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MULTIPLE ENGINES OF DYNAMIC CHANGE IN LOCAL PRODUCTION SYSTEMS:

Lessons from the Third Italy to Developing Contexts

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Multiple engines of dynamic change in local production systems: lessons from the Third Italy to Developing Contexts

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Abstract

This article analyses the history of local production systems in the Third Italy (i.e. industrial districts) in order to identify the factors that help these systems to move dynamically towards new and more advanced stages of development. Using the 1990 seminal work of Brusco on the subject, this paper goes through the stages that had been identified, such as craft production, wider industrialisation through large firms, atomisation of production and growth of small-size units (i.e. Mark I), new routes to innovation and globalisation (Mark II). A holistic theoretical framework is presented, that permits to deepen the comprehension of the subject. It presents a complete description of the causal levels that intervened in the process over the second half of the past century. Economic, policy and social causal levels are identified and presented as unescapable keys to produce the expected change in local systems. These factors work altogether in an interdependent way in order to produce the structural and cumulative changes that explain the effective development process at the local level. As a conclusion, this paper suggests the ways in which this analysis can influence the policy schemes that are being applied in various local contexts at different development stages.

J.E.L.: L0, L2, L6, N0, N6, O0, O1, O2, R11, Z13

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Introduction

This article analyses the contexts of local production systems in Italy (i.e. districts and clusters) through a theoretical framework that emphasises a new development policy scheme that can be implemented more widely. It refers to a holistic framework that stresses the existence of several complementary causes as the roots for local systems' expansion. Through an analysis of the historic steps that these production systems have gone through, this work identifies the keys that helped them to pass from one stage to another. As a conclusion, it suggests how these lessons can influence the policy schemes that are being applied in various contexts at different development stages.

This analysis starts from Brusco's identification of different phases of growth of Italian industrial districts from the 1940s onwards (Brusco, 1990). He identifies four historic steps that indicate the route of growth of industrial districts. The first of these is related to the process of agglomeration of small workshops specialised in traditional manufacturing activities, which took place in the immediate Post-War period in the Third Italy. A second stage materialised in the 1950s, when a few large enterprises took the lead in local production systems, concentrating manufacturing activity, but also spurring the shift from craft to industrial production (i.e. utilisation of scale economies).

The third stage refers to the crisis of the fordist system of large enterprises, which promoted a strong process of creation of a dense fabric of SMEs capable of aggregating and jointly producing and marketing their products abroad. This stage started at the end of the 1960s and went on up to the end of the 1980s. In the last ten or fifteen years, a fourth stage has started, but has not yet been fully accomplished. It refers to the new globalised environment in which the competitive struggle constrains SMEs to shift upwards to the technological frontier, as a way to avoid the "low-road competition" of newcomers (Pyke and Sengenberger, 1991).

Using the successful case of the Italian industrial districts, we try to demonstrate that the key determinants that spur these transformations are multi-faceted and involve policy, economic and social aspect. These factors work altogether in an interdependent way to produce the structural and cumulative changes that explain the effective development process of local production systems (Parrilli, 2001). Through this perspective, this paper aims at giving useful indications to less successful local production systems, in both developed and developing contexts.

What Factors Matter

Before proceeding to the analysis of the historic stages, we need to explain the factors or causal levels that we have chosen to focus on. We need to go through these to explain our theoretical perspective on the development of local production systems. At this aim, we present the main theoretical approaches on SME clusters, which help us add further key causal levels of local development and complete the theoretical framework for policy.

A first type of approach insists on the spontaneous nature of the development process that took place in the industrial districts. The natural allocation of market forces determined the growth of districts and clusters, by pulling together rich endowments in natural resources, capital and labour and mixed these with the social and institutional capacity to work for the collective welfare. This viewpoint considers the social and institutional environments as having had a fundamental role in the development of the districts, but nevertheless considers this process as region-specific and hardly replicable elsewhere. This approach tends to suggest soft types of policies, mainly oriented to the local level and the provision of "real services" (Schmitz and Musick, 1994; Brusco, 1990).

A second significant approach emphasises the governance aspect and the effects that policy-making has on markets. Specifically, its theorists observe the history of (Third) Italy and stress the relevant creation of policies that helped to shape a purposive environment for SMEs. It is the case of general laws for the promotion of SMEs that have been set up all along the XX century and that created the conditions to make SMEs competitive in the global market. This view has implications for the policy perspective in the development of local production systems that tend to transcend the limits of the local level and anchor it to national and international schemes (Bianchi, 1995; 1998; Arrighetti and Seravalli, 1997; Bertini, 1998; Di Tommaso, 1999; Cowling and Sugden, 1999).

This second approach tends to strengthen the role of an important actor of development: the institutions. These local and/or national actors can create (bureaucratic) routines and/or rigidities that help or prevent the efficient working of the economic system. The bureaucracy (e.g. local government, state agencies, etc.) does not have the same economic objectives of the firms and can hinder their development, unless a specific complementarity in the field and among their objectives (Stigler, 1971; North, 1990).

In our view, these two approaches emphasise very important aspects of the development of local production systems. The "spontaneous growth" represents the endogenous dynamism of the local context, which on the basis of rich economic and social endowments generated a process of development. "Policy" represents the nationwide legal support that the governance sphere recognises to clusters and districts. "Spontaneity" guarantees the move "bottom-up" to development, while "policy" guarantees the move "top-down". Saying that these two are to be taken together is quite an important theoretical consideration, but in our view these two causal levels are not yet enough. For example, the situation in most of Southern Italy criticises both approaches. In respect of the first stance, it shows the existence of plenty of small firms and clusters, which are not quite successful (Amin, 1994). In contrast to the second stance, the laws for SME promotion were at work throughout the whole of Italy and, none the less, did not help Southern Italy to create successful systems of small firms as in the Centre-North. In the same Centre-North of Italy different degrees of local policy support produced similar outcomes (Belussi, 1999).

A further perspective stresses the relevance of the social factors that influence the development of local production systems. Its theorists emphasise the concept of "trust" as a fluid that helps to reduce transaction costs and ease cooperation and collective efficiency (Bagnasco, 1988; Becattini, 1990; Trigilia, 1991; Lorenz, 1992; Dei Ottati, 1994; Schmitz, 1999; Nadvi, 1999). If trust is a key aspect of the necessary "social cohesion" in the local system, an integral social approach would focus also on factors that spur the dynamic capacity of the local system in the market. These can be symbolised through the spirit of "self-achievement" of the individuals. In this sense, there are studies indicating the importance of institutions such as "sharecropping" as a historic basis for the creation of this individual dynamism (Brusco, 1982; Bagnasco, 1988)[1].

The two mentioned elements are interdependent on one another in order to produce a "positive sum game" for the local system as a whole. In fact, the first alone would generate a comfortable but static society; the second alone would risk to create a dualistic society, in which a smaller part becomes able to join the international markets, while a larger part of the local production system remains linked to very traditional productions and markets (Parrilli, 2001). From a development strategy perspective, until now, the social approach to clustering has not pulled together these two aspects and has maintained a rather economic focus, by stressing the role of economic policies in the creation of "collective goods" such as those linked to technological know-how diffusion, trade promotion, business skills training, workers training and so on. In contrast, our point of view of the

[1] On the importance of the individual dynamism for the development of small firms (not taken in clusters) there are other important studies, such as those discussed by Hyalager (1993) and Cowling (1998).

social perspective affirms that it has the potential to promote a strategic policy approach that includes the social landscape and the need to promote a dynamic process among the social actors, in their different levels of aggregation, responsibility, aims and objectives. This policy level is to be seen as interdepedent and complementary with the mentioned "bottom-up" and "top-down" moves in the generation of a more effective development process.

Synthesising, our analysis indicates the three causal levels that seem to be essential for the development of local production systems. They represent a mix of the different approaches to SMEs clustering, which individually explain only a part of the process. An approach to local development that takes into account these causal levels, linked in an interdependent relation, helps them acquire more explanatory power for the promotion of those systems[2].

Passage I: from Rural Life to Artisanal Clusters (1920s - early 1950s)

This section sketches the passage from rural economies to artisanal clusters. Starting from a condition of dispersed rural life, the people start agglomerating in urban centres. This happens in a very particular way, different from other kinds of urban agglomeration. Many rural inhabitants come to the town and decide to focus their job on a specific sector, which after a while defines the productive and social features of that town. The "survival clusters" described by Altenburg and Meyer-Stamer (1999) are these types of basic agglomerations. They are not the bottom-line of development, but interesting starting points, since they present basic features of the future industrial districts (i.e. geographical and sectoral concentration of firms).

Passage I: from 1920s to the early 1950s

Main Trends	Economic Factors	Social Factors	Policy Factors
Urbanisation and Craft Agglomeration	Urban-rural wage Gap, Natural Endowment, Local Market, Craft Skills	Family links in town, Entrepreneurial spirit, Tradition of Craft work in the towns	Statute for small firms and craftwork, Basic Infrastructures, Public Employment

Source: Author's elaboration.

[2] Other aspects can also be taken into account, such as geographic localisation, size of urbanisation, historic specificities, etc. All of these factors matter and are likely to explain part of the development of local production systems. But these parts seem to be rather specific and, in a quantitative type of analysis, would be more likely to be considered "dummy" variables. These explain some processes, but not in all cases.

This first stage represents the passage from the rural life of the population to the urbanisation of the future industrial districts, that took place in a long period going from the 1920s to the 1950s. This move was different from that of the industrial triangle of the North-West of Italy, because the people that arrived to the towns of the Third Italy were coming from the rural areas around them and not from the South (Murat and Paba, 2001).

In this passage I, the economic causal level operated through different aspects, some of which worked in a general way towards agglomeration and manufacturing development, while others favoured the growth of a specialised production. In the first kind of factors, there was the classic element of the (expected) wage-gap among rural and urban activities, that pushed rural people to leave the countryside and search for a job in the town (Harris and Todaro, 1970). Also the existence of a local market - despite the rather reduced size of the towns in this area – guaranteed the rural people the possibility to find enough consumers for their own manufacts.

In the second class of factors, there were the natural resource endowment of the locality/region or an easy connection to it, that promoted the specialisation of the town in a particular manufacturing activity. For instance, the presence of wood promoted the development of furniture in Brianza and Appennini, the caves promoted the development of the tile industry in Sassuolo, the cattle-farming in the countryside helped creating a strong dairy industry in Parma, etc. Another important factor refers to the craft skills that the rural population had in activities that were not yet industrial and that were practiced also in the countryside, such as the productions of food, shoes, clothes, furniture.

The society was participating in the development of the towns through specific features that represented the interdependent factors of social cohesion and self-achievement. Referring to the first, the urbanisation of thousands of farmers was promoted by the family linkages existing with people that had already moved to town and that constituted a basis of support for the newcomers. At the same time, the family in the countryside helped the moving family by providing a security net in case the attempt had failed (Bagnasco, 1988).

Referring to the self-achievement, these people participated actively to the urban life. They avoided unemployment by creating microenterprises, that in spite of being informal, were yet enterprises providing a process of accumulation. At this aim, they benefited from the often rich tradition of the

town in which they moved and that rooted in the history of medieval corporations (Platteau, 1994; Putnam, 1993).

The third causal level at work is policy. History demonstrates that policy was relevant at that time too. In Italy, from the 1930s onwards the State organised specific policies for the legal protection of micro, craft and cooperative enterprises, such as the law of Failure in 1942, which gave the craft enterprises an incredible advantage. It was "the advantage of not being subject to failure (which) is something that is not present in any other industrialised country". (Brusco and Paba, 1997: 324; Arrighetti and Seravalli, 1997: 358). In the following years, these provisions were deepened through the general law for the promotion of small and medium firms approved in 1952 (Bianchi, 1992) and the law 860 for craft enterprises approved in 1956 (Bianchi and Parrilli, 2002).

In this context, the institutional environment promoted the proper working of policies and markets. The institutional efficiency of local governments, state bodies and public enterprises convinced the people that their policies could deliver adequate facilities and incentives to let them adjust to the urban life. The upgrading of infrastructural services in the growing urban centres is an example. Electricity, telephones, water pipelines, sewage, transportations, housing, markets have certainly been important stimula for the people to raise their living standard. At the same time, the incentive represented by the employment capacity of public institutions and enterprises also had particular significance (Murat and Paba, 2001**)**. All these aspects were mediated by the special responsiveness of the political leaders within regions and clusters of the centre-north of Italy, which has characterised their history ever since (Putnam, 1993).

As Table 1 highlights, the three causal levels (i.e. economic, social and policy) show the various complementary strengths of the Italian industrial districts in their first phase of development. They constituted powerful and coordinated factors of local development.

Passage II : from Craft Production to Industrial Concentration (1950s-1970s)

The second stage overlaps with the former in the 1950s. It started with the growth of a few large factories, that later would constitute the basis for a specialised and industrial know-how that would promote a process of spin off of small firms. These large firms became the leaders of the local development process (Brusco, 1990; Bellandi, 2001). This occasion produced a generalised move of

the local production systems towards a process of industrialisation, which can be observed through the dramatic increase in manufacturing and industrial output over those years (Barca, 1997; Cohen and Federico, 2001).

Passage II: from the 1950s to the 1960s

Main Trends	Economic Factors	Social Factors	Policy Factors
Industrialisation	Growth of local large firms, Abundant workforce with craft skills	Social cohesion within the districts, Large Investors from the locality	European Recovery Plan, National Champions and Subsidies to Industrialisation

Source: Author's elaboration.

The most interesting characteristic of this process is the structural innovation that these firms brought into the local production context. Indeed, up to that point production was artisanal, which means small craft productions oriented to the local market, in opposition to the new trend of industrialisation, that involves large volumes of standardised (but still personalised) goods for mass consumption (Piore and Sabel, 1984; Womack, Roos and Jones, 1990; Best, 1990).

The entrepreneurs of these large firms were often coming from the same local fabric, which eased the process of incorporation of new and abundant workforce in the industrial process. In the area of the future industrial districts never arose the same open conflictuality among the capitalists and the industry workers that occurred in the North-western region of the industrial triangle (Locke, 1995).

In this phase of starting industrialisation, the large firms benefited a lot from the abundant workforce that was widely available and that accepted to work in their premises for an acceptable wage (if compared to their former rural alternative). At the same time, the craft skills of the people helped these firms and/or self-employed people to achieve good levels of productivity and competitiveness, which helped them to sell their products/activities in the wider market to other national consumers. For the first time, the small firms started to overcome their local boundaries.

At the social causal level, the mechanisms of social cohesion and self-achievement were at work too. The family linkages were preserved even within the town and constituted a basis for maintaining good social relations. Craft enterprises continued to work even in this period, but as a

low-productivity sector oriented to a still local and poor market segment. The factor of self-achievement can be seen in the attempt of people to pick up a new opportunity given by large firms to earn a higher wage, count on a better living standard and a more comfortable condition within the more uniform urban society. Implicitly, this phase consituted also the premises on which the would-be entrepreneurs based their own learning and know-how, which would have used more directly ten-fifteen years later.

At the policy level, the State organised an industrial policy on the basis of a renewed support coming through the European Recovery Program (i.e. ERP or Marshall Plan). It oriented its incentives to stimulate the growth of public enterprises and "national champions"[3]. The general state policies were subsidising the basic industries of siderurgy, mechanics, chemicals. The sectoral policies promoted the role of the electrodomestic and the automobiles industry; also the television was a type of product that spurred important manufacturing sectors, often led by large firms of the North-western triangle (Bianchi, 1998; 2002). From the institutional point of view, the increasing public employment and the provision of basic infrastructures continued to stimulate the migration of rural population to the towns.

On the whole, this second phase of the development of the future industrial districts has been a very short phase, that lasted probably no more than ten-fifteen years. Nonetheless, as a phase it has been quite critical, by helping the system to shift from an artisanal modality of production to an industrial modality. State policies and urban accumulation helped a few local and national entrepreneurs to set up their own large industries in specific localities of the Third Italy. In this phase, the small firms maintained an apparently marginal role; but their social "milieu" started restructuring for the boom coming in the 1960s and 1970s.

Passage III : from Industrial Concentration to Industrial Districts (1960s-1970s)

The third stage partly overlaps with the former, but also represents the new and more typical configuration of "industrial" district. It pulls together numerous small firms, that are also able to work together through a detailed division and specialisation of labour and to sell their final goods and services in the international market.

[3] Public investments grew of about 350% in respect to 140% of private investment during the period among 1954 and 1962 (Cohen and Federico, 2001: 100).

Passage III

Main Trends	Economic Factors	Social Factors	Policy Factors
Increased Production and Internationalisation of Small Firms	Crisis of Fordism, Collective efficiency of small firms, Europe Common Mkt.	Preference for Independent and Family work; Trust among people	Sabatini and Ossola Laws, Local Government, Business Associations, Institutional Services

Source: Author's elaboration.

The catalyst for such a structural change was the crisis of the Fordist production system that had driven the national economies of industrialised countries from the beginning of the past century to the end of the 1960s. Overproduction generated serious macroeconomic imbalances between demand and supply, while the economic and social conflicts among capital and labour threw the system into a confused situation in which the previous economic centres (i.e. large cities and large firms) weakened.

In this context, a new feature of production came about in specific geographical regions: a dense network of small and medium-sized firms capable to work together and offset the many scale and scope advantages that large enterprises had thus far enjoyed. Joint action, external economies and flexibility constituted the collective efficiency arguments of small firms, given the new type of demand for more personalised and innovative goods.

While large firms in and outside the districts entered a deep crisis, their workers – within the districts - left and set up their own small firms. The birth rate of small firms within the districts increased from 27% in 1951 to the astonishing 99% in 1961. Employment within small firms increased from 59% in 1951 to 65% in 1961 and 73% in 1971, with a parallel decline in the large firms' share (Brusco and Paba, 1997: 288 and 292). Often it happened thanks to the collaboration between the workers' former employer (i.e. large firm) and their enterprise. The former employer sold (or lent) machinery to a specialised worker in order to externalise production, reducing fixed costs and risks. As a part of the more general process of outsourcing, the bigger market that ("surviving") large firms controlled, guaranteed a rather secure basis for small firms and helped them grow undisturbed for a decade or so. This solution permitted the local production system to cope with the crisis, open up new markets and new organisational frontiers (Lazerson, 1990).

The collective efficiency response to the crisis of mass production cannot be explained without a reference to the social factors of development. These clarify why local people did not surrender to the crisis, but fought as a collective actor to find a common way out. In this environment of increasing subcontracting of large part of production, self-achievement and social cohesion were strongly present. The first aspect is seen in the entrepreneurial spirit of the people, that once having achieved a significantly better living standard, preferred looking for their own way by constituting their own enterprises. The intense process of spin off of firms coming out of their former employers is a clear example of a population that accepts to take some risks in order to manage directly the productive activity. The desire to be one's own master prevails – still in a collective context -, leading the employee to be able to decide the daily timetable, the commercial relationships, the workers, the type of investments, and so on (Hjalager, 1993). In this sense, it is very relevant the emphasis Brusco and other theorists put on the institution of "sharecropping" as a historic basis for the creation of such an entrepreneurial spirit among the local population (Brusco, 1982; Bagnasco, 1988; 1999; Bellandi, 2001).

The aspect of social cohesion worked on the bases of the particular social fabric that was present in those geographical areas, where most of the people had been knowing each other for decades. These areas were thus characterised by a rather naturally trustful atmosphere, which was very supportive to small firms' start-ups. This type of trust is not based uniquely upon ethnic roots, as it probably was in a first stage of development, when the cluster was at the beginning of its production cycle (Schmitz, 1999). As several scholars mention, it depends on the positive repetition of productive and commercial exchanges among the local actors. It allows them to know each other better, to diffuse information about each other's reputation (Axelrod, 1984; Lorenz, 1992; Platteau, 1994; Dei Ottati, 1994) and to recognise the "cost of non-cooperating" (Schmitz, 1995).

As a substantial part of social cohesion, the value of the family is not to be underestimated either in this third passage. Few efforts could have succeeded if the entrepreneurs had not had such a support by the family in terms of long working hours, shared responsibility and extended skills, the capacity to control the production and marketing cycle, among others. The family is probably the aspect of social cohesion that worked all along the development of these local production systems, sometimes in a more hidden and implicit way, some others in a more explicit and active way, such as in this passage III.

To produce the passage to the third stage of development, these local production systems have been supported also by the policy causal level. Even in this stage of development, some important laws for SMEs development had been passed. An example is the 1329/1965, also known as, "Sabatini Law" on technological upgrading of firms and the 227/1977, or "Ossola Law", on export promotion (Bertini, 1998). Thanks to the first law, more than 200,000 firms were able to restructure and upgrade their technological assets over a period of thirty years with an average of US$ 50,000 per firm. Thanks to the second law, small firms were helped to increase their capacity to export most of their production[4]. These laws were approved as a part of the conscious effort of the state and the national and/or local societies to help small firms to upgrade and join the international market competitively. These legal provisions can be considered another necessary, but not sufficient bases, for the economic success of small firms' industrial districts. The laws strengthened the cumulative process that characterises development, by giving appropriate tools to the entrepreneurs to allow them benefit from the positive trend of the national and international economy.

The whole legal and policy system has certainly been complemented by efficient institutions. These latter constituted the organisational framework that supported the implementation of those laws and regulations and promoted the materialisation of the third stage. Institutions often represented the public service agents - originating in local contexts - that promoted the deep division and specialisation of labour which is typical of the industrial districts. These institutions are important not only for the policy tools they choose and implement, but also for the daily support they give to the local production system (e.g. by easing the administrative procedures of firms through special services). In the case of the Third Italy, there are several examples of such an important contribution to the districts' success. These are ERVET, ASTER, CITER, the plenty of active local governments and their helpful bureaucracies, the business associations such as CNA, among others (Best, 1990)[5].

Passage IV: from Industrial Districts to New Competitive Atmospheres (1980s-2000s)

This passage refers to the new challenge that local production systems face nowadays in the new globalised market, in which compete with other production systems, often led by competitive large

[4] For example, the furniture district of Forlí, among others, for many years exported more than 50% of production (CCIAA, 1996; Bertini, 1997).

[5] In Brusco's analysis, the relevant role of local institutions arrived as a part of the "industrial districts Mark II" (i.e. the following step), but in our view they are part of that first indentification of the industrial districts as such. Indeed, their growth and expansion can date back to the 1970s and 1980s; in contrast, Brusco's Mark II only started in the 1980s and is still underway.

firms. In this new context, other competitors, such as continental China and other East Asian and East European countries, reach the global market and fight for the same consumers.

Passage IV

Main Trends	Economic Factors	Social Factors	Policy Factors
New Global competition	Knowledge and innovation, Groups of firms; Multinational networks	New education/ career models, New types of social cohesion/linkages	Laws 44 & 95 on Firms' Creation; Laws 81 & 91 on Innovation, Wider Institutional Networks

Source: Author's synthesis.

From the economic point of view, the new market competition is wider and changing, since it deals with several segments of consumers that have particular tastes and preferences. All these segments are interested in receiving new personalised and innovative goods and services. There is a general recognition that local production systems are losing their own configuration, in terms of the markets in which the firms compete, and their production sites, which are either set up far from the original location or tend to blur into "multinational networks" of firms (Bianchi and Di Tommaso, 1998; Bianchi, Di Tommaso and Rubini, 2000). The investments in plants and joint ventures set up in the last decade in Eastern Europe by industrial districts' entrepreneurs are examples of how production and market dynamics are changing radically in that way.

One of the traditional strategies to network is subcontracting and outsourcing in general. But nowadays, the strategic view of these important relations, that have been applied successfully from the 1960s onwards, needs to change configuration and extend its meaning to involve a common work on different and wider bases, as it is described by the French School on SMEs networks. These theorists have emphasised that aggregation does not need to be physical, since it can also take place through the networks created by new information technologies (Gilly and Torre, 1998; Perrat, 1998).

Aggregation needs to take place through a joint venture of firms and institutions, which could occur more and more across nations in a sort of multinational institutional criss-crossing (Sugden and Wilson, 2000). This would replicate the "specialised type of subcontracting" of the 1970s and 1980s (Caddy, 1998; Lazerson, 1990; Innocenti and Labory, 2001), but extending it to include the whole

set of possible competitive relations with local, national and international institutions. The case of academic spin-offs is an example of this new type of networking, which is certainly needed by the local production system (European Union, 2001; Baroncelli, 2000).

Another recent strategy of traditional industrial districts is the formation of "Groups" of firms. These show the importance to return to acceptable size of operations. This aspect is not very important in terms of production, because these economies of scale are ensured by the subcontracting and outsourcing that have been very much practiced in the districts for decades. In contrast, the size of operations is extremely important for aspects such as marketing and market distribution, research and development, etc. (Brioschi and Cainelli, 2001; Russo, 1989). In these sectors, the new kind of grouping creates the margin of tolerance in respect of the hard competition coming from East Asia and other countries with a low labour cost.

On the whole, it is evident that the new competition cannot use only the old instruments of "price" to gain competitiveness (Best, 1990; Pyke and Sengenberger, 1991). Nowadays, other factors are extremely relevant for consumers. Consumers are interested in the innovation of product and the relative services, such as attention to the client at the sale point, assistance in the setting up of the product, guarantee of the product after sale, among other factors. Therefore, the winners must not only count on their price competitiveness; they need to propose some advantages even in these other competitive fields.

In this sense, the aspects of information flow and knowledge creation and diffusion among the actors of the cluster assume a strategic role. These factors ease the transmission of the competitive elements among firms and push the system towards higher technological frontiers. Within this perspective, the individuals become the real subjects of knowledge, since they take it with themselves whenever they leave firms and institutions. They are also the means to open up new room for important spillovers. "Distance is no (more) important when transmitting information, but still is important when we refer to the transmission of knowledge and tacit knowledge, which now are the strongest base for industrial development and competitiveness" (Audretsch, 1998: 21-22).

At the same time, the firms constitute one of the most important channels for information and diffusion of new technology within clusters of small and medium-sized firms. The dense interaction between firms within formal and informal networks become essential aspects to allow small firms' clusters to shift from less dynamic types to more competitive types. It is the case of the so called

"technology district, that are at the heart of advanced economic development, distinguishing these from those that are territorial collections of economic activities" (Asheim, 1994).

Considering the policy level, this analysis recognises that, simultaneously at the functioning of the market, there are policies and laws also at work. These instruments try to define the limits for permitting efficient and effective operations within the market as well as creating the incentives system that supports the proactivity of firms. A stream of thought emphasises the importance of an analysis of power relations within the local production system in order to identify the main (groups of) interests playing the game of development, even from opposed perspectives (Cowling and Sugden, 1997; Bianchi, 1998). Thus, they stress the need for a wide approach to policy-making that includes several aspects of competitiveness, such as institutional building and competition policy, public goods, services and infrastructures, innovation, territories and small firms. All of these aspects, insofar as the relative policies, can work efficiently only when they are integrated in a systemic framework and vision, such as that applied in the process of formation of the European Union (Bianchi, 1995; 1998; Sugden and Wilson, 2000).

The policy causal level confirms its arguments on the basis of concrete industrial policies implemented in recent times. In the case of the Third Italy, it refers to various processes and legal provisions that have been promoting the role of small firms and clusters in the regional and national economic fabric. In particular, two laws have been approved during the latter period, which seem to be directed to spur a further dynamism among local production systems. These are Law 44/1986 (then amended by Law 95/1995) on Firms' Creation and Law 46/1982 (then amended by Law 317/1991) on Innovation (Bertini, 1998: 327). These legal tools have been used in the region, but not as extensively as the most successful policy instruments of the previous decades. This aspect points to some possible limitation of these instruments that needs to be further investigated.

The efficient impact of policy requires always a specific institutional environment. In this stage, there seems to be the need for insisting on a wider networking, as a means to promote more democratic economic environments. It promotes a different and "higher-road" type of relations among the local economic agents. One example is represented by the mentioned process of spin-off of small high-tech firms from Universities, independent and applied research centers, local governments. At present, the results of these attempts cannot be considered conclusive. It is an experimental situation that has not passed yet to "productions in series".

The social factor is the third pillar of development. In this fourth stage, the social level has to do with the human resources of the cluster and their internal and external linkages. Nowadays, it seems that development is ensured by the continuous improvement of human resources. The capacities of these agents do not depend only on their skills and knowledge, but also on their motivation and social roots. In this sense, the spirit of self-achievement remains a key factor. In the context of systems of small firms, all responsibilities remain with the entrepreneur. But when he/she becomes old there is a need to shift these responsibilities to other family members. Nowadays, in some districts there is a problem, because younger generations are less willing to accept those responsibilities. They opt for managerial roles within big enterprises and large bureaucracies (e.g. Universities, the State, public enterprises) and leave their parents' activity, rather than extending their own and the firm's competences in newer fields such as electronics and software, marketing, telecommunications, among others[6].

In terms of social cohesion, small firms are always due to focus their activities on joint actions if they want to offset the larger economies of large firms. A new way of social cohesion is needed in order to coagulate people and firms around complementary aims and objectives. The mentioned Groups represent the economic face of it. At the same time, this cohesion promotes a wide joint venture of firms and institutions, which nowadays needs to be open also to across-nations influences and relations. Economically, it is something that already happens, but the social implications are not clear yet. It cannot be just the economic and financial interest that guides the possibility to cooperate, because it would be short-term oriented. There is a need for some deeper and longer-term linkages, which only the social level can guarantee.

The same idea of a wider networking, which spans from Universitites to firms passing through local and regional governments, business associations, state bureaucracies, needs to be conceived as part of a new and wider environment of social cohesion. Nowadays, the positive atmosphere created by the active presence of the whole spectrum of public bodies becomes necessary to set up the basis for a wider joint planning and support to the growth of the local production systems.

[6] Author's interviews to entrepreneurs of the furniture sector in Forli, Emilia-Romagna, in May 2000.

Concluding Remarks

This paper wants to stress that development does not depend just on one specific factor, but on many layers of human interaction. It is not only a matter of leaving the market free or setting the economic fundamentals right, in order to obtain some sort of "spontaneous development". And it is not a matter of making the state or the local government once again "interventionist". The analysis of the history of the districts shows that various causal levels participated in their systemic evolution and development. That is why we appreciate the role that these different levels of analysis (i.e. the economic, policy and social levels) have had in the growth process of the industrial districts and draw the appropriate development conclusions.

We agree that economic factors have been important in the different phases, respectively in terms of income gap, large investments, collective efficiency, innovation. But at the same time, the analysis of policy shows that several specific policy tools have been successfully applied to promote the development process of local production systems. The Sabatini Law is a clear example. The institutional support supplied to small firms and their associations by local and regional governments through services that rectify market failures and lower transaction costs in innovation, market information, human resources training are other clear examples. Finally, the social causal level of development also had a special relevance to promote dynamism and compactness of the production system, in which the former comes through an attitude familiar with learning-on-the-job practices and entrepreneurial independence, while the latter comes through the appreciation of family, peer and other forms of social support in the productive activity of the firm.

Using a metaphore, all those aspects are extremely important. They are like the different parts of a racing car: steering wheel, engine, gears and brakes. These parts must be finely coordinated in order to get to the top speed without going off the road. In a curve, the machine (productive system) does not necessarily have to push all these factors to their top limit, because it could mean losing control of the system. There is a need to harmonise these different parts in order to speed up progressively and go towards the optimal solution. In this sense, the fine tuning of the components is an important rule for growth and development.

That is why, the natural recommendation for other developed and developing contexts highlights the importance to create a rounded framework in which all the mentioned aspects are taken into account in an appropriate way. It means taking into account aspects that are usually left out of policy programs (i.e. the social factors), and harmonising them with the rest of the system's factors.

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