Multi-Enterprise Tie and Co-Operation Mechanism in Mexican Agro Industry SME's¹

Tania Elena González Alvarado, and Ma. Antonieta Martín Granados

Abstract—The aim of this paper is to explain what a multienterprise tie is, what evidence its analysis provides and how does the cooperation mechanism influence the establishment of a multienterprise tie. The study focuses on businesses of smaller dimension, geographically dispersed and whose businessmen are learning to cooperate in an international environment. The empirical evidence obtained at this moment permits to conclude the following: The tie is not long-lasting, it has an end; opportunism is an opportunity to learn; the multi-enterprise tie is a space to learn about the cooperation mechanism; the local tie permits a businessman to alternate between competition and cooperation strategies; the disappearance of a tie is an experience of learning for a businessman, diminishing the possibility of failure in the next tie; the cooperation mechanism tends to eliminate hierarchical relations; the multienterprise tie diminishes the asymmetries and permits SME's to have a better position when they negotiate with large companies; the multi-enterprise tie impacts positively on the local system. The collection of empirical evidence was done trough the following instruments: direct observation in a business encounter to which the businesses attended in 2003 (202 Mexican agro industry SME's), a survey applied in 2004 (129), a questionnaire applied in 2005 (86 businesses), field visits to the businesses during the period 2006-2008 and; a survey applied by telephone in 2008 (55 Mexican agro industry SME's).

Keywords—Cooperation, multi-enterprise tie, links, networks.

I. INTRODUCTION

THE study of businesses ties has based on the Social Networks Analysis, from which quantitative models have been created (Wasserman & Faust, 1994). Quantitative models have shown important evidence in the study of the business tie, however quantitative approaches do not miss to capture qualitative issues that may be important for the theoretical advance. Qualitative aspects, such as: How does the businessman link with others? He uses cooperation strategies or competition strategies (Lax & Sebenius, 1991; Perez, 2004), what effect does the experience of a failure have

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¹ The Project "Las redes de cooperación empresarial internacionales. Creación de valor para la PYME mexicana" is supported by PAPIIT IN308008, DGAPA, UNAM in the establishment of a new link, how does businessman learn to cooperate, how does the cooperation mechanism facilitate the establishment of links with foreign companies, how to detect if the businessman trusts or not in the other businessman. Strong and weak, dyadic and triadic, and complex ties have been studied with quantitative models (Wasserman & Faust, 1994; Granovetter, 1973). But, a tie formed by three elements or more, with the cooperation mechanism, where the centrality (Sarason, *et al.* 1978) has been practically nullified, its not studied yet. Its study needs a qualitative focus, abandoning thus the quantitative one.

On the other hand, the majority of the studies about business tie have been focused on clusters, industrial districts and/or conglomerates (Schmitz 1999, De Martino *et al.* 2006, Grabher & Ibert, 2005; Waxell & Malmberg 2007). In other words, they have been based on the study of geographically concentrated businesses. This concentration is due to centripetal force (Krugman, 1996; Fujita, *et al.*, 2000) that permit firms to be near, to create links with competition strategies. Therefore, firms under these circumstances may not be representative for the study of the cooperation strategies (González, 2005).

Most of the works on international business links have centered in the study of transnational companies and their asymmetric relations with their branch offices, their clients or suppliers in other regions. These approaches have been left aside and one more adequate to the phenomenon of study has been applied. The study is centered on businesses of smaller dimension, geographically dispersed and whose businessmen are learning to cooperate in an international environment (Dini & Stumpo, 2004; Peres & Stumpo, 2002; Montes, *et al.*; Ramos *et al.*; Escribá, *et al.*). The case study analysis, interviews, observation and documentary review were identified as better allies for collecting empirical evidence.

The investigation project is more extensive than this presentation. It intends to detect the possible factors that facilitate SME's internationalization, through business cooperation networks, with the purpose that a larger number of firms may take advantage of these networks. Successful cases of Mexican agro industry SME's participating in international networks are analyzed. The project tries to find why and how to cause new cases of success, particularly, in rural zones. In the development of this investigation, the term "multi-enterprise tie" is used in reference to the cases of several businesses that have managed to collaborate with common objective, diminishing the centrality between them and with favorable results to their internationalization. Three

cases are presented. These cases have been selected of a group of 55 agro industry SME's. These enterprises have been monitored for five years. The empirical evidence has been collected by means of: direct observation in a business encounter to which the businesses participated in 2003 (202 Mexican agro industry SME's), a survey applied in 2004 (129), a questionnaire applied in 2005 (86 businesses), field visits to the businesses during the period 2006-2008 and; a telephone survey applied in 2008 (55 Mexican agro industry SME's).

Within the group there are more cases with a similar profile to them. These cases have been studied in the project but they have not been included in this paper. The cases extracted have been selected by following criteria:

- a) Firms with local multi-enterprise tie, have also established links with firms from other regions
- b) Businessmen have faced to failures, they have learned about bad experiences and were not discouraged to establish new links
- c) Businessmen are found willing to establish new links
- d) Firms with local multi-enterprise tie have impacted positively upon generating and/or to maintain sources of employment (Vázquez, 1999)

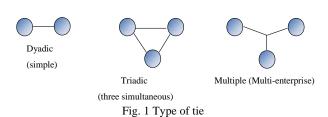
A multi-enterprise tie is defined in the next part.

II. MULTI-ENTERPRISE TIE

The empirical evidence shows that local links facilitate businessman to learn about cooperation. These links permit to accumulate experience on the solution of conflicts.

Simple business links are formed for two businesses (dyadic tie). These simple links can take place simultaneously. Various simple links (simultaneous simple links) under quantitative models have been studied and defined as triadic (Wasserman & Faust, 1994). In the measure in which a business establishes links and accumulates experience strategies of cooperation and competition, on the results reached and the circumstances in which these last were obtained, the businessman matures in the establishment of the links. This maturity may be manifested itself in the formation of a multi-enterprise tie.

Under a cooperation mechanism, a multi-enterprise link is a tie in which the centrality between members tends to diminish, at the same time the hierarchical level diminishes. This occurs inside the link and it manifests by proposing a common objective for the firms involved in the multi-enterprise tie. This objective under the cooperation mechanism is represented as a link among more than two firms.



The simple links (dyadic) and simple simultaneous links (triadic) have been analyzed based on quantitative models. The multi-enterprise tie, representing more than two firms with one objective in common, is difficult to study using these models. Multi-enterprise tie couldn't be studied using quantitative models. Furthermore, it is also difficult to recover those links in which the hierarchical levels have diminished for the cooperation mechanism, making that business link with each other and have one common objective. The multi-enterprise tie is detected and studied through the qualitative method, particularly, the case study.

The multi-enterprise tie presents the following characteristics:

- A) If it is created under the cooperation mechanism then it does not exceed the number of firms, because as long as the number of firms participating in the tie increases, it is more difficult to arrange a common objective.
- B) The multi-enterprise tie is originated of the simple links, particularly of the simultaneous simple links. Simple links will tend to become multi-enterprise tie, if the businessman finds that, by the rationality of the group, the benefit obtained from cooperation with a specific number of businessmen is lower to the benefit that could be obtained incorporating a new element
- C) The multi-enterprise tie is limited in the number of elements. There is a limit in the number of members only under the cooperation mechanism.
- D) The multi-enterprise tie under a cooperation mechanism facilitates the internationalization of SME's.
- E) A local multi-enterprise tie could encourage or strengthen local networks.

Export consortium and strategic alliances represent business ties (Rialp *et al.*, 2005; ICEX, 2007; López, 2001; Renart, 1999). When the tie is created by the cooperation mechanism then the centrality among firms diminish. These characteristics represent a multi-enterprise tie. Multi-enterprise tie doesn't depend on the contractual form in which the firms relate to each other. Multi-enterprise tie depends on the mechanism. Less asymmetric relationships could be created by the multi-enterprise tie. The multi-enterprise tie may diminish asymmetries. Asymmetries occur when SME's negotiate with a multinational. In many cases, SME's prefer to work together than working alone. It is better together, never alone.

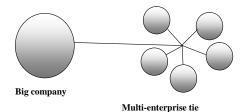


Fig. 2 Relation between the multi-enterprise tie and a multinational

Three cases out of 55 in the study are presented in the following section of the paper.

III. CASES ON THE MULTI-ENTERPRISE TIE

A. The Tacambaro Tie

The firm is located in Tacambaro, Michoacan. It is formed by 240 producers of avocado. Because of their work together in the international market, there are not many intermediaries. Which results in low commercialization costs and profits can be greater for each producer. The avocado is exported to Canada, France, Japan and Costa Rica. This multi-enterprise tie has been studied for five years, and it has been visited in three times.

This multi-enterprise tie is a clear example of greater possibilities of survival of local productive systems, if they are articulated to international networks. This local link, with more than fifty years, has increased its production and guaranteed the international demand. All this has been achieved by being linked with foreign businesses. The economic impact in the locality has been positive, contributing to improve the standard of living of people, opening the opportunity to have a better education for children, collaborating with the municipality for creating infrastructure, including the maintenance in good condition of the roads that conduct to this locality. This multi-enterprise tie is working with the government, promoting the cooperative culture among new generations.

When the need for credit emerged in the Tacambaro tie, the members established a cooperative of savings and credit. The main goal of this cooperative is to solve the financial needs of participants for the improvement of the production and the commercialization of the product.

To maintain this cooperative of savings and credit the central axis has been the savings, which are directed to the people with less resources. People have been taught that it is not important to save much money, but the constancy in saving, even if it is a small amount of money.

The resources that have been obtained through the savings are invested those areas of great need of the Tacambaro tie, such as technical advice and training. Sharing technical advice among members has made it possible to increase the quality of avocado, becoming a product with enough quality to compete in international markets. Thus, it is observed that the Tacambaro tie evolved into a virtuous circle between savings and investment.

It was identified that learning resulted from an act of opportunism. In this case, a business link with a French businessman was broken and members of the tie looked for a new link with a different French businessman. During the interview, the engineer said that "It was necessary to maintain the French market", because he recognizes the internationalization of the tie is important.

The interviewee believed that the French businessman was not sincere enough to recognize that the market was closed and share the losses. The French businessman did not pay the last three containerships; he waited for the complaint by Mexicans and then declared that "the final client had returned the product by defects".

Avocado is a perishable product, therefore there wasn't way to determine whether show the product was damaged, or in good conditions. Who was saying the truth? In this situation it is not easy to find a fair solution. It is complicated to establish mechanisms that protect exporters of fresh products from this type of risk.

This experience showed the weak position of small producers that participate in foreign markets. Nevertheless, they did not stop establishing links with other foreigner. It is probable that the experience inside the multi-enterprise tie locally influenced decisively the attitude it was assumed to deal with the foreign business. That is to say, before the conflict Tacambaro tie was not focused on seeking who was guilty; but it sought a possible solution that helped the multienterprise tie to continue participating in the international market. They had clear that the other firm was not the market, it was only a means to reach the French market. Despite a broken link, it was not considered that the French market was closed and the participants in the Tacambaro tie decided to find a new business tie. In this way, they kept exporting to France. Currently, they have two more clients in France. Besides, they established a control system that permits to verify if the product arrives to France in good conditions or not, and they have modified the contracts to prevent that another client surprises them again.

Additionally, Tacambaro tie is exporting to Japan and Canada. Tacambaro tie is not alone in these news markets. The multi-enterprise tie has been supported by two SME's. They have been a supporter for the multi-enterprise tie, sharing their experience about Japanese and Canadian markets. This case shows that the Tacambaro tie is a multi-enterprise tie that gathers 240 producers, it has generated local links that permit to establish relations with foreign businesses under better conditions.

B. The Triple Tie

This multi-enterprise tie is localized in Uruapan, Michoacan. As this tie is formed by three firms it is called a multi-enterprise tie. These firms are: an avocado producer, an avocado packing company and a packing cage factory. The owner of the three businesses was the first one in bringing the graft of Hass avocado to the zone. Local people recognize him like the pioneer in the production of Hass avocado in Uruapan.

This multi-enterprise tie is selling to Canada, the United States and Japan. The triple tie has taken advantage of the visits of foreigners to the zone, the international business encounters and the recommendations for new contacts. The triple tie has five Japanese contacts. Two of them are more than clients, they have tightened their links, and ship containers constantly.

The triple tie has dealt with opportunism from foreign firms. The triple tie has chosen the legal way, nevertheless, it considers that communication and trust are better instruments for conflict solution. In the case of the two Japanese contacts, they maintain an open communication line; they seek to clarify everything when something is not clear enough. The triple tie always trusts its counterpart.

There are local producers who prefer to send Hass avocado to the triple tie for this latter to sell it. Because of this, the tie has been recognized by the community as a pioneer. External producers don't need an affiliation contract for selling their product to the triple tie. They do it just for recognizing the tie as a pioneer allowing triple tie to comply with all orders. The triple tie doesn't need to operate in order to its capacity. Besides the triple tie has personnel uniquely dedicated to the collection of the fruit, and who constantly visit the neighboring gardens to be up to date with what is being produced.

The triple tie exports the avocado pulp too. It permits to take advantage of all the avocado production. The fruit is selected according to its size, this leads to sell smaller avocados to the local market at low price, in spite of their high quality similar to the avocado for the export market. The selling of the pulp permits to maintain high profits still by the avocado of smaller size.

The first image of the avocado packing firm is hat of a self-sufficient firm without any relation with other local businesses. Nevertheless, when the antecedents and circumstances of the packing firm are analyzed, the image of self-sufficient disappears and a multi-enterprise tie is uncovered which is strongly rooted locally.

The owner was born in Uruapan. He started the business with the avocado production, creating his first company in this way. This company is maintained until today, including more than three hundred employees. An increasing production of avocado made it necessary to contact packing firms but then he was encourage to start his own packing firm. After this company, the next step was to establish a factory producing packing caser since the packing of the avocado increases the costs, and impacts negatively on profits. Every company is legally independent as well as their operations, but they are linked to each other under the cooperation mechanism. The triple tie generates thousand jobs in Uruapan, having a favorable economic impact on the locality. The businessman creates businesses to articulate them.

C. The Multicultural Tie

The multicultural tie is located in Oaxaca. This tie is an expression of a multi-enterprise tie that serves of pillar for a local network. It is formed by producers of different native groups, 44 communities from six linguistic groups (mixteco, mixe, chinanteco, cuicateco, zapoteco and chatino).

People are identity and communities in Mexico are dynamic so they are continuously redefined. It is important to understand that people maintain an enormous diversity in history, language and cultures. They possess diverse ways to understand the world, as well as specific organization forms and social cohesion. The culture in Mexico is not homogeneous either static (Suarez, 2006: 85). By this way the multi-enterprise tie is analyzed.

Multicultural tie is formed by small producers and is twenty-one years old. Inside the region there are communities that can be considered inaccessible because there isn't an overland route. Therefore, the producers have to walk for eight hours through difficult routes, charging 50 kilograms in their back to transport their product to the closest city and sell it.

These producers created a local network with multi-enterprise ties. Through the multi-enterprise tie, producers have opportunities for them as for their families. This local network has being fortified. The multi-enterprise tie gives experience and learning to producers. The multi-enterprise tie has been inserted at the same time in an international network. The international network is caused by Fair Trade. Multicultural tie participates in foreign markets, so producers offer coffee, corn, firewater, powdered brown sugar, among others more, to international markets. All these products are promoted abroad as organic products.

The multicultural tie has cooperated with the others for decades, sharing the clients, and knowledge on sowing, cultivation techniques and information that permit to improve their products, and innovate according to the sustainable development philosophy. The multi-enterprise tie with more experience teaches and supports the new multi-enterprise ties. The Multicultural tie has benefited from other multi-enterprise tie with more years and experience. They have shared clients, training and resources.

The local network maintained by the multi-enterprise tie has an efficient communication system. The communities work and learn in spite of the distance between them and their different languages. The communication system permits to transmit the training experience to each member of the different communities. Costs are reduced and greater benefits are obtained. The multicultural tie includes an international vision, with a sense of protection to the environment, with support towards the community and with respect to "the mother Earth". People consider that "the respect to the mother earth" is important to increase the quality of life.

The meetings held with the multicultural tie are in Spanish but the assembly members speak mixteco, mixe, chinanteco, cuicateco, zapoteco and chatino. They resolve the communication problems with bilingual persons.

The multicultural tie has participated in business encounters in Germany and the United States, always with the support of international organizations.

The multicultural tie deals with local competition. This competition is caused by intermediaries. The intermediaries arrive at the door of the small producer. They offer to buy products without considering the quality, and in turn the intermediary sells them to multinational companies. This intermediary practice inhibits the production of higher quality; causing the fall of prices at the local level; it is also a way to sabotage the development project led by Fair Trade. If there were not multi-enterprise ties, people would be exposed to the competition mechanism used by multinational companies.

The multicultural tie has become the pillar and catalyze of a local network (1185 associates), in a space of learning for them, an agent articulator between local and international network. The local network is formed by producers from forty-four communities. It could be considered as local network because they are near geographically; nevertheless, without communications infrastructure, with multilingual and multicultural structures, it could be defined as an international

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network. This network needs the cooperation mechanism for its existence. This local network is found articulated to an international network, being the multi-enterprise tie an articulator.

IV. RESULTS

Businessmen maintain international ties after they have established a local tie. People learn at home, and then they try to practice outside. Local ties have been characterized at the first moment by competition strategies. These same ties have been affected for the cooperation mechanism in the measure that businessmen have learned to create value and to share it.

The tie in which more than two firms participate (multienterprise tie), with the cooperation mechanism, have been characterized for less hierarchies, conducting businessmen to avoid the opportunism, learning to solve conflicts by means of the cooperation principles.

The businessmen have expressed that the opportunism act is a lesson. They learn about it and could be prepared for the establishment of a new tie, being few the cases in which the businessman has shown little optimism to link again.

The local multi-enterprise tie (more than two firms with a single objective into the same tie) has been spaces of learning to decide between cooperate and compete. The multi-enterprise tie has permitted to diminish the asymmetries. Asymmetries manifest when SME's negotiate with a multinational firm. Thus, it is better to cooperate with other SME's, to have a better position when negotiating with multinational companies

According to the questionnaire applied to 55 businessmen in 2008 about the ties and international relationships, the results are the next:

- A) 78% maintains links with firms out of his locality, like the United States, the European Union and Asia. Many ties have been created in business encounters, and others by personal recommendations.
- B) 56% of contacts declared to have faced the opportunism act. None of them declared that the opportunism act was a reason for not to create a future tie. By the way, 100% of contacts that have experienced failure, declared to be willing to establish a new tie.
- C) 96% of contacts expressed interest in the establishment of a new tie. Only two of them expressed not to be interested in establishing new ties.

V. CONCLUSION

The empirical evidence obtained up to this moment permits to conclude the following:

- A) The tie is not forever, it has an end
- B) Opportunism is an opportunity to learn
- C) The multi-enterprise tie is a space to learn about the cooperation mechanism

- D) The local tie permits a businessman to alternate between competition and cooperation strategies
- E) The disappearance of a tie is an experience of learning for the businessman, who diminishes the possibility of failure in the next tie
- F) The cooperation mechanism tends to eliminate hierarchical relations
- G) The multi-enterprise tie diminishes the asymmetries and permits SME's to have a better position when they negotiate with large companies
- H) The multi-enterprise tie impacts positively on the local system

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