Università degli Studi di Ferrara

DIPARTIMENTO DI ECONOMIA, ISTITUZIONI, TERRITORIO

Corso Ercole I D'Este n.44, 44100 Ferrara

Quaderni del Dipartimento

n.14/2001

November 2001

The Contribution of Small and Medium-Sized Enterprises to Development.

Linkages between individual opportunities, work culture and social milieu with reference to India.

Luca Crudeli

The contribution of small and medium-sized enterprises to development

Linkages between individual opportunities, work culture and social milieu with reference to India

By Luca Crudeli*

Version - April 2002

The role recovered by small and medium sized enterprises (SME) in the course of economic growth and development, has recently become the subject of revitalized and growing analysis. The aim of this article is to criticize the approach that has commonly been adopted by district economists, and to propose a new way, in which social communities, the social milieu and the relational networks are no longer the point of departure of the analysis, seen as merely as a constraint to private initiative, but become the object of the analysis itself.

The meaning of this paper is two fold. On one side a country like India needs to reinforce its industrial competitiveness after the impressive process of liberalization that has been put in place during the 90s. Certainly, SMEs are among those economic agents that have suffered the most as a consequence of the reforms introduced under the pressure of the Bretton Woods institutions by Rao's government. A second motivation comes from the need to give to researchers and cluster economists a new point of view on the relevance of industrial districts. The whole literature in this domain is, in fact, based on the idea that clusters are not only an economic phenomenon, but primarily a product of a network of social relations with specific characteristics. However, even if a better understanding of the linkages within industrial districts and their role in inducing

* Student in the Doctoral Programme in Economics and Institutions at the Università degli Studi di Bologna, Italy. MSc in Economics with reference to South Asia at the *School of Oriental and African Studies* (*SOAS*), *University of London* (UK). Master in Development Economics at the *School of Development, Innovation and Change* (*SDIC*), *Università degli Studi di Bologna*. Member of the research team on "*Flexibility, Enterprise Organization, and Generation of Human Capital*",

efficient technological development – that is technological development associated with the identification of competitive industries – is vital to the identification of viable technology-related policies for the growing Indian SME sector, it is my opinion that economists have often been too concerned in analysing what social features are at the origin of industrial districts, without considering what strategies focussed on the development of local small entrepreneurship can do for the development of social structures themselves. In other words, the literature on industrial districts is remarkably biased towards a functionalist approach, from society to economy, and doesn't highlight the bi-directional interactions that exist between the two.

The article is organized as follows. First, I will review the role that economic planning in India has reserved to SMEs, having Gibrat's law as theoretical background. The second section will be focused on the literature that treats industrial clusters in developing countries. In particular I will refer to the never-ending debate about the actual existence of a "cluster model". The last part of the paper is finally devoted to the design of a different approach to industrial district development, with particular reference to the effects that a diffused entrepreneurship has on the *work culture*.

Project of National Interest (PRIN) Italian Ministry of University and Scientific Research (MURST) at the Università degli Studi di Ferrara, Dipartimento di Economia Istituzioni e Territorio. Email: crudeli@spbo.unibo.it

Small firms, growth and innovation.

The role that small and medium enterprises play in the process of industrial development has been widely explored by economists. Generally, studies have gone in two directions. On the one hand, earlier works have tried to asses the growth potential of small firms vis-à-vis big firms. This branch of literature is composed of several writings focused around what, after the seminal work of Gibrat in 1931, is known as "*Gibrat's law*". Arguments such as Gibrat's law and the discussion on SMEs growth-potential play a pivotal role in understanding the first phase of Indian industrial development[1]. More recently, other authors have focussed on the small firms' capability to specialize production within a wide network of economic relations with competitors, ancillary firms, and subcontractors. This letter branch of economic theory has revealed itself as very prolific, and it has come out with the design of new analytical tools and concept as of "*flexible specialization*" (Piore and Sabel, 1984), "*industrial cluster*", and "*social milieu*". This second strand of literature on industrial clusters is certainly a more appropriate tool to understand the new Indian industrial policy, particularly after the liberalization of the Indian economy during the 90s and the consequent industrial crisis in 1994-96.

Gibrat's law and the small firms potential for growth

Traditionally Indian SMEs and cottage industries have been confined to play a secondary role in the development of the country industrial sector, since the first Indian Planning Commission started to operate in 1951 (under the lead of Jawahrlal Nehru). SMEs and cottage industries have traditionally been relegated to labour absorption and the simply provision of consumer goods.

The designer of the first plans, professor Mahalanobis, adopted the view of the simple two sector model of Soviet planning (investment goods / consumption goods), giving top priority to investment goods, as they were crucial for further economic growth. The main faults of this strategy were basically two. Firstly, it was capital deepening, that is, it implied the commitment of large amounts of capital to heavy industry, which yielded low returns. Secondly, the high amount of investment was generating buying power, which could not be absorbed

[1] The reader should refer to the so called "*reservation policy*" that has shaped the development of the SME sector from the early years of the *Mahalanobis strategy* till the liberalization of the economy and the *New Political Economy* (between 1951 and 1991).

by the industry due to the neglect of consumption goods. The excess of demand that was in this way generated was constantly leading to inflation (Rothermund, 1993).

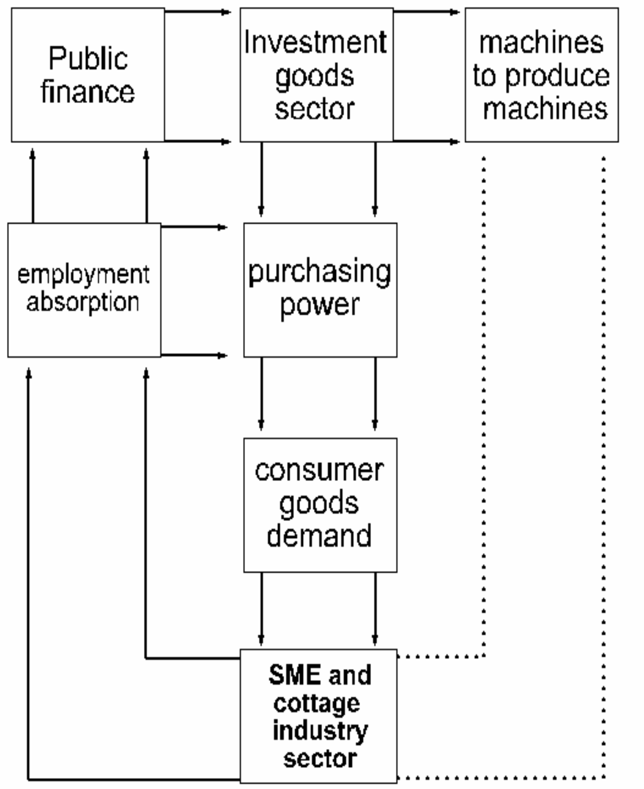

figure 1 – The Mahalanobis approach.

Despite what it can be deduced from the evident disequilibrium, Mahalanobis was aware of the difficulties of a development strategy biased towards the investment good sector. His fault was however to rely too much in the virtues of the so cooled 'mixed economy', thus in the capability of cottage industries to respond to demand pressures. The approach was indeed simple. The heavy industry, in public hands, was expected to forge the market by generating purchasing power and by producing machine tools, while the priva te small industry was assumed to merely respond to the market by following a demand-led development path (*figure 1*). In this view, no relevant role was recognised to the small industry sector. As it can be understood, the major mistake of the Mahalanobis strategy was to presume from any consideration about the dynamic development of the industry. Mahalanobis seemed to have blindly relied on the validity of Gibrat's law.

Gibrat's *law of proportionate effect* states that the proportional change in the size of a firm is independent of its absolute size. An implication of this is that large and small firms have the same average proportionate rates of growth (Samuels, 1965). Gibrat's ideas became very popular at the time of the Mahalanobis' five years plans, albeit this was with a very long lag after their first formulation[2]. They suggested that a development path purely based on heavy industrialization could be followed with no implications on the rate of growth of the economy[3].

Quantitative growth vs. qualitative growth. How SMEs became important for development

If Gibrat's law was the implicit theoretical argument that ruled in Mahalanobis' *Weltanschaung*, different were the arguments that were put forward by policy makers in official documents. Since independence the Indian Government has, in fact, offered on image of itself very supportive of small and medium-sized enterprises, but, despite the soundly declarations, policies however have never paid adequate attention to the economic importance of SMEs.

Three main arguments in favour of an industrial development policy focussed on SMEs have generally been put forward although in a superficial way; these are the "equality argument", the "decentralization argument" and the "latent resources" argument (Datt and Sundharam, 2000, pp. 634-35). The *Industrial Policy Resolution of 1956* well summarizes the governmental approach to the development of the SME sector:

> "[Small firms] provide immediate large-scale employment; they offer a method of ensuring a more equitable distribution of the national income and they facilitate an effective mobilisation of resources of capital and skill which might otherwise remain unutilised. Some of the problems that unplanned urbanisation tends to create will be

[2] Michael Kaleki's in a 1945 article describes Gibrat's book as a "great achievement". Other studies of the growth of firms, before the 1950's, had found evidence to support the law, but it was not until the 1950s and 60s that the apparent regularity of the size of distribution became the focus of sustained empirical research (Gibrat, 1931; Hart and Prais, 1956; Hart, 1962).

[3] Later works showed, however, that market structure varied in a systematic way from one industry to another, in a manner to be related to a number of industry characteristics, such as the scale-economies, the role played by advertising, or the influence of R&D (Bain, 1966; Dunne, Roberts and Samuelson, 1988, 1989; Evans, 1987a, 1987b; Pryor, 1972; Phlips, 1971). Although Gibrat's model might have fitted data well, it was purely stochastic.

avoided by the establishment of small centres of industrial production all over the country" (Planning Commission, *Second-Five-Years Plan*, 1956, p.47).

The equality argument

The equality argument suggests that the income generated in a large number of small enterprises is dispersed more widely in the community than income generated in a few larger companies. SMEs are therefore supposed to bring about greater equality of income distribution. The equality effect is also reinforced by the fact that since most of the small enterprises are either proprietary or partnership concerns, they are expected to be characterised by more harmonious relationships between the workers and the employers than larger establishments.

Two points should be taken into consideration. First, we need to make a distinction between small enterprises and cottage industries. Secondly, we need keep in mind that labour relations also strictly depend on which market the company is operating on. For instance, compare two small companies operating in different areas, such as a small software enterprise based in Delhi, and a traditional cottage firm producing neatly carved marble handicrafts, situated in Agra[4]. Despite the fact that both firms sell 90 per cent of their products to international clients, and need therefore to keep a certain level of product quality, they face very different levels of competition.

First of all, the market for software packages have low entry barrier since products are hardly differentiated and no high sunk costs are needed to start a new company. As a consequence, software companies in India, as anywhere else in the world, face a very tough competition (*external pressure*). Secondly, software packages are generally sold to highly demanding professional customers, which evaluate the product not only in terms of quality, but also in terms of the level of competence shown by the software company itself in conducting business[5]. Most of software packages are client-specific and tailored over the client's needs. Clients evaluate the producing company before than the products they buy, therefore software companies are forced to develop a reputation of high professionalism (*internal pressure*).

---

[4] I have visited both firms in August 2001.

The marble company, which is well representative of a cluster of small companies in the sector of marble handicrafts production in Agra, operates in a very different environment than the software company and faces no external nor internal pressures. Firstly, these kind of companies rely almost exclusively on the traditional carving skills that are abundant in certain areas like the Agra region[6], and the uniqueness of the items that local artisans can produce dismisses any fear of competition from the entire sector. Secondly, marble handicrafts are not essential items, therefore the real challenge of the market is simply to induce potential customers (mainly tourists) to get to know and desire some marble handicrafts. Moreover, the market for marble handicrafts is certainly characterised by a lower level of efficiency in the spread of information than the software market is. It is indeed hard for casual buyers, like tourists visiting Agra, to collect sufficient information to be able to value the product they are purchasing. Given these market characteristics, therefore marble handicrafts industries have rarely the interest to innovate. What attracts buyers is simply the fact that handicrafts are hand-made, traditional products, they do not care about the “quality” of the firm. As a result marble companies in Agra are traditionally rapacious, they cheat on customers and have no interest to build up an image of professionalism.

A part from the characteristics of the market in which companies operate, a further argument that needs to be considered is that in under-developed countries workers have generally only one choice between a low paid job in small enterprises or no job at all. For these reasons, low paid jobs are accepted by the force of circumstances, and in the absence of small enterprises, workers would have to lose even the small wage, which they hope to get[7]. It is true, however, that with a more effective implementation of the factory laws, the difference between the average wage of a worker in small enterprise and a large enterprise would considerably narrow down, but this problem is more related to the lack of efficient institutions and to ineffective enforcement mechanism rather than the nature of small firms itself.

[6] This kind of tradition can be dated back to the times of the Taj Mahal, and of other very important monuments built around the city of Agra.

[7] Statistical evidence, in fact, suggests that whereas small enterprises in India pay in the average only about 50 per cent of the wage earned by a worker in large enterprises, in U.S.A. and Britain, a worker in a small firm earns about 80 per cent or even more of the wage earned by his counterpart in a large enterprise (Datt and Sundharam, 2000)

The decentralisation argument

This argument impasses the necessity of a regional dispersal of industries. Since large enterprises are mostly concentrated in metropolitan areas in order to benefit from modern industrialism smaller towns and the countryside must encourage small enterprises.

It may be true that it is not possible to start small enterprises in every village, but it is quite possible to select a group of villages and start small enterprises to cater to the needs of the small area from the local centre. In other words, the focus for industrial development under a dispersal policy should be neither the metropolis nor the village, but rather the large range of potentially attractive cities and towns between these two extremes. This is even more important when we consider that decentralisation of industrial enterprises also helps to tap local resources, such as idle savings and local talents, and also improves the standard of living in backward regions (Datt and Sundharam, 2000).

Despite these arguments in favour of a decentralised industrial development, however, the whole idea of a dispersed economic activity has produced more damages then benefits to the Indian industrial sector. In the name of a geographically distributed industrial development, political intervention in the economic field in India has often been dirigistic and it has not always looked at economic conveniences. In many cases subsidies have been addressed to firms settled in inappropriate environments, while legal constraints have prevented other clusters of firms from reaching adequate economies of scale. These set of distortions together with a strongly import-substituting trade policy, were tailored specifically to support inefficient investment decisions which were appointed in pursuit of a dispersed economic development (Ahluwalia I.J., 1994).

The latent resources argument

It is certainly true that small enterprises encourage the growth of a class of small entrepreneurs, which introduces a dynamic element in the economy. This element is one of the cornerstones around which any industrial development policy that intends to develop the SME sector should be based. All economists agree on the fact that small enterprises provide an environment in which latent talents of individual entrepreneurs find self-expression in localised innovations and cost-saving measures. Moreover, the generally informal relationship between employers and employees, together with a relatively higher participation of workers in the life of the company, make of the SME industrial environment the perfect tool to develop a well spread business-friendly *culture of work*. This is an extremely relevant aspect that has been denied too often by policy makers and researchers in the field.

In a recent, very interesting paper Cowling and Sugden (1998) rediscover the argument of latent resources. Even if the authors refer their analysis to the developed countries, the point they make easily fits the case of developing economies. The idea is that "to be successful, in terms of enhancing the general level of welfare or well-being, technology policy must support, guide, and encourage the evolution of the market system into one which releases the talent of more people" [pp. 239-40]. This automatically leads to choosing a development path that privileges private initiatives in the form of small and medium-sized enterprises. This point is even more important if we consider that any economy dominated by a few large producers is totally dependent on these firms strategic decision-making and the direction of technological development that they decide to take. Crucial to this argument is the idea that strategic decision-making in large corporations is concentrated in the hands of an elite and this poses the market system with inevitable difficulties. The best example of these difficulties is given by the impact of trans-national corporations, which today, in many ways, play a dominant role in the free-market system. Trans-nationals can use their global flexibility to play-off both people (as workers) and governments in different countries. In a way, making a parallel with a famous paper by Marglin (1974), we could say that trans-nationals are able to effectively "divide and rule" international markets. In this way, and as a consequence of their strategic decisions, trans-nationals are often likely to promote a world of uneven development where workers are exploited and technological progress is biased.

Summarising, as far as the latent resource argument is concerned, by following the idea of Cowling and Sugden, a key issue for development is to 'look for ways of appropriately involving more and more people affected by strategic decisions in the process of making decisions' (pg. 242). This noticeably could be achieved with "flexible specialisation" (Piore and Sabel, 1984) and an emphasis on smaller firms, as against national champions, particularly smaller firms organized in mutually supportive groups. Despite the soundly emphasis on decentralised development however, the Indian economy does not seem to present such characteristics.

Local industrial clusters as a new model of development

The latent resource argument that we have analysed in last paragraph naturally leads to take into consideration the new attention that has recently been devoted to SMEs and the particular from of small firms agglomerations known as industrial districts. Central idea of industrial districts theory is that small and medium-sized enterprises are vulnerable if they stand alone, while if organised in clusters or networks of interdependent small firms they do not only survive, but also prosper and provide employment (Holmström, 1998a).

Marshall firstly noted industrial districts when he analysed the economy of the Sheffield (culterly) and Lancashire (textiles) areas in his 1980 *Principles of Economics*. According to the Marshallian definition, industrial districts are constituted by two dimensions that can be separated analytically: the *functional* dimension of *external economies*, on the one hand, and the *territorial* dimension of *agglomeration economies*, on the other hand (Asheim, 1994). According to Marshall, an industrial district is therefore much more than the simple geographical agglomeration of small firms in a localised area. What characterises an industrial district is an integrated system of local entrepreneurial, institutional and social interdependencies, that is, a collectivity of dense linkages between individual actors. This network of social interactions (that we can identify as the "social milieu") generates what is known as the 'industrial atmosphere' of the industrial district, or the consolidation of an area as a centre of knowledge creation, inventiveness, entrepreneurial capability and information dissemination within a given industrial sector (Amin, 1994).

Within the existing economic literature on industrial clusters many definitions of industrial district have been given. Some of them deserve special attention as the one by Piore and Sabel (1984) and the one by Becattini (1991).

The work conducted by Piore and Sabel (1984) is focused mainly on the organization of production in local districts and particularly on the notion of "flexible specialisation", that is a form of decentralised production based on less hierarchical management practices. With flexible specialisation, firms innovate constantly, multi-purpose machines are implemented and workers are 'forced' to constantly update their skills to respond to a fragmented and rapidly changing demand in constantly shifting markets. The pursuit of flexible specialisation can be on a large- or small-scale level, although the small-firm variant is more appealing, since small enterprises in industrial districts can often be more dynamic than large national champions.

According to the industrial district theory depicted by Piore and Sable small firms can redress the weakness due to their reduced dimension by integrating themselves into a larger network of inter-firm cooperation so to gain economies of scale and scope similar to those of large firms (Van Dijk, 1994). At the same time, within the firm itself, flexible specialisation means that decision making is decentralised, not just to managers of departments or profit centres within the firm, but also to workers who are expected to take an interest in the production and its market, and who constantly discuss quality and innovation with technicians and managers in an informal atmosphere, without hierarchical barriers to free exchange of ideas. In such an arrangement, the emphasis is obviously on the horizontal and vertical links among independent firms and/or independent decision makers. Companies that operate in local districts, whether big or small in size, have indeed backward linkages with suppliers and forward linkages with their clients while, at the same time, they cooperate and/or compete with each other. Industries operating under flexible specialisation function in a sophisticated network of inter-firm relations. Firms generally subcontract to each other, often share knowledge and jointly develop new production methods and new product. Different forms of collaboration occur, particularly in smaller enterprises.

Despite the importance of formal and informal networks of relations within Piore and Sabel's analysis, one must remark that social relations play a merely functional role within this framework, simply seen as a mean to facilitate the diffusion of information and lower transaction costs. Despite, it must be observed that what counts the most, in local districts, is in fact the blend of competition and cooperation which promotes innovative capabilities and firms' competitive efficiency. Indeed, inter-firm cooperation enables firms to choose how they want to become or remain competitive. As we will see further on, often the "low" and "high" roads to industrialisation are distinguished, the low road being based on cheap labour while the high road stresses innovation (Van Dijk, 1994; pg. 10).

Differently from Piore and Sabel, Becattini (1991) is more interested in the social dimensions of the industrial districts. In brief, the importance of Becattini's analysis is to stress the *socio-political factors*, the links between suppliers and clients, and the impact of the community in enhancing the performance of firms within industrial districts (Holmström, 1998a) and around industrial districts.

After Beccatini, a whole branch of literature has developed, which includes the contribution of both Italian and international scholars[8]. By this group of authors four systematic features of industrial districts, have been identified by this group of authors, which offer economic advantages to individual firms while ensuring a process of self-sustaining economic development. These are: local product specialisation, local containment of the division of labour, the collective aspect of knowledge creation and diffusion, the presence of a certain 'institutional thickness'. While the first two features are easy to understand the second two would probably need some explanation.

The collective aspect of ***knowledge creation and diffusion*** is the hallmark of the industrial district as an economic model. Innovation and technological progress in industrial districts are in fact claimed to be the product itself of the network of social relations that characterises any industrial district, both at the informal level[9] and at the institutional level[10]. However, what contributes to the consolidation of interactions characterised by socialization, sociability, trust and cooperation is not at all clear in the literature[11]. Among the factors that have been identified the most relevant are certainly the following: the experience of sharing certain common services and resources; the presence of binding cultural norms and values which sanction against rogue behaviour and system-threatening inter-firm conflict or the excessive pursuit of self-interest; the presence of public institutions working together on behalf of the greater collectivity.

The idea of "***institutional thickness***" is another fundamental element for industrial district economics. Späth (1994) has very effectively summarised what the institutional thickness of an industrial district is, when she claims that it is

> "based upon the existence of (i) strong production and information networks among firms; (ii) interest groups, such as employers' organizations and trade unions; (iii) self-help groups and sectoral associations; (iv) the back-up by regional and local authorities and (v) specialised support and real service institutions" [pp. 289-90].

[8] Bellandi, 1989: Beccattini, 1990, 1991; Holmström, 1998a, are some among others.
[9] The so called "café economies" as they are defined by Becattini (1990).
[10] One of the most important elements of industrial districts is the determinant presence of the local government in the economic activity.
[11] As pointed out by Amin, 1994.

In other words the institutional thickness represents a form of ***self-awareness*** of the members of a specific industrial district that the industrial district itself exists and that it is beneficial to the whole social community. If we take a closer look to the successful Italian cases, one of the first astonishing aspects that the vast majority of people living and working in Carpi[12], or in Sassuolo[13], or in Prato[14] have not acquired their entrepreneurial skills in any school or university, but were simply born in the place where they work, within a family that have traditionally been involved into the economic life of the district itself. The competitiveness of their cluster therefore emerges form the agents' awareness that they can rely on a social network characterised by trustful relationships, while the high level of trust is guaranteed by the many economic opportunities that exist for each individual of the cluster. In other words, agents are aware of their capabilities, of the characteristics of their cluster, of how the products of that cluster are valued on international markets, because these aspects have become part of the societal "genetic code" itself, being handed down from generation to generation. At the same time, the mutual trust, the active participation of the local government and the high level of awareness (even "pride", in a certain sense), all contribute to creation of a positive image of the industrial district and its products on the international market, within a process that we could define as "spontaneous marketing".

Industrial districts in India. The debate on the viability of a model of development

Much of the interest recently emerged around industrial districts has been nourished by the hope that they could represent a relatively "less expensive" model of development. The reason for this positive faith comes out from the fact that industrial districts are not purely an economic phenomenon, but mostly a social one.

Yet, not all economists agree about the effective possibility to export the industrial district model to developing countries. A particularly critical approach on the subject has been taken by the United Nations in two very interesting recent publications, thus the collection of paper presented at the United Nations Conference on Trade and Development (UNCTAD) in 1992, and a more recent (1998) book edited by Cadène and Holmström. Both publications underline the uniqueness of the Third Italy experience, and point out how the model of industrial districts cannot be exported if not after losing the definition of Marshallian district itself (Späth,

[12] A world-wide exporting high-quality garments district in Emilia Romagna.
[13] A local cluster in Emilia Romagna, which is very famous for ceramics.

1994).

If we consider the evident differences between developed and developing countries, the effective exportability of the industrial district model of development seems even less viable. Industrial clusters in developing countries generally operate under labour-surplus conditions and in the absence of labour regulations regarding wages, health, and safety standards (Nadvi, 1994). Despite all ethical considerations, this aspect is extremely relevant since in economies characterised by surplus labour, as India, wage-competition represents a powerful disincentive to process innovation and is likely to dampen technological progress. In such circumstances industrial districts simply tend to become spatial agglomerations of firms with no innovative capacity (Schmitz, 1989, Holmström, 1998a). When this is the case to privilege a model of development based on small and medium enterprises means, in a way, to export Fordism, or to encourage a system of labour exploitation which has all the disadvantages of fordism (like boring work) and none of its advantages (like high wages[15]) (Schmitz, 1989).

The position held by UN economists is however often too narrow and too often following a functional approach to industrial districts which considers economic performances as a result of pre-existent social structures and excluding from the analysis the existence of eventual feedbacks. Small-firm clusters in developing countries, in fact, are not necessarily doomed to a non-innovative "low road" growth path, but on the contrary, as pointed out by Sengenberger and Pyke (1991) and reported by Nadvi (1994, pg. 230), "a continuum of possible paths lying between the two extremes of high and low road may well be more plausible". The real debate is therefore about whether new forms of decentralised production offer a way forward for industrialising countries like India, or perhaps the only way forward.

For a country like India, with massive surplus labour, we might depict three possible paths of development. The first is Fordist or Taylorist mass production, characterised by boring, deskilled, but well-paid jobs for those lucky enough to find them. India might move into this kind of production as rich industrial countries move out of it, and attract low-wage, low-technology productions. A second one is the option of low-paid insecure work for as many people as possible, capitalising on the single advantage of cheap labour (the low-road to development). This seem the road imposed by structural adjustment plans as they are actually imposed by Bretton Woods

[14] Another world famous district for leather garments.

Institutions. The third, more helpful scenario is instead something on the lines of flexible specialisation (the high-road to development), where the biggest number of resources and brains are employed to have a rapid and well spread development (Holmström, 1998a). in synthesis, the choice for the path however, can no longer ignore the analysis of the social background, since the interaction between the economic and the social sphere are a crucial element for development. The issue at stake is not simply how to increase the performance of the industrial sector, but which path of development would lead to generalised, well diffused and self-sustaining welfare.

[15] Henry Ford used to pay the highest wages in America.

Redefining the concept of social milieu. Feedbacks from SMEs to the social fabric

As we have seen that one of the fundaments of industrial districts is the concept of "social milieu". The definition of social milieu in the economic literature is not clear and needs to be clarified. In this section we will proceed to the identification of some of the most important elements that contribute to the formation of the social milieu, and we will try to understand what role these elements play within industrial districts.

What is the social milieu

The definition of social milieu, is not so clear cut. Taking example from the experience of some successful industrial districts, authors have often identified the social milieu with an abstract and generalized social character which aids inter-firm relations, innovation and entrepreneurship. In other situations instead, the definition includes tangible and particular social institutions and social norms, which effectively minimize transaction costs within the cluster by regulating its functioning, mediating between potentially divisive aspects of competition and cooperation, and enforcing sanctions upon those who contravene socially-defined "rules" of behaviour. Despite the evident differences, economists agree on identifying a few elements which are characteristic of a the social milieu. These are: ***a dense network of relationships*** among the economic actors of the cluster, ***a set of common values***, the ***reciprocal recognition of the importance of the role played*** by each single actor within the social community, and the ***community self awareness***.

As it has been defined, the social milieu carries within it aspects of "agglomerative economies" which are specific to a community. Included in this is a bank of tacit knowledge related to the manufacturing activity of the community, and often specific to each cluster. The codification of such knowledge and its transmission, particularly the dynamics of learning, takes place within the social space of the cluster. The process of acquiring skills usually occurs through informal socially-defined institutions (particularly via skilled craftsmen and the apprenticeship system) and on-the-job learning, thus ensuring the collective reproduction of the community and the enterprise (Nadvi, 1994).

The concept of ***tacit knowledge*** is central to understand what is the social milieu. The bank of tacit knowledge of a given industrial district includes much more than the simple "know-how" acquired through collective historical experience. Many social functions and community attributes are, in fact, not directly observable by analysts, since they are intangible, abstract, informal or subterranean. Frequently members of the community internalise social identities, and their associated properties, without being consciously aware of it. Hence, what constitutes the social milieu and how it functions is usually more difficult to discern than the relatively perceptible patterns of inter-firm productions relations, and the literature seems not to have captured the relevance of economic and social interactions at full[16].

Despite having a grasp of the tacit knowledge and of what are the hidden community attributes of the industrial district, another conceptual difficulty undermines the definition of social milieu, that is, to understand to which degree common social identities directly serve to reinforce inter-firm cooperation[17].

These observations underline the contrasting characteristic of the social milieu, which can be the base for innovation as well as a simple background to minimize transaction costs.

Towards a redefinition of the relationship between social milieu and economic performance

Scholars have too-often followed a functional approach that sees economic performance purely as a consequence of the social features of the community. Viewed the astonishing dynamism of some industrial districts, authors have in fact generally dug into the socio-economic features of the community that is insisting on that cluster to find out what were the origins of its success. The outcome of this approach has generally been the abstraction of a set of defining characteristics, which have been used to construct the profile for the "ideal-type" industrial district. This approach, however, misses out most of the relationship between industrial districts and their social milieus.

First of all, as Amin suggests (1994, pg. 52), the construction of an ideal-type '*runs the risk of forcing*

[16] In India caste identities might be an obstacle to the emergence of efficient social milieus, since they are the leading criteria in delineating social groups within small-firm clusters. As reported by Nadvi (1994), the diamond-polishing industry of Surat is one of the striking examples of this. "Workers and entrepreneurs here belong to the same caste (Patels) and job search is carried out through kinship networks." Similarly, another example is given by the cluster of Ludhiana, where "a significant proportion of the [...] highly successful regional small-firm economy consists of those who are from the artisanal caste of *ramgarhias* known for their collective ability to fashion and adapt machinery" (Nadvi, 1994, pg. 219).

[17] To take India again as example, we can observe that within the diamond-polishing cluster of Surat, for instance, despite strong caste and social kinship ties, firms appear more competitive than complementary (Kashyap, 1992, p.31). Similarly, the divisions within the Agra footwear cluster between producers and traders remarked by Knorriga (1992) are further heightened by the distinct social castes to which producers and traders belong, thereby weakening the prospects for cooperation and collective innovation.

different, and perhaps even incompatible, realities into the same conceptual basket'. Secondly, the use of a too narrowly defined ideal-type forces the study of industrial districts into a very rigid theoretical grid, in which precise, inevitable causality relations are assumed to exist, while less importance is given to feedbacks and mutual interactions. As a matter of fact, while all studies are concerned with what are the social elements at the origin of small and medium enterprises performances no author seems to be interested in understanding how the promotion of an efficient SME sector can influence the network of social relations [18]. As synthesised in *figure 2* the limitation of such a "functionally-biased approach" is to highlight a direct casual relationship between a pre-existent set of social values and the existence of dynamism within the industrial district.

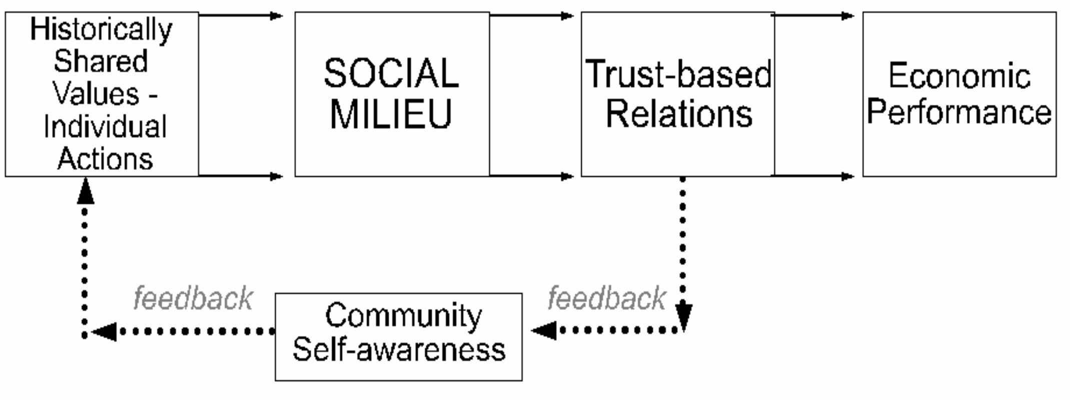

figure 2 – The functionalist approach to industrial districts.

differently to what is the mainstream approach, on the contrary, the complex problematique attached to the understanding of industrial districts would require a systemic approach, in which the researcher identifies what are the interaction between the opportunities generated by the economic activity of the industrial district and the social structures that naturally emerge in order to capture these opportunities. Such an approach, of course, trespasses the boundaries of economics and need make reference to a wider spectrum of disciplines. March and Olsen's (1975) famous model of organizational learning for instance, could represent a valid point of departure to define a new approach.

[18] As we will se in the next session.

March and Olsen's model of Organizational Learning

Although it has not been specifically designed to study how societies change their systems of values, but rather to understand how complex organizations like big companies work, the model by March and Olsen can offer some interesting highlights. The model consists of a simple four-stage cycle through which individuals interpret the environment, act upon their interpretation, and through their action precipitate organizational action. The latter, in turn, responds to the environment, from which the cycle gets repeated (*figure 3*).

The first advantage is that March and Olsen clearly distinguish between individual and organizational levels of analysis, highlighting the reciprocal interactions between the two. Despite the fact that they do not explicitly indicate small firms or industrial clusters as relevant players in the process of collective learning, the general approach endorsed by the model allows for their inclusion as moderators between individual and the organizational action, or the society's system of values.

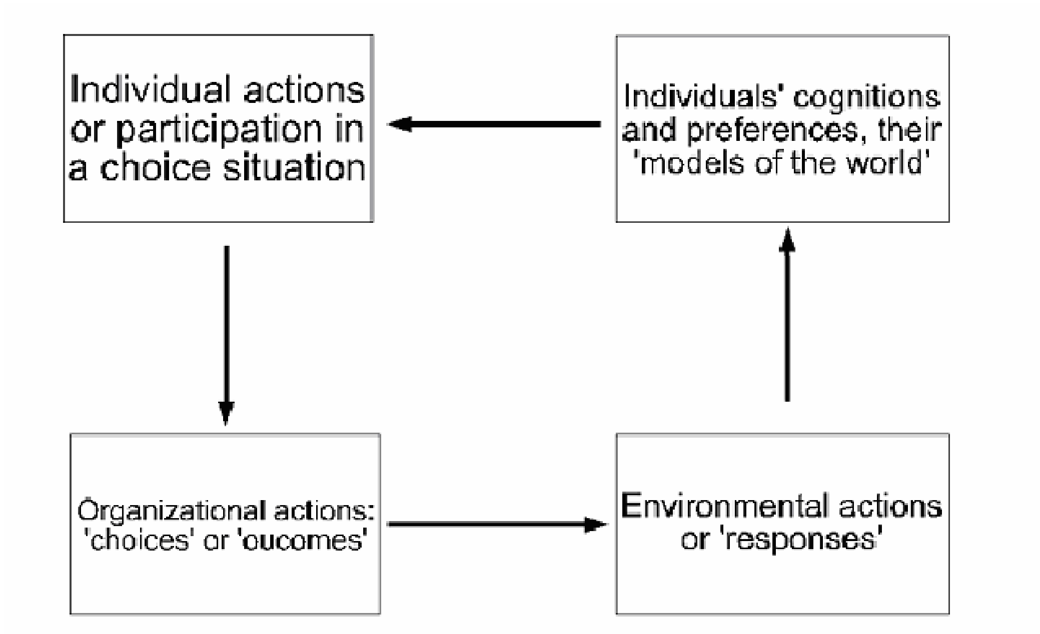

figure 3 – A model of organizational learning,

Source: March and Olsen, 1975 (pp. 147-171).

To put it in a simple way, according to March and Olsen, individuals in industrial districts modify their understanding in a way that is intendedly adaptive even though faced with ambiguity about what happened, why it happened, and whether it is good. This process of change is based on “liking”, “seeing”, “trusting”, “contact”, and “integration” and takes advantage of the spatial proximity characteristic of industrial districts. Organizational intelligence comes from either rational calculation about future consequences, or from a process of learning by experience, where feedback from previous experience is used to choose among alternatives. Within this framework, learning happens on a totally empirical basis, through experimentation, evaluation, and assessment. In substance, the model puts in evidence how collective behaviours change and adapt according to the opportunities that the environment presents, via a sort of bi-directional relationship between individual profit-seeking and collective behavioural norms.

This approach is extremely meaningful with particular regard to empirical analysis. The experience of Bangalore for instance, has shown how the agents learn fast when the prospects of profit are concrete, but also how the community is able to “adapt” its set of values rapidly, even if this require radical changes as the adoption of specific “languages” (technical languages, foreign languages) and/or specific behaviours (as of acquiring skills to build up competitive professionalism). The international nature of the market for software and the high degree of competition that characterises it have forced the society of Bangalore to rapidly change. People have adapted to western business standards, they have learned how to interact with and listen to their clients, they have understood the importance of *reputation* in business transactions. The society of Bangalore has adapted to the needs of the market itself. Due to a day-by-day interaction with the market, people have also gained the awareness of their potentialities, of their capacity in conducting business, of the competitiveness of their company and of the entire district on the international market. In other words, the market has worked as a benchmark for these communities in the same way as it has happened in more advanced and successful districts of the west.

Why small firms can make a difference.

Between two extremes represented by individual selfishness and the collectivity self-awareness of a local system, firms represent those institutional arenas in which economic opportunities and social interactions are shaped. To understand this fully, we have to go beyond pure economic literature and refer to a concept that is dear to sociologists that work within the domain of industrial relations, that is the concept of "***work culture***".

Work culture is a part of a broader societal culture which is conceptualised as a multi-layer phenomenon. The core consists of basic assumptions and values regarding the nature of human beings and the way they relate with other human beings and the environment (Schein, 1987). The basic assumptions and values manifest in behaviours which produce a range of tangible (e.g. physical) as well as not-so-tangible (e.g. social) artefacts. Hence, work culture means the assumptions, values and meanings attached to work, ant that might be translated to societal life. It is like a sort of corporate soul which permeates in the fabrics of an organization and it is one of the defining aspects of a specific social milieu. In other the words the work culture is one of the aspects that tailors the set of values of a specific local community.

The concept of *work culture* has been introduced for the first time by Jai B.P Sinha (1990). In his analysis Sinha has emphasized the activities, cognition, affect and importance attached to work. He remarks how these are reflected in norms and values that employees develop with reference to their work, and how they are rooted in a number of contextual factors. As of India, Sinha identifies two profiles of work culture which represent the extremes of a continuum of work culture in Indian organizations. These are identified as "***soft***" and "***synergic***" work culture.

In a *soft work culture* work seems to be displaced from its central place in the minds of the employees by non-work activities and interests. Employees do not derive satisfaction from their work. They take work easy and try to maximize their personal gains even at the cost of the organization. They spend fewer hours at work and do not feel like belonging to the organization. They do not believe that hard and sincere work can help them in advancing their career or in getting recognition. They touch too little of the company's eventual successes on the market. A soft work culture seem to represent the norm more than the exception for India and this is widely recognised by authors as the "most baffling problem in India" (Mishra, 1994, pg. 335). Sinha himself (1990, pg. 30) observes:

> "Work is not intrinsically valued in India. There exists a culture of *aram* which roughly means rest and relaxation without being preceded by hard and exhausting work. Although there are

large regional variations, it is not infrequent to find a large number of people sitting here and there and doing nothing. Even those who are employed often come late to office and leave early unless they are forced to be punctual. Once in office, they receive friends and relatives who feel free to call at any time without prior appointment. People relish chatting and talking over a cup of tea or coffee while work suffers."

In contrast to soft work culture, a *synergetic work culture* is reflected in the beliefs that hard and sincere work is invariably rewarded, merit matters, organization cares for the employees, individuals and organizations are inter-dependent, individuals cannot realise their own interests without contributing to the organization, etc. consequently individuals derive satisfaction from their work, feel involved, and try to be creative and innovative at the work place. They develop their identity around the organization.

Small and medium-sized enterprises are the perfect environment where a synergic work culture can be developed. As we have seen, the linkage between small firms and social values are very tight, and the development of a successful industrial fabric made of small and medium enterprises can have large feedbacks on the local social milieu. Besides, industrial districts represent a particularly rich contexts that offer to firms and individuals great opportunities to learn, have experiences, and enrich their knowledge and competencies [Corno, Reinmoeller and Nonaka, 1999, pg. 379]. Industrial districts represent the perfect environment for firms and individuals to share their knowledge and experiences. Nonanka and Konno (1998) have emphasized the role of industrial districts as a place of exchange, by associating them with the Japanese concept of "ba" (palce), which represents the dynamic context of interaction (such as networks and media) facilitating knowledge creation. In *Bas*, as well as in industrial districts, knowledge is concentrated and relationships emerge providing an ideal platform for the creation of individual and/or collective self awareness, of knowledge and efficient institutions.

How work culture shifts from markets to individuals

In developing their theory on organisational knowledge creation, Nonaka and Takeuchi (1995) highlight the critical role played by tacit knowledge in Bas, by focussing on the interplay between the tacit and the explicit dimensions of knowledge. According to them, inter-firm relationships within the Ba provide a vehicle for the transfer of knowledge and, through the internalisation of externally-generated knowledge, firms act as a catalyst for new learning trajectories. The formation of new knowledge, however, depends on the interaction of people, and the more a firm can rely on a wide set of high-involvement relationships, the more effective its generation of knowledge will be. In accordance with Polany (1966), the stress in the process of knowledge creation is posed on *knowledge conversion*, small firms being the best place for individuals to learn.

The advantages that smaller firms offer to individual learning centre around the related factors of size, growth and market uncertainty, and the consequent requirement for flexibility. Small size means that employees have to perform a wider range of tasks than normal occupational definitions might require. Growth means that at least some of them have to perform across a wider range of situations and respond to a wider variety of people than they might encounter at similar levels of experience, age, career in larger firms. Both factors, therefore, enable and require employees to extend their competence over a wider performance domain, accelerating learning, and assuming increased responsibility. Market uncertainty impacts on firms and knowledge creation in a number of ways. First, a higher proportion of small firms operating in highly competitive international markets contributes to new occupational skills and specialisms, since niche specialisation means more specialised skills (Crudeli, 2001). Second, the degree of flux in the markets of both new firms and older firms means that smaller firms often find it more convenient to keep their definitions of tasks and skills flexible. As a result, in small firms tasks are often put together in unusual combinations and job definitions are subject to change.

Final Remarks

The role that SMEs can play for Indian industrial development has been often underestimated. Even the most recent attempts to revitalize cluster economics and to evaluate industrial districts as a valuable model of development have been discouraged by the international literature, and in particular by Un economists. Analysis are however often biased. Cluster economists continue to follow an epistemological approach that values social milieus as purely as the constraint or the mean for industrial growth, and not as the goal of development. In this analysis I have showed how this approach is limitative and misleading.

Although designed for social learning, March and Olsen's model of collective learning seems to offer a valid alternative for analysing the relationship between social milieu and economic performances. The basic idea suggested by March and Olsen is that individuals in organizations modify their understanding of the reality in a way that is intendedly adaptive and highly responsive to environmental changes. Translated to the social milieu/industrial district context, this would mean that if stimulated by lucrative economic opportunities societies characterised by a "*soft work culture*" like India, would be ready to change their values and attitudes towards "*synergic work culture*". In this process industrial districts and small firms would still represent the best environment for individuals and communities to learn and still present themselves as the deputed place for a cultural change to happen.

Countries like India, in which the economical and political environment are changing fast in the wake of liberalisation, should be particularly careful of their small and medium enterprise sectors. This is even more true if we consider that decades of legal and administrative controls have created an attitudinal climate of risk aversion among entrepreneurs and managers and poor work ethos among the employees and these have now emerged as strong stumbling blocks in the path of further progress. Some policy recommendations should be considered promptly.

First of all, the State needs to develop the capacity to identify and support those industrial districts that are potentially prosperous and sources of growth, State support being a recurrent characteristic of western industrial districts too. While state intervention does not actually create industrial districts, such assistance, particularly in the form of "real services", can be critical in ensuring the overall success of small-firm clusters which otherwise lack the capacity to generate internally support infrastructure. As a second remark, programmes to sustain proto industrial districts are likely to be more effective if formulated by levels of government which are politically rooted in the community, in much the same way that the industrial cluster is socially embedded; in the same way, local governments must actively involve the participation of those to whom they are directed through representative sectoral associations. In this regard a number of State institutions, although not overtly geared to small-firm clusters, are supposed to provide “real service”-type facilities to small manufacturing enterprises in developing countries.

A further, even more important, recommendation to generate a synergic work culture, would be for governments to encourage enterprises in ameliorating their human resource management practices. Industrial relations indeed provide the immediate backdrop for effective organizational performance., while, on the other hand, it is influenced by the state of work culture that prevails in the enterprise. In this domain, bcal governments, in cooperation with representative organizations like trade unions or the confederation of industry, should take serious look at the way work culture evolves. This implies that certain strategies should be fostered within the enterprises, such a more transparent management, the adoption of practices of information sharing, management by values and the redefinition of employment relations in the direction of spreading responsibilities among workers. This should be all done in the attempt to change enterprises into local learning organisations and empowering people to develop a positive work culture. Foreign investors should be particularly targeted by this kind of policies, since they posses the know how and more economic capability to implement advanced human resource practices. Actors from outside the district are often indispensable to these processes because they act as pollinators. Yet, much of the industrial district literature treats external actors as a threat to the district. People that have been trained and have experience in internationally-competing companies should be encouraged to start their own business (Lazerson and Lorenzoni, 1999).

In brief, all policies directed to the diffusion of entrepreneurship and of a positive work ethos are fundamental for development while tailoring economic policies on SMEs and industrial districts is certainly the cornerstone of such approach.

A last point that emerges in our analysis is the importance played by markets in shaping social relations. Local markets should be gradually opened to international competition with the active intervention and support of local governments. For instance, it is desirable that developing countries, with the help of local governments and local institutions, arrange campaigns to promote the image of their own industrial districts. As the development of professionalism often goes together with the creation of reputation on the international market, this kind of promotional campaigns would not only help employers in marketing their products on the world markets, but they also would instil the people of the districts with a certain level of confidence and sense of responsibility.

Bibliography.

Amin A. (1994), 'The Potential for Turning Informal Economies into Marshallian Industrial Districts', in United Nations conference on Trade and Development, *Technological dynamism in industrial districts: an alternative approach to industrialization in developing countries?: papers and synthesis of discussions of a symposium on industrial districts and technology held at the Palais des Nations, Geneva on 16 and 17 November 1992*, New York: United Nations, pg. 51-71.

Ahaluwalia I.J. (1994), 'The Role of Trade Policy in Indian Industrialisation', in T.J. Byres (ed.), *The State and Development Planning in India*, SOAS, London: Oxford University Press.

Asheim B.T. (1994), 'Industrial Districts, Inter-firm Cooperation and Endogenous Technological Development: The Experience of Developed Countries', in United Nations conference on Trade and Development, *Technological dynamism in industrial districts: an alternative approach to industrialization in developing countries?: papers and synthesis of discussions of a symposium on industrial districts and technology held at the Palais des Nations, Geneva on 16 and 17 November 1992*, New York: United Nations, pg. 91-141.

Bain J.S. (1966), *International Differences in Industrial Structure: Eight Nations in the 1950s*, New Haven: Yale U. Press.

Beccattini G. (1990), 'The Marshallian Industrial District as a Socio-economic Notion', in F. Pyke and G. Becattini (eds.), *Industrial Districts and Inter-firm Coopertion in Italy*, Geneva: ILO.

Beccattini G. (1991), 'The Industrial District as a Creative Milieu', in G. Benko and M. Dunford (eds.), *Industrial Change and Regional Development: The Transformation of New Industrial Spaces,* London: Belhaven Press.

Bellandi M. (1989), 'The Industrial District in Marshall', in E. Goodman, J. Bamford and P. Saynor (eds.), *Small Firms and Industrial Districts in Italy,* London: Routledge.

Cadène P. and Holmström M. (eds.) (1998), *Decentralised Production in India. Industrial Districts, Flexible Specialisation, and Employment*, New Delhi: French Institute of Pondicherry and Sage Publications.

Corno F., P. Reinmoeller and I. Nonaka (1999), 'Knowledge Creation within Industrial Systems', *Journal of Management and Governance*, Vol. 3, pp. 379-94.

Cowling K. and Sugden R. (1998), 'Technology Policy: Strategic Failures and the Need for a New Direction' in J. Michie and J.G. Smith (eds.), *Globalization, Growth, and Governance*, Oxford: Oxford University Press.

Crudeli L. (2001), 'Obiettivi e strumenti del salario variabile. Uno schema interpretativo', in Cainelli G., Fabbri R., Pini P. (eds.), *Partecipazione all'impresa e flessibilità retributiva in sistemi locali. Teorie, metodologie, risultati*, Ch. I, Franco Angeli Editore, Milano.

Datt R. and Sundharam K.P.M. (2000), *Indian Economy*, New Delhi: S. Chand & Company ltd..

Dunne T., M.J. Roberts and L. Samuelson (1988), 'Patterns of Firms Entry and Exit in U.S. Manufacturing Industries', *Rand Journal of Economics*, Vol. 19, No. 4, pp. 495-515.

Dunne T., M.J. Roberts and L. Samuelson (1989), 'The Growth and Failure of U.S. Manufacturing Plants', *Quarterly Journal of Economics*, Vol. 104, No. 4, pp. 671-98.

Evans D. (1987a), 'The Relationship between Firm Growth, Size and Age: Estimates for 100 Manufacturing Industries', *Journal of Industrial Economics*, Vol. 35, No. 4, pp. 567-81.

Evans D. (1987b), 'Tests of Alternative Theories of Firm Growth', *Journal of Political Economics*, Vol. 95, No. 4, pp. 657-74.

Gibrat R. (1931), *Les inégalites écomoniques*, Paris, *mimeo,* quoted in 'Entry, Gibrat's Law, Innovation, and the Growth of Firms', by Mansfield E. (1962),*The American Economic Review*, vol. 52, Issue 5.

Hart P.E. (1975), *The Evolution of Giant Firms in Great Britain,* Cambridge: Cambridge University Press.

Hart P.E. and Prais S.J. (1956), 'The Analysis of Business Concentration: A Statistical Approach', *J. Royal Statistical Society*, 119, pt. 2, pp. 150-81.

Holmström M. (1998a), 'Introduction: Industrial districts and Flexible Specialisation – The Outlook for Smaller Firms in India' in Cadène P. And Holmström M. (eds.) *Decentralised Production in India. Industrial Districts, Flexible Specialisation, and Employment*, New Delhi: Sage, pp. 7-44.

Kaleki M. (1945), 'On Gibrat Distribution', *Econometrica*, Vol. 13, No. 2, pp. 161-70.

Kashyap S.P. (1992), 'Recent Developments in the Small Enterprises Sector in India: Economic and Social Aspects', *ILO Discussion Paper*, no. 48, Geneva: International Institute of Labour Studies.

Lazerson M. and G. Lorenzoni (1999), 'Resisting Organizational Inertia: The Evolution of Industrial Districts', *Journal of Management and Governance*, Vol. 3, pp. 361-77.

Mansfield E. (1962), 'Entry, Gibrat's Law, Innovations, and the Growth of Firms', *American Economic Review*, Vol. 52, Issue 5.

March J.G. and J.P. Olsen (1975), 'The Uncertainty of the Past: Organizational Learning Under Ambiguity', *European Journal of Political Research*, Vol. 3, pp. 147-71.

Marglin S. (1974), 'What do Bosses do?', *The Review of Radical Political Economy*, Vol.6 (Summer 1974), pp. 60-112.

Marshall A.A. (1890), *Principles of Economics*, 8th edition, reprinted 1966. London: Macmillan.

Mishra C. (1994), 'Developing Work Culture', *Indian Journal of Industrial Relations*, Vol. 29, No. 3, January.

Nadvi K. (1994), 'Industrial District Experience in Developing Countries', in United Nations conference on Trade and Development, *Technological dynamism in industrial districts: an alternative approach to industrialization in developing countries?: papers and synthesis of discussions of a symposium on industrial districts and technology held at the Palais des Nations, Geneva on 16 and 17 November 1992*, New York: United Nations, pg. 191-255.

Nonaka I. and H. Takeuchi (1995), *The Knowledge-Creating Company*, Oxford: Oxford University Press.

Phlips L. (1971), *Effects of Industrial Concentration: a Cross-section analysis for the Common Market*, Amsterdam: Norht Holland.

Piore M.J. and Sabel C.F. (1984), *The Second Industrial Divide: Possibilities for Prosperity.* New York: Basic Books.

Polany M. (1966), *The Tacit Dimension*, London: Routledge & Kegan Paul.

Pryor F.L. (1972), 'An International Comparison of concentration Ratios', *Review of Economics and Statistics*, Vol. 54, No. 2, pp. 130-40.

Rothermund D. (1993), *An Economic History of India. From Pre-colonial Times to 1991,* New York: Routledge.

Samuels J.M. (1965), 'Size and Growth of Firms', *Review of Economic Studies*, Vol. 32, No. 1, pp. 105-12.

Schein E.H. (1987), *Organizational Culture and Leadership*, San Francisco: Jossey and Bass.

Schmitz H. (1989), 'Flexible Specialisation: a New Paradigm of Small Scale Industrialisation', *IDS Discussion Paper*, no. 261, Sussex.

Sengenberger W. and F. Pyke, (1991), ‚Small Firm Industrial Districts and Local Economic Regeneration: Research and Policy Issues', *Labour and Society*, vol. 16, no. 1.

Sinha J.B.P. (1990), *Work Culture in the Indian Context*, New Delhi: Sage.

Späth B. (1994), 'Implications of Industrial Districts for Upgrading Small Firms in Developing Countries: a Synthesis of the Discussion', in United Nations conference on Trade and Development, *Technological dynamism in industrial districts: an alternative approach to industrialization in developing countries?: papers and synthesis of discussions of a symposium on industrial districts and technology held at the Palais des Nations, Geneva on 16 and 17 November 1992*, New York: United Nations, pg. 287-342.

United Nations Conference on Trade and Development (1992), *Technological dynamism in industrial districts: an alternative approach to industrialization in developing countries?: papers and synthesis of discussions of a symposium on industrial districts and technology held at the Palais des Nations, Geneva on 16 and 17 November 1992*, New York: United Nations.

Van Dijk M.P. (1994), 'The Interrelations between Industrial Districts and Technological Capabilities Development: Concepts and Issues', in United Nations conference on Trade and Development, *Technological dynamism in industrial districts: an alternative approach to industrialization in developing countries?: papers and synthesis of discussions of a symposium on industrial districts and technology held at the Palais des Nations, Geneva on 16 and 17 November 1992*, New York: United Nations, pg. 3-49.