Title of paper:

Business networks and the internationalization of local cluster suppliers

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Abstract
Whether and how geographical proximity within local clusters supports internationalization of small to medium-sized suppliers is the topic we tackle in this study. At best of our knowledge, this paper is the first attempt that tries to answer this question.
Local cluster scholars maintain that within local clusters supplier and customer relationships are collaborative, trust-based and a source of valuable tangible and intangible resources for local cluster members. Combining this theory with the network approach on international business networks, we derive an original framework suggesting that both partnerships with local suppliers and with local customers support the degree of internationalization of a local cluster supplier. Partially contrasting this framework, our findings suggest that while partnerships with local suppliers support the degree of internationalization of local cluster suppliers, partnerships with local customers hinder it. These results suggest important theoretical contributions and managerial lessons.

Keywords: local clusters suppliers, internationalization of SMEs, international business networks, local partnerships

Introduction

The vast literature on local clusters has long pointed out the importance of geographical proximity in fostering social interaction and cooperation in business relationships (Becattini, 1990; Maskell, 2001; Dahl and Pedersen, 2004; Camuffo and Grandinetti, 2005; Iammarino and McCann, 2006). This importance notwithstanding, literature on business networks has so far neglected the role plaid by local business relationships in supporting the internationalization of small to medium-sized firms operating within local clusters.

This paper wonders whether and how local business relationships of a small to medium business firm (i.e. relationships with customers and suppliers located in the same local cluster) support its degree of internationalization.

We integrate the network approach with the literature on local clusters to answer this question. We test our hypotheses on a sample of firms operating in business markets located in an Italian local cluster considering both upstream and downstream local partnerships of these firms. We discover that while partnerships with local suppliers enhance the internationalization of the firm, partnerships with local customers hinder it. We argue that partnerships with local suppliers are more likely to be associated with anticipated constructive effects (Anderson et al., 1994) that strengthen the flexibility of the firm and its ability to cope with an ever increasing complexity of the environment thus supporting its internationalization. On the other hand, partnerships with local customers seem to generate anticipated deleterious effects that make difficult for the business firm to develop new international relationships or to maintain the existing ones.

The paper is organized as follows. Second section presents the relevant literature and develops the hypotheses to be tested. Third section gives an outline of research design and methodology. Fourth section shows the results of the research while fifth section discusses the findings. Final section highlights the limitations of the study and concludes the paper providing directions for future research.

Theory and hypotheses
International relationships and business networks

Over the last twenty years the network approach developed by the scholars of Industrial Marketing and Purchasing (IMP) Group has become one of the most prominent stream of literature in business relationships and networks especially those involving small-to-medium sized firms (Håkansson, 1982; Håkansson and Snehota, 1995; Ford, 1980; Anderson et al., 1994). On the base of the results of extensive international researches, the network approach maintains that most of the firms operating in business markets are linked through long-lasting, high committed relationships (Ford, 1980; Johanson and Mattson, 1988). Through social interaction the firms learn how to cooperate and coordinate their reciprocal activities thereby generating more value along the value chain "as compared with a chain in which the firms transact arm's length" (Blankenburg et al., 1996; p. 1037).

A second assumption of the network approach is that each business relationship is directly and indirectly connected to other relationships of the business network in which it is embedded (Håkansson and Snehota, 1995). A business network is defined as a set of two or more connected business relationships, in which each relation is between business firms that are conceptualized as collective actors (Emerson, 1981). The coordination between a supplier firm and a customer firm takes place within a wider business network context and these two firms bring to this relation their connected networks of relationships.

As Anderson et al. (1994) argue, a focal relationship, beyond its direct outcomes within that relationship, can have both positive and negative connections with the focal firm's network identity, i.e. "the perceived attractiveness/repulsiveness of a firm as an exchange partner due to its unique set of connected relations with other firms, links to their activities, and ties with their resources" (p. 4). The authors advance two constructs reflecting this influence: anticipated constructive effects and anticipated deleterious effects.

The first construct captures the extent to which "a focal firm perceives that engaging in an exchange relation episodes with its partner firm has, in addition to effects on outcomes in the relation, a strengthening, supportive, or otherwise advantageous effect on its network identity" (Anderson et al., 1994; p. 7). The authors identify three constituent facets of this construct:

1. anticipated resources transferability: the extent to which knowledge and solutions are transportable between the relationships of the business network and the focal relationship;
2. anticipated activity complementarity: the extent to which there are positive volume or quality effects between the activities performed in the business network and the focal relationship;
3. anticipated actor-relationship generalizability: the extent to which the cooperation with certain actors of the business network context can have a positive effect on the perception of other actors.

The second construct reflects the extent to which the participation to a business relationship with a partner firm has negative, damaging or harmful effects on the network identity of the focal firm. It is composed by the following constituent facets:

1. anticipated resource particularity: the extent to which the resources for exchange devoted to the focal relationship have to be reallocated from other business relationships;
2. anticipated activity irreconcilability: the extent to which activities performed in business network relationships are difficult to integrate with the activities performed in the focal relationship;
3. anticipated actor-relationship incompatibility: the extent to which engaging in the focal relationship can be perceived as a threat by other actors of the business network.

It is implied in the network approach that both these effects are mostly produced by collaborative relationships or partnerships as only these relationships can affect network identity of the focal firm.

Several authors have applied the network approach to international business relations, i.e. business relationships involving a supplier from a country and a customer from another country. These authors study the internationalization of small-to-medium sized business firms whose primary foreign market entry mode is exporting through business-to-business relationships (Bradley et al., 2006). Exporting strategy is indeed particularly applicable to small and medium enterprises (SMEs) that often lack the resources, financial or otherwise, for foreign direct investments (Lu and Beamish, 2001). In the case of firms operating in business markets, exporting strategy obviously results in developing business relationships with foreign customers.

Coherently with these theoretical underpinnings, Johanson and Mattson (1988) maintain that international business relationships do not occur in isolation, but need to be considered within a context of connected network relations. Blankenburg et al. (1996) provide evidence that international business network connection (defined as the degree to which a focal international relationship is affected by other relationships of the network) positively affects the commitment of the focal firm to that international relationship. Chetty and Blankenburg (2000) report several examples of firms that leverage on their existing domestic partnerships to strengthen their network identity that in turn allows them to develop new international business relationships or to foster the existing ones. From the case studies reported by the authors, it emerges that domestic buyers and/or suppliers can be valuable sources of knowledge about foreign markets (e.g. the entrance in a new international business project or the contact with a new customer) and can provide useful resources and capabilities to penetrate networks abroad. Along this vein, Bradley et al. (2006) find that domestic business relationships provide small and medium suppliers with the know-how to access foreign markets thus enhancing the chances of survival and reducing the risk of concentrating their efforts only on domestic relationships. In particular, the higher the attitude of the SMEs towards collaborations in business relationships with domestic customers the higher is the likelihood of winning new customers abroad.

International relationships and local business networks

In this paper we study firms located in local clusters and operating in business markets (hereafter local cluster suppliers). In particular we focus on the effects of local business networks of these firms on their degree of internationalization. We define local business networks as composed by focal

firm's suppliers and customers located within the local cluster of the focal firm. A local cluster is a "geographic concentration of interconnected companies and institutions in a particular field" (Porter, 1998; p. 78). A local cluster is mainly composed by small and medium firms and provides them with external relationships that are important resources for their development (Beekman and Robinson, 2004; Street and Cameron, 2007).

Typically, two types of firms operate in a local cluster: firms that produce final goods and firms operating in business markets (i.e. in the upper tiers of the value chain such as intermediate goods, business services and machinery and technologies). Traditionally, the first type of firms relies a considerable part of their business on export and the largest ones have been increasingly involved in cross-border operations. The second type of firms has flourished in their local cluster relying on a number of co-located customers, and such "quasi-captive" demand has usually saturated their production capacity and shaped their capabilities (Grandinetti, Furlan, Camuffo, 2007). These firms operate in different stages of the supply chain and many of them source an important part of their inputs from local suppliers.

However, challenged by globalization and the spread of new technologies, also these small and medium sized suppliers have started to diversify their businesses on an international basis thus reducing their level of symbiosis with local customers and suppliers. But as these firms internationalize, are they maintaining/strengthening their partnerships with local customers and suppliers?

Building on the network approach depicted in the previous paragraph, we now refer to the features of local business networks that are likely to support the internationalization of small and medium local cluster suppliers.

First of all, most of the interfirm relations embedded in local clusters are governed by relational, informal contracts (Baker, Gibbons and Murphy, 2002; Dahl and Pedersen, 2004). These partnerships, embedded in local contexts and social relationships, create norms of behavior (e.g. trust, reciprocity, reputation, peer pressure and cooperation) and incentives to share information that reduce the threat of opportunism and induce risk sharing among nearby companies (Granovetter, 1985; Grabher, 1993). Sourcing within the cluster eases communication and can result in lower transaction costs than those associated with distant sourcing (Porter, 1998). Partnerships between firms within a local cluster are also one of the main mechanisms that allows knowledge transfer fostering productivity and innovation within the cluster (Maskell, 2001; Dahl and Pedersen, 2004; Iammarino and McCann, 2006; Camuffo, Furlan and Rettore, 2007; Camuffo and Grandinetti, 2005). This favorable relational context fosters anticipated constructive effects between local business networks and international business relationships of a local cluster supplier. On the one hand, through its local relationships, the exporting supplier can access non-tradable resources (e.g. information and knowledge) and use them to nurture its international business relationships. On the other hand, cooperation and flexibility characterizing local business relationships uphold responsiveness and the level of service of the supplier towards its foreign customers.

A second important feature of local clusters is the peculiar division of labor among the cluster members. Production activities located in a local cluster are not the result of operations carried on by one or more vertically integrated firms, but is achieved by a group of relatively independent, local firms that are specialized in one or more segments of a supply chain (Saxenian, 1994; Maskell, 2001). Locating within a cluster provides superior access to specialized inputs such as components, machinery, business services and personnel as compared to alternatives (Porter, 1990). This increases the chances for a local cluster supplier to find external specialized resources located within its local business network in order to fulfill the needs of new foreign customers.

The presence of important and sophisticated buyers is a third feature making local clusters an elitist platform for internationalization process of local cluster suppliers. The availability of information about current buyer needs is in fact an important benefit granted by local buyers. Especially for small to medium-sized firms operating in business markets, having accurate and readily available information about customer needs is crucial in gaining competitive advantage (Jacob, 2006). Local cluster suppliers learn about new buyer trends and new technological opportunities faster than isolated competitors thanks to the relationships that they have with local cluster customers. Customer

partnerships characterized by co-development, frequent face-to-face contacts, reciprocal information exchanges ease the learning by the focal firm of "evolving technology, component and machinery availability, service and marketing concepts and so on" (Porter, 1998; p. 83). These relationships and the resulted enhanced innovation capability of the supplier, strengthen the ability of the supplier to actively search for new foreign customers.

As a consequence of these related arguments, we advance the following hypotheses:

Hypothesis 1: The degree of internationalization of a local cluster supplier is positively related to the presence of partnerships with local customers.

Hypothesis 2: The degree of internationalization of a local cluster supplier is positively related to the presence of partnerships with local suppliers.

Methodology
Research context and sample profile

The Italian industrial system represents an ideal research setting for a study on internationalization and local clusters. It is known worldwide for the high level of firm size fragmentation, its organization around geographically coupled production systems (i.e. industrial districts or local clusters), a relevant number of small and medium subcontractors specialized in one or few phases of a supply chain and a flourishing presence of technology and service providers (Sabel and Piore, 1984; Becattini, 1990; Porter, 1990; Sforzi, 2003).

Our study is based on a sample of 62 local cluster suppliers, selected from a population of firms operating in the mechanic local cluster (MLC) of Pordenone. MLC represents an important industrial district in the North East of Italy with a concentration of 726 firms (487 ltd companies) within a radius of few kilometers. All the firms of this local cluster belong to mechanic industries involving a number of vertical chains of different industries (e.g. household appliances, automotive, constructions, food, textile and others) with firms that have a number of similarities such as similar inputs and technologies, overlapping sales channels or complementary products.

The 62 suppliers come from a data base of the 487 limited companies located in the cluster (the data base with the references of these firms was provided by the Pordenone Chamber of Commerce). We followed a two-step sampling procedure. First of all, we selected the sub-population of the firms operating primarily in industrial or business to business markets (supplier firms). Then, we used a random algorithm to sample 62 firms from the sub-population of local cluster suppliers. Interviews have been personally conducted with the founder or the C.E.O. of the firms. Each interview took approximately 1.5 hours. Anecdotal evidence coming from the interviews was used to triangulate the results of the quantitative analysis.

Table 1 gives information about the size of the firms in the sample showing that most of the suppliers are small firms while only 14.6% of them can be considered medium sized firms (the European Union defines medium-sized those firms with a total turnover ranging from 10 million € to 50 million € and a total workforce ranging from 50 to249 employees). Only one firm of the sample can be considered a large firm.

Table 1 - About here

We choose this cluster for two main reasons. First of all, it perfectly fits the typical situation of a local cluster depicted by Becattini (1990) and Porter (1998): a) a population of firms operating in a specific narrow territory and specialized in few industrial fields, b) the division of labor among firms, and c) the presence of government and other institutions (i.e. local business and trade associations and government agencies in charge of the development of the cluster) providing training, education, technical support, information and research. Moreover, most of the firms sprang up as the consequence of subsequent spin-offs from few large firms that acted as primary incubators (Camuffo and Grandinetti, 2005). Indeed, about 74% of the company founders of our sample before starting their own business were employees of firms located in the MLC. The other reason that led us to

choose this specific local cluster is that we sought a cluster with good, or at least steady, performances in order to find remedy against potential data bias related to the recent negative business climate. While during 2001-2005 some Italian local clusters have undergone a relentless contraction, MLC has shown a slightly positive dynamic in terms of the number of firms. Moreover, during these years our sample of firms has increased both number of employees (11,6%) and total sales (6,0%).

Measures
Dependent variable. We measure our dependent variable, i.e. the degree of internationalization of local cluster suppliers, using three different measures. Several authors (Welch and Luostarinen, 1993; Chetty, 1999) propose that examining various dimensions of internationalization yields a better overview of the firm's internationalization strategy. Indeed, some measures gauge the internationalization stricto sensu while others cope with the complexity managed in the international environment.

Our first measure is the ratio of export sales/total sales (ESTS). This measure has been frequently used for the degree of internationalization of SMEs (Lu and Beamish, 2001) since most SMEs do not have subsidiaries, foreign assets or even employees abroad (indeed out of the 62 firms of our sample only 2 have foreign production plants covering a marginal part of their total production). However, ESTS is often overvalued and may indeed produce misleading results when it is considered alone (Ruzzier et al., 2007).

The second measure is the geographical scope of foreign sales, i.e. the number of foreign markets the company is selling to (Brush et al., 2002). In this way we account for differences between firms with business customers in just few foreign countries and firms with business customers in many foreign countries.

The third measure is the number of foreign customer relationships. Business relationship is indeed the central unit of analysis of our framework and is coherent with the peculiarity of the business to business markets as opposed to consumer markets since in business markets firms operate in environments which include only a limited number of identifiable actors (Håkansson and Snehota, 2006; p. 259).

Independent variables. Our independent variables, i.e. the presence of partnerships with local customers and the presence of partnerships with local suppliers, are measured by the number of partnerships.

We employ a definition of partnership that matches the key characteristics of business relationships as stated by the network approach: a) close and collaborative relationships, b) frequently long-term and complex relationships and c) mutual orientation and commitment of the partners (Håkansson and Snehota, 1995; Turnbull et al., 1996; Håkansson and Snehota, 2006). By definition partnerships are selective, require reciprocal idiosyncratic investments and, therefore, a firm can develop partnerships only with just a few number of customers and suppliers.

Coherently with this approach, we asked the informant to count the customers (and suppliers) located within the local cluster with which the firm has developed relationships that fall within this definition: long-lasting and cooperative relationships characterized by a) extensive contacts between several individuals of the firms and b) mutual adaptation and reciprocal information sharing in managing business processes such as new product development (i.e. co-development or black box development), logistics-manufacturing integration, pricing and quality management.

Coherently with our theoretical framework (Anderson et al., 1994; Chetty and Blankenburg, 1996; Bradley et al., 2006), we choose to use the number of local partnerships rather than standardized measures (e.g. the incidence of local partnerships on total partnerships) since each local partnership matters. Having three partnerships with local partners is different than having just one no matter how many partnerships the firm has developed in total.

Results

Table 2 reports the descriptive statistics of the measures for our dependent and independent variables.

Table 2 - About here

We first noticed that our independent variables were not evenly distributed among the firms of the sample. In fact, several firms have not developed partnerships with neither suppliers nor customers while other have developed one or more of them both with suppliers and customers. Moreover, there are firms that have developed partnerships with customers but not with suppliers and vice-versa. Hence, four groups can be identified:

- group 1 - local cluster suppliers that do not have any local partnership (18 firms);
- group 2 - local cluster suppliers having partnerships only with local suppliers (8 firms);
- group 3 - local cluster suppliers having partnerships only with local customers (19 firms);
- group 4 - local cluster suppliers with partnerships with local suppliers and with local customers (17 firms).

Using one-way ANOVA, we compared these four groups with regard to the measures of the degree of internationalization. Interestingly enough, we found that group 2 has the highest mean for all our dependent variables (ANOVA results and Tukey differences are reported in table 3). This degree of internationalization is remarkable particularly if we consider the numerous barriers hindering small business export development (Leonidou, 2004). Those suppliers that have developed at least one partnership with a local supplier but do not have any partnership with local customers are the ones that perform better in terms of all our measures of internationalization. In other words, firms adopting a business network configuration with only upstream local partnerships prevails over the others in terms of internationalization performance.

Table 3 - About here

On the whole, ANOVA results are coherent with hypothesis two but seem to contradict hypothesis one. However, since ANOVA compare groups identified on the basis of the presence/absence of partnerships, they do not tell us how the number of partnerships is actually related to the measures of the degree of internationalization.

We use OLS (Ordinary Least Square) regression to test this relation. Table 4 shows the regression results using as independent variables each measure of the degree of internationalization. We test for the fulfillment of the conditions required by the multiple regression. The absence of multicollinearity has been tested by calculating the VIF-values and finding that all values lie within a range from 1 to 2.

All the regression results are coherent with previous analysis rejecting hypothesis 1 while providing strong support to hypothesis 2. The number of partnerships with local customers has a negative impact on the internationalization of the local cluster suppliers while the number of partnerships with local suppliers has a positive impact on it.

Table 4 - About here

Discussion

Local cluster scholars maintain that within local clusters relationships are collaborative, trust-based and a source of valuable tangible and intangible resources for the local cluster members (Porter, 1998; Maskell, 2001; Jacob, 2006). Combining this theory with the network approach on international business networks of small to medium-sized firms (Johanson and Mattson, 1998; Anderson et al., 1994; Bradley et al., 2006), we derive a new framework suggesting that both partnerships with local suppliers and with local customers should support the degree of internationalization of a small to medium-sized local cluster supplier.

Partially contrasting this framework, our findings suggests that while partnerships with local suppliers support the degree of internationalization of local cluster suppliers, partnerships with local customers hinder it.

Two reasons support the first, positive effect. The first reason is related to the nature of inter-firm relationships within the local cluster. As the theory on local clusters points out these relationships are collaborative, trust-based and characterized by strong institutional and cultural mechanisms that foster the circulation and sharing of knowledge. Knowledge transfer among local cluster members is also facilitated because of the existence of effective transfer mechanisms within the cluster and a high absorptive capacity among the cluster members (Maskell, 2001; Camuffo and Grandinetti, 2005). For these reasons, each local partnership with individual suppliers triggers important constructive effects towards international relationships (Anderson et al., 1994). We argue that these positive effects manifest themselves mostly in the form of resource transferability and activity complementarity. Local cluster suppliers absorb important technical and commercial knowledge learned from each and every of their suppliers and transfer it on an international basis using it to strengthen the existing international customer relationships or to develop new ones. Moreover, the very nature of each partnership makes the coordination between the activities carried out with local suppliers and the activities managed with foreign customers smooth and flexible. This way the ability of local cluster suppliers to handle quickly and effectively unforeseen issues that arise from international markets is enhanced. For example, from one of our interviews it emerged that intense partnerships with two die-sinkers were fundamental driving forces leading the firm to increase its export up to 60% of the total sales of taps and fittings for large installations and to increase its responsiveness to an ever changing and ever demanding foreign demand.

The second reason explaining the supportive effect between the presence of partnerships with local suppliers and the degree of internationalization of small to medium-sized suppliers is related to the widespread division of labor among local cluster members (Porter, 1998; Maskell, 2001). A high variety of suppliers with different specializations exists within the local cluster and this increases the chances for the local cluster supplier to flexibly combine unique capabilities provided by different suppliers. The larger is the set of local partnerships the focal firm establishes with local suppliers, the stronger is the ability to flexibly combine their capabilities in order to cope with an ever increasing variety of international markets.

The negative impact of local partnerships with customers on the degree of internationalization of a local cluster supplier is quite surprising. We argue that the main reason of this negative effect is due to the absence of anticipated constructive effects (or the presence of anticipated deleterious effects) between most of the partnerships with local customers and the relationships with foreign customers. In the majority of local clusters, customers are small-sized firms operating in product niches and requiring a highly customized output from their strategic local suppliers. Local cluster suppliers have limited managerial resources for exchanges (especially since most of them are small firms) and investing in partnerships with local customers is likely to result in tying up resources from use in international relationships. As an interviewee pointed out, commercial or technical knowledge that a small supplier of the sample learns from a local customer could not be reused to develop or reinforce foreign relationships. Partnerships with local customers absorb lots of resources without producing any positive effects towards internationalization. The very nature of partnerships with local customers leads also to a high activity irreconcilability (Anderson et al., 1994) with international relationships. Since activity patterns have to be tailored to the requirements of the local customers (Hallen, Johanson and Seyed-Mohamed, 1991; Furlan et al., 2006), it is very difficult or impossible for the small to medium-sized supplier to integrate activities in local and international partnerships with each other. Moreover, the small size of local customers and the highly specific relational investments arising from these partnerships prevent suppliers from exploit any volume-based or qualitative positive effect to be shared between local and international partnerships.

These arguments notwithstanding, the role of local customers towards internationalization of local cluster suppliers has to be considered carefully. During the evolution process of many local cluster suppliers, local customers have indeed a major role in supporting the evolution of their capabilities that eventually triggers their internationalization process (Furlan, Grandinetti and Camuffo, 2007).

For example, one of the most internationalized firms of our sample in the early stage of its life cycle had only one local customer that helped the firm to evolve its capabilities and enlarge its market horizons.

The comparison among the four groups of local cluster suppliers suggest important managerial implications.

First of all, developing partnerships with local suppliers but not with local customers (group 2) is the business model that entrepreneurs should adopt when they want to boost the firm internationalization. This business model uses local cluster as a mine of specialized skills and capabilities that present strong complementarities with firm assets. If managed correctly, this complementarities enhances the innovativeness of the firm (Stieglitz and Heine, 2007) thus supporting the search of foreign customers or the development of the existing international relationships. The firms of the group 2 have a market and strategic orientation that is not limited to the national boundaries but assumes a global dimension. Local market does not represent a valuable resource neither in terms of volume nor in terms of knowledge while it absorbs important managerial resources needed in the internationalization process. Local cluster suppliers that mostly resemble the theory of local clusters are those firms that cooperate both upstream with local suppliers and downstream with local customers (group 4). This business model hinders the internationalization of the firm in that it shuts the firm in the local cluster. Indeed, partnerships with local clusters while requiring specific investments do not produce any constructive effect towards international relationships. Local cluster suppliers that cooperate just with local customers (group 3) are in a worse position as regard the internationalization than group 4 in that they suffer the negative effects deriving from local customers without enjoying the positive effects of partnerships with local suppliers. Finally, small to medium-sized suppliers that do not have local partnerships at all (group 1) are those that adopt a business model of mere executors without developing collaborative relationships with any of the local cluster members. Entrepreneurs that adopt this business model do not rely their strategy on internationalization but on providing their outputs mostly to local or domestic customers.

Conclusions

Whether and how geographical proximity within local clusters supports internationalization of small to medium-sized suppliers is the topic we tackle in this study. At best of our knowledge, this paper is the first attempt that tries to answer this question. In doing this, we advance an original conceptual framework that integrates the network approach on international business network with the literature on local clusters.

Our study provides important and original insights on the role that local business networks play in supporting the internationalization process of firms operating in industrial markets.

On the whole, our results suggest that geographical proximity can be a valuable dimension to be integrated in the network approach. They confirm that no business relationship is an island (Håkansson and Snehota, 2006) and highlight the importance to study interdependences among the relationships of a business network. Moreover, they pinpoint the role that geographical proximity plays in affecting the interdependence between local business networks and international business relationships.

From a managerial standpoint, we maintain the importance for a small to medium-sized local cluster supplier striving to internationalize its customer portfolio to leverage on partnerships with its local suppliers by carefully coordinating international business relationships with its local upstream business network. At the same time, managers have to be aware of the potential negative effects that partnerships with local customers can have on the internationalization process. As a firm operating in business markets goes international, it should sever strong ties with local customers.

The study suffers from a number of limitations that can provide venues for future research. First of all, given the purpose of the study and in line with most of the works that draw on the network approach (Anderson et al.. 1994; Blackenburg et al.. 1996), we focus our attention only on vertical business relationships. Future studies should consider other local relationships such as those with competitors firms or institutions. Moreover, following Blankenburg et al. (1996) we consider only

direct business relationships (i.e. those that are directly managed by the focal firm) on the assumption that the effects produced by the indirect relationships are mediated by the direct relationships. Considering the local indirect relationships trough thorough and well-conducted case studies can be a valuable way to enrich our framework. Future research can also compare the four groups of local cluster suppliers to see if significant differences exist in terms of firm profitability. Finally, comparisons between different local clusters are needed in order to back up our results.

Table 1
Distribution of the suppliers by size

Employees range	N	%
1-9	15	24.2
10-19	14	22.6
20-49	23	37.1
50-99	7	11.3
100-249	2	3.2
250 or more	1	1.6
Total	62	100.0

Table 2
Descriptive statistics and correlations (N=62)

	Mean	S.D.	1	2	3	4	5
1.ESTS	27,42%	30,320	1	0,494**	0,324*	0,115	-0,287*
2.Foreign markets	8,45	12,053		1	0,545**	0,256*	-0,227[+]
3.International customers	69,35	190,875			1	0,471**	-0,101
4.Partnerships with local suppliers	1,92	3,395				1	0,272*
5.Partnerships with local customers	7,55	15,710					1

[+]$p<0.10$: *$p<0.05$; **$p<0.001$

Table 3
ANOVA results and Tukey differences (N=62)

	N	ESTS	Foreign markets	International customers
Group 1	18	21,00	6,16	43,50
Group 2	8	60,12	19,75	247,25
Group 3	19	27,68	7,42	30,84
Group 4	17	18,52	6,71	56,05
		F=4,529	F=2,991	F=2,975
		p=0,006	p=0,038	p=0,039

	Tukey (p-value lower than 0,90)
ESTS	1,2 (0,009); 2,3 (0,039); 2,4 (0.050)
Foreign markets	1,2 (0,036); 2,3 (0,064); 2,4 (0,050)
International customers	1,2 (0,052); 2,3 (0,033); 2,4 (0,080)

Table 4
Regression results (T-test in parentheses); N=62

Dependent variable	ESTS	Foreign markets	International customers
Intercept	28,810**	7,941**	33,230
	(6,529)	(4,629)	(1,320)
Partnerships with local suppliers	1,856[+]	1,212*	30,144**
	(1,650)	(2,771)	(4,695)
Partnerships with local customers	-0,664*	-0,246*	-3,008*
	(-2,716)	(-2,585)	(-2,156)
R-square	0,123	0,161	0,279
Adjusted R-square	0,093	0,132	0,132
F-statistic	4,138	5,652	5,652

[+]$p<0.10$: *$p<0.05$; **$p<0.001$

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