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GLOBAL VALUE CHAINS AND  
INTERNATIONALIZATION OF SMES

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# **GLOBAL VALUE CHAINS AND INTERNATIONALIZATION OF SMEs**

## **ABSTRACT**

The paper is oriented at improving the understanding of internationalization strategies of firms by applying the global value chain studies at the firm level, in the context of SMEs. An original contribution of our paper is to apply such theoretical approach to the Italian model of economic organization mainly characterized by local manufacturing systems. Our hypothesis is that SMEs select the mechanism of governance for supplier selection and management in their international value chains consistently with their business models and the level of suppliers' competences. The paper discusses how SMEs develop a mix of mechanisms of governance of their supply chains depending on the firm strategy and the specificities of the countries of destination of SMEs' outsourcing strategies. By exploiting an original dataset of over 1,000 Italian firms, the paper shows that SMEs manage internationalization processes with different patterns across countries.

*Keywords:* global value chain, internationalization, SMEs, industrial districts, supply chain management

## **Introduction**

Literature on SMEs has considered interaction as the pillar of SMEs' strategies in innovation processes, manufacturing activities and market relationships. In particular, studies on industrial districts SMEs emphasized the relational mechanism of governance in value chains, with a strong role of the embeddedness of supply network at the local level in product and process innovation (i.e. Becattini *et al.*, 2009). Using the framework of the global value chain (from now on GVC) literature (i.e. Gereffi *et al.*, 2005), we enhance such theoretical scheme to analyze internationalization processes of SMEs specifically in upstream processes.

On the one hand, many contributions on internationalization consider foreign direct investments (FDIs) as the primary strategy to go global (i.e. Dunning, 1993). On the other hand, the GVC literature discusses about alternative mechanisms of governance for international transactions, based on the specificity of the information involved, the codification of the transactions as well as the supplier's capabilities (Gereffi *et al.*, 2005). Hierarchy and market are two opposite mechanisms of coordination of GVCs, which can also include modular systems or more relational interactions.

The paper is oriented at improving the understanding of internationalization strategies of firms by applying the GVC studies at the firm level, in the context of SMEs. On the one hand, knowledge flows globally within GVCs and, hence, firms could benefit from entering into global linkages by enhancing their commercial opportunities or innovative processes (Schmitz and Knorrninga, 2000). On the other hand, however, the control of key knowledge influences the power between firms and shapes the governance of GVCs (Gereffi *et al.* 2005). Nevertheless, independently from the size of the company a firm can achieve value from developing or accessing key knowledge in the supply or commercial relationships.

Such perspective is particularly interesting for district SMEs. Used to create supply networks at the local level, even those companies may redesign their competitive strategies

internationally in the framework of GVCs. SMEs can promote upgrading strategies to overcome the boundaries of local networks and exploit their competencies on a wider scale. However, by going global district (but also not district) SMEs are asked to reconsider the traditional relational mechanisms of governance toward alternative forms, coherent with their business models as well as with the characteristics of GVCs in which they want to enter.

Starting from the analysis of GVC literature (i.e. Gereffi and Korzeniewicz, 1994; Bair, 2009), contributions from industrial district theory (i.e. Becattini *et al.*, 2009; Belussi *et al.*, 2003) and supply chain management literature (Gadde and Håkansson, 2001), the paper aims at outlining an integrated theoretical framework of internationalization by focusing on SMEs. More specifically, the paper is oriented to verify the characteristics of governance of GVCs where SMEs are involved and the impacts on competitiveness. Our hypothesis is that SMEs select the mechanism of governance for supplier selection and management in their international value chains consistently with their business models and the level of suppliers' competences.

The paper describes these processes from an empirical point of view based on the result of the annual TeDIS surveys focused on more than 1,000 Italian SMEs specializing in the Made in Italy sectors. The analysis is oriented to identify the relationships between the supply chain management strategies of Italian SMEs and the governance of supplier-firm connections at the global scale. Moreover, the empirical section will be devoted to identifying the models of governance based on the theoretical GVC framework.

### **Internationalization studies and the governance of global value chains**

Lots of studies on international management focused on the characteristics of strategies and structures of multinational companies (i.e. Andersson *et al.*, 2002; Asmussen *et al.*, 2007; Dunning, 1993; Yeung, 2003). Through direct investments both upstream (i.e. productive

plants) and downstream (i.e. commercial subsidiaries) firms can obtain significant benefits from multiple perspectives: increased market control, cost reduction and process efficiency, innovation opportunities, enhanced knowledge management activities related to the coordination of subsidiaries and the exploitation of linkages with local contexts, etc.

The hierarchical option strategy, discussed in the international studies in its many forms – multinational corporation, transnational company, global firm, metanational company (Bartlett and Ghoshal, 1998; Doz *et al.*, 2001; Dunning, 1993; Porter, 1990) – has been considered as the main form of firm's internationalization. However, a stream of literature on international business discusses also other forms of internationalizations, based on cooperative (non-equity) forms of governance (i.e. Contractor and Lorange, 2002). Coordination and management of international activities can be achieved also through alliances and networks (Brouthers and Hennart, 2007; Nohria and Ghosal, 1997). Moreover, other studies have criticized the emphasis on multinational companies: there is no necessary direct correlation between multinationality and better performance in the international arena (i.e. Hennart, 2007).

In such framework, studies on internationalization of SMEs have paid attention on how smaller firms can follow large companies – namely multinational firms – in their international strategies (i.e. Coviello and McAuley, 1999). Some scholars analyzed SMEs' internationalization opportunities by developing comparison with larger firms (i.e. Arranz *et al.* 2002; Buckley, 1989) with a focus on similarities in international approaches and governance solutions. Other scholars stressed the differences between large and small firms in their internationalization paths, due to SMEs' economic and organizational constraints (Bell *et al.*, 2004). In this respect, for instance research on family SMEs highlighted the limits of the specific corporate governance of those firms in approaching international markets and the need for external competences to effectively support such strategy (Fernández, Nieto, 2005).

Furthermore, the social dimension that characterizes SMEs' competitive behavior and their business management approach influences the internationalization strategy of smaller firms (Ellis, 2000). This issue is specifically important for firms embedded into local manufacturing systems and social networks (i.e. industrial districts), where personal connections affect business choices (Majocchi and Zucchella, 2003; Manolova, *et al.*, 2002).

*Organizing economic activities globally: the global value chain perspective*

In order to provide a better comprehension on how firms – especially SMEs – structure and coordinate their internationalization activities and control the value created globally, we will refer to studies on internationalization of economic system focused on GVCs. In the broad international relations and sociological literature, an interesting theoretical approach on internationalization and its impact on political and socio-economy systems have been developing in the last fifhtteen years by Gereffi and colleagues (Gereffi and Korzeniewicz, 1994).

Based on the seminal work of Wallerstein (1974) and other scholars (Bair, 2005), Gereffi's more economic analysis is focused on global commodity chains, then re-named global value chains (Bair, 2005, 2009). Referring to the contributions of Micheal Porter on the value chains (1985; 1990), on the transaction cost theory (Williamson, 1985) and studies on power, the literature on global value chains describes the reorganization of the division of labor within specific sectors on a global dimension (e.g. Gereffi *et al.* 2005). Specifically, those contributions emphasize the role of a few firms in setting the governance and coordinating the inter-firm networks on a wide scale.

On the one hand, the GVC theory can offer a solid explanation on how the global economy works, by showing how power influences the structure of global industries and how the value created is achieved by the players involved (Bair, 2005). On the other hand, those studies

provide advanced methodologies to develop empirical analysis on the organization of global industries and to identify guidelines for policy makers in terms of territorial economic (and social) development. Moreover, GVCs literature is oriented to revise the sectoral logics in the global economy by presenting the interpretive framework of upgrading. In such theoretical scheme (see below), GVC studies have showed and described specializations and competences of firms in the different countries, depending on the industry considered (Bair, Gereffi, 2001; Evgeniev, 2008; Pietrobelli and Rabellotti, 2007; Sturgeon *et al.*, 2008; Tokatli, 2007).

The management of business-to-business relationships in GVC can rely on alternative mechanisms, where pure hierarchy or pure market approaches are just two extremes of a continuum. Gereffi *et al.* (2005) refer to three specific criteria in order to outline the governance models of GVCs: 1) the complexity of information required in the transaction; 2) the level of codification of the information exchanged; 3) the suppliers' capabilities in relation to a transaction's requirement. The higher the complexity of information as well as the lower the level of codification and suppliers' capabilities, the higher the need for internal management of international activities (hierarchy). Captive forms of organizations exist whenever the level of codification increases, but the lead firm is able to control the transaction (and achieve the value) due to weak suppliers' capabilities. In case of higher suppliers' capabilities two options arises: on the one hand, modular architectures that exploit the possibility to codify information related to transactions, on the other hand, relational mechanisms of governance are used in case of low codification.

This theoretical framework is helpful in describing the distribution of value created among the players in the GVC, according to the power of the firms involved and their capacity to control the transaction process. More specifically, it supports the idea that network models of governance are consistent with a global dimension of economic activities, even in case of



SMEs. According to the three variables that describe the five models of governance in GVCs, many dynamics emerge. An increased set of suppliers' capabilities reduces power asymmetry between lead firm and suppliers as well as a higher level of codification in the transaction (i.e. through computerization or the rise of open standard). Hence, GVC governance mechanism shifts from hierarchical and captive options to more open, interactive and equalitarian forms of governance (relational and modular architecture, market).

In order to understand internationalization strategies of firms in their competitive arena, the GVC theoretical framework offers operational tools to describe the position of a single firm in the GVC and its ability to capture the value created, depending on the variables observed. At the same time it suggests potential strategic evolutionary paths for firms based on the upgrading alternative options (process, product, function, and inter-industry upgrading). A firm can increase the amount of economic value achieved based on its distinctive capabilities, also shaping and controlling the structure of the GVC. Lead firms are in fact the players that develop, organize and rule the GVCs.

Studies on GVC do not necessarily stress the size of the firm as the main driver of firm's power in the GVCs. Hence, SMEs cannot only enter into well-established GVCs driven by large companies. They can also develop their own GVCs on the basis of their capability to select and manage suppliers in a dynamic framework of complexity of transaction and codification of exchanges.

### **SMEs and their role in extended value chains**

#### *SMEs' internationalization strategies and GVC framework*

International business studies emphasized FDIs as one of the main forms of internationalization a firm can choose to enter into new markets and manage global business. However, from a small firm perspective many studies (i.e. Coviello and McAuley, 1999; Lu

and Beamish, 2001; Zhou *et al.* 2007) recognize also the relevance of network mechanisms in SMEs internationalization strategies. In this perspective, internationalization of firms embedded into social networks and local manufacturing system may not follow the proprietary path of investments to internationalize (Aspelund and Moen, 2005; Bradley *et al.* 2006; Zhao and Hsu, 2007). In terms of entry modes, SMEs may rely on their (entrepreneurial) social and business networks to internationalize or through direct exporting (market mechanisms). However, if a firm's resources are location-specific, then higher resource access mode may be required (i.e. FDIs) or a SME can internationalize through the links with larger companies.

In our perspective, the level of influence of local resources on SMEs' competitiveness stressed in the internationalization studies is a key issue in order to explain the SMEs' strategies in the global arena and the forms adopted to internationalize. Firms embedded into a particular geographical context and clustered have specific economic and technological advantages (external economies) that influence their internationalization options (i.e. Crouch *et al.*, 2001). To complete this scenario, research on networks and internationalization put in evidence also the relevance of external factors that sustain SMEs. Being node of a network enriches the knowledge access and the small firm's potentialities, because the firm can rely on others' competencies and specialization.

In this debate, GVC theory is helpful in the analysis of internationalization approach of small firms and SMEs embedded into specific socio-economic contexts (industrial districts) as it stresses the relevance of suppliers' capabilities as one of the drivers of GVC structure and governance (Humphrey and Schmitz, 2002). Studies on GVCs and on country specialization (Kenney and Florida, 2004) emphasize how suppliers in different countries can differ in terms of technological and productive competences. Research on developing countries (Brach and Kappel, 2009; Beugelsdijk *et al.*, 2009) for instance highlight the opportunities of inward

investments as well as sourcing for foreign /global firms who can benefit from an increased level of efficiency in a cost-cutting strategy. Others GVC researchers show the different characteristics of specialization of suppliers and firms (OEM - Original Equipment Manufacturers) located in specific territories – i.e. studies on Latin American clusters or Mexican *maquilladora* in the fashion industry or Turkey in the jeans production, technological and manufacturing competences of Far East firms in the electronic sector or firms located in many Western countries (i.e. Japan, US or Europe) in the global automotive industry (Bair and Gereffi, 2001; Evgeniev, 2008; Pietrobelli and Rabellotti, 2007; Sturgeon *et al.*, 2008; Tokatli, 2007).

According to those studies leading firms select suppliers and organize GVCs dynamically, consistently with their competitive strategies and the level of suppliers' specialization. In the GVC framework the level of manufacturing outsourcing can be particularly high, such as in the case of brand vendors, which completely outsource their manufacturing processes and product assembly to specialized firms (i.e. contract manufacturers) to focus on value-added functions. The higher the relevance of non-manufacturing functions on the competitive business model of the firm (marketing – design), the higher the importance of suppliers for value creation. Hence, supplier selection and management become a key competence for buyers, which have to constantly monitor and evaluate suppliers (Camuffo *et al.*, 2007b; Håkansson and Personn, 2004). At the same time, the development of long-term relationships with strategic suppliers is crucial for innovation purposes.

#### *Small firms in local manufacturing systems facing the global economy*

As the theoretical (and empirical) research on GVC framework in SMEs and specifically in industrial districts is still limited (Belussi and Sammarra, 2009; Chiarvesio *et al.*, 2010; Rabellotti *et al.*, 2009; Schmitz, 2004), we are interested in enriching the theoretical debate on

international management of SMEs, specifically those firms embedded into local systems, by including the GVC theory in the analysis.

The main literature on industrial districts depicts this model of industrial organization as strongly affected by embeddedness in the local context (Pyke and Sengenber, 1992; Piore and Sabel, 1984; Becattini *et al.*, 2009). Spatial proximity plays a critical role in the district dynamics, reducing firms' transaction costs in terms of control, information sharing, and coordination. Information exchanges are linked with the process of knowledge creation and diffusion, which are made possible by strong social and trust-based relationships among firms (Dei Ottati, 1994). Supply chain management is focused on exploiting local suppliers' competencies, which are able to sustain a firm's innovation strategy. Not all local suppliers are considered as strategic ones by district firms, that is not all suppliers' contributions are equally important for the value creation. However, district suppliers can offer interesting cost advantages for local firms in terms of flexibility and speed in responding to the local clients' requests due to physical and cognitive proximity (Belussi, 2009).

The many studies on the process of internationalization of industrial districts (i.e. Belussi and Sedita, 2009; Biggiero, 2006; Crouch *et al.*, 2001; Mariotti *et al.* 2008) converge on the idea that such well-established local economic systems of small firms are transforming their internal structure and modifying firm's sources of competitiveness. On the one hand, some studies consider internationalization to have an impact on the whole system, which has to find an integrated and coherent way of face global competitiveness (Giuliani, 2005). On the one hand, other researchers emphasize the variety of internal option strategies put in place by local actors to face international competition and to exploit the advantages of an international reconfiguration of local activities – both upstream and downstream (i.e. Paniccchia, 1998; Tunisini and Bocconcelli, 2009).

Districts “on the move” (Sabel, 2004; Amighini and Rabellotti, 2006; Rabellotti *et al.*, 2009) are asked to transform their socio-economic structures because of the international competition and market evolution and update their traditional sources of competitive advantage. In this framework, on the one hand, codification of district products and procedures – modularity – allow district firms entering into global business networks. However, on the other hand, district firms can exploit also their specific mechanism business-to-business relationship management even on a wider level, through the valorization of their ability to cooperate on a flexible way – pragmatic collaboration (Helper *et al.*, 2000).

In the GVC perspective, the traditional form of governance in the district system is the relational mechanism, where there is low level of power asymmetry between lead firms and its (first-tier) suppliers and they benefit from interaction in terms of product and process innovation. On the one hand, high specialization of local suppliers can increase their ability to enter into GVCs to exploit their competencies on a wider scale (Camuffo, *et al.* 2007a). They can maintain their district localization and benefit from the relationship with global buyers (Schmitz and Knorringa, 2000; Humphrey and Schmitz, 2002). On the other hand, internationalization of lead firms can have consequences on the local supply network – in terms of substitution of local suppliers with new international ones or with FDIs.

By adopting a GVC perspective, we argue that SMEs in general and specifically district firms select alternative mechanisms of governance of their global value chains depending on the three variables considered (complexity of transaction, codification, and suppliers’ capabilities).

*Hypothesis 1a: If the firm’s internationalization strategy is to access to high suppliers’ capabilities, the governance mechanism adopted is the relational or modular one.*

*Hypothesis 1b: If the firm’s internationalization strategy is cost-driven, the governance mechanism adopted is the captive or hierarchical one.*

Many studies on internationalization of industrial districts have emphasized the role of knowledge management in explaining district firms' strategies (i.e. Grandinetti and Rullani, 1994; Bellandi *et al.*, 2009). Local firms develop external linkages both upstream and downstream to access to new technological and/or market knowledge available outside the local system (and the domestic arena) (Belussi *et al.*, 2003). This process of exploration is often mixed with exploitation activities: knowledge produced at the local level – in terms of technology, manufacturing processes, materials, market requirements, etc. – is used internationally in terms of new product offering or market access.

In this perspective, literature emphasizes the role of district leading firms (Corò and Grandinetti, 1999) in playing the role of knowledge gatekeeper (Morrison, 2008) between the district system and the outside. Firms are interested in finding efficiency abroad, but they are also driven by strategies of innovation-seeking (Zucchella, 2006), where the role of global circuit of knowledge may open new opportunities of product innovation and market interaction. Generally speaking, in the management of resources, leading firms are oriented to evaluate local (and global) resources and providers according to higher quality standards (Kogut, 1985). As the studies on GVC suggested, foreign suppliers' selection is influenced by suppliers' competencies, which are also related to the economic systems in which they are located, that can modify a firm's perception of outsourcing opportunities (i.e. Nadvi and Halder, 2005), with impacts on knowledge management opportunities (Saliola and Zanfei, 2009).

*Hypothesis 2a: The more innovation-seeking is the firm' strategy the higher the presence of suppliers and FDIs in Western (developed) countries*

*Hypothesis 2b: The more efficiency-seeking is the firm' strategy the higher the presence of suppliers and FDIs in Far East and Eastern European countries*

## **GVC in made in Italy SMEs**

Our hypothesis will be tested through a quantitative analysis, based on the dataset of the TeDIS survey aimed at monitoring the internationalization processes going on in Italian SMEs, belonging both to industrial districts and non-district areas. Internationalization of production processes for Italian firms is a quite recent phenomenon. Especially for those firms embedded into local manufacturing systems, this is a new dimension that leads to different managerial implications that need to be understood.

### *Methodology and general profile of the sample*

This research<sup>1</sup> involved 1003 companies belonging to the so-called “made in Italy” industries: fashion system (textiles, clothing, footwear, leather products, eyewear), home and furniture cluster (furniture, tiles, glass), mechanical and plant engineering firms, food. 500 companies belong to the 45 most relevant industrial districts<sup>2</sup> and were selected from the population of companies with a turnover higher than 2.5 million Euros (1,818 firms) (ID firms); 503 are Non-Industrial District companies selected (random sample layered by industry) from the population of North Italy companies with a turnover higher than 5 million Euros (10,620 firms) (non-ID firms).

In this paper we will focus only on three macro-industries, excluding food, and on the companies with a turnover higher than 5 million Euros. Hence, 801 companies form the total sample analyzed: 385 district firms and 416 not district firms, distributed as in Table 1<sup>3</sup>.

Moreover, as our hypotheses refer to the governance of internationalization of production

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<sup>1</sup> The data presented in the following paragraphs refer to a 2008 survey performed by Osservatorio TeDIS.

<sup>2</sup> The relevance of the industrial district derives from: a) the number of firms and the incidence of the district production (in terms of value and exports) on the Italian production (at industry level or, more often, referring to the specific specialization within the industry); b) the reputation the district has gained in the international markets through the companies (and their brands) located there.

<sup>3</sup> Data are usually referred to the whole sample of SMEs; we will make distinctions among ID and non-ID firms when they are relevant in our discourse.

processes, we will *de facto* work on a subset of companies composed by those businesses that have organized at least part of their production at the international level (defined as at least one supplier abroad or a FDI). The subset is formed by 284 companies (126 ID and 158 non-ID firms): 35.5% of the total sample (32.7% of ID sample, 38.0% of non-ID sample). The second part of Table 1 shows distribution and profile of this subset of companies (from now on, internationalized companies, or INT companies). Compared to the general sample, INT companies have the same geographical distribution, but they are more often specialized in the mechanical sector, they are bigger in terms of employees (difference in turnover is not statistically significant) and more export oriented<sup>4</sup>.

----- Insert here Table 1 -----

If we look at the whole sample, these enterprises are very much inclined to export and 63.8% of the interviewed companies have managed to develop at least partial forms of direct control over international markets by using networks of qualified agents, commercial partners, franchising networks and direct points of sale. If we look at the list of main countries that companies export to, it is interesting to see that the traditional main export markets of the European Union (Germany and France at the forefront) and the United States are now firmly flanked by Russia and China.

A remarkable number of companies combine the reorganization of the value chain in an international context with a broader process of innovation that directly involves the product, in terms of R&D, design and communication (Table 2 presents also a comparison between INT and not internationalized companies in the same variables). 79.5% of interviewed companies declare that they have implemented product innovation in the last 3 years, while

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<sup>4</sup> T-test was used to test differences in continuous variables, while Chi-square was used for dichotomic variables. Differences between INT companies and non-INT companies have been tested.



55.9% has invested in building proprietary brands to reinforce their image. Many enterprises declare that they have set up dedicated research and development facilities (60.7%), although only 31.8% has also registered patents. 34.4% of firms has established relationships with national or international research centers (but contacts are mainly, if not exclusively, with Italian Universities). 38.3% of companies have a clearly defined internal design function. The last element supporting innovation in internal organizations and in relationships with other companies is ICT (Information and Communication Technology), namely the tools available to manage and govern relationships with the value chain. ERPs (Enterprise Resource Planning) are used by 54.4% of companies, while e-mail and websites are adopted by almost everyone.

----- Insert here Table 2 -----

#### *Production management and supplier portfolio*

The production process is mainly organized as “make to order”, in some cases it is characterized by a modular approach (“assemble to order”), while in others there is a deeper customization approach (“engineer to order”); most part of the companies interviewed outsource at least part of the production process (Table 3).

A small percentage of companies has invested in proprietary (or participated) manufacturing companies abroad (FDI); within the global value chain approach an FDI is a hierarchical way to govern the value chain at a global level. More precisely, 18.8% of companies have at least one FDI; the percentage is higher in non-ID companies than ID firms (respectively 22.6% and 14.8%, p-value Chi square = 0.007). Half of INT companies (51.1%) have an FDI (44.4% in ID companies, 56.3% in non-ID companies, p-value Chi square = 0.030). Almost half of the enterprises involved in FDIs have a manufacturing plant in West Europe (47.5%), followed by Far East countries (31.2% of businesses), Balkans and other East Europe countries. It was

interesting to evaluate the connection of those results with the district/non district dimension and with industry specialization. The cross section shows no statistic relevance of the first variable, so both ID and non-ID firms have the same preferences concerning countries. On the contrary, industry matters: mechanical companies are more oriented toward European Union (15) countries, while fashion firms have more FDIs from Balkans and Far East.

The TeDIS survey does not gather information concerning a firm's motivation to develop an FDI strategy opposite to an outsourcing option. Hence, this issue cannot be further explored in our analysis.

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Regarding outsourcing (Table 4), the most frequent activity outsourced consists of operations with usually a high incidence of human work realized by subcontractors; this kind of outsourcing is very often flanked by the production of semi-finished products. Almost one third of the companies outsources specific components or finished products, especially in the case of INT companies. In the INT sample, a higher percentage of ID companies than non-ID outsource the production of finished products (Chi-square test).

The supplier portfolio is composed by 47 suppliers on average, that count for almost the 30% of the total company turnover; the average number of suppliers is 72 in INT companies, with, obviously, a higher incidence on the turnover. One third of the suppliers are perceived as strategic ones, which means they are important for the competitiveness of the company.

On average, in the general sample half of the suppliers are located in the district or local area, while 11.9% are abroad. In the case of INT companies, 37.7% of suppliers are in the local area, while 27.3% are abroad (there is no statistically significant difference among ID and non-ID firms).

----- Insert here Table 4 -----

Supplier networks of INT companies are mainly located in the European Union (60.5%), but about 43% of firms have consolidated manufacturing relationships in Eastern Europe and 46.2% in Far East countries (Table 5). Only few companies have suppliers in North America or Japan, among well-developed countries, and South America and North Africa, among emergent countries. As far as the relation with ID/non-ID issue and industry, we find the same results of FDIs; there is no statistic incidence of ID-non ID variable, while mechanical companies are more oriented toward European Union (15) countries, whereas fashion firms have more suppliers from Balkans and Far East.

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As far as country specificities is concerned, Table 6 shows the activities that are mainly outsourced in the different macro geographical areas considered in this research<sup>5</sup>. Table 7 shows the main reasons for the specific outsourcing strategy mentioned. The two tables together support the hypothesis that INT companies consider local companies mainly as suppliers of specialized work, as source of manufacturing competencies. This typically happens in industrial districts. European and American suppliers mainly provide specific components using specialized competencies, often coupled with a higher knowledge and competence in the deployment of product and process advanced technologies. East Europe countries suppliers are part of the global value chain of Italian SMEs as they can provide semi-finished products and finished products at a lower cost than the internal one; for the same reason Italian firms have suppliers from Far East countries, even if, in this case, they supply mainly finished products.

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<sup>5</sup> We have grouped countries mentioned in previous tables in three macro-areas: EU15/USA-Canada, corresponding to so-called Western developed-countries; East Europe, that comprehends emergent economies of Balkans and other East European countries; Far East, for China and other Far East countries.

----- Insert here Table 7 -----

*The governance models of international relations (Hypothesis 1a and 1b)*

Results discussed in the previous session offer the general framework about the organization of production processes of Italian firms at the international level. Our interest is to analyze the alternative forms of governance adopted by the firms in their international approach.

Table 8 represent the cross section among goals and reasons for outsourcing and the different governance models considered in our research. Based on the GVC literature, the forms of governance adopted in our research are as follows:

- a) Collaboration: it refers to the GVC relational model of supplier network governance;
- b) Execution of specific tasks: this governance model can be both referred to the captive model or to the modular one mentioned by Gereffi and colleagues. We can consider it as captive when tasks are very well defined and the company has a strict control on the supplier. In a weaker form, the execution of task can be considered as a modular one when the company defines a project, a specific design, product standards and characteristics, without any role of the supplier in the innovation process, but there is no customer' influence on the supplier, its organization and production process;
- c) Standard transaction of goods and services, that is the market exchange model.

As previously mentioned, the hierarchical model is not included in the analysis. Even though we can provide a description of the hierarchical foreign investments of Italian SMEs - represented by FDIs analysis discussed above – there are no data related to the reasons explaining why an Italian SME decide to this strategy in opposition or in addition to outsourcing options.

Table 8 shows all the cross results concerning the motivation underlying Italian firms outsourcing strategies. According to our theoretical framework, the main reasons for an outsourcing strategy (underlined in *italics*) can be explained as follows<sup>6</sup>:

- a) Local suppliers are mainly source of specialized competencies, and the prevailing governance model is collaboration/relational, followed by the execution of tasks;
- b) West Europe and American suppliers provide specialized competencies and are mainly managed by giving specific tasks;
- c) East Europe and Far East suppliers allow reducing Italian companies internal costs and the governance models are in both cases captive or modular.

----- Insert here Table 8 -----

Our results partially confirm H1a and H1b. In fact, on the one hand, results show a connection between the competence-seeking strategy of outsourcing and the two models of collaboration and task definition (local and Western suppliers are selected mainly for their competencies; 49.4% of companies adopt a collaboration model with local partners, while 44.9% of firms have a task definition approach to European or North American suppliers); on the other hand, the cost-driven strategy is correlated to the task definition model (in both cases of East Europe or Far East suppliers, companies are looking overall for cost savings, and in both cases the prevailing governance model is the execution of tasks). The collaboration model corresponds to the relational model depicted by the GVC literature: the supply chain management strategy adopted by Italian SMEs is consistent with the GVC framework. However, the task definition model identified through the quantitative analysis could both refer to captive or modular

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<sup>6</sup> Our aim was to test hypothesis about the prevailing governance models of Italian SMEs' global value chains; in doing so, we have selected only the most important reasons driving the customer and country selection. Moreover, as shown in Table 7, for each country there is only one reason explaining outsourcing that clearly prevails on the others.

forms of governance, with very different degree of supplier's autonomy and firm's control on the value produced.

Even though the survey results do not allow us distinguishing between the two alternative situations (captive versus modular one), qualitative research about countries specificities we carried out to support our analysis, aimed at study in depth the specific and prevalent organization models of production processes between local companies and foreign customers (see § 3) provided useful knowledge about the two models. In East Europe countries there is usually a direct contact between the supplier and the customer, with very detailed and direct communication that can be considered, in our case, as captive form rather than relational one. On the contrary, many companies operating in Far East countries do not have a direct relation with final suppliers, but refer to a number of intermediaries that are responsible for the final product supplied (turn-key suppliers in the GVC framework). Moreover, we have seen that Far East suppliers provide finished products (Table 6), that is coherent with the modular governance model.

Based on those elements, we confirm H1a, while H1b is only partially confirmed, as a modular governance model characterizes cost-driven strategies in Far East countries. Those results are the same if checked by control variables: district or non-district firm, industry specialization, firm size (turnover ranges), innovation model (presence of R&D department or design department), product (finished product or semi-finished product), and percentage of outsourcing.

*Governance models, firm's strategy and country specificities (Hypothesis 2a and 2b)*

The relation among firm's strategy and supplier capabilities in different countries have been tested by crossing the main drivers of firm's competitive advantage with the frequency of supplier relations or FDI's presence in different geographic areas. In the Table 9 we will

focus on the three most important drivers of source of competitive advantage a firm should invest to maintain a good position in the market – product innovation (29.8%), product quality (22.5%) and reduction of production costs (19.6%) – as they have been mentioned by 71.9% of INT companies (71.1% of the total sample). Results show that companies investing in product innovation have suppliers mainly in UE, but FDIs both in UE and Far East countries. When product quality is the main competitive goal, both suppliers and FDIs are located mainly in UE. However, a high percentage of companies has also suppliers in the Far East area. Companies that think they should invest mainly in cost reduction have more frequently than others suppliers in Balkan area, but also in UE; the same happens with FDIs, but the phenomenon is less evident.

----- Insert here Table 9 -----

Results confirm H2a, but only partially H2b. In fact, on the one hand, efficiency-seeking companies are more oriented than others to invest in the Eastern European. On the other hand, Far East countries as areas for outsourcing and FDIs are appealing also for innovation and quality seeking companies.

#### *An overview of main results*

The following table (Table 10) summarizes the main findings of our research, comparing firms' strategies, prevailing approach to supplier selection and location of supplies.

----- Insert here Table 10 -----

When SMEs go global to structure their supply chain, SMEs replicate their traditional relational model of governance (Hp 1a). More precisely, the search for distinctive supplier capabilities is related not only to the relational but also to the modular model. Such form of governance allows SMEs benefitting from the supplier' knowledge on an interactive basis,

where foreign suppliers have a key role in the value production and are selected because of their contribution to the firm's competitiveness. However, our research results partially confirm our hypothesis 1b. In case of cost-seeking international strategies, Italian SMEs adopt a captive form of governance only to manage business-to-business relationships with East European suppliers. Suppliers located in Far East are instead managed through a modular approach. We could argue that cost benefits can be achieved even in this case (reduced coordination costs). Nevertheless, this evidence should be further explored in future research. Concerning the selection of foreign suppliers and their locations, our hypotheses are partially confirmed. Italian SMEs are interested in selecting suppliers in Western countries because of their capabilities, whenever an innovation-seeking strategy is concerned. Those suppliers can provide the firm with strategic knowledge and competences that sustain its product and/or process innovation approach. Nevertheless, in case of suppliers selected in "so called" low-cost countries different strategies emerge. Companies have business relations with Far East suppliers in order to exploit lower production costs. However, not only companies with an efficiency seeking strategy pursue this aim, but also innovation seekers. Far East suppliers could be interesting also for the latter for many reasons, such as firm's upgrading strategies with more intense rate of manufacturing outsourcing or the firm's strategic need to combine cost reduction for product components with higher financial resources available for technical or marketing-based innovation. Even in this case, further research is required to better explain the relationship between governance model and firm strategy.

### **Conclusion and future research**

GVC studies suggest that firms adopt alternative forms of governance of their international value chains depending on three drivers - the complexity of information required in the transaction, the level of codification of the information exchanged and the suppliers'



capabilities in relation to a transaction's requirement. Hence, in their upstream internationalization processes firms have to carefully consider the “make-or-buy” decisions, as well as their supplier selection and supply chain management approach, consistently with their strategies. By focusing on suppliers' capabilities at the local and international level, a firm can design its own outsourcing strategy in order to combine location advantages – either related to cost-cutting options or knowledge opportunities – and internal competencies and knowledge.

Our analysis on internationalization processes of Italian SMEs is able to offer an original empirical view of the internationalization strategies put in place by small firms specializing in low and medium-tech industries, under the GVC framework.

Compared to the GVC model proposed by Gereffi *et al.* (2005) our results suggest some differences in Italian SMEs internationalization processes compared to the framework of GVC studies. On the one hand, smaller firms seem to adopt a more network-oriented approach to global value chains consistently with the traditional model of firms embedded into local economic systems, where the hierarchical dimension (we can also include the captive form in this discourse) is far less important in the management of economic activities. Our results are consistent with studies on international business that emphasize the limited organizational and financial resources of SMEs to go global and the relevance of networking and social linkages in SMEs business.

Our original contribution is related to the empirical implementation of the GVC theoretical framework in the Italian context, mainly characterized by district firms and local systems of SMEs. However, our analysis suffers from specific constraints related to the dataset used in our empirical elaboration. In fact, according to the TeDIS questionnaire it is not possible to discriminate between modular forms of governance and captive ones. Moreover, there is no information concerning the reasons behind foreign proprietary manufacturing investments –

in addition or in substitution of local suppliers – as well as about FDI strategies in different countries. Hence, we adapted the GVC theoretical model to combine the five options of governance with the three forms of supply chain governance – collaboration, task execution and market. While the two extremes are quite easily identifiable, further research is needed to explain whether the characteristics of task execution can be referred to independent suppliers (modular or “turn-key” suppliers) or to captive suppliers. Further research efforts should also address the longitudinal perspective – that is the changes of forms of governance over time - and the international comparison.

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## TABLES

**Table 1** *Interviewed enterprises: distribution and profile of the sample and of companies with international production (INT companies)*

<b>Whole sample</b>					
Region	a.v.	%	Industry	a.v.	%
North East	284	35.5	Home furnishing	171	21.3
North West	295	36.8	Mechanics	408	50.9
Center and South	222	27.7	Fashion	222	27.7
Total	801	100.0	Total	801	100.0
Average turnover (ml euro)		49.2			
Median turnover 2007 (ml euro)		18.8			
Average employees 2007		130.5			
Median employees 2007		75.0			
Average Export (% on the turnover)		41.9%			
<b>INT companies</b>					
Region	a.v.	%	Industry	a.v.	%
North East	106	37.3	Home furnishing	40	14.1
North West	98	34.5	Mechanics	159	56.0
Center and South	80	28.2	Fashion	85	29.9
Total	284	100.0	Total	284	100.0
Average turnover (ml euro)		58.8			
Median turnover 2007 (ml euro)		27.1			
Average employees 2007		178.7			
Median employees 2007		100.0			
Average Export (% on the turnover)		49.6%			

Source: TeDIS, 2008.

**Table 2** *Main characteristics of the sample (% values) (a)*

	Whole Sample	INT companies	Non INT companies	p-value
Finished products (to consumers or other companies)	78.8	86.6	75.2	0.000
Competitive position: relevant or leadership	90.1	93.7	88.2	0.017
Industrial group	43.3	48.2	40.6	0.044
International commercial network	63.8	74.5	57.5	0.000
Product innovation	79.5	84.1	76.7	0.016
Trademarks	55.9	72.1	46.5	0.000
R&D structure	60.7	72.7	53.8	0.000
Design structure	38.3	43.3	35.5	0.032
Patents	31.8	45.0	24.1	0.000
E-mail	98.8	99.6	98.4	0.172
Website	92.5	94.4	91.5	0.193
ERP	54.4	66.4	48.0	0.000

*Source TeDIS, 2008.*

(a) differences between INT and non INT companies have been tested through Chi-square; p-value is referred to that test.

**Table 3** *The organization of production (% on valid answers)*

	Whole sample	INT companies	Non INT companies
<b>Organization of production</b>			
Make to order	65.7	63.7	66.9
Make to stock	16.6	20.8	14.1
Assemble to order	14.6	11.6	16.4
Engineer to order	3.1	3.9	2.7
<b>Outsourcing of production</b>			
Total outsourcing	9.4	16.9	5.1
Partial outsourcing	66.0	71.5	62.8
No outsourcing (vertical integration)	24.6	11.6	32.1
<b>Manufacturing FDI</b>			
	18.1	51.1	0.0

*Source TeDIS, 2008.*

**Table 4** *The supplier portfolio (a)*

	Whole sample	INT companies	Non INT companies	p-value
<b>Activities of suppliers</b>				
Specific components for the company (%)	30.9	41.4	22.9	0.000
Semi-finished products (%)	50.4	57.0	45.5	0.004
Semi-finished products on behalf of the company (%)	70.2	62.9	75.6	0.001
Finished products (%)	26.8	42.2	15.1	0.000
<b>Supplier portfolio</b>				
Average # of suppliers	47.0	72.1	27.8	0.000
Average incidence of suppliers on company turnover (%)	29.6	39.6	21.7	0.000
Strategic suppliers on total suppliers (%)	33.7	32.6	34.5	0.563
Local/district suppliers (%)	54.4	37.7	67.4	0.000
Regional suppliers (%)	16.9	16.6	17.2	0.805
National suppliers (%)	16.6	18.2	15.4	0.224
Foreign suppliers (%)	11.9	27.3	0.0	0.000

*Source TeDIS, 2008.*

(a) differences between INT and non INT companies have been tested through Chi-square or t-test; p-value is referred to that test.

**Table 5** *The localization of international suppliers (% on valid answers)*

Country	INT companies	
European Union (15)	118	60.5
Usa/Canada	16	8.2
Japan	9	4.6
Balkans	56	28.7
Other East Europe countries	28	14.4
South America	5	2.6
Far East	90	46.2
North Africa	15	7.7

*Source TeDIS, 2008*

**Table 6** *Main activities of suppliers in selected areas (% on valid answers – INT companies)*

	Local system		UE 15/ USA-Canada		East Europe		Far East	
	v.a.	%	v.a.	%	v.a.	%	v.a.	%
Specific components for the company	28	16.6	43	36.8	9	12.5	18	20.2
Semi-finished products	49	29.0	32	27.4	25	34.7	19	21.3
Semi-finished products on behalf of the company	76	45.0	15	12.8	16	22.2	8	9.0
Finished products	16	9.5	27	23.1	22	30.6	44	49.4
Total	169	100.0	117	100.0	72	100.0	89	100.0

*Source TeDIS, 2008*

**Table 7** *Reasons of outsourcing in selected areas (% on valid answers – INT companies)*

	Local system		UE 15/ USA- Canada		East Europe		Far East	
	v.a	%	v.a	%	v.a	%	v.a	%
To satisfy occasional demand picks	15	9.0	2	1.7	3	4.2	1	1.1
To reduce internal costs	47	28.3	28	24.3	53	74.6	73	82.0
To exploit supplier flexibility	23	13.9	7	6.1	4	5.6	2	2.2
To exploit specialist competencies	81	48.8	78	67.8	11	15.5	13	14.6
Total	166	100.0	115	100.0	71	100.0	89	100.0

*Source TeDIS, 2008*

**Table 8** *The governance models of the supply chain*

Goal of outsourcing /Governance model	Collaboration		The supplier receive and execute specific tasks		Standard transaction of services and goods		Total	
	a.v.	%	a.v.	%	a.v.	%	a.v.	%
<b>Local/District suppliers</b>								
To satisfy occasional demand picks	4	26.7	11	73.3	0	0.0	15	100.0
To reduce internal costs	23	48.9	22	46.8	2	4.3	47	100.0
To exploit supplier flexibility	9	39.1	14	60.9	0	0.0	23	100.0
<i>To exploit specialist competencies</i>	<i>40</i>	<i>49.4</i>	<i>37</i>	<i>45.7</i>	<i>4</i>	<i>4.9</i>	<i>81</i>	<i>100.0</i>
<b>UE 15-USA/Canada</b>								
To satisfy occasional demand picks	1	50.0	1	50.0	0	0.0	2	100.0
To reduce internal costs	15	53.6	12	42.9	1	3.6	28	100.0
To exploit supplier flexibility	3	42.9	4	57.1	0	0.0	7	100.0
<i>To exploit specialist competencies</i>	<i>24</i>	<i>30.8</i>	<i>35</i>	<i>44.9</i>	<i>19</i>	<i>24.4</i>	<i>78</i>	<i>100.0</i>
<b>East Europe</b>								
To satisfy occasional demand picks	2	66.7	1	33.3	0	0.0	3	100.0
<i>To reduce internal costs</i>	<i>16</i>	<i>30.2</i>	<i>35</i>	<i>66.0</i>	<i>2</i>	<i>3.8</i>	<i>53</i>	<i>100.0</i>
To exploit supplier flexibility	3	75.0	1	25.0	0	0.0	4	100.0
To exploit specialist competencies	3	27.3	4	36.4	4	36.4	11	100.0
<b>Far East</b>								
To satisfy occasional demand picks	0	0.0	1	100.0	0	0.0	1	100.0
<i>To reduce internal costs</i>	<i>23</i>	<i>31.5</i>	<i>38</i>	<i>52.1</i>	<i>12</i>	<i>16.4</i>	<i>73</i>	<i>100.0</i>
To exploit supplier flexibility	0	0.0	2	100.0	0	0.0	2	100.0
To exploit specialist competencies	3	23.1	7	53.8	3	23.1	13	100.0

Source TeDIS, 2008



**Table 9** *Competitive advantage and distribution of suppliers and FDIs (% on valid answers – INT companies)*

	UE 15	USA/CA NADA	Balkans	Other East Europe	Far East
<b>Suppliers</b>					
Product innovation	78.0	13.6	15.3	11.9	39.0
Product quality	57.1	7.1	35.7	16.7	42.9
Reduction of production costs	50.0	2.9	41.2	14.7	44.1
Average INT companies	60.5	8.2	28.7	14.4	46.2
<b>FDIs</b>					
Product innovation	48.9	24.4	13.3	15.6	44.4
Product quality	50.0	21.9	12.5	25.0	28.1
Reduction of production costs	50.0	7.1	21.4	21.4	39.3
Average INT companies	47.5	18.4	22.7	19.9	31.2

*Source: TeDIS, 2008*

**Table 10** *A synthetic view of main results*

<b>Supplier localization</b>	<b>Main firm strategy</b>	<b>Main advantage achieved from suppliers</b>	<b>Most frequent governance model</b>
<i>Local system</i>	Innovation and quality	Competences (specialized expertise)	Relational
<i>UE 15 – US/Canada</i>	Innovation and quality	Competences (specialized expertise)	Modular
<i>East Europe</i>	Efficiency	Cost reduction	Captive
<i>Far East</i>	Innovation and quality	Cost reduction	Modular

*Source: authors' elaboration*