The reinterpretation of the agri-food system and its spatial dynamics through the industrial district

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Abstract: The industrial district theory has brought to the development economics the opportunity to interpret the economic change through places, where it actually is formed, as a result of the join action of the local and extra-local social, economic and institutional forces. This paper sets out to discuss the contribution that the industrial district theory can make to the debate on the spatial dynamics of agri-food systems in the age of globalisation. To this end, the first part of the paper analyses the contribution of the industrial district approach in the relationship between industry and territory; the second part studies the evolution of the concept of the agri-food system and the main determinants of the spatial dynamics in modern agri food systems. This paper supports that the industrial district theory can shed a new light on the spatial dynamics of agri-food systems, and can offer an alternative to the mainstream approach. In using the local community as a unit of analysis, the ID theory gives a key role to human agents of production and their knowledge and the agri-food system can be seen as 'a global network of places', each place being specialized in a different component of the system.

Key words: agri-food system, globalisation, industrial district, spaces, spatial dynamics, territory

INTRODUCTION: THE INDUSTRIAL DISTRICT AND ITS VARIOUS MEANINGS

The industrial district (hereafter: ID) is widely recognized as a *model of production* by the international academic community in that it reveals the capacity of small and medium enterprises (hereafter: SMEs) to attain the same level of competitiveness as large firms. It represents a model of economic growth and social development.

Since the 1990s, regional authorities in Italy have used the IDs as an *instrument of industrial policy* on the initiative of central government, which has promoted their legal recognition. In the first decade of this century, the ID was adopted as a theoretical background for the policy of *agrupaciones de empresas innovadoras* (Innovative Business Groupings) in Spain (MITYC 2006). In developing countries, the Italian experience of IDs has been used as a reference model by the UNIDO (2001) for policies encouraging the cooperation among artisan firms. Currently the ID is the object of study and monitoring in many regions of Italy by academics and professionals working for public and private institutions.

The ID concept has also informed similar concepts such as the *systèmes productifs localisés* (localized production systems) (Courlet 2008), and hinted to introduce a 'territorial dimension' into concepts such as the *cluster* (Porter 1990; Porter and Ketels 2009). The intellectual debt of these concepts to the ID is widely recognized in the literature.

The ID theory has also breathed a new life into the industrial and regional economics. Most recently, it has brought to the development economics the opportunity to interpret the economic change through places where it actually is formed, as a result of the joint action of local and extra-local social, economic and institutional forces.

Because of these multiple meanings – as the French economist Claude Courlet (2006, p. 20) noted – the original ID concept 'lost scientific rigor' or it has been misinterpreted.

As a matter of fact, defining an ID as a geographical concentration of industry is equivalent to assimilating it through the theoretical framework of the location of industries. But that is precisely the theoretical framework called into question by ID theory; an ID comprises a local community specialized in an industry instead of an industry concentrated in a place.

Let us take an example to clarify this point. Langhirano – a place that gourmets know well, because it produces the 'Parma Ham' – can be seen

either as one of the places where the food industry is localized, or as a mountain community near Parma which procures what it cannot produce itself by specializing in what it makes best. In the first view, the unit of the analysis is the food industry, and a study of its spatial distribution reveals Langhirano. In the second view, the unit of the analysis is the community of Langhirano and the research on the production structure of the place brings into focus the food industry. In the first view, the socio-economic reality is seen as 'an array of interrelated industries' and in the second view, it is 'a mosaic of places'.

International historiography (e.g., Daumas 2007) is unanimous in recognizing that the ID concept began to spread among the scientific community thanks to the 1979 article by Giacomo Becattini, the Florentine economist founder of the Italian neo-Marshallian school.

Becattini's 1979 article was entitled "From industrial 'sector' to industrial 'district': Some remarks on the unit of the analysis of industrial economics" (now reprinted in: Becattini 2004). The title leaves no room for doubt; Becattini proposes the *district* in the place of the *sector* as a unit of the analysis.

It is true that the article discusses economies of production and how:

> the advantages of production on a large scale can in general be as well attained by the aggregation of a large number of small masters into one district as by the erection of a few large works (Marshall, cit. in Becattini 1979).

This clearly paves the way for the ID to be conceptualized as a model of production. But the central nucleus of the ID theory remains that the ID is the unit of the analysis of the industrial phenomenology.

This paper sets out to discuss the contribution that the industrial district theory can make to the debate on the spatial dynamics of agri-food systems in the age of globalisation.

Section 2 explains the theoretical foundations for this paper. It examines the contribution of the ID theory in the relationship between industry and territory. It analyses, then, the increasing importance given to territory in the analysis of the agri-food systems, highlighted by the growing number of theoretical approaches that use the territory as the explanatory variable of the socio-economic dynamics in modern agri-food systems, such as the *systèmes agro-alimentaires localisés* (hereafter: SYAL). Section 3 tackles the issue of spatial dynamics in agri-food systems and their determinants. Section 4 discusses a reinterpretation of the agri-food system and its spatial dynamics through the ID theory and Section 5 proposes some final remarks.

THEORETICAL APPROACH TO THE RELATIONSHIP BETWEEN INDUSTRY AND TERRITORY

The ID theory as an analytical framework to redefine the relationship between industry and territory

To this end, we need to consider the theoretical importance of taking the ID as a unit of the analysis. The ID theory breaks with the mainstream economics, which sees the relationship between industry and territory as the result of industrial location.

In the way the ID theory introduces territory into economic analysis, it turns this reverse of perspective.

In contrast with studying the distribution of industries over a territory, searching for the presence of manufacturing agglomerations and the related locational factors, the ID theory takes as its starting point the place where the economic agents (both entrepreneurs and workers) are embedded.

This approach is justified by the way in which industry is conceptualized. Instead of defining industry according to the traditional technological criterion, that is as 'the set of firms which produce a given class of goods sharing the same technical characteristic or material of the manufacturing process', we conceptualize industry as 'the awareness that economic agents have of belonging to an industry', namely through a criterion of identity.

Giacomo Becattini, in his 1962 book on the concept of industry, writes:

> As well as a set of manufacturing processes, industry may be seen as a set of sacrifices of work, expectations and organization (Becattini 1962, p. 23).

In this view, the place of the industry is not a *local production system* (LPS), that is 'a cluster characterised by proximity among productive systems [...] that are related in different degrees' (Courlet 2002), but has the nature of a *place of living*, that is a bounded territory where a group of people live and earn their living in economic activities located in it. Most daily social relationships occur and the need for social integration is met within this same place.

The economic agents' awareness of belonging to an industry is formed inside the place (or local community) through the way in which the networks of local relationships (internal markets) intermingle with the networks of connections established with their customers and suppliers which may be national or even global (external markets). This system of internal/external networks between economic agents is also influenced by the relationships with family and institutions, and their links with the social and

institutional contexts. All these aspects lead to the sharing of representations norms, values and sanctions which provide a framework and background for the social and economic life of the local community (Blake and Davis 1964).

It is this local community, relatively self-contained economically, socially and institutionally, which is the unit of the analysis and which we label 'industrial district'.

In this view, the industrial district is not the production model – celebrated by the international literature – that explains how small businesses can get the same degree of competitiveness as larger ones. As a unit of the analysis – both of the Industrial Economics (Becattini 1979) and the Development Economics (Becattini 2006) – the industrial district is a place (local community) that can be characterized by different kinds of firms, not only SMEs; i.e. by different models of production: a model dominated by SMEs or a model focused on a large company and its local supply chain of production.

To summarise, the ID model and the ID theory are two distinct lines of research, which should not be confused.

The role of "territory" in the agri-food system

The relationship between the agri-food system and territory has been gradually defined over time. Initially, the agri-food system was interpreted through the notion of *agribusiness* in order to bring out the role of farming and its upstream and downstream activities in the industrial processing of food products. Davis and Goldberg (1957) for example examined only the aspects of production and gave farming a key role in the advanced capitalist economies. At the beginning of the 1970s, the French school studied the industrialization of farming and focused on its role in fulfilling the requirement for food (Malassis and Bourdon 1970). It was found that the consumer drove the engine of the agri-food business and the attention of agrarian economists shifted from supply to demand.

In Italy the work of the French school was further developed by Galizzi (1975), who defined the field of agri-food study as 'the set of functions which jointly satisfy a new requirement for food'. Galizzi correctly predicted that supermarkets would gain the precedence in the relationship with the consumer and the dominance over the other components of the agri-food system.

Many subsequent researchers were to agree that the primary function of the sector is 'feeding'. Ghersi and Bencharif (1995) for example write:

> The agri-food system is made up of a set of agents in dynamic interaction who act on the production and transfer of food products in order to ensure food supply.

Ghersi and Bencharif thus recognise the complexity of the relationships between different, evolving, components of the agri-food system: farming, processing firms, suppliers of goods and services, food distribution, catering, consumers and institutions governing the agri-food system.

Again thanks to the contributions of the French school, territory was recognized in the 1990s as playing a key role in the agri-food system. As a consequence of this realization, the natural environment (i.e., the use and preservation of natural resources) and the socio-cultural environment (i.e., the local history and manufacturing traditions), were also given a new consideration. Both types of environment affect the production system and the tangible and intangible quality of a product. Food production was now interpreted as the result of a production model where economic agents are linked through the characteristics of a specific territory. Cultural and social aspects and the collective dimension of production knowhow of foods gave rise to a very rich field of study (Sylvander and Lassaut 1994; Berard and Marchenay 1995; Letablier and Delfosse 1995; Casabianca and Valceschini 1996; De Sainte Marie 1996; Sylvander 1996; Berard and Marchenay 1997).

The influence of the territory becomes particularly relevant in specialty foods. There are three types of factors involved: the specifically local nature of resources, the history and traditions, and the collective dimension of knowledge shared locally (Bérard and Merchenay 1995; De Sainte Marie et al. 1995; Sylvander 1995; Barjolle et al. 1998; Casabianca et al. 2005).

The relationship between the agri-food system and territory allows us to separate the agri-food system into constituent subsystems; product, consumption, institutions and territory (Bertazzoli et al. 2006). For each subsystem, the characteristics need to be specified. These include the type of firm, characteristics of products, variety of services, the type of institutions etc. It is also necessary to specify the function (productive, cultural, social, political, landscape) as well as the relationship between these aspects. The consequence is that there is not a single agri-food system. There are many different systems, and each one is defined and reproduced according to the characteristics and links among the subsystems.

From the agri-food system to localised agri-food systems

The use of the variable "territory" for the study of local production initiatives led to the proliferation of classifications[1].

A relevant approach to interpreting the relationship between the agri-food system and the territory is the French *systèmes agro-alimentaires localisés* (SYAL). The concept was first formulated in the mid-90s by the CIRAD (1996) and since then it has gradually been refined (Muchnik 2010). It incorporates the territorial dimension of the system and allows for a plurality of situations. SYALs, in fact, change according to the different spatial configurations and modes of coordination between the actors (Fournier and Muchnik 2010); they are processes in construction, spaces of production constructed by the relationship with the actors sharing interests linked to one or more rural agri-food sectors (Boucher 2007). Without the collective processes of innovation, the SYAL is destined to disappear, as the falling rates of profit following the increase in the number of producers generate a shift of the actors to other activities (Fournier 2002).

For Muchnik (2006), SYALs lie within the framework of globalisation and they can be also considered as the models of the agri-food development. This interpretation has led to a use for the SYAL in the territorial innovation processes as "an institutional tool which can be used by administrative bodies in their planning programs" (Muchnik 2009). There is no space here to comprehensively summarise the evolution of the concept, but it is important to note that the concept of the SYAL is related to another concept formulated in France, the *système productif localisé* (SPL) by Courlet and Pecqueur (1992), and developed and consolidated by Courlet over the following decade (Courlet 2008). That there are certain similarities between the SYAL and the SPL is confirmed by a recent comparative analysis by Requier-Desjardins (2007). Requier-Desjardins shows, though, that the SYAL and the SPL involve a different definition of the relationship between the economic activity and the territory. For a SPL, the industry has to be concentrated in a relatively small area, a single place, while for a SYAL

> the notion of geographical concentration given the dispersion typical of rural areas must be softened: spatial limits of SYAL may be quite wide, embracing sometimes an entire region, or a set of micro-basins in a region, a kind of archipelago (Requier-Desjardins 2007, p. 11).

Let us take a couple of examples from the Parma area. The pig hind legs to be turned into the *Prosciutto di Parma* come to Langhirano from pig farms located in various regions of Italy, so the SYAL is a very wide area. But for producing the *Parmigiano-Reggiano*, the milk has to come from the same area that the cheese-making, ripening and sale take place, so the SYAL is geographically much smaller.

An industrial economist could point out that for the Biella wool – Biella is a local community located in the North-east Italy – the raw material does not actually come from the Biella area but from sheep farmed in Australia. Again, Biella would remain a local system specialized in woollen textiles even if some of its production stages are relocated outside the local system. This is because an industrial economist makes a distinction between the *industrial district* of Biella and the *economic space* of the industrial district of Biella, which is defined by the networks of trade with suppliers and even with final consumers located outside the district.

So, after all, the agri-food system is not so typical; its features are shared by the production systems of other manufacturing sectors. In this view, a *localized agri-food system* coincides with its *economic space*, so its components (producers, manufacturers, retailers, consumers) may belong to any territory. The SYAL has a multi-localized nature with regard to territory, which is typical of a sectoral approach. But in this way, the territory does not define the production system, it only describes it.

DETERMINANTS OF SPATIAL DYNAMICS IN AGRI-FOOD SYSTEMS

The spatial dynamics characterizing modern agri-food systems are mainly the result of the social, economic, cultural, technological, and institutional change. The way in which the agri-food systems reorganize to manage change underlies their spatial dynamics, and it is a cause rather than an effect of the current globalisation.

Hirst and Thompson (2003, p. 17) write:

> Globalisation has a history. The 50 years between 1950–2000 are not remarkable when compared with the period 1850–1914. In that period flows of merchandise trade, capital investment and labour migration were all comparable to or greater than those of today.

But it is undeniable that one of the main features of the contemporary globalisation is the ease with which the production processes can be divided into stages, locating each stage in places throughout the world according to the best cost advantage, and implementing remote monitoring of production through the wireless technology.

[1]See, for instance, Alternative Agro-Food Networks (Goodman 2003), Local Food Systems (Feenstra 1997), Short Food Supply Chains (Renting et al. 2003).

The main changes in the agri-food systems are occurring in four areas:

– new models of consumption;
– modern retail;
– technical progress and information;
– international regulations.

New models of consumption

Changes in the economy, society and demographics have led to the requirement for food products with a high service content.

The increasing participation of women in the labour market and the fact that women are now not entirely responsible for producing meals at home means that there is today an increased demand for time-saving products. At the same time, the changes in the labour organisation, such as greater distances travelled between home and work and the decline of longer lunch breaks, are making meals less important and increasing the demand for snack products. The increased consumption of food outside home and the growth of catering chains, immigration, population ageing and an increase in the number of single person households and single parent families are all factors which have led to a wider range of agri-food products being offered and stimulated the development of new sales formats and packaging.

A second type of variables affecting consumers is cultural. Food consumption today is no longer simply a question of nutrition; it is also an expression of the lifestyle and personal values. The desire for physical well-being has led to an increased demand for 'light' products, fresh rather than processed, fruit and vegetable rather than meat-based, GM-free, organic foods and the so-called 'novel food' enriched with nutrients. New awareness of the environment is encouraging the consumer to choose low environmental impact products, organically and sustainably grown foods, and to save food miles by using the local distribution channels and the short supply chain. Ethical considerations are making the fair trade models more widespread in trade with poorer countries.

The consumer choice is thus influenced by a range of socio-economic demographic and cultural variables acting jointly on decision-making processes. Demand for local speciality products, for example, is the result of the consumer sensitivity to the advantages of buying from local producers as well as the appreciation of the chemical-physical and taste-smell characteristics of products. Another example of converging wants is the spread of fast food and catering chains which satisfy the requirement to save time and at the same time the desire to imitate the consumption styles imported from abroad. And naturally, the price variable remains a basic criterion for the majority of consumers who are obliged to behave rationally in spending their income (Belletti and Marescotti 1996).

Modern retail

In the agri-food supply chain, a downstream shift is currently taking place in the formation of value; the composition of agri-food products is increasingly influenced by those links in the chain closest to the final consumer. The most important of these actors is that, over the recent years, the modern retail has consolidated a relationship of loyalty with the consumer and replaced the traditional role of the manufacturer.

The use of private label in particular has enabled the modern retail to intercept the relationship of the consumer with the manufacturer, by reinterpreting the consumer requirements and providing a personal guarantee of products on offer. This strategy has overturned the supply chain relationship between manufacturer and retailer. It has become hard for the consumer to correctly identify the producer, who can thus be easily replaced by the retailer who has invested the image of the supermarket or chain in becoming the owner of a brand name.

Whereas traditionally the manufacturer was considered to be the main operator and the wholesaler or the retailer the agent[2], the new relationship sees the supermarket in the main role. The supermarket now has the vertical control of the chain; it controls to a large extent the pricing policy upstream for the agri-food manufacturers and farmers, and defines the characteristics of the product it sells. Moreover, the supermarket often controls the supplier output through the 'supply chain contracts' and/or imposing its own standards (Benoun and Héliès-Hassid 2003; Giacomini et al. 2010). These standards concern the health and hygiene requirements, quality guarantees and environmental and animal welfare requisites, and agreeing to them is often a necessary condition for the suppliers wanting to sell to the modern retail (Arfini and Mancini 2004; Henson and Reardon 2005;

[2]In the principal-agent model, all market power lies in the hands of one party, the party offering the contract, who is the leader in the vertical hierarchy between producer and distributor. For the vertical chain control and the principal-agent model see: Ross (1973); Rey and Tirole (1986); Tirole (1989); Salanié (1994, 1998).

Valceschini et al. 2005; Fulponi 2006; Fulponi et al. 2006; Giraud-Heraud et al. 2006). Many of them were set up by *large retailers* in Europe and have now spread all over the world. For example, the Global GAP standard has now been adopted in the countries of Latin America, Africa, Asia and Oceania in response to the growing demand for the out-of-season fruits and vegetables in the Western markets.

Such private certification schemes are useful to the modern retail in two ways. As well as giving them a vertical control of the supply chain, they ensure that the retailers can offer a differentiated range of products (Hatanaka et al. 1996), available in the market for both mass and niche consumption models.

The appearance of alternative consumer goods such as green foods, health foods and local specialty foods in supermarkets implies that the modern retail standards today are used both in the alternative and conventional supply chains in the developed and developing countries.

The vertical control of the modern retail chains over the production constitutes a new form of the agri-food *governance* which is overtaking the public regulation on quality and food safety with the private forms of control and guarantee (Farina et al. 2005; Bush and Bain 2004) and strengthening the oligopoly of supermarkets (Campbell et al. 2006).

Technical progress and information

Agri-food chain actors are today using new models of organization to remain competitive in their response to the consumer preference. A key role in competitiveness is played by the technical progress applied to production and preservation of foods as well as the distribution and telecommunication. This process of 'technicalisation' of food production, together with the recent series of food scares and the important presence of credence attributes in food products[3] has led to a degree of breakdown of trust among consumers. It is now commonplace for them to search out for information on the credence attributes as well as the origins and nutritional value of a food product in a sort of self-defence. So the dissemination of information has come to play a key role in regaining and strengthening the consumer trust of producers and institutions. This is why there is now a proliferation of communication regarding food: there are specialized magazines published by consumer associations or supermarkets themselves, product certification schemes which are sometimes voluntary and public rules and regulations.

International regulations

Trade policies, food product quality standards and the environmental sustainability of production processes are all increasingly subject to regulation, while the role of the state in promoting this legislation is being increasingly supplanted by international organizations. There are several facets to international legislation. Its intention is to ensure food safety for consumers but at the same time, it affects the organization of companies and the food chain, and in the final analysis the balance of the power and profit distribution along the supply chain (Hammoudi et al. 2009).

Busch and Bain (2004) find that the intervention of the WTO, which has brought an intense activity of the regulatory standardization along with the liberalization of international trade, has contributed to the proliferation of private standards. Imposed by the large-scale retail organizations in order to guarantee the product compliance with the growing body of legislation, private standards have become a tool for the large-scale retail organizations in strengthening their role in the agri-food systems.

In the same way, the EU food safety regulations have also led to a change in the composition of the agri-food chain. The EU regulations have favoured big firms at the expense of smaller ones, as these have not been able to exploit the large-scale economies in complying with new regulations, and have thus become less competitive (Loader and Hobbs 1999).

Spatial dynamics in agri-food systems

The previous sub-sections 3.1, 3.2, 3.3 and 3.4 have briefly summarized the main determinants of the current spatial dynamics in the agri-food systems.

The heterogeneous nature of consumer wants is reflected in the supply of a wide range of agri-food products for which production stages take place overseas, even though the production and distribution chains may be organized differently.

Products with high service content are usually the output of an agri-food chain where the crop cultivation or farming and the initial phases of processing take place in the country of origin, often a developing country. On the other hand, industrial processing, which adds the most value, usually takes place near the final market in developed countries.

Low production costs, the complementary seasonal availability of products, the speed of freight and the increasing capacity of developing countries to produce in the quality and quantity required by the large-scale

[3]Credence attributes are those that the consumer cannot evaluate before sale or during consumption (Nelson 1970).

retail organizations are all factors making the spatial separation of the different phases of production across different countries more frequent. In the terms put forward by Grossman and Rossi-Hansberg (2006; 2008), the networks of *trade-in-tasks* are replacing the networks of *trade-in-goods*.

And this process of separating components of the agri-food chain on the global scale is one of the main manifestations of the internationalisation of economic activity.

DISCUSSION: REINTERPRETATION OF THE AGRI-FOOD SYSTEM AND ITS SPATIAL DYNAMICS THROUGH THE ID THEORY

Nomen omen (true to its name), said the Latins, and the agri-food system is just that. Whether it is defined as localized, or indeed without an adjective, the agri-food system has a sectoral focus. It is a production system which is geographically spread, not a system of places that, at a given time, are specialised in one or a few parts of the same process of production, processing, distribution and consumption.

In the traditional analytical framework, the territory is (a) a sub-system when introduced as a component of the agri-food system, in the same way as firms, the product, consumption and institutions; (b) a secondary category of analysis when used to indicate the origin of a product or the location of production stages.

In the framework of the ID theory, the territory is (a) a local community in which economic agents are embedded; (b) a factor which modifies productivity and innovativeness deriving from the way the local community relates to the apparatus of production supplying 'the social climate and the human factor'.

However, the research on a place (local community) does not focus merely on internal factors: the inter-firm cooperation, the way that local population supplies the apparatus of production with new entrepreneurs and employees, the institutional provision of public goods. But the research also investigates external relationships with other places: those which are the sources of raw materials or semi-processed goods (that is, the place of production) and those which are final destinations of the finished goods (that is, the place of consumption).

So, reinterpreted through the ID theory, the agri-food system can be seen as 'a global network of places', each place being specialized in a different component of the system. The spatial dynamics of the agri-food system, or the ability to be connected in a global value chain, depends on the social, economic and institutional dynamics of each place comprising the network. The network may have multiple interrelated places and it may change according to the number of the involved places and the consequent inter-local co-operative relationships, and according to the hierarchical order among them.

It is important to note that the impulse for change can appear at any place on the network, in production, processing or in consumption. A previous section of this paper described the decisive role of consumption in bringing about the change in the spatial dynamics of the agri-food system thanks to the role of retailers in responding to the new consumer wants.

But in the 'global networks of places', production and processing places can also affect the change on the places of consumption. This is possible in that the social turnover entails innovation on the part of a new class of entrepreneurs. These *homines novi* (new men) put forward new ideas for products of two types: (a) new ways of satisfying the existing wants or (b) new products which give rise to new wants in the minds of consumers.

The role of activating the production process passes from one place to another with a certain frequency, so it seems safe to accept the hypothesis that the hierarchy between places on the network is dynamic. This is what makes a given agri-food system competitive.

Another possibility for the places of production or processing to play a driving role in the spatial dynamics of the agri-food systems derives from the increasing concern of consumers about the origin of food products and the reliability of the processes of transformation.

This demand for food safety is frequently accompanied by the awareness of the food biodiversity, functional to a non-standardised way to satisfy the food wants.

Spatial dynamics such as those discussed above typify places where agri-food production is based on the methods of crop growing, animal farming and processing with regard to which human skills are more important than technology (Arfini et al. 2010).

Places (local communities) whose products meet both the need for the food safety and biodiversity have a competitive advantage in so far as they succeed to convey and market their products.

In this view, globalisation brings advantages. Local communities can link up more easily thanks to the new communications and transport networks.

The fall in the cost of communications has a double effect. It makes easier, on the one hand, the diffusion of knowledge of agri-food products both for manufacturers and consumers; on the other hand, the interchange of the innovative entrepreneurial ideas between local communities of distant places.

The fall in the cost of the transport of goods has a double effect, too. It makes the circulation of agri-food products easier and encourages the trend towards specialization both in producing and in processing.

The large retailers help to promote the competitiveness of local producers, including the selected products into their array to meet the consumers' wants.

Consistently with this theoretical framework, the research in agri-food appears to confirm that there is a greater vitality among producers in places where there is a sense of belonging to the local community. The research shows that globalisation has not led to the disappearance of local distinctions. In fact, given that it is places offering tangible and intangible, cultural and institutional resources, which sustain the innovation and interaction necessary for competition in the global arena, globalisation has often implied a re-evaluation of the particular local characteristics (Valdani and Ancarani 2001).

CONCLUSION

This paper has suggested that the ID theory can shed a new light on the spatial dynamics of the agri-food systems, and can offer an alternative to the mainstream approach.

In using the local community as a unit of analysis, the ID theory gives a key role to human agents of production and their knowledge. The general and specialized human ability, in both technical fields and business, lies at the core of all economic and social change, and therefore the spatial dynamics of production systems, including the agri-food ones.

This theoretical position leads us to consider the local community as a learning environment and an incubator of the entrepreneurial talent. These two aspects affect the competitiveness of each individual place and of the nation as a whole.

The policy implications of this reasoning are mainly relevant for institutions. These should ensure that human resources – the real asset of a place – develop and improve continuously. This should be not only in response to the external stimuli from the market, but rather a policy of updating the knowledge and skills and increasing the entrepreneurial capital through the support for new enterprises.

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