilean context, little input has been produced in issues related to business management from the marketing point of view. The growing global evidence of the positive effects of market orientation increases the interest in understanding its determinants; it is here where literature exposes how internal factors are considered of utmost importance, since the control on the aspects that may influence market orientation are mainly handled by managers or executives (Kohli & Jaworski, 1990)Santos, Vasquez, & Alvarez, 2002).

The internal organizational structure is considered as one of the most important additional resources for the success of an organizational strategy. Thus, the literary evidence shows the moderating role of ownership structures in the performance of market
In his study, Ho S.-H.a Wu, (2010), highlights the important role of corporate management in supporting market orientation of companies, this is how market orientation acts as a resource and corporate governance as a capacity within the company. It is the combination of resources and capabilities that allow companies to achieve positive results.

Based on the above, this study aims to assess empirically whether the corporate governance that considers the board focused on the presence of independent Directors and its size, as concentration of ownership (Ducassy & Montandrua, 2015; Lemmon & Lins, 2003; Mollah, Al Farooque, & Karim, 2012; Shapiro & Tang, 2015a), are presented as determinants in the degree of market orientation and on their internal dimensions (customer orientation, orientation to competition and cross-functional coordination), emphasizing the importance of organizational factors on companies and how they can exert great influence on the success of market orientation.

For this, the study focuses on a sample of 358 companies traded on the stock exchange in Santiago, the data of the market orientation dependent variable were collected through the three-dimensional scale validated by Olavarrieta et al., (1999) in his study conducted in Chile that follows the conceptualization proposed by Narver and Slater (1990); the questionnaire was administered to owners, partners or main executives in the company selected. Subsequently, a process of validation of the scale, correlation analysis and regression model development for testing the hypothesis followed, to end with a discussion of the main findings and limitations.

This research aims to contribute to the literature on market orientation that, as mentioned, is scarce in the Chilean environment. Firstly, different corporate governance dimensions are considered, providing new perspectives and implications to consider in business practice. The current literature on these topics addresses the reality of North America and other Western economies, where most companies are private; however, in the case of emerging economies, corporate governance aspects differ, so their findings cannot be generalized to companies in less developed economies, (Song, Wei, & Wang, 2015a), so answering the following questionnaire may help companies to determine the extent to which specific aspects of their corporate governance influence their market orientation, deepening on the existing analysis considering the role of corporate governance in the realm of business administration and marketing.

**B. THEORETICAL FRAMEWORK AND HYPOTHESIS**

**B.1 “Market Orientation” Determinants**

According to Narver & Slater, (1990) market orientation brings together a system of values followed by the company, it is divided into three categories: competitors orientation, consumer orientation and cross-functional coordination. This research adopts the three constructions introduced by Narver and Slater (1990) to measure the market orientation of the company. Market orientation is related
to specific and routine processes that create superior customer value and allow companies to gain a sustainable competitive advantage (Long, 2015).

From the literature review, the Chilean research has focused on three aspects, firstly assessing the degree of market orientation in different sectors, secondly the analysis of the consequences of market orientation in companies, and finally the construction of assessment models that allow analyzing the influence of market orientation on organizational performance. (Olavarrieta et al., 1999; Olavarrieta & Friedmann, 2008; Valenzuela & Villegas, 2013).

The growing evidence of the existence of a positive relationship in company performance and market orientation generates a growing interest in understanding the main determinants related to market orientation. Evidence that is exposed from the pass to the present in the results of research at worldwide level (Bernard et al., 1993; Kanagasabai, 2008; Riliang Qu & Ennew, 2005).

The determinants of market orientation have been a work of great importance in literature. Kohli & Jaworski, (1990) define market orientation as the meeting of the organization around market intelligence as fundamental strategy for the recognition of current and future customer needs, in addition to the dissemination of such information by other areas of the company.

The existence of studies that focus on the influence of factors identified by Kohli and Jaworski (1990) is varied. Riliang Qu et al., (2005), make an assessment of the determinants of market orientation in the tourism sector in China; they assess the background recognized in the work of Kohli and Jaworski (1990), together with a proposal that meets different factors (government regulation and ownership structure). In their results, they coincide on the fact that factors related to regulation, the effects of corporate governance agreements (through the ownership structure) have a positive relationship with market orientation.

More recent studies assess the influence of boards on market orientation. In their findings, Indu & Vishag, (2016), demonstrate how the board of directors exerts a positive influence on the degree of market orientation. Despite the collective research worldwide, attention to such aspects in Latin American countries is limited. Specifically in Chile, the studies identified in the literature search mentioned above do not concentrate their attention on the study of the determinants of market orientation in the business sector. Therefore, the next section presents how the components of corporate governance can influence the degree of market orientation of the company.

**B.1.1 Corporate governance as determinant in market orientation**

Corporate governance is understood as the link between the rules and practices that rule the power of directors (Charreaux, 2006). The legitimacy of that power includes as a whole the efficiency of external control mechanisms such as the financial market, labor,
political and legal ones, as well as internal controls related to shareholders control, mutual control between directors and the board (Ducassya, 2014). Around the world, different associations indicate that effective corporate governance structures encourage companies to create value through innovation and development, ensuring proper accountability and improving performance and compliance with objectives set (Securities Market Association, 2010). Multiple researches, focusing on corporate governance, indicate the existence of internal mechanisms of corporate governance and their effect on different business variables; ownership structure and the board of directors or board (Ducassy & Montandrau, 2015; Lemmon & Lins, 2003; Mollah et al., 2012; Shapiro & Tang, 2015a), similarly, research in Chile has contemplated the study of these dimensions when studying corporate governance (Lefort & Urzúa, 2008). This way, the study includes said mechanisms in the objective of assessing the implications of corporate governance as determinant in the degree of market orientation.

**B.1.1.1 Ownership structure.**

Ownership structure includes the extent of the distribution of shares ownership between the majority shareholders and other participants in the company; it estimates the relationship between the main owners and minority owners (De Miguel, Pindado, & De La Torre, 2004). Multiple empirical studies highlight the impact of good corporate governance in the current era of globalization where competition in the business world makes it necessary to have an organizational management in order to respond to changes in the environment and to maintain competitiveness (Sanusi & Pel, 2015). According to the "hypothesis of active surveillance," concentration of shareholders reduces managerial opportunism, resulting in fewer conflicts between directors and shareholders (Friend & Lang, 1988). In their research on the effects of market orientation and good corporate governance on managerial performance, Sanusi & Pel, (2015) indicate that the ownership structure is an important determinant of the results of the business, thus concluding that ownership structure acts as an internal mechanism for companies to maintain key resources focused on activities that promulgate customer orientation.

In this case, the concentration of ownership becomes more important in safeguarding the interests of minority shareholders (Hill & Snell, 1989). Other examples of recent studies validate the importance of the ownership structure in the corporate environment and its influence on the performance of companies. Li, Chau, & Lai, (2010), discuss in their research how strategic factors (market orientation and ownership structure), may affect the assimilation of the company to e-commerce processes. In their findings, the moderating influence of the majority shareholders between market orientation and assimilation of e-commerce is ratified.

Wang & Shailer, (2015) propose a theoretical framework supporting how the theory indicates the way in which the accumulation of majority shareholders boosts their interest for controlling the misuse of management, (Shleifer & Vishny, 1997). Authors suggest that the increased concentration of ownership motivates the majority shareholders to pressure the administration to improve and
respond to market forces, which results in greater market orientation (Ralston, Terpstra-Tong, Terpstra, Wang, & Egri, 2006). Song et al., (2015) assessed the effect of ownership concentration of public state companies’ shareholders on the degree of market orientation. One of their findings confirms that concentrated ownership can increase the ability of the company for a more responsible management, leading the company to respond to market forces.

Song, Wei, & Wang, (2015), show how different kinds of ownership structures may encourage innovative actions resulting from a strong market orientation. Their main hypothesis focuses on corroborating how a high level of concentration can motivate the majority owner to closely monitor the decision-making of managers, manage to dampen the willingness of management for turning into risk reduction strategies that may minimize the interest of potential shareholders (Bethel & Liebeskind, 1993).

Liu, Li, & Xue, (2011), study how ownership structure affects strategic orientation of a company in their interest for facilitating the success of their international businesses. The results indicate that ownership concentration is a significant predictor of market orientation. The results highlight how high ownership concentration is a disadvantage factor that impedes the development of business activities in emerging markets companies. When ownership concentration is low, the owners do not have the necessary information nor the power to monitor management decisions efficiently (Hill & Snell, 1989). Based on the bibliographic study, it is possible to indicate that the results in emerging markets confirmed a positive relation between ownership concentration and the degree of market orientation, not without contradictory findings, it is possible to state that a positive effect of this variable is estimated. The interest is to confirm or deny such relationship in order to generate results against the Chilean situation. From the bibliographic study conducted, we propose the following hypothesis:

**H1: ownership concentration is positively related to the degree of market orientation of the company.**

Similarly, is intended to verify the possible influence of market orientation on internal dimensions, so the following additional hypotheses are proposed.

**H1a.** Ownership concentration is positively related with the degree of customer orientation  
**H1b.** Ownership concentration is positively related to the degree of orientation to competition  
**H1c.** Ownership concentration is positively related to the degree of cross-functional coordination

**B.1.1.2 Structure of the Board (Presence of independent Directors)**

The board is considered the main body of governance of the company, they exercise the administration of the company, representing the interests of shareholders, and their decisions play an important role in creating value (Lefort, 2008). The board exercises control over senior executives and managers the issue of incentives, the board is responsible for reviewing the conduct and monitoring the results of the company to satisfy the major shareholders (Hillman & Dalziel, 2003). There are many researches that have been conducted in order to analyze the impact of the board of directors on the result of the company. The literature makes clear how the activities of corporate social responsibility are crucial in the perspective of market orientation, since the company must have the
ability to serve the stakeholders, through its knowledge (Brik, Rettab, & Mellahi, 2011). The theoretical framework established by Preston & O’Bannon, (1997) served as bases for empirical studies that have been made in the recent times, (Cabeza & Ferna, 2016; Rose, Mazza, Norman, & Rose, 2013; Yoo & Pae, 2015) these studies assess the relevance of corporate governance in social management and in the performance of the company.

By doing the bibliographic analysis, it is possible to indicate that there is little conclusive evidence of the existence of a relationship between the characteristics of the board and the value that it entails to the degree of market orientation of the company, so it is worth noting a series of theoretical principles that could confirm a relationship between these variables.

In their study, Cabeza & Ferna, (2016) study the relationship between social corporate responsibility, the board of directors, and company results. The theoretical framework of this research indicates that the principles behind corporate social responsibility practices serve to formalize commitments to society and convey credibility, so that responsible practices with suppliers, customers and the community have a direct impact on the competitiveness of the company, all this leading to specialized inputs to be included, sophistication to be fostered and a more productive environment to be created (Porter & Kramer, 2002). More than two decades ago, Narver & Slater, (1990), recognized the relationship between social responsibility and market orientation, showing how companies should be sensitive to the expectations and needs of its customers and competitors.

More recent studies confirm a positive and significant relationship between the existence of a greater number of independent directors in the board with the adoption of social responsibility in emerging markets (Devi et al., 2016). The main argument revolves around considering that the presence of independent directors increases surveillance on management, which reduces the problems of agency. The same study confirms that the existence of independent directors allows a high market capitalization, these because of the reputation improvement of independent directors such as their experience and knowledge.

Based on the theory of resources (RBV), corporate performance of businesses depends largely on the ability to align strategic actions, resources and capabilities efficiently (Armstrong et al., 1991). In their findings, Cabeza & Ferna, (2016) determine the existence of a positive effect of the increased presence of independent directors on the value of the company, this supports the theoretical framework which states that independent directors manage to have a closer relationship with stakeholders, better knowing their expectations and thus improving the response to market demands (Ibrahim & Angelidis, 1995).

Another theory that supports the impact of board composition in the company is that of resource dependence (IDT). It suggests that the selection of external members is a strategy that allows dealing with the relations of the organization with its involvement, in addition to improving the reputation and credibility of the organization (Pfeffer & Salancik, 1978). This is how the existence of
external directors can keep the company focused on external contingencies since independent directors seek to expose that their responsibility encompasses more than just the shareholders, being more conscious of the needs and expectations of different groups that form the company, aspects proven in the research performed by J. Wang & Dewhirst, (1992). Therefore, it can be considered that the existence of independent directors can make a company more sensitive to external issues that affect it, favoring better and superior performance, a characteristic of a market-oriented company.

Shapiro & Tang, (2015b), set out in their results evidence of the importance of having independent members on the board, as this positively affects the innovative development of the company. Their support validates that the presence of independent actors allows obtaining external assets achieving representation by important stakeholders, which is part of the attributes of a market-oriented company, this if we consider that most of the theoretical and empirical literature agrees in pointing out that market orientation involves a continuous innovative effort, supported essentially by doing something new or different in response to market conditions (Jaworski & Kohli, 1993)(Narver & Slater, 1990).

In the Chilean case, Lefort & Urzúa, (2008), have conducted studies on the composition of boards in Chile and its effect on the value of companies. The study aimed to assess whether the presence of independent directors significantly increases the value of companies in Chile; they conclude that the increase in the proportion of independent directors tends to increase the value of the company on the market. From the literary study conducted, we propose the following hypothesis:

H2. The higher the percentage of independent directors, the greater the degree of market orientation.

Similarly, it is intended to verify the possible influence of the variable on internal dimensions of market orientation, so the following additional hypotheses are proposed.

H2a. The higher the percentage of independent directors, the greater the degree of customer orientation
H2b. The higher the percentage of independent directors, the greater the degree of orientation to competition
H2c. The higher the present test of independent directors, the greater the degree of cross-functional coordination

B.1.1.2 Structure of the Board (Size of the Board)

Another aspect to consider in multiple researches takes into account the size of the Board of Directors. For this case, there is information that highlights both positive and negative aspects of the board size. The research framework regarding the impact of this variable has taken different approaches, firstly, a significant relationship with the improvement of companies performance has been confirmed; aspects of innovation or corporate social responsibility (de Cleyn & Braet, 2012; Mollah et al., 2012; Zahra, 2000), while another group has demonstrated a negative relationship (Cabeza & Ferna, 2016; Shapiro & Tang, 2015b).
The literature indicates that small boards can facilitate decisions making and control in order to improve management (Forbes & Milliken, 1999), great boards can hinder decision-making and fall into spreading the responsibilities, which reduces the performance of the company (Brown, Helland, & Smith, 2006). This is an aspect that must be taken into consideration in order to improve market orientation, since it is facilitated when senior managers give the necessary emphasis to this aspect in every part of the company, where the need to be sensitive to the assessment of the market is highlighted (Bernard et al., 1993). Studies conducted in emerging environments show that in those countries as well as in Chile, ownership is highly concentrated, therefore, firms are less likely to suffer coordination problems, but lack access to resources, thus preventing innovation actions, among other processes (Handoko, Smith, & Burvill, 2014).

Some authors suggest that larger boards can have more advantages. It is stated that a larger board can allow access to different perspectives and experiences, which is crucial in the development of companies (Aaboen et al., 2006). Secondly, literature indicates that a greater number of directors allows the company to have a greater amount of external resources available, (technological and financial), which proves to be critical for innovation (Adams, Hermalin, & Weisbach, 2010), a market-oriented company is aware of the continuing need of improving products, services and procedures, which demands the use of resources, internally and externally, in order to create links between departments, ensure quality and customer satisfaction, and be continuously updated regarding competitive environment (Narver & Slater, 1990). Based on the foregoing, we could say that access to greater resources could influence the degree of orientation of the company, which relates to the existence of a larger board of directors.

Through literary analysis, it is possible to say the results in relation to this variable are characterized by different results in relation to the impact of board sizes in business results, being inconclusive against its effects. From the literature review and discussion presented above, we propose the following hypothesis:

| H3: The size of the board has an influence on the degree of market orientation of companies |

Similarly, it is intended to verify the possible influence of the variable on internal dimensions of market orientation, so the following additional hypotheses are proposed.

| H3a: The size of the board has an influence on the degree of customer orientation of companies |
| H3b: The size of the board as an influence on the degree of orientation to competition of companies |
| H3c: The size of the board has an influence on the degree of cross-functional coordination |

C. RESEARCH METHOD

C.1. Study design

The focus of the research is quantitative, descriptive. A non-experimental research design is used. Regarding the extra polarity degree, this study is of exploratory origin, indicating that it presents conclusive results for the sample being analyzed, but not to be extrapolated to the population.
C.2. Sample
For the study, the 358 companies traded on the stock exchange in Santiago were considered as sample, there are multiple studies that have taken this sample as a reference, both in the study of market orientation and in the study of corporate governance (Cabeza & Ferna, 2016; Lefort & Walker, 2005; Mollah et al., 2012; Olavarrieta & Friedmann, 2008b; S et al., 1999). These companies are registered in the database of the Santiago Stock Exchange, the main Chilean stock market. It considers only companies that presented results of at least three consecutive years (Martínez, Stöhr, & Quiroga, 2007). Using the sample allowed to access data from reliable secondary sources in order to consolidate the measurements of independent variables.

C.3. Measurements and instrument
C.3.1. Variables
The study variables were designed on the basis of a thorough examination of the existing literature that takes the research framework as reference and its similarity with the objectives of the study and the key variables of the analysis.

C.3.1.1. Dependent variable

C.1.1.1.1 Market orientation
For market orientation, the conceptualization proposed by Narver and Slater (1190) was followed, which has served as a guide in multiple studies that measure the degree of this variable in different countries and economic sectors (Ho S.-H.a Wu, 2010; Johnson, Dibrell, & Hansen, 2009; Riliang Qu et al., 2005; Song, Wang, et al., 2015). In this way, the overall measure of market orientation is estimated as the average of the mean scores for the three dimensions, so it is considered that the three dimensions are equally important in the concept of market orientation. In the case of the scores related to the dimensions, the average of the scores of the items related to each viable are also taken into account.

The construct used includes the three dimensions developed and validated by the above mentioned authors. For this case, the three-dimensional scale validated by Olavarrieta et al., (1999) in a study conducted in Chile was used (See Annex 1), it was corrected by professionals who guaranteed their understanding of Spanish language and it was assessed in the Chilean business environment.

C.3.1.2. Independent Variables: Corporate governance dimensions.
The data source used in the measurement of the independent variables come from the public information provided by the companies listed in the stock market to the main oversight body in Chile (the Superintendency of Securities and Insurance - SVS).
C.3.1.2.1 Ownership concentration

Regarding ownership concentration considered in H1 (a, b, c), we consider ownership concentration as the proportion of shares held by the controlling shareholder, this method has been used in multiple studies, it is recommended since it considers the fraction of shares held by the majority shareholder (Chen, Li, Shapiro, & Zhang, 2014; Lefort & Walker, 2005; J. Li, Lam, Qian, & Fang, 2006; Shapiro & Tang, 2015a; Song, Wei, et al., 2015b).

C.3.1.2.2 Board structure and composition (Presence of independent directors).

As a variable for the analysis, we will use the total percentage of independent directors considering the total size of the board, this in order to control the variable given the different sizes of boards (Cleyn & Braet, 2012). This variable has been defined in the same way in multiple studies, for example (Cleyn & Braet, 2012; Honoré, Munari, & van Pottelsbergh de La Potterie, 2015). In order to test hypothesis H2 (a, b, c), we will represent the proportion of independent directors in the board with the following formula.

\[
\text{INDEP} = \frac{\text{number of independent directors}}{\text{total number of directors}}
\]

C.3.1.2.3 Size of the board

This variable will be used to test hypothesis H3 (a, b, c). It corresponds to the representation of the total number of directors who make up the company's board. This idea has been used in different studies previously consulted in order to analyze the relation between the size of the board and the performance of some business performance variables. (Cuadrado Ballesteros, García Rubio, & Martínez Ferrero, 2014; de Cleyn & Braet, 2012; Franken & Cook, 2013; Honoré et al., 2015; Lin, Li, & Bu, 2015; Porter & Kramer, 2006; Shapiro & Tang, 2015a).

C.3.1.3. Control variable

Control Variable (Company size)

The existing literature in the field of corporate governance as market orientation gives relevance to company size as a control variable in order to test the hypothesis. According to the literature, larger companies are able to make a better allocation of resources, thus paying attention to key factors of demand and stakeholders that, as we mentioned in subsequent chapters, is part of the strategies of a market oriented company (Lin et al., 2015)(de Cleyn & Braet, 2012). On the contrary, small businesses often lack funding, experience and knowledge, which prevents the appropriation of innovation strategies (Rothwell And Dogdson M & Dogdson And Rothwell R, 1994). Other authors argue that small businesses are more easily able to modify their plans, are less bureaucratic favoring the recognition of opportunities and effective action against such opportunities (Klepper, 1996)(Day, G. S., & Nedungadi, 1994; Narver & Slater, 1990).
Given the above, the size of the company is included as a control variable and is measured as the natural logarithm of total assets, measurement used in studies where its effect on the variables that this research covers were tested (Aaboen et al., 2006; Bin-sariman, Ali, Nazli, & Nor, 2016; Cuadrado Ballesteros et al., 2014; Ho S.-H.a Wu, 2010; Song, Wei, et al., 2015b; Yang & Wang, 2014).

D. ANALYSIS STRATEGY

D.1 Pre Test and data collection

The preliminary questionnaire that assesses market orientation was subjected to a pilot test (pre testing) as recommended in the methods of multiple investigations conducted in emerging countries, as well as in researches conducted in the Chilean market (Ho S.-H.a Wu, 2010; D. Li et al., 2010; Song, Wei, et al., 2015b). The test was applied to MBA students in all its modalities (Weekend, Sunrise, Evening, and Global) of the School of Economy and Business at the University of Chile.

As recommended in previous studies that assess the variables considered in this study, the questionnaire was administered to owners, partners or senior executives in the companies selected (Johnson et al., 2009, Kanagasabai, 2008; Riliang Qu & Ennew, 2005; Sanusi & Pel, 2015. It was sent via mail, through qualtrics. This collection method has been used in multiple studies focused on market orientation, since it allows the desirability of answering according to their availability online via internet. (Ho S.-H.a Wu, 2010; Johnson et al., 2009).

D.2. Data analysis

The information from the final survey applied to the study sample was subjected to different methods of analysis in order to confirm the validity and reliability of the scale. The reliability study was conducted through the assessment of internal consistency, (Ho S.-H.a Wu, 2010; D. Li et al., 2010; Liu et al., 2011; Long, 2015). Subsequent to this analysis, an exploratory factor analysis of main components was undertaken; with the previous analysis is possible to analyze the dimensional structure proposed in the theory. Subsequently, a confirmatory factor analysis was conducted, which is considered useful in the validation of the scales for measuring specific constructs. (Hair, Anderson, Tatham, Black, & Hair Jr, J.F.; Anderson, R.E.; Tatham, R.L.; Black, 1995). The tools used for data analysis were: Microsoft Excel, SPSS (Statistical Package for Social Science) v.16 for Windows, for statistical analysis. EQS (Structural Equation Program version 6.1), (Bentler, 1985) for validation of the scale of market orientation through confirmatory factor analysis.

Hypothesis testing

An analysis is performed through multiple regressions, mainly following the approach used by Kohli and Jaworski, pioneers in the study of the background of market orientation. This methodology has been adopted by more recent studies that include among their
objectives the analysis of different business aspects that are considered predecessors of market orientation, (Mollah et al., 2012; R Qu, Ennew, & Sinclair, 2005; Shapiro & Tang, 2015b)

As a first approach to the model and the study of the relationships between the variables as the testing of the hypothesis, a correlation analysis was performed.

Continuing with the testing of the hypothesis, multiple regression analysis is used in order to examine the direct relationship between variables. In this way, it allows us to study and quantify the relationship between a dependent variable (Y) and one or more independent variables (X), the results of this kind of analysis allow showing the connection between the independent variables and their effect on the variability of the degree of companies market orientation. (Bernard et al., 1993).

A one-dimensional measure of market orientation is used, as previously stated in the conceptualization of the variables; the following equations thus estimated.

\[
Y = Bo + b1X1 + b2X2 + b3X3 + b4X4 + E
\]

Where:
- \( Y \): MPOM (MARKET ORIENTATION) = average of mean scores of the three dimensions
- \( X1 \): CONPRO (OWNERSHIP CONCENTRATION) = average of shares held by the 5 main shareholders “controlling shareholders”
- \( X2 \): INDEP (BOARD COMPOSITION) = (number of independent directors) / (total number of directors)
- \( X3 \): BSIZE (BOARD SIZE) = total number of directors on the Board
- \( X4 \): FIRMS (COMPANY SIZE) = Natural logarithm of total assets
- \( Bo \): constant
- \( E \): (remainders: ε) that includes anything that independent variables are not able to explain.

In the case of the complementary hypotheses, the same equation previously discussed is taken into account, in this case considering each dimension of the market orientation scale as a dependent variable.

\[
Y (ccl, cco, ci) = Bo + b1X1 + b2X2 + b3X3 + b4X4 + E
\]

Where:
- \( Ycl \): MPON(O customer) = average of mean scores of the items that make up the assessment in the scale.
- \( Ycco \): MPON(O competition) = average of mean scores of the items that make up the assessment in the scale.
- \( Yci \): MPON(C cross-functional) = average of mean scores of the items that make up the assessment in the scale.

E. RESULTS

The survey was finally sent to a sample of 280 companies. With a closing date of 12 weeks after different periods of sending, a total of 120 responses were received. From a review process, we proceeded to eliminate incomplete surveys, the companies of which there
was no information regarding the other study variables, eliminating outliers. A total of 101 questioners were recorded, which resulted in an effective response rate of 36%. Such response rate is comparable to previous studies on market orientation in emerging countries (Slater and Narver, 1994; Greenley, 1995; Riliang Qu et al., 2005) (143-24.4%), (Ho S.-H.a Wu, 2010) (127-14%) and in studies conducted in Chile (Olavarrieta & Friedmann, 2008b) (116-36.6%).

E.1 RELIABILITY AND EXPLORATORY AND CONFIRMATORY VALIDITY

From the initial model, reliability of each one of the market orientation dimensions was calculated, through Cronbach’s Alpha coefficient. The three subscales in which market orientation is divided (customer orientation, competition orientation and cross-functional coordination), present Cronbach’s Alpha coefficient in line with the lower limits generally accepted (0.70). For the three factors, (0.91), (0.89) and (0.89) were obtained respectively, in this case the three factors are assessed as excellent, (George and Mallery 2003, p. 231), this guarantees the internal consistency of the components of each factor, effectively measuring the same construct in this case. (See table 1).

When proceeding with the data obtained, a factor analysis was performed (of main components) for each one of the resulting dimensions. The factors obtained in the Analysis after Varimax Rotation, shows that the factor loading of the three sub-dimensions exceed 0.80 in each one of the items. The 3 factors explain an 83.78% variance of the original data. (See table 1). From this data, we can say that the market orientation scale proposed has some degree of reliability, being free from random errors and capable of providing consistent results. With the aim of promoting the validity and interpretation of the constructs, a confirmatory analysis was applied; this method has been followed by multiple researches in order to successfully perform the validation of the scale. (Long, 2015; Özer et al., 2006; Prajogo, 2015; Rapp et al., 2008). The model suitably fits to the data. There is evidence of convergence between the respective indicators of the variable with the respective first-order factors (customer orientation, competition orientation and cross-functional coordination, and of their convergence within the second-order construct (Market orientation).

The above is concluded given the analysis of the following aspects. The chi-square of Satorra-Bentler ($\chi^2$S-B) is equal to 27.7857, the degrees of freedom are 24, the ratio between the two is equal to 1.15, the model indicates a good fit because the ratio is less than 2. Hu and Bentler (1999) suggest that values of CFI and NNFI equal or greater than a 0.95 indicate a good fit, in our case it is (CFI=0.995) (NNFI=0.98). The root mean square error of approximation (RMSEA) estimates the discrepancy between the observed and predicted covariance matrix, a cutoff point is suggested in values equal or less than 0.06, in our case it is (0.040) which indicates a proper fit. (See table 1). When analyzing the statistical t, we can test the null hypothesis that the parameter is null, since the sample is larger than 60, values higher than ±1.96 allow rejecting said null hypothesis for a significance level $\alpha \leq 0.05$, or above 2.56 for $\alpha$
The factor loading (or regression coefficient) is, thus, significant for each of the items evaluated, all of them exceeding the value previously indicated. The factor loadings of the items with respect to the first-order constructs vary from 0.79 to 0.88 and are significant to p<0.01. In addition, for the loadings of the first order factors with respect to second-order ones vary from 0.61 to 0.88 and are significant to p<0.01. As we can see, the estimated values of the parameters are all greater than 0.40 and statistically significant. The R2 of the relationship posed reaches in all the cases values greater than 0.40 for each one of the items considering, therefore, that each one of them has the power to predict or explain the degree of customer orientation, competition orientation and cross-functional coordination. This is how the second-order construct explains the 88%, 80% and 61% of the variation of the first-order factors (customer orientation, competition orientation, cross-functional coordination). (See table 1) Therefore, the second order factor model is used to represent market orientation and so we guarantee to perform a one-dimensional measurement of the variable.

**TABLE 1: Exploratory and conclusive reliability and validity**

<table>
<thead>
<tr>
<th>EXPLORATORY RELIABILITY AND VALIDITY</th>
<th>CONFIRMATORY FACTOR ANALYSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alfa if the element is deleted</td>
<td>Factor loading</td>
</tr>
<tr>
<td>Customer orientation</td>
<td>0.917</td>
</tr>
<tr>
<td>FINAL CRONBACH’S ALFA</td>
<td>0.917</td>
</tr>
<tr>
<td>% of explained Variance</td>
<td>57.58%</td>
</tr>
<tr>
<td>Item 1</td>
<td>0.896</td>
</tr>
<tr>
<td>Item 2</td>
<td>0.91</td>
</tr>
<tr>
<td>Item 3</td>
<td>0.881</td>
</tr>
<tr>
<td>Item 4</td>
<td>0.882</td>
</tr>
<tr>
<td>COMPETITION ORIENTATION</td>
<td>0.894</td>
</tr>
<tr>
<td>FINAL CRONBACH’S ALFA</td>
<td>0.894</td>
</tr>
<tr>
<td>% of explained Variance</td>
<td>17.14%</td>
</tr>
<tr>
<td>Item 5</td>
<td>0.846</td>
</tr>
<tr>
<td>Item 6</td>
<td>0.874</td>
</tr>
<tr>
<td>Item 7</td>
<td>0.825</td>
</tr>
<tr>
<td>Cross-functional coordination</td>
<td>0.89</td>
</tr>
<tr>
<td>FINAL CRONBACH’S ALFA</td>
<td>0.89</td>
</tr>
<tr>
<td>% of explained Variance</td>
<td>9%</td>
</tr>
<tr>
<td>Item 6</td>
<td>-</td>
</tr>
<tr>
<td>Item 7</td>
<td>-</td>
</tr>
<tr>
<td>KMO</td>
<td>0.84</td>
</tr>
<tr>
<td>E. BARTLETT</td>
<td>0.00 sig</td>
</tr>
<tr>
<td>Variance explained by the three components</td>
<td>83.78%</td>
</tr>
<tr>
<td>GOODNESS OF FIT INDEX</td>
<td></td>
</tr>
<tr>
<td>SATORRA-BENTLER SCALED CHI-SQUARE</td>
<td>1.15</td>
</tr>
<tr>
<td>NON-NORMED FIT INDEX</td>
<td>0.985</td>
</tr>
<tr>
<td>COMPARATIVE FIT INDEX (CFI)</td>
<td>0.990</td>
</tr>
</tbody>
</table>

*Parameter set to the unit to set the measurement scale of the latent variable

** Values t-Student statistic: significant at 0.05 (1.98).
E.2 HYPOTHESIS TESTING

Correlations

The Kolmogorov-Smirnov test showed that not all variables meet a normal distribution for subsequent analysis using parametric tests. Therefore, we proceed to the analysis by applying nonparametric tests (Bonett & Wright, 2000). According to the above and under the scheme of nonparametric correlations, we proceeded to apply to tests, Spearman, which yielded the following results:

The correlation analysis was performed on all variables in this study for two purposes. The first reason was to explore the relationship between the variables. The second was to verify the presence of multicollinearity. From the information presented in (Table 2), it is possible to establish that there is a correlation between the independent parables, reasons why it was not possible to include all the variables in order to avoid the problem of multicollinearity. Regarding the relationship of predictor and MPON (market orientation) variables, it is possible to indicate that none of the variables has a high correlation, confirming that there is no linear relationship between the independent variables CONPRO (ownership concentration) \((r=0.94, p >0.01)\), INDEP (% independent directors) \((r=0.55, p >0.01)\) and FIRMS (company size) \((r=0.31, p >0.01)\) and the dependent variable MPON (market orientation), for this specific sample of companies in Chile.

The data show the existence of a low but significant correlation between the BSIZE (size of the board) and the MPON (degree of market orientation) \((r=0.227, p <0.05)\), which would indicate that the benefits associated with the existence of a large board such as the perspectives and experience of its members (Aaboen et al., 2006) and the availability of a greater amount of external resources, (Adams et al., 2010), would favor the use and application of strategies focused on knowing and adequately addressing the customer (Cuadrado Ballesteros et al., 2014) (See Table 2).

Similarly, when doing the analysis with respect to the internal dimensions of market orientation that work as dependent variable, a moderate and positive relationship is shown between the degree of customer orientation MPON\((O \text{ customer})\) and BISE (size of the board of directors) \((r=0.307, p <0.01)\), this makes manifest the influence of the size of the board for accessing resources and timely improving customer orientation.

The previously shared information can also give rise to the existence of a low but significant correlation between the (cross-functional coordination) and the BSIZE (size of the board)\((r=0.210, p <0.05)\) (See Table 2). It has been stated that a larger board can allow access to different perspectives and experience, (Aaboen et al., 2006), the inclusion of a variety of perspectives on corporate strategy that includes improved communication and exchange of information and resources in different areas (Pearce & Zahra, 2012).
TABLE 2: Spearman Rho correlations of dependent variables dimension of market orientation and predictor variables

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>KS</th>
<th>1</th>
<th>1.1</th>
<th>1.2</th>
<th>1.3</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MPON</td>
<td>5.37</td>
<td>1.09</td>
<td>0.466</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Ocli</td>
<td>5.85</td>
<td>1.17</td>
<td>0.006*</td>
<td>0.777**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2 Ocom</td>
<td>5.02</td>
<td>1.41</td>
<td>0.376</td>
<td>0.775**</td>
<td>0.413**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 Cint</td>
<td>5.44</td>
<td>1.1</td>
<td>0.428</td>
<td>0.921**</td>
<td>0.806**</td>
<td>0.872**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. CONPRO</td>
<td>0.56</td>
<td>0.3</td>
<td>0.125</td>
<td>-0.094</td>
<td>-0.052</td>
<td>-0.030</td>
<td>-0.047</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. INDEP</td>
<td>0.18</td>
<td>0.19</td>
<td>0.004*</td>
<td>-0.061</td>
<td>-0.054</td>
<td>-0.023</td>
<td>-0.043</td>
<td>-0.128</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. BSIZE</td>
<td>7.03</td>
<td>1.66</td>
<td>0*</td>
<td>0.227*</td>
<td>0.303**</td>
<td>0.069</td>
<td>0.210*</td>
<td>-0.258*</td>
<td>0.155</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5. FIRMS</td>
<td>19.42</td>
<td>2.07</td>
<td>0.661</td>
<td>-0.103</td>
<td>-0.103</td>
<td>-0.034</td>
<td>-0.034</td>
<td>0.097</td>
<td>0.353**</td>
<td>0.396**</td>
<td>1</td>
</tr>
</tbody>
</table>

* Degree of market orientation
b Customer orientation
c Orientation to competition.
d Cross-functional coordination.
e Percentage of shares held by the “controlling shareholder”
f Percentage of independent directors in the board
g Total number of directors in the Board
h Natural logarithm of total assets
* Correlation is significant at level 0.05 (bilateral).
** Correlation is significant at level 0.01 (bilateral).

E.3 REGRESSION

The results of the regression analysis are shown in the Table 3; in a first step, if we consider the equation proposed in this study (Model 1) (See Table 3), we can say that there is no significant explanatory power by the independent variables on the degree of market orientation, these results indicate that the set of variables concerning corporate governance does not significantly affect the degree of orientation of the companies selected in this specific sample of companies. The multiple correlation coefficient R = 0.260 indicates the correlation between the set of predictor variables (COMPRO, INDEP, BSIZE, FIRMS) and the criterion (MPON), R² = 6.7%. The adjustment of the model can be considered rather low according to this data. Regarding the ANOVA and its corresponding Fe model index is clearly shown as invalid to represent the data. The significance value obtained (F = 1.627 p = 0.174 p > 0.01) (see table 3) indicates that the probability that the set of predictor variables introduced is not sufficient to provide explanation of the predicted values Y (MPON) (Market orientation) is high.

However, through the correlation analysis previously performed on each of the predictors as shown in table 2 lead us to state that not all of them are equally relevant. So we proceeded to perform a purging of the multiple regression model, eliminating those regressors that, due to their “not significant” predictive power, do not explain much more about MPON (market orientation) than those that do.
By means of the correlation analysis, we know that the variable BSIZE (size of the board) was the only one that was significant. Model 3 (See Table 3) shows the results, excluding other predictor variables (COMPRO, INDEP) in addition to the control variable FIRMS that, as explained above, causes multicollinearity in the model. The Durbin Watson test approximated to 2 (DW= 2.013) indicates that the principle that the remainder terms are NOT correlated with each other is true, the validity of the model improves, where the value of p related to index F shows significance of this coefficient, p ≤ .05, (F= 5.076 p= 0.027 p < 0.05) (See table 3). The model is valid and, therefore, we can say that the degree of market orientation is significantly affected by the variable BSIZE (size of the board) (t=-0.150, p=0.026 p < 0.05), so it is possible to say that companies with a larger board are more market-oriented.

Therefore, the results mildly support H3, and we say that the null hypothesis is accepted, thus accepting the influence of this variable on the degree of market orientation of the company; the relation is positive, so companies with greater board are more market-oriented.

Regarding the study of dimensions, in the table 3 are the results for each one of the models, considering each dimension as independent variable. As evidenced in model 1 where customer orientation is the dependent variable, including all the independent variables considered in this study, the model shows the non-significance related to the variables COMPRO (p= 0.875 p >0.05), INDEP (p= 0.334 p >0.05 Y FIRMS (p= 0.931 p >0.05). So we proceeded to perform a purging of the multiple regression model, model 2 where customer orientation is the dependent variable, the value of p associated to index F indicates a significance of this coefficient, p ≤ .05, (F= 9.665 p= 0.003 p < 0.05) the model is valid in this case, where the significance of the variable BSIZE size of the board (p=0.003p < 0.05) can be evidenced. In model 3, where orientation to the competition is the independent variable, we concluded that there is no significant explanatory power of any of the predictor variables on the degree of orientation to the competition (F= 0.212 p= 0.931 p >0.05). Also, the results of the regression (See Table 3) p value > 0.05 in the variables COMPRO, INDEP and FIRMS, show no significance.

As evidenced in model 4 (See Table 3), where the dependent variable is the cross-functional coordination including all the independent variables considered in this study, the significance value obtained (F= 1.210 p= 0.312 p >0.05) (See Table 3) indicates that the probability that the set of predictor variables introduced is not sufficient to provide explanation of the predicted values of MPON cross-functional coordination is high. Similarly, the model shows the non-significance related to the variables COMPRO (p= 0.933 p >0.05), INDEP (p= 0.561 p >0.05 and FIRMS (p= 0.750 p >0.05). Therefore, we proceeded to perform a purging of the multiple regression model, model 5 where cross-functional coordination is the dependent variable, p value associated to the index F shows significance of this coefficient, p ≤ .05, (F= 4.268 p= 0.041 p < 0.05) the model is valid in this case, where the significance of the variable BSIZE size of the board (p=0.041 p < 0.05) can be evidenced. As we can see in table 3, model 2, results show that the degree of customer orientation is significantly affected by the variable BSIZE (size of the board) (t=-0.3107, p=0.03 p < 0.05),
supporting hypothesis H3a; the relation is positive, so companies with a greater board size are more customer-oriented. As we can see in the table 3 model 5, the results show that the degree of cross-functional coordination is significantly affected by variable BSIZE (size of the board) (t=2.071, p=0.041 p < 0.05), we can say that although there is a very weak support, the degree of cross-functional coordination is significantly affected by variable BSIZE (size of the board), thus the regression results weekly support H3c; the relation is positive, so companies with a larger board size have a greater degree of cross-functional coordination. (See Table 4, Hypothesis contrast summary).

**TABLE 3: Results of the regression. Dependent variable MPON market orientation and dependent variable MPON dimensions Market orientation**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>MPON a</th>
<th>OCLI b</th>
<th>OCOM c</th>
<th>CINT d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
<td>Model 1</td>
</tr>
<tr>
<td>B (t value)</td>
<td>B (t value)</td>
<td>B (t value)</td>
<td>B (t value)</td>
<td>B (t value)</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------</td>
<td>---------------------------------</td>
<td>---------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMPRO e</td>
<td>-0.228(-0.603)</td>
<td>-0.165(-0.453)</td>
<td>-</td>
<td>0.06(0.16)</td>
</tr>
<tr>
<td>INDEP f</td>
<td>-1.125(-1.153)</td>
<td>-0.911(-1.001)</td>
<td>-</td>
<td>-1(-0.97)</td>
</tr>
<tr>
<td>BSIZE g</td>
<td>0.132(1.707)</td>
<td>0.152(2.184)</td>
<td>0.15(2.253)*</td>
<td>0.23(2.81)</td>
</tr>
<tr>
<td><strong>Control Variable</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIRMS h</td>
<td>0.036(0.623)</td>
<td>-</td>
<td>-</td>
<td>0.01(0.09)</td>
</tr>
<tr>
<td><strong>ADJUSTED</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>0.260*</td>
<td>0.252a</td>
<td>0.227a</td>
<td>0.324a</td>
</tr>
<tr>
<td>R2 MODEL</td>
<td>0.067</td>
<td>0.063</td>
<td>0.052</td>
<td>0.11</td>
</tr>
<tr>
<td>R2</td>
<td>0.026</td>
<td>0.033</td>
<td>0.042</td>
<td>0.07</td>
</tr>
<tr>
<td>F</td>
<td>1.627</td>
<td>2.054</td>
<td>(5.076)*</td>
<td>(2.64)*</td>
</tr>
<tr>
<td>D Watson</td>
<td>2.006</td>
<td>2.026</td>
<td>2.013</td>
<td>2.18</td>
</tr>
</tbody>
</table>

* Degree of market orientation
  b Customer orientation
  c Orientation to competition.
  d Cross-functional coordination.
  e Percentage of shares held by the “controlling shareholder”
  f Percentage of independent directors in the board
  g Total number of directors in the Board
  h Natural logarithm of total assets
  * Correlation is significant at level 0.05 (bilateral).
  **. Correlation is significant at level 0.01 (bilateral).
### DISCUSSION AND CONCLUSIONS

Companies today are exposed to an environment that invokes being aware of the different economic scenarios and the different types of public, market orientation is thus a strategy that should be part of the organizational culture, and be a starting point in harnessing knowledge to the study of the needs and desires of customers and the study of competition, to react with innovative alternatives in a joint working environment focused on value co-creation. This makes business aspects, including organizational culture and corporate governance, key factors when developing and focusing objectives, given the challenges of the current environment.
In this paper we contribute to the literature, focusing on the question of whether the corporate governance affects the result of the degree of market orientation of companies in the emerging economy of Chile. We studied a sample of 101 companies listed on the Santiago stock Exchange, most of them large, focused on the manufacturing sector of services and wholesale and retail commerce. A global measure was made of the degree of market orientation and of individual measures for each one of its dimensions, customer orientation, competition orientation and cross-functional coordination. Given the scarcity of literature on the study of the determinants of market orientation in Chile and Latin America, the results of this research are intended to serve as a basis for future studies that give prominence to the importance of business and organizational aspects in the implementation of marketing oriented activities.

Regarding the general objective of this research, in general, we found that the impact of corporate governance on the degree of market orientation in this group of companies is low. We found little evidence that the variables of corporate governance may have a significant effect on market orientation; regressions showed that the coefficients of the governance variables are not significant, except for the coefficient related to the size of the board, which was found to be marginally significant and positive. Moderate evidence was found indicating that the size of the board has a positive impact on the degree of market orientation and on internal dimensions (customer orientation and cross functional coordination). Therefore, the marginal effect of the degree of market orientation is slightly higher when the number of directors of the board increases. Similarly, evidence was found that the size of the board has a positive influence on the degree of customer orientation and mildly on the improvement of the degree of cross-functional coordination of the companies considered in this study.

The empirical findings of this research only provide limited evidence consistent with the literature in this area, based on emerging countries, (Lefort & Urzúa, 2008; Song, Wang, et al., 2015). This could suggest that the relation between corporate governance and management activities not only in the area of market orientation, but in innovation and corporate social responsibility may be different and complex in emerging economies, (Shapiro & Tang, 2015a; Song, Wei, et al., 2015a). This indicates that more work is required in this area in order to understand the nature and the measurement of the degree of market orientation of Chilean companies and its relation with corporate governance.

This study verifies the strategic role of the board, which highlights the impact that this management body has on business performance, complementing the existing literature that supports the positive relationship between the size of the board and business performance, (Fitriya & Locke, 2012; Forbes & Milliken, 1999; Ganguli, 2013) the implementation of corporate social responsibility (Cabeza & Ferna, 2016), and the appropriation of innovation-oriented strategies (de Cleyn & Braet, 2012). This study aims to
encourage researchers in the field of marketing that have focused, in an isolated manner, on studying the effects and consequences of the implementation of strategies in this area, to direct more attention on the determinants and their consequences, involving all the levels and organization areas that have a strategic and corporate function of great importance for any company, whether small or large.

The board of directors and especially the size of the board have been a source of research in the study of corporate governance, in literature there is evidence of the relevance of larger board in the control of agency problems, this is in relation to this case, a greater number of people would be attentive in making decisions, and make more effective monitoring. From the perspective of resources dependence, it is stated that a larger board increases the opportunities of creating connections and, therefore, access to different resources; management theory indicates that a larger board opens doors to a higher level of knowledge and skills when seeking improvements to conflicts or implementation of strategies (Adams et al., 2010; Fitriya & Locke, 2012).

The larger size of the board slightly impacts the degree of market orientation; this would indicate that the plurality of views, the access to resources and greater control with respect to the decisions made, play an important role in improving the degree of market orientation, and of two of its dimensions in the Chilean case (customer orientation and cross-functional coordination). Literature in the area of marketing emphasizes that to implement principles focused on these two dimensions, operational management focused on generating market intelligence is required in order to understand current and future customers needs, internal dissemination of knowledge generated in all departments and areas that make up the company and in the third instance the design and implementation of response actions that consider meeting the previously identified needs (Casielles, 2001; Narver & Slater, 1990).

Access to resources is considered a key aspect when addressing the needs of the market and thus adapt to its changes. This is how the company should direct its human and material resources in order to design action plans that are implemented including all organizational areas and levels. To target resources and internal capabilities, a market-oriented business philosophy and culture is required; our results, in line with administrative theory, would indicate that the access to a higher level of knowledge and skills can facilitate the implementation of strategies focused on the environment, that guarantee the generation, dissemination and interpretation of information through an internal coordination of the company’s departments. In this sense (Day, Nedungadi, & Day, G. S., & Nedungadi, 1994) state that “Directors guided by the market have achieved a balance between the perspectives of consumers and competitors, and work avoiding the oversimplification inherent to the representations biased towards any of these market elements”, so large boards could improve access to these types of prospects and motivation.
The results in this study set out an important focus for the expansion of literature on the strategic role of board of directors within companies. (Gautam & Boeker, 2016). The existing literature is not clear to define to what extent the aspects of business strategy affect implementation and development of activities in the area of marketing. As the authors Jaworski & Kohli, (1993) conclude, it is always useful to continue exploring the relationship between market orientation and alternative dimensions of business performance, in order to better understand the conditions under which the degree of market orientation improves, emphasizing the importance that it has on business performance in the current environment.

LIMITATION

These limitations can be consider in order to expand research in this area, in a first step the sample is relatively small, this may limit the reliability of the results to another national context or to different types of businesses. Valuable would consider studying the longitudinal effect of the variables with the intention to generate knowledge on determinants of the degree of market orientation. Similarly it would help to avoid the endogeneity problem exposed by some scholars authors in the area of corporate governance and the effects of the directory, this relates to existing sources of heterogeneity not observed, so they are not easily captured by the explanatory variables and the control variables of the proposed model. This unobserved heterogeneity is hidden in the error term, which also causes endogeneity (Song, Wei, et al., 2015b). The results of this investigation should be regarded as provisional given the lack of previous empirical research in this area. The most important finding of this study is that many existing arguments in the literature have not been confirmed by the results. The challenge is to expand research in these areas and equally articulate existing knowledge in order to build consensus on a greater number of variables, measurement methods or theoretical in the search for causal relationships between variables taken into account models.

REFERENCES


Gautam, K., & Boeker, W. (2016). The Effects of Board Size and Diversity on Strategic Change Author ( s ) : Jerry Goodstein , Kanak Gautam and Warren Boeker Stable URL : http://www.jstor.org/stable/2486969 REFERENCES Linked references are available on JSTOR for this article : You may need, 53(3), 241–250.


**ANNEXES**

**Annex 1. Scale recital proposed by Narver and Staler (1990) modified based on (Olavarrieta et al., 1999)**

<table>
<thead>
<tr>
<th>Customer orientation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The objectives of our company are based on achieving customer satisfaction</td>
<td></td>
</tr>
<tr>
<td>b. We continually monitor our commitment to serve the needs of customers</td>
<td></td>
</tr>
<tr>
<td>c. Our competitive strategy is based on understanding of customer needs</td>
<td></td>
</tr>
<tr>
<td>d. The satisfaction of our customers is measured continuously and systematically</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Facing competition</th>
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</thead>
<tbody>
<tr>
<td>e. Vendors or business executives of our company share information about our competitors</td>
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<tr>
<td>g. Our firm responds quickly to the actions of our competitors</td>
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<tr>
<td>h. Senior executives of our company regularly discuss the actions of competitors</td>
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<table>
<thead>
<tr>
<th>Functional coordination</th>
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<tbody>
<tr>
<td>i. Managers regularly visit their customers and prospects.</td>
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<tr>
<td>j. In our company, the functional areas are integrated to meet the needs of our target market</td>
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</tbody>
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