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# ITALIAN INDUSTRIAL DISTRICTS: A MODEL OF SUCCESS OR A WEAK PRODUCTIVE SYSTEM?

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ABSTRACT. The present contribution focuses on two issues. The first one concerns the characteristics of industrial districts and the increasing weight of these districts in the Italian industrial districts, if they represent a model of success or rather a weak system of production. Thus, the transformation of the industrial districts is examined and the strengths and weaknesses are highlighted. One argument that comes out of this investigation is that industrial districts are strongly influenced by institutions, territory, and also by the social and cultural environment. The second argument regards the competitiveness of this Italian industrial development model, based on SMEs, which is founded on the specialization of productions, on innovation and internationalization. The paper argues that this model, which represents the "Made in Italy", is still a strong and dynamic system which has shown good performances and it represents a paradigm of lasting competitiveness, even if it is restrained by many external chronic constraints.

### 1. Introduction

The industrial district has become a conceptual and analytical category commonly used among economists and policy makers. Several authors (eg, Becattini, 1989, 2000; Corò, Micelli, 2006; Fortis, Quadrio Curzio, 2006; Quadrio Curzio, Fortis, 2007; Fortis, Carminati, 2009; Schilirò, 2008) finds that a growing number of regions have founded their development on local systems of small and medium enterprises; these local systems of production are based on manufacturing specialization and internationalization. The production system of industrial districts appears to these scholars as a viable and dynamic system, which manages to maintain a leading role in Europe and worldwide with its high capacity to export its products and with stories of entrepreneurial success.

Other scholars (Toniolo, Visco, 2004; Baldwin, Beard Navaretti, Boeri, 2007) highlight instead some critical issues such as the significant difficulties of many districts in international competition and the relatively low presence in foreign markets, the complex conditions necessary to replicate the industrial districts in new contexts, but also the size of the district firms which is too small, their reluctance to innovation due to insufficient activity in research and development. The effects of globalization and the current global economic crisis have also contributed to mark a critical reflection on the industrial districts. This paper will analyze the characteristics of the model of local development based on industrial districts and SMEs, pointing out the growing importance of the districts in the entire Italian manufacturing system. Are thus examined the competitive ability of industrial districts and SMEs that compose them, their potentiality, their evolutionary process, while not neglecting some reflections on critical aspects that Italian districts show.

In outlining the contents of the districts, the overlapping between economic factors (production system) and social ones (community agents) becomes relevant, as emphasized by Becattini (1989, 2000). On the basis of this overlapping, the results of the enterprises stem not only from structural and business variables and/or from sectoral ones (firm or industry specific), but also from local specific factors or related to the context, where most of these factors, and often the most important, assumes the characteristics of intangibility. In the industrial district, the interdependence between the production system and the local community is reflected in the definition of adequate institutions for the proper functioning of the system and this important process of institutional design involves both formal and informal institutions (North, 1990; Schilirò, 2005). It also highlighted the importance of relational goods (Storper, Harrison, 1991; Rullani, 2004), of the development of the knowledge economy (Rullani, 2004, Schilirò, 2007), of the new role of demand, which becomes differentiated, variable, individual, and that must often reveal even social prestige (Schilirò, 2008). So the representation of industrial districts cannot be separated from the analysis of social and cultural contexts, institutions and territory. Lastly are some elements of external nature that constrain the actions of the districts and represent the critical factors for the competitiveness of these systems of manufacturing production.

### 2. The notion of industrial district

The term "industrial district" was created by Alfred Marshall (1842-1924). The studies of Marshall represent a milestone from which the industrial district is beginning to be regarded as a socio-economic concept.

Marshall had noticed how the co-presence of firms in the same sector and in the same area would create an "industrial atmosphere" that can support and encourage the strengthening of local industry. This led him to believe that the local dimension had a key role on the organization of industry but also on economic development. Moreover, the industrial district was based on the importance of external economies in understanding the development of agglomerations of small and medium enterprises, where producers, suppliers and customers interact constantly. This idea was later re-interpreted in the literature on districts in a view of learning, where the central element concerns the proximity of the actors in economic activity, which involves precisely those benefits related to external economies.

Giacomo Becattini went into this line of research. He has had the merit of reorganizing the fundamental insights of Marshall in an interpretive organic framework applying to the analysis of industrial districts in Italy. According to Becattini (1989) the industrial district is essentially defined "as a socio-territorial entity characterized by the active co-presence, in a limited area, of a community of people and a population of industrial firms". And also: "... the district is the concrete form, defined on two dimensions - the industry and the territory of the principle of increasing returns to the widening of demand in a competitive environment".

The close relationship established between communities and businesses in the district is the key factor that drives innovation, knowledge and quality.

The defining characteristics of the industrial district in the theoretical vision of Becattini are:

- i) a dominant activity of industrial nature; the activity must configure a specialization in a given production of goods.
- ii) A local community made up of a community of people and a parallel institutional system; the community of persons must incorporate a "fairly smooth" system of values that it has developed over time and that should give incentives to entrepreneurial activity and introduction of innovations. This system of values is widespread and transmitted through the institutional system, that is, the market, the firm, the family, the government, political associations, trade unions and private associations.
- iii) A population of firms, each specializing in a single step (or few steps) of the production process of the district, which constitutes a case of achievement of a localized process of division of labor.
- iv) The specialization of the district consists of firms that mostly belong to the same industry, defined to include those that Marshall called 'ancillary industries', such as companies that produce equipment or providing services to other companies, and that constitute the industry chain or a vertically integrated sector.

These are, then, the essential features of the district model, which turns out to be a sophisticated concept of the local system, synthesis of history, culture, social and industrial organization, where external economies play a crucial role and transaction costs are low enough; where it can be found a widespread combination of versatility, quality and innovation.

So, according to Becattini, the industrial district is a new unit of analysis, because it represents an economic entity in the middle way between the individual firm and the industry, which takes into consideration the places of production, the producing communities in their specializations and de-specializations. In addition, in the analysis of industrial districts and local development Becattini speaks of circular production process, reproposing the idea of the pattern of reproduction of Quesnay. Quesnay's idea, in fact, brings together the technical and economic aspects with the social, cultural and institutional ones, where the production of goods includes the social reproduction of the organism (values, knowledge, institutions, social environment) that serves to perpetuate it.

Storper (1997) is consistent with the theoretical argument of Becattini when he says that there are a variety of models of production difficult to be codified, within predefined frames, by certain behavioral patterns universally determined by the orthodox theoretical approach. Moreover, Storper and Harrison (1991) have emphasized the positive externalities caused by the processes of vertical disintegration which, in many local contexts, have generated economies of agglomeration favoring the establishment of industrial districts and have also produced relational goods arising from the growing interdependence between firms.

Another important aspect and feature of industrial district is the combination of competition and collaboration ('coopetition') between firms. Fortis says that within the district competition between firms is very strong and selects the best and most efficient firms. But at the same time, firms in the industrial districts often cooperate on common projects such as, for example, initiatives for the promotion abroad of products of the districts.

The importance of territory for the analysis of industrial districts and, more generally, of the processes of industrialization was emphasized especially by Carlo Trigilia (2005). The consideration of this factor has certainly enriched the interpretation of industrial development, as it has allowed an assessment of the productive powers of 'local contexts', thus being able to better explain, even ex post, because the development has occurred in certain areas and not others.

The territory, in the overcoming of the traditional view, represents a concept of space in which relational goods become significant in the local competitive strategies. The ability to produce competitive advantages from the territory and thus the possibility to arrive at the configuration of the district is not uniquely generated by using a model based on endogenous resources. It is possible, in fact, that the regional organizational structure can differentiate on the basis of a diverse set of explanatory variables, not least those related to historical and institutional factors (David,1994; North, 1990).

Trigilia has also insisted on the centrality of territorial politics in the new geo-economic scenarios and has traced the way in which innovation processes unfold. The fertility of the territories, then, is a direct function of their ability to create public goods that increase the competitiveness of local enterprises, and because it has lower costs because they can increase their capacity for innovation. All this, however, is not a simple product of civic traditions, but it depends on the intentional cooperation between local governments, institutions and enterprises, and this cooperation is able to produce tangible and intangible external economies. Thus, the vision of Trigilia, which incorporates concepts and issues already present in the analysis of Becattini on districts, interprets the production as a process inherently localized, where each territory in the process of production mobilizes its natural conformation, its history, its culture, its own social organization. In this view the resources have their specificity and are different from those that can be mobilized in other places and territories. The environmental context, which represents the synthesis of a human and natural history, made up of all local factors, which in turn provide the business system work, entrepreneurship, infrastructure and intangible assets, social culture and institutional organization, is, therefore, crucial.

Finally, in this theoretical representation of the districts and local development, the demand takes an increasingly crucial role. A demand mainly linked to different income levels and different cultural sensibilities of those who express it, and that becomes the expression of a society where emotions, feelings, aesthetics are increasingly becoming the reference parameters of consumption choices.

The interpretive analysis of industrial districts by Becattini and other scholars of his school have had considerable success on the theoretical level, but their application to empirical level have proved difficult. This is because the essential components of the theory of the districts are made up of intangible facts, which are crucial, as for example, the quality of information flows, but also for the lack in the census data of a correct classification of the territories suitable to grasp the reality of industrial districts. For this latter problem is found, in part, a solution through the definition of "local systems of work" (LSW), which

are classified as those local systems which possess certain characteristics (eg, in terms of incidence of manufacturing jobs) in excess of certain thresholds.

# **3.** Italian industrial districts and Made in Italy: a model of success or a system in crisis of competitiveness?

The industrial districts are the main specific feature of the Italian productive system, which differs for this peculiarity from the production systems of countries with high level of development. Basic elements of our districts are without a doubt:

- i) the dynamism of small and medium enterprises, which constitute them, and that are a direct expression of a lively and widespread entrepreneurship;
- ii) their presence throughout the territory, particularly in areas of North and of the Centre, but also in some parts of the South (particularly in Abruzzo, Puglia, Basilicata);
- iii) their territorial specificity. Italy is today, despite the global crisis, the second largest manufacturing industry in Europe, after Germany, its strength lies primarily in its production system widespread in the territory, which combines tradition and innovation, variety and quality in the supply of its products and services.

The Italian districts are characterized by their productive specialization in traditional sectors (such as, for example, textiles and clothing, leather and footwear, wood and furniture, etc..) and light engineering; they are closely related to the so-called "Made in Italy", ie the product of a complex of areas strongly associated with the image of our country in the world. The "Made in Italy" is synonymous with quality and can therefore be defined as the set of cultural values and of human, technical, scientific, creative and production assets that characterizes the production system in Italy, which involve the manufacturing districts, but also the infinite micro-systems of production geographically distributed in various areas of the country.

The set of industrial districts contains one quarter of the Italian employment. In the districts firms operate by dividing the tasks among themselves and organize production efficiently as in a large company, but with more flexibility, using the territorial context in which they are placed. This is made possible by the flow of external economies that are generated locally between businesses and derive from the set of knowledge, values, behaviors and typical institutions through which the (local) society operates on the organization of production.

Furthermore, the industrial districts push the italian exports, in fact their exports account for about three quarters of the entire industry. The Italian provinces with the highest share of exports are those characterized by a strong presence of districts, whose firms are driven into foreign markets precisely by the high specialization in production and the search for wider markets.

The 156 industrial manufacturing districts surveyed in 2001 by ISTAT are geographically distributed as follows: 42 in the North-East, 39 in North-West, 49 in Central Italy and 26 in the South. The sector distribution, which concerns the specialization of the districts, is as follows: 45 districts in textiles and clothing, 32 for household goods, 20 in leather goods and shoes, 38 in mechanics, 21 in other manufacturing sectors including food.

In recent years the Italian productive system of industrial districts has experienced ups and downs during which while it has been strengthened in many productions and some sectors, focusing on quality and also producing a lot of innovation, on the other underwent the competitive pressure imposed by globalization, which has often put a strain on the firms that belong to this system. This is due, according to some scholars (Toniolo, Visco, 2004, Baldwin et al., 2007), to the inadequate size of the firms of the districts, to their low productivity and the prevalence of traditional sectors. Moreover, the districts have a low intensity of research and development (R&D).

Despite the criticism, I share the view of Marco Fortis and Alberto Quadrio Curzio (2006) and Fortis and Carminati (2009) that the Italian model of industrial development based on industrial districts, consisting of small and medium enterprises, in turn characterized by a strong local roots, is still a competitive and dynamic system. This unique production system based on manufacturing specialization, innovation and internationalization, which represents the "Made in Italy", has shown and continues to demonstrate, despite the current global economic crisis, of establishing a paradigm of lasting competitiveness. All this is carried out albeit the firms are penalized at country-level by chronic constraints (weight of bureaucracy, excessive taxation, high public debt, deficiencies in infrastructure, etc..). It is, therefore, very important the role that the local institutions and the State can play in creating favorable environmental conditions for enterprises to improve their competitiveness.

The analysis of statistical data compiled by the Edison Foundation and conducted by Fortis goes to show that Italy, thanks to the districts of "Made in Italy", is the first European net exporter of fashion, home furnishing, metal products and instrumental mechanics. In their recent report by Fortis and Carminati (2009, p.6) point out that Italy is in second place behind Germany, in the top ten most competitive countries in world trade, according to the Trade Performance Index (TPI). Still based on this index, Italy is the first country in textiles, apparel and leather, leather goods and footwear. It is the second in non-electronic mechanics, electrical mechanics and home appliances, in chemicals, metal products, in ceramics, eyewear, jewelry; it is the third country in processed foods, ie wine, oil, pasta, preserves, baked goods, processed meats. Export growth has been directed towards emerging countries like Russia and other Eastern European countries, Latin America, and, for Europe, especially Spai. The average export turnover has been increasing in recent years, particularly for medium-sized firms located in the districts, which show a higher propensity to export than firms located in other areas.

The manufacturing sector, of which the industrial districts represent a significant part, has continued to present themselves until 2008 as the cornerstone of the wellbeing of our country, thanks to the surplus of 64 billion euro in export-import of manufactured goods, with a trend of exports in line with world trade. In 2009, the situation has deteriorated significantly, the decline in exports in the districts and sectors of the "Made in Italy" was in fact very strong, amounting to about 21% less than the same period last year, the worst figure in forty years, because of the collapse of foreign demand and the exchange rate appreciation of the euro.

However, districts are "an economy in motion", that stands adapting to changing external conditions and also continually revising its internal factors, in particular innovation. The sources of competitiveness of the industrial districts of "Made in Italy" are based on flexibility in work organization, quality of work, the ability of the acquisition, adaptation and diffusion of technologies, but also on design and product quality, on marketing and after-sales services.

For those who still believe in the validity of the Marshallian-type model of industrial districts the problem is the capacity to transform the enterprises belonging to every specialized productive system into a network system, this means an indivisible structure of interdependencies (interactions, relationships, connections) that changes in quantity and quality the performance of the subjects included in it. Obviously, to characterize a network system, it counts the size of firms, but are also important the relationships between firms, the guidelines inwards and outwards of the network by the firms. The reasons for the choice of the network solution concern, firstly, the fact that the existence and proper functioning of networks between the different actors (firms, local institutions, universities and research institutes, banks and financial intermediaries) is crucial for competitiveness and development, as a concrete expression of social capital, i.e. of that important resource made of the network of relationships in which individuals and institutions interact on the basis of relations of trust, norms, interests and shared objectives. Second, because knowledge is increasingly the factor that must be channeled within the systems of production and export on foreign markets. Finally, strengthening the existing firm networks, it allows greater use of the positive externalities of productive nature.

However, in the understanding of network systems the influence of relational goods and the study of relationships is usually invoked as a methodological tool (Maggioni, 1994). The metaphor of the network focuses on the relationships that develop between economic agents and, in the study of the districts, is reputed to be a comprehensive approach to the analysis of phenomena typical of a local system. This interaction defines a type of organizational system that stems from the initiative of individual agents and institutions that find themselves in a mutually beneficial relationship (Cook and Morgan, 1993).

Enzo Rullani (2004) have correctly argued that today you have to deal with the invisible internationalization which is not just made of exports and foreign direct investment (FDI), but mainly of knowledge and thus of networks of firms, investments in communications, logistics, systems of assurance to the customer. He suggests that it is not allocating immobile factors, but spreading knowledge from one place to another that internationalization creates new value. Thus the development of industrial districts is substantially related to the development of the knowledge economy (Corò, Micelli, 2006; Schilirò, 2007a), which depends primarily on the research, the quality of human capital, the existence and efficiency of the networks and the ability to create "network firms".

The strategic factors on which the SMEs must focus are primarily: research, innovation, quality of human capital, teamwork, the size, the rules, the brand. Among these factors, the size is very important to compete in the era of globalization (Traù, 1999; Tattara, Corò, Volpe, 2006), since the growth of firms which does not necessarily imply the large size is accompanied by increased investment in new technologies, equipment, intangible assets and also to a greater use of skilled labor, from that often follows an increased ability to expand export markets.

In a context in which technological progress runs at high speed resulting in a sharp reduction in the product cycle, while globalization has greatly expanded markets, the pattern of small and medium-sized enterprises, whether embedded in the system of districts, is still valid and winning for the Italian economy, as evidenced by several studies that emphasize the ability of innovation and the process of internationalization of firms that are part of the districts (Fortis, Quadrio, 2006; Becattini, 2007; Fortis, Carminati, 2009).

To understand the process of innovation within the industrial districts, it is necessary to consider their multifaceted composition, the multidimensionality resulting from their territorial development that makes them different from each other. Several scholars (eg. Trigilia, 2005) confirm the value of the territories in determining competitiveness, suggesting the need for territorial policies both in terms of physical infrastructures and of intangible assets. But innovation also depends on the internationalization process and the nature of the sector and activities in which the firm operates. Empirical studies in general have largely confirmed the relationship between sectors and factors such as knowledge, technologies, production processes, demand, heterogeneous population of firms and institutions. Innovation follows different paths depending on the specific sector in which it develops. In addition, innovation is developed through the dissemination of knowledge (codified and tacit) and through learning mechanisms (Schilirò, 2007a). These processes are greatly facilitated by the existence of networks of firms and networks of scientific and research communities. Finally, innovation depends heavily on investment in R & D and human capital, but also on other important factors such as organization, finance, institutions and policies.

Globalization has certainly put a strain on the maintenance of industrial manufacturing districts, inevitably causing changes in the processes of production and development, and emphasizing the importance of the relationship between economic activities and territory. This transformation is part of a wider process of structural change in the economy, which involves processes of selection, and tends to a model of knowledge economy, where research and high rates of innovation, market integration, upgrading of human capital, network systems, are among the elements that characterize it, and requires a new deepening on local development issues. In addition Italy, for over a decade, showed a low rate of economic growth and the situation is obviously exacerbated by the recession caused by the global economic crisis (Schilrò, 2007b), but the country also lives a long period of political and institutional transition, which however has not yet managed to establish a clear and definite ending.

Undoubtedly districts suffer from the energy vulnerability of Italy, which results in increased costs, for the asymmetric competition from China and other emerging countries, for a still relatively low use of new technologies, especially ICT in small businesses, for the low level of education of many entrepreneurs. In particular, the low presence of Italian enterprises in strategic high technology, the positioning of many district firms in medium-low technology sectors, and especially the excessive weight of a traditional sector such as textiles are factors that limit the competitive capacity of firms.

Many Italian manufacturing firms embedded in the districts, both small and medium, however, have been particularly successful over the years to change "skin", not without difficulty and often through difficult restructuring. In addition, several successful enterprises have had the ability to create important market "niches", focusing on the quality of their products, the brand and positioning of upper-middle market segments without having to renounce their productive specialization in traditional sectors. Being now the market increasingly global, these "niches" have become important and impressive in terms of value, turnover, exports and profits.

Another element that has characterized the transformation of industrial districts is the corporate reorganization that led to the spread of "district group", ie a legal and organizational architecture of groups of companies headquartered in the legal district and engaged in a the different stages of the production of the district (Cainelli, 2008). With regard to the strategic factor of innovation Marco Fortis (Fortis, Quadrio Curzio, 2006) argues that it is not true that the districts do little innovation, because innovation, especially product innovation, has been constant in the industrial districts during all these years, while it was lacking in other areas. In fact, the product innovation of small and medium enterprises is stimulated by a demand increasingly differentiated and with a tendency towards a higher technical and cultural content. This product innovation is based on design, while process innovation is based on tacit knowledge, which is difficult to be codified and is not easily transferable to a patent, with the consequent easy imitation by competitors.

Therefore, the criticism that the industrial districts do little innovation has to be rejected. because it is the quality of the product, its (often) manifest beauty and an inexhaustible creativity that are the hallmark of the innovative vitality of many districts in Italy and their firms. Finally, the transformation of industrial districts has led to collaborations between enterprises in different sectors, and this has allowed a higher rate of innovation. Consequently, in some production has established a different model than the traditional district with a single productive vocation, a new type of model cross-sector and multi-faceted, where even the universities, in some cases, play a significant role (Corò, Micelli, 2006). This helps explain why the Italian production system based on industrial districts is still strong and dynamic and is characterized by intense innovation activity. The metamorphosis of the districts, mainly driven by globalization, is causing significant changes in development processes and has highlighted the importance and a new way of conceiving the relationship between economic activities and territory. The territorial proximity that characterizes today's district firms tends to bring up the territory often as an anchor that gives economic benefits, rather than a common social and cultural root, so firms tend to require longer networks to compete and push the boundaries the territory.

Also, warns Trigilia (2005), to realize the full potential and evolutionary processes of industrial districts in this new phase of global markets need to find resources for policy development from the bottom, but first, you need a good governance by the various institutions which shall have a good quality of human capital.

In general, policies for innovation, the building of networks of relationships with universities and public research centers, private investment in new technologies require a set of interventions of a different nature than those of unplanned development prevailing in the history of industrial districts in Italy.

### 4. Conclusions

The present work has analyzed the characteristics of the industrial districts since these specialized systems of production have significant potentialities and are still driving forces for the Italian economy. Secondly, the paper has highlighted the competitive capacity of

C2-10

the system of Italian districts, without neglecting, however, some reflections on critical aspects that the system presents. In this way it tried to answer the question whether Italian industrial districts represent a model of success, or rather a weak system of production.

Industrial districts still enjoy some benefits at the micro level in terms of efficiency and flexibility related to the spreading of entrepreneurship, the productive specialization, the sharing of certain codes of behavior, and the quality of information flows that can be made only within community of well-defined and self-contained. The analysis has also high-lighted some aspects of evolution in the organization of production of the districts and has identified the innovation and the internationalization as the key factors for the competitive-ness of the districts, which confront themselves with increasingly open markets.

The work supports the thesis that the institutions and the State must help create favorable conditions for competitiveness and growth. The spheres of action are the tangible and intangible infrastructure, human capital, bureaucracy.

These arguments give further support to the thesis backed by Fortis, Quadrio Curzio (2006), Becattini (2007), Fortis and Carminati (2009) that the Italian model of industrial districts, based on specialized manufacturing, innovation and internationalization is still a viable and dynamic system, which, indeed, has demonstrated over time a strong and sustainable competitiveness, and that is able to successfully export a significant share of its turnover. Although this model of development has been influenced, to varying degrees, by the low growth of the italian economy, the trends in fluctuating commodity prices which inevitably are reflected in product markets, the various forms of asymmetric competition, it especially suffers for the objective difficulties encountered at country-level system.

The arguments set out above certainly constitute an assurance about the quality of the district model, however, they leave open the question of production specialization of enterprises and of the Italian industrial districts, which are almost, though not completely, absent in some strategic and highly innovative sectors, such as computer science, biotechnology, nanotechnology, to name a few. This makes Italian industry as a whole a bit weaker and in some aspects more critical with respect to industrial countries our competitors.

The current economic crisis is showing as in the path of strategic repositioning tend to be favored firms located in districts that have positive externalities of a technological nature and also in terms of quality and differentiation of production, that are richer in human capital and advanced services such as design, consultancy and research. Moreover, the transformation of the districts is bringing out a new way of conceiving the relationship between economic activities and territory. The territorial proximity that characterizes the district firms now seeks to rediscover the territory as a strength, since it represents the bearer of cultural roots and traditions that have proved of great importance in the new competitive scenario because they facilitate the raising of the quality of products and the finding of qualified human capital.

In conclusion, the policies for innovation, the investment in new technologies, the internationalization, the quality strategies, the building of networks of relationships with universities and public research centers and private, are the actions that should characterize districts and require, in any case, even by local institutions and the Government a set of reaching measures and of different nature from those prevailing in the history of the districts in Italy. In this way the district model may still represent an industrial model of success and counteract the declining trends.

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