Local Clusters in Global Value Chains
Linking Actors and Territories Through Manufacturing and Innovation

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3 Evolutionary trajectories of industrial districts in global value chains

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Introduction

Italian industrial districts (IDs) or clusters have been undergoing profound structural changes in the last 15 years, mostly driven by globalization (e.g. Rabellotti et al., 2009, De Marchi and Grandinetti, 2014b; Giuliani and Rabellotti, Chapter 2 in this book). But that does not necessarily mean that Italy’s industrial districts have come to the end of their life cycle and can no longer be a source of global competitiveness for district firms. Rather, such changes call for a new framework to understand their actual configurations and opportunities for growth considering their capacity to respond to global changes and evolutionary trajectories, ranging from decline to resiliency (Grandinetti and De Marchi, 2012; De Marchi and Grandinetti, 2014b).

Interestingly, a resilient performance in today’s global economy cannot be ascribed to particular industries per se, since comparative studies of clusters specialized in the same industry have revealed quite different performances across clusters (e.g. footwear, Belso-Martinez, 2008; or gold jewellery, De Marchi et al., 2014). Rather, studies suggest that a key determinant of the heterogeneous capacity of IDs to compete in global markets may be their position in global value chains (GVCs) (e.g. Rabellotti, 2004; Chiarvesio et al., 2010), which leverages the international interdependence of economic activities and its economic and social implications for countries and regions (Gereffi, 2014).

The value-added activities performed by suppliers of global lead firms (GLFs), which are the key actors shaping how value is created and captured along GVCs, define three distinct roles suppliers can play in GVCs: 1) focusing just on manufacturing activities to work under the lead firm’s specifications (original equipment manufacturer, OEM); 2) carrying out pre-production activities such as R&D and design (original design manufacturer, ODM); or 3) adding branding and marketing functions (original brand manufacturer, OBM) (Gereffi, 1999). While the GVC framework has been applied mostly to understand the implication of the participation in GVCs for firms based in developing economies, we believe that this approach can be used to investigate the development of industrial districts in advanced countries as well (see also De Marchi et al., Chapter 1 in this book).

Although a rich literature exists to describe recent changes in IDs – mostly focusing on one or a few districts at a time (e.g. Alberti, 2006) or treating them as a homogenous category (e.g. Rabellotti et al., 2009; Chiarvesio et al., 2010) – a comprehensive understanding of the role of global-local linkages in shaping trajectories of local development is still missing. What factors drive the ability of some IDs to compete and capture value within GVCs, while other districts are stagnant or in decline?

Based on different configurations of ID evolution contained in the literature (see De Marchi and Grandinetti, 2014a), a key contribution of this chapter is to investigate the factors
related to the emergence of IDs as well as implications for their future competitiveness. We analyse four IDs based in the Veneto region of Italy, characterized by a very high number of IDs, and we provide an integrative framework including internal (ID-related) elements and global (GVC-related) ones to understand how clusters based in developed countries evolve and compete in the global context, addressing the challenge of adopting jointly the global and local levels of analysis proposed by Gereffi and Lee (2016). While the results provided are based on IDs located in a developed country—Italy, the archetype of an ID-based development model—we wish to set out a research agenda for understanding the developmental trajectories of advanced manufacturing clusters based in developing countries as well.

Factors affecting the evolution of IDs in the global economy

The traditional type of IDs was a dynamic component of the Italian economy and an essential factor in explaining the success of “Made in Italy” products in international markets during the 1970s and 1980s, but times have changed. Some new factors were already evident in the 1990s (e.g. Harrison, 1994; Crestanello, 1997; Corò and Grandinetti, 1999), but the transformation that occurred in the last 20 years was more dramatic and characterized by different drivers, mostly related to globalization but exacerbated by internal difficulties (Rabellotti et al., 2009; Grandinetti and De Marchi, 2012).

All the IDs in the “old” world had to come to terms with a formidable intensification of global competition since the arrival of newcomers on the world market, mainly from Asia, capable of offering a wide range of export products at lower costs. This external challenge was exacerbated in the last decade due to the effects of the 2008–09 world recession. The increasing geographic and organizational consolidations in most industries, both at country and firm levels (Cattaneo et al., 2010), is further hindering the ability of the small and -micro-sized enterprises within IDs to compete. This has prompted a sizable number of firms, specialized both in the production of final goods as well as intermediate inputs, to shut down. The former suffered from the aggressive pricing policies of their developing country competitors, especially for low-cost products. The latter are being displaced by the surviving firms, as many local final-goods companies have turned to foreign suppliers for their intermediate inputs in order to remain competitive, changing the geography of product and knowledge sourcing and eroding the fabric of local relationships (Dunford, 2006; Tattara et al., 2006; De Propis et al., 2008).

In addition to the decreasing numbers of ID firms, a second threat to the traditional district model is the heightened significance of larger firms in IDs (Rabellotti, 2009). Relatively large enterprises emerged in a number of IDs, both as end-product firms or specialized suppliers (Chiarese et al., 2010; Camuffo and Grandinetti, 2011), and occasionally attained global leadership status in their industry. In other cases, large foreign firms entered many IDs from the outside and played a major role in their development (Belussi, 2003). These include the global buyers, brands or producers described by the GVC literature as the key lead firms shaping how, where, when and by whom value is added within global industries (Gereffi, 1999; Bair and Gereffi, 2001; Cattaneo et al., 2010).

The impact of such transformations has been exacerbated by a deep change in the social structure of local entrepreneurship. Local entrepreneurs have become a scarce element because of cultural changes: fewer new companies are founded (high birth rates were a common feature of traditional IDs) and many existing enterprises are facing succession problems (De Marchi and Grandinetti, 2014b). The strong influx of immigrant employees and entrepreneurs further weakens the “communitarian factor” typical of the traditional ID configuration (Dei Ottati, 2014; Guercini, Chapter 8 in this book).
Identifying ID evolutionary trajectories

Taken together, these changes have modified the core features of the ID model, which was characterized by a large population of interconnected businesses (mainly SMEs) operating in the same industry with different specializations and displaying high competitiveness on foreign markets. First, they have impacted the population of ID firms, determined both by the exit of existing companies, net of the entries by foreign firms, and by a reduction in their birth rate. Second, they affect concentration within IDs, with a few companies becoming considerably larger and more capable on international markets, whereas in the traditional model resources and competencies (often measured in terms of firm size) were distributed among a plurality of interdependent and quite homogeneous firms. Third, they spurred a reduction in the overall ID capacity to generate value and diminished their role in GVCs, in contrast to traditional IDs that were known for employment growth, innovation and extraordinary performance on international markets.

Such changes, however, have not affected all IDs in the same way. Three distinct trajectories appear within the traditional configuration of Italian IDs: decline, hierarchization and resiliency (De Marchi and Grandinetti, 2014a). As summarized in Table 3.1, we suggest that such evolutionary trajectories are related to the intensity of change along the three dimensions identified above. We describe each trajectory below according to this model.

**Decline** identifies districts characterized by a strong reduction in the number of firms able to face global competition and in the overall ability of the ID to produce value, which is not associated with the emergence of few large players. Scholarly contributions support the emergence of this trajectory for the textile ID of Como (Alberti, 2006), the Vitrata-Tordino-Vomano clothing ID (Sannarra and Belussi, 2006), the Manfano cutlery ID (Corò and Grandinetti, 2001), and the Barletta footwear ID (Amighini and Rabellotti, 2006), among others.

**Hierarchization** involves a marked depletion of the population of district enterprises, to the advantage of a few large corporations that might (at least partially) compensate for employment losses and that generate and capture the largest part of the value produced in IDs. Districts along this trajectory have a concentration of employment and revenues in a few big corporations, which are not necessarily connected with the local context. The scholarly description of the Castel Goffredo hosiery and Santa Croce sull’Arno leather IDs (Carminucci and Casucci, 1997), and the Sassuolo ceramic tile (Bursi and Nardin, 2008) and Belluno eyewear (Camuffo, 2003) clusters resemble this trajectory.

The **resilience** trajectory characterizes IDs that have experienced a moderate contraction in their population of firms and employment, and a good capacity to generate value. While concentration does not increase strongly, a number of dynamic firms are emerging. The literature suggests that such a trajectory may describe the mechanics ID of Pordenone (Bortoluzzi et al., 2006; Furlan et al., 2009), the Arzignano leather district ID (Belussi and Sedita, 2008), and the Montebelluna sportswear system ID (Sannarra and Belussi, 2006; Gottardi and Scarso, 2009). While decline and hierarchization have fairly clear-cut boundaries, the

<table>
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<tr>
<th>Table 3.1 Trajectories of ID evolution in GVCs</th>
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<tr>
<td>Reduction of ID firm population &amp; Decline</td>
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<td>Increase of resource concentration</td>
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<td>Reduction of ID value production</td>
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*Source: Authors.*
trajectory describing the districts with a resilient capability is more heterogeneous, but these IDs manifest the capability to adapt to relevant changes and to compete in global markets.

**Trajectories of IDs in GVCs: learning from the Veneto case**

**The methodology adopted**

The identification of the decline, hierarchization and resilience trajectories allows us to recognize the variety of Italian traditional IDs that was spurred by drivers external and internal to the clusters. The question remains open, however, about what features allowed one trajectory or the other to emerge. Why have some districts gone into decline, while others have been resilient in global markets? Which characteristics, internal to the district and inherent to the GVC, have supported such diversified outcomes?

We have explored these questions via a case-study approach, using the district as the object of the analysis. Such a methodology is appropriate considering the guidelines by Yin (2003), due to the "why?" nature of the research questions under scrutiny. Our objective is to generate new hypotheses and expand our existing knowledge, since the case-study literature is still relatively limited. We decided to focus on districts based in the Veneto region, located in the Northeast of Italy, which is the second most active region in Italy for IDs according to the ISTAT 2001 and 2011 census, with a high prevalence of traditional IDs. The focus on a single region allows us to control for the potential impact of contextual factors not related specifically to the IDs or GVCs being analysed (e.g. infrastructure quality, policy and regulation, workforce development, institutions, cultural factors). Adopting a theoretical sampling strategy (Eisenhardt and Graebner, 2007), we selected four districts within this region: one each representative of the decline and the hierarchization trajectories (the Vicenza gold jewellery and Belluno eyewear districts, respectively); and two representative of the resilience trajectory (Riviera del Brenta footwear and Montebelluna sport systems), given the greater heterogeneity characterizing this trajectory and our interest in learning more about the most "successful" cases.

Starting from the list (and definitions) of IDs acknowledged by the latest Regional Law on industrial districts (L.R. 13/2014), we identified districts based on a preliminary review of the existing literature and on the actual values of the three key dimensions identified in Table 3.1. We operationalized them as follows:

- **Reduction of the population of ID firms has been calculated as the variation of active firms between 2004 and 2014, using Movimprese data.**
- **Increase in the resource concentration has been calculated employing the Herfindal-Hirshman (HH) concentration index on turnover, measured as the sum of the squared turnover of each firm on the total turnover of the districts.** Data have been extracted by the AIDA Bureau Van Dijk dataset – including balance sheet data on limited liability companies only, the subgroup of companies responsible for the largest share of the overall turnover. Instead of evaluating the variation of the index, which should be calculated on a longer time span than the one allowed by the data at hand, we use a static measure (2014 data) to examine the outcome of concentration over the years.
- **The reduction of ID value production, consistent with the previous measures, has been calculated in terms of variation of turnover by ID firms, based on AIDA data during the period 2008–14.**
Table 3.2 Identifying the IDs analysed

<table>
<thead>
<tr>
<th></th>
<th>Vicenza Jewellery</th>
<th>Belluno Eyewear</th>
<th>Montebelluna Sport System</th>
<th>Riviera del Brenta Footwear</th>
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<tr>
<td><strong>Reduction of ID firm population</strong></td>
<td></td>
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<tr>
<td>Active firms var. (2004–14) (*)</td>
<td>-41.2%</td>
<td>-49.8%</td>
<td>-12.6%</td>
<td>-2.4%</td>
</tr>
<tr>
<td>Number of active firms (2014) (*)</td>
<td>623</td>
<td>313</td>
<td>525</td>
<td>548</td>
</tr>
<tr>
<td><strong>Increase of resource concentration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HH index (2014) ($)</td>
<td>4.7</td>
<td>63.7</td>
<td>14.3</td>
<td>6.4</td>
</tr>
<tr>
<td>Turnover by top firm (2014) ($)</td>
<td>12.2%</td>
<td>78.7%</td>
<td>33.4%</td>
<td>21.2%</td>
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<tr>
<td><strong>Reduction of ID value production</strong></td>
<td></td>
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<tr>
<td>ID Turnover var. (2008–14) ($)</td>
<td>-4.5%</td>
<td>39.3%</td>
<td>7.7%</td>
<td>17.6%</td>
</tr>
</tbody>
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Source: Authors, based on Movimprese (*) and AIDA Bureau Van Dijk ($) data.

Note: Definition of size classes: small (less than 50 employees); medium (between 50 and 250 employees); and large (more than 250 employees).

Focused interviews are the most relevant qualitative data source for our analysis. Since our study deals with a complex system, we have interviewed several of its elements, including both ID institutions and firms representative of the universe of ID firms. Information collected has been triangulated with evidence emerging from documentary information (academic contributions, industry reports and newspaper articles). Table 3.2 reports for each ID the values of the three dimensions as we have operationalized them.

The Vicenza gold jewellery district

Jewellery production in the Vicenza province has a long tradition but boomed in the 1960s thanks to mechanization, which supported the development of a relatively large average firm size. Having the US mass market as the major destination, exports from the district grew fast, especially through the selling of machinery-produced affordable jewels (e.g. chains), even though artisan-like, higher-value-added firms were also present (De Marchi et al., 2014; Gaggio, 2007). During the 1980s and up to the early 2000s, the ID reached its peak in terms of exports and output, and a number of companies invested heavily in mechanization. Other companies gave up local manufacturing activities to import and sell jewellery produced in the Far East. Until this period, the majority of firms were small ODMs, specialized mostly in design and manufacturing activities. All the products were easily sold to foreign wholesalers and exporters, mostly through the local Vicenza fair. Additionally, there were specialized suppliers (chain producers being the strongest) and a few OBMs.

In the 2000s, the district experienced a severe crisis; the number of active firms dropped by 41.2% between 2004 and 2014; during 2008–14 turnover fell by 4.5%, despite the increasing price of gold and silver, making up a large part of the final value of the products. The crisis was driven by strong foreign competition in Vicenza’s major export markets (mainly Thailand, Turkey and, to a lesser extent, China), and also by changes in global demand and the consolidation of the retail system, especially in the United States (De Marchi et al., 2014). Companies specialized in lower quality products, and those with no local manufacturing capabilities quickly exited the market with small ODMs suffering the most. Before the mid-2000s, several district firms responded by delocalizing production or importing components, and/or reducing the amount of gold employed or substituting it with cheaper silver; but these strategies did not prove to be effective.
Starting in 2008–09, as the recession crisis magnified the effect of the earlier “globalization” crisis (see De Marchi et al., 2014), a diverse set of upgrading strategies were implemented by resilient and successful local companies. All entailed substantial quality improvement, moving from the mass market, where foreign competition was stiffer to higher value niche markets. Some firms invested in product and process upgrading for smaller batch sizes or higher quality products, in some case making the jewellery more affordable thanks to process upgrading (e.g. FAcco), as well as jewellery in higher quality niches (e.g. Fili Bo). Functional upgrading took place as well: larger companies (specialized suppliers like Better Silver and Chrysos, or OBMs like Fili Bo) invested in branding (creating new brands or improving existing ones), and in marketing and distribution (selling directly to selected jewellery chains rather than wholesalers, and providing them with additional services, like Fope or Facco).  

Very few firms (mostly larger and more consolidated ones) are working for global brands (either jewellery brands, such as Tiffany and Swarovski, or non-jewellery brands like Bottega Veneta), which is viewed as an additional and minor business. No local firms have been acquired by global companies either. Up to now, the largest companies are gold or silver chain producers (such as Vieri, Asolo Gold, Filk and Better Silver), which often are vertically integrated to support efficiency. A handful of medium-sized OBMs that have solid reputations abroad in medium-high quality jewellery are present as well (e.g. Marco Biciego, Cielo Venezia, Roberto Coin, Chiomento, Lorenzo Muraro). However, they do not seem to drive local development and in some cases have been experiencing serious financial problems in recent years. Additionally, many companies are still working as ODMs, despite the market power of global buyers with which they interact. The two sets of firms suffering the most have been medium-sized companies with their own brand or design capabilities but with no strong marketing and distribution capabilities, and non-specialized small sub-suppliers serving local companies.

Overall, relationships within the Vicenza jewellery district have been weakening. A few larger companies are still competitive but no one is emerging as a key player, and they have little connection to local producers. Thus, they are not working to upgrade their suppliers; indeed, many of the most successful companies are vertically integrated. Data on turnover concentration support this view: the top company makes up 12.2% of overall sales (see Table 3.2). Despite the strong reduction in final-product firms, the district is still perceived to be an important knowledge repository. The presence of numerous competitors, customers and suppliers (especially in supporting industries such as machinery and chemistry) is a key spur and a resource to develop innovative solutions and improve product and process quality for the most dynamic firms of the industry, which are located both within and outside the ID. Several district institutions are present and active in the ID (including the local Vicenza trade show, plus an institution representing the larger/most structured companies and one pooling SMEs mostly from Vicenza but also from other Italian gold jewellery IDs), but they do not seem to play as critical a role as they did in the past.

The Belluno eyewear district

Eyewear production in Belluno started in the mid-19th century thanks to the presence of skilled and low-cost manpower and the abundance of energy, but developed in a district form in the 1970s and 1980s, when many spin-offs were founded that specialized in eyewear production. Local output and the district’s leadership in foreign markets boomed in the 1990s, as branded sunglasses were introduced thanks to agreements with global-brand firms such as Armani, Bulgari, Yves Saint Laurent and Versace. Beginning in the mid-1990s, the number of local firms fell dramatically, whereas employment kept increasing, with capacity
suppliers suffering the most. Recent data support this view: between 2004 and 2014, active firms dropped by 49.8% (see Table 3.2), but employment increased by 28% (ANFAO data).

In the same period, local concentration grew within the district, which became evident during the 2000s. In the early 1980s, large firms represented 17.6% of local employment (Bramanti and Gambarotto, 2008); in 2014, the largest company alone was responsible for 78.7% of ID turnover (see Table 3.2). Whereas in the 1980s and 1990s production was ensured by the coordination of numerous capacity and specialized suppliers located in the ID, the largest companies became vertically integrated and developed as leaders in international markets thanks to the opening of new factories abroad (mostly in China) and the development of an international network of suppliers to lower production costs and support innovation (Camuffo, 2003; Nassimbeni, 2003).

The unquestioned leading enterprise is Luxottica, a company born and nurtured in the district that became the eyewear industry’s global leader with net sales of more than €8.8 billion in 2015 and roughly 79,000 employees. The business runs a fully integrated production cycle with six manufacturing plants in Italy, three in China, and others in Brazil, India and the United States. In early 2017, it completed its vertical integration strategy by merging with the French multinational Essilor, specialized in the complementary specialization of the production of ophthalmic lenses and optical equipment. Luxottica’s brand portfolio is very broad, including house brands like Ray-Ban, and licensed brands like Giorgio Armani, Versace and Prada. The firm’s vertical integration policy also extends to distribution, with a growing level of direct control over the wholesale and retail stages, in part as a result of international acquisitions. Today, nearly three-quarters of the group’s employees work in its wholesale or retail operations.

Safilo, the second largest enterprise in the district, has adopted the Luxottica model, albeit with lower levels of upstream and downstream vertical integration. Thus, the two firms show different GVC configurations. Safilo’s downstream integration stops at the wholesale stage, while its production is concentrated in five plants owned by the group, one of which is within the district and two are abroad (in Slovenia and China). Unlike Luxottica, however, Safilo uses a global supplier network based on capacity subcontractors to cope with peaks in demand for products that are not part of the luxury segment (Bramanti and Gambarotto, 2008). In the most recent years (2014 on), re-shoring of the higher-end products of large firms is taking place (ANFAO, 2015). Both companies are opening new plants in the ID (2016 data).

Other than a handful of lead firms (including De Rigo, Marcolin, Marchon and Fedon, the last being a case producer), the firms surviving in the district are very small; in 2014, 85.9% of the firms had less than 50 employees (Table 3.2, see also Bettiol et al., Chapter 9 in this book). While capacity suppliers of local companies and firms in the low-end of the market were most affected by the crisis, there is a small group of dynamic firms: OBM serving specific niches, especially abroad and in the luxury segment (e.g. Dolpi, producing wooden eyewear), or specialized component suppliers, engineering service providers, technology specialists and case producers (e.g. Visottica-Comotec) (Campagnolo and Camuffo, 2011).

The Montebelluna sportswear district

As reported in Codara and Morato (2002), production of leather mountain boots in the Montebelluna area dates back to the early 19th century, a competence that during the following decades was adapted to make ski boots. Production boomed as plastic ski boots were introduced in the mid-1960s (a break-through innovation developed by a local company), thanks to spin-off processes that started to take shape in the ID with the development of sub-suppliers
and supporting industries. The Montebelluna district enjoyed a world leadership in these products due to the innovation and flexibility enabled by the traditional ID configuration.

Since the 1970s, ID production became increasingly diversified as other mountain-related products were introduced (e.g. après-ski boots). In the 1980s, following a strong demand crisis and increasing foreign competition, trekking, soccer, motorcycle, bicycle and tennis shoes were all developed in the ID, and in the 1990s, skates production and sport-related performance outerwear grew in prominence. The 2000s was marked by the growth of everyday/casual shoes, driven by the success of Geox, now by far the largest company in the ID.

In sum, there was a concentric pattern of diversification driven by product diversity (e.g. ski and clothing for motorcycles), user diversity (athletes of racing, climbing, trekking and skiing) and technological diversity (e.g. the use of plastic for the production of ski boots vs. high-performance textiles to produce apparel for motorcycles). The process originated with lead users (e.g. Calzaturificio SCARPA to develop the new climbing line), which drove important and successful innovation in those markets (Ciappei and Simoni, 2005).

In addition to diversification, other factors, such as the delocalization of manufacturing activities and the increasing role of GLFs (home-grown and foreign), began to shape the district. Companies specialized in component manufacturing (especially producers of uppers) were most seriously affected in the 1990s, as local OBMs, especially the largest firms, developed global supply chains. Components production was increasingly moved offshore, either via foreign direct investment or, more often, via outsourcing to foreign suppliers, especially in East European countries (mostly Romania, in the Timisoara region), a strategy that became mainstream in the 2000s (see also Belussi and Asheim, 2010). Suppliers of specialized services (such as prototyping and new materials development) are still a dynamic component of the ID (e.g. Novation Tech, Claudio Franco Design&Develop), but they employ the knowledge developed in the district to serve international clients/firms specialized in different industries.

Today, most of the local companies are brand manufacturers, designing and branding the final products but having delocalized production. While some of these OBMs face shrinking sales (even large ones as in the case of Tecnica), a number of local OBMs grew and have garnered global recognition. These include very large companies working in mass markets (such as Diadora), or medium-sized companies that became leaders of specific sport niches because of their innovation and quality capabilities (e.g. Alpinestar for motorcycle boots and clothing; Aku and Asolo for performance trekking shoes) (Chapter 9).

Starting in the 1990s, GLFs began to play a key role in the Montebelluna district. The high manufacturing and innovation capabilities present in the area attracted global companies that acquired existing medium/large OBMs (see Belussi et al., Chapter 5 in this book) and worked with local ODMs (as in the case of Grisport for Decathlon). Interestingly they also opened R&D labs and some production facilities within the ID in order to learn specific manufacturing capabilities (e.g. regarding soccer shoe production), as in the cases of Nike and Adidas. Although they all left by the mid-2000s after they acquired the key competences they sought when entering the ID, these companies are still drawing on Montebelluna’s knowledge base by acquiring high-skilled personnel, which are employed in the US R&D offices. This can be interpreted as evidence that relevant knowledge is still “sticky” in manufacturing locales that are attractive to GLFs.

As reported in Table 3.2, during 2004–14 the number of firms in the district dropped by 12.6%; since the start of the recession (2008), turnover increased by 7.7%. Concentration in the district is moderate; the largest company, being a homegrown GLF – Geox – makes up 33.4% of the ID overall turnover; medium and large companies make up 84.2% of total employment. Due to the increasing importance of large companies (local and foreign),
district institutions, once very effective, are no longer playing a significant role, and the sense of belonging to the district has faded quite substantially due to the extensive diversification.

The Riviera del Brenta footwear district

The district developed at the beginning of the 20th century after the first company was set up by an entrepreneur that merged technical and commercial knowledge acquired during his stay in the United States with craftsmanship skills available in the area (Fontana et al., 1998). During the 1950s and 1960s, the number of firms and production boomed, thanks to the growth in export markets. In the mid-1970s, Riviera del Brenta firms gradually improved the quality of their product; luxury shoes for women became the main product offered, while production was carried out by independent SMEs rather than centralized within companies.

The major clients were Italian and increasingly German retailers.

From the mid-1990s, the district entered into a deep transformation in terms of the role of its final product companies. On the one hand, lower value-added activities were increasingly outsourced to Eastern Europe (see also Amighini and Rabellotti, 2006) or carried out by immigrant entrepreneurs, especially the most labour-intensive activities related to the manufacturing of components (e.g. upper shoes). In the 2000s, production of lower-end products (such as everyday shoes) moved to the same locations or closed (e.g. Donna Carolina, Calzaturificio Ca’ D’Oro). Some district entrepreneurs subsequently moved to Romania, Serbia and China to teach shoe-making to local companies.

On the other hand, local companies that specialized in the production of high-end shoes gradually gave up their own brands to produce for global brands such as Kering Group, LVMH, Prada and Armani. While these GVC leaders are responsible for the design, marketing and distribution of the final products, local firms cooperate on the development of the products and are responsible for prototyping and carrying out the final steps required for manufacturing luxury footwear. Thus, they could be defined as OEM suppliers, who can also perform activities similar to ODMs. In order to accommodate these global brands, the local firms heavily invested in upgrading their processes in order to ensure they could produce at the requisite scale or to deal with certifications required by the brands. Although the largest and most successful OEMs tended to be vertically integrated, other district OEMs worked with a limited number of local and, to a lesser extent, foreign suppliers.

According to a survey by Rabellotti (2004), in the mid-2000s half of the firms investigated worked only as OEMs for global brands; recent interviews indicate that 90% of the district’s production is now carried out for global brands. In addition to the “simple” OEMs, which often work for several brands at a time, there are other approaches: a few OEMs pursue a “hybrid strategy” with a small fraction of turnover from their own brand (such as Ballin shoes); super-luxury, established OBM (such as René Caovilla); and a growing number of small OBM specialized in different products (e.g. fashion, high-end sneakers for women, like Philippe Model).

In an initial phase, GLFs entered the district developing long-term relationships with local firms. In the mid-2000s, however, they shifted to broader investment strategies that included vertical integration, whereby they acquired their major local suppliers, as well as greenfield investments, which has been the most popular strategy in recent years (see also Chapter 5 by Belussi et al.). Such global companies are now the largest enterprises in the ID in term of employment and turnover; concentration is modest but increasing.

The number of active firms in Riviera del Brenta has been relatively stable (a mild decline of 2.4% between 2004 and 2014), as lower-end production was gradually abandoned and
many companies proved unable to work with GLFs (either because they were too small or not capable of keeping pace with their production requirements). All in all, however, interviews and turnover figures (+17.6% between 2008–14) support the finding that, despite the huge transformation that took place in the ID during the last 20 years, the Riviera de Brenta district is still performing well, and its integration with global brands, while challenging, is perceived more as a strong asset than a threat. Concentration remains quite limited (Table 3.2).

The local industry association (ACRIB, developed in the 1960s) is still playing an active role within the ID, both providing technical knowledge (via the “politecnico calzaturiero” school), supporting the internationalization of SMEs (via the “Consorzio Maestri Calzaturieri”), and ensuring that the high-value-added competences of the ID are maintained and preserved. The role of local unions has proved to be supportive as well (see also Azzariti and Candoni, 2007; De Stefani, 2012).

A theory of ID evolution in GVCs

The detailed analyses of the four districts covered in this chapter, summarized in Table 3.3, highlight a major transformation that has taken place in the Veneto’s IDs during recent years – a very different landscape from that described in the traditional Marshallian ID model (Becattini 1990). Our narratives of the four districts, which 20 years ago had very similar industrial structures, showcase their great heterogeneity today and their ability to respond to both internal and external challenges.

The decline, hierarchization, and resilience trajectories – as corroborated by the Vicenza, Belluno, Montebelluna and Riviera del Brenta cases – typify three distinct pathways from the traditional ID model, implying diverse journeys within GVCs. While the decline trajectory points to the inability of these IDs to reproduce the basis of their success in the changed global scenario – even if there is a number of successful firms locally, they do not appear to boost other local companies to develop in GVCs – both the hierarchization and the resilience trajectories represent two positive responses to globalization, denoting a capability to adapt to global challenges. However, they entail a different distribution of the value created and a distinct industrial organization model too, with non-trivial differences in terms of policy implications. Indeed, both have retained a large portion of value-added in the ID (being driven rather by pre- and post-production activities in Belluno and Montebelluna, and by production activities in Riviera del Brenta). In the hierarchization trajectory, however, such a capacity is concentrated in only a few companies, which might be disconnected from the rest of the ID, whereas in the resilience trajectory, growth is driven and value is spread among a larger amount of actors, which allows these IDs to better support the development and upgrading of SMEs.

The strategies that local firms put in place in response to recent global challenges to engage in GVCs have been quite diverse, representing different sets of capabilities. In some cases, local producers have integrated with GLFs by focusing only on the manufacturing activities (from OBM to OEM), which is by far the most common strategy in Riviera del Brenta. However, it also occurred in some of the largest companies within the Vicenza and Montebelluna districts, where it has mostly taken the form of a “hybrid” strategy (OEM and OBM). In other cases, local producers have tried to change their role in the GVC by performing more value-added activities (e.g. in Vicenza, specialized suppliers getting OBM, or OBM focusing just on branding activities). Finally, the growth of home-grown GLFs, which are focusing on pre- and post-production activities, has been observed in Belluno and Montebelluna (where the greater degree of diversification supported a lower level of concentration).
Table 3.3 Overview of the Vicenza, Belluno, Montebelluna and Riviera del Brenta clusters and their position in the GVC

<table>
<thead>
<tr>
<th></th>
<th><strong>Vicenza Jewellery</strong></th>
<th><strong>Belluno Eyewear</strong></th>
<th><strong>Montebelluna SportSystem</strong></th>
<th><strong>Riviera del Brenta Footwear</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Share of companies by size classes (2014)</strong> §</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>0.0%</td>
<td>5.1%</td>
<td>4.3%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Medium</td>
<td>5.7%</td>
<td>9.1%</td>
<td>10.1%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Small</td>
<td>94.3%</td>
<td>85.9%</td>
<td>85.5%</td>
<td>87.0%</td>
</tr>
<tr>
<td><strong>Share of employment by size classes (2014)</strong> §</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>35.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>64.8%</td>
<td>97.9%</td>
<td>70.5%</td>
<td>9.6%</td>
</tr>
<tr>
<td><strong>Activities mostly performed locally</strong></td>
<td>Pre-production, production, (some post-production)</td>
<td>Pre-production, production and post-production</td>
<td>Pre-production (some post-production)</td>
<td>Production</td>
</tr>
<tr>
<td><strong>Upgrading trajectories</strong></td>
<td>Process upgrading, branding and distribution</td>
<td>Vertical Integration, control of retailing activities</td>
<td>Product diversification, internationalization of sourcing, branding (OBM)</td>
<td>From OBM to OEM (producing for global brands)</td>
</tr>
<tr>
<td><strong>Global lead firms (GLF)</strong></td>
<td>None</td>
<td>Home-grown</td>
<td>Home-grown and foreign</td>
<td>Foreign</td>
</tr>
<tr>
<td><strong>Key local companies</strong></td>
<td>Specialized suppliers</td>
<td>Global leaders (Luxottica, Safilo)</td>
<td>Internationally recognized OBMs; global leaders (Geox); KIBS</td>
<td>Capable OEMs</td>
</tr>
<tr>
<td><strong>Support by local institutions</strong></td>
<td>Internationalization</td>
<td>Training, internationalization, product certifications</td>
<td>No support activity recently</td>
<td>Training, internationalization</td>
</tr>
</tbody>
</table>

*Source: Authors, based on AIDA Bureau Van Dijk (§) data and interviews.*
Table 3.4 Key local/global determinants of ID trajectories in GVCs

<table>
<thead>
<tr>
<th>Global lead firms (GLFs)</th>
<th>Decline</th>
<th>Hierarchization</th>
<th>Resilience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home-grown (inside-out)</td>
<td>Absent</td>
<td>Present</td>
<td>Present</td>
</tr>
<tr>
<td>Foreign (outside-in)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local dynamic actors (LDAs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OEMs or ODMs with advanced</td>
<td>Absent</td>
<td>Absent</td>
<td>Present</td>
</tr>
<tr>
<td>production capabilities</td>
<td></td>
<td></td>
<td>(variety)</td>
</tr>
<tr>
<td>OBM with advanced post-production capabilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highly specialized suppliers with distinct manufact/service capabilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capable local institutions</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Authors.*

What are the key factors explaining the ability of IDs to effectively compete in GVCs? In order to create a theory that is useful to policy-makers who wish to support local development, we simplify and abstract from the rich and heterogeneous evidence collected and identify the main factors that determine the different trajectories. While acknowledging the role that ID history, industry specificities, institutions, and the local social context might play in the evolution of the ID, we believe that the major factors characterizing the trajectories (see Table 3.4) are:

1) the presence of global lead firms (GLFs) – well described in the GVC literature; and
2) the presence of a variety of local dynamic actors (LDAs) – emerging in many recent scholarly contributions on IDs.

All the IDs that proved to be successful in GVCs are characterized by the presence of GLFs, which might have grown within the ID itself until becoming a global leader (homegrown GLF) or it might be an MNE that decided to directly invest in the ID (through acquisition, greenfield investments or orchestrating sourcing locally) (foreign GLF). Whatever the case, such a GLF represents a channel for the ID to participate in GVCs, especially to the extent it is actively engaging with a network of local ID firms.

What distinguishes the hierarchization and the resilience trajectories is the presence of a large base of local dynamic actors (LDAs), entailing peculiar and hard-to-replicate value-adding capabilities, and maintaining, albeit selectively, relationships with other ID firms. Such firms work as knowledge integrators or gatekeepers (Canuffo and Grandinetti, 2011) between the knowledge (mostly related to the market) embedded in GVCs and the knowledge embedded in the local context (mostly related to the technology). This is diffused via local relationships, similarly to what has been described earlier with GVC lead firms.

Different types of LDAs might be envisioned, depending on the specificity of the industry/ID:

- OEMs or ODMs with advanced production capabilities;
- OBM with advanced post-production capabilities;
- Highly specialized suppliers with distinct manufacturing or service capabilities; and
- Capable local institutions.

The first category refers to OEMs or ODMs able to respond to the requests by global brands, with production capabilities that can combine the high manufacturing quality of artisanal
production with the structured organization needed to meet GLF standards. This is particularly relevant where manufacturing represents a high value-adding activity (as in the case of luxury products). Relevant international relationships for such firms are downstream with the GLFs. OBMs with advanced post-production capabilities are able to preside over their own final markets (e.g. having developed their own distribution channels, such as shops, franchising or shop-in-shop) and/or having developed a leadership in a market niche (see also Corò and Grandinetti, 1999; Guercini, 2004; Capasso et al., 2013). Relevant international relationships for such firms are both downstream, in terms of presence in international markets, and upstream, in terms of managing global supply networks.

The third category includes highly specialized suppliers with distinct manufacturing capabilities, providers of knowledge-intensive business services (e.g. design, prototyping, development of new materials, quality tests, customized software, marketing services, advanced logistics), or manufacturers of machine tools and other high-value components (see also Camuffo and Grandinetti, 2011; Di Maria et al., 2012; Tunisini and Bocconcelli, 2009). Relevant international relationships for such firms are mostly downstream, since they serve customers outside of the ID (and of the country); in some cases, they also are specialized in different industries.16

Finally, a fourth LDA is represented by local institutions that support the reproduction of the local knowledge and capabilities base (e.g. by providing training on high-value activities, implementing collective marketing to create and communicate the intangible value of the ID, or provide certifications and R&D activities) (see also Grandinetti, 2011; De Michele, 2015). Based on the narrative in the previous paragraphs, Table 3.5 provides some examples of the four types of LDAs and the two GLFs for each ID analysed.

| Table 3.5 Key local/global determinants of ID trajectories in GVCs in the cases analysed |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                  | Decline         | Hierarchization | Resilience      | Riviera del Brenta |
|                                 | Vicenza         | Belluno         | Montebelluna    | footwear         |
| Jewellery                       | Belluno         | Montebelluna    | Riviera del     |                  |
|                                 | Eyewear         | Sport system    | Brenta          |                  |
| Global lead firms (GLFs)        |                 |                 |                 |                  |
| Home-grown                      |                 | (Luxottica, Safilo) | (Geox)         | (LVMI, Kering Group, Prada, . . .) |
| Foreign                         |                 |                 |                 |                  |
| Variety of local dynamic actors (LDAs) |                 |                 |                 |                  |
| OEMs/ODMs                       |                 |                 |                 |                  |
| w. advanced production capabilities |                 |                 |                 |                  |
| OBMs                            |                 |                 |                 |                  |
| w. advanced post-production capabilities |                 |                 |                 |                  |
| Highly specialized suppliers w. distinct manuf./service capabilities | (Better Silver, . . .) | (Novation tech, Claudio Franco Design&Develop, . . .) |                  |
| Capable local institutions      | (Gold&Silver Italian group) |                 | (ACRIB)         |                  |

Source: Authors.
The larger the set of LDAs located in a district — either several companies of the same category or a mix of the possible categories listed — the greater the likelihood that it will hold a competitive position in GVCs, if a GLF is embedded in the ID. This variety is what makes the framework different from the role of the "local lead firms" identified in earlier studies on IDs (Lazerson and Lorenzoni, 1999), which are "solo" actors in the ID. An additional difference is that LDAs also involve relationships external to the ID (e.g. OEM interacting with GLFs; OBM s having direct contact with the final markets and/or rely on international suppliers; and specialized suppliers working for global customers). Such distributed knowledge interface can support the reproduction of the ID competence base and its adaptation to global needs. Finally, size is a third distinguishing element of LDAs, since managing international relationships, achieving the standards required by GLFs, and leadership in niche markets based on innovation or branding capabilities all require investment and resources. Small firm size is usually an impediment to this role. This characterization is corroborated by data in Table 3.3, reporting that resilient IDs contain a higher proportion of medium and large companies.

Conclusion

Italian IDs no longer fit the traditional model that characterized them up until 20–30 years ago. At least three evolutionary trajectories can be found in the literature: decline, hierarchization and resiliency. In this chapter, we addressed the challenge of identifying the key determinants of the different trajectories utilizing the GVC framework. First, via a critical review of the existing literature, we operationalized the main changes taking place in Italian IDs with respect to the traditional ID model in three variables: 1) the reduction in the population of firms; 2) the concentration of resources within few firms; and 3) the reduction in value addition within the IDs. These variables are subsequently used to identify empirically the three trajectories of iD transformation defined by the literature.

Second, based on the detailed histories of change in the Vicenza gold jewellery ID (exemplifying the decline trajectory), the Belluno eyewear ID (the hierarchization trajectory) and the Montebelluna sportswear and the Riviera del Brenta footwear IDs (resilience trajectories), we suggested that the direct engagement of Global Lead Firms (GLFs) and presence of Local Dynamic Actors (i.e. OEMs/ODMs with advanced production capabilities, OBM s with advanced post-production capabilities, highly specialized suppliers, and capable local institutions) are the main determinants that shape which trajectory occurs. In particular, the presence of GLFs is a necessary condition for hierarchization and resilience to take place, enabling the IDs to effectively participate in GVCs; the presence of a large set of LDAs facilitates the resilience trajectory — acting as knowledge integrators between local and global knowledge flows, they support a diffused capability to retain value locally.

During the "golden age" of IDs, the focus was on IDs as a system. We suggest that additional levels of analysis are needed to track resiliency: the GVC level and the local-firm level. A key implication of our analysis is that it is no longer possible to understand the evolution of IDs without including the GVCs in which they are embedded. GVC tools are fundamental to understand the role that local companies play in their industries, with an emphasis on the activities they are performing (pre-production, production, post-production) and ability to create and capture local value-added (via the capabilities embedded in their OEM, ODM and OBM roles). Similarly, the interplay of GLFs and LDAs is of utmost importance determining the future of IDs. To keep pace with global challenges, the activities performed and relationships implemented within IDs have evolved in significant ways. For exampl
“downgrading” design and branding functions to participate in GVCs led by GLFs may allow capable OEMs and ODMs to gain competitiveness in high-value market niches. An increase in size has been a prerequisite and a consequence for such diversified strategies, supporting the importance of medium-sized and relatively large firms for the resilience of local clusters.

In this chapter, we adopted a parsimonious approach to theory building that highlighted salient differences across clusters that are most relevant to our research focus. Indeed, this analysis is neither a recipe for future development nor a comprehensive schema of all the specificities that may support the evolution of IDs. Rather, trajectories are intended to serve as useful scenarios for the interpretation of a complex reality, offering potential insights for policy-makers interested to support the development of IDs through tailored and selective policies (rather than a one-size-fits-all approach). “Entrepreneurial” cluster institutions can play a key role in this respect.

Moreover, the three trajectories are neither prescriptive nor immutable; districts that were in decline might move toward a more resilient configuration, provided that a sufficient number of capable companies link up with GLFs (e.g. Valenza Po jewellery, in De Marchi et al., 2014). IDs in the hierarchization trajectory could decline if the supporting GLF presence fades away (e.g. the textile ID headed by Benetton – see Harrison, 1994). Similarly, while some trends might be clear cut in an ID (like the move from OBM to OEM in Riviera del Brenta), firms implementing different strategies could flourish in the same ID as well (e.g. firms developing their own brands via collaboration with foreign designers). This underlines the need to continuously assess the presence and nature of LDAs in the context of the broader GVC system.

Notes

1 We do not intend to study the entire evolutionary experience of clusters or IDs, but rather the analysis of recent trajectories (the last 15–20 years, when globalization has hit the hardest) for those IDs that: 1) had a traditional, Marshallian, configuration; 2) are specialized in a traditional, manufacturing industry; and 3) are participating in GVCs.

2 See: http://bur.regione.veneto.it/BurvServices/pubblica/DetttaglioLegge.aspx?id=275529

3 We have not considered the mechanical IDs (Treviso Inox Valley, Vicenza mechanics, Padova refrigeration) and the Polesine fishing and Valdobiadene prosecco IDs because of peculiarities of these industries with respect to the traditional Marshallian IDs. Veneto IDs have been identified based on the municipalities and the ATECO (Classificazione Attivita ECONomiche or Statistical Classification of Economic Activities in Italy) industry code indicated by the regional law. We have included additional municipalities if they were reported in the existing literature and, in 2014, there were firms with a turnover higher than 2.5 million euros or employing more than 50 people (based on AIDA data), or if there were more than 10 active firms in the municipality (based on Movimprese data). In some cases, we have included additional industry codes if this was consistent with the existing literature or to support consistencies in the correspondence between ATECO 2002 codes (used for the years 2004–08) and ATECO 2007 codes (used from 2009 on). Industry codes and city considered are available upon request.

4 We do not consider the possibility of an increase in the ID population as the empirical evidence today indicates a reduction of companies across all industries in developed countries such as Italy.

5 Because we aim at comparing IDs specialized in different industries and because of data availability, we measured concentration and value production in terms of turnover. Future research, however, should think of this choice in a critical way, considering case by case, if other measures such as employees, value-added, or export levels might be better. A similar reflection is relevant to the time period analysed. We focused on transformations from 2004 on, this year being a tipping point for globalization dynamics (see De Marchi et al., 2014), but each industry might be characterized by different turning points.

6 Data for 2008 are calculated summing turnover by all firms present in that year, irrespective if they were present in 2014 as well; the opposite for 2014. Consolidated balance sheets have been considered when available (Luxottica, Safilo, Marcolin, Fedon for the Belluno eyewear ID; Geox,
Unfortunately, it was not possible to use data earlier years due to data constraints. Even though the phenomena may have a longer time span, we assume the results for the later years (starting with the recession) to be coherent and therefore indicative.

There were also cases of "functional downgrading": ODMs/ODMs giving up their manufacturing capabilities; pooling production by small ODMs to increase market power; and selling products to the wholesalers and foreign importers.

Often they are vertically integrated, which tends to diminish local linkages.

This may reflect the fact that Vicenza is home to a variety of IDIs in diverse industries, including textiles and apparel, handicrafts, furniture, and engineering/computer components.

This is true especially for the trade show, whose centrality as a 'distribution channel' faded away due to changes in the global retailing systems.

The most important factory is located within the district, together with the group's head office.

This figure would be much higher if we excluded from the analysis the largest company in the ID specializing in winter sport equipment, which has been in trouble for several years. The performance of medium-sized companies is particularly positive (see De Marchi and Grandinetti, 2016).

For instance, LVTHM and YSL opened new large factories in 2016.

They have been fighting the recent increase of companies led by immigrants, mostly Chinese, which established in the district and specialized in low-value-added steps of the value chain, exploiting a competitive advantage based on illegal practices and the violation of social standards.

Claudio Franco Design & Develop is a case in point; it is an agency offering design services, engineering, product steering and prototyping. It began as a knowledge-intensive supplier for ID companies, and from the recession crisis of 2009, it started to serve more and more external clients (it exports 80% of its services). It is specialized in very different sectors, such as eyewear and medical.

References


Evolutionary trajectories of IDs in GVCs


