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# **From competitive advantage to dynamic capabilities: Small and Medium-sized Multinationals in Asia<sup>1</sup>**

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## Abstract

Italian firms have recently engaged in direct investment abroad through the establishment of production facilities in China and India. Using data gathered from interviews conducted in those countries in 2009 with 16 Italian predominantly small and medium-sized firms, this article explores: the motivations behind Italian parent companies' decisions to create subsidiaries in Asia; relations between the newly established production facilities and their local suppliers and markets; any subsequent organizational adaptations; and the cultural and administrative difficulties the enterprises have encountered. The article provides a novel perspective on how predominantly small and medium-sized manufacturing firms achieve cost and differentiation advantages by leveraging their dynamic capabilities.

JEL: F23, F14, L25

Key words: Strategic management of multinational firms, Value chains, Capability-based strategies.

## **1. Introduction.**

This article examines the prospects and problems faced by Italian firms that recently established production facilities in China and India through direct investment. Over 4 months, in spring 2009, we visited 16 factories in China and India – most of them of small and medium size (controlled by Italian parent companies) – , and discussed with their general managers the reasons underlying the decision to produce abroad; the direction, extent and nature of adaptation (in respect of strategies, structures, resources, and more) to foreign market conditions; and the character of the management of new networks that were created, in relation to the parent companies, to foreign suppliers, and to the sales market<sup>2</sup>.

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<sup>1</sup> I would like to thank the participants in the seminar of the School of Economics at the University of Reading where the paper was discussed. Special thanks are due to Marina della Giusta, Carlo Gianelle, Andrea Ginzburg, Faith Hatani, David Lane, and Frank Pyke for their careful reading and valuable comments. Partial funding was provided by Osservatorio economico provinciale, Treviso.

<sup>2</sup> Hatani (2009; 2010). These are the main questions faced today by international business, according to the Delphi study (Griffith, Cavusgil, Xu, 2008)

The article begins, in Section 2, with an outline of the research methodology used in the study. The following Section 3 discusses the role of country specific circumstances in explaining the development of the cross border organisation of Italian firms, comparing the strategies of internationalization towards Asia with that towards Central and Eastern Europe. Section 4 presents firm level case studies and discusses how firms have adapted their specific advantages to the particular circumstances of foreign markets. Firms are grouped into 3 clusters according to the motives that induced the Italian parent companies to create subsidiaries in China or India. Each group is discussed in a sub-section (4.1, 4.2, 4.3). Section 5 summarizes the previous discussion and considers the shift made by several firms in moving from “competitive advantage” to “sustainable advantage” through the creation of dynamic capabilities (Teece et al. 1994;1997). The subsequent Section 6 reports on binding institutional constraints faced by subsidiaries and the necessary adaptation of managerial strategies. The following section 7 concludes.

**2. Research Methodology** The investigation of the experiences of Italian firms investing abroad employed a multiple case study approach. Through qualitative research we were able to achieve a comprehensive understanding of how events unfolded and the context in which this occurred. Firms were selected according to their size and sector, and their readiness to grant permission to visit their foreign plants and carry out detailed interviews with the managers. Not all firms that were asked agreed to our request. Reasons for refusal mainly related to difficulties connected to subsidiary re-organization.

We interviewed 16 firms in China or India, all of which have Italian parent companies in part or in whole. In fact, 13 of the subsidiaries in Asia were 100% controlled by a parent company in Italy; the remaining 3 had participation by Chinese firms. Some of the subsidiaries had the same parent company (the Carraro Group) which meant that the total number of parent companies was 12. Of these, 10 had additional subsidiary plants in other countries. Also, 10 of the parent companies were located in Veneto, a region in the North East of Italy, and it was to the Asian subsidiaries of these companies that our interviews were initially directed. Interviews with the subsidiaries of 2 more Italian parent firms were added during the process. All but 3 interviewed subsidiaries in Asia were small or medium sized<sup>3</sup>. 9 of them belonged to medium-sized groups<sup>4</sup> with well-known brands. 7 belonged to

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<sup>3</sup> The legal definition varies by country and by industry (Peterson et al. 1986). In line with most definitions, in this paper a small firm is defined as having fewer than 50 employees (L, table 1), a medium-sized firm as having between 51 and 249, and a large-sized business as one with 250 or more employees (G,O,P) (See, for example, the OECD, 2005, p. 17). According to this definition, the majority of our interviewed subsidiaries were of medium size. However, using a definition based on size of turnover all interviewed subsidiaries but 2 would be defined as of small size. C and Q are of medium size according to the size of turnover.

large groups. Of these, 5 (B,C,D,O,Q: See Table 1) belonged to a single important mechanical engineering group (Carraro), 1 (H) to a technical textiles group (Filmanmande), and 1 (P) to a cotton textiles group (Monti). The biggest group employs worldwide more than 4,000 employees, while the second and third biggest have around 1000.

The majority of the head offices of the interviewed firms (B,C,D,E,L,N,O,Q: See Table 1) are located in the "mechanical district" of Padua in the Veneto region, Italy; 2 (R,M) are located close to that district's borders; 2 (H,P) belong to the textiles-garments sector and are located in Treviso, Veneto region; and 2 (A,G) belong to the "furniture district" of Treviso; of the remaining 2, 1 (F) is located in the Republic of San Marino, and the other (I) in Brescia, northern Italy.

All the firms retained their headquarters in Italy (or San Marino) and all but one retained in Italy their most important manufacturing units. The large majority of parent firms already had international expertise and were following a strategy of continuous geographic expansion. All firms were challenged by their entrance into markets that presented entirely new environments.

A "case" is defined as a visit to an industrial plant accompanied by an in-depth interview with a senior manager. Interviews were transcribed, and then analysed. The use of open interviews allowed a respondent driven agenda to emerge, permitting the Italian managers interviewed to concentrate on what they considered to be the important aspects of their Asian operations, thereby avoiding certain biases associated with more structured interview approaches. One of the most powerful sources of evidence is when in a case study approach interviewees use their own words to "tell the story." We have followed this method to bring the reader into the world of the participants, who provide in depth insights into the rationale for events and the rich contexts in which they occur (Mintzberg, 1979; Van Maanen, 1988; Yin, 2003).

Semi-structured interviews were conducted both in Asia (16 interviews) and in Italy (4 interviews) in two waves between October 2008 and June 2009. All interviewed persons held a leading top management position. Each interview lasted at least two hours, in many cases half a day, and in all cases included a tour of the factory, both in Italy and in Asia. All but 2 interviews were conducted in Italian; the other 2 were conducted in English. The interviews focused on company background and marketing policy, motivations for the entry into the

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Of course, none of the small and medium-sized businesses we interviewed had a completely independent management and nor were they independently owned. We are well aware that a firm's behaviour is influenced by how it may be linked to a group to which it belongs, and/or by the sector in which the group operates.

<sup>4</sup> The OECD defines the size of a group by adding up the employees and turnover of all members.

Asian market, the position of the firm in the value chain, and relations with and policies towards customers, consumers and local suppliers.

Information was complemented by interviews in China with two Italian government agencies that have the role of supporting Italian firms in Asia (The Italian Chamber of Commerce and the Italian Trade Institute), and by follow-up contacts with people we interviewed, and by reviews of press releases and company material.

## Sectors

Cases span several sectors i.e. mechanical engineering, textiles and garments, and furniture; and involve firms of varying dimensions, with the consequence that the research has highlighted a spectrum of adaptation efforts by enterprises driven to Asia for different purposes.

10 out of the 16 firms interviewed belonged to the **mechanical engineering sector**. Of these 10, 5 belonged to the Carraro group, which is a leader in the production of axles, transmissions, and final and slew drives for agricultural and construction equipment. We interviewed the directors of two factories in the drive system division of the Group in China (Quingdao:B) and in India (Pune:C); the directors of 2 plants in the gear division in India (Pune:Q) and in China (Suhzou:O); and also in the research division the director of the design centre in Pune (D).

Also in the mechanical engineering sector, we interviewed the directors of subsidiaries that produced agricultural machinery (Maschio: N), hydraulic fittings (Genarl Fittings: I), radiators (Irsap: M), pressure washers (Hydroeast: L), welding machines (Ritmo: E), and amusement rides (Zamperla: R). They all produce their own brand products and have well defined niches in their respective international markets.

The remaining 5 of the interviewed firms belonged to the "traditional manufacturing" sectors of **textiles and furniture**. These included: a cotton factory in India (Monti: P); a producer of high performance yarns in the sub-sector of technical textiles (Filmanmade: H); and 3 furniture firms (Colombini: A; Faram: G; DalianMato: F).

For 9 firms (B,C,D,H,L,N,O,P,Q) the interviews at the foreign plants were supplemented with interviews in their parent firms in Italy. Table 1 summarizes the main characteristics of the interviewed firms.

<TABLE 1>

All the firms employed technology that was modern for their sectors, and used, whenever necessary, European components in order to ensure product quality. In fact, the proportion of components used that are imported varies a lot, according to the particular strategy pursued by each firm. However, sometimes the use of low cost of labour is reflected by the presence of low levels of automation. For example, activities such as stock control, warehouse usage, and quality control are often manually executed; in contrast, the corresponding operations in Italy would have been organized with a higher level of automation. 2 firms (L, J) made extensive use of machinery transferred to China from Italian parent companies, which was later updated with more automated technology.

### **3. Off-shoring and Production Internationalization.**

Italian firms initiated significant internationalization strategies in the mid-nineties and today the off-shoring of a part of production is an important feature of that country's manufacturing system, in particular in the North Eastern regions of Italy (Schiattarella, 2001; Tattara, 2011). Until the late eighties Italian firms operating in the international market were mainly concerned with expanding their exports, and increasing their share of markets in the richest countries, selling in Europe products manufactured at home, in Italy. Since the mid-nineties, however, many firms began transferring a significant part of their manufacturing activity across borders to other countries, which also provided flourishing sales markets.

It became profitable to develop outside Italy a part of production with the onset of circumstances that reduced transaction costs involved in operating abroad. At the macro level (Kedia, Mukherjee, 2009), the establishment of a fixed exchange rate in the late nineties, and the subsequent appreciation of the Euro, induced Italian export firms to abandon a strategy of making their products more competitive through currency devaluation. Currency devaluation had been a strategy that Italian firms had practised after the defeat, in the early seventies, of the Bretton-Woods regime of fixed exchange rates, and which had promoted exports, with alternating movements, for 25 years. In the nineties, with the defeat of the Soviet empire, new territories in Central and Eastern Europe, close to two of the most important countries of industrial Europe, Germany and Italy, opened up to foreign investment. Countries with stable social and political structures, educated populations, low labour costs, and fiscal regimes very favourable to foreign investments encouraged Italian firms to establish plants there.

Until the mid-1990s, for Italian firms the role of developing Asian economies as places for investment remained negligible. However, as emerging countries, particularly in Asia, removed restrictions, and implemented policies to attract foreign direct investment inflows, a new interest developed. Producing in China and India, and other Asian countries, became to be seen as attractive because of the low cost of resources and because firms producing locally can easily adapt and quickly benefit from a growing consumer demand due to the rapid growth of incomes and populations (Agarwal, 1980; Kaplinsky, Farooki, 2010).

Nonetheless, few Italian firms have yet in 2011 established production activities in these countries. Indeed, many are reluctant to launch new businesses so far away, and in fact many firms that did so have gone bankrupt<sup>5</sup>. Managerial decisions about internationalization must take into account the nature of the environment in which enterprises operate: obvious advantages may be balanced by costs that relate to cultural, administrative, geographical and economic (CAGE) distance (Ghemawat, 2007).

For our sample, all the parent firms but 3 have other factories abroad and for them the move to Asia can be considered a step in a process of incremental acquisition of knowledge of foreign markets<sup>6</sup>. By the mid-nineties firms in Veneto districts were faced by increased competition and felt that the advantages linked to their traditional local assets were rapidly fading away and their claimed superiority over non district firms was being questioned (Iuzzolino, Micucci, 2007; Iuzzolino, Menon, 2010; Callegari, Callegaro, Tattara, 2010). In order to meet the competition district firms now had to use a wider range of suppliers and to internationalize parts of production that were once outsourced locally.

The majority of the parent firms have plants in Central and Eastern Europe: in Poland, in Russia and in Slovenia, and especially in Romania. Today, in the most developed area of Romania there are difficulties in labour recruitment because of a massive emigration of Romanians. Because of the constant appreciation of the Euro in relation to the Dollar the relative cost of labour in Eastern and Central Europe has risen considerably, and this factor together with a lowering of transport costs to places elsewhere in the world means we are now seeing a transfer of production from Europe to North Africa and to Asia. In most recent years, China, and to a lesser degree, India, have offered European investors not only a

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<sup>5</sup> According to anecdotal evidence provided to us by the director of the Italian Foreign trade institute, and by the secretary of the Italian Chamber of Commerce in Beijing, the story of Italian foreign investments in China is not encouraging.

<sup>6</sup> The acquisition of information in "psychically distant" markets - different in culture, language, levels of education and economic development - is part of a learning process. Firms start with exports and gradually engage in producing abroad. Only at a subsequent stage are they willing and able to capitalize on their positions to achieve sales penetration in the local market (Johansson and Vahlne, 1977; 2009; Chang, Rosenzweig, 1998; De Propriis, Menghinello, Sugden, 2008), although the rapid growth of the Asian market gave a big impetus in this direction.

reservoir of cheap labour but also enormous and profitable consumer markets<sup>7</sup>. Available data on direct investments confirm a relative stagnation of flows moving from Italy to Central and East European (CEE) countries (+16% between 2002 and 2009 measured by the number of employees), while direct investments directed towards Asia have rapidly increased (+35%).

Internationalization derives from the ability to adapt firm specific advantages to the circumstances of foreign markets. Such adaptation takes multiple forms, including engagement in commodity flows, subcontracting, direct investments, commercial and technological agreements, licences and other arrangements formal and informal (Rugman, Verbeke 2005; De Propris, Menghinello, Sugden, 2008).

Data is currently available in a systematic way for trade flows and direct investments. Italy's imports from some CEE countries mainly relate to the clothing and footwear subcontracting trade. This is particularly the case for Romania, from where 61% of imported goods to Italy in 2009 were so related. For Romania, imports from that country into Italy are an end stage of a process which firstly saw the export of semi-manufactured goods and raw materials from Italian based firms to firms in Romania, owned either by local or Italian entrepreneurs; then the Romanian firms used the imported materials to manufacture and subsequently re-export to Italy finished products or advanced level parts, which are then distributed (Crestanello, Tattara, 2010).

Levels of imports to Italy of textiles, clothing and footwear from Romania were close to imports from China in value until 2006. Subsequently, China took the lead, but products imported from China have been mainly produced utilizing a model of full package outsourcing by Italian brands. Under this model, articles are manufactured by large local firms capable of processing high volumes at low prices; and raw materials and accessories are acquired directly in the Asian market, where it is possible to find quality and variety. There is not an equal flow of exports from Italy to China for these commodities. In contrast, Romanian imports from, and exports to, Italy are of similar values because Italian exports to that country provide the basic materials for producing future imports under sourcing agreements.

In clothing and footwear, due to the importance of subcontracting, commodity flows between Italy and CEE countries are basically reciprocal. Internationalization is accomplished by large inflows and outflows of commodities across a country's borders in a

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<sup>7</sup> The cost of labour in China and India is a fraction of that in Italy, and is definitively lower than in Central and Eastern European (CEE) countries, and energy and components purchased on the local markets are definitively cheaper than those purchased in Italy. International outsourcing to Romania is mainly cost-driven, while in the case of Asia it is market-seeking, first, and then cost-driven.



sequence of transactions that are, in most cases, internal to the firm (Tattara, 2005).

In the mechanical engineering industry a different situation exists. In this industry, control of proprietary knowledge of key aspects of industrial technology is important. Consequently, usually, when a firm from one country establishes a subsidiary in an emerging country in order to have access to cheaper resources, hierarchical relations between the parent company and the subsidiary are maintained, and only gradually is the subsidiary allowed to acquire autonomy in respect of either local sourcing or the sales market<sup>8</sup>.

Italian foreign direct investments are overall bigger in CEE countries than in Asia, but those investments in European countries are mainly in "traditional sectors", while in Asia the mechanical engineering industry is important (figure 1) and has been gaining ground rapidly in recent years. The rate of increase in the number of Italian foreign direct investments in CEE countries from 2002 to 2009 is nil in traditional sectors and positive in mechanical engineering industries (+5%), while both sectors have grown at significant rates in Asia (respectively 18% and 54%).

<FIGURE 1>

#### **4. The Case Studies: Different Strategies of Subsidiaries in Asia.**

Our case studies are summarized in Section 2-table 1. To better understand how a firm develops a competitive advantage, value chain theory divides up the business system into a series of "primary" activities. These are then conceived as being underpinned by "support" activities, providing various inputs or infrastructures that allow the primary activities to occur on an ongoing basis (Porter, 1985). "It is only at the level of discrete activities that the competitive advantage can be truly understood" (Porter, 1986, p. 13). Primary activities include procurement, inbound logistics, operations, outbound logistics, marketing and sales, and services<sup>9</sup>.

The organisation of the value chain is conceived as being characterised by semi-autonomous units which can vary their activities independently of one another. Typically a firm must locate downstream activities such as marketing close to the buyer in the countries in which it operates while upstream activities can, at least conceptually, be decoupled from where the buyer is located (Porter, 1986, p.16). There are two driving forces which may decouple the

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<sup>8</sup> See, for example, Gereffi, Humphrey and Sturgeon (2005, 85 ff.)

<sup>9</sup> This classification is tailored to our interviews and differs slightly from the classic Porter's classification (see Porter, 1985). For a recent study on offshoring by French firms, see Jabbour (2008).

links in an existing chain<sup>10</sup>, namely: the search for low cost resources, and, secondly, the desire to achieve a better product differentiation. This reflects the fact that there are thought to be two alternative kinds of competitive advantage that a firm can possess: one based on low relative cost and another on product differentiation (Porter, 1986, p. 25; Wathne, Heide, 2004).

Interviewed Italian firms moving to China and India came from different perspectives and each subsidiary employed different strategies according to: the motivations parent companies had for establishing them; the power relation between subsidiaries and their parent companies; and the strategies the subsidiaries were able to implement and pursue. For the purposes of this article, the subsidiaries have been grouped into 3 clusters. These include a first cluster where subsidiaries had a low level of independence thanks to a high power asymmetry with parent companies, and where the firms were initially established abroad in order to reduce production costs. In a second group, firms have been clustered which have been pulled into foreign markets by the internationalisation activities of larger network partners, and where the ability to compete abroad was a function of the technological embeddedness of the subsidiary. A third cluster includes subsidiaries for which the motivation to set them up included a significant consideration of accessing markets. These firms have a more autonomous management, and sell in the foreign market with their own brand products engineered in Italy and adapted to local market needs.

#### **4.1. Cluster 1. At First Seeking Cost Advantages but then Sales in Asian Markets.**

This cluster groups firms that initially went to Asia in order for the parent company to exploit differences in absolute costs of labour and components (Li et al., 2008; Swan, Allred, 2009)<sup>11</sup>, and more advantageous fiscal regimes. This strategy was pursued by 6 firms (E,I,N,L,P), but then for 3 of them, to varying degrees, there was an evolution. The firms making cotton textiles (P), welding machines (E) and fittings (I), once they had settled in Asia, searched for their own production and sale niches on that market, engendering a

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<sup>10</sup> Rugman and Verbeke (2004) assume a "normative" hypothetical balanced expansion over time whereby the firm specific advantages derived from sourcing locally grow at a similar rate to those derived from Asian market penetration. Our case studies show that this is not a desirable neither a profitable expansion path. Firms decouple procurement from distribution and sales market penetration.

<sup>11</sup> The factory making agricultural machinery in China (N), at Qingdao, is part of this group. It is a small factory located in rented premises, and produces small agricultural machines (rotary tillers), and also a basic gear box for its parent company. At the time of our visit the cost of labour in the factory was 4% of the total cost and components accounted for 70%, mainly outsourced. In Italy, the cost of labour was 35% of the total for the same gearbox in the same period. The management in China faced no quality problems as these machines are unsophisticated and the components required have large tolerances. The profitability derived from producing in China was explained in the following terms: cost of production for the gear box was 90€ in China and 130€ in Italy. The cost of sending the China produced gearbox to Italy was less than 1€ per unit all included (freight, duties etc). 60% of production was sent to Italy, and 40% to the firm's representatives in the United States.

change in management strategy that was not planned in advance, but proved necessary to their survival.

### Cotton Textiles Producer

The cotton textiles producer (P) is an important firm producing high quality fabrics, mainly for shirt making. It has suffered from an adverse market for classic garments in Europe, and by competition from low cost producers, and chose to transfer almost the whole of its production to its new plant in India, and to two plants it owns in the Czech Republic, which were previously producing for it as subcontractors. Only design, the manufacture of textile samples and a very limited segment of the production process have been retained in Italy. At the end of the nineties, the Italian plant had almost 1000 employees and produced 20 million metres of textiles. By the time of the interview, production was split between the Indian plant which was producing 7-8 million metres a year, but which had a capacity double that, the two Czech Republic plants (producing 1-2 million metres a year), and the Italian plant (producing only 250 thousand metres a year) (Campagnol and Tattara, 2008).

The firm was attracted to India by the good quality cotton yarn available, and by the low cost of labour. The cost of labour for its Indian plant was about 100€ a month per blue collar. The factory had a complex administrative department that took charge of the large initial investment and which also marketed the product in India where, at the time of the interview, almost half of the production of the Indian plant was sold. The plant was vertically integrated, including in its activities the manufacture of raw yarns and cotton fabrics. From the parent company in Italy came design and dies; although dies were sometimes also purchased in India where they were manufactured under European licence. Machines used in manufacture were almost all Italian or German, most of them brought from the parent Italian plant or from the company's Czech Republic plants, and have been imported duty exempted under special provision.

The cost structure for producing 1 metre of cotton fabric "I dogi" in the India plant is detailed in table 2. This fabric was sent to Italy to be sanforized and distributed from the Italian headquarters<sup>12</sup>.

<TABLE 2>

The extent of the cost reduction achieved by the Group by producing in India in comparison

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<sup>12</sup> The reference is to cloth sold in Europe, and the Group took advantage of a recent plant built in Treviso, Veneto, a few years before moving production abroad.

with an equivalent production in Italy was significant. As one of the owners in Italy told us:

*"It is no longer possible to meet international competition with cotton textiles produced in Italy. All factories are closing down. The high cost of labour, the high cost of energy and the appreciation of the Euro have put us out of the market. Our main competitor produces in the Czech Republic and in 2009 it set up a new plant in Egypt. Now the cost of labour in the Czech Republic has rapidly increased and the country has lost its attractiveness."*

The unit cost of production of high quality cotton fabric in India was around 2,38 € per metre (table 2), 1/3 of the cost in Italy. The sale price varied between 6 and 8 € per metre and consequently after 2005 the Group began again to make profits, although the capacity of the Indian plant was still underutilized.

A few years after having established a main plant in India, the Group incrementally added further operations there. Familiarity with the country and the size of the market induced the textile factory to enter the shirt making business, an activity that was never directly undertaken in Italy but which, at the time of the visit, absorbed more than 1/3 of the total production of the plant in India. In order to enter the new business, in 2005 the Group established Laguna Clothing, a 50:50 Joint Venture between the Group and Aquarelle of Mauritius, a shirt maker working for the most famous European and USA brands, with the aim of providing high end shirts. Initially, shirts were manufactured in a single plant in Bangalore with a capacity of 5,000 shirts per day, but recently (2010) a new plant was added bringing the total capacity to 15,000 shirts per day, using the fabrics produced by the Indian plant as well as those of others. The Group had never made shirts before; it "exapted"<sup>13</sup> the traditional home country organization of production to the new environment, and added the shirt making phase downstream of weaving in order to increase revenue and profits. By 2009, the shirt factory in Bangalore was responsible for about 40% of total Indian textile production, a percentage likely to increase when the new planned factory comes on stream.

### Fittings Producer

Access to cheap labour was an important country factor condition determining the offshoring decision by other firms of this cluster. The fittings producer (I), belongs to a group based in Brescia, Italy, which is a leader in the fittings sector for plumbing and heating. It

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<sup>13</sup> We refer to this choice as "exaptation", a term imported from biology since the change has implied a new functionality in the product or in the management of the firm's organization (Villani et al. 2007; Lane et al., 2009).

has plants in Italy, Mexico, and Romania and in 2005 it opened a plant in China (Nanjing) in order to reduce production costs. At the beginning of 2007, production for the Italian parent company started. The production manager told us:

*"It was contract manufacturing for the most simple fittings, that are no longer produced in Italy. However, high quality forged brass rods made to standard CW617 – the standard required by the American and European markets for fittings - are not locally available. So brass rods were purchased in Italy by the parent company and then sent to China. From the brass rods fittings were made through a die cast process and then sent back to the Italian company for distribution. On the whole, the process provided only a marginal contribution to Group turnover, and production was not very profitable both because in China the cost of labour is relatively high in respect to other South Asian countries and also the brass rods sent from Italy were made more expensive by the time and cost of transport"*

In die cast manufacturing, the cost of labour in the Chinese plant was 30% of the manufacturing cost; the remaining part was accounted for by plant amortization and depreciation, metal losses, and energy (which in Nanjing costs 50% less than in Italy). The Chinese plant was less automated than the Italian plant, especially in respect of the movement of components, and taking everything into account the overall cost reduction was limited to 25% of the cost of the same product manufactured in Italy, and so not worth the initial investment, which was substantial (table1).

At the end of 2007 a new management decided that the Chinese plant needed to change its function, and to move from contract manufacturing for its parent company to producing brass components for the Chinese market. At the time of the interview 25% of total production was sold in China. It was a complex move because the Chinese market did not demand sanitary metal fittings for private houses where fittings are mainly low quality plastic ones, and the new manager has been gearing production towards the automotive and shipbuilding industries. At the time of the interview, General Fittings China supplied a wide range of standard products as well as articles tailor-made to specific customer demands. This change in functionality reduced brass imports because in China Western accreditations were not required; the Chinese factory used brass purchased in the local market and competed successfully with local producers.

Welding Machines Manufacturer

The firm producing welding machines (Ritmo, E) shared part of this story of learning and adapting. The Group produces welding machines for any size of plastic pipes and entered China to reduce manufacturing costs. The building was rented and the initial investment was kept to a minimum. The Group had production plants in Italy and Bulgaria and the production made by the plant in China was marginal to the Group turnover. Ritmo entered China because two important customers required a lower price and the initial purpose of the investment was to assemble and sell in Asia machines for which the parts were produced in Italy.

To off-shore the assembly line turned out to be not the correct strategy. The importing of components was burdened by duties that varied between 5 and 15% of the imported value (no drawback was allowed because the machines were sold in the local market) and, at the beginning, the imported components accounted for 70% of the final value: the selling price was still too high for the Chinese market<sup>14</sup>. The turnover for the first couple of years was very small, a few hundred thousand Euros. In 2008 the strategy changed. A new manager created a new brand (NewRitmoAsia), and launched a line tailored to the East Asian market with its own brand (mainly China and Indonesia). The aim was to manufacture locally almost the entire product, whilst maintaining good quality and reducing drastically imports from Italy which by the time of the interview were reduced almost to nothing; an hydraulic cylinder was still imported because it was not available to the same quality or, at least, it was available but not by firms that supply the short buckles that were required by the Chinese plant.

At the time of the interview, savings on Chinese components varied between 30% and 50%, but, against this, at the beginning returned items had peaks as high as 80%. For example, nickel and zinc Chinese plating firms very seldom produced to Western standards, and some metal components were roughly finished and were not acceptable to the firm. A strict monitoring process was introduced and the percentage of returned items was lowered to less than 30%, but this was still too much.

Both the welding machines manufacturer (E) and the fittings producer (I), at first offshored in order to reduce their costs of production but such a strategy did not lead to market success and both consciously demonstrated timely responsiveness and rapid and flexible product innovation, along with the management capability to effectively coordinate and redeploy internal and external competences in order to sell directly on the foreign market.

The manager of the fittings producer (I) searched for a new functionality, which was to make automobile components, which the company did not make before. The manager of

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<sup>14</sup> Ritmo remains the undisputed leader for electronic machines, where price is less important.

welding machines (E) sought local subcontractors for almost all components that were previously imported from Italy, delivering a considerable cost reduction, and repositioned the product by launching a new series. This move implied a process of selection of suppliers, a standardization of production, the ensuring of quality control, and the development of relations of trust; only a few strategic components were still imported. This was a difficult process for a small firm like the welding machine firm, as the market for components both in China and India was not well developed and reliable components were often produced by companies supplying big orders for large international firms, but not the limited amounts demanded by small sized customers (Buckley, 2004; Lemoine, Ünal-Kesenci, 2002). The local supply market for components and parts that can be sourced by a small firm was composed of backward local firms who lacked testing equipment and whose product quality was often inconsistent (Humphrey, 2008; Kaplinsky, Farooki, 2010). They were not capable of implementing the correct procedures, did not know the proper vocabulary, and technology was seldom trustworthy.

#### High-pressure Washer Manufacturer

The problem of the quality of Chinese components has been tackled and solved successfully by the subsidiary company in China of an Italian parent company that produces high-pressure washers and cleaning machines for professional cleaning. Hydroeast (L) went to China to buy at low cost components for its washers and send them back to Italy to be assembled, or send them as spare parts to the various markets where the Group sold its products (including USA, Europe and Russia). The Chinese market for high-pressure washers was still in its infancy and the volume of production sold in China was modest. At the time of the interview the percentage of components the factory in China was returning to its local suppliers was less than 2%. The manager of the Group told us:

*"We have in China about a hundred suppliers, of which 30 are stable suppliers and each of which I know in person. To these I grant constant orders, so that they can organize their warehouse and respond to our orders just in time. Every new component needs a long preparation. On average, from receiving the order to the consignment takes one month because our suppliers are small local mechanical engineering firms and communication is difficult. The production manager of our subsidiary is in daily contact with our suppliers. If they use reliable machines we test a few components, randomly, but if the suppliers use*

*machines that we don't consider reliable we test every single component. Any new order is split into two suppliers that compete one with another and enter a selection process.*

*We have chosen small size suppliers because we purchase small bucks and for this reason we have localized our plant in a district of small firms [Ningbo south of Shanghai]. At the end of the year our suppliers are evaluated and the best suppliers (according to aspects such as quality and timely delivery) are awarded the Hydroeast certified supplier status. We organise an award ceremony at which all our suppliers are invited and they take part enthusiastically with all their families. We have created in China the relations of trust that we had, and still have, in Veneto with our suppliers<sup>15</sup>.*

#### **4.2. Cluster 2. Following Large Network Partners.**

This cluster groups firms that produce for third parties under subcontracting agreements and have been pushed to Asia by their clients. Retaining key clients was the main motivation. Holding onto these clients meant opening subsidiaries in Asia in order to reduce production costs, and to maintain an efficient and timely service for their customers. It included the members of the Carraro Group (B,C,D,O,Q), the technical textiles firm (H), and a manufacturer of furniture components (G).

##### The Mechanical Engineering Manufacturers

The main customers of the Carraro Group, a big international brand in agricultural machinery and construction equipment, sell machinery directly in Asia, and have pressed the Italian parent company to open production units in Asia to shorten the time to market of the product and to maintain quality at a low unit cost. The Group has invested abroad in response to the demands of their main customers, and value chain leaders, which subsequent to deciding to move to Asia encouraged their suppliers to follow suit and off-shore their production. 3 of these firms made big initial investments, around 10-20 millions € (B,C,Q). The other two (D,O) have a comparably lean structure as they occupy rented premises. In fact, the Group's main customers base their reputation on an efficient repair capability, and so required the Group to supply components as quickly as possible. Labour

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<sup>15</sup> Hatani shows that, in the case of Toyota, and possibly of other large international firms, suppliers in a well integrated network can enter a foreign market even before the establishment of the core firm's assembly unit (Hatani, 2009). On the importance of social networks for manufacturing in developing economies see Danis, De Clercq, Petricevic (2011).



cost was much less important.

Among the main customers of the Carraro Group in India (C) and China (B) are producers of tractors and construction machines. In India, the subsidiary opened in 1999, under pressure from Case New Holland; it produced for Case, Caterpillar, John Deere and others and axles for lorries too; a limited quota, 5-10% of production, was supplied to the Indian firms Larsen&Toubro and Mahindra (for its tractors). India is the largest world market for tractors, but only recently have producers started producing 4 wheel drive vehicles, whose axles are a speciality of the Group. In this sector, interest in the Asian market has grown in recent years. For example, Caterpillar has moved a significant part of its business to Asia, and in 2008 this market was responsible for 20% of its turnover (compared with 12% in 2006). To reinforce its presence on the Asian market it has recently purchased the Korean firm Jinsung, which produces undercarriage components.

The establishment of the two subsidiaries in Asia was a part of the trend to follow major customers to Asia, although the managers of the two plants kept a fairly diversified customer portfolio. As well as producing for similar customers to its sister Indian factory, the Qingdao<sup>16</sup> plant in China also made steel gears for Kone, the Finnish multinational that produces lifts, escalators, and loading bays, and which in 2005 purchased significant enterprises in Asia (Giant Elevators in China and Fuji Lift&Escalator in Malaysia).

To sell on the Asian market proved difficult and a significant part of the Indian production, and a small part of the Chinese production, were sent back to Europe. For example, both in India and China, the subsidiaries built drivers for eolic turbines required in Germany by a partner of the same Group. The global recession of the last two years drastically reduced orders from international corporations and the Group managers were targeting the more flourishing Chinese and Indian markets. The attempt to sell domestically was delegated by the manager of the China plant to a Chinese dealer Guangzhou Match and prospects were favourable. The latest information from the Group headquarters, in 2010, tells us that the value of turnover due to sales in the Chinese market had reached 27% of total turnover of the Qingdao plant; at the time of our visit, in 2009, the proportion was as low as 2%. The increase was particularly due to the drive production. China is now both a prime production location and a key market<sup>17</sup>.

One characteristic that distinguished the 2 Carraro factories, in India and China, is that the second was able to find on the domestic market high-level subcontractors supplying gears of

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<sup>16</sup> On Qingdao, Kim, Zhang (2008)

<sup>17</sup> Our results seem to confirm the finding that investment is generally more market seeking in China and resource seeking in India, with a tendency to evolutionary learning-based upgrading in both countries as argued by Bruche, 2009.

high quality that in India were not easy to find. Consequently, the factories in India and China had different structures. In India the factory was vertically integrated with the nearby plant Turbo Gear that belonged to the same Group, and had its own steel hardening process, and sold 50% of its steel gear production to Carraro India. In the case of the Chinese Carraro factory, in contrast, steel gears were purchased from third parties, the customer taking advantage of the opportunity to source from large firms that worked for the army; only a few special parts, such as gaskets, were imported from Italy<sup>18</sup>.

The industrial cost in China of the main product, axles, was at the time of our interview, 30% less than for similar products manufactured in Europe, and 15% higher than for those made in India.

### Technical Textiles Producer

The textile producer (H) produces high-range quality yarns using the most advanced cotton spinning technologies available on the market. The yarns are used for the production of special fabrics for clothing, furnishings, and sophisticated industrial applications such as filtration and protective wear. The Group is the leader in Europe in this field.

The managing director of the Group told us:

*"When our main customer decided to offshore one of its textile units to China we understood that we would not be able to continue to supply it from Europe with our yarns, because the cost would be too high. We signed a three-year manufacturing agreement with it that covered the start-up of our new plant, and we chose a new location in China together with our customer, next to his plant"*

Production costs include electric energy (which in Italy is twice that in China), depreciation and amortization of machines, and, least significantly, the cost of labour. Production is highly automated so that per capita productivity is almost the same in different countries<sup>19</sup>. At the time of the interview the parent company was seeking to utilize the full capacity of its Chinese subsidiary by outsourcing orders from Italy. The purchase guaranteed by the main

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<sup>18</sup> The subsidiary gear manufacturing plant in Suzhou (O) was established to supply small metal sinterized gears to international producers of electric and gardening tools who have moved to China a part of their production (such as Bosch, Black&Decker, and Stihl). 57% of its production is sold to international firms operating in China, 27% to firms operating in North America and the remaining part to companies in Europe. The decision to off-shore this production was completely independent from the decision to off-shore the Group subsidiary in Qingdao (B).

<sup>19</sup> In fact, during the world crisis employment in the Chinese plant declined by 1/3 and then at the first sign of recovery, in early 2010, the management increased staff working hours (12 hours a day instead of the previous 8 hours, for 6 days) leaving unaffected the number of employees, and so the per capita production is now much higher in China than in Italy.

customer amounted to 40% of the plant's production, but only 13% of its optimal capacity. To successfully place the remaining part on the Chinese market is a difficult task. The manager of the textile plant explained the problem:

*"We had two customers in Europe, buying yarns for their industrial filters, one German and one Scottish, both of which off-shored to China and once we also moved there we felt sure we would be able to continue to sell to them. It has not been so. Both have left us and have chosen new Chinese producers that sell to them at a price that is 1/3 of our price. Filters sold in China are of very low quality and our price is not competitive but they are preferred because of the absence of strict regulatory standards in the domestic market.<sup>20</sup>*

*Not so for our yarns sold in Turkey where the quality of our yarn is appreciated and we are able to sell to Turkish firms even though our product is more expensive than competitors' prices. The reason is that Turkish firms sell mainly to European countries where the observation of regulatory standards is compulsory."*

#### Furniture Components Firm

The furniture components firm (G) in China started in 2007. The factory was located in the export industrial zone of Dalian, to the north East of Beijing, and produced solid wood kitchen doors. Raw materials included imported water varnish, dried wood imported from the United States (oak), Russia and Estonia (ash and birch), and wood panels bought directly in China<sup>21</sup>. The firm exported doors to large kitchen producers, including British and American manufacturers, among these firms belonging to the Ikea Group. For this producer also off-shoring has been in response to pressure from its main customers which required door panel production at a price the parent company was not able to produce in Italy.

At the time of the visit purchasing agreements were arranged by the Italian headquarters and the Chinese plant acted in fact as an off-shored producing unit of the Italian parent company. In China the cost of labour was around 5% of the total cost of production; raw materials and metal components accounted for 70% and varnishes for 15%. The remaining 10% or so was down to general expenditures. Local suppliers provided all the packaging

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<sup>20</sup> Standards are likely to be of reduced significance for China according to Kaplinski, Farookil, 2010a; Kaplinski et al. 2011; Humphrey, Schmitz, 2008. We have evidence that the lack of regulatory standards in this market prevents Italian firms from selling some products to China. For example the technical textile firm sells regularly in North America, but is not able to sell on the Chinese market because a lack of adequate regulatory standards makes its products too expensive for the domestic market. This is a situation shared by the fittings producer which die casts two kinds of brass bars, with different specifications and prices for the two markets.

<sup>21</sup> China is a wood resource poor country with a very low forest per capita density.

materials. The main customer was Ikea USA; it would not have purchased the more expensive kitchen doors produced by the parent company in Italy and demanded a product at a lower price, a demand that the Italian plant was not able to meet.

In all of the firms in cluster 2 the cost of labour is not a significant part of industrial costs. For all it amounts roughly to 5% of total costs or less.

### **4.3. Cluster 3. Exploiting Asian Market Opportunities to the Forefront.**

This cluster groups a set of medium-sized firms that sell on the final market with their own brands (A,F,M,R). These firms had important brand positions in Europe and were established in Asia to both gain access to a large sales market and to reduce costs of production. Direct sales from Italy to China, or to the broader international market, were inhibited by the high cost of the Italian product, by import duties and by the distance. These firms were fairly independent from their parent companies, and market directly their own production under their companies' brand names.

#### Manufacturer of Office Furniture

Firm (A) is a world leader in the design and manufacture of office furniture and partitions, and is characterised by its use of leading edge technology, and its products by functionality, ergonomics, durability and environmental friendliness. The parent Group has four production plants in Italy and this one in China. The typical customer is an architecture studio and the Group takes part in different competitions at the international level. The Chinese subsidiary was created following the visit to Italy of a delegation from Beijing municipality looking for foreign investments. Beijing Building Materials Group, a holding of the municipality, has minority control.

At the time of the interview, 75-90% of raw materials were purchased on the Chinese market, exact amounts depending on what is being produced, and 25-10% came from Italy. In China, the company had a network of suppliers while a strategic supplier (working on aluminium bars) worked on the factory premises, in close contact with the contractor's technicians. The Chinese subsidiary sold its output on both the international and Chinese markets (around 50%). The main advantage of producing in China was the ability to be able to respond quickly to consumer demand. The frenetic pace of construction occurring in China makes the business of contract furnishing frenetic too.

Raw materials and semi-finished products acquired in the host country represented about 30% of total turnover; the cost of labour 14% of total turnover (the unit cost varied between 150€ and 170€ per month); and the final industrial cost was 50-60% of the Italian cost for a comparable item.

#### Producer of Fairground Rides

The next firm (R) is a big producer, and world leader, of rides for the amusement industry and in the design of the layout of amusement parks. In China, the Group realized a quarter of its total turnover. The Group has other production plants in Russia, Slovakia, and the Philippines. With the appreciation of the Euro the increase in production costs made it difficult for the Group to continue to sell from Europe to China and the parent company decided to offshore production to reduce costs. Initially, a plant was set up in the Philippines because it was seen as offering a “Western” milieu and an avoidance of linguistic problems, but it did not prove the right choice for selling to China where Philippino exports were subject to duties. The Group then moved directly to China where it opened a factory in Suzhou, close to Shanghai. The products were often single rides, or produced in very short series (7-8 rides). They were reworks of designs produced in Italy and were assembled using parts and components made by Chinese subcontractors (80% of industrial cost).

#### Producer of Children’s Bedroom Furniture

The firm (F) is an Italian family enterprise and is the leading manufacturer in Italy in the production of children’s bedrooms and bedroom furniture. Its products are distributed in Italy, Europe, North America, the Far East and Africa. The creative driving force of the company is its centre in Italy dedicated to innovation and design quality.<sup>22</sup> The Group entered China with a precise market oriented attitude, intending to establish a strong position in the niche market for children’s bedrooms. At the time of the interview the Chinese firm produced only children’s furniture in melamine (MDF) and sold 80% of the product of the Chinese plant on the local market. The panels and various accessories were bought in China, the design was made by a Group design team in Italy, and special accessories were bought in Italy (e.g. Ferrari<sup>23</sup> metal drawer guides). The firm in China had a

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<sup>22</sup> The Group entered the Chinese market in 2005 in a joint partnership with a local firm, although at the time of the interview the Group was intending to purchase the share of its partner.

<sup>23</sup> As the manager told us: “I could buy them here, but the brand Ferrari deeply impresses the Chinese customers, although it is just an homonym of the famous racing car maker”.

unit cost, for the same product, 30% less than the cost of its Italian parent company. The lower cost was due both to savings on labour and on components, particularly metal and glass parts. The sale price was higher than that of competitive products by 7-8%, but the difference reflected a recognised quality premium.

#### Producer of Radiators

The radiator producer (M) is an Italian-Chinese partnership, the Chinese partner being Golden Tiger Radiators of Beijing. Following the purchase, the Group brought to China its own machines, made products to its design (mainly tubular radiators), and started selling on the domestic market; this absorbed the entire production. A project to also sell to Russia was underway at the time of our interview.

### **5. From Competitive Advantage to Dynamic Capabilities.**

The case studies have revealed that an adequate understanding of the evolution of the organisation of value chains requires an awareness of the effects of the particular strategies pursued at various points in the chain. That is to say, value chains are not just structured in a simple linear fashion according to the behaviour of perceived chain leaders. Rather, our analysis indicates that value chain structure and organisation has a dynamic character, and that even small and medium-sized subsidiaries that are not themselves chain leaders can contribute to that dynamism.

Of interest here is that some of the subsidiaries we interviewed themselves developed new capabilities – dynamic capabilities (Teece, Pisano, Shuen, 1994) – , integrating, building, and reconfiguring internal and external competences in the face of a changing environment and an evolving competition. Through utilising their core competencies the subsidiaries were able to continuously create and upgrade their asset bases (Teece, Pisano, Shuen, 1997, p. 516; Tallman, Fladmoe-Lindquist, 2002, p.117-18), and build sustainable competitive advantages.

The development of dynamic capability is influenced, firstly, by the key role of strategic management and its ability to appropriately adapt, integrate, and re-configure internal and external organizational skills, resources, and functional competences; and, secondly, by an ability to adapt to shifting environments. At the time of our interviews, the fall in international demand was indeed providing a shifting environment, pushing subsidiaries to orient themselves to a local market which was still expanding. This was enabled by the fact

that Asian countries do not lack skilled technicians capable of design innovations, and neither do they lack sophisticated consumers.

From our case studies, it is clear that some subsidiaries were able to develop their dynamic capabilities by: leveraging access to skilled labour, engaging in new forms of production organisation, developing a capacity for product differentiation, and participating in new marketing, distribution and sales activities. Below, the importance of these activities are discussed, both for the subsidiaries which engaged in them to improve their dynamic capabilities, and more generally.

#### Leveraging Access to Skilled Labour

The Indian subsidiary (D) of the Carraro Group - unique among the interviewed firms-, was able to leverage the science educated segment of the Indian labour market that has rapidly grown in recent years, to set up a research team of engineers dedicated to tractor design and directed by a local manager. The firm took advantage of high levels of competencies by Indian engineers to carry out a capability building process, which has contributed key competences to the parent company. The subsidiary was created in 2006 with a staff of 45 engineers who work, under local management, closely with the Group's Italy based design department to design small tractors that big brands subcontract to it. Integration has been made possible by the advanced standardization and codification reached in design of mechanical components and by a common software that allow the two firms to interact in real time. The cost of an engineer in India is half of the cost of a newly employed engineer in Italy, so the difference is not as big as the difference in blue collar wages, but flexibility and versatility of high level engineers is greater in India than in Italy, and the number of employees of the Indian subsidiary is due to increase in the near future. The plant of the mechanical engineering Group in China (B), in the same vein, has signed an agreement with a polytechnic that supplies good engineers.

#### Developing New Forms of Production Organisation: Moving from Vertical Integration to Subcontracting, or Vice Versa.

Subcontracting can be more efficient than direct production because it offers the potential for lower sunk costs and/or for enhanced flexibility. However, such benefits may be offset by other, possibly higher, costs. When assets required to produce a good are specific, they are of value to the firm needing them and if provided by another firm can induce the

supplier to engage in opportunistic behaviour. Also, it may be necessary to rigorously test quality. Furthermore, the outsourcer is vulnerable to disruptions in supply (Endervick, 1989, p. 54). Also, outsourcing often leads to high costs of coordination, maybe because of physical distance, or maybe because of difficulties in communicating with suppliers (Meyer et al., 2011, p. 245).

In Italy, mechanical engineering producers make substantial use of subcontracting but in an emerging economy context there may be a preference for vertical integration. Let us consider, for example, the subsidiaries (B and C) of the Carraro Group. In the past, this Group outsourced in Italy, especially in the neighbourhood of its main plant, and encouraged some of its employees to set up their own firms, leasing them some of its own machines. Even today, the Italian plant assembles components that are produced in the nearby district. In the case of the Group's India plant (C), however, all the manufacturing process takes place inside the firm. Selling on the international market requires the adoption of well defined standards and the vertical integration of operations guarantees for a buyer that a product has been made in accordance with particular desired characteristics. In the Group's Chinese plant (B) some phases, such as hardening (an asset specific component<sup>24</sup>), are carried out externally and the firm has a sophisticated department to test incoming components, a function that in Italy does not exist as components are certified by the suppliers themselves.

The integration of new suppliers into the value chain increases coordination challenges as reliable producers in India and China are seldom available given the limited quantity demanded by the small and medium-sized subsidiaries we have interviewed. External sourcing requires the existence of a group of competent and reliable suppliers and so in these countries there is a need for small local producers to improve their performances<sup>25</sup>. Both in China and in India this creates a gap between capabilities required for the domestic market and those required by international customers, which raises the degree of monitoring and control required by buyers. Suppliers and customers cannot be easily linked and de-linked and subcontracting locally may require firms to develop relationships of trust (see, for example, I,L,and R) and to run their own technical test departments (B).

Small foreign firms that want to buy components locally need to engage in a process similar to that which led to the formation of Italian industrial districts. Many difficulties would prove

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<sup>24</sup> When asset specificity increases, the hazard of opportunism, as well as the bilateral dependency of the firms involved in the transaction, increases (with higher transaction costs), and subcontracting is less likely. Subcontracting transactions involved by firms I,L,R involve low asset specificity - although the firms' products have high specificity (i.e. all three firms have well defined brands) - , have low transaction costs, and are more easily managed through market governance (Zott, Amit, 2006).

<sup>25</sup> in developing countries suppliers are expected to meet requirements that frequently do not apply to their domestic markets (Keesing, Lall, 1992).



more tractable if large Italian firms were present in Asia, as this size of firm can help to create a network of local reliable producers. This is what happened in Italian districts in the sixties when relatively large firms outsourced a part of their production and created a market for parts and components that was at the origin of production fragmentation, capability building, and specialization that are the cornerstones of the industrial districts<sup>26</sup>. Basic assemblers do not need large direct investments. Some of them work in rented premises (E,L,R assemble manually simple components) and sunk costs are very low in comparison with costs sustained by vertically integrated producers. Complete labour flexibility (due to low wages and very limited labour protection) is available to even vertically integrated plants; this makes the ability to exploit flexibility through local networks of producers less relevant than in Italy.

#### Engaging in Product Differentiation and Greater Product Sophistication: A Way of Achieving Competitive Advantage.

Three subsidiaries (E,I,P) directly addressed the issues of redesigning and re-engineering their products, Two subsidiaries (E and I) began with simple production facilities carrying out basic production for their parent companies but their initial projects of assembling in Asia Italian components proved faulty. Both firms reshaped their product offers and production processes – the welding machines producer (E) outsourced locally previously imported components – in order to sell locally, launched its own brand targeted to the Asian market (NewRitmoAsia), and contributed to re-defining the core competencies of their parent companies. The fitting producer (I) addressed an entirely new market sector, the automotive, the textile cotton producer (P) added a shirt making activity to its traditional operations and repositioned itself on the international market, in the process internalizing an activity with high value added; a process it never did before, neither at home or abroad.

#### Participating in New Distribution, Marketing and Sales Activities.

According to Porter (1986, p.27), an important determinant of a country's attractiveness as a platform for industry is the character of domestic demand. The proportion of sales made in the Asian region is an important indicator of the success of an Asian venture, and as such it plays the role of a critical performance parameter. For the factory in India (C) belonging to the Carraro Group, the products it sends back to Europe account for a much larger

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<sup>26</sup> Langlois (2003) refers to Williamson's famous heuristic dictum: "In the beginning there were markets". This is simply not true. For the role of large firms in Italian districts see Tattara (2001). For a recent assessment of the Italian districts see Becattini et al. (2009).

proportion of its turnover than in the case of the Group's factory in China (B); and the latter's prospects are brighter. During the recent global crisis, international demand drastically declined, and the factory in China addressed directly the comparatively more dynamic Asian market in order to fill idle capacity. Of the 16 subsidiaries interviewed, the proportion of turnover accounted for by sales in China is significant for 5 of them (E,F,I,M,R). The entrance into the Chinese market has not been easy for any of them as cultural and administrative distances have added to geographical distance, and a huge investment and management dedication was required.

The furniture producer (F), has developed its own network. At present, it has in China 50 retail stores selling under its own brand, each with the same design, colour and atmosphere. These stores are located inside "furniture cities" that are run by local retailers on a franchise basis<sup>27</sup>, at a cost to the firm that is clearly lower than the cost in Europe. A second selling route is that of sales to purchasing groups. These are common in China when lessees or new owners purchase, and then need to furnish, flats that are part of a new block, a frequent occurrence due to the fast growth of the Chinese cities. These groups operate on the internet and the firm has a strong presence in this market. A second example is the radiator producer (M) that has built on the experience of its Chinese partner, Golden Tiger Radiators and its personnel. The Italian Group maintains direct sales links to building firms, in addition to selling through retailers. 80% of sales are in the town of Beijing, where the climate is harsher and the population richer than in other towns.

Retail distribution on the Chinese market is difficult as the product first requires to be reworked to make it suitable for Chinese tastes and habits. For example, the furniture firm (F) reports considerable waste in adapting Italian designs to the size of wood panels sold in China that are of different size to those sold in Europe<sup>28</sup>.

## **6. Social and Regulatory Determinants of Enterprise Behaviour and Value Chain Restructuring**

Our research has shown how the structure and organization of value chains are subject to varying strategies carried out by members of the chain, with some developing new dynamic capabilities in response to a changing environment, including particular social and regulatory contexts.

Duties on value added in particular locations, tariffs on imports, the promptness of local

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<sup>27</sup> The firm (F) enters into a continuing contractual relationship with local retailers that operate under the franchisor's trade name, with the franchisor's guidance, in exchange for a fee.

<sup>28</sup> Children's rooms in China often require a grandmother's bed, resulting in different layouts of the original projects.

bureaucracy, language difficulties are all elements that may condition decision making. One interviewed firm (R) highlighted the importance of reduced import duties in influencing plans to establish a subsidiary in Asia. Another two (E,I) changed their initial plans because the effect of import duties had not been adequately considered. The lack of standards in the Chinese market was at the root of difficulties experienced by another firm (H) that was not able to sell its (relatively) expensive product on the local market, where the standard required elsewhere was not needed.

There can also be social and cultural constraints on, and facilitators of, enterprise decision/making and success. In fact, China and India differ from Europe in culture, legal traditions, business systems, and degree of political risk (Park, Luo, 2001; Prevezer, 2008; Estrin, Prevezer, 2010; Towers, Song, 2010; Yueh, 2007). Only 2 Italian managers out of the 16 we interviewed (firms E,G) wrote Chinese, and so for most every communication, from communications with workers to communications with the political authority, had to be mediated.

The Chinese system is described by Italian managers as a flexible system where all is negotiable, from the basic rules that govern labour to taxes, export permission, and more. Some of the firms we interviewed were located in special economic zones, and it is well known that these played an important role in China's striking performance. Special economic zones are characterized by their institutional flexibility that stems from having a privileged political status, the possession of an autonomous fiscal authority, and the employment of a streamlined organizational structure (Zheng, 2010). The system is for the most part considered adequate and attentive to the needs of foreign firms, particularly outside of the main cities, in the periphery, where foreign investments are most in demand, and are a sign of distinction for the political leaders in their effort to alleviate unemployment; and so negotiations are much easier. No one entrepreneur referred to the system as corrupt, but all agreed that interacting with Chinese institutions takes a lot of learning through trial and error. In India, transparency is much more valued but political uncertainty is much higher and this negatively affects Italian entrepreneurs.

## **7. Conclusions.**

This article has reported on an analysis of case studies of Italian multinationals that have invested in Asia. Cases were differentiated into 3 clusters according to variations in the motives for Italian parent companies to establish new subsidiaries in Asia, the relation between the subsidiary and the parent company and the strategy pursued by the subsidiary.

All firms moving to Asia sought to increase their competitive advantages based on a difficult to imitate asset - their technological and organisational capability -, combined with reduced costs of production following from the relocation of business processes to low wage locations. In a fast-moving business environment open to global competition and characterized by the dispersion to various geographical locations, the achievement of sustainable advantage requires more than simply moving to low cost places. It requires also a capacity to enhance a subsidiary's capabilities through the creation, extension, and upgrading of a firm specific initial asset, and - when necessary - reconfiguring it (Teece, 2007). Our study shows that the possession of dynamic capabilities often associated with high-tech industries also proves to be relevant for firms operating in traditional sectors, but they are more difficult to acquire when operating in poorly developed markets, and where firms are faced by institutional constraints that are particularly liable to affect small firms. Several subsidiaries adapted quickly and moved to develop new products, technologies, and commercialization strategies. But almost all firms, including those that were pushed to Asia as part of an international network, had to face a decline in demand and were required to search for new commercial opportunities and customers.

The interviews with senior managers identified the background economic elements that allowed firms to move to new strategies. Only the presence of firm specific advantages such as the ability to organise local resources, to adapt product design, and to develop own marketing and distribution strategies led to greater market success, but a capacity for flexibility was required. For example, the achievement of a reduction in supplier uncertainty, and the development of appropriate marketing strategies, required the subsidiaries to employ flexible management strategies.

Our research challenges theoretical approaches which tend to see production chains, value chains, or commodity chains as relatively static organizational forms, rather than, as suggested by this paper, as much more fluid phenomena. The character of inter-firm relationships are liable to (possibly frequent) change as individual enterprises - even small enterprises - cannot rely on their initial competitive advantages, and must strive to sustain their advantages in the context of dynamic, changing environments.

## **References**

Agarwal J.P. 1980, Determinants of Foreign Direct Investment: A survey, *Weltwirtschaftliches Archiv*, 116:763-773.

Becattini G., Bellandi M., De Propris L., (eds.), 2009, *A Handbook Of Industrial Districts*, Edward Elgar

- Bruche G., 2009, The Emergence of China and India as New Competitors in MNCs. *Innovation Networks. Competition & Change*, 13(3): 267-288
- Buckley P.J. and M. C. Casson, 1976, *The Future of the Multinational Enterprise*, London, Macmillan
- Buckley, P.J., 2004, Asian Network Firms: An Analytical Framework. *Asian Pacific Business Review*. 10 (3/4): 254-271
- Callegari F., Callegaro L., Tattara G., 2010, Ripensare lo sviluppo regionale (a partire dal Veneto) in Feltrin P., Tattara G. (eds) *Crescere per competere. Le piccole e medie imprese in un mondo globale*. Milan: Bruno Mondadori.
- Campagnol D., Tattara G., 2008, Delocalizzazione produttiva e ammortizzatori sociali. *La Tessitura Monti spa. Economia e società regionale*. 102(2): 63-81
- Chang S.,J., Rosenzweig P., M., 1998, Industry and Regional Patterns in Sequential Foreign Market Entry, *Journal of Management Studies*, 35(6): 797-821
- Crestanello P., Tattara G., 2010, Industrial Clusters and the Governance of the Global Value Chain. *The Romania- Veneto Network in Footwear and Clothing. Regional Studies*, 1
- Danis W. M., De Clercq D., Petricevic O., 2011, Are social networks more important for new business activity in emerging than in developed economies? An empirical extension. *International Business Review*, 20: 394-408.
- De Propriis L., Menghinello S., Sugden R., 2008, The internationalisation of production systems: embeddedness, openness and governance, *Entrepreneurship & Regional Development*, 20 november: 493-515.
- Estrin S., and Prevezer M, 2010, Role of Informal Institutions in Corporate Governance: Brazil, Russia, India and China Compared. Queen Mary. University of London, CGR WP 31
- Gemawat P., 2007, *Crossing Borders in a World Where Differences Still Matter*. Boston: Harvard Business School Press. Gereffi, G., J. Humphrey and T. Sturgeon, 2005. "The Governance of Global Value Chains". *Review of International Political Economy*, 12(1): 78-104
- Griffith D. A., Cavusgil S.T., Xu S., 2008, Emergine Themes in International Business Research, *Journal of International Business*, 39: 1220-1235
- Hatani F., 2009, The logic of spillover interception: The impact of global supply chains in China. *Journal of World Business* 44(2): 158-166
- Hatani, F. 2010. Network learning in global expansion: An evolutionary view. In *The Society for the Advancement of Socio-Economics (SASE) Annual Conference*. Temple University, Philadelphia, USA.
- Humphrey J., Schmitz H., 2008, Inter-firm relationships in global value chains: trends in chain governance and their policy implications, *Int. J. Technological Learning, Innovation and Development*, 1(3): 258-282
- Iuzzolino G, Menon C., 2011, Le agglomerazioni industriali del Nord Est: segnali di discontinuità negli anni Duemila, Banca d'Italia-Servizio Studi
- Iuzzolino G., Micucci G., 2011, Le recenti trasformazioni nei distretti industriali, in *II Rapporto dell'Osservatorio Nazionale Distretti Italiani*, Rome.
- Jabbour L., 2008, "Slicing the Value Chain" Internationally: Empirical Evidente on the Offshoring Strategy by French Firms, University of Notthingam Research paper GEP n. 2

- Johanson, J. J.E. Vahlne, 1977, The Internationalization Process of the Firm. A Model of Knowledge Development and Increasing Market Commitment. *Journal of International Business Studies*, 8(1):23-32
- Johanson, J. J.E. Vahlne, 2009, The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9):1411-1431
- Kaplinsky R., Farooki M., 2010, What are the Implications for Global Value Chains When the Market Shifts from the North to the South? WP. 5202, The World Bank
- Kaplinsky R., Terheggen A., Tijaja J., 2011, What Happens When the Market Shifts to China? The Gabon Timber and Thai Cassava Value Chains. *World Development*. 39 (7) 1179-90
- Kedia B. L., Mukerjee D., 2009, Understanding Offshoring: A Research Framework Based on Disintegration, location and externalization Advantages. *Journal of world business*, 44: 250-61
- Keesing, D.B., Lall S., 1992, Marketing manufactured exports from developing Trade Policy, *Industrialization and Development: New Perspectives*, Oxford: Clarendon Press: 176-93
- Kim J.Y., Zhang, L., 2008, Formation of Foreign Direct Investment Clustering-A New Path to Local Economic Development? The Case of Qingdao. *Regional Studies* 42(2): 265-280
- Kimura F., Ando M., 2005, Two-dimensional fragmentation in East Asia: Conceptual framework and empirics. *International Review of Economics and Finance*. 14: 317-348
- Lane D. Maxfield R., Read D., van der Leeuw S., 2009, From Population to Organization Thinking, in Lane, van der Leeuw S., D. Pumain D., West G., *Complexity Perspectives in Innovation and Social Change*, Springer: 11-41
- Langlois R.N., 2003, The Vanishing Hand: the Changing Dynamics of Industrial Capitalism, *Industrial and Corporate Change* 12 (2): 351-385
- Lemoine F. and Ünal-Kesenci D., 2002, China's Outward-Oriented Industries: A Source of Technological Dependency or a Means to Catch-Up?, *La lettre du Cepii*, n. 213, June
- Li K., Song L., Zhao X., 2008, Component Trade in China, WP UNU Wider n. 101
- McCann P., Mudambi R., 2004, The Location Behavior of the Multinational Enterprise: Some Analytical Issues. *Growth and Change*. 35(4), pages 491-524
- Meyer K.E., Mudambi R., Narula R., 2011, Multinational Enterprises and Local Contexts: The Opportunities and Challenges of Multiple Embeddedness, *Journal of Management Studies*, 48(2): 235-252.
- Mintzberg H., 1979, An emerging strategy of direct research, *Adm. Sci. Q.* 24: 105-116
- OECD, 2005, *SME and Entrepreneurship Outlook*. OECD Paris.
- Park S. H., Luo Y., 2001, Guanxi and Organizational Dynamics: Organizational Networking in Chinese Firms, *Strategic Management Journal*. 22: 455-477
- Peterson R.A., Albaum G., Kozmetsky G., 1986, The Public's Definition of Small Business. *Journal of Small Business Management*. 24: 63-68
- Porter M., 1985, *Competitive Advantage: creating and sustaining superior Performance*, Free Press, New York: 1985

- Porter M., E., 1986, Changing Patterns of International Competition, *California management Review*, XXVIII, 2: 9-40
- Prevezer M., 2008, The emergence of markets and capabilities, dynamic transaction costs and institutions: effects on organizational choices in off-shored and outsourced business services in China. WP. Queen Mary. University of London. CGR WP. 26
- Rugman A. M., A. Verbeke, 2004, A Perspective on Regional and Global Strategies of Multinational Enterprises. *Journal of International Business Studies*, 35.1: 3-18
- Rugman A. M., A. Verbeke, 2005, Towards a Theory of Regional Multinationals: A Transaction Cost Economics Approach. *Management International Review*, 45.1: 5-17.
- Schiattarella R., 2001, International relocation and employment: an analysis for the traditional Italian industries, in Franzini M., Pizzuti R. F. (eds.), *Globalization, institutions and social cohesion*, Springer: 99-114
- Swan K., S., Allred B., B., 2009, Does 'the China Option' influence subsidiary technology sourcing strategy? *Journal of International Management*, 15: 169-180
- Tattara G. (ed.), 2001, *Il piccolo che nasce dal grande*. Angeli: Milano
- Tattara G., 2005, Il diverso modo in cui le piccole imprese misurano il loro successo. *Economia e società regionale*. 92(4): 31-58
- Tattara G., 2011, Choosing between foreign investment and subcontracting: Strategies of Italian firms in Romania.
- Teece, D.J., 2007, Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal* 28(13): 1319-1350
- Teece D. J., Pisano G., Schuen A., 1994, The dynamic capabilities of firms: an introduction. *Industrial and Corporate Change*, 3 (3): 537-556
- Teece D. J., Pisano G., Schuen A., 1997, Dynamic capabilities and strategic management. *Strategic Management Journal*, 18 (7): 509-533
- Towers N., Song Y. 2010, Assessing the future challenges in strategic sourcing commodity from China: a case study analysis, *Asia Pacific Business Review*, 16 (4): 527-544.
- van Maanen J., 1988, *Tales from the field: On writing ethnography*. Chicago: University of Chicago Press.
- Villani M., Bonacini S., Ferrari D., Serra R., Lane D., 2007, An agent-based model of exaptive processes. *European Management Review*, 4: 141-151
- Wathne K.H., Heide J.B., 2004, Relationship Governance in a Supply Chain Network. *Journal of Marketing* 68 (1): 73-89
- Yin R.K., 2003, *Case study research: design and methods*, Sage, Beverly Hills
- Yueh L., 2007, *China's Entrepreneurs*, WP. n. 324. University of Oxford
- Zheng Y. 2010, Institutions Matter: How Do Special Economic Zones Attract Foreign Direct Investment in China? <[http://www.allacademic.com/meta/p98978\\_index.html](http://www.allacademic.com/meta/p98978_index.html)>
- Zott C., 2006, How Do Firm Specificity and Asset Specificity Differ? Implications for the Choice of Firm Boundaries, WP 5, October





Table 1. Interviewed firms

Name of the firm	Interviewed subsidiary firm			Parent company in Italy			Markets where the offshored subsidiary operates
	Year of establishment	Employees at the time of the visit	Turnover millions € in 2008	Name, location and date of the interview*	Legal ownership/ Initial investment in the Asian plant in €	Proportion of the parent company turnover	
A Beijing Great Faram Wall Decoration China	2002-03	142	7,5	Treviso	50% controlled by Faram and 50% by Beijing Municipality/ 2 millions	<10%	International furniture market (70%) and China (30%)
B Carraro, China	2006	138	11	Padova, 2008	100% control by Carraro Group 18 millions	<10%	China, Usa, Europe
C Carraro India	2000	243	28	Padova, 2008	100% control Carraro Group 15 millions	<10%	sales in India and Europe (50%)
D Carraro Technologies, India	2006	42	1	Padova, 2008	100% control Carraro Group		Design centre, in collaboration with AgriCarraro
E Changsu Ritmo Welding Technology	2005	22	0,7	Padova	100% control by Ritmo 0,2 millions	<5%	Asia (80%), Italy
F Colombini, China	2005	100	2,6	Rep. San Marino	80% control by Colombina 2 millions	<10%	China, its own retail network
G Dalian Mato Furn&Compt China,	2005-2006	320	7,5	Treviso	100% control Mobilclan 10 millions	<20%	Ikea USA (30%), Auri's Kitchen UK, and France
H FMMG China	2006	93	5	Treviso, 2010	100% control FilMan MadeGroup/ 20 millions	<10%	Glen Raven (60%) and Italy
I General Fittings	2005	99	2,1	Brescia	100% Gambari Group 3 millions	<10%	China (25-50%) and Europe
L Hydroeast	2004	11	0,3	Padova, 2009	100% Idrobase 0,1 millions	<5%	Europe (95%), Russia
M Irsap Jintaige	2005	150	1,9	Rovigo	100% control by Irsap Group	<10%	China

	Radiators, China					5 millions		
N	Maschio China	2006	56	4,4	Padova, 2008	100% control by Maschio&Gasp ardo 3 millions	<5%	Usa, Italy
O	MiniGears, China	2004	268	9	Padova, 2008	100% control by GearWorld 11 million	<10%	China, Usa
P	Tessitura Monti India	2001	450	17	Treviso, 2008	100% control Tessitura monti 50 millions	> 70%	50% in Europe 50% in Asia (40% to Aquarelle)
Q	Turbo Gears, India	2008	231	4,3	Padova, 2008	100% control GearWorld 20 millions	<10%	Sales to Carraro India and to Indian firms
R	Zamperla	2006	64	5,0	Vicenza	100% Zamperla 1,3 millions	<10%	China and Asia

\*when the date is missing no interview has taken place with the parent company.

Table 2. Industrial cost for 1 metre of cotton fabric in India, €

raw cotton yarn	44,77
Dying	10,36
Energy	18,08
Labour	3,86
Maintenance	5,18
Depreciation	12,32
Others	5,43
	100,00
total cost per metre	1,91€
Sanforization (Italy)	0,47€
Total	2,38€

