

DIVISION OF LABOUR, SOCIAL NETWORKS  
AND INTANGIBLE RESOURCES:  
THE ITALIAN CASE OF NETWORK BUSINESS CREATION\*

Francesco Schiavone  
[schiavone@unive.it](mailto:schiavone@unive.it)

Ph.D. Student in “Network Economy and Knowledge Management”  
SSAV, Scuola Studi Avanzati Venezia (Ca’ Foscari University)  
Dorsoduro 3488, 30123, Venice (Italy)

Marie Curie Training Fellow at “University of Twente”  
NIKOS, (Dutch Institute for Knowledge Intensive Entrepreneurship)  
Postbus 217, 7500 AE, Enschede (The Netherlands)

**Abstract:**

The paper underlines the division of labour principle for understanding the development of the entrepreneurial process within a social network; the principal background premise is that the two crucial factors affecting the entrepreneur when he is creating a new business are his previous employment (and so his skills, competencies, knowledge) and the advice and assistance he receives by his social environments. The aim of the paper is to specify, therefore, a conceptual proposal, based upon the analysis of the division of labour principle, evidencing that intangible resources as social network capital and human entrepreneurial capital are the critical levers for the creation of new business within a reticular business environment. For enhancing empirically such proposal, the “Industrial District Model”, particularly spread in the Italian economy, provides a useful example of how these assumptions work in a real industrial network.

**Key Words:**

Division of Labour; Social Networks; Human Capital; Social Capital; Business Creation; Industrial Districts.

---

\* Paper presented at the Conference “High Technology Small Firms”, May 24 & 25 2004, University of Twente, Enschede, The Netherlands.

## 1. Introduction

During 1980s and 1990s the scientific community often underlined the crucial role of social networks for the creation of new businesses (Birley, 1985; Aldrich and Zimmer, 1986; Foss, 1993; Johannisson, 1996); a social network, indeed, enables the exchanges of information and resources between the net operators and, in this way, it becomes a crucial medium of communication allowing an entrepreneur and his start-up firm to benefit of every advice coming from it. Nevertheless, the social networks influence substantially the nature of the rising firm and the entrepreneurial behaviour too, due to the “social embeddedness” (Granovetter, 1985) involving the whole corporate human capital.

The enhancement of the network perspective in the academic research about entrepreneurship is clearly linked to the increase of the scientific relevance given to the intangible factors for understanding corporate performances. Indeed, considering the most influent literature, the topic of the entrepreneur’s access to intangible factors (network relations, information, human and social capital and so on) available in networks seems the predominant aspect in the actual academic debate (Hoang and Antoncic, 2003).

The linkage between social networks, their intangible factors and the process of business creation becomes stronger considering the actual shape of the worldwide business environment; indeed, due to the last modifications of many environmental conditions (as the spread of new technologies, uncertainty and globalization of markets and so on), the complexity to create and to manage a business not so much linked with its environment, is highly increased. It requires, therefore, the insert of the entrepreneur and of the start-up human capital within a social context helping the firm to avoid these troubles and to start its activity with a considerable “network” competitive advantage.

Such assumptions, once empirically translated, provide the principal background premise of the paper: the two crucial factors affecting the entrepreneur when he is creating a new business are his previous employment (skills, competencies, knowledge) and the advice and assistance he receives in the entrepreneurial process by his social environments (Birley, 1985).

Moreover, within an industrial network, various empirical cases (Bresnahan, Gambardella and Saxenian, 2001; Torrasi, 2002) suggest that the main condition allowing the creation of a new business is division of labour principle; already defined more than two centuries ago by Adam Smith, division of labour empirically does not just “extract” (via spin-offs, outsourcings or externalisations) some not strategic activities from a pre-existent firm to other firms but also it allows the increase of the corporate human capital, making the workers suitable for an entrepreneurial activity.

Division of labour allows, therefore, the mobility of human capital and social capital (as inter-organisational relationships, social conditions, diffuse knowledge and so on) within the industrial network. These are the foundations of another crucial premise of the paper: within a social network, the business creation is strictly dependent by division of labour.

It happens, indeed, for two reasons: 1) division of labour increases worker human capital and, therefore, also their entrepreneurial inclination; 2) due to the corporate externalisation of not strategic productive phases (before internal), division of labour creates the basic industrial demand that will be satisfied by the new firms.

The thesis here proposed is, therefore, that the human capital, enhanced by internal division of labour, and the social capital, resultant of the trust involving the social networks of the entrepreneur and his firm, are the main elements enabling the creation of new businesses within a network; moreover, these two intangible resources affect the entrepreneurial activity much more than those material assets (as the machines or the plants) since they are the

background unavoidable conditions facilitating the working of the latter ones. They are therefore the invisible hands of the entrepreneurial activity within a network.

Summarizing, the research question of the paper is to specify a conceptual proposal, based upon such concepts pointed out by the related scientific literature, showing that the intangible resource as social network capital and human entrepreneurial capital are the critical levers for the creation of new businesses within a reticular business environment. To enhance empirically it, the “industrial district model” (Piore and Sabel, 1984; Becattini, 1991; Garofali, 1991; Brusco and Paba, 1997) provides a powerful example of how these assumptions work and interact within a real industrial network.

The paper is organised as follows: the next paragraph describes the key factors (division of labour, social networks, human and social capital concepts) composing the theoretical assumption pointed out in the third section. The fourth paragraph links the conceptual proposal to a typical entrepreneurial social network, that is the “Industrial District Model”, enhancing the discussion with some examples of industrial districts present in Italy. Finally, the last section remarks the crucial role of the intangible factors to develop business creation and entrepreneurship within a network environment (as shown by the Italian case), and suggests some managerial and research implications related to this assumption.

## **2. The foundations of the network entrepreneurship**

### **2.1 Division of Labour**

Division of Labour is a method of working, described by Adam Smith in the first chapter of his book, “An Inquiry into the Nature and Causes of the Wealth of Nations” (1776). It is based upon the split of a broad task into subtasks, each of which is then assigned to a worker who specializes in carrying out that subtask. A specialized worker, therefore, achieves better performances than a generic worker within a firm, acquiring a deep knowledge about its subtask and allowing the firm to enhance its productivity and quality standards. More deeply, Smith argues division of labour within a firm produces three main consequences:

- 1- The increase of the dexterity in every worker. Indeed, due to the specialization of the worker in just a specific subtask, its capability to complete it faster and better increases considerably. In other words, division of labour creates specialization, distinctive competencies and an enhancement of the human capital of the worker;
- 2- The saving of time in passing from one sort of work to another one. Indeed, avoiding the continuous shift of the workers (and of the firms) from a certain activity to another different task (necessary for developing a work not specialized), the economic actor reacts more in good time to market requirements and it increases its productivity level;
- 3- The invention of a great number of machines easing and abridging the labour. Indeed, when a work is not subdivided in a subtask requiring specific functionalities and working modalities, it is not so necessary to develop or to innovate the firm machinery. Division of labour, therefore, is also a considerable lever for increasing the corporate innovation.

However, such assumptions have been pointed out more than two centuries ago, when ideas as partnerships, outsourcings or networks were inconceivable; this reason explains because Smith underlined essentially division of labour within the same firm and he did not care so much about interfirm linkages. Indeed, in the actual economy, division of labour does not work just through the internal specialization of the workers but also in an external modality and it represents the main reason allowing the formation of industrial networks and clusters.

The actual firms adopt division of labour when they want to develop just some productive activities (considered as the core business) and not the whole productive process, pushing

outside their boundaries those phases not strategic. This managerial behaviour generates an industrial demand that creates those profitable conditions allowing the business creation.

Division of labour, therefore, provides a double enhancement of the entrepreneurial process; on the one hand, there is an “internal” explanation, based upon the exit of the best corporate workers, interested to become new entrepreneurs; on the other hand there is an “external” explanation, due to the generation of industrial demand for those activities not involved in the corporate specialization. It produces the favourable conditions for opening a new business that can be exploited also by human capital not related to the contractor firm but by other individuals involved in some way with the industrial and social network.

In such case, the split of the corporate supply-chain favours empirically the business creation giving to who has interest to become an entrepreneur the chance to perform those activities autonomously with a new firm; instead, in the case of a strong division of labour within the firm, enhancing corporate human capital quality, the entrepreneurial process happens empirically via spin-offs, with the creation of a new business is due to the exit of some employees from the firm (Cooper, 1971; Parhankangas and Arenius, 2003). In both the cases, the main consequence of division of labour is the definition of a social network within which new entrepreneurs and new enterprises can arise and interact.

## **2.2 Social networks**

Social networks are defined in a generic way by a set of nodes or actors (individuals or organizations) connected by a set of social relationships or ties of a specified type (Brass, 1992). A family, a football team, a university department, a firms cluster represent common examples of social networks. Such linkages are distinguishable for strength and trust. Particularly, the level of trust in a tie is a crucial dimension for the social network working.

Indeed, as argued by Putnam (1993), the membership of an actor in a social network increases its trust level towards the other actors and it allows the composition of the network “social capital”. Even if some empirical evidences underlined that some social networks, being too exclusively, can produce undesired effects as the loss of good development opportunities (Grabher, 1993), the mainstream accredits to this theory a crucial role for enhance an economic context and for the working of an industrial cluster.

For example, how recently observed in the case of Silicon Valley, social networks help the movement of labour, the evolution of influence and power, and the production of innovation. Indeed, due to the Silicon Valley social networks, firms can adapt easily and quickly to market mutations via the “reshuffling of organizational and institutional boundaries and members” (Castilla et al., 2000). Considering the labour market in such high-tech industrial cluster, it has been evidenced that “the result of this unique culture and vast network of weak ties is that engineers in the Valley move frequently from one project or company to another. High mobility reinforces the dense networks, strengthening their role as channels through which technical and market information, as well as other intangibles - organizational culture and trust, for example - are diffused and shared among firms” (Saxenian, 1994).

The social network approach in the entrepreneurship research turns attention to relationships between entrepreneurs and others actors. Analysing the scientific literature about entrepreneurship produced over last twenty years, in a network perspective there are at least three emerging elements for the understanding of the entrepreneurial action (Hoang and Antoncic, 2003).

Firstly, the scientific interest has been mainly focused about the contents exchanged between the networks actors; it has been pointed out the key question regards the access to intangible resources (as business information, advice, problem solving, emotional support and so on) that are exchanged via the interpersonal and interorganizational relationships working as

media between the network actors. In detail, the entrepreneurs often get by social networks advices, information and resources to recognize favourable opportunities for launching the new businesses (Birley, 1985; Greve and Salaff, 2003).

Secondly, other relevant issue concerns the governance mechanisms driving network relationships; particularly, mutual trust between the nodes plays a key role, supporting the whole idea of network and allowing the social capital production. Indeed, it has been widely defined by Scholars as the critical factor enhancing the quality of resource flows since it creates an economic advantage reducing the transactions costs for the exchanges between the network actors. Moreover, trust influences the depth and the richness of the exchange relations, making more reliable especially the information trades.

Finally, the last relevant scientific body outlined concerns the network structure created by relationships between the actors. There are various measures useful to the network analysis; a first typology, referring to the amount of resources achievable by an actor (entrepreneur), focuses about the size and the centrality of the network. There is, then, a second branch of measurements concerning the diversity of resources that develops the ideas of weak ties and structural holes to explain the extent of the intangible assets accessible.

### **2.3 Intangible resources and entrepreneurship**

The amount of intangible resources exploitable by a firm is wide and diversified (as the brand, the knowledge, the core competencies and so on); however, taking care merely about the entrepreneurial process and to the business creation moment, division of labour (at an individual level) and social network (at an aggregate level) seem able to build the favourable conditions allowing the entrepreneurship.

Indeed, it does not depend just only on tangible resources (such as physical assets or the financial resources of the entrepreneur) but it is widely subordinate to the entrepreneurial availability of individual and social factors too. Adopting such assumption to guide the present analysis, therefore, the intangible resources directly arising out of division of labour and social networks are identifiable as the human capital and the social capital.

Firstly, the concept of human capital refers to that resource composed by the set of skills which an employee acquires on the job, through training and experience, and which increases its value in the marketplace. It clearly finds its roots within the division of labour principle; indeed, the assumption of the increase of the workers skills arising from the specialization made by division of labour allows a link with the human capital theory (Becker, 1964) which argues, basically, that when the workers have a specialized competence, achieved also via training and learning, they have a higher quality human capital too. In the entrepreneurial debate, such developed human capital, if there are interesting opportunities to create new economic activity, allows the best corporate workers to exit from the original firm, to engage the entrepreneurial process and, probably, to exploit it in a suitable way (Davidsson and Honig, 2003). Division of labour, therefore, is a crucial condition increasing human capital and, consequently, it favours the ability of some firm workers to change their positions from employees to employers.

Regarding the second point, the main consequence for a social actor arising out of the membership to a network is the capability to have access to the “social capital” embedded in that specific social structure; this one is a productive resource available to the network actors which comes about through changes in the relations among persons and it allows such actors to exploit actions easily within the structure (Coleman, 1988; Adler and Kwon, 2000). It is a kind of public good that refers “to features of social organization, such as network, norms and trust, that facilitate co-ordination and co-operation for mutual benefit” (Putnam, 1993).

Even if there is a relevant body of literature underlining the negative effects of social capital for entrepreneurship (see also Westlund and Bolton, 2003), such intangible resource arising out of the social network appears to be crucial in the entrepreneurial process; for example, Coleman (1990) refers to the critical role played by relatives and friends when someone wants to open a new venture. In the initial phase of the entrepreneurial action, this one exploits therefore, following the advices and the suggestions of such persons, the social capital emerging from its familiar network to optimise the fundamental choices and to obtain strategic information related to the entrepreneurial project.

Social capital must not be confused with human capital; indeed, following Coleman perspective, the latter is the individual-related resource present in the nodes of the network while social capital is that network attribute situated in the links (the relations) between individuals or organizations. While the social capital, therefore, is a common condition influencing all the network actors, the human capital is a particular dimension of the individuals. If division of labour, therefore, contributes to enhance individuals' skills and to create favourable conditions for the creation of business (the individual human capital), such social structures embed completely new entrepreneurs and organizations, which act under the influence of the network and of other actors too (Aldrich and Zimmer, 1986; Schiavone, 2003).

### **3. A conceptual proposal for the network entrepreneurship**

The previous paragraph provided a brief landscape about those principles here considered as the theoretical roots of the entrepreneurship within a network; it described the economic and social foundations that affect the entrepreneur when he is going to open a new venture and it indirectly assumed that the intangible resources (as human capital and social capital) can give a more realistic view for understanding such process because within a network the entrepreneurship relies mainly on not material levers. Such premise has been based upon the consideration there are two crucial factors affecting the entrepreneur when he is creating a new business (Birley, 1985): his previous employment and the advice and assistance he receives by his social environments.

The logic process composing this conceptual proposal is simple: every firm is involved as actor in some (financial, territorial, commercial and so on) firms network that facilitates such enterprise for acquiring information, knowledge, workers, advice and so on. Within such network, the adoption of division of labour is necessarily a basic principle of organization, even when there is not externalisation of any production phase. For example, Henry Ford was a great developer of the internal division of labour principle between his workers but he did not ever externalise any corporate activity to any other firm. Such strategy was the essence of the Fordist paradigm (Dezi and Golinelli, 1997; Romano and Rullani, 1998).

Nevertheless, due to the internal division of labour, the firm achieves those advantages already outlined by Smith (worker dexterity, saving time, innovation); of course, for the entrepreneurial topic, the enhancement of the performances achievable by the workers, due to their specific dexterity, is a crucial assumption. Indeed, it clearly defines the strong tie connecting internal division of labour and the increase of human capital within a firm. Such workers once learned how to do as better as possible their specific task, become potential entrepreneurs of a firm devoted to develop just those activities for which they have a distinctive competence.

To exploit really an entrepreneurial project, anyway, internal division of labour is not enough; indeed, the social networks involving such potential business creators must help these ones to develop their entrepreneurial actions. For example, observing various empirical

cases as the industrial districts, the external division of labour gives a strong enhancement to entrepreneurship generating a specific industrial demand requiring some the existence in the local context of some firms able to perform it. Other crucial advice comes from the family and from the friends of the potential new entrepreneur which would facilitate him to acquire some resources, as information, relations, financial aid, business contacts, managerial suggestions and so on.

Such facilitations arising out of the social connections of the entrepreneur affect strongly the business creation process; it is the benefit of the social capital provided by those social networks where the new entrepreneur is involved. Thanks to the trust linking him with the other social actors, he can access to this network intangible resource that eases the realization of his entrepreneurial project.

The rising venture seems, therefore, as the visible product of two not material factors; it is the resultant of the interaction between the intangible resource active at an individual level (human capital achieved by internal division of labour) and that one working as a network attribute (social capital achieved by social networks). The interaction of such intangible resources gives to those ones powered by them the capability to develop their entrepreneurial action starting from a crucial competitive advantage.

This one comes from the availability of all those factors making realisable the entrepreneurial project; for example, one entrepreneur might also rely on own financial investments to open a new business or to buy all the machines required to develop a production process, without looking for any advice or information in the network. Nevertheless, such material resources cannot be developed well if there is no human capital adequate to that entrepreneurial project or a social context embedding the firm to exchange outputs, knowledge and resources. Human and social capital seem, therefore, those unavoidable background conditions allowing not just the business creation but also the achievement of a correct strategic management; they are the co-ordination mechanisms allowing the material factors to work. They are therefore the invisible hands of the entrepreneurial activity within a network.

In such assumption there is another crucial foundation of the proposal: the superiority of the intangible factors than those material ones both to develop the entrepreneurship and to manage the firm. Indeed, the latter ones (as the physical assets or the financial lever) are essentially dependent by the intangible resources of the entrepreneur and his firm; they take inputs by the human individual capital and by the social network capital not just to work but also (and mainly) to exist.

#### **4. The Italian Case: The Industrial District model**

##### **4.1 A brief introduction about the Industrial Districts Model**

Even if the definitive success of the industrial district model is quite recent, the concept is about one hundred years old; indeed, Alfred Marshall (1982) was the first economist to write about industrial districts phenomenon, defining it as a population of independent small and medium enterprises, coincident with the single productive units.

The industrial district is, therefore, a clear example of external network of firms, located within a concentrated territory, which work and co-operate in the same supply-chain. Within these territorial areas, every firm attends to one phase of the production process and it maximises the efficiency of trade relationships with the other firms placed upstream and downstream the supply-chain (Golinelli and Dezi, 1997). The industrial district is commonly defined as “the result of the relation between various factors: social and cultural traits of a community, historical and natural features of a geographic area and some technical features

of the productive process. At the same time, the industrial district is the outcome of a dynamic integration process among division of labour in the district and the market enlargement of its products” (Becattini 1991). Such definition underlines the social networks working in the industrial districts and such “industrial atmosphere” (Marshall, 1892) permeating the whole territory and living within its inhabitants. Such atmosphere is not just a common interest for some industrial activities but it is essentially also a social public good developing trust and community between the districts actors and affecting their behaviours.

Even if there are many interpretation of the phenomenon, the following features are widely considered as the key elements building the competitive advantage of the industrial district model (Becattini, 1991; Garofoli, 1991; Brusco and Paba, 1997):

- High firms specialization in a specific industry; for example, the historical industry for many Italian industrial districts is the “Made in Italy”, that is the whole of industries related to fashion system (clothes, glasses, shoes and so on...);
- Large number of small and medium enterprises, which are the predominant entrepreneurial typology of the district industrial system;
- Decomposition of the productive processes in different phases characterized by optimal reduced dimensions. It allows every firm, according to its core competencies, to realize a specific supply-chain segment;
- Presence of external economies for the single firm but internal for the local territory;
- Development of subcontracts and cooperative behaviours between district firms. Indeed, this feature often becomes the real propeller for the territorial entrepreneurship;
- Development of a productive and organizational common know-how, incorporated in the workers competencies, periodically regenerated and renewed by knowledge-exchange processes between the social network actors.

Finally, even if the industrial district model had the best empirical development in Italy, there are other similar experiences all around the world as the English cotton district of Lancashire (described by Marshall) or the American hi-tech industrial district of Silicon Valley.

## **4.2 The Italian Industrial Districts**

In Italy such model has old roots, even if there has been an improvement of the industrial districts number mainly in last twenty years. Particularly, “The third Italy” has been defined as the best example of Marshallian industrial district. Considering the peculiarities of Italian capitalistic model (predominance of SMEs, firms management of the entrepreneurs and family businesses), the district model seems the prevalent typology of managing a business. The industrial district model in Italy is, therefore, not only a synonym of flexible specialisation, high qualitative standards and good performances; it is the ideal-type of the Italian industry too.

The industrial districts presence is concentrated in the northern and central regions (about 190 clusters), where the “mezzadria” system was widely diffuse; it is a typical agricultural Italian mechanism of organisation among the owner of the land and the worker, in which the latter was directly involved in the final outcomes of the ground. Other conditions favourable to the genesis in Italy of the industrial districts were (Brusco and Paba 1997):

- The productive externalisation done by Italian large corporations that, to contrast the syndicate pressure happened during 1970s, carried out a part of their productive activities outside their boundaries, allowing so the birth of small businesses near them, then became autonomous;
- The presence and the successive evolution, of artisan schools specialised in various manufacturing industries, able to provide highly professional labour and to diffuse entrepreneurial culture.



The last analysis provided by ISTAT (2001) underlined the good working of the labour market of Italian districts; indeed, in the municipalities placed in district areas there is a stable level of employment in the manufacturing industries, an improvement of workers in the trade (5,4%), public employees (17,2%) and a strong expansion in the other services (42,6%). These dynamics are in contrast with those ones registered for the other Italian cities, where the manufacturing employment levels are strongly decreased (-13,3%).

Such district supremacy substantially comes from the higher strategic and organisational flexibility of the district firms than the normal SMEs (relying on partnerships and industrial relations with economic operators geographically close), from the clear and notable economic advantages related to the district external economies and from the traditions, the culture and the history of a local system, which translate and transform these typical features into physical products, realising so the “Made in Italy” phenomenon.

### **4.3 The business creation in the Italian Industrial Districts**

Markusen (1996) described four typologies of industrial districts that arise out of four different entrepreneurial philosophies (Marshallian ID, Hub and Spoke ID; State-Anchored ID, Satellite Platform ID); nevertheless, considering the morphology of the industrial districts in Italy, just the first two typologies reflect its reality (see figure 1):

- 1- *The Marshallian industrial district*, that is the kind mainly developed in Italy constituting the “second industrial divide” (Piore and Sabel, 1984). It is based upon those features already pointed out by Alfred Marshall a century ago (external economies, strong social background developing co-operative behaviours, industrial atmosphere, family businesses and so on);
- 2- *The Hub and Spokes industrial district*, that is typical of the American industrial clusters (as in the Detroit case), where within a geographical region one or more large corporations play the role of attractive pole (hub) for creating other SMEs (spokes) that gravitate around the first ones, for example being their suppliers or sub-contractors.

In the Marshallian district there is, therefore, the predominance of the so-called “project firm”, that is the result of the entrepreneurial inclination of the local actors which invest for the development of such family business their own time and resources. Instead, the second kind of industrial district (more marginal in Italy than the first one) arises out of the presence of the so-called “fragments firms”; these ones are the results of a fragmentation process exploited by a large corporation which externalises some production phases or some corporate services (Becattini 2002).

In both the cases, division of labour plays a key role; indeed, while for the “project firm” case the main reason allowing the business creation is the local industrial specialization of the population (spread via internal division of labour), in the second case the adoption of the Smith principle by a large corporation (via outsourcings and so on) is clearly the crucial condition for the district entrepreneurship.

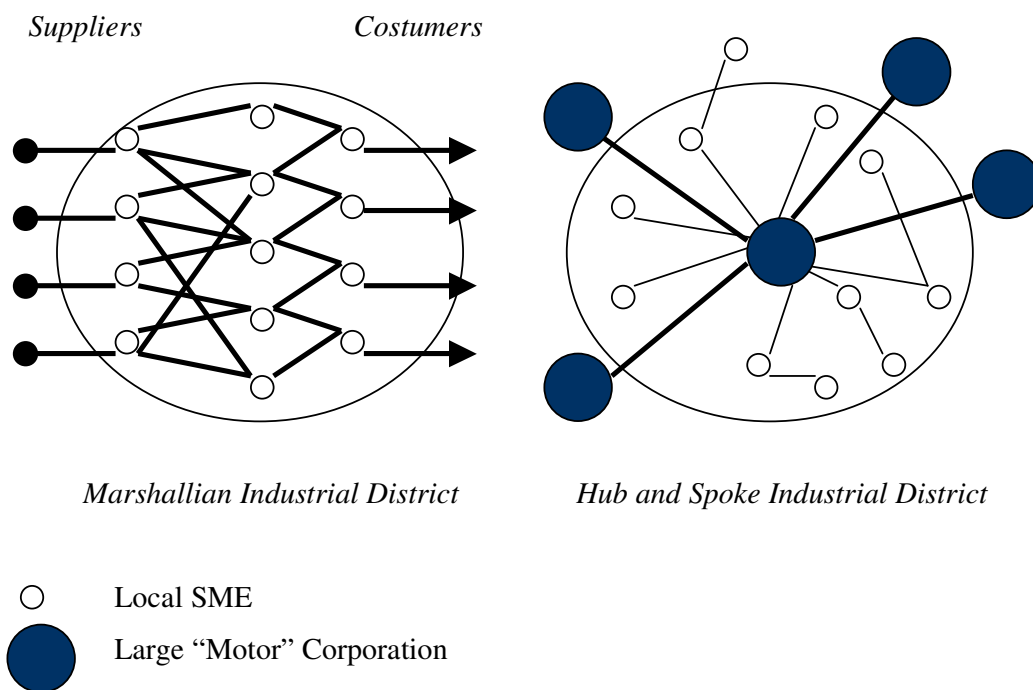
For the Marshallian district, the working of the social capital is evidently related to the industrial atmosphere that involves the area. It is proximal to the milieu concept, that is “a permanent set of social and cultural features localized in a specific geographic area thanks to the historical evolution of subjective relations which are connected to the modalities to use and to develop the natural resources of the local systems” (Dematteis, 1994); the milieu of a Marshallian district allows the creation both of human and social capital since it is that social common background developing such intangible resources.

Moreover, the organization of the district firms is strongly based upon the division of labour principle; indeed, it is via such development of co-operative behaviours that the intangible resources can shift within the network. While the milieu (or the industrial atmosphere, to use

the Marshallian words), is the active principle of the entrepreneurship, division of labour is therefore the preferred vehicle to develop it in the network.

The textile district of Prato, near Florence, gives a famous example of how social and human capital help the entrepreneurial activity. Arisen in the 13<sup>th</sup>/14<sup>th</sup> centuries, it always has been composed by hundreds of SMEs managed by merchants-entrepreneurs, active in all the production phases (except the worldwide wars periods when there were few integrated large corporations). Such deep division of labour produced all over these centuries a great productive specialization in the whole local system that enhanced the entrepreneurial inclination towards the textile industry. Moreover, once gone back to its original configuration, Prato district had a notable development over last fifty years, thanks to its “industrial atmosphere”, that continuously created new local entrepreneurs, facilitated also by the low district entry barriers (Consorzio A.A.S.T.E.R., 2001). The social capital creating trust and efficient transactions between the district actors arises out, therefore, directly of such network “milieu” affecting all the area and its inhabitants.

Figure 1 – Italian typologies of industrial district



Source: Elaboration from Markusen, 1996

Also in the case of a hub and spoke district, such intangible resources play a crucial role for developing the entrepreneurial action. Such typology of industrial district, even if it is less present in the Italian economy, is also extremely relevant and it arises out of the presence of a large corporation expanding in the social network around the firm some industrial knowledge that provides the competencies necessary for the business creation to the local inhabitants. While in the Marshallian case, the factor that mainly enables the entrepreneurship is the social capital (provided by the industrial atmosphere), in the hub and spoke district, the

human capital seems a resources coming before the social conditions of the network in the stimulation of the entrepreneurial activity. Nevertheless, division of labour (both internal and external) is in both the cases the basic principle allowing the interaction of those intangible resources with the local entrepreneurial inclination.

An empirical case of such district typology has been provided over last years by the processes of entrepreneurial agglomeration started up by FIAT before in the Piedmont region (where is the historical strategic basis of the Italian firm) and then in the southern region of Basilicata, in Melfi. Via the development of a deep outsourcing strategy the Turin firm created a proper industrial district in its region (Piedmont), where the automobile industrial culture always had a wide spread between the population, and in Melfi, where the outsourcing processes, encouraged also by the Italian government, allowed the growth of a new industrial context specialized in the automobiles production (Negrelli, 2000). Particularly, the open of a new FIAT factory in the southern Italy allowed the entrepreneurial development of many local SMEs dedicated to supply the new “hub” with automobile components.

## **5. Conclusions and final remarks**

The paper proposed a rereading of the Smith principle of division of labour for understanding the entrepreneurial process within a social network; it developed an analysis of the entrepreneurial activity underlining the dynamic interaction of two crucial dimensions:

- 1- Individual dimension: the capability of division of labour to increase human capital within an organization and to enhance the individual skills of the worker is the first prerequisite to push someone to develop an entrepreneurial thinking;
- 2- Network dimension: the social networks embedding the firms and the workers produce trust between the actors and social capital, that is the network general condition easing those workers with high human capital to perform better the entrepreneurial action.

Such double-side analysis pointed out the strategic relevance of the intangible resources (as human capital and social capital) for the entrepreneurial activity; indeed, as demonstrated by the Italian industrial districts case, they are the co-ordination mechanisms allowing the tangible resources of the firm to work. In such perspective, they are the real levers of the business creation within a network and they can be considered as the “invisible hands” for performing an entrepreneurial project.

Of course, there are some doubtful points in such proposal; the principal one regards the role of the social capital for the development of the entrepreneurship. Indeed, the actual debate is split about the real effect of this intangible resource for the entrepreneurship. In some cases (as Silicon Valley) it had a positive influence on the network entrepreneurship while in other ones (as Ruhr during seventies) it did not allow a regional development creating such lock-ins, due to the high network closure.

The understanding of the real effect of social capital on entrepreneurship is not, therefore, completely definitive; of course, the industrial district model provides a positive view of such relation and, considering the Italian case, it could give an explanation for such mismatching and it could be also an interesting further research line.

Thinking about not just to the social capital involving the district but also to the genetic creativity affecting the Italian district population, the reason of such different outcomes of the social capital could refer to the capability of the social network actors to interact with the external environment, developing from such interactions innovative behaviours which can increase the strength and competitiveness of the social network.

Finally, the main managerial implication arising out of the Italian case refers to the link between (internal and external) division of labour and the entrepreneurship development;

indeed, the firms can stimulate via division of labour not just the increase of the local entrepreneurial activity but they can also achieve an own crucial strategic goal. Due to the extreme organizational flexibility required by the actual business environment, the enterprises acquire, via an internal division of labour, a competitive advantage for producing their outputs arising out of the enhancement of their human capital and, via an external division of labour, they can manage better their productive processes, focusing about the core business. The facilitation of entrepreneurship generated by division of labour is, therefore, not just a regional development tool but also a crucial corporate strategy.

## References

- Adler, P. and S. Kwon (2000). "Social capital: the good, the bad, and the ugly". In E. L. Lesser (Eds.), *Knowledge and Social Capital: Foundations and Applications* (pp. 89-115). Butterworth-Heinemann, Boston.
- Aldrich, H.E. and C. Zimmer (1986). "Entrepreneurship through social networks". In D. Sexton and J. Kasarda (Eds.), *The art and science of entrepreneurship*, Cambridge, MA.: Ballinger.
- Becattini, G. (1991). "Il distretto industriale marshalliano come concetto socio-economico". In G. Becattini et. al. (Eds.), *Distretti industriali e cooperazione tra imprese in Italia*. Firenze: Banca Toscana.
- Becattini, G. e Bellandi, M. (2002). "*Forti Pigmei e deboli Vatussi. Considerazioni sull'industria italiana*", *Economia Italiana*, n.3, 587-618;
- Becker, G. (1964). *Human Capital*. Columbia University Press.
- Birley, S. (1985). "*The role of networks in the entrepreneurial process*", *Journal of Business Venturing*, vol. 1, 107-117.
- Brass, D. J. (1992). "Power in organizations: A social network Perspective". In G. Moore & J.A. Whitt (Eds.), *Research in Politics and Society*, 295-323., JAI Press, Greenwich.
- Bresnahan, T. Gambardella, A. and A. Saxenian (2001). "*Old Economy Inputs for New Economy Outputs: Cluster Formation in the New Silicon Valleys*". *Industrial and Corporate Change*, vol.10, 835-860.
- Brusco, S. and S. Paba (1997). "Per una storia dei distretti produttivi italiani dal secondo dopoguerra agli anni novanta". In F. Barca (Eds.), *Storia del capitalismo italiano dal dopoguerra a oggi*, 120-156. Donzelli, Roma.
- Castilla, E. and M. Granovetter, H. Hwang and E. Granovetter (2000). "Social Networks in Silicon Valley". In C. Lee, W. F. Miller, M. Gong Hancock, and H. S. Rowen (Eds.), *The Silicon Valley Edge*, 218-247. Stanford University Press, Stanford.
- Coleman, J. (1988). "*Social Capital in the Creation of Human Capital*". *The American Journal of Sociology*, vol. 94, S95-S120.
- Coleman, J. (1990). *Foundations of Social Theory*. Cambridge, Harvard University Press.
- Consorzio A.A.S.T.E.R. (2001). "*Rapporto sui principali distretti industriali italiani*", *Quaderni di impresa artigiana di Confartigianato*, n. 34;
- Cooper, A. (1971). "*Spin-offs and technical entrepreneurship*". *IEEE Transactions on Engineering Management*, EM 18, 2-6.
- Davidsson, P. and B. Honig, (2003). "*The role of social and human capital among nascent entrepreneurs*". *Journal of Business Venturing*, vol. 18, 301-331.

- Dematteis, G. (1994). “*Possibilità e limiti dello sviluppo locale*”. Sviluppo locale, n. 1, 10-30.
- Garofoli, G. (1991). *Modelli locali di sviluppo*. Franco Angeli, Milano.
- Golinelli, G.M. and L. Dezi (1997). *Reti Finanza Progetti*. CEDAM, Padova.
- Granovetter, M. (1985). “*Economic Action and Social Structure: The Problem of Embeddedness*”. American Journal of Sociology, vol. 91, 481-510.
- Grabher, G. (1993). “The weakness of strong ties. The lock-in of regional development in the Ruhr area”. In G. Grabher (Eds.), *The Embedded Firm: On the Socio-economics of Industrial Networks*. Routledge, London.
- Greve, A. and J. Salaff (2003). “*Social Networks and Entrepreneurship*”. Entrepreneurship, Theory & Practice, vol. 28(1), 1-22.
- Foss, L. (1993). “Resources, networks and entrepreneurship: a survey of 153 starters and 84 non-starters in the cod farming industry in Norway”. In: N. S. Churchill et al. (Eds.), *Frontiers of Entrepreneurship Research*, 355–369.
- Johannisson, B. (1996). “The dynamics of entrepreneurial networks”. In: P. Reynolds et al. (Eds.), *Frontiers of Entrepreneurship Research*, 253–267.
- Hoang, H. and B. Antoncic (2003). “*Network-based research in entrepreneurship: A critical review*”. Journal of Business Venturing, vol. 18, 165–187.
- ISTAT (2001). Ottavo censimento dell’Industria e dei servizi. Risultati provvisori.
- Markusen, A. (1996), “*Sticky Places in Slippery Space: A Typology of Industrial Districts*”. Economic Geography, vol. 72, 293-313.
- Marshall, A. (1892). *Elements of Economics of Industry*. Macmillan, London.
- Negrelli, S. (2000). *Prato verde prato rosso. “Produzione snella” e partecipazione dei lavoratori nella Fiat del duemila*. Soveria Mannelli, Rubbettino.
- Parhankangas, A. and P. Arenius (2003). “From a corporate venture to an independent company: a base for a taxonomy for corporate spin-off firms”. Research Policy, vol. 32, 463-481.
- Piore, M. J. and C. F. Sabel, (1984). *The second industrial Divide*. New York, Basic Books.
- Putnam R. (1993). *Making Democracy Work*. Princeton Univ. Press, Princeton.
- Romano L. and E. Rullani (1998). *Il postfordismo. Idee per il capitalismo prossimo venturo*. ETAS Libri, Milano.
- Saxenian, A. (1994). *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*. Cambridge, Mass.: Harvard University Press.

Schiavone, F. (2003). "Governance, Reti d'Imprese e Distretti Industriali: Considerazioni Metodologiche". *Economia Aziendale 2000 Web*, n.4.

Smith, A. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*. London: Methuen and Co., Ltd.,

Torrisi, S. (2002). *Imprenditorialità e distretti ad alta tecnologia*. Franco Angeli, Milano.

Westlund, H. and R. Bolton (2003). "Local Social Capital and Entrepreneurship. *Small Business Economics*, vol. 21, 77-113.