
Received on

December, 19, 2013

Approved on

May, 13, 2015

1. Leonardo Pinheiro

Deboçá

Doctor in Business

Administration

Universidade Federal de Minas

Gerais

(Brazil)

[leonardopd@gmail.com]

2. Ricardo Silveira Martins

Doctor in Applied Economics

ESALQ – Universidade de São

Paulo

(Brazil)

[rmartins@face.ufmg.br]

Competitive Advantages from Horizontal Relationships in Productive Agglomerations: perceptions of local agents

Leonardo Pinheiro Deboçá

Universidade Federal de Viçosa – Rio Paranaíba Campus, MG, Brazil

Ricardo Silveira Martins

CEPEAD, Universidade Federal de Minas Gerais, MG, Brazil

Responsible editor: João Maurício Gama Boaventura, Dr.

Evaluation process: Double Blind Review

ABSTRACT

Objective – This paper aims to assess to what extent relational view assumptions can explain competitive advantages perceived in the industrial agglomeration contexts of small businesses.

Design/methodology/approach – We used qualitative research; two furniture centers, Misassol (SP) and Ubá (MG), were examined through comparative data analysis. Data was collected through interviews with executives from 40 companies and 13 supporting organizations. The relational view and its assumptions point to factors that generate competitive advantage resulting from collaborative relationships between companies. Moreover, agglomerations provide intense relationships and are encouraged by governance entities.

Findings – No competitive advantages clearly established due to relational gains were identified. The behavior of entrepreneurs in both centers tends strongly towards individualism. What agents identify as competitive advantages corresponds to situational or contextual factors in these centers and do not result from the realization of relational view assumptions. Escaping to this paradigm, the relational gains can be sourced only in subgroups with affinity, without intervention of governance entities.

Practical implications – Despite an agglomeration tendency within companies belonging to the furniture sector, a strong inclination towards individualism creates barriers to obtaining additional advantages resulting from relational gains, whether due to market regionalization, access of sales representatives, or logistics and tax costs, among other issues. However, actions in small groups are an important governance mechanism for that context.

Contributions – Evaluate the assumptions of relational view and its explanatory power for competitive advantages in agglomerations of Brazilian furniture companies.

Keywords – Competitive advantage; Relational view; Furniture industry.



Review of Business Management

DOI:10.7819/rbgn.v17i56.1848

1 INTRODUCTION

Competitive advantage is a concept that is closely associated with company's higher earnings when compared to their competitors. It has been the subject of different theoretical views in academic literature. Regarding a possible increase in earnings, however, approaches that deal with collective action strategies have been increasingly used as explanation.

This applies to the relational view, which raises questions to the strategy field, especially regarding the sources of competitive advantage. This field aims to explain the differences in the performance of companies, while the main contribution of the relational view is the construction of a theory that considers companies' dyads and networks as analytical key units to explain the superior performance of an individual firm (Dyer & Singh, 1998).

Relational gains can be present in different ways, or denominations, in collective action contexts, such as local productive arrangements, productive agglomerations, clusters, supply chains, and industrial centers, among others.

Particularly in small businesses, which are the case of most of the furniture industry in Brazil, group strategies may be an important form of development and access to competitive advantages, since these organizations are usually under disadvantageous conditions, when compared to large companies. This includes access to technology and financial resources.

Therefore, the present paper aimed to examine the factors considered competitive advantages in inter-organizational relationships and clarify the possible relationships between these events and the assumptions of the relational view, based on the perceptions of local agents. The relations between furniture producing companies in the furniture centers of Ubá (MG) and Mirassol (SP) are used as empirical evidence.

In addition to this introductory chapter, the theoretical rationale presents considerations on productive agglomerations, followed by the relational view and its assumptions for generating relational gains. Next, competitive advantage and

performance are discussed. The third chapter describes the method and procedures used, highlighting a topic from the furniture industry as an empirical field and another topic on methodological procedures. The fourth chapter presents the results; its first section highlights the competitive advantages and disadvantages in Mirassol and Ubá, according to representatives of supporting agencies and from the entrepreneurs' point of view. In the fourth topic, relationships are assessed, considering the relational view assumptions. Finally, the fifth chapter presents conclusions, followed by references.

2 THEORETICAL RATIONALE

2.1 Productive agglomerations

Starting with the contributions of Marshall (1890), who addressed British industrial districts, then moving on to Perroux (1959), who discussed the economic nature and the dominance of geographical areas, as far as Porter (1990), who tackled the competitive advantage of nations, and then on to contemporary literature, the concept of productive agglomerations adjusts itself to different ideas, including clusters, industrial districts, local productive arrangements, local productive and innovative systems, industrial centers and enterprise networks. All these forms of agglomeration involve some kind of regional production specialization (Lastres & Cassiolato, 2003) which they are a part of.

Over recent decades, certain highlighted industrial districts (Third Italy, Silicon Valley and Baden-Württemberg), whose dynamics were notoriously based on local assets, led region or location to reappear as a central hub of competitive and innovative advantages (Lastres & Cassiolato, 2003; Lastres *et al.*, 1999; Vargas, 2002).

Lastres and Cassiolato (2003, p. 7) claimed that,

The main aspect of the term productive, scientific, technological and/or innovative cluster is the territorial proximity of economic, political and

social agents (companies and other organizations and public and private institutions). A major issue associated with the term is the formation of agglomeration-based economies, that is, the advantages arising from the geographical proximity of agents, including access to raw materials, equipment, labor, among others. The agglomeration of companies is thought to increase their chances of survival and growth and is a significant source of competitive advantages. This is particularly significant in the case of micro and small businesses. (p. 7)

The term Local Productive Arrangement (LPA), used for productive agglomerations or collective strategies, according to federal government efforts towards specific public policies for entrepreneurial agglomerations, refers to both vertical and horizontal links (Sacomano & Paulillo, 2012).

Bustamante (2004) distinguishes the relations between companies according to the forms of cooperation. In vertical cooperation, companies develop complementary activities at different stages of the production chain, and goals are focused on reducing information and communication costs, as well as risks referring to the introduction of new products and to the time new products take to be developed.

Horizontal cooperation, on the other hand, according to the same author, tends to take place between same-sized companies in the same segment, and may also involve supporting institutions, such as business associations. The objectives usually focus on reducing transaction costs, developing marketing strategies, acquiring inputs, sharing facilities, machinery, equipment or tools for common use, on information on market and development of new products or processes (Bustamante, 2004).

2.2 The relational view and its assumptions in the generation of relational gains, in opposition to the transaction costs perspective

In business and strategy literature, the relational view surpasses the two other important

explanations given for above average gains and competitive advantage. The first view refers to industrial structure, widely developed from Porter on. The second corresponds to a perspective based on resources, which explains competitive advantages as arising from the idiosyncrasies of resources and skills within the organization (Dyer & Singh, 1998).

The relational view is based on different theoretical motivations, such as: few explicit explanations in literature on the drivers of gains in strategic alliances; discovery of possible sources of gains and competitive advantage in previous papers of one of the authors (see Dyer, 1996; 1994); and research on strategies for acquisitions in which the nature of synergies and the conditions under which companies can create a joint value through transactions are explored (Science Watch, 2008).

The analysis of the relationships developed by companies is important because competitiveness emerges not only from its internal resources, but also from those it accesses through its network of relationships (Dyer & Singh, 1998; Lavie, 2006). Empirical studies seek to verify the positive relationship between the adoption of process integration, collaborative relationships, information sharing and business performance (Slado, Dant & Tekleab, 2008; Lazzarini, 2007). Considering that the generation of competitive advantage may be beyond companies' boundaries, Dyer and Singh (1998) identify four potential sources of inter-organizational gains: i) relationship specific asset; ii) knowledge sharing routines; iii) complementary resources and skills; and iv) effective governance.

In the relational view, the scope of supernormal profit or relational gains are not feasible for individual organizations or in specific market relationships, but as a result of a single combination of resources, dispersed in governance relations (Dyer & Singh, 1998). Relational gains can be achieved when allied partners combine, exchange or invest in idiosyncratic assets, knowledge and resources or skills, and/or employ effective mechanisms of governance that reduce

transaction costs or allow gains to be obtained through synergies in the combination of assets, knowledge or skills (Dyer & Singh, 1998).

Given its bases and assumptions, the relational view can be considered, in a sense, as derived from the resource-based theory (Acedo *et al.*, 2006; Paulraj *et al.*, 2008), especially regarding the capacity and opportunities for value creation increasingly dependent not only on organizations' own resources but also on those of their partners (Chaddad, 2005).

The cooperative development of resources can be a more economical mechanism. However, there is the cost of renouncing an individualistic perspective, since companies start to operate under the logic of collective strategies. Collaboration allows sharing knowledge, assets and time for the development of a new resource (Balestrin & Verschoore, 2008).

Knowledge sharing and the exchange of ideas are important for creating value in a network, and depend on the trust established between partners (Gerolamo *et al.*, 2008). Accordingly, Redondo and Fierro (2007) indicate confidence and commitment as elements that have a major impact on long term relationships between companies. Other important factors observed by the authors are communication, contact between companies, flexibility and willingness to adapt to changes in the external environment.

However, Barney and Hesterly (2004, p. 52) claim that "while significant economic incentives are given to make companies cooperate, important economic incentives are also available for the defrauding of those alliances already formed", through moral hazard, adverse selection or theft. On one hand, relational gains can be achieved; on the other, mechanisms to reduce possible defrauding are used.

We must consider, however, that, as business segments become dynamic and knowledge-intensive, the prospect of a collective strategy seems to be more appropriate, since the competitiveness of a company becomes more dependent on its ability to complement and coordinate resources along with partners, at

the expense of individual property and domain of strategic resources (Balestrin & Verschoore, 2008).

In this context, governance and confidence have become two main mechanisms for reducing the threat of fraud. The greater the defrauding threat, due to higher economic benefits, the more elaborate should be the required governance structure. Regarding the trust mechanism, if there is a lack of opportunistic behavior in time, trust can be established and replace more expensive forms of governances (Barney & Hesterly, 2004; Barney & Hanse, 1995).

On one hand, the relational view has theoretical elements that aim to explain the competitive advantage through relational gains; on the other hand, somehow complementary, the view of transaction costs can explain elements that hinder relational gains.

So-called transaction costs are explained by the transaction costs theory (TCT), which admits a set of factors that explain uncertainty about the future of market functioning. The factors forming the base of the exchange relations between the agents are: bounded rationality, opportunistic behavior, asymmetric information and failure to fulfill contracts (Silva, 2006).

For Silva (2006), the limited rationality of agents prevents all decisions from maximizing welfare. Opportunistic behavior leads to actions favoring the achievement of benefits at the expense of the interests of other agents. Information asymmetry results from the unequal access of stakeholders to information on trade. The inability to fulfill contracts refers to the impossibility of predicting a range of possible events involving exchanges. Even if it were possible, this would produce inflexibility.

TCT, or transaction costs economics, is based on two theoretical pillars: the behavioral assumptions of the agents and the attributes of the transactions. Opportunism and bounded rationality stand out concerning agents' behavior. About the attributes of transactions, the specificity of assets, frequency of transactions and uncertainty

that pervades the actions of agents can be highlighted (Arbage, 2004).

The specificity of assets can be demonstrated in different ways: a) local specificity, referring to the decision referring to location; if it will be close to supplier market or consumer market; b) physical specificity, which relates to investments in equipment and machinery characterized for the transaction; c) human specificity, referring to specific training to meet the transaction; d) specificity of dedicated assets, which corresponds to specific investments to meet transactions; e) specific mark, relating to investment in the image of the company or the product; f) Temporal specificity, linked to the perishability of the product and the time for the transaction (Williamson, 1991).

There are transaction costs at different levels of collaboration, from those referring to trade with other organizations to those dealing with exchange of information and financial flows. Transaction costs may refer to the establishment of contacts with new partners, the achievement of new contracts with partners and monitoring of the fulfillment of contracts by partners (Skjoett-Larsen et al., 2003).

2.3 Competitive advantage and performance

The main theoretical sources for research in the field of strategic management are provided by the concept of Industrial Organization (IO), mainly by the work of Michael Porter, with respect to companies' performance determinants. The idea that industrial structural characteristics determine performance is the core of this line of thought (Hawawini *et al.*, 2003). The works of Edward Mason and Joe Bain, which gave rise to the *Structure-Conduct-Performance* model, pioneered this line of thought, later referring to the contributions of Porter (Vasconcelos & Cyrino, 2000).

However, other factors may explain different performances between organizations. One of the theories addressing this issue is the vision based on resources (VBR).

From this point of view, attention is given to organizations' factors, that is, to the resources and skills developed within organizations. Since they are unique to each organization, they may explain better performance.

Regarding IO, Hawawini *et al.* (2003, p. 14) observe that "in fact, a significant part of the observed performance variations are attributed to unknown factors." That is, the IO view alone does not fully explain the origins of performance variations.

Another limitation in this approach is the very nature of the industry. What defines a certain sector is based solely on the type of production process in which the companies operate, which disregards, for example, similarities or differences between consumers and the size of companies, among other factors (Hawawini *et al.*, 2003).

However, although there are criticisms and different views on competitiveness and performance, since organizations operate in a competitive environment, business practices demand advanced explanations, models and tools targeting more effectiveness in managing activities.

3 METHOD AND METHODOLOGICAL PROCEDURES

This paper results from an explanatory research. Gil (1999) states that this type of research provides the deepest knowledge of a given phenomenon, since it seeks the reasons and causes of relationships or facts. Regarding the process, this research was qualitative, developed through comparative study between two furniture production centers. A longitudinal cut with cross cuts was employed, in which, according to Vieira (2004), research focused on the development of the phenomenon over time, on certain historical moments of this development, or on critical events that marked the history of the phenomenon, which are presently relevant, but with data collection performed at a single moment in time. Also regarding characterization, analysis level

went as far as furniture production companies and participating supporting organizations. Testimonials, opinions and information obtained from entrepreneurs or managers of enterprises and organizations were considered units of analysis.

3.1 Regarding the empirical field: furniture industry

The furniture industry is known for bringing together various production processes that involve different raw materials and a wide variety of end products. It can be classified mainly according to the materials used in furniture production, including wood and metal, or according to their intended uses, especially in homes and offices. In this industry, due to

technical and market aspects, companies generally specialize in one or two types of furniture, such as kitchen and bathroom cabinets and upholstery, for example (Gorini, 1998).

The Brazilian furniture sector is also characterized by the prevalence of micro and small enterprises (over 95%). They are traditional, national capital, family enterprises. Only some specific sectors have been attracting foreign companies, which is the case of office furniture. The Brazilian furniture industry is characterized by a large number of small companies with national capital offering a great number of employment opportunities, which is also true all over the world (ABIMÓVEL, 2006).

The table below presents selected data for the sector, in order to expand the contextualization of the national furniture industry.

TABLE 1 – Brazilian furniture sector

Variable	2009	2010	2011	2012	2013
Companies	14,795	15,117	16,082	17,132	18,248
Personnel employed	236,633	267,626	281,420	295,201	298,739
Production (1,000 items)	369,955	413,787	431,031	460,561	476,230
Billing (R\$ 1,000)	22,063,979	26,532,248	29,503,859	32,496,331	35,989,689
Exports (US\$ 1,000)	688,903	765,793	736,655	703,584	680,421
Imports (US\$ 1,000)	316,723	468,972	561,575	649,297	739,828
Investments (R\$ 1,000)	615,487	673,875	1,062,139	1,314,860	1,403,081

Source: Developed from the Relatório Setorial 2014 (Sector Report) - MOVERGS, IEMI, 2014.

This research considered the furniture production centers of Mirassol (SP) and Ubá (MG), which are among the main centers for the sector in Brazil.

3.2 Methodological procedures

The chronological order of the field research observed the following sequence: supporting organizations in the Ubá center; supporting organizations in polo Mirassol; companies in the Mirassol and Ubá centers. Intentionally, interviews with the supporting organizations preceded interviews in companies. The professionals of these companies, mostly managers, were expected to help in setting up a

panorama of the center, even allowing directions, or adjustments to the interview script that would be later applied to entrepreneurs. Indeed, chronology was helpful in this regard.

The snowball sampling technique, used for the supporting organizations, is a non-probability technique in which an initial group of respondents is randomly selected and subsequent interviewees are selected according to information obtained from those previously interviewed. This process is conducted in successive waves (Malhotra, 2001).

Scripts of semi-structured interviews were the main instrument for data collection. In both centers, the interviews were first applied to the furniture company unions. These institutions are considered the most representative of the

centers, due to their participation and the role played in these environments, including for being exclusively dedicated to businesses of the sector.

When the interviews were applied to companies, the owners were the respondents. In some cases, one of the managers would answer. Interviews were applied in a random sequence, based on interviewees' availability, considering a schedule provided at the time of collection.

The units were chosen from the list of companies included in the aforementioned research "Analysis of Supply Chain Competitiveness through Network Theory: Study of Relationships between the Links of Brazilian Furniture Industry" (*Análise da Competitividade de Cadeias de Suprimentos por meio da Teoria de Redes: Estudo dos Relacionamentos entre os Elos da Indústria Moveleira Brasileira*), carried in 2011, and coordinated by one of the authors of this paper. Out of the 22 companies in Mirassol and 16 in Ubá participating in the previous research, 21 from Mirassol and 11 from Ubá adhered to this research. To these, one company in Mirassol and 7 in Ubá were added, totaling 40 units studied.

Fieldwork was carried out between August and November 2012. All in all, the interviews were conducted in 53 units, 40 of which were businesses and 13, supporting organizations. About 49 hours were spent with taped interviews, which were later transcribed, excepting two cases that were not counted in the recordings, since the data were collected by telephone, notes and e-mails.

Aiming to disclose the results of this paper, the identity of respondents and organizations was preserved. The code "Ent" was used for support institutions and "Emp" for businesses, followed by an identification number. So, when the company was located in Mirassol, was added the "M" code to the "Emp", followed by an identification number, ranging from 1 to 22. When located in Ubá, code "U" was added to "Emp", followed by an identification number, ranging from 1 to 18. Supporting institutions were identified by the code "Ent", created within the same system, ranging from 1 to 4 for Mirassol

and 1 to 9 for Ubá, according to the number of surveyed institutions. Thus, for example, *Emp M 4* identifies the impressions or answers of 4 located in Mirassol, and *Ent U 1* indicates the answers or statements gathered from supporting institution 1 in Ubá.

The data was treated by content analysis, using the Atlas.ti software system, Version 4.1. Walter and Bach (2009, p. 1) explain that "the Atlas.ti software system is a tool for the analysis of qualitative data that can facilitate their management and interpretation."

This tool has been used in different fields of knowledge and different types of studies, including grounded theory and content analysis (Walter & Bach, 2009; Bandeira-De-Mello & Cunha, 2003). The main goal of this study was the generation of codes, or key concepts, to explain the occurrence of assumptions of relational view in furniture production centers and the elements associated with the inter-organizational relationships within these centers.

According to Mozzato and Grzybovski (2011, p. 733), "content analysis is a data analysis technique that has been often used in qualitative research in administration, psychology, political science, education, advertising and mainly sociology".

Five main categories were defined for the analysis of the results, namely, competitive advantages and disadvantages; Specific relationship assets; Knowledge of sharing routines; Complementary resources and skills, and; Effective governance.

4 RESULTS

4.1 Competitive advantages and disadvantages in Mirassol and Ubá centers

The competitive advantages of the centers were identified in order to pinpoint any elements that may affect the differentiation between the centers as units and, at the same time, help understanding the activity scenario of businesses.

The representatives of organizations supporting the Mirassol center reported that, compared to other centers, they have the following competitive advantages: location (proximity to consumer centers), fast access to roads, improved qualification of entrepreneurs and fast access to port. Competitive parity in technology was mentioned (machinery, equipment, processes, etc.) and a trend for equality due to the peculiarities of each center. The lack of municipal incentives and absence of industrial districts were mentioned as competitive disadvantages.

By comparing the center of Ubá and other furniture centers in Brazil, especially in Arapongas, Bento Gonçalves and Mirassol, representatives of supporting organizations demonstrated convergent and complementary opinions when identifying the advantages and disadvantages of that center. The following advantages were highlighted: geographic location, partnerships between supporting organizations and entrepreneurship. The disadvantages mentioned were the distance from suppliers, lack of energy production and flat land, distance from ports, lack of unity among entrepreneurs, poor design, compared to competitors in southern Brazil, and scarce manpower. It was also reported a certain competitive parity between the centers regarding the technologies used, for example.

Some of the arguments are questionable, such as the geographic location. Especially in the comparison between Mirassol and Ubá, we observed that consumer markets and even suppliers tend to be equidistant. Access to ports is another example, which is mentioned as an advantage in the first center and a disadvantage in the second. In fact, none of these centers uses port services in significant volume. Therefore, the weight of this variable is insignificant. In addition, in Mirassol, according to interviews with entrepreneurs, improvement in the training of entrepreneurs was recorded, while in Ubá, partnerships were observed between supporting organizations.

The entrepreneurs highlighted the geographical factor as an advantage in both centers, which means that the centers are close to the national largest consumer centers. By comparing Mirassol and Ubá, however, this argument contradicts the evidence of equivalence in the distances between the companies and their major markets, as reported in their own interviews.

The following advantages were pointed out in Mirassol: easy access to supplies, roads and a furniture fair (Movinter). In Ubá, the advantages mentioned were improvement in products, forms of labor and technology, quality and aesthetics. Besides, "past criticism" was also cited (for example, issues referring to counterfeit), creativity (in spite of counterfeits), entrepreneurial spirit, diversity of products, cooperation with traders, a trend of less bureaucracy for further joint work.

The following disadvantages were detected for both centers: lack of unity among entrepreneurs, distance from areas with raw materials and unsatisfactory performance of supporting institutions.

In Mirassol, it was detected that, according to international standards, the education level and productivity of employees was low. Besides, Ubá has lower wages and receives incentives from the state government and the Mirassol center has been weakened over the years by pressures referring to taxes, labor and environment.

Interviewees in Ubá mentioned disadvantages referring to access to technology, distance from ports, poor electricity service, fierce competition, lack of organization, strength and adhesion, and poor cooperation between companies.

The interviews also indicate parity between centers or factors that are not considered advantage or disadvantage for Mirassol or Ubá. The two centers are similar and market regionalization of the centers is typical in Ubá and Mirassol.

In Mirassol, respondents consider that Bento Gonçalves is more advanced, active, organized, and more modern technologically and managerially than the others. On the other

hand, Arapongas, Mirassol and Ubá would be similar. Besides, Arapongas is thought to receive incentives from the state government, hold larger companies and have a large and more connected and modern center. In Paraná and Rio Grande do Sul, companies cooperate and have advantages in purchasing raw material for the centers in the South. Besides, they consider that Ubá is a new center, with larger companies, compared to Mirassol.

In Ubá, the cultural factor stands out as a defining element of the status of each center. The Southern centers were regarded as references in the sector, for their updated technology, improved managerial ability and cooperation. The following centers were perceived as references, in this sequence: Bento Gonçalves, Arapongas and Ubá. Bento Gonçalves was cited as a center with strong cooperation, more advanced than the others, organized and the one that sets the rules for the sector. It is also noteworthy that Mirassol is a new center and Ubá made investments using its own resources.

In the view of some respondents, considering that the furniture industry is organized into centers, collective action strategies most likely constitute a competitive advantage to a center in relation to another, so that competition could be more clearly seen between centers rather than between companies in the same center.

According to the relational view, competitive advantage comes from relational gains earned in combinations, exchanges or investments in assets, knowledge or resources under an effective governance system (Dyer & Singh, 1998). The expressions of respondents in both centers do not mention the effect of the assumptions of relational view based on what they define as advantage or disadvantage at each center. In the Ubá center, however, partnerships between supporting organizations is highlighted by respondents, which potentially strengthens

a local governance system. Similarly, gains in the quality of products and processes, as well as improvements in the cooperation with other links in the chain (retailers), refer to the relational view, either through the development of collective resources (Balestrin & Verschoore, 2008), or the development of a governance structure (Dyer & Singh, 1998).

The following section assesses the manifestations of the assumptions of the relational view in the surveyed centers.

4.2 Relational view assumptions and the relationships in the furniture production centers

In order to explain the phenomenon of relationships in both centers using the assumptions of relational view as reference, the respondents were asked about the existence of collective actions in the center, participation and motivation of their companies relating to these actions, information and knowledge sharing between companies, complementariness or the tendency of taking isolated actions and the functioning of the governance system in the center.

In figures 1 to 5, the factors emerging from the content analysis are followed by a number in parentheses, when greater than one, which is the number of respondents who expressed each factor. This quantification also allowed categorizing, in the figures, by means of horizontal lines, the levels of intensity into high, medium and low.

4.2.1 Relationship specific assets

Given the scarcity of investments in relationship specific assets, the term “joint actions” was chosen for this category, since it is more comprehensive in the commitment to collective efforts in the centers.

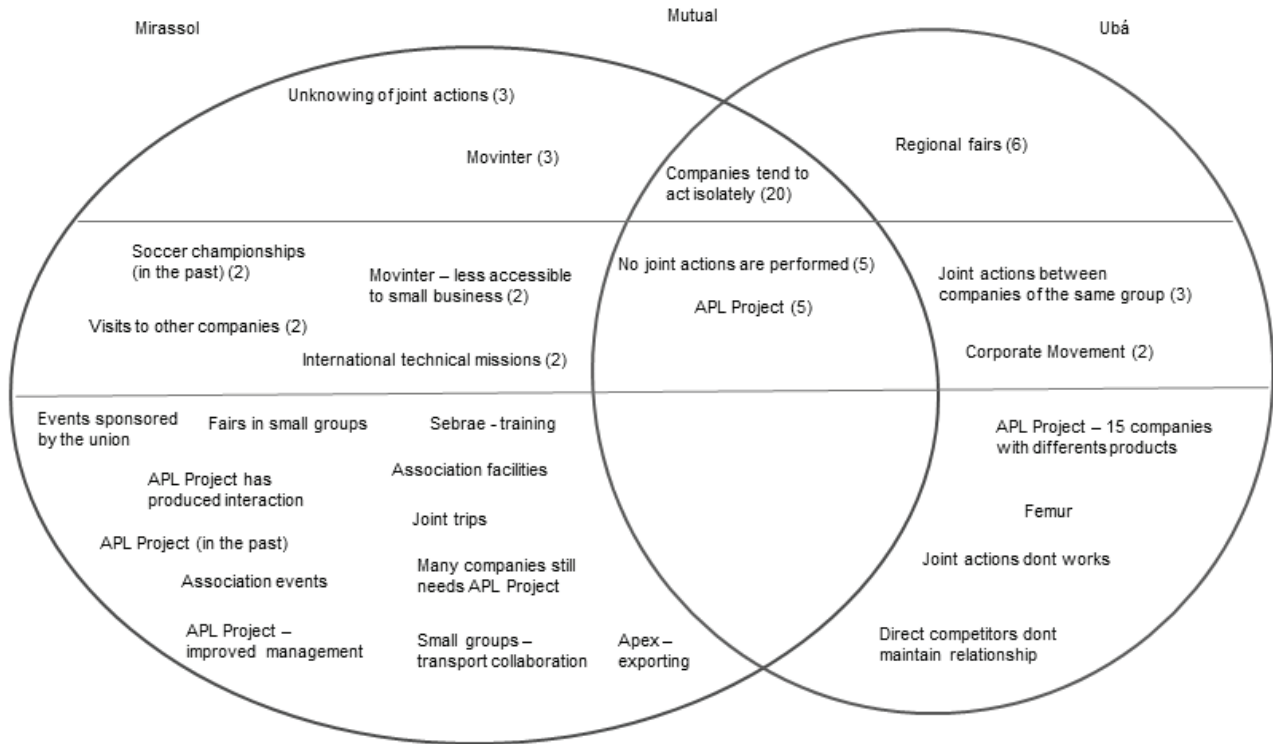


FIGURE 1 – Joint actions in Mirassol and Ubá.

Source: Search Results, 2013.

In the joint actions category for both centers, *companies tend to act in an isolated way* (20), and *no joint actions are performed* (5). Some interviewees, however, consider the LPA Project (5) as a kind of collective action.

Specifically in Mirassol, it is emphasized that the LPA Project allowed interaction between entrepreneurs and improved management. However, that project was conducted in the past. There is the idea that many companies still need this project.

Movinter is mentioned as an important joint action, although perceived as less accessible to small businesses. Fairs in small groups and collaboration in transport in small groups were also mentioned. Exporting group by Apex, joint travel, international technical missions and visits to other companies (under the LPA Project) were also cited, as well as soccer championships, events sponsored by the union or held in the Association facilities, advisory services given by the Association and training provided by

SEBRAE. However, some respondents ignored such joint actions.

According to Bleeke and Ernst (2001), partnerships tend to obtain better results when partners are less unequal, which is supported by Bustamante (2004) when referring to horizontal collaboration. This agent may be associated with relationships in small groups and tends to occur between similar-sized companies, mainly observed in the Ubá center. However, heterogeneity between partners has also some benefits, considering, for example, the view of social capital, according to Burt (2001), insofar as access to resources and information becomes redundant.

Investment in physical assets occurred only partially, since in the two situations when it happened, it was not exclusively in the furniture industry, as explained below:

“This is where Movinter is held, where Movinter 2012 occurred, but it is... an event facility, which was built for this purpose, but there are 13 shareholders,

but out of these 13 shareholders, 5 are furniture makers, the others are other people. So, at that time, it was built by all these people, there is not even an industrial district here. I don't know, there isn't a specific name, at least that I know of, but it was the Industrial District that was built by the entrepreneurs. They bought the area [...] divided the land between them, prepared the asphalt infrastructure for it, right [...] we had no incentives from the Government. So they did it, and today it is a super valued Industrial District, right, with large companies there (Ent M 3)."

Regarding joint actions, in the case of Ubá, it was mentioned that the LPA project develops actions in group of around fifteen companies producing different products. Besides, direct competitors were said not to maintain relationship, while joint activities are conducted only among companies of the same group, i.e., those with family or friendship ties. It was also said that joint actions are ineffective.

Besides Femur, regional fairs were also mentioned. They also indicated the Movimento Empresarial (Corporate Movement), which effectively exemplifies the inclusion of investment in a specific asset in its constitution, since the group of founding entrepreneurs used their own capital to build the warehouse, where the Femur has been held since then.

"There's the case of the pavilion. It belongs to the Movimento Empresarial group ... They were 17 businessmen who invested in the expansion of the pavilion, and this is money that does not return to their pockets. They put their hands into their pockets, invested one million at the time (Ent U 7)."

The phenomenon of the shares in small groups of furniture companies can be analyzed in the light of theoretical explanations on collective action provided by Olson (1999). This author explains that organizations are created by groups of individuals for the achievement of collective goals. But the generated collective assets benefit everyone and can thus be consumed by everyone.

In the case of the two centers studied, we observed that only about a third of the furniture companies is affiliated to the labor union at the center. However, actions promoted by the local union and other supporting entities are potentially available to all companies.

Olson challenges the idea that all individuals in a group will operate to fulfill a certain goal that is of common interest to a community. That is, when the group generates collective goods that are accessible to everyone, including those who did not contribute to their generation, it strengthens opportunistic behavior (Wegner, 2011).

According to this view, the group manifestations are preceded by calculations rationally made in order to know the possible resulting gains and benefits (Melo, 2007). The size of the groups, incentives and penalties applied to members are important elements for understanding the collective action. The larger the group, the more suboptimal the results and the less noticeable the individual acts performed by other members. On the other hand, in smaller groups, social penalties and rewards tend to be more effective, especially because of the greater proximity between the members (Olson, 1999).

The idea that trust and effective governance may inhibit opportunism or fraud (Barney & Hesterly, 2004; Barney & Hanse, 1995) is reconsidered. In both centers, the collective experiences materialized in relationship specific investments have low capillarity, and such absence does not strengthen governance structures. As in a vicious circle, it does not promote confidence or possible relational gains.

4.2.2 Knowledge sharing routines

Figure 2 gathers the terms, or codes, from the evaluation of information and knowledge sharing. In the same logic used for other relational view assumptions, common terms can be identified and the two furniture production centers can be distinguished.

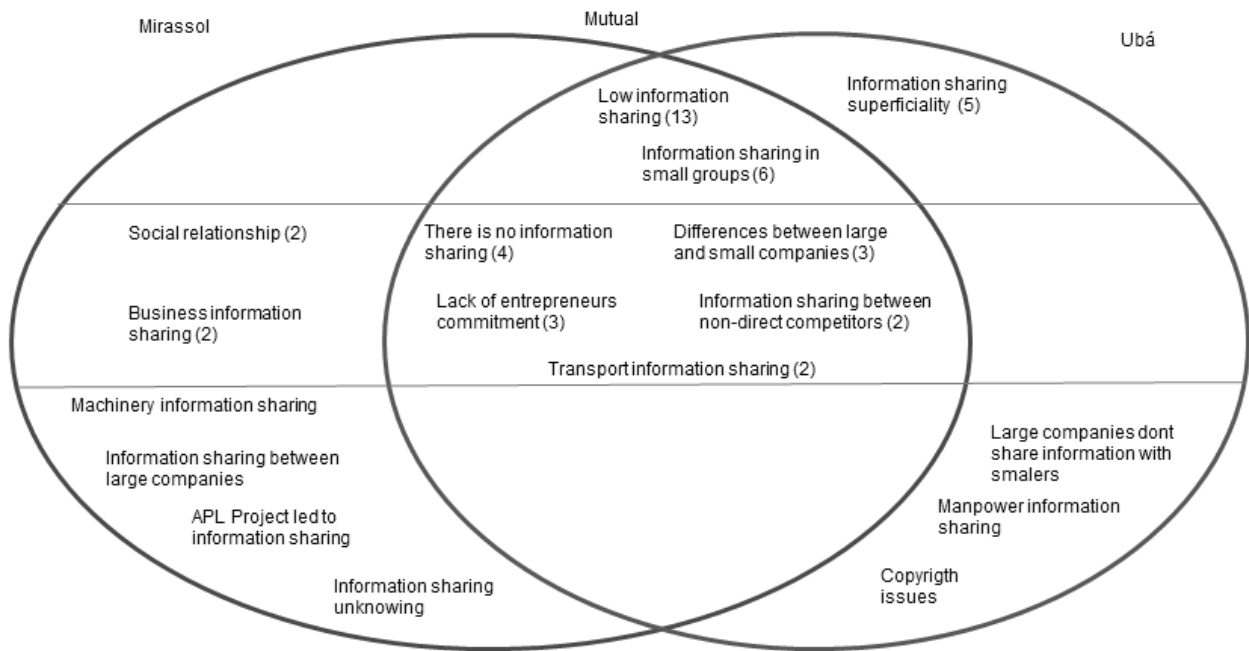


FIGURE 2 – Information sharing in Mirassol and Ubá.

Source: Search Results, 2013.

In the category information sharing, the following terms: *low information sharing* (13), *there is no information sharing* (4), *information sharing in small groups* (6), *transport information sharing* (2) and *information sharing between non-direct competitors* (2) can be highlighted in both centers.

In Mirassol, reports say that sharing is limited to commercial information. One of the respondents mentioned machinery information sharing. Another aspect is that the social relationship differs from professional relationship. Information sharing between large companies was mentioned. In a more general context, it was stated that the LPA Project led to information sharing between companies. One respondent, on the other hand, said to ignore information sharing at the center.

In the Ubá center, information sharing superficiality was highlighted. The sharing of information on manpower was mentioned. Unlike Mirassol, the idea that large companies do not share information was suggested. Copyright issues may inhibit information sharing.

Information sharing and confidence are intrinsically linked to governance mechanisms which, when present, are mutually strengthened, generate value in inter-organizational relationships and reduce transaction costs (Dyer & Chu, 2003).

4.2.3 Resources and complementary skills

In the category complementation, the term *outsourcing of accessories* (4) referring to complements to products (hardware kits, furniture feet and others) is common to both centers.

In the Mirassol center, people talk about outsourcing as a complementation between companies. However, this was characterized as disorganized outsourcing. Respondents also said that there is no complementation between companies. Trade secrecy would inhibit complementation, or even information sharing at the center.

Outsourcing typically tends to preserve social relationships, which may be associated with the fear that the practice may develop competitors.

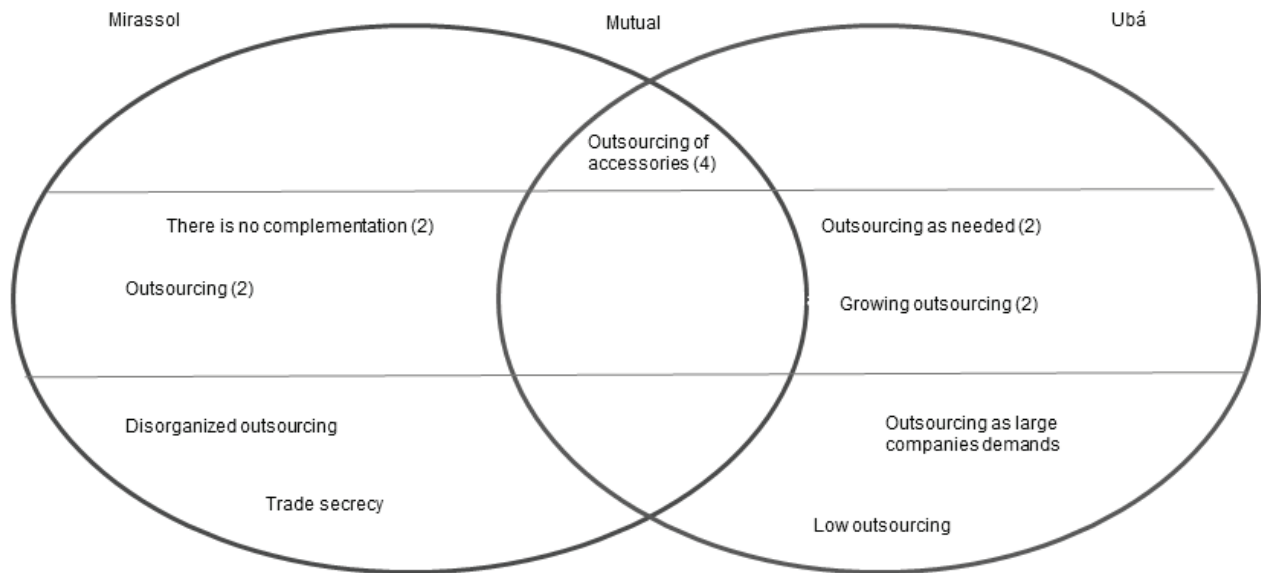


FIGURE 3 – Complementation in Mirassol and Ubá.

Source: Search Results, 2013.

“Well, the companies themselves, are ... or even a family member creates an outsourcing company to meet the demand of the company belonging to a brother or brother-in-law, and outsourcing has grown very much (Ent M 3).”

In the Ubá center, outsourcing, which is also an alternative for complementation between companies, although growing, is regarded as incipient. Moreover, outsourcing occurs because it is needed. In other words, it is assumed that certain processes cannot be internalized, and it is also regarded as a process driven by larger companies.

One interviewee from a Mirassol company explains the problem of complementation in the center:

“I think that, in the sense you have various links in the chain represented, there is, you know? Packaging, paint, accessories, plates, and so on. But you don't have integrated links, you don't have cooperative links with each other, and similarly, the furniture segment, a particular industrial process, you may have the outsourced personnel, that is what we've just talked about, it is part of the process, but you don't have expertise

in the industry to complement the other industry (Ent M 2).”

The above statement suggests insufficient empirical evidence of collective strategies such as supply chain management at the center, due to the lack of cooperation and integration of processes (Mentzer *et al.*, 2001) and the absence of a collaborative strategy for value generation (Simatupang & Sridharan, 2001).

4.2.4 *Effective governance*

Factors referring to the governance characteristics and problems were identified in this category. The following characteristics stood out for both centers: *Labor union* (17) and *Labor Union attempt* (7), and the emerging idea that governance is generated by a link between the Union and SEBRAE (5). Besides, some common governance problems can be identified: *poor adherence* of entrepreneurs to Union actions (5), *lack of commitment from entrepreneurs* (3), *differences between large and small businesses*, which inhibit effective coordination (3) and the idea that the labor Union does not insist (2).

In the case of Mirassol, the Association is quoted as a governance entity. It is worth noting that there is some overlap in the entrepreneurs' perception of the role played by the Association (ASSIMI) and the Union (SIMM), to the extent that, in the interviews, they sometimes attributed to the Association actions conducted by the union.

This may occur because ASSIMI was established in 1979 and SIMM, only in 1993. Therefore, over the years, ASSIMI met the demands of furniture production entrepreneurs, which would be later performed by SIMM. Besides, the headquarters of the two entities share the same address.

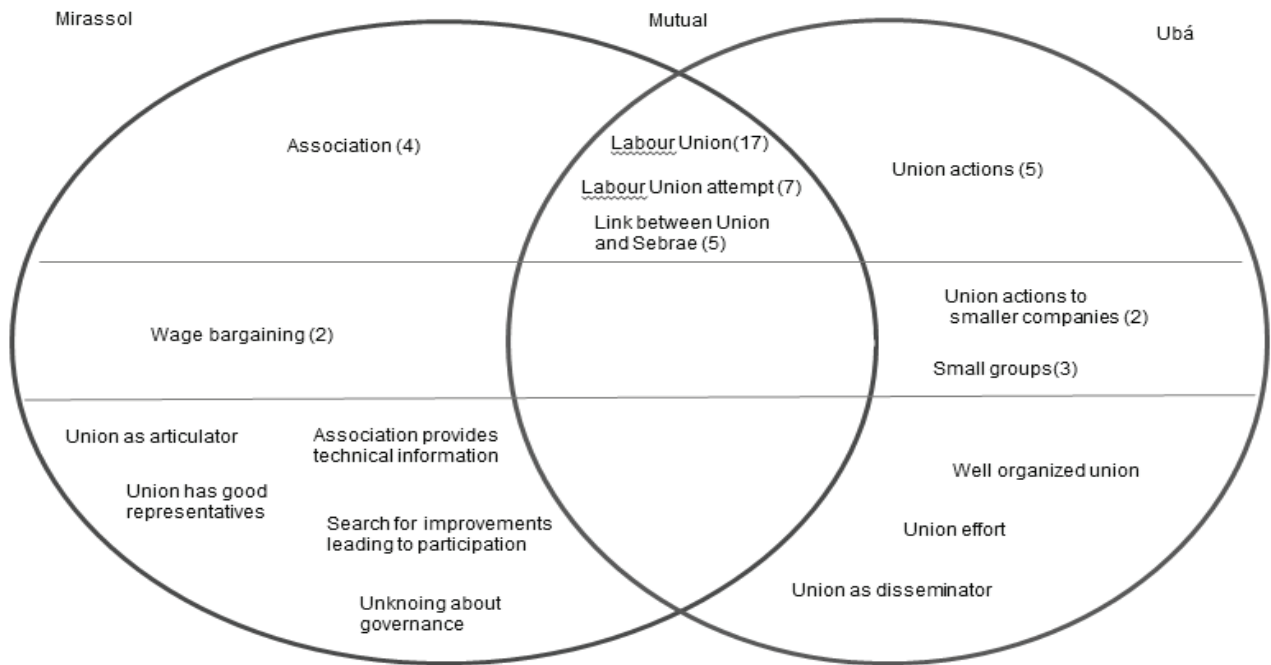


Figure 4 – Governance in Mirassol and Ubá.

Source: Search Results, 2013.

The Union appears as articulator and its representatives deserve compliments. The Association is cited as a provider of information on technical and wage bargaining issues. One of the entrepreneurs interviewed highlighted the search for improvements in the company as a reason to participate in collective actions. On the other hand, ignorance about governance at the center was also mentioned.

The relationship between the companies was predominantly identified as low in these centers, which must cause “governance problems”. In other words, deficiencies in the system of relationship among enterprises lead to the lack of effective governance.

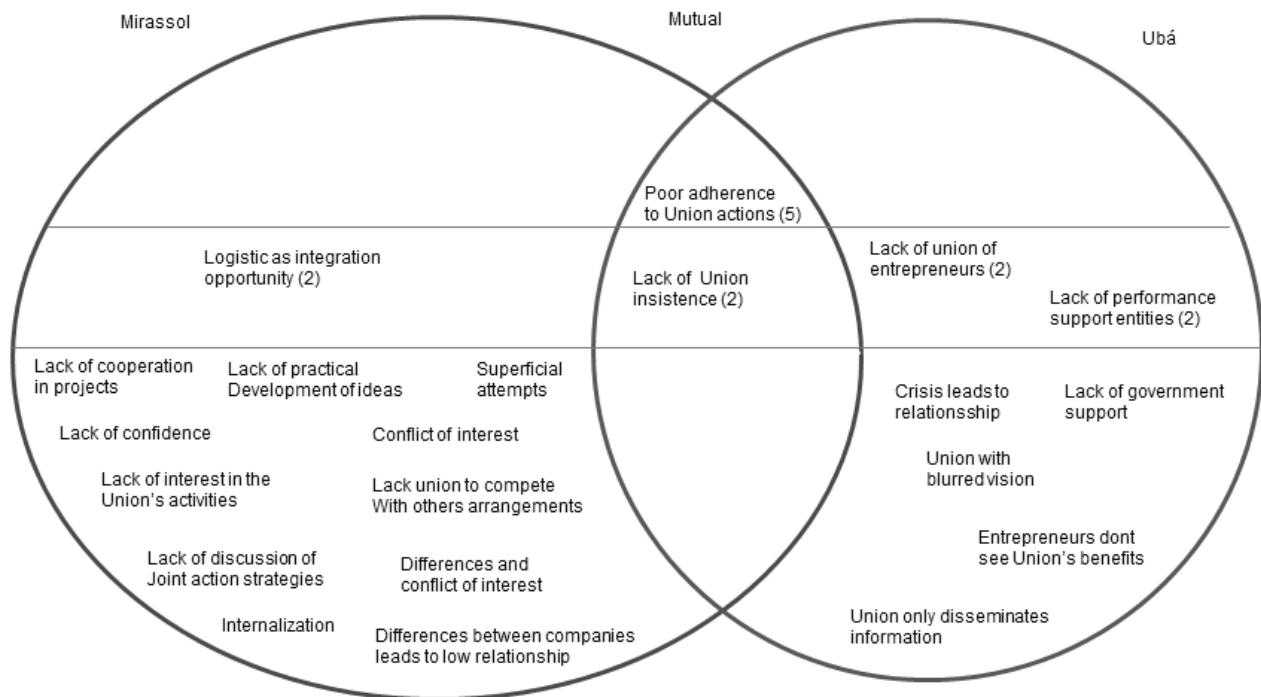


Figure 5 – Governance issues in Mirassol and Ubá.

Source: Search Results, 2013.

Respondents mentioned the following governance problems in Mirassol: superficial attempts, lack of cooperation in projects, lack of confidence and practical development of ideas, lack of interest from some people in the Union's activities, differences and conflict of interest, lack of discussions on joint action strategies and union to compete with other centers. Still, internalization tendency and differences between companies have led to poor relationship. In this context, logistics has been identified as an opportunity for integration.

A major challenge to the effectiveness of governance is in the balance in conflicting interests. If the network is made up of agents that have heterogeneous interests, information flows asymmetrically, and the viability of the network is threatened in the long run (Theurl, 2005).

In the Ubá center, union activities are highlighted. Respondents also indicated that these actions would refer to smaller companies. The union's efforts were mentioned, saying that it was supposedly well organized and had the role of

making the center well-known. However, the issue of small groups was highlighted, as well as the fact that relationships would connect companies through affinity.

As for governance issues, the ineffectiveness of the supporting organizations and the lack of state government support were highlighted. Some respondents complained that the Union only disseminates untrue information. Entrepreneurs do not see benefits from the Union. In this scenario, there is no unity among business owners. However, in times of crisis, the relationship between entrepreneurs would improve.

“Do you know what I think? That there must be a leader to start something... to take everyone by the hand, and say ‘C'mon, guys, let's go? Let's go, let's go... Don't give up! Come on!’. I think this is really necessary, someone with time, with determination, to encourage everybody. You must have heard all of this before. This business is good for everyone, but no one wants to embrace it, nobody wants to be open first. I think there is no one who says: ‘Come on, let's go, oh, this is mine, come with me, let's go?’ (Emp M 4).”

One of the main effects of the lack of coordination is the phenomenon of the expansion of the product mix in companies which, in turn, increase competition for similar products between the companies. Due to direct competition, companies tend to avoid relationship between them.

“Nowadays, everyone makes everything, right, the big ones, right. Production is very large. You take someone... that only produces bed, so many beds produced, right? So I think the opportunity arose for staff to grow and achieve more knowledge, if the guy makes wardrobes, why not make beds? I mean, if I buy a bed from a producer and the wardrobe from another, the color will not be the same. So, let's produce all bedroom furniture, right? Yes, isolation leads to idle production. Clients make a demand, so they'll try to make this first thing (Emp M 19).”

Besides, inefficiencies are generated by the production process, with dedicated machines in serial production systems, due to more diversified product mix.

“Nowadays, I have over 130 products ... In fact, what happens? At Emp U 10, I've been here for 5 months [current general manager]. I came today to fix production processes ... administrative processes within Emp U 10, and one of the problems that I identified was this one, at first, and now do you know what I need? With the number of employees that I have and the revenues that I have, I need to reduce my plant so that... let's say, ideally 80%, I have to reduce to 75 products (Emp U 10).”

The lack of a more effective governance system at the centers, to encourage exchange of information and resources and complementation between companies, thus allowing the generation of relational value, is clear.

Rationally, the governance structure in enterprise networks is the result of the negotiation process between the participants of the arrangement. Each company waives certain individual freedoms in favor of a collective coordination, under the rules that govern the group (Wegner, 2012; Albers, 2005).

5 CONCLUSIONS

In the current modes of operation, there are no competitive advantages clearly identified between the companies of the Mirassol and Ubá centers, according to the assumptions of the relational view. The benefits identified by respondents, predominantly refer to issues such as location (proximity to large consumer centers) and access to roads. However, these arguments were mentioned by both centers. In fact, there is a trend for market regionalization historically constructed as enterprises were being included, partly conditioned by the access of their sales representatives and the costs with logistics and tax, among other issues.

Investment in joint assets (or shares), information and knowledge sharing, complementation between the companies and an effective system of governance are typical instruments for the generation of relational value (Dyer & Singh, 1998). However, their competitive advantages in the centers are not empirically evidenced. Thus, it can be said that the practices developed there are inconsistent, according to the assumptions of the relational view.

To a certain extent, some companies that exemplify the phenomenon of relationships in small groups seem to contradict this observation. Such governance mechanism may be more accepted by companies because relationships in larger groups can expose members to the opportunistic behavior of partners, which is inhibited in small groups (Olson, 1999).

Thus, geographical proximity and formalization of Local Productive Arrangements do not give businesses substantial benefits referring to differentiation, which is nonetheless an extremely important potential loss and a substantial gap in the implementation of these agglomerations and in the impact of the public investments applied, in the competitiveness of business chains and regional economies.

REFERENCES

Albers, S. (2005). *The design of Alliance Governance Systems*. Köln: Kölner Wissenschaftsverlag.

- Arbage, A. P. (2004). *Custos de Transação e seu Impacto na Formação e na Gestão da Cadeia de Suprimentos*: Estudo de caso em estruturas de governança híbridas do sistema agroalimentar do Rio Grande do Sul. Tese de doutorado. Programa de Pós-Graduação em Administração – Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil.
- Associação Brasileira de Móveis. (2006). *Panorama do setor moveleiro no Brasil*. Available at: <<http://www.abimovel.org.br/>>. Access on: Mai 25, 2011.
- Acedo, F. J., Barroso, C. & Galan, J. L. (2006), The Resource-based Theory: dissemination and main trends. *Strategic Management Journal*, v. 27, n. 7, p. 621-636.
- Balestrin, A. & Verschoore, J. (2008) *Redes de cooperação empresarial: estratégias de gestão na nova economia*. Porto Alegre: Bookman.
- Bandeira-de-Mello, R. & Cunha, C. J. C. De A. (2003) Operacionalizando o método da grounded theory nas pesquisas em estratégia: técnicas e procedimentos de análise com apoio do software Atlas/ti. In: *Encontro de Estudos em Estratégia*, 1, 2003, Curitiba. Anais... Rio de Janeiro, *Anais*.
- Barney, J. B. & Hansen, M. H. (1995). Trustworthiness as a Source of Competitive advantage. *Strategic Management Journal*. vol. 15, 175-190.
- Barney, J. B. & Hesterly, W. (2004). Economia das organizações: entendendo a relação entre as organizações e a análise econômica. In: CLEGG, S. R.; HARDY, C. NORD, W. R. (Ed.). *Handbook de estudos organizacionais*. vol 3. São Paulo: Atlas.
- Bleeke, J., & Ernst, D. (2001). Colaborando para competir. In Mintzberg, H., & Quinn, J. B. (Orgs.). *O processo da estratégia*. Porto Alegre: Bookman.
- Burt, S. R. (2001). Structural holes versus network closure as social capital. In: Lin, N.; Cook, K.; Burt, S.R. (Eds.). *Social capital: theory and research*. New York: Aldine de Gruyter.
- Bustamante, P. M. A. C. (2004). *Arranjos e Sistemas Produtivos e Inovativos Locais – O Caso do Polo Moveleiro de Ubá – MG*. Uberlândia, Dissertação (Mestrado). Instituto de Economia. Uberlândia: Universidade Federal de Uberlândia.
- Chaddad, F. R. (2005). Networking for Competitive Advantage: The case of cooperatives in the United States. *IXXX Encontro da Associação Nacional de Pós-Graduação em Administração*. Brasília. Anais. Rio de Janeiro: ANPAD.
- Dyer, J. H. (1994). Dedicated Assets: Japan's Manufacturing Edge. *Harvard Business Review*, November-December, 174-178.
- Dyer, J. H. (1997). Effective Interfirm Collaboration: How firms minimize transaction costs and maximize transaction value. *Strategic Management Journal*. v. 18, n.7, 535-556.
- Dyer, J. H. (1996). Specialized Supplier Networks as a Source of Competitive Advantage: Evidence from the Auto Industry. *Strategic Management Journal*. vol. 17, n. 4, 271-292.
- Dyer, J. H. & Chu, W. (2003). The Role of Trustworthiness in Reducing Transaction Costs and Improving Performance: Empirical evidence from the United States, Japan, and Korea. *Organization Science*. v. 14, n. 1, 2003, p. 57-68.
- Dyer, J. H., Kale, P. & Singh, H. (2001). Strategic Alliances Work. *MIT Sloan Management Review*. pp. 37-43. Summer.
- Dyer, J. H. & Singh, H. (1998). The Relational View: Cooperative strategy and sources of interorganizational competitive advantage. *Academy of Management Review*. v. 23, n. 4, p. 660- 679.
- Gil, A. C. (1999). *Métodos e Técnicas de Pesquisa Social*. 5ª Ed. São Paulo: Atlas.

- Gerolamo, M. C., Carpinetti, L. C. R., Fieschutz, T. & Seliger, G. (2008). Clusters e redes de cooperação de pequenas e médias empresas: observatório europeu, caso alemão e contribuições ao caso brasileiro. *Gestão & Produção*, São Carlos, v. 15, n.2, p. 351-365, maio-ago.
- Gorini, A. P. F. (1998). *Panorama do Setor Moveleiro no Brasil, com Ênfase na Competitividade Externa a partir do Desenvolvimento da Cadeia Industrial de Produtos Sólidos de Madeira*. Brasília: BNDES. 47 p.
- Harris, M. L., Mcdowell, W. C., Gibson, S. G. & Cooke, B. N. (2011). SMEs and Performance: The role of trust and dependence in the supply chain *USASBE 2011 Proceedings*, Page 0887.
- Hawawini, G., Subramanian, V. & Verdin, P. (2003). Is Performance Driven by Industry- or Firm-specific Factors? A new look at the evidence. *Strategic Management Journal*. v. 24, N. 1.
- Lado, A. A., Dant, R. R. & Tekleab, A. G. (2008). Trust-opportunism paradox, relationalism, and performance in interfirm relationships: evidence from the retail industry. *Strategic Management Journal*, v. 29, n. 4, p. 401-423.
- Lastres, H. M. M. & Cassiolato, J. E. (2003). *Glossário de Arranjos e Sistemas Produtivos e Inovativos Locais*. Rede de Pesquisa em Sistemas Produtivos e Inovativos Locais.
- Lastres, H. M. M., Cassiolato, J. E., Lemos, C., Maldonado J., Vargas, M. A. (1999). "Globalização e inovação localizada". In: CASSIOLATO, J.E. e LASTRES, H. M. M *Globalização e Inovação Localizada - Experiências de Sistemas Locais no Mercosul*. Brasília: IEL/IBICT.
- Lazzarini, S. G. (2007). The Impact of Membership in Competing Alliance Constellations: Evidence on the Operational Performance of Global. *Strategic Management Journal*, v. 28, n. 2, p. 345-367.
- Lavie, D. (2006). The competitive advantage of interconnected firms: an extension of the resource-based view. *Academy of Management Review*, (2006). v. 31, n. 3, p. 638-658.
- Malhotra, N. (2001). *Pesquisa de Marketing: Uma orientação aplicada*. Porto Alegre: Bookmamn.
- Marshall, A. (1890). *Principles of Economics*. Londres: MacMillan and Co.
- Melo, J. A. C. J. De C. (2007). A ação coletiva e seus intérpretes. *Pensamento Plural*. v. 1, p. 65-87.
- Mentzer, J. T., Witt, W. D., Keebler, J. S., Min, S. , Nix, N. W. Smith, C. D. & Zacharia, Z. G. (2001). Defining Supply Chain Management. *Journal of Business Logistics*. v. 22, n. 2.
- Instituto de Estudos e Marketing Industrial. MOVERGS. (2014). Relatório Setorial 2014 – Polo Moveleiro do Rio Grande do Sul. Available at: http://www.movergs.com.br/views/imagem_pdf.php?pasta=relatorio_setorial2014
- Mozzato, A. R. & Grzybovski, D. (2011). Análise de conteúdo como técnica de análise de dados qualitativos no campo da Administração: potencial e desafios. *Revista de Administração Contemporânea*, v. 15, n. 4, p. 731-747, 2011.
- Olson, M. (1999). *A lógica da ação coletiva*. São Paulo: Edusp.
- Paulraj, A., Lado, A. A. & Chen, I. J. (2008). Inter-organizational communication as a relational competency: Antecedents and performance outcomes in collaborative buyer–supplier relationships. *Journal of Operations Management*, v. 26, p. 45-64.
- Perroux, F. (1959). *L'Economie du XX Siècle*. Paris: Presses Universitaires de France.
- Porter, M. E. (1990). *The Competitive Advantage of Nations*. New York: Free Press.
- Redondo, Y. P. & Fierro, J. J. C. (2007). Importance of Company Size in Long-Term Orientation of Supply Function: An empirical research. *Journal of Business and Industrial Marketing*. v. 22, n. 4, p. 236-248.
- Vasconcelos, F. C. & Cyrino A. B. (2000). Vantagem competitiva: os modelos teóricos

atuais e a convergência entre estratégia e teoria organizacional. *Revista de Administração de Empresas*. v. 40, n. 4, p. 20-37.

Redondo, Y. P. & Fierro, J. J. C. (2007). Importance of Company Size in Long-Term Orientation of Supply Function: An empirical research. *Journal of Business and Industrial Marketing*. v. 22, n. 4, p. 236-248.

Sacomano Neto, M. & Paulillo, L. F. O. (2012). Estruturas de governança em arranjos produtivos locais: um estudo comparativo nos arranjos calçadistas e sucroalcooleiro no estado de São Paulo. *Revista de Administração Pública*, Rio de Janeiro, v. 46, n. 4, p. 1131-1155, jul/ago.

Sciencewacth. (2008). *Tracking Trends and Performance in Basic Research*. Author Commentaries: Jeff Dyer and Harbir Singh, Aug.

Silva Filho, E. B. (2006). A Teoria da Firma e a Abordagem dos Custos de Transação: Elementos para uma crítica institucionalista. *Pesquisa e Debate*. SP, V. 17, n. 2 (30) pp. 259-277.

Simatupang, T. M. & Sridharan, R. (2001). The Collaborative Supply Chain. *International Journal Of Logistics Management*. v. 13, n. 1.

Skjoett-Larsen, T. & Thernoe, C.; Andresen, C. (2003). Supply Chain Collaboration: Theoretical perspectives and empirical evidence. *International Journal of Physical Distribution and Logistics Management*. v. 33, n. 6, p. 531-549.

Theurl, T. (2005). From corporate to cooperative governance. In: THEURL, T. *Economics of*

Interfirm Networks. Tubingen: Mohr Siebeck, p. 149-192.

Vieira, M. M. F. & Zouain, D. M. (Orgs.) (2004). *Pesquisa Qualitativa em Administração*. Rio de Janeiro: Editora FGV.

Walter, S. A. & Bach, T. M. (2009). Adeus papel, marca-textos, tesoura e cola: Inovando o processo de análise de conteúdo por meio do ATLAS.ti. XII *Seminário de Administração*, São Paulo, *Anais*.

Vargas, M. (2002). *Proximidade territorial, aprendizado e inovação: um estudo sobre a dimensão local de processos de capacitação inovativa em arranjos e sistemas produtivos no Brasil*. Rio de Janeiro: UFRJ/IE, tese de doutorado.

Wegner, D. (2011). *Governança, gestão e capital social em redes horizontais de empresas: uma análise de suas relações com o desempenho das empresas participantes*. Tese (Doutorado), Escola de Administração, Universidade Federal do Rio Grande do Sul, Porto Alegre. Brazil.

Wegner, D., Koetz, C. I. & Wilk, E. de O. (2012). A Influência da Governança Formal de Redes Interorganizacionais (RIOs) no Desempenho das Empresas Participantes. XXXIII Encontro da ANPAD – ENANPAD. *Anais...* Rio de Janeiro.

Williamson, O. E. (1991). Comparative Economic Organization: The analysis of discrete structural alternatives. *Administrative Science Quarterly*, Amsterdam: v. 36, p. 269-296.

Observation: In Minas Gerais: The Programa de Apoio à Competitividade dos Arranjos Produtivos Locais (APL) (Competitiveness Support Program for the Local Productive Arrangements) of Minas Gerais – is a program created through a partnership between the Government of Minas Gerais, Fiemg System, through IEL, Sebrae-MG and BID - with the support of labor unions and associations (<http://www.fiemg.org.br/Default.aspx?tabid=11898>). In São Paulo: Local Productive Arrangements Development Program (APLs), linked to the Economic Development, Science and Technology Secretariat, financed by BID, through the Rede Paulista de Arranjos Produtivos Locais, (Local Productive Arrangement São Paulo Network), with the participation of Sebrae-SP, Fiesp and Secretaria de Planejamento e Desenvolvimento Regional (Regional Planning and Development Secretariat) (<http://www.desenvolvimento.sp.gov.br/drt/apls/>).