Local Development in Italian Districts "After the Deluge"

ITALO TREVISAN

Abstract Italian industrial structure is characterised by the importance of SMEs and their weighty contribution in terms of employment, sales and exports. The international competitiveness of Italian SMEs has been enhanced by another peculiarity of Italian industrial structure: the sectoral concentration of production in small, specific areas. The industrial districts in which industry has been concentrated were instrumental in the development of many areas of Italy and are distinct from the powerhouses of Italian industrialisation and development, meaning that they are not located within the large conurbations of the North-West. The additional distinctiveness of these districts has been their strong interaction with the local community, thus the related districts can be seen as an evolved form of the Marshallian industrial district.[i] This evolution has been characterised by the importance that the communities and the people of these areas have had in the establishment and successful development of these districts.

Keywords: • industrial districts • globalisation • economic crisis • adaptation • Italy

CORRESPONDENCE ADDRESS: Itaalo Trevisan, Ph.D., Associate Professor, University of Trento, Faculty of Economics and Trade, Via Inama 5, 38122 Trento, Italy, email: italo.trevisan@unitn.it.

https://doi.org/10.4335/978-961-6842-91-4.13 ISBN 978-961-6842-91-4

Available online at http://www.lex-localis.press.

1 Italian industrial districts according to statistics

The Italian economy is characterised by the still large role of the secondary sector. The proportion of employment in industry (28.3%) is the highest among large developed countries,[1] and the weight of industry in GDP (24%) is surpassed only by Germany and Japan (30.1% and 29.7%, respectively).[2] Another characteristic of the Italian economy is the great weight of small- and medium-sized firms (SMEs), which in 2015 made up 99.4% of all companies. In any country small firms make up a large proportion of the total (inevitably, the smaller the size, the larger the number), but the importance of SMEs in the Italian economy can be seen from other perspectives, too. SMEs employ 78% of the total workforce; they contribute 48.8% of total turnover, and (even more surprisingly) 50.8% of added value. If an assessment is made with exclusive reference to the manufacturing industry (where larger firms are more common), the weight of SMEs is still extremely high. They make up 90% of all manufacturing firms, employ 76.5% of the workforce employed in manufacturing, create 60% of turnover and 66% of added value.

Possibly the most characteristic element of the Italian industrial structure is the clustering of SMEs that belong to the same industry in a number of relatively small industrial districts. Indeed, in no other country is the weight of industrial districts as important for the economy as in Italy.

In 2001, a year when the consolidated success of the districts started to fade, just before the "deluge" (but when the effects of some "heavy rain" were already being felt), there were 181 manufacturing SME industrial districts, as identified by ISTAT (the Italian statistical service). In these areas were operating about one-quarter (24.3%) of all local units of Italian firms, and they were responsible for one-quarter (25.4%) of national employment and the production of 27% of national added value. More specifically, these districts were home to 38.8% of all local units engaged in manufacturing in Italy, employed 39.3% of all the people working in this sector, and produced 38% of value added in manufacturing. Their weight in Italian exports was even greater: 44% of exports of manufactured goods came from these areas, with peaks of 52% in exports of machinery and 60% in tiles and ornamental stones.

In 2011, after the deluge of Chinese exports and the additional hit of the recession that started at the end of 2008, there were 141 industrial districts still in operation. They accounted for 24.4% of all local units and 24.5% of total employment. Their importance for the manufacturing sector was still greater, as they accounted for 34.3% of manufacturing local units, and 37.9% of employment in manufacturing. Their weight in national exports had slightly increased to 48% of the total, again with a much higher concentration in the sectors represented by the so-called "4As" of the "Made in Italy".[3]

Industrial districts are one of the major success stories of the Italian economy. Their success is also shown by the growing international interest in this phenomenon that many consider to be a useful reference model for the promotion of local development.

Industrial districts, however, are not a novelty nor are they a peculiarity of Italy. The concept of the industrial district goes back to Alfred Marshall (Marshall 1920, paragraph 3). In *Principles of Economics,* he discusses the occurrence of the "concentration of specialised industries in particular localities" and explains that such a concentration "within the narrow boundaries of a manufacturing town or a thickly peopled industrial district" happens thanks to the external localization economies resulting from the concentration of many small firms of a similar nature in specific places. This concentration facilitates the finding and changing of jobs and the intra-district flexibility of labour. In these small areas owners and workers live together; therefore the solidity of the district is strengthened because "[s]ocial forces here co-operate with economic: there are often strong friendships between employers and employed". The circulation of workers and the relative ease of starting a new business spreads know-how about the industry of specialization. As Marshall puts it, "[t]he mysteries of the trade become no mysteries; but are as it were in the air, and children learn many of them unconsciously" (Marshall 1920, paragraph 3).

The district, then, is something more than a simple agglomeration of firms in a certain place; it is a stable community where production activity is enriched by a shared specialist technical expertise, and where a strong local cultural identity can develop.

Some peculiarities distinguish the Italian industrial district[4] from the archetype explained by Marshall. In the Italianate industrial districts too, there is a strong "industrial atmosphere" of a Marshallian type. The industrial district is a local community that specializes in manufacturing a certain type of product. More significantly, the emergence of some models of productions of excellence ends up reinforcing the spirit of identity of its inhabitants and their attachment to the territory in which they live. Local people are particularly proud of the success of their firms and of their territory, to which everyone is aware of having contributed. In a way, community and firms tend to blend. The district, then, is a socio-territorial entity characterized by active coexistence, in a geographically circumscribed and historically determined area, of a community of people and a population of industrial enterprises focused around one specific industry (Becattini 1990). Most firms are SMEs, but some larger, leading companies also often emerge. From these, new enterprises are frequently born through a process of "gemmation," meaning that in periods of cyclical upswing of the characteristic industry workers from established firms resign in order to establish their own small firms. This process often implies some form of support being given to the leaving workers by the owner of the firm where they were employed. This hints at the presence of an attitude of cooperation between firms that is one of the peculiarities of the Italianate industrial district.[5] In fact, this peculiarity is a combination of competition and collaboration between companies. Internal competition is very strong and fosters selection of the best companies. However, the companies in the districts often collaborate with each other in relation to shared projects (marketing abroad, the management of environmental problems, etc.).

The interaction and integration of disparate elements make evident the systemic nature of the Italianate industrial district and its complexity. Moreover, this complexity is a specific indication of the evolution of the Italianate manufacturing districts from the traditional Marshallian industrial district to a more sophisticated entity called *Area Sistema* (AS). To sum up, according to the literature six essential elements should be present in the evolution of an Italianate industrial district into an Area Sistema.[6] These are:

- A small and clearly demarcated *territory*, with some definite characteristic that set it apart from neighbouring areas;
- The presence of a *community*, sharing a homogeneous system of values in terms of work ethic, family values, a sense of belonging;
- A large number of *small and medium-sized enterprises* specialized in one or few phases of the production process;
- The presence of *strong* and, as a rule, informal *links among firms*, creating an atypical system of relations, where co-operation and competition coexist;
- *Widespread competency and know-how*, mostly of a technical type, related to the dominant industry of the area, thus the specific level of competence of the local population is quite high;
- The involvement, not necessarily from the beginning, of *institutional players*; this involvement is the expression of the full participation of all the components of the local community in the working of the *AS* (Trevisan 2006).

The Italianate districts and their evolved forms, the Area Sistema, are a resourceful answer to the problems of local economic development in Italy. Localized in small areas – often eccentric to the main industrial centers of the country – they have played a determining role in the economic and social development of whole regions that had been left behind in the first stage of industrialization of the country. Although they started, similarly to any industrial district, as areas with an industrial monoculture (wherein the productive structure was based on a single industry), they have developed to incorporate a degree of complexity and interaction among firms that belong to different, albeit related, industries that make them a specific sub-type of industrial district.

From a structural point of view, it is possible to detect a certain trend towards increased complexity that marks the development of the Italianate industrial district. As with any industrial district, the former started as an area of industrial monoculture. In time, most districts acquired a higher degree of complexity and expanded their industrial focus to different, albeit related, industries.

Industrial districts can be classified according to the degree of their organizational and structural complexity (Garofoli 1983). This classification can be seen as an evolutionary sequence whereby some districts evolve, and by evolving become stronger and more successful, while those that do not evolve tend to falter and sometimes disappear.[7]

The first step, at the lowest level of complexity, is the *area monoculturale semplice* (simple monoculture area), which is the typical *industrial district*. This has a large concentration of mostly small and medium-sized firms that belong to one industry and which are quite often specialized in one phase of the production process. These firms are locked in tough competition and – as in Marshall's formulation – do not have any meaningful structured relationships. The few (relatively) large firms tend to have a guiding role that strongly limits the independence of the smaller ones. The essence of the *area monoculturale semplice* is the subdivision of labour and specialization in the production process.

The second step is the *sistema produttivo locale* (local production system). Here, too, SMEs mostly operate in the same industry and are specialized in one or a few phases of the production process. Strong horizontal competition characterizes this type of district but, as a consequence of specialization and strong community feelings, intra-industry relations are much more developed and are not limited to short-term transactions. Relationships and groupings of firms are changeable but tend to revolve around a core of firms that have developed long-term cooperation. Development in the area is fostered by the build-up of a critical mass of factors, leading to the increased formation of firms. Some leading companies appear in the ranks of local firms. These, however, tend to remain of middling dimensions; if greater production capacity becomes necessary, it is achieved through groups of SMEs, generally family run.

The last step is the Area Sistema (AS, integrated industrial system) which involves a higher degree of structural complexity. The main characteristics of a population of specialized SMEs operating in different phases of the dominant industry are still present. However, some of the most successful firms may reach a larger size (but seldom above 500 employees) and take a leading role in shaping the strategy of the area. Strategic collaboration among firms is widespread and is both intra-industry (without dampening strong local competition) and inter-industry, linking upstream and downstream activities. Therefore, the division of tasks and specialization of firms and activities also evolves beyond the original – still dominant – industry, involving related and supporting industries, such as a mechanical engineering industry producing specialized machinery for the main production activities, or specialized marketing services. The outcome of this evolution is an accumulation of differentiated capabilities due to the strong functional links between the dominant (manufacturing) industry and the set of activities that supply it with operational or strategic inputs. This combination creates greater resilience and stronger competitive advantages for the Area Sistema as a whole, and for its firms.

This is, for now, the last complete step in the evolution of Italianate industrial districts.[8] This is the distinguishing trait of the most successful of the Italian industrial districts, while many others remain at a simpler stage and can be considered Area Sistema *in fieri.*[9] This evolution has allowed many Italian industrial districts to meet the significant and disruptive changes occurring in the competitive structure of the world economy, and to maintain or regain their competitiveness when facing the many challenges of the first decades of the twenty-first century.

2 The internationalization of Italian industrial districts

The industrial districts represent, in a way, a different form of economic development, and the Italianate districts are certainly an example of this diversity. The entrepreneurs in the districts' firms, often based on deeply rooted local traditions of craftsmanship, have taken an autonomous path of development, focusing on manufacturing niches in light industries, often in "traditional" sectors. In a country going through a rapid process of industrialization, with government policies focused on stimulating the development of southern regions through massive investment into heavy industry, district entrepreneurs became accustomed to working without protection or aid. Districts were the unplanned response of a peripheral economic system with good potential for development, but substantially ignored by an industrial policy biased firstly towards the "protected" sectors of state industry and, secondarily, the support (or rescue) of the large companies in the hands of the historical families of Italian capitalism.

Operating in a domestic market dominated by a few large companies, district firms had as an important and sometimes main reference the world market. Since the mid-1960s, foreign markets became the training ground where district firms and districts themselves strengthened their competitive capacity. In many industries, the districts soon become world leaders in their specialty sectors.

The start of the evolution of the districts and their internationalization can be dated to around the mid-1960s, after a short recession that brought to an end the Italian "economic miracle". During those years, the transformation of the many widespread artisanal businesses into proper industrial activities took place. This also created the conditions for the take-off of the districts and their internationalization. The slowing growth rate in the mid-1960s became insufficient for ensuring the growth of the districts' firms on the relatively small Italian home market. Therefore, entrepreneurs from the sectors where Italy had recognized skills – those sectors that later became identified by the sobriquet[10] Made in Italy – started looking at international markets. This period saw the large-scale launch of exports of footwear, furniture, jewellery, textiles and clothing, ceramic tiles, taps, etc. from Italian districts. The districts became a veritable manufacturing powerhouse, compensating for the contracting trend of the main industrial areas dominated by the large companies (state-owned and private). The district environment was advantageous to local firms in several ways, not least the avoidance of social tension. In the metropolitan areas where the large companies were, the 1970s were difficult years of exasperating trade union conflict, increasing unemployment and terrorism. In the districts, the locally embedded SMEs were lean and fast, and could adapt quickly to changes, unemployment was almost nonexistent, and social tensions were minimal. Thus, the second "economic miracle" of Italy, the miracle of "Made in Italy," largely built by the districts, was born almost spontaneously and outside any pre-established industrial policy design.

Indeed, the industrial policy of the time focused on how state intervention was able to develop the southern part of the country through the expansion of heavy industry and subsidies to large companies. While this effort continued with dismal results, the large pool of entrepreneurs in the districts (and outside them) had moved ahead, leveraging their competence and the flexibility of their SMEs to move into the international market, specializing in those sectors of light industry (such as food, fashion, home-furniture, and light mechanical engineering that were their traditional strengths. This evolution also relied on the gradual sophistication and ripening of district types of organization of production, and allowed for the development of dynamic new regional areas of the country: the North East and the Adriatic coast.

The 1980s and especially the 1990s were the period of maximum development of the model of the district and of Made in Italy. Italy was ranked sixth in the world in terms of value of exports, and in 1996 Italy's trade balance was the third largest in the world after Germany and Japan. This success became the "Italian puzzle". Italy was one of the biggest economies in the world (for a short time ranked fifth in terms of GDP) but this appeared incompatible with the persistence of the "backward" characteristics of the production system. Italy was not only characterized by a large presence of SMEs, but also had fewer large enterprises than the other industrialized countries by far (very few Italian companies – 10 – ranked among the 500 biggest in the world). Among these countries, it had the highest proportion of self-employed people and the lowest proportion of female employment. It had a marginal presence in high-tech sectors (accounting for less than 10% of exports) and a very low level of R&D expenditure. The "country system," moreover, had a penalizing effect because of significant bureaucracy and structural and political inefficiency, leading to the insufficient development of crucial infrastructure, and the highest energy costs in Europe. However, this country of middle-sized and small firms, often struggling to access finance, was the sixth largest exporter in the world (and more than half of these exports were due to SMEs). Italy was (and is) a prosperous advanced industrial country but its strength on foreign markets has often been linked to "traditional," labour-intensive industries where the competitive advantage would normally have gone to low-wage developing countries.

The answer to this puzzle lies in the phenomenon of integrated industrial districts, the Areas Sistema. The latter were the factor driving Italian competitiveness on world markets.[11] They constituted the strength of the country, creating employment and a trade surplus despite the decline of many of the larger companies. The networked structure of the Area Sistema, which valorises the connection of the small to the small, transformed what were individual weaknesses into collective strength, making the districts a powerhouse of internationalization and innovation.

3 Industrial districts and globalization

In the 1990s, after a phase of tumultuous and uninterrupted growth, the districts were faced with a number of new problems. globalization did not simply mean new openings in new international markets; it started to mean increased competition from low-cost countries, particularly in sectors with lower added value, and most strongly in textiles and clothing, Asian competition began to be felt. Additional factors adding to the uncertainty included enhanced attention to environmental issues which required serious investment (particularly in districts specialized in activities such as tanning and the production of ceramic tiles) and additional costs, and a growing shortage of skilled labour (most local youths being less interested in taking up a factory job than in the previous generation). Moreover, with Italy's adoption of the euro, the practice of the periodic devaluation[12] of the lira had to cease, putting an end to this method of rebalancing the competitiveness of Italian exporters. In this new context, characterized by the intensification of globalization processes, it seemed that factors that once represented the strong points of the districts (the small size of firms, a preference for exports rather than investment in foreign facilities – FDI – and strong links to territory) could become structural weaknesses for both the districts and the whole Italian manufacturing sector.

The significant competitive capacity of the districts developed in a period when the competitive context allowed for processes of adaptive learning (reacting to market stimuli, imitating successful strategies, focusing on incremental innovation) to become the basis of the attainment of competitive advantage. For decades, the model of development of most districts was essentially one of the "extensive" type, based on the progressive enlargement of the production base in quantitative terms (growth in demand = growth in companies and employees). The transformations that begun to be clearly felt around the turn of the century created a more complex competitive environment, which had the power to undermine the stability of the districts on many fronts.

The increased tempo and changing character of technological innovation was an important factor. Since the last years of the twentieth century, innovation has been mostly associated with the new technological paradigm of information and communication technologies, but many industrial districts have lacked access to this know-how. In addition, the changes in values and social attitudes and the processes of homogenization that have affected most societies in the developed world have touched the districts as well. This has placed their social fabric under stress, already strained by the generational change in the ownership of local firms, which is more often than not a threat to business continuity, and the solidity of the district as a whole.

However, the main destabilizing factor has been globalization. From this period onwards Italian districts, as well as the Italian and European manufacturing sector as a whole, were, so to say, at the "receiving end" of globalization. Until then, they had been protagonists and beneficiaries of this process, but from that point they started feeling increasing competitive pressure from firms located in developing countries. This competition became more troubling because these countries added to their well-established cost advantages by improving their technical and operational skills, leading to improvements in the quality of their products and their marketing. This hit the Italian industrial districts particularly hard, because they were (and are) specialized mainly in "traditional" and mature industries, which are the natural fields of expansion of companies from developing countries.

The need to adapt to this changing competitive environment and to adopt a new competitive approach better suited to the increasing and more threatening dynamism required significant changes in the firms of the districts, and of the districts as a competitive unit. This new situation, in fact, required a new, proactive approach that would anticipate the changes in the international competitive system. The competitiveness of Italian industrial districts could be maintained only by exploiting new, different levers of innovation and internationalization, and by readjusting the shape of the value chains of firms.

In order to tackle the growing competition from low-cost producers, many district companies decided to fully embrace globalization and adopt a delocalization strategy. At the beginning (in the years around the turn of the century) the delocalization strategy adopted by some of the more important firms in the districts did not involve disruptive dimensions: some firms started to source their supplies from abroad, or relocated some labour-intensive phases of the production process in low-cost countries. However, almost immediately it transpired that following this path might pose an existential risk to the district. These shifts started to cause a loss of business for the many smaller firms specialized in the simpler or more labour-intensive phases of the production process; a loss that risked the demise of the firms and the loss of local jobs. This also created the risk of a loss of cohesion in the district because of the weakening of links within the community. The shifting of activities outside the district moreover progressively increased the risk of dispersion and the loss of accumulated knowledge, which was one of the strong points of the districts. Cutting the local supply chains in many districts caused a structural crisis both for the main industries and for ancillary industries that had grown up to support them and which had originally shaped the development of the Area Sistema.

There was no doubt that the previous model of development of the district was not up to the new situation. It was based on locally embedded know-how, on successful access to foreign markets, and on exporting in a competitive environment where most competitors who could make products of a similar or slightly lower quality had higher costs, and those who produced at a (slightly) lower cost were creating products of much lower quality. In this situation, the districts grew "extensively" through the progressive enlargement of the production base in quantitative terms (i.e. growth of demand led to growth in number of companies and employees). In the new situation, characterized by requirements for new, ICT-based and less localised, know-how, and by a competitive environment in which competitors had significantly lower costs and made improvements in the quality of their products,[13] a different model of development was necessary.

The districts already had a highly internationalized industrial structure in the sense that they were selling a large proportion of their finished products abroad. However, in the new situation they were not global enough in the sense that they did not have a production chain distributed across various countries, suitably selected to take advantage of the activities located there.

District firms woke to the realization that internationalization and exporting were no longer synonymous, even for them. Some district firms started exploring two different paths to internationalization.

- The first strategy option was delocalization: companies could foster the transnational distribution of the various activities of the value chain to be able to exploit to their advantage the national differentials specific to different countries. Firms can gain a decisive advantage by selecting the location of various activities according to the different characteristics of cost and productivity. Given the differences between countries, particularly considering emerging countries with low labour costs, the maximum value of each business may be attained by distributing the activities of the supply chain in such a way as to exploit the relative advantages.
- The second strategy option was active participation in international networks for the purpose of sharing tasks related to the production and use of knowledge. Firms may acquire a decisive advantage because they can use knowledge and specialization accessible on a global scale, rather than producing this on their own – or in the "closed" environment of the district – at high cost and risk. Being part of such a network allows firms to specialize in a specific form of know-how which can be exploited on a global scale, and to count for everything else on other firms in the network with whom a relationship of trust and fairly open communication has been developed. This, after all, would not be anything new for a district firm: it would "simply" involve the transposition at a global level of the patterns of relationship developed in the district.

As a consequence of the changes in the competitive environment, a new avenue to internationalization developed among the (bigger) firms in the districts – an approach that gave much more space to transnational exchanges of knowledge, instead of limiting external relations to the marketing of finished or intermediate products.

Delocalization and global networking heralded a new model of growth for the districts. Accordingly, the districts were to grow "*intensively*" by grounding their growth on progressive increases in the intrinsic quality of existing products, on product innovation, and on productivity gains. The application of this model did not involve an increase in the number of companies or employees, but rather implied some tendencies towards their general reduction.

4 The reorganization of industrial districts

Moving from an export focus to the global organization of the production chain, however, is not easy. It is necessary to develop a strategy of networking and/or to implement correctly the process of the Delocalization of the "poorer" phases of the production process, and to try to get access to places where new technological development is taking place (without forgetting that, in terms of product differentiation and targeted process innovation, Italian districts have quite often been in the vanguard).

The path of Delocalization in search of lower costs, however, not only offers the possibility to decrease labour costs and to help compete with low-cost producers from emerging countries. It also leads to the emergence of leading companies whose connections, not only in terms of outlet markets but also of production capacity and innovative ideas, have shifted from a logic of territorial proximity to a widened logic of the global scale, which occurs essentially based on strategies of convenience and apparently without any territory-based restraint.

The relocation of phases of the production process to other countries inevitably brought with it a fall in employment in the districts. The parallel development of network technologies gradually reinforced and amplified the de-structuring of the districts. The expansion of the geographical boundaries within which the leading district firms connected, driven by economic advantages and technological support, loosened the links of territorial contiguity that characterized the Italian district and on which it based its strength. On the one hand, the interconnections and relationships that innervated[14] the district were modified, raising the spectre of their total disruption. On the other hand, the success of those leading firms whose action – aimed at preserving their competitive capacity, if not their self-preservation in a more threatening competitive environment – had the potential for disrupting the districts from which they had drawn their strength was not a foregone conclusion.

The interpersonal relationships that regulate the relationships within the individual districts, the different forms of aggregation outside the places of production, the informal communications that are based on collective experience, and a common culture of production are phenomena difficult to replicate across borders, let alone through the internet. A different situation, however, applies to business relationships outside the district. The requirement is to find a "common language" that allows local companies to network beyond the boundaries of the district and permits closer interaction with outside actors.

In this period, the district well-known as an area specialized in the production of Made in Italy quality goods started to undergo important changes. Alongside the usual interlocutors, new partners, already long used to dialogue with foreign markets in terms of export orientation, started joining these firms. The firms from the district faced a potentially deadly threat, and most of the attempts at surviving that threat and remaining successfully present on global markets also increased the threat to the districts, which were still the basis of their strength.

This dilemma came to the fore in the period after the turn of the century. Increasingly tough price competition from low-cost producers (either from developing countries or from the companies of the developed world that had already delocalized to those countries) pushed many medium-sized district firms to delocalize.[15] In the first five years of the new century, the Italian economy started showing less dynamism in comparison to main European competitors.[16] Nevertheless, alongside the steep decline in big business, the industrial districts, considered as a whole, maintained in this period surprisingly strong capacity. Yet the picture has both light and shadow, and situations of growth were accompanied by obvious situations of difficulty and crisis.

Broadly speaking, the districts as a whole managed to maintain their importance as a manufacturing and exporting powerhouse. In the framework of increased exports (from 178 billion USD in 1992 to 236 billion USD in 2000 to 366 billion USD in 2005), the export propensity of the districts grew from 39% in 1992 to 48.3% in 2000 to 50.9% in 2005. The strong performance of the districts in foreign markets was still mainly due to exports, but was complemented by their more active presence through the establishment of commercial branches and franchising agreements. Most significant in these years was the internationalization of the production *filière.*[17] The setting up of international supply chains came about as a result both of agreements with small producers localised in lower-cost countries (such as the countries of Central and Eastern Europe), often as part of Outward Processing Traffic (OPT),[18] and of the direct establishment of production facilities, sometimes fully owned and sometimes joint ventures. In these years, the average proportion of exports in the turnover of firms increased, particularly for the district firms.

It appeared that, despite the slowing down of the Italian economy, the model of industrial development based on small- and medium-sized businesses embedded in the industrial districts and on manufacturing specialization and internationalization was still a vital and dynamic system, which played an important role in Europe and throughout the world thanks to its significant export capacity. However, the districts found it difficult to react rapidly to the profound transformations that were affecting the world economy. Thus, despite success apparently still characterizing their performance, the general situation of the districts had deteriorated. They found it increasingly difficult *to fend off international competitors* and *to maintain internal cohesion in the face of this competitive onslaught.*

5 The "Deluge"

The growing difficulty in international markets was clearly related to the emergence of Asian economies and, in particular, of China and (to a lesser extent) India. The scale of their economies is truly gigantic. The size of these economies makes their growth (and its effects) quite different from the case of the "four tigers" of East Asia in the 1980s and

1990s. Transformation in the world economy became a gigantic process of reallocation of wealth, with very significant processes of income redistribution between countries and between wages and profits in individual countries.

To assess the impact of this phenomenon it is worth taking China as an example,[19] although there were other countries that also competed on the international markets that the districts participated in, and the problems for the districts started before the explosion of Chinese exports. Between 1996 and 2005, there was an extraordinary deterioration in Italy's trade balance with China (from a deficit of € 930 million to more than € 9 billion). However, the problem concerned the traditional export markets more than the internal market. The German market has been for decades and still is the main reference market for Italian exports and, in particular, exports from industrial districts. The trade balance of Italy with Germany reached a positive peak (€ 4 billion) in 1996; by 2005 the balance was a deficit of more than € 12 billion. Italy had kept importing – in increasing measures – products from Germany (from chemicals to cars); the large retail chains and large German buying groups, on the other hand, were replacing Made in Italy products with cheap products from Asia.

The difficulty the districts had in maintaining their internal cohesion sprung, as already mentioned, from the attempt of the main companies in the districts to reshape their approach to international activity. The evolution of the districts tended to create growing asymmetry between its firms, with the strengthening of the leading firms and their networks that increasingly extended beyond the district. The leading companies consolidated their control of the supply chain by modifying their relationships with suppliers and developing networks of companies governed in a hierarchical way, and also through the formation of groups. While activities linked to design, technology and marketing became more important (and therefore more closely kept under control by the leading firms), basic manufacturing activities were increasingly subcontracted outside the district, especially abroad. Trying to improve their performance, the leading companies changed both inter-organizational relations and district boundaries. It was no longer possible to see the district as an area in which the production cycle was self-contained. The division of labour within the district changed because the leading firms, needing to adapt to new ways of transnationally producing value to remain competitive in a globalized market, opened up to external relations, jeopardizing the local interconnections that sustained the district. As a consequence, some of the "upstream" subcontractors also started looking (with mixed results) at markets other than those no longer comprised of local customers.

The relationships of internal complementarity, which gave strength to the district as a socio-economic unit and, consequently, to its firms, started crumbling. On the one hand, the leading downstream firms, by abandoning their local suppliers for suppliers outside the district, caused the demise of many of the former. On the other hand, upstream suppliers, in order to face the mortal threat of losing their local clients, looked outside too. Some of them did so by replicating the Delocalization strategy of their clients –

indeed, delocalising to keep them – while others followed different strategies. Some looked for new clients – outside the district and internationally – supplying them with the know-how developed in the district; some tried to integrate downstream and become competitors of their former clients. Not many of them were successful, but in one way or the other the "natural" complementarity of interests, on which the district's collective value chain rested, broke down when the interests and attitudes of the various firms diverged in the face of the new international challenges. Downstream firms (customers) started feeling the competition from external producers that was powered by technologies, skills, services that had accumulated in the district and that became available on the international market thanks to sales or cooperation agreements made by the district's upstream producers. Conversely, these upstream firms (suppliers) could no longer count on being the fixed points of reference for their local district customers. They felt the weight of competition from other potential suppliers who became accessible to their customers thanks to their new international locations. This created the potential for conflicts of interest that could have seriously undermined the foundations on which the "district atmosphere" of competitive collaboration and territorial unity rested.

Another development placed additional strain on these foundations. To complement the outgoing flow of FDI from the delocalising firms, an opposite flow of incoming investments appeared. These acquisitions of district firms by foreign ones (quite often large multinationals) resulted in the acquisition by foreign companies of technological skills and supply chain auxiliary firms that typically developed within the districts. In some circumstances, this helped other smaller district firms to become visible on international markets. More often, however, the bigger external firms tended to use the districts as specialized production centers, places for manufacturing skills, moving activities with strategic value for the company and the local system to the headquarters of the company. In such cases of "functional downgrading" local firms tended to lose control of their design, brands, and of their direct relationship with the market. Even when in the short term the performance and profitability of such acquired companies was positive, in the longer term they risked losing the ability to innovate and reach final markets. Consequently, the district as a whole became impoverished, and less able to internationally compete and maintain the level of local integration and job creation.

The financial crisis of 2008 heralded the so-called Great Recession which affected a large proportion of the world's economies (in the first quarter of 2009, 59 countries simultaneously saw a fall in their GDP), and Italy was particularly heavily and for a longer time (despite some quarters of recovery, Italy was still in recession in the fourth quarter of 2014) (Eurostat 2018).[20] The districts were obviously affected by the recession, which increased the pressure on them and their efforts to respond to the threats mentioned above. In fact, in these years the districts underperformed other areas of Italy where a more mixed composition of activities and the presence of larger firms resulted in a less steep fall in turnover and employment.

Looking at the census data for 2011 (i.e., after the first wave of the recession), it is possible to see its effects on the districts and on the Italian economy. The first noticeable fact is that the number of areas recognizable as districts[21] in 2011 was 141 compared to the 181 that were present in 2001. Moreover, 35 of these districts were "new" areas that ten years earlier did not have the characteristics of industrial districts. This has two implications. On the one hand, it means that 75 areas that were recognized as industrial districts in 2001 were no longer such areas in 2011: thus in ten years 41% of the districts had disappeared. This obviously does not mean that they had all become industrial deserts. However, it does mean that the surviving firms in those areas did not form the industry-specific critical mass that represents the nature of a district. In some cases, indeed, the district basically disappeared due to a precipitous fall in the number of active firms and people employed in the area. This was more often the case with districts specialized in the textile and clothing industry, as well as furniture and household goods, while the number of districts specialized in mechanical engineering and metal products increased significantly (Eurostat 2018).

This suggests another implication of the data about the changes in the number of districts from 2001 to 2011. The amount of people employed in the districts and the number of local units increased. However, this increase was due to a positive balance between the decrease of both employees and local units in the manufacturing sector (as narrowly defined) and the growth in the same districts of employees and local units in non-manufacturing activities (most noticeably in the services-to-industry category) (Magliocchi 2015a). The districts appeared to be in a phase of transformation that, albeit sometimes disruptive, allowed them (at least those that were successfully managing the transformation) to weather the dangerous storm of the Great Recession combined with the preexisting competitive challenges of globalization.

In addition, the numerical contraction of the districts over the decade and the simultaneous birth of new industrial districts created clear variation in the geographical distribution of districts in the various regions of Italy. The areas with the biggest decrease were North-West Italy (-30% in the number of districts and -24% in the number of employees in manufacturing) and North-East Italy (-27% and 19%, respectively).

The following few years were ones of renewed recession and difficulty for the districts, as well as for Italian industry as a whole. However, the year 2014, still recessionary, saw a recovery of Italian manufacturing and specifically of most industrial districts, led by an increase in exports. Turnover, orders, and employment showed positive trends, in particular in medium-high technology industries (mechanical engineering and electro-mechanics), but also in the more traditional Made in Italy industries (food and beverages, textiles and clothing, and furniture and home furnishings) (Mazzeo 2016). During this still weak recovery, the districts – after almost a decade when they underperformed the other industrial areas of Italy – returned to growing faster than the rest of the production system. It appeared that the "district factor," despite some curtailment of its strength, remained an important element in the competitiveness of Italian industry.

This return to growth of the districts, albeit hoped for, was rather unexpected. It was also the outcome of a structural transformation in the most successful districts, each reinterpreting its activity and functions and developing diverse organizational models. The crisis led to a revision of the market and the organizational strategies of the district firms, particularly in relation to the thick fabric of formal and informal networks. The consequence is ongoing change in the shape and substance of the districts, still rooted, however, in the solid practices that gave the districts their strength. New elements are influencing the paths of innovation (with the growing uptake of digitalization in production processes), the configuration of supply chains, and the strategies of internationalization, reshaping the relationship between the production systems of the territory and its social capital.

The reshaping of the district model and its fabric of networks is a consequence of the twin developments of globalization and digitalization. On the one hand, these factors have compelled the district firms to combine the traditional local dimensions of their networks with enlarged ones that include the foreign countries where they operate and sometimes try to recreate a "district atmosphere". On the other hand, they have pushed the firms to blend their rather informal traditional ways of organising production with the transmission of capabilities and the more formalized organization of production and distribution processes, relying on automation and the remote control allowed (or rather, required) by digitalization. As the process of modernization of industry rests mainly on ever-closer integration between manufacturing and advanced services, in particular with those related to ICT, the (successful) districts appear to have taken a path whereby the impact of digitalization becomes transformative, leading perhaps to a new phase in their life cycle. Indeed, because of the twin developments mentioned above, knowledge networks are changing and the district model needs to change correspondingly, with its territorial structure possibly taking on new shape.

This appears particularly true in relation to the organization of supply chains and supply networks. In this period, the lengthening of supply networks became widespread with the strengthening and widening of relationships with firms located outside the district, and sometimes abroad. By 2015, more than one-third of the main suppliers of the district firms were from outside the district (but still within Italy).[22]

The widespread changes have also involved the downstream side of activity. The growth in exports from the districts in 2014 and 2015 was a result of their revitalized competitiveness, linked to the evolution of the approach to internationalization and the modification of the competitive strategies of the district firms. In the past, international competitiveness was based on the division of labour and specialization at the district level, which allowed the district firms to benefit from economies of scale that – accompanied by good quality products – gave them an advantage in price competition. When differences in inflation or costs made it difficult to compete successfully on price, the devaluation of the Italian currency restored the competitiveness of Italian firms. With the adoption of the euro, this strategy of recovering price competitiveness through cadenced devaluation became impossible. Moreover, competing on price with producers from emerging markets would have been hopeless. The successful district firms were those that changed their competitive strategy from a strategy of cost leadership to “differentiated leadership”.

Regaining competitiveness was strongly helped by the strength of the Made in Italy brand in most of the industries of district specialization. The positive “Country of Origin Effect” played (and plays) an important role in the international competitiveness of Italian products in the field of mechanical engineering as well as in more traditional areas such as food and clothing, where low-cost competitors would otherwise have a free run at obtaining market share. The strength of the Made in Italy brand, however, would not have been sufficient without product innovation, the personalization of products, diverse distribution strategies, and direct control of after-sales services, all of which increased the ability of companies to retain customers and to reinforce both the components of the Country of Origin Effect (Han 1989).[23] In the period following the 2008 crisis, an increasing number of district firms – and not only the leading or larger ones in the district – implemented multifaceted export strategies. Moreover, in the increasingly frequent cases of the localization of production lines abroad (Mariotti and Mutinelli 2017),[24] the main motivation ceased to be cost savings and became the possibility to operate in a more direct and immediate way in markets of high importance to the firm.

These developments were able to produce a change in the nature of the districts that now could become "bodiless" sorts of entities. They could transform into multi-localised entities in which the territory of origin of the "district" became the seat of design and development and of more sophisticated and non-transferable functions, while the structures located abroad increasingly became nodes of production and distribution networks focused on regional markets.

The most striking change in the system of relationships, however, is not that which affects the knowledge exchanges and the supply and production networks, but the one that modifies the social networks and the internal connections of the district. These connect the various actors that have given life to the district: smaller firms, industry associations, local banks, local foundations, chambers of commerce, and higher education institutions. The leading firms in the district, and smaller ones too, have in this period loosened their links with these subjects and organizations, preferring to make connections with outside networks that facilitate the process of internationalization and technological development. However, quite a few companies have found that some problems, such as the need for specialized vocational training or financial institutions that are connected with and knowledgeable about local situations, can be better addressed through the activities of local subjects rather than external ones.

The issue of the intensity of the links between the business players of the district and its territory, and the connections between the district as a productive unit and the social capital of the district as a community remains at the fore. Although the relational framework in which the district firms operate is constantly and increasingly evolving, the elements that constitute the foundations of the district are always present. Certainly, the link with territory is changing and is apparently looser; collaboration networks are changing their shape and extent. However, the district is still a manifestation of the specificities and the values of its territory and its community. It is still the outcome of know-how that was accumulated over a period of time which is ingrained in its social capital. Not all districts have weathered the storm of the emergence of third-world (particularly Chinese) manufacturing and the Great Recession; many have sunk under its onslaught. Many others have survived, changing when necessary, and preserving what is useful. By 2015, the surviving districts were still vital and competitive elements of world markets and were still at the forefront of the development of the country.

In subsequent years, the districts again showed that they are the place where operations that foster innovation – be this technological, organizational or market-related – are more readily adopted and disseminated. District firms performed better than non-district ones. In the districts there is a higher proportion of exporting firms than in the country as a whole (38% vs. 28%), of firms with internationally registered trademarks (31% vs. 25%), of involvement in Foreign Direct Investment (29 firms invested in for every 100 district firms vs. 20 for every 100 firms nationally) (Intesa Sanpaolo – Direzione Studi e Ricerche 2017). The fact that district firms of every size are present on foreign markets is indicative of the permanence and intensification of informal and sometimes unintentional mechanisms for exchanging and sharing knowledge about the markets that have always been present in the districts. These mechanisms activate a process of imitation of commercial strategies adopted by the most active firms that permits many other smaller firms to compete internationally.

In the critical years after the financial crisis, another development also took place in Italian manufacturing structures. The impact of the often intangible factors of competitiveness that have always characterized these territories gradually strengthened and became more disseminated, and led to the concentration of entire sectors in the districts. As a result, many sectors, such as tanning, footwear, hosiery, jewellery and tiles, are now strongly if not exclusively concentrated in districts. It appears that the districts continue to generate positive externalities which support the global competitiveness of their firms. Moreover, this creates a context that favours investment in the ever more specialized districts by larger Italian firms, as well as foreign multinationals (De Michele 2017).

This rediscovery of the districts as a competitive home base, attracting FDI from foreign multinationals – either in the form of acquisitions of local firms or the establishment of new production units – has had an additional positive consequence. The leading district firms that kicked off the process of Delocalization from the districts in the 1990s have now started to bring back to the district their production (or at least a part of it). Indeed, the perception of quality linked to the Made in Italy brand and the distinctive and specialized competences of the districts are encouraging the phenomenon of "*reshoring*," the bringing back of production activities once delocalized to low-cost countries to the place from where they originate (Fratocchi *et al.* 2015). Numerous cases of reshoring have occurred in the fashion industry as well as in furniture and household goods and mechanical engineering. This has led to a revival of production in the districts, with a consequent increase in local employment. This has also required renewed focus on high-end segments of the market, which allows these firms to counterbalance the higher costs of production in a country such as Italy compared to emerging countries (such as Turkey and China).

The evolution of the last few years thus points to the resilience of the districts. Those that have weathered the storm have renewed their competitiveness by reinterpreting their traditional factors of strength, leveraging them to reestablish their centrality in the strategies of local firms, and by developing new ways to reinforce and extend the network of connections that helps circulates their vital "lymph".[25]

In order to understand how some districts have weathered the storm, and some have not, a brief analysis of two districts is presented. The tannery district of Arzignano – Valle del Chiampo is a district that has managed to overcome difficulties, and whose firms are still successful players on world markets, while the chair-making district of Manzano is a district that has gone through a near-death experience over the last decade and, despite attempts at reviving it, is a shadow of its former self.

5.1 Case study: the Arzignano-Valle del Chiampo tannery district

This tannery district, located in the Valle del Chiampo (in the Vicenza Province, about 90 km west of Venice), includes 15 communes extending over 130 Km^2 and has a population of 99,000 inhabitants. Economic activity in this area is heavily concentrated in the tannery industry, which employs 8,500 people in 458 local units (Unione Nazionale Industria Conciaria 2018). It is the biggest of the three areas in which most of the Italian tannery industry is located (see Table 1).

Table 1: Italian tannery industry, 2017

District	Number of firms	%	Number of employees	%	Value of production in EUR million	%
Valle del Chiampo	458	37.2	8,498	47.9	2,867	56.2

S. Croce sull'Arno	526	42.7	5,762	32.4	1,420	27.8
Solofra	157	12.7	1884	10.6	360	7.0
ITALY	1231	100.0	17,746	100.0	5,100	100.0

Source: Unione Nazionale Industria Conciaria (2018).

The tannery industry has always been one of the strong points of Italian manufacturing. In the last seventy years it has gained increasingly significant weight on international markets, becoming the largest producer and the largest exporter of leather in the world. It kept this position until the turn of the century, when it was overtaken, in terms of quantity produced, by China.[26] It still remains the leading producer in terms of value: in 2018, the value of Italian leather products amounted to 20% of the world total. Even more predominant is the position of Italy in international trade: the export of leather (finished hides) amounts to 27% of the world total (Unione Nazionale Industria Conciaria 2018, 18).[27] The industry employs 17,746 workers in 1,213 firms (if ancillary industries are included, the figures can be doubled). Almost 75% of the production of industry is exported, making it one of the most export-oriented activities in the country. In 2017, the value of exports was € 3.8 billion.

As in the case of many other industries in Italy, tanneries are also concentrated in specialized districts. Indeed, 1,141 firms (94%) and 16,144 workers (91%) creating products worth € 4.65 billion (91%) are localised in the three districts of Arzignano-Valle del Chiampo, S. Croce sull'Arno (near Pisa), and Solofra (in the province of Avellino, in the mountains 70 km east of Naples). Arzignano is the biggest of these, accounting for 38% of firms, 48% of workers and 56% of the turnover of the tannery industry in Italy. Moreover, the Arzignano district is one of the districts that evolved earlier under the Area Sistema structure. Therefore, the tanneries, many specialized in some phases of production or in certain types of skins or final products, are supported by a whole set of firms specialized in collateral activities. So-called "ancillary" industries here range from the mechanical engineering industry that creates the specialized machinery required by the tanning process to the chemical industry that makes specific products for the various phases of processing of hides, from marketing services to traders.

5.2 History of the Valle del Chiampo district

In the Valle del Chiampo tannery traditions are deeply rooted. The first modern record of the presence of a tannery industry in the Vicenza province dates back to 1366, and in documents from the first decades of the following century can be found the first references to tanneries in the Valle del Chiampo. In those years, the acquisition of the territory of Vicenza by the Most Serene Republic of Venice (AD 1404) — opening up the territory to the Venetian trade network — created the conditions for the expansion of economic activities in the area. Among these were the tannery industry in valleys such as the Valle del Chiampo, rich in water and in trees from which tannin could be extracted.

For a couple of centuries this activity prospered for a couple of centuries, but the weakening of Venice also brought about an economic slump, which impacted on the tannery industry as well. From the middle of the seventeenth century, tanning activities declined, and by 1746 only four tanneries were left in the Valle del Chiampo (Zampiva 1997). The industrialization of the Province of Vicenza in the nineteenth century was based on the textile industry, and in particular, wool. In the Chiampo valley, towards the end of the century wool was superseded by the production of silk.[28] Tannery activities, although still a deeply rooted, by 1907 were undertaken by only three smallish firms (which were at the forefront of the revival of the industry in the valley in the following decades) (Fontana 2004). In subsequent years, the silk industry was challenged by a decline in demand during the two world wars and by strong Japanese competition. This crisis intensified in the 1950s and the last spinning mill was closed in 1968, when the leather industry was already booming.

The expansion of the tanning industry in the Chiampo valley can be rightly defined as a boom that started in the 1950s. The revival of this industry had a slow start during the years of the First World War and the interwar period. By 1927, seven tanneries were operating, employing 94 workers (see Table 2). As early as in the years immediately after the Second World War, tanneries opened up in the valley, trebling the number of firms that were present and workers employed.

Table 2: Evolution of the tannery industry in the Chiampo valley in the twentieth century

Year	**1907**	**1927**	**1951**	**1961**	**1971**	**1981**	**1991**
Firms (Local units)*	3	7	19	100	161	602	447
Employees	n.a.	94	361	1,929	3,209	6,358	7,2

* Note: the figures refer to local units: a larger firm may have more than one local unit.
Source: Author's construction using data from Unioncamere (2016) and ISTAT (2019).

Initially, the birth of the district was due to the growth of a few historical firms that expanded their production and increased their dimensions. The real launch of the industry and the establishment of a proper industrial district happened in the 1950s when an increasing number of technicians and even workmen employed by those firms decided to become independent and set up their own small firms. By the end of the decade, the number of tanneries in the valley as well as the people employed by them had increased fivefold. These processes of spin-off from existing firms continued in the following decades and were fostered by the growth of international demand that stimulated the establishment of new firms also specialized in trading (raw material inputs) and marketing sectors. The fact that the larger firms preferred to keep abreast of the growing demand not so much as by internal expansion as through growing recourse to subcontracting gave the district its specific structure based on the external division of tasks and deep specialization.

The 1980s saw the first period of contraction. In the first part of the decade, the tanning industry suffered the effects of the unfavourable economic situation that hit the Italian economy in those years. Then, when the Italian economy started recovering, the tanning operators realized that the problems of the sector were not cyclical but structural. Until then, the output of the industry was mainly absorbed by downstream industries in Italy: footwear, leather goods, furnishing, apparel, all highly successful industries with a strong position in world markets. However, in the early 1980s these downstream industries were in difficulty: the downsizing of the leather goods sector was followed by that of the main customer of the tanneries: the Italian footwear industry, which had become less competitive (mainly on price, but also because of fashion). In other downstream sectors, too, Italian products were losing market share. It appeared that national demand was going to remain stagnant, and that for products of medium-low quality was definitely contracting. This led to a structural surplus of supply that had the potential to cause the downfall of the Italian tanning industry and the demise of the Arzignano district.

By the middle of the decade, many operators were in serious difficulty: the drop in orders from downstream industries led to cash-flow problems for larger companies, which in turn stopped payments to suppliers and subcontractors. Firms started going out of business and unemployment become a problem for the first time in thirty years. This led to reactions from the whole district, from firms to local authorities (Panati *et al.* 1988). The firms made considerable effort – in technological innovation, in managerial modernization and in promotional activity – that required some time to bear fruit. There was a serious process of restructuring among the firms of the district following the closure and merging of several companies. While the less efficient firms dropped out of the market, the most solid ones were able to take over these failed activities and start a process of concentration. By 1991, the number of active firms was down by about one quarter, but efforts were showing some results and the number of people employed in tanneries was already picking up (+ 13% on 1981).

5.3 The evolution of the district and its internationalization

The local authorities favoured the establishment of support services that could be shared by all the firms. They helped the latter to cooperate in their approach to foreign markets and to develop a positive image of the production of the district rather than (or in addition to) that of single companies. The shift to higher quality, facilitated by technological innovation, the improvement of the image of the products of the area, the push to find new uses for products, and the joint drive with downstream firms to regain leadership in fashion were the factors that allowed the district to overcome difficulties and reshape itself for a new period of successful growth.

The consolidation and the recovery of the district also stemmed from the activities of the supporting institutions and of related and supporting industries. The former concerned the training of workforce and the provision of infrastructure (in particular, the establishment of a purification plant to raise compliance with new anti-pollution rules), and the latter to the expansion in the district of firms in ancillary industries. This included suppliers of inputs, such as chemicals for the tanning process and specialized machinery or traders specialized in different types of hides, as well as suppliers of services and even some downstream industry. In particular, in those years a process of the establishment of small firms in the mechanical engineering industry took place in the western Vicenza area. It also involved the district, where a thriving industry for tanning machinery developed.

The 1990s saw the full transformation of the industrial district of the Valle del Chiampo into a fully-fledged Area Sistema (see Table 3). The development of new technologies for tanning machinery was undoubtedly a form of support for the development of the district. In little more than a decade, because of extremely demanding local customers, the local producers of specialized machinery for the tanning industry reached a high technological level that made them uncontested world leaders in their sector.[29]

Table 3: Evolution of the tannery Area Sistema of Chiampo valley (1991–2001)

Activity		1991	1996	2001
Tanneries	**Firms (Local units)***	447	594	644
	Employees	7,2	9,341	10,111
Travel items, bags, saddlery	**Firms (Local units)***	27	21	22
	Employees	135	83	258
Leather gloves and belts	**Firms (Local units)***	7	13	9
	Employees	47	93	47

Making, installing machines for the leather industry	**Firms (Local units)***	32	33	44
	Employees	558	592	570
Materials used in fixing textiles and leather	**Firms (Local units)***	9	13	20
	Employees	132	179	357
Wholesale trade of skins, including leather	**Firms (Local units)***	89	106	139
	Employees	207	272	340

* Note: the figures refer to local units: a larger firm may have more than one local unit.
Source: Banca Intesa (2006).

This evolution gave renewed strength to the district and allowed it to take advantage of the revival of Italian downstream industries, which in turn had overcome the crisis of the 1980s. Moreover, this regained strength allowed the firms of the district to launch their conquest of international markets. These two factors combined to make the 1990s a period of high growth for the district.

In particular, the expansion of the district firms in international markets was quite remarkable and in itself the cornerstone of the success of the 1990s. In this period, the district became one of the most important players in the world tannery industry, with sales on foreign markets growing from 430 million Euros in 1991 to 1,537 million euros in 2000, with an average growth rate of more than 28% per year for the whole decade. In some markets, the growth of the value of exports was truly astonishing: more than tenfold[30] (see Table 5 below).

The number of firms engaged in the main form of industry grew by 44% and the number of people employed by 40%. This was a new golden period for the district, which achieved the highest number of firms and employees in that industry.

5.4 Double-edged globalization

However, the evolution of the competitive environment was again moving in an adverse direction and the problems that were pointed out earlier when discussing of the evolution of the industrial districts were becoming graver. The international expansion of the firms of the district, which initially was aimed at gaining control and protecting the supply of hides, was changing in nature and motive. Initially, because many governments of supplier countries pressed for higher prices for their exports, firms started delocalising the first phases of the tanning process. The alternative of buying the semi-processed hides from external suppliers did not appeal to the tanneries of the district, because using these inputs presented the risk of a loss of quality control and innovation in the upstream phases of production. The answer was to control, through various forms of Delocalization, the production phases located in the countries of origin of the hides.

Of course, the lower labour costs and the laxer environmental protection rules in those countries were strong additional motives for such a move. Indeed, the increasing price competition brought about by low-cost producers enhanced the attractiveness of a Delocalization strategy. Moreover, similar transformation taking place in the downstream industries (apparel, footwear, and furniture) made a *follow-the-client* strategy more attractive for the tanning companies of the district. In addition, some of these countries were developing their own industrial basis and represented interesting and growing markets of their own. However, this strategy required some of the tanneries to also shift the more advanced phases of the production process to the emerging countries where their clients had moved, or where new clients could be found. These were the ones with highest added value, and on which the competitive strength of the district was based.

Table 4: Evolution of the tannery industry in the Chiampo Valley at the turn of the century

Year	**1991**	**1996**	**2001**	**2004**
Firms (Local units) *	447	594	644	482
Employees	7,2	9,341	10,111	12,482

* Note: the figures refer to local units: larger firms may have had more than one local unit.

The years after the turn of the century involved a tightening of competition, also due to the considerable appreciation of the euro against the dollar, which made it impossible to compete on price with the producers of emerging low-cost countries. These were years of renewed difficulty: performance on foreign markets significantly worsened, turnover and especially profits plummeted. The weakest firms were immediately in trouble, while the most robust ones kept on operating (with less profit) and even increased the number of their employees (see Table 4).

After the success and growth of the1990s, when – as we have already seen – the number of firms increased by 44% and that of their employees by 40%, in the first few years of the twenty-first century one-quarter of all firms disappeared (-25.2% from 2001 to 2004). This was not immediately reflected in the employment figures: in 2004, the number of employees in the tannery industry reached a maximum of 12,482 (an increase of 23.5% over the same three years). Exports, the main engine of growth of the previous years, faltered: in the three years leading up to 2003, exports were down by 4.8%, at a yearly rate of 1.7%. (see Table 5).

Table 5: Evolution of tannery industry exports from the Vicenza province* (1991–2004)

	1991			2000			2004			91/2000	00/03	2004
Country	€M	%		€M	%		€M	%		Δ % yr	Δ % yr	Δ %
Germany	95.4	22.2		225.1	14.6		188.3	12.7		15.1	-7.5	5.5
USA	18.3	4.3		243.4	15.8		173.1	11.7		136.6	-7.9	-8.9
Hong Kong	12.3	2.9		144.7	9.4		170.4	11.5		119.6	6.5	-2.6
France	86.2	20.1		116.9	7.6		96.9	6.5		4.0	-13.2	26.8
Spain	26.5	6.2		97.8	6.4		81.2	5.5		29.9	-8.1	6.8
Poland	2.7	0.6		36.0	2.3		81.2	5.5		137.0	33.8	-6.0
UK	28.7	6.7		98.0	6.4		76.0	5.1		26.8	-6.8	-4.4
China	0.4	0.1		11.6	0.8		67.7	4.6		311.1	60.4	41.8
World	429.6	100.0		1537.4	100.0		1487	100.0		28.6	-1.7	1.6

* Note: Statistical data for exports are available at the province level.
Source: Author's construction using data from Intesa Sanpaolo (2017) and ISTAT (2019).

Initially, this difficult period led to consolidation of the industrial base: while the number of firms decreased sharply, the number of employees kept rising. The effects of this consolidation were rapidly felt: by 2004 exports started increasing again, albeit at a snail's pace. As happened with the whole Italian economy, the district started growing again and kept growing (at a much reduced rate in comparison to the previous decade) for the next few years, reaching a peak in 2007 when products of a value of 1,700 million euros were exported.

Table 6: Evolution of exports of the tannery industry in the Chiampo valley (2000–2010)

Year	1991	2000	2004	2007	2008	2009	2010	2011	2016	2017
Exports € million	430	1,537	1,487	1,700	1,565	1,229	1,370	1,488	2,270	2,379
Growth rate	--	*16.9	°0.81	*4.77	**-7.9**	-21.5	11.5	8.6	*10.5	4.8
Index (2000=100)	28.0	100.0	96.7	110.6	101.8	79.9	89.2	96.8	147.6	154.7

* Note: Average per year for the period, note ° idem, but 2004 saw an increase, see also Table 5.
Source: Author's construction using data Unioncamere (2016) and ISTAT (2019).

This period of renewed growth was cut short by the Great Recession which started in the second half of 2008. In that year its hindering effects were already felt in the district, which saw exports decrease by almost 8% to return to the levels of eight years earlier, while the number of people employed in the tannery industry fell by more than 9% (see Tables 6 and 7).

Table 7: Evolution of the tannery industry in the Chiampo valley from 2004

Year	2004	2008	2010	2012	2014	2015	2016	2017
Firms (Local units)*	482	480	475	472	469	467	459	458
Employees	12,482	11,283	*8,183	8,220	8,358	8,341	8,324	8,498
Value of Production $ billion	2.53	n.a.	2.29	2.48	2.8	2.81	°2.73	3.08

* Note: the extremely sharp fall in the number of employees (72%) is partly due to a change in the way the statistical service counts people who are employed in industry. The decline in 2016, as well as the growth of 2017, were emphasized due to the vagaries of the dollar-euro exchange rate.
Source: Author's construction using data Unioncamere (2016) and ISTAT (2019).

The full shock of the crisis arrived in 2009, when markets folded, exports collapsed (-21.5%) and companies started shedding employees. There was a reaction to this, and

2010 saw an upturn in exports, followed by another smaller one in 2011. However, the value of production and exports was still lower than in 2000, and the number of people employed was sharply reduced. The district as a whole stumbled along, and the situation, already quite bad, was made worse by the attempts of many local companies, among them some of the biggest ones in the district, to weather the storm by avoiding paying taxes.[31] The following few years brought additional troubles and it took until 2014 for the value of production to rise above the level of the year 2000.

The process of consolidation in the district continued, but at a much slower pace, and the fall in the number of employees stopped. The last few years have seen a good recovery (although with fluctuations): the value of production has stabilized and lately increased. Exports were the engine of this recovery, reaching new heights in 2016 and 2017.

5.5 Survival and recovery of the district

The deluge caused by the successive bursting of the Chinese tanneries onto world markets and the Great Recession caused serious problems for the district. However, it was able to face the challenge and seems to have rediscovered ways to remain the world leader in the production of leather, safeguarding both the profitability of its companies and the compactness of the area, its firms, its institutions, and its population.

The firms in the district managed to overcome the challenge of the low-cost producers by focusing on the most profitable activities and positioning their products in the high-quality segments of the market. Innovation in production process and in inputs (machinery and chemicals) helped maintain and sometimes increase this lead in quality. This allowed the district firms to keep in the district a large part of higher added value activities, even increasing the value of some of them. Additional attention was paid to services or combinations of products and services that are particularly significant in the B2B markets in which they operate.

As already mentioned, the engine of the recovery is exports: an increase in sales in many traditional markets and successful penetration in new markets. Particularly remarkable is success on the Chinese market: having lost out to Chinese leather producers the low price segments of the international market, the Arzignano tanneries (as well as those of the other Italian tannery districts) have managed to establish themselves firmly as preferential suppliers for high quality leather to the downstream Chinese industries.[32]

A very important step in the recovery of the district and in the maintenance of the leading position in quality products and preserving the compactness of the district as a socioeconomic unit was the keen attention paid to – and huge investments in – controlling environmental impacts. Indeed, the choice to take the road of environmental sustainability and transparency with regard to the production process, in particular in the use of chemical substances, is a trend common to the entire Italian tannery industry. In the year 2016 the industry spent on sustainability measures 4.4% of turnover, compared to 1.9% in 2002. This not only makes for a better living environment for the inhabitants of the district (from the owners of the firms in their villas halfway up the side of the hills to the shop-floor workers in their flats in the valley – both of whom breathe the same air), but also creates a competitive advantage in the eyes of downstream customers.

The top international brands (in fashion, the automotive industry, interior design and furniture) that are their most important clients deem having a sustainable business strategy a necessity and require this of their suppliers. Therefore, environmentally friendly suppliers are in a strong competitive position. Italian tanneries, including those in the Arzignano district, have been very proactive in this field. Most firms now have environmental certification; programs for reducing the use of water (consumption in 2016 was 20% lower than in 2003), energy (-32%) and chemicals (-4% from 2007) are widespread (Unione Nazionale Industria Conciaria 2018). Further efforts are being made to improve the treatment of waste water, reduce emissions to atmosphere and to recover and use waste products.[33]

Innovation, the search for new markets, attention to the sustainability of production and to the local environment have allowed the district to stand up to competition from other countries, to maintain its position as a leader in the industry, and to keep in large part intact the social structure that gives it its extraordinary resilience in the turbulent economic environment of the present times.

6 The Manzano "Chair district"

The "chair district," located in the eastern part of the Friuli-Venezia Giulia region (province of Udine, about 110 km north-east of Venice), includes 11 communes extending over 224 Km^2, and has a population of 37,000 inhabitants. Economic activity in this area is heavily concentrated in the furniture industry, specifically chair-making, which employs 5,500 people in 878 local units that belong to 660 firms (Magliocchi 2015a; 2015b). It is one of the many (12) districts in Italy specialized in the production of furniture; indeed, it is among the five most important districts in this industry,[34] but it is the only one focused almost exclusively on making chairs.

The furniture industry is another of the strong points of Italian manufacturing. The furniture sector (excluding the upstream activities of the first processing of wood) comprises 18,000 firms employing 132,100 people and has a turnover of about 21 billion euros, of which 44% comes from exports.[35] This is another of the industries in which Italian producers have for a long time dominated international trade. Italy became the leader in world exports in the 1980s and 1990s, and in particular in the first half of the 1990s when the devaluation of the lira noticeably increased the competitiveness of Italian producers. From the turn of the century, this position was gradually eroded, due both to an unfavourable trend in the exchange rate[36] and to the diffusion in the international markets of products from emerging countries (see Table 8).

Table 8: Exports of Product 94: Furniture; bedding, mattresses, cushions, etc. Million US $

Year	2001		2004		2008		2010		2012		2014		2016		2017	
Country	M US$	%	M US$	%	M US$	%	M US$	%	M US$	%	M US$	%	M US$	%	M US$	%
China	2,421	7.4	5,986	13.0	13,737	19.2	18,041	27.7	27,017	34.4	28,435	33.3	25,912	32.6	26,560	31.4
Germany	2,874	8.8	3,951	8.6	7,688	10.8	6,639	10.2	7,492	9.5	7,912	9.3	7,228	9.1	7,462	8.8
Italy	4,836	**14.8**	6,286	**13.7**	9,315	**13.0**	7,049	**10.8**	7,293	**9.3**	7,919	**9.3**	6,910	**8.7**	7,223	**8.6**
Vietnam	199	0.6	716	1.6	1,841	2.6	2,129	3.3	2,655	4.0	3,430	4.0	3,901	4.9	5,882	7.0
Poland	1,123	3.4	1,937	4.2	3,644	5.1	2,920	4.5	3,154	5.0	4,234	5.0	3,985	5.0	4,314	5.1
USA	1,819	5.6	1,826	4.0	2,922	4.1	2,607	4.0	3,122	3.8	3,233	3.8	2,893	3.6	2,946	3.5
Canada	3,184	9.7	3,337	7.3	2,874	4.0	1,993	3.1	2,115	2.7	2,273	2.7	2,758	3.5	2,818	3.3
World	32,683	100.0	45,963	100.0	71,486	100.0	65,214	100.0	78,648	100.0	85,436	100.0	79,381	100.0	84,454	100.0

Source: International Trade Centre (2018).

In particular the entry and success on the international markets of producers from countries with cheap labour (*in primis*, China) exerted considerable competitive pressure, above all on Italian production positioned in the medium-low market segment. This caused a loss of market share in world exports as early as in the first half of the 2000s, which after a short recovery became steeper after the crisis of 2009 and steadied only after 2015.

As is made clear by Table 8, although other players gained significant market share in the 17 years of this century, the real disruptive influence was China, whose share grew from 7.4% in 2001 to 31.4% in 2017.[37] Italy is now in third place as an exporter of furniture and has been overtaken by Germany, which declined more slowly after the crisis.

However, the decline did not affect all the Italian furniture companies to the same extent; some of them managed to weather the storm better than others. Comparison of the performance of the main districts explains these differences. In the first years of this century, when Chinese competitors appeared on global markets, some districts (Murgia and Manzano) felt more stress than others. They also missed out on the partial recovery in the middle of the decade and felt most heavily the impact of the 2009 Great Recession. The explanation for the great difficulty encountered by these two districts is in their competitive positioning in terms of production processes, product quality and product differentiation. Those districts, which were already focused on high quality furniture and differentiation of their offerings, could better withstand the price competition from emerging countries and even take advantage of the purchasing power of the increasingly rich segments of those countries.

The Murgia and Manzano districts, however, were negatively affected by their focus on a single type of product that in the heyday of their companies did not require much attention to high quality. These characteristics fully exposed the firms of these districts to the strong price competition of Chinese producers. Within a few years, the latter had taken leadership positions in all the main markets of the sectors in which the firms in the Murgia and Manzano districts were specialized (upholstered furniture and chairs, respectively). The situation of the firms in these two districts worsened after the 2009 Great Recession and few of them have managed to maintain or regain their competitiveness. As a consequence, these two districts have gone through a very disruptive experience.

6.1 Historical development of the Manzano district

Although the origins of chair-making in the eastern part of Friuli can be traced back to the second half of the eighteenth century, the initial establishment of chair-making producers in Manzano is dated to 1878. In short, a growing number of craft undertakings and small family businesses developed in three neighbouring municipalities,[38] bringing into being what became known as the "*Triangolo della sedia*" (the "chair triangle"). In the years around the turn of the nineteenth century chair-making activity spurred the process of industrial development of the area. The First World War brought to an end this initial development. For more than three years the front line at Isonzo was less than twenty kilometres away. Austro-Hungarian forces then occupied the area after the battle of Caporetto, and it was liberated by Italian forces one year later, after the battle of Vittorio Veneto, just before the armistice that brought to an end the war on the Italian front. At the end of the war, 70% of the industrial potential of the area had been destroyed.

In the following years, the area recovered (also thanks to the expansion of the border of Italy to the east) and by 1928 a few hundred firms were active in the wood and furniture industry. Almost all were small or very small family-run, artisan businesses, usually located within family homes. Some elements of the district structure started to appear, insofar as the process of specialization commenced with the development of a network of firms that complemented each other, with the largest ones subcontracting some of the components of the final products.

The Second World War also brought disruption to the area, and the recovery took some time. However, in 1951 the district already counted 3,545 people employed in the wood and furniture industry (91% of whom within the three original communes of the "chair triangle"). As with most of Italy, the 1950s and 1960s were times of growth. For most of this time, the development of the district followed the same pattern as the interwar period. Craftsmen and businessmen (the latter most often belonging to the former group) built their plants or – usually – workshops close to their homes. These small firms seldom had the resources to manage the whole production process internally, and this created the mesh of interdependency that bound them together.

Here, too, the district as a socio-economic phenomenon emerged. Local firms, although pursuing their own interests, closely interacted. This was justified in economic terms by the division of labour that – by having each firm focused on a single or a few phases of production – fostered the development of highly specialized skills. This helped the district as a whole to act as a vertically integrated company, in which each phase was carried out by a different firm that worked to the highest standards. Close interaction was also justified (and fostered) on social grounds, facilitating collaboration based on mutual trust. Most of the owners of these firms knew each other. As villagers, they went to the same school, met in the same bars, shared leisure activities, and often had links of kinship or friendship. For these reasons, the risk of opportunistic behaviour was much reduced and transaction costs between local firms were very low.

This season of growth was brought to a temporary halt by the end of the Italian "economic miracle" in the late 1960s, followed by the oil crisis and general worsening of the global economic atmosphere of the early 1970s. Just when a slow process of recovery had just started, an additional blow hit the area in 1976 in the form of a disastrous earthquake. The district was only partially affected, with six municipalities out of eleven being designated "damaged localities" (one of which "gravely damaged").[39] Industrial activity also suffered, but the process of recovery from the slump of the early 1970s, already under way, slowed but did not stop. By 1981, the district was again growing rapidly. It had close to 1,000 local units in the wood and furniture industry, with 12,000 employees (see Table 9).

Table 9: Local units and employees in the Chair District of Manzano (1951–1991)

Year	1951	1981	1990	1991
local units	n.a.	n.a	1,126	1,022
employees	3,545	12,045	11,661	10,188

Source: Jelen (1993, 168).

The 1980s were a period of growth, marred by some slowdowns, particularly towards the end of the decade. By 1991, the number of units, after some additional growth, had returned to the number at the beginning of the decade and the number of people employed had declined to around 10,000.

The heyday of the chair district was the 1990s. The globalization process entered an accelerated phase and the firms in this district took full advantage of it and of a favourable environment. Exports soared, and within a few years the Manzano district had became the world superpower in the chair industry. About 50% of all the wooden chairs produced in the then 12 countries of the European Union and almost 80% of those made in Italy were produced in the district (Jelen 1993). An important component of this growth was expansion into foreign markets.

Table 10: Italian exports of chairs and seats (ATECO CM31092) (1991–2000)

	1991	1993	1995	1997	1999	2000
Thousand euros	472,498	627,409	810,335	882,204	1,015,484	1,140,597
% of world exports	n.a.	n.a.	18.8	18.0	18.5	19.4

Source: Author's construction using Coeweb-ISTAT (2019) and UNCTAD data (2019).

Around 90% of Italian exports of chairs came from the Manzano district; in this decade they increased by 142% to reach a value of 1.14 billion euros (see Table 10). The district dominated trade in this type of product and for a long time was the largest world exporter of this item of furniture, with close to one-fifth of all chairs sold across borders coming from its eleven municipalities. However, towards the end of the century signs that things were changing started appearing. Competition from emerging countries strengthened and Chinese producers began a phase of expansion that would lead to the conquest of international markets.

6.2 The crisis of the Manzano district

Since the beginning of the 2000s, the Manzano chair district has entered a period of productive and occupational crisis that has almost brought about its demise. The downturn was sudden and due to a combination of factors. Endogenous structural factors (the obsolescence of products and scarce technological innovation) affected the competitiveness of the district and weakened it, making it more vulnerable to the influence of subsequent exogenous factors triggered by the global crisis of 2009.

The most obvious exogenous factor was the competitive push of Chinese firms. Chinese producers, who had begun their expansion in the second half of the 1990s a few years after the accession of China to the WTO, stormed world markets and obtained a hegemonic position (see Table 11), accounting for 6.3% of world exports in 2001, reaching a high tide mark of 34.1% in 2014.[40]

Table 11: Share of exports in seats, etc. (SH4 9401); selected countries (2001–2017)

Year	2001	2004	2008	2010	2012	2014	2015	2016
Italy	14.3	12.1	7.9	6.1	4.9	4.9	4.5	4.7
China	6.3	11.2	24.5	28.8	34.1	32.3	33.5	30.7
Mexico	10.1	9.0	5.8	6.4	7.3	8.5	8.9	9.1
Poland	5.1	7.4	8.0	7.8	7.1	7.6	7.3	7.7
USA	11.1	7.2	5.8	5.7	5.8	6.1	6.4	6.4
Germany	8.0	7.9	7.8	6.9	6.6	6.1	5.9	5.7

Source: Author's construction based on International Trade Centre (2018) data.

Considering that until the end of the century Italian producers had befitted from the competitive devaluation of the lira, the adoption of the euro – and the consequent impossibility of devaluing the currency – itself constrained their competitiveness. To this must be added that after the freezing of the exchange rate of lira-euro in 1999, after a period of slight weakening the euro appreciated significantly in relation to the US Dollar (by 2004, the dollar exchange rate had fallen by 39.8% and touched its lowest point in 2008 when the fall reached -65.3%[41]). One of the most important factors that had driven exports and the production volumes of the district, *price competitiveness* – linked to the exchange rate, lower labour costs compared to European competitors and the "district economies" – had suddenly disappeared. Moreover, an additional threat on the international market became evident: producers from Central-Eastern Europe, in particular Poland. An additional factor of the structural weakness of the Manzano district became apparent: wooden chairs are not a complicated product to make, and many small firms from the district had never tried to improve them. Competition from Asian and central-Eastern European producers was strongest in the market for low-cost products, which were also those items sold in the largest quantities.

The result of these changes was a general loss of competitiveness of district firms on international markets, which led to a sharp decline both in the value of exports (-22.3% from the peak of 2000 to 2008) and in the share of world exports (see Table 12). The growth of new competitors, in particular Chinese ones, was a structural feature of the competitive context of the sector. This explains why the crisis of the district did not abate, as happened in the Arzignano tannery district after the middle of the decade. The plunge in exports caused, as a result, a fall in the production and profitability of almost all businesses; numerous closures of firms, and a corresponding loss of jobs. An additional factor amplifying the production and employment crunch was – as happened in most Italian districts – the (partial) Delocalization of the production process undertaken by some of the large firms from the district.

Table 12: Italian exports of chairs and seats (ATECO CM31092) (2001–2008)

	2001	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
Thousand euros	1,130,637	1,102,137	1,009,807	961,336	896,051	903,966	915,601	886,614
% world exports	16.4	16.2	15.2	13.0	10.7	9.4	9.0	8.1

Source: Author's construction using Coeweb-ISTAT (2019) and UNCTAD (2019) data.

These firms assigned to their newly established subsidiaries or joint ventures in countries with low labour costs the task of supplying semi-finished products previously supplied by small-sized district firms. The latter had prospered by performing this task well, but could not match the low cost of production of the former countries. The outsourcing strategies implemented by their traditional district customers shrank their market and caused their demise in growing numbers.

From 2001 to 2008 the number of local units fell by 38% and employment in the sector fell by 21% (see Table 13), and the worst was yet to come. Even more threatening for the fate of the district than the shrinking number of companies and employees was the loss of know-how and professional skills necessary for carrying out the various phases of production.

Table 13: Local units and employees in the Chair District of Manzano (2001–2010)

Year	**2001**	**2004**	**2008**	**2010**
local units	1,289	1,212	796	734
employees	10,684	9,253	8,326	7,299

Source: Author's construction using Grandinetti (2003) and Unioncamere (2016) data.

Innovation trends that pushed designs and models towards lacquered or laminated furniture and panels and parts and components made with materials other than wood also hit the district and its wooden chair manufacturers, particularly the smaller subcontracting companies. Moreover, the increasing number of products on the furniture market made in a standardized way without using specific manual processes progressively replaced traditional production processes and the traditional skills involved in them, as well as more traditional styles of furniture.

The Great Recession of 2009 hit the districts of the home furnishing industry harder than other Italian districts with a different specialization; the Manzano chair district was one of the hardest hit. Besides the previously mentioned factors (the entry of new competitors and unfavourable exchange rate) that were at the root of the troubles of the district since the beginning of the century, others came into play. The recession caused a slump in real estate markets everywhere, thus the market for producers of house fittings was essentially frozen for a few years. Another factor specific to the Manzano district was the inability of many firms, particularly the smaller ones, to introduce specific innovations in production processes and in products that would have made it possible to differentiate their products from those of the rising competition. Again, the firms most affected were small artisanal ones (those with up to ten employees, classified as micro-enterprises) that by not making a finished product but only components were the captive suppliers of the larger firms in the district. These firms (making up about two-thirds of the firms in the district) had almost no contractual power and were decimated by the combined pressure of shifting market preferences, increasingly difficulty in accessing credit, and growing recourse to the delocalized supply of their larger customers.

For the Manzano district, the impact of the competition of low-cost producers that appeared in the first years of the twenty-first century was not simply a cyclical factor but a structural feature of the competitive context that exposed structural weaknesses in the district. As a consequence, the crisis was not of provisional duration as it was in other Italian districts. The downwards trend in employment, exports, and the number and profitability of local firms remained constant from the beginning of this period and continued for fifteen years (see Tables 13 and 14). By 2010, the former were back at the levels of the late 1980s and continuing to decrease.

Table 14: Local units and employees in the Chair District of Manzano (2010–2016)

Year	2010	2014	2015	2016
local units	734	643	635	644
employees	7,299	4,500	4,400	n.a.

Source: Author's construction using Passon et al. (2016).

The outcome of this movement was that some of the factors in the success of the chair district almost disappeared. Recourse to outside suppliers or the area's own delocalized production facilities tore apart the fine mesh of interrelationships among the district firms. The degree of personal acquaintance between business owners diminished, and with it their ties of kinship or friendship; because of the fall in number of operational units and employment, the chair industry (and therefore the district) ceased to be the point of reference in terms of job opportunities for the local population. Moreover, because of the Delocalization, the long-lasting relationships between business owners and their employees became frayed; this relationship had allowed the former to ask for additional effort from the latter (such as working on weekends to complete urgent orders) and gave the district firms an additional competitive advantage.

6.3 Survival of the Manzano District

In these years, the district clearly evolved in the direction of a dichotomous model. A few (larger) leading firms, through their propensity to innovate, managed to influence the network of smaller firms that by changing and innovating remained linked to them, and continued to be competitive on world markets, while a large number of smaller firms, unable to adapt, remained inescapably behind and struggled – and often failed – to survive.

One of the decisive factors in the survival of firms was their export orientation. Firms focused on innovation with an export orientation also achieved positive results in these years. Particularly after the recession of 2009, firms that focused on the national market suffered heavily, be they subcontractors or final product assemblers or producers. Indeed, the small companies that best weathered the storm were also the ones which were strongly export oriented or which had managed to join the networks of bigger ones (also export oriented).

The efforts of those firms indicated the direction of survival of the district: innovation, partial replacement of wood as the raw material for furniture, product differentiation, and expansion of the product range beyond chairs. The district structure, with its strong interaction between institutional actors and firms, also helped survival. Regional and local authorities launched initiatives aimed at regrouping the firms of the district and supporting them through coordinated efforts. The establishment of the consortium *Cluster Arredo e Sistema Casa*[42] in the region Friuli-Venezia Giulia and its branch that operates in the chair district (the Italian Chair District) helped to modernize district firms and maintain their presence on international markets. The exports of the chair district started recovering in 2015 and since then have modestly but continuously trended upwards (see Table 15).

Table 15: Rate of growth of exports of the chair district

Year	**2013**	**2014**	**2015**	**2016**	**2017**
Exports	-3.1	+1.3	+1.1	+1.2	+2.9

Source: ICD (2019) data.

The recovery of exports also led to an inversion in the downward trend in the number of firms and employees that in 2016 grew at the same pace as exports. It is too early to say whether these are signs of a definitive revival of the district; however, the fall appears to have stopped and the capacity for penetration into foreign markets of the surviving firms appears to be good and increasing.

7 Conclusions

The first two decades of the twenty-first century saw great changes in world economies and in the relative economic comparative weights of many countries. Although the countries that had the largest economies are still in great part the same, the new entrants to this group have caused significant disruption in many industries and affected the economic conditions of many countries. Italy, too, was affected by this evolution, somehow more than other countries (Italian GDP growth in this period was the lowest among the largest economies). Even though Italy remains one of the biggest exporters in the world (ninth in 2017), and has had – since 2011 – the second largest trade balance surplus among the G7 and the third among EU countries, it has felt the severe effects of the double disruptions of this century (first, the bursting of China onto world markets, and then the Great Recession of 2009). Given that the Italian industrial structure is based on the Area Sistema industrial districts, it is inevitable that the districts fully felt the brunt of this disruption. Some districts managed to weather this deluge in a relatively short time (within a couple of years after Chinese accession to the WTO, five years after the recession), while others have barely survived (being in decline since the first years of this century). An example of the former is the tannery district of Arzignano, and of the latter the chair district of Manzano.

The factors that determined the different performance of these two districts are varied. They typify the reasons for the ability of the district model to resist and react to the disruption. The most important one is the reactivity of the business-people of the area. Only if the districts' firms are able to adapt and possibly to anticipate changes in the competitive environment can they keep abreast of the changes and remain vital. Product innovation that follows if not instigates the changing trends in the market is essential. Too many firms (particularly small ones) in the Manzano district remained anchored to making wooden chairs of a traditional design and average quality, and were crushed by producers who could sell the same products at a much lower price. Only quite late in the day was a strategy of product innovation and the use of different materials pursued by some of the firms.

In the Arzignano district, in contrast, most firms kept making leather but managed to maintain and improve the high quality for which they were already well known. For this, they also had to improve their production processes. Process innovation can not only reduce cost, but, more importantly, may allow the exploitation of new technology, fostering the making of things in new ways, and improving quality and reducing waste. This was certainly the winning card played by the Arzignano district. The introduction of new tanning processes and new machinery allowed the district firms to exploit the shift in consumer demand for more environmentally friendly products, helping them become the leaders in "green" innovation in the industry.

The process of "greening" leather production and the whole district was significantly helped by the facilitating support, and sometimes the more direct role, of public institutions, and in particular of local municipalities. In the Arzignano district institutions had learnt to play a facilitating role in the development of the Area Sistema since the 1980s and this expertise played an important part in the relatively rapid recovery of the district. The Manzano district saw the less proactive role of local institutions, which became significant only after the crisis had almost destroyed the area.

Finally, the social structure of the districts endured a severe battering, because, besides the usual problems faced in previous downturns (closures of businesses, unemployment, and reduced spending power affecting all facets of the local economy), the structural shift caused by the delocalization policies of many of the larger firms sapped the trust between district stakeholders. This development might have caused the demise of the districts as they are normally portrayed (and in Manzano this came close to happening). However, the nature of the districts and the combined efforts of all stakeholders led to success in working out a response to this existential crisis. Smaller companies (the surviving ones) learnt new methods of production and management that allowed them either to access directly final users or to play a supporting role for the larger firms through their capacity for innovation. Larger companies realized that the process of internationalizing their supply network was giving diminishing returns and undermining one of the most important sources of their strength; they thus paid more attention to maintaining a local supply base, thereby helping smaller companies come through the crisis.

Institutions played an important role by stimulating and supporting innovation in firms, by establishing or strengthening training programs and specialized schools, and by supporting joint efforts to develop district-wide infrastructure. This concerted effort managed to restore trust among stakeholders, at least to the level where it was once again a significant factor in the socio-economic environment of the district.

This path to recovery is common to the two districts. However, in Arzignano this process started earlier, in an environment where some aspects of success were already integrated. This allowed the district to get through the first disruptive wave of low-cost competition and recover their leading worldwide role in industry before being hit by the second and more disruptive wave of the Great Recession combined with the explosive growth of Chinese exports. This second crisis was deeper and more destructive than the first one, but the district was in a good situation and many of the instruments and attitudes necessary for overcoming the challenges were already in place.

As a consequence, the district managed to recover after five long years of troubles and reassert its leading role, returning to an expansion of production, exports, and profits in the five years afterwards. In Manzano, initial conditions were not as good and the process started much later. The district was hit much more forcefully by the first wave and had not recovered before being hit by the second one. The disruption in this district was much more severe; the response only came later and in a more damaged socioeconomic environment. The revival of the district started after 13 years of steeper decline, and it is still tentative. That it is reviving at all is testament to the inherent strength of the district model and its resilience as a socioeconomic unit.

Notes:

[i] The term "industrial district" was defined first by the economist Alfred Marshall (1842–1924). Marshallian industrial districts show a high degree of vertical and horizontal specialisation. Firms are geographically clustered, tend to be small, specialised and competitive, and rely on market mechanisms for exchange. The communities where skilled labour is based are close-by, making it relatively easy to recruit staff for firms, while technical knowledge is easy to disseminate and enables a decrease in transaction costs.

[1] The proportion of employment attributable to industry among those countries is Italy 28.3%, Japan 26.2%, Germany 24.2%, USA 20.3%, France 20%, UK 15.2% (CIA 2018).

[2] The proportion of GDP attributable to industry among the same countries is: Germany 30.1%, Japan 26.2%, Italy 24%, France 20.1%, USA 19% and UK 19% (CIA 2018).

[3] These are the sectors that propel Italian products in international markets and where excellence linked to Italian mastery in crafts makes for a strong and successful competitive position. The "four As" come from the Italian words for the related sectors: *Alimentari-vini* (food and wines), *Abbigliamento-moda* (clothing and fashion – including textiles), *Arredo-casa* (home furnishings) and *Automazione-meccanica* (automation and mechanical engineering).

[4] We call it an *Italianate* industrial district to indicate that it has become an archetype in itself and may become a model reproduced in other countries. Use of the term Italianate for such Italian districts is found in an old paper from Alberti (2018).

[5] The concept of the Marshallian industrial district did not imply that local actors needed to consciously cooperate to ensure the existence and successful operation of the district. In the Italianate district conscious cooperation among actors is widespread, and indeed is one of its characteristics.

[6] Besides Becattini (1990), who was the first to identify these elements, I refer to Gandolfi and Cozzi (1988) and to Tripodi (2000).

[7] As may be remembered, in 2001 ISTAT identified 181 manufacturing industrial districts, while in 2011 it found 141 of them – some of them new.

[8]The term "cluster" denotes a similar, but not identical phenomenon. The classification of clusters is based on similar, but not identical concepts. See Enright (2003) where *working*, *latent*, *potential*, *policy driven* and *wishful thinking* clusters are mentioned.

[9] "*In fieri*" (Latin): Being in the course of accomplishment, in the process of execution; a thing commenced but not completed.

[10] Sobriquet: nickname.

[11] In those years, 12.4% of the world exports of shoes came from Italy, as well as 20% of leather and 49% of global exports of ceramic tiles. However, this world leadership was not limited to such "traditional" industries. For example, 11.2% of world exports of machinery for agriculture and forestry and 12% of industrial machinery also came from Italy.

[12] This was a way to compensate for the loss of international competitiveness due to differences in inflation from Italy's main international competitors (primarily Germany) and the other inefficiencies of the "country-system" of Italy, which regularly put Italian firms at a disadvantage.

[13] It should not be forgotten that, at least in part, the devastating competitiveness of low-cost competitors (in particular, of Chinese companies) was facilitated by the frequent practice of engaging in unfair methods. The appropriation of intellectual property (sometimes by simply copying, or reverse-engineering a product) and below-cost pricing (either straightforward dumping,

or due to state financial support for exports) were – and still are – quite common. Another common and damaging practice is counterfeiting, which causes serious losses due to impacts on sales, leading to loss of market share, and often to lower quality products and thus a decrease in brand image.

[14] Innervate: to supply with nerves, to pervade.

[15] However, the fact should not be overlooked that for a proportion of the delocalising firms the reason for doing so was to exploit the possibilities offered by markets growing at a much faster pace than the national one.

[16] The growth rate of Italian GDP (in real US Dollar terms) in comparison with other main European countries was:

Country	00	01	02	03	04	05
Italy	3.71	1.77	0.25	0.15	1.58	0.95
France	3.88	1.95	1.12	0.82	2.79	1.61
Germany	2.96	1.70	0.00	-0.71	1.17	0.71
UK	3.66	2.54	2.46	3.33	2.36	3.10
Spain	5.29	4.00	2.88	3.19	3.17	3.72

Therefore, in these six years Italy's economy performed worse than that of the other big European countries, except for Germany.

[17] Filière: network, industrial network.

[18] OPT (Outward Processing Traffic) is a form of delocalization that affects only part of the production process and results in a dual flow of goods: first of basic materials or components from the de-localizing firm to the processing one, then of the processed components back to the first firm. According to an OECD definition, the temporary export of goods for outward processing is a customs procedure under which goods that are in free circulation in a customs territory may be temporarily exported for manufacturing, processing or repair abroad and then reimported with total or partial exemption from import duties and taxes.

[19] After all, China is certainly the country that has the greatest potential, and therefore represents the greatest menace in both the traditional and new export markets of the districts.

[20] Altogether, Italy was in recession for 60 months, including six months in the second half of 2007, and 15 months from Q2 of 2008 to Q2 of 2009. After two years' recovery, Italy fell back into recession again in Q3 of 2011 and remained in this state for 27 continuous months until Q3 of 2013. Finally, it returned to recession for the whole of 2014 (Eurostat 2018).

[21] Italian law defines industrial districts as "local territorial areas characterized by high concentration of small businesses, with particular reference to the relationship between the presence of companies and the resident population and the productive specialization of all companies" (Art. 36, Law 317/1991). The two main criteria for identifying an industrial district are thus: a) high concentration in the area of industrial firms, with a prevalence of small and medium-sized ones; and b) productive specialisation of the business system.

[22] However, for the majority of district firms (53%), the main suppliers are still located in the same province or region. This suggests that proximity, albeit not narrowly restricted to within the few towns of the district, certainly helps with the formation of solid and effective networks (Unioncamere 2016).

[23] The *Country of Origin Effect* (COE) manifests itself in two ways. When consumers are not familiar with a product and cannot tell its actual quality, they refer to the image they have of the country of origin (or the country they associate with the product) to infer its quality. This is the *halo effect*, which directly influences consumers' beliefs about product attributes and indirectly

affects the overall evaluation of that product through initial beliefs. When consumers are familiar with certain products from a given country, they abstract from this knowledge an evaluation of the quality of other not known products from the same country. This is the *summary effect.* Thereby the country image consumers have constructed through their appreciation of different products directly affects their attitudes towards unknown brands or products from the same country. See: Han (1989).

[24] Although increasingly used, equity and non-equity agreements, as well as foreign direct investment, are still the domain of a very small number of firms (Mariotti and Mutinelli 2017).

[25] Lymph is a fluid that circulates throughout the lymphatic system of the human body. In this context "circulating vital lymph" means maintaining the efficiency of economic operations.

[26] Until the year 1997 Italy was the biggest producer of leather in the world (with 2,020 million square feet), ahead of China (1,969 Mft^2), South Korea (1,235 Mft^2) and India (1,036 Mft^2). China overtook Italy the following year, but Italy remained the second largest producer (in 2006, China was by far the biggest producer in terms of quantity, with 4,000 million square feet, followed by Italy, 2,039 Mft^2; Brazil, 1,655 Mft^2; Russia, 1,410 Mft^2; India, 1,119 Mft^2; and South Korea, 1,090 Mft^2). Source: Banca Intesa (2006).

[27] However, this was 34% of the total value of exports of finished hides and 22% of the total exports of the industry (including raw hides and semi-finished products) Source: Banca Intesa (2006).

[28] The wool industry remained a mainstay of the industrialisation of the province of Vicenza. In particular, in the next valley to the east of the Chiampo, the Valle dell'Agno is still located one of the largest Italian textile groups, the Marzotto Group, established in 1836 as Lanificio Luigi Marzotto e Figli.

[29] The first tanning machines arrived in Arzignano in the 1950s, and were of German manufacture, in which country a well-established specialized industry had existed for a long time. Subsequently, the first producers of machines and drums for tanning began to appear in the area. By the 1980s a local industry was well established and started developing specialised know-how.

[30] For example, the value of exports to the USA grew more than 13 times, from € 18M to € 243M, at an average rate of 136% per year; those to China grew 29 times, admittedly from a low base, from € 0.4M to € 11.6M, at an average yearly rate of 311%.

[31] The *Guardia di Finanza* (Financial Police) identified a number of business people, including some of the owners of some of the biggest groups in the district, who had evaded taxes in amounts greater than € 100 million.

[32] However, this might spell trouble in the future to the Italian downstream industries as their Chinese competitors are improving the quality of their production.

[33] Among the best practices in this field implemented in the Arzignano district, it is worth mentioning the establishment, through collaboration of firms and the local administration, of a company that recovers the solid waste from the production process and transforms it into fertilisers and other products for agriculture, and the start of the Arzignano Green Land programme that fosters the efforts of the districts to promote a circular economy, and to publicise the latter.

[34] The five most important districts in the furniture industry, in order of turnover, are: the wood and furniture district of Brianza (Lombardy), the furniture district of Livenza e Quartier del Piave (Friuli-Venezia Giulia and Veneto), the kitchen district of Pesaro (Marche), the chair district of Manzano (Friuli-Venezia Giulia, and the upholstered furniture district of Murgia (Apulia and Basilicata).

[35] Ministero dello Sviluppo Economico. 2018. *Statistiche relative all'interscambio commerciale italiano nel settore dei mobile*. Available at: https://www.mise.gov.it/images/stories/commercio_internazionale/osservatorio_commercio_internazionale/interscambio_settoriale/mobili_19_01_2018.pdf (15 March, 2019).

[36] In a few years, the US$-€ exchange rate went from 0.82 to 1.20, representing an increase of more than 46% in the value of the euro. This sapped the competitiveness of exports from all the countries in the Eurozone.
[37] Peaking at 35.7% in 2015, not shown in the Table 8.
[38] The municipalities of Manzano, Corno di Rosazzo and San Giovanni al Natisone.
[39] The earthquake hit Friuli, with its epicentre north-west of the district. It caused 990 deaths, and 45 municipalities were declared "disaster areas," meaning that very few buildings were left standing. Although the district was only partially affected, 1,057 residential buildings had to be rebuilt or significantly repaired (meaning that until repaired they were not safe to live in). Industrial activities were similarly affected, particularly those small firms which had their workshops on the ground floors of houses or in attached buildings.
[40] The share of international exports of Italy as given in Tables 10 and 12 is different from those provided in Table 11 because the sources used different classifications for the products. ATECO CM31092 goes into finer detail than SH4. Moreover, SH4 includes types of furniture whose sales rebounded faster than those of chairs. This explains why the market share of Italy differs so markedly in the two sets of data after the year 2008.
[41] Based on the annual average.
[42] The consortium offers tailored services to companies in the furniture sector. Its other task is to propose and implement strategies for the development of the entire furniture and home system sector.

References:

Alberti, L. (2018) *The concept of industrial district: main contributions* (Rome: INSME), available at: http://www.insme.org/files/922 (March 15, 2019).

Banca Intesa (2006) *Il distretto della concia di Arzignano, Studi sui distretti industriali* (Turin: Banca Intesa), available at: http://www.crea121online.it/biblioteca/Il%20distretto%20della%20concia.pdf (March 15, 2019).

Becattini, G. (1990) The Marshallian industrial district as a socioeconomic notion, In: Pyke, F., Becattini, G. & Sengenberger, W. (eds.) *Small Firms and Industrial Districts in Italy* (Geneva: International Institute for Labour Studies), pp. 13–32.

Becattini, G. (2002) From Marshall's to the Italian "Industrial Districts". A Brief Critical Reconstruction, In: Quadrio Curzio, A. & Fortis, M. (eds.) *Complexity and industrial clusters. Dynamics and models in theory and practice* (Heidelberg: Physica-Verlag HD).

Central Intelligence Agency (2018) *World Factbook 2018* (Langley: Central Intelligence Agency), available at: https://www.cia.gov/library/publications/download/download-2018/index.html (March 15, 2019).

Dallago, B. (2006) *Transformation and European Integration. The Local Dimension* (Basingstoke: Palgrave Macmillan).

De Michele, C. (2017) I processi di internazionalizzazione attiva e passiva nei distretti italiani, *Economia e finanza dei distretti industriali. Rapporto annuale - n. 10,* available at: http://www.polomeccatronica.it/sites/default/files/Economia%20e%20finanza%20volume%2010%20%281%29.pdf (March 15, 2019).

Enright, M. J. (2003) Regional clusters: what we know and what we should know, In: Bröcker, J., Dohse, D. & Soltwedel, R. (eds.) *Innovation Clusters and Interregional Competition. Advances in Spatial Science* (Berlin and Heidelberg: Springer), available at: https://link.springer.com/chapter/10.1007/978-3-540-24760-9_6#citeas (March 15, 2019).

Eurostat (2018) *GDP and main components – volumes: Percentage change on previous quarter*. Database (Luxembourg: Eurostat), available at: https://ec.europa.eu/eurostat/data/database (March 15, 2019).

Fontana, G. L. (2004) *L'industria vicentina dal Medioevo a oggi* (Vicenza: Centro Studi sull'Impresa e sul Patrimonio Industriale).

Fortis, M. (2005) Alcune chiavi di lettura, In: *DistrettItalia. Guida ai distretti italiani 2005–2006*, (Montepulciano: Le Balze).

Fratocchi, L., Ancarani, A., Barbieri, P., Di Mauro, C., Nassimbeni, G., Sartor, M., Vignoli, M. & Zanoni, A. (2015) Il back-reshoring manifatturiero nei processi di internazionalizzazione: inquadramento teorico ed evidenze empiriche, *Sinergie*, 33(98), pp. 125–147.

Gandolfi, V. & Cozzi, G. (1988) *Aree sistema: internazionalizzazione e reti telematiche* (Milano: Franco Angeli).

Garofoli, G. (1983) Le aree sistema in Italia, *Politica ed Economia*, 11, pp. 7–34.

Grandinetti, R. (2003) The chair manufacturing district of Manzano: evolutionary processes and the role of the institutions, In: Belussi, F., Gottardi, G. & Rullani, E. (ed.) *The Technological Evolution of Industrial Districts* (New York: Springer), pp. 463–479.

Han, C. M. (1989) Country Image: Halo or Summary Construct?, *Journal of Marketing Research*, 26(2), pp. 222–229.

International Trade Centre (2018) *International trade in goods - Exports 2001–2017* (Geneva: International Trade Center), available at: http://www.intracen.org/itc/market-info-tools/statistics-export-product-country/ (March 15, 2019).

Intesa Sanpaolo – Direzione Studi e Ricerche (2017) *Economia e finanza dei distretti industriali. Rapporto annuale - n. 10*, available at: http://www.polomeccatronica.it/sites/default/files/Economia%20e%20finanza%20volume%2010%20%281%29.pdf (March 15, 2019).

ISTAT (2019) *The Italian statistical service*, available at: https://www.istat.it/ (March 15, 2019).

Italian Chair District (ICD) (2019) available at: http://www.italian-chair-district.it/en (March 15, 2019).

Jelen, I. (1993) Un contributo allo studio della geografia dei distretti industriali, *Geographica Helvetica*, 4, pp. 165–172.

Magliocchi, M. G. (2015a) Capitolo 1 - I distretti industriali: uno sguardo di insieme, In: Direzione Centrale delle Rilevazioni Censuarie e Registri Statistici (DCCR) (ed.) *I distretti industriali 2011*; *9° Censimento dell'industria e dei servizi e Censimento delle istituzioni non profit*, available at: https://www.istat.it/it/files//2015/10/I-distretti-industriali-2011.pdf (March 15, 2019), pp. 9–11.

Magliocchi, M. G. (2015b) Capitolo 2 - L'occupazione nei distretti industriali, In: Direzione Centrale delle Rilevazioni Censuarie e Registri Statistici (DCCR) (ed.) *I distretti industriali 2011*; *9° Censimento dell'industria e dei servizi e Censimento delle istituzioni non profit*, available at: https://www.istat.it/it/files//2015/10/I-distretti-industriali-2011.pdf (March 15, 2019), pp. 13–17.

Majocchi, A. (2004) *Developing a favourable business environment: lessons from the experience of Italian firms in the region of Timişoara, Romania*. OECD-LEED conference on Cluster of enterprises and the internationalisation of SMEs: the case of the Romanian region of Timişoara, Timişoara, Romania, 24 May.

Mariotti, S. & Mutinelli, M. (eds.) (2017) *Italia Multinazionale 2017. Le partecipazioni italiane all'estero ed estere in Italia* (Rome: ICE).

Marshall, A. [1890] (1920) Book IV, Chapter X. Industrial Organization, Continued. The Concentration of Specialized Industries in Particular Localities, In: Marshall, A. (ed.) *Principles of Economics* (London: Macmillan), pp. 154–160.

Mazzeo, E. (2016) I segnali di ripresa in uno scenario economico mondiale incerto: le esportazioni dei distretti italiani tra il 2014 e il 2015, In: *Osservatorio nazionale distretti italiani. Il nuovo respiro dei distretti tra ripresa e riposizionamento – Rapporto 2015* (Rome: Unioncamere), available at: https://www.sose.it/sites/default/files/inline-files/Rapporto%20Osservatori%20Distretti-2015.pdf (March 15, 2019).

Ministero dello Sviluppo Economico (2018) *Statistiche relative all'interscambio commerciale italiano nel settore dei mobile*, available at: https://www.mise.gov.it/images/stories/commercio_internazionale/osservatorio_commercio_internazionale/interscambio_settoriale/mobili_19_01_2018.pdf (March 15, 2019).

Panati, G., Trevisan, I. & Barin, F. (1988) *Studio di fattibilità di un centro servizi per il settore conciario* (Arzignano: Dal Molin).

Passon, M., Buiatti, F. & Cappello, M. (2016) *Il distretto friulano dell sedia* (Udine: Centro Studi CCIAA di Udine).

Pyke, F., Becattini, G. & Sengenberger, W. (eds.) (1990) *Small Firms and Industrial Districts in Italy* (Geneva: International Institute for Labour Studies).

Quadrio Curzio, A. Fortis, M. (eds.) (2002) *Complexity and industrial clusters. Dynamics and models in theory and practice* (Heidelberg: Physica-Verlag HD).

Sforzi, F. (2008) The Industrial District: From Marshall to Becattini, *Il pensiero economico italiano*, 16(2), pp. 71–80.

Trevisan, I. (2006) De-localisation, Investments and Knowledge Transfer: The Case of "Triveneto" Industrial SMEs' De-localisation in Romania, In: Dellago, B. (ed.) *Transformation and European Integration. The Local Dimension* (Basingstoke: Palgrave Macmillan), pp. 177–196.

Tripodi, C. (2000) I sistemi locali di imprese: alcune riflessioni sulla riproducibilità del modello, *Sinergie*, 52, pp. 333–351.

UNCTAD (2019) available at: https://unctad.org/en/Pages/Home.aspx (March 15, 2019).

Unioncamere (2016) *Osservatorio nazionale distretti italiani. Il nuovo respiro dei distretti tra ripresa e riposizionamento – Rapporto 2015* (Rome: Unioncamere).

Unione Nazionale Industria Conciaria (2018) *Relazione 2017* (Milano: UNIC), available at: http://unic.it//storage/relazione2018.pdf (March 15, 2019).

Zampiva, F. (1997) *L'arte della concia: Ad Arzignano, nel Vicentino, nel Veneto e in Italia: dalle origini ai giorni nostril* (Vicenza: Egida).