INSTITUTIONAL BARRIERS TO ENTREPRENEURSHIP IN CLUSTERS: EVIDENCE FROM THE TURKISH TEXTILE SECTOR*

by

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STRUCTURED ABSTRACT

Purpose of this paper	The paper highlights the extent to which the institutional context of a country can inhibit entrepreneurial activity in clusters.
Design/methodology /approach	Case study method employing exploratory survey questionnaire and interviews administered to 78 firms in the Denizli textile cluster in Turkey.
Findings	Findings show that Denizli district firms nurture effectively only some of the features of an industrial district, that is flexibility, participative managerial structure and trust. However, there is limited availability of skilled workers, and limited co-operation in the form of joint projects and investments for innovation owing to the weak institutional context in which these firms are embedded. Although, this might be expected to discourage economic benefits, performance, particularly in terms of efficiency and relations with internal and external customers, is perceived to be high by the cluster firms.
Research limitations /implications (if applicable)	It is not adequate to argue that policy makers of developing countries should take particular systems of organizing such as cluster formation into consideration for their industrialization efforts. One needs to consider the wider institutional context in which entrepreneurial activity is embedded that can limit the degree to which clusters can stimulate economic development. This has implications for the applicability of a cluster approach to foreign contexts particularly where global value chain governance is of a quasi-hierarchical form.
Practical implications (if applicable)	Although district firms can strategize on the basis of their flexibility, trust relations and managerial structures within the confines of a state-organized institutional environment and a quasi-hierarchical global value chain, further improvements such as relocation of production and equity participation are needed to meet the global challenge. Technological innovation in production and distribution is necessary for low production costs and speedy response to changing demands. The number of local associations can also be increased to provide technological support, qualified human and marketing resources. The linkages between favourable cluster and institutional arrangements should serve to support entrepreneurial activity.
What is original/value of paper	Although several conditions at the national and firm levels such as government policy and common values have been cited as contributing to productivity and innovativeness, the very specific historical and social circumstances of environments that can act as a barrier to entrepreneurial activity in localities have not been given due attention. This study shows that the institutional make-up of a country can discourage actors from changing patterns of organizing for innovation. Although a substantial number of studies has been carried out for more than a decade on the internal structure and formation of clusters, these pertain predominantly to operations in developed nations, and by and large, ignore developing countries. The paper argues that clusters may not generate the same economic benefits when embedded in weak state-organized institutional settings as when operating in strong collaborative institutional contexts. The study is of value particularly to policy makers.

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ABSTRACT

The emphasis in the literature on clusters has been on the dynamic linkages between the socio-cultural features of a productive community and the rate of growth of both its productivity and innovativeness. Although several conditions at the national and firm levels such as government policy and common values have been cited as contributing to positive performance, the very specific historical and social circumstances of environments that can act as a barrier to entrepreneurial activity in other localities have not been given due attention. This study shows that the institutional make-up of a country can discourage actors from changing patterns of organizing for innovation. It demonstrates how institutional legacies can lock actors into particular ways of operating through a case study of a textile cluster in Turkey. Our findings show that the textile firms nurture effectively only some of the features of an industrial district. The availability of skilled workers and co-operation in the form of joint projects and investments for innovation are limited owing to the weak institutional context in which these firms are embedded. The findings also highlight the constraints imposed by a quasi-hierarchical global value chain that cluster firms occupy on development. However, even though these may be expected to discourage economic benefits, performance, particularly in terms of efficiency and relations with internal and external customers, is perceived to be high by the cluster firms.

Introduction

Of human resources quite typical of industrial districts (IDs) is the entrepreneur who follows with utmost care the events of the worldwide market of the products of the district, as well as improves continuously his own knowledge of the district as a production and socio-cultural entity (Becattini, 2004). The immediate environment in which the entrepreneur operates is seen as fostering dynamic linkages between socio-cultural features of a productive community and the rate of growth of productivity and innovativeness (Becattini, 1989). Although several conditions at the national and firm levels such as government policy and common values have been cited as contributing to positive performance (Paniccia, 2002; Porter, 1998), the very specific historical and social circumstances of environments that can act as a barrier to entrepreneurial activity in other localities have not been given due attention. This study shows that the institutional make-up of a country can discourage actors from changing patterns of organizing for innovation. It demonstrates how institutional legacies can lock actors into particular ways of operating through a case study of a textile cluster in Turkey. The Denizli cluster, traditionally known for its weaving, is investigated for its inter-firm relations and economic performance through an exploratory survey administered to 78 firms operating in the area. Two distinct— industrial cluster and institutional—literatures are examined to explore firm-level and national-institutional influences on the performance implications of entrepreneurial activity.

In the following section, we discuss the concept of clusters, reviewing its principal features, and assess the extent to which institutional peculiarities influence entrepreneurial activity. The research method and empirical setting are introduced in the third section. The fourth section reports the findings on the Denizli cluster features and

how they relate to firm performance. The factors that are critical to entrepreneurial activity in the context of a state-organized business system are discussed in the fifth section. The last section presents the implications of the analysis for institutional and industrial cluster literatures and points to avenues for future research.

The Principal Features of Industrial Districts

The concept of industrial district was proposed by Becattini as a revitalization of Marshall's (1920) notions of external economies and economies of agglomeration that produce positive effects in terms of efficiency, growth and innovation (see Brown and Hendry, 1988; Pyke *et al*., 1990). Becattini has refined these notions to include conditions attaining to the attitudes and values of local population in determining positive performance. In this view, districts are socio-economic systems joining together a community of people with common values or culture and economy (Paniccia, 2002). These geographically defined productive systems are conceived as a social and an economic whole. In other words, the success of clusters lies not just in the economic sphere but also in the broader social and institutional aspects. On the economic front, a group of firms, each specialized in a different manufacturing phase of a dominant regional industry, constitutes a model of extensive division of labour. From a social point of view, there is relatively a homogeneous system of values and views that creates community standards or norms of reciprocity and trust (e.g. Lorenz, 1993). Opportunistic behaviour is controlled by institutions in the form of informal rules that are shared and taken for granted in the district. Other social features include solidarity and co-operation as a governance mechanism in inter-firm relations. Survival is not related to competitive struggle but to collective growth where the strength of a firm depends on the flexibility

and endurance of the wider network in which it is embedded (Amin, 1999). Adaptability and innovativeness are hallmarks with a communal capacity to cater for rapidly changing product demands that is heavily dependent on a flexible labour force and flexible productive networks. In other words, local skills and labour markets, specialized services and mutual trust and personal relationships, among other factors, have been shown to contribute to flourishing regions (e.g. Pyke *et al*., 1990; Freeman and Soete, 1997). However, it is not sufficient to argue that firms with common geographical background which share certain resources provide for competitive advantage. It is the combination of social factors within a close community at the firm level and favourable (local and national) institutional factors that provide the context for economic success in clusters.

At the firm level, an important feature of clusters is inter-firm co-operation (Paniccia, 2002). Co-operation reduces the risks associated with the starting of a new activity or investment in new products or processes. The proximity of firms in a cluster ensures a continuous flow of technical and commercial information as well as the diffusion and local rootedness of competences and skills to foster entrepreneurial activity. The media of exchange are not only money and goods but ideas, particularly solutions to problems (Best, 1990).

Trust that is promoted by close community relationships constitutes the second trait. Local customs prevail not only in terms business ethics, but also in terms of the quality of merchandise and services exchanged within local markets, of conditions of sale and delivery (Giner and Maria, 2002). The assumption here is that the social embeddedness of firms helps develop trust that lowers transaction costs (Maskell, 2001) and facilitates knowledge exchange for innovation.

The quality of work life in industrial districts, as a third trait, also has implications for economic success. Two attractive features of working in industrial districts are shown as the greater degree of autonomy, and space for worker self-management that allow for better appreciation of worker skills and knowledge (Pyke and Sengenberger, 1990). There is the capacity to restructure without the need to rely on managerial hierarchy. This enables the formation of a collective identity (Porac *et al*., 1989) that enriches the social capital born of exchange between partners within a network.

The provision of a local pool of skill, or a mechanism for inducing rapid growth of skills, capable of application in a variety of contexts and firms, is also seen as necessary for the success of a cluster. It is argued that clusters provide easier access to skilled labour, and suppliers of raw materials, components, new machinery and special equipment (e.g. Pietrobelli and Barrera, 2002). Firms can maintain unique competitive skills that provide competitive advantage to the group as a whole through readily available labour (Porter, 1998).

A further feature of clusters is flexibility in ways of operating. For instance, the Italian clusters are perceived as having social structures that are particularly well suited to the flexible co-ordination of resources. Close community and kinship ties are said to provide mechanisms for mutual assistance in times of need, as well as funds for establishing new businesses. The way the industry is organized provides a particularly adaptable structure for responding to changing market requirements. Through close interrelations, small enterprises are able to achieve great flexibility and capacity to adapt, which permits them to respond rapidly to new external requirements and conditions (Giner and Maria, 2002). Flexibility is often obtained as a result of collective processes of

decentralized co-operation in decision-making and is strengthened by the culture and know-how accumulated by local agents (Pietrobelli and Barrera, 2002).

At the local institutional or regional level, there is the role of business associations and non-profit-seeking enterprises in institution building that sustains entrepreneurial activity. A business association, such as the Confederazione Nazionale dell' Artigianato (CNA) in Italy, can provide accounting and financial services, assistance in the creation of business service centres in IDs, and assistance in establishing co-operatives to solve general problems for a group of firms such as quality control, bulk purchasing of raw materials or export marketing. Finance and marketing activities can also be supported by consortia. For example, the Loan Guarantee Consortium of Modena in Italy supplies i) an objective insider's assessment of entrepreneurial ideas at low cost, ii) a strong incentive to pay back loans, and iii) a means of recovering loan defaults for small firms to gain entrepreneurial credit from banks (Best, 1990). The services provided by marketing consortia include export promotion, trade fairs, market research, files on financial soundness of existing and potential clients, bulk buying and warehousing of raw materials, and training facilities. In addition, public and co-operative authorities provide research and development as well as training and education services.

In spite of similarities in firm-level and local institutional features across countries, there has been diversity of experiences in fostering entrepreneurship in clusters. The very specific historical and social circumstances of clusters responsible for success can discourage the replication of entrepreneurial activity in other localities (e.g. Amin and Robins, 1990). The historical neo-institutional theory, which the present article adopts, argues that economic activity is seen as embedded in and shaped by a particular set of institutional arrangements (see Hollingsworth and Boyer, 1997). Social

relationships and the collective norms that mould them are examined in relation to their structural and historical underpinnings (Djelic, 1999). Differences in dominant forms of governance or key macro-level institutions, which are defined as the state, financial system, and legal system, are seen as shaping different forms of work organization and inter-firm relations at the micro level (Whitley, 1996). Where there is a weak institutional support, firms will find it difficult to engage in co-operative relations, sustain a code of conduct, and lack the finances to invest in entrepreneurial activities. This article demonstrates that this is especially the case for entrepreneurial activity in Turkey owing to the specific economic, legal and political system characterizing the country. The state-organized business system of Turkey, in which markets are highly regulated and authority is paternalistic (Gökşen and Üsdiken, 2001), differs from, for instance, the collaborative Italian business system in which institutional co-operation is a key feature.

Collaborative business systems such as Italian industrial districts encourage collaboration between competitors and between employees and employers. In comparison to other systems, they exhibit more organized integration of inputs and outputs with production chains as well as more sectoral co-operation. Although ownership units are small and owner-controlled, they rely more on worker commitment, particularly on employees' willingness to innovate (Whitley, 1999). Local governments, banks, and training organizations typically work with quite strong forms of local labour representation to restrict adversarial, price-based competition in favour of high-quality, innovative strategies based on highly skilled and flexible labour (Estevez-Abe *et al*., 2001). Thus, institutions in collaborative systems provide high levels of support for relational requirements that foster incremental innovation.

By contrast, state-organized business systems such as Turkey are characterized by co-ordination that is centralized by the state. Such systems develop in less pluralist, dirigiste environments where the state dominates economic decision-making and tightly controls intermediary associations (Whitley, 1999). Firms and their owners are highly dependent on state agencies, and, as a result, delegate little to employees and find it difficult to develop long-term commitments with business partners or competitors. The 'state tradition' has been inherited from the Ottoman era and characterized by a fragmented bureaucratic structure and the absence of a long-term vision (Öniş, 1992). Such structure and unstable state policies inhibit entrepreneurial development in Turkey (Çetindamar, 2005). The infrastructure suffers from the existence of a large informal economy that tends to support self-employment rather than entrepreneurship. The lack of strong intermediary organizations between firms and the state creates an environment in which high personal and direct control over work processes is exercised and employer-employee trust is constrained. Özcan and Çokgezen (2003) identify populist-clientalist policies, lax oversight practices, and the social norms that allow investors to accept flimsy assurances and fuzzy legality as having undermined market trust in the country.

In view of the foregoing, we investigate the extent to which institutional factors can limit entrepreneurial activity despite the initiatives of cluster firms to foster such activity in the context of a developing country. Although a substantial number of studies has been carried out for more than a decade on the internal structure and formation of clusters, these pertain predominantly to operations in developed nations, and by and large, ignore developing countries. Thus, we aim to highlight the significance of institutional settings for entrepreneurship in the context of Turkey with implications for countries with similar characteristics. We contend that clusters may not generate the same

economic benefits when embedded in weak state-organized institutional settings as when operating in strong collaborative institutional contexts. We explore this through a study of inter-firm relations and economic performance in the Denizli district of Turkey, whose characteristics of firm size, and geographical concentration fit the definition of industrial clusters.

Research Design and Site

The study examines the extent to which 78 firms operating in the Denizli textile cluster in Turkey bear the features of a cluster as understood in more developed nations, and assesses the level of influence that institutional factors have on their activities. It also investigates the performance implications of cluster features.

Data were collected through an exploratory survey questionnaire, which summarized the key features—co-operation, trust, managerial structure, skill level of workforce, and flexibility—of a cluster. Additional information was gathered from a total of five interviews with managers in three Denizli district firms and the Denizli Chamber of Commerce. The list of 78 firms composing the population of the cluster was obtained from the Denizli Chamber of Commerce.

The questionnaire, which was forwarded to managing directors/owners by fax, e-mail and post in April and May 2004, was administered to all of the 78 firms. 27 of the questionnaires were returned. This constituted an acceptable response rate of 35 per cent. There were no significant differences in respect of size, female-male composition and product lines of the responding firms. Therefore, a highly representative random sample could be assumed. The survey method was followed by a small-scale field study employing an hour-long interview with human resource managers at two Denizli cluster

firms—Gamteks and Nesteks (pseudonyms)—employing around 1000 employees, and with an owner/managing director at a cluster firm—Miteks (a pseudonym)—that employed 230 employees (as of 2004). Information was sought on the meaning that cluster features had for company managers. This was performed to validate our findings from the survey, as well as to highlight the reasons underlying unexpected results. Factory tours served to enhance 'analytic realism' (Denzin and Lincoln, 1998). Furthermore, interviews with the R&D manager and an EU Information Centre representative at the Denizli Chamber of Commerce guided the collection of data on local government practices that helped sustain the Denizli cluster. Protocols (Yin, 1994) incorporating schedules of company visits and members to be interviewed were developed. Although it would have been ideal to record interviews for verbatim quotes, the conditions under which interviews were conducted were not suitable for recording. Researchers were invited to hold interviews in open-plan offices with background noise. In addition, given the low out-group trust inherent in the Turkish society (which ranks similar to Brazil and Peru in trust league tables), the researchers chose to build rapport with the participants by avoiding the use of voice recorders. As both researchers were present at the interviews, there was the possibility to validate notes through cross-checking.

The questionnaire was formulated in three sections. The first section focused on firm-specific characteristics such as the nature of business activity, employment figure, type of ownership at the time of foundation and at present, type of technology used and the biggest business challenge faced. The second section addressed the extent to which firms possessed the key features of a cluster. Here, firms were asked to rate the items measuring a cluster feature (see Table 1) on a five-point Likert scale. The measures for

'co-operation' and 'skill level of workforce' were based on Guerrieri *et al.*'s (2001) validated scale. However, since no questions were readily available in cluster research to measure 'trust'[1], 'managerial structure' and 'flexibility', we developed our own scale. The third section included firm performance criteria, that is efficiency, profitability, market share, sales, exports, company image, competitiveness, and customer and employee satisfaction. Although the most commonly used performance indicator in cluster research is profitability (e.g. Paniccia, 2002), we chose to include a larger set of indicators due to the recent financial crisis (2000-2002) in Turkey. We felt that the short-term performance indicator of profitability would not have adequately reflected performance in the cluster. Firms were requested to assess improvements in performance owing to their operation in the Denizli cluster. In other words, the measure of performance was based on the perception of research participants. Objective measures that requested for exact values of various performance indicators as that in Guerrieri *et al.* (2001) could not be collected. This is due to the difficulty of obtaining objective indicators from companies that are not listed on the stock market and are run by families who tend to be discreet over their performance figures. We were alerted to this difficulty by the Denizli Chamber of Commerce before the administration of the survey. Nonetheless, caution was exercised over data collection. 70 per cent of the managing directors who responded to the survey were also the owners of firms. Hence, a large portion of the respondents had been with the companies since their foundation. This minimized the likelihood of respondents overstressing the advantages of operating in Denizli.

[1] Trust is defined by Sako (1992) as a state of mind, an expectation held by an economic agent about another, that the other behaves or responds in a predictable and mutually acceptable manner. Following

Table 1 about here

The reliability of our scale presented satisfactory results. The Cronbach's alpha for 31 items on ID conditions was 0.80, and that for the performance-related items was 0.88.

Empirical setting

The textile industry in Turkey has been growing rapidly through export orientation since the liberalization in 1980. The sector has been experiencing a steady increase in its export figures from USD 525 million in 1994 to USD 3.7 billion in 2003 (Denizli Chamber of Commerce, 2004). Profitability in this sector was particularly high prior to the customs union agreement in 1995. In parallel to this development, the industrial activity in Denizli, which is located in the Aegean region of Turkey with a population of 850,000 people and employing 15,000 workers in the textile sector, developed rapidly. The key factors contributing to this development were the widely available local supply of raw materials—primarily cotton—, weaving skill, labour supply and proximity to the market (Mutluer, 1995), as well as the government's stability programme that encouraged the internationalization of SMEs, particularly in the textile industry (Denizli Chamber of Commerce, 2004). The cluster contributes to 13.3 per cent of the total textile production in the country (Denizli Textile and Apparel Exporters' Union, 2004). However, there is limited financing in the region owing to the country's level of economic advancement

Sako's distinction, our survey focuses on this predictability as existing for contractual and goodwill reasons, the latter of which is indicated, for instance, by openness in information sharing.

(real GDP per capita of USD 4,222). Most of the capital for investment in Denizli comes from the agricultural, small industrial and commercial activity. There is, however, inward investment in the region that has increased since 1985 with 178 firms (until 1993—the highest figure when all sectors are considered) receiving incentive to invest in the textile sector. The firms in the region export to Germany, the UK, the Netherlands, France, Italy, the US and Canada. However, export figures are not high enough to be compared to those of clusters in developed nations, for there are quotas imposed on Turkish textile products from the EU (in 1982) and the US (in 1987) (Mutluer, 1995). Although the introduction of the Multi-Fibre Agreement in January 2005 has enforced the uplifting of quota restrictions, this change is too recent to have had a significant impact on export patterns. The lack of financing in the region inhibits product diversification strategies to cope with the placement of quotas.

70 per cent of the firms in the Denizli cluster that have participated in our study are family-owned and are mainly involved in the weaving and production of thread, towels-bathrobes, and clothes. The percentage of firms that have shifted from family ownership to non-family management since the time of foundation is 30. Thus, most of the firms still continue to operate under family-ownership. More than half of the participating firms (55 per cent) constitute SMEs[2] and most employ female operators. A large number of the firms (92 per cent) use the latest and the most advanced textile machinery. 74 per cent of the firms follow technological changes and have upgraded their machinery to match these changes within the last three years. According to the participating firms, limited financing and the inability to market products represent the biggest business challenges.

Findings

Findings show that Denizli district firms nurture effectively only some of the features of an industrial district, that is flexibility, participative managerial structure and trust. However, there is limited availability of skilled workers, and limited co-operation in the form of joint projects and investments for innovation owing to the weak institutional context in which these firms are embedded. Although, this might be expected to discourage economic benefits, performance particularly in terms of efficiency and relations with internal and external customers is perceived to be high by the cluster firms.

At the local institutional level, there is only the provision of limited amounts of credit and training to cluster firms. The Denizli Chamber of Commerce 'provide[s] [its] members loans with low interest through agreements with 10 banks' (R&D manager, Denizli Chamber of Commerce). Unlike in, for instance, Italian districts, there are no consortia that support financial and marketing activities in the Denizli district. However, there are efforts by the European Commission to promote SME development in Turkey as in other European countries. The European Information Centre, which was founded in Denizli in 2003, puts Denizli district firms in touch with those in other parts of Europe for possible partnerships. Its responsibilities include the establishment of two-way relations in foreign trade; informing firms of the European Commission's funds and financial incentives available for SME development, and market and sectoral research results; organizing work, education and fair-related trips; and conveying to Europe information on developments and activities in Denizli (EU Information Centre representative, Denizli Chamber of Commerce). In addition, Denizli Textile and Apparel Exporters' Union, to which nine of the cluster firms are members, encourages co-

[2] SMEs are defined here as those firms that employ fewer than 250 people. 251 employees and above

operative competition by negotiating for equal pay rises and equal payment to those performing similar jobs across member firms. The union also seeks new markets to which members can export their products.

At the firm level, as can be seen in Figure 1, only a small number of participating firms (26 per cent) perceive inter-firm co-operation as prevalent in the district. This is despite the trust felt towards co-operating firms. 70 per cent of the participating firms (see the percentage for trust in Figure 1) believe that co-operating firms will not act opportunistically, deliver raw materials on time and at requested quality, and share information in the area in which the firms are co-operating.

Figure 1 about here

As can be seen in Table 2, even though firms benefit from knowledge exchange in new product development and receive assistance from firms perceived as knowledgeable in areas where it is required, they (81.5 per cent of participating firms—the sum of columns for 'undecided', 'disagree', and 'strongly disagree') do not feel the need to collaborate with other firms on joint projects and investments. The follow-up interviews show that co-operation takes the form of raw material and machinery exchange, as well as information exchange in problem resolution among small firms in Denizli rather than common investment or joint product development as is observed, for instance, among brand producers in Italian districts. This is due to the production rather than a design role that most Denizli firms have in the international market. 'In order to create our own brand, we need a warehouse system, concentrated production, the transportation of goods

constitute large firms (see EU, 2002).

to distribution and sales points, and huge investment in advertising and promotion' (general manager at Miteks). This points to the difficulty of industrial upgrading in the Denizli cluster. The cluster firms are part of a global buyer 'Global Commodity (or Value) Chains' (GVC hereafter) (Gereffi, 1994). 'Buyer-driven commodity chains refer to those industries in which large retailers, marketers and branded manufacturers play the pivotal roles in setting up decentralized production networks in a variety of exporting countries, typically located in the third world' (Humphrey and Schmitz, 2000).

The multinational enterprises that these firms serve have developed a quasi-hierarchical value chain characterized by high degree of control of buyer over supplier. As Humphrey and Schmitz (2000) propose, this form of co-ordination reduces the scope for local upgrading strategies by cluster firms in, particularly, design and sale of own brands (labelled as functional upgrading by the authors).

Insert Table 2

The findings also show that firms in the Denizli district (66 per cent—'managerial structure' in Figure 1) encourage participative management. The district contains the organizational form necessary to provide the appropriate kind of environment for entrepreneurial activity and adaptation to changing market requirements. It is known that employment in small firms in clusters permits space for worker self-management (e.g. Pyke *et al.*, 1990). This is also observed among firms in Denizli with 89 per cent of participating firms preferring to employ a participative rather than an authoritative managerial structure (see Table 2—sum of columns for agree and strongly agree for 'participative management' under 'managerial structure'). Non-family managers are

employed to ensure that there is support for teamwork. This is also observed in the social responsibility displayed by small firms towards the welfare of their employees. For instance, at Miteks, '[W]e have managed to increase accountability and organizational commitment by providing shelter, food and counselling to the homeless and the unemployed' (managing director).

We had earlier argued that the provision of a local pool of skill is significant for a cluster's performance. Brusco (1990) argues that the skill and knowledge of firms in a district are increased by fostering interaction between the skilled workers and small entrepreneurs. 74 per cent of the participating firms in Denizli feel that the skill level of their workforce is high (see Figure 1). These employees tend to be those that possess the skills necessary for an effective execution of their work. They also possess and put to use knowledge related to the whole integrated process of production. However, about half of the survey firms perceive problems in finding qualified employees (see the columns for 'strongly disagree', 'disagree', and 'undecided' for ' availability of qualified employees' under 'skill level' in Table 2). Others face the challenge of retaining qualified people (managers interviewed at Miteks, Gamteks and Nesteks). 'There is no continuity in employment. Given the instability in the workforce, firms are reluctant to invest in employee training' (R&D manager, Denizli Chamber of Commerce). 'We have problems in training. Every firm should develop training programmes and provide its people with on-the-job training' (general manager at Miteks).

96 per cent of participating firms in the Denizli district are endowed with social structures that are particularly well-suited to the flexible co-ordination of resources (see 'flexibility' in Figure 1). They have adaptable structures to respond to changing market requirements. 92 per cent of the survey firms in Denizli state that they are able to respond

to consumers quickly (see Table 2). These firms have adopted managerial templates that are well-suited to coping with changes in market conditions. They are able to decide quickly in the likely occurrence of an unexpected event. Quite a number of these firms are also able to respond to technological changes speedily. In addition, they can attain internal consistency in change efforts. More specifically, 74 per cent of the participating firms agree to the condition that collaboration can be achieved among employees for a united effort to launch any type of change. The flexibility of Denizli firms allows for continuous adjustment to external pressures.

Performance Implications of ID Features

It is claimed that features attaining to the attitudes and values of local population as well as the agglomeration of firms is important for the success of a cluster (e.g. Paniccia, 2002). For instance, the location of a firm in a cluster may give rise to better performance in the form of high profitability or stable market leadership, if the firm internalizes local externalities by hiring high-skilled workers, buying cheaper intermediate products or specialized services, economizing on transaction costs or introducing new techniques, organizational procedures or technologies available in the local environment (ibid.). The proximity of firms, and the district's long tradition in its specialization industry aids in knowledge creation that reflects on firm profitability. The assumption here is that the more profitable are the firms, the higher the district's overall performance (e.g. Becattini, 1989). Efficiency can be improved if a firm can concentrate on new production ideas and technology in a limited range of activities, yet count on other firms to develop new technologies in related activities (Best, 1990). This requires co-operation with firms in complementary phases of production. In spite of the lack of co-operation, between 52 to

96 per cent of the survey firms in the Denizli district show an increase in almost all except three of the performance criteria through participation in the cluster (see Table 3—based on the sum of columns for 'agree' and 'strongly agree' on performance measures).

Insert Table 3

As can be seen in Figure 2, the greatest increase is observed in company image or reputation. This is followed by an increase in customer satisfaction (74 per cent). Firms have also noted enhancement in competitiveness, employee satisfaction (both at 66 per cent), and efficiency (60 per cent). However, profitability, sales and export figures have not risen through operation in the Denizli district.

Insert Figure 2

Although the district firms have come to be recognized worldwide as high quality manufacturers of textile, particularly towels and bathrobes, that is delivered on time and to customer's specifications (Miteks managing director), they are faced with financing and marketing difficulties. The lack of local brands and excess supply of goods constrain the district firms' flexibility to set high prices for their products. 'There is no unity in efforts. We are competing to get orders. If foreign firms demand 1000 units of a good, then they will ask different district firms that provide the best value for the best price to supply only 100 units of the total order' (HR manager at Gamteks). It should also be noted that profitability, sales and exports are affected by factors outside the realm of the

cluster such as currency fluctuations and other international market conditions. It may be less of a challenge for the district firms to judge the impact of cluster features on firm performance in terms of company image, efficiency, and employee and customer satisfaction.

In spite of the perceived positive impact that operating in Denizli ID has on firms, there is a need for improvement particularly in terms of marketing activities. As the export performance indicator shows, the Denizli district firms need to upgrade their functions for greater involvement with firms in the design and marketing processes, and to produce more sophisticated, and higher-value added goods. The firms also need to reduce their high level of dependence on technology that is imported from abroad (managers interviewed at Miteks, Gamteks and Nesteks).

Discussion

The findings in the Denizli cluster reveal that despite the common social and cultural backgrounds, the organization of linkages among business actors in the Denizli district is constrained. Co-operation in the form of joint investments or collaborative projects, as one of the main features of clusters, is not observed. It is evident only in the form of resource exchange, such as raw materials and machinery, among small firms. Moreover, it is challenging for firms to find qualified people to employ. These can be, in part, explained by the institutional features of a state-organized system as that of Turkey. As Whitley (1999) argues, horizontal linkages between actors are limited by firms' strong ties of political dependence on the state. The attitude of state officials towards small industry has been characterized as a 'deliberate neglect' in Turkey (Buğra, 1994). Populalist-clientalist policies of the state have created discontinuities in politics and law

making. The political uncertainty and shaky coalitions throughout the 1970s and 1990s have failed to produce a coherent institutional infrastructure conducive to cluster development. Furthermore, the weak public training system for developing skills and weak unions have encouraged employers to compete on the basis of wage cost reductions rather than innovation and improvements to products. Similarly, at the regional level, Denizli lacks business associations or non-profit organizations that can provide financial and marketing services. The efforts of the European Information Centre and the Denizli Textile and Apparel Exporters' Union to facilitate co-operation within and outside the district have not yet borne their fruits.

Although the weak institutional structure discourages entrepreneurial activity in Denizli, it does not stifle perceived performance, particularly efficiency and relations with internal and external customers. Unlike what is observed in, for instance, Latin America (e.g. Pietrobelli and Barrera, 2002), limited enterprise networks in Denizli do not hinder perceived collective efficiency.

The Denizli cluster displays production of high quality based on distinctive competences that result from specialization by phase within the production chain, and flexibility that results from the capacity for reconstituting micro production units as technology advances and market conditions change. However, the institutional capacity to continuously learn and adjust is hampered by the lack of financing. The credit-based financial system in Turkey is oriented towards large firm development. Banks and other financial institutions share investment and growth risks with leading clients, because the larger their customers the more services they can provide and the faster will be their own growth (Whitley, 1999). This model does not encourage unleashing of local resources for entrepreneurial development.

There is no evidence of co-ordination to improve perceived performance through innovation in Denizli. Knowledge and ideas are not readily shared across individual firms. The participative means of managing activities internally cannot be generalized to external networking efforts. The lack of financial and human resources to integrate efforts in design, production and marketing of goods tends to inhibit the sharing of a vision based on a mutual awareness of unwritten norms of what it means to be a member of a community. Although this might suggest low level of 'goodwill' trust across firms (see Sako, 1992), the survey results demonstrate the opposite. Firms are not engaged in opportunistic pursuit of self-interest where there is joint action. This aligns well with one of the major aspects of the Turkish socio-cultural context, that is close personal relationships that reflect a 'caring attitude for people and nature…maintaining harmony among in-group members…loyalty, forgiveness, helpfulness, love and humility' (Aygün and İmamoğlu, 2002: 343). It is further illustrated by Denizli district firms' attempts to retain employees by appealing to their sense of social obligation. Some firms hire homeless and unemployed people and 'provide them with food and shelter' rather than offer attractive salaries (managing director at Miteks).

It is doubtful that if the Denizli cluster is closest in its conditions to what is projected as the ideal ID that it will exhibit the best perceived performance in terms profitability and exports. This is because Denizli cluster firms predominantly constitute suppliers of large, mainly foreign purchasing centres. They are the smallest firms that offer a small range of products of a low to high price-quality ratio and are specialized in production services to other firms. Their goods are largely sold under their customer's brand name and they tend to have the highest export propensity in comparison to firms following a high reputation-high quality and market oriented group and a traditional

competitive model. Although a quasi-hierarchical chain does not inevitably lead to lock-in, a combination of national human resource and industrial development policies, local institutional support and firm-level strategic intent is required for the Denizli cluster firms to upgrade their activities to design and own-brand manufacturing as that observed, for instance, in Korea and Taiwan (Humphrey and Schmitz, 2000). In spite of the fact that the integration of the Denizli cluster into a global quasi-hierarchical chain enables exports into markets that would otherwise be difficult to penetrate, it ties firms into relationships that prevent functional upgrading (Humphrey and Schmitz, 2002). Denizli cluster firms need to invest in equipment, organizational arrangements and people prior to exploring new markets and capabilities to change power relations with their buyers.

The embeddedness of Denizli in an institutional setting that sustains structural disadvantages for smallness discourages co-operative milieux among firms. Collaboration is limited to the exchange of raw material, machinery and information to cope with unexpected market conditions. District characteristics of flexibility, participative managerial structure and trust are not sufficient to facilitate entrepreneurship. This suggests that cluster traits alone cannot provide a full explanation of entrepreneurial activity. Institutional factors tend to play a more prominent role than cluster features in patterns of organizing for innovation. The point to note is that the impact of institutional factors on entrepreneurial activity needs to be considered in conjunction with that of cluster characteristics. The findings also show that the type of global value chain that cluster firms occupy has implications for firm strategies, upgrading opportunities and development outcomes. This confirms the basic proposition of Gereffi (1999) that the type of governance structure that characterizes a value chain shapes the local development outcomes.

Conclusion

The findings highlight the institutional limits to entrepreneurial activity in the context a developing nation. It is not adequate to argue that policy makers of developing countries should take particular systems of organizing such as cluster formation into consideration for their industrialization efforts (e.g. Parrilli, 2004). One needs to consider the wider institutional context in which entrepreneurial activity is embedded that can limit the degree to which clusters can stimulate economic development. This has implications for the applicability of a cluster approach to foreign contexts particularly where global value chain governance is of a quasi-hierarchical form. The functionally equivalent conditions of an ID, listed here as co-operation, trust, managerial structure, skill level of workforce, and flexibility, do not necessarily define a single most efficient model to apply to other settings where management styles, industrial relations and social systems are different. The role of the state, local institutions, as well as financial, public training and legal systems can constrain the creation of technical advantages in clusters as can the power relations with buyers. Although the Denizli district firms have a supply of skilled workers, and can forge trust-based relations with collaborators, they do not have the capital or ability to join efforts in product development or any innovation-generating investment. The prevailing strategy has been to internalize stages of the productive process to meet the demands of buyers that govern quasi-hierarchical value chains.

Nonetheless, firms display improvements in company image, customer satisfaction, efficiency, competitiveness and employee satisfaction through their membership in the Denizli district. This may be explained by what district firms can strategize on the basis of their flexibility, trust relations and managerial structures within

the confines of a state-organized institutional environment and a quasi-hierarchical global value chain. However, further improvements such as relocation of production and equity participation are needed to meet the global challenge. Technological innovation in production and distribution is necessary for low production costs and speedy response to changing demands. By the same token, a well-functioning educational and financial infrastructure can be developed to create a strong entrepreneurial background for the formal economy (Çetindamar, 2005). The number of local associations can also be increased to provide technological support, and qualified human and marketing resources. The linkages between favourable cluster and institutional arrangements should serve to support entrepreneurial activity.

In the process of undergoing institutional changes to meet global pressures, particularly that from China, it would be interesting to investigate the extent to and the means by which Denizli district firms participate in global innovation networks that entail relationships with suppliers, distributors, financial systems and customers, each of them contributing differently to the innovation of products and processes. One can specifically highlight the qualitative changes in types of networks connecting local firms to export markets with the arrival of a new set of foreign buyers for industrial upgrading, which is well illustrated by, for instance, Mexico (e.g. Bair and Gereffi, 2001), upon changes in institutions.

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Table 1. The Operationalization of ID Features

ID features	*Statements relating to a given feature*
Co-operation	Know-how exchange in new product development with other firms
	Receiving assistance from firms perceived as knowledgeable in areas where it is required
	Having the chance to observe first-hand the production processes of other firms operating in the same sector
	Access to raw materials from suppliers that conform to standards
	Joint projects and investments with other firms
Trust	Belief in the fact that co-operating firms will not harm you
	Delivery of raw materials on time and at requested quality
	Sharing all information related to the area in which the firms are co-operating
	The fundamental reason underlying co-operation with other firms is trust
Managerial structure	Few hierarchical levels in firms
	(reverse statement) Taking decisions centrally
	Assigning non-family managers
	Preference for participative rather than authoritative management
	Support for teamwork
Skill level of workforce	Having no problems in finding qualified employees
	Employees possess the skills necessary for an effective execution of their work
	Provision of training to the extent that employees can follow new developments
	Possessing and putting to use process knowledge
Flexibility	Being able to respond quickly to consumers
	Collaboration among employees to a large degree in any type of a change activity
	Being able to follow and put to use technological changes quickly
	Being able to decide quickly under unexpected conditions

Table 2. The ID Features of Denizli Cluster Firms

Items	*Measures*	*Strongly disagree*		*Disagree*		*Undecided*		*Agree*		*Strongly agree*	
		No.	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*
Co-oper.	Know-how exchange	2	7.4	5	18.6	6	22.2	12	44.4	2	7.4
	Receiving assistance	1	3.7	2	7.4	4	14.8	17	63	3	11.1
	Observing others' production processes	3	11.1	8	29.6	6	22.2	9	33.3	1	3.7
	Access to raw materials	0	0	0	0	3	11.1	19	70.3	5	18.6
	Joint projects and investments	6	22.2	11	40.7	5	18.6	5	18.6	0	0
Trust	No harm	1	3.7	2	7.4	8	29.6	14	14.9	2	7.4
	On-time delivery of raw materials	0	0	1	3.7	2	7.4	21	77.8	3	11.1
	Sharing information	1	3.7	6	22.2	9	33.3	9	33.4	2	7.4
	Reason for co-operation is trust	1	3.7	4	14.8	6	22.2	12	44.4	4	14.9
Mgr struct.	Few hierarchical levels	1	3.7	4	14.8	5	18.6	12	44.3	5	18.6
	Centralised decision making	6	22.2	12	44.4	1	3.7	8	29.7	0	0
	Assigning non-family managers	0	0	1	3.7	5	18.6	12	44.4	9	33.3
	Participative management	0	0	2	7.4	1	3.7	16	59.3	8	29.6
	Support for teamwork	0	0	1	3.7	3	11.1	13	48.2	10	37
Skill level	Availability of qualified employees	1	3.7	9	33.2	3	11.1	10	37	4	14.8
	Effective exec. of work	0	0	1	3.7	6	22.3	12	44.4	8	29.6
	Provision of training	0	0	5	18.5	6	22.3	9	33.3	7	25.9
	Use of process knowledge	0	0	1	3.7	6	22.3	15	55.5	5	18.5
Flexib.	Quick response to consumers	0	0	1	3.7	1	3.7	13	48.2	12	44.4
	Collaboration among employ.	0	0	1	3.7	6	22.2	11	40.8	9	33.3
	Implement technological changes quickly	0	0	1	3.7	5	18.5	13	48.2	8	29.6
	Quick decision-making	0	0	0	0	3	11.1	11	40.8	13	48.1

Table 3. Performance Measures of Denizli Cluster Firms

Items	*Strongly disagree*		*Disagree*		*Undecided*		*Agree*		*Strongly agree*	
	No.	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*
Employee satisfaction	0	3.7	4	14.8	5	18.5	13	48.2	5	18.5
Customer satisfaction	0	3.7	4	14.8	3	11.1	15	55.6	5	18.5
Competitiveness	1	3.7	5	18.5	3	11.1	10	37	8	29.7
Company image	0	0	1	3.7	0	0	17	63	9	33.3
Exports	0	0	6	22.2	9	33.3	9	33.3	3	11.2
Sales	0	0	7	25.9	6	22.2	11	40.8	3	11.1
Market share	1	3.7	5	18.5	6	22.2	13	48.2	2	7.4
Profitability	1	3.7	9	33.3	4	14.8	10	37	3	11.2
Efficiency	1	3.7	6	22.2	4	14.8	9	33.3	7	26

Figure 1. ID Features Displayed by Denizli Firms

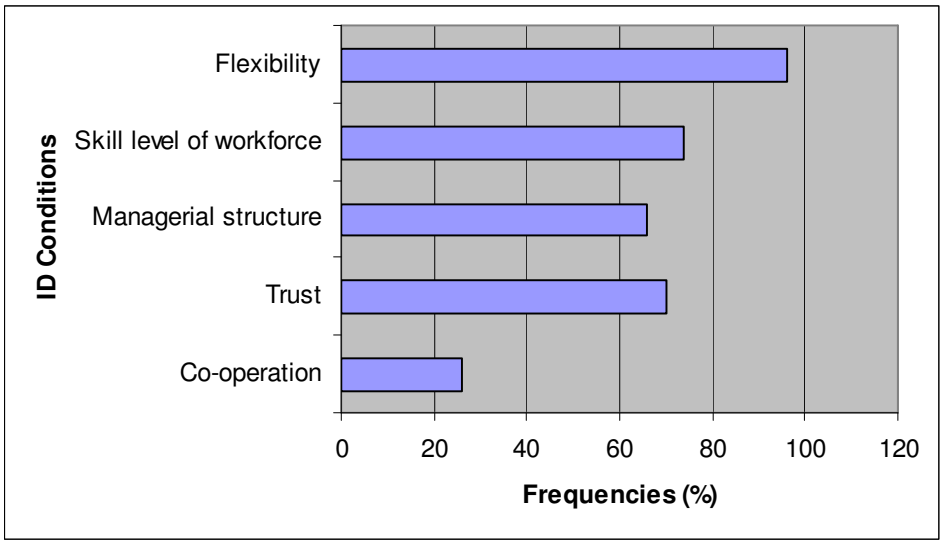

Figure 2. Perceived Increase in Performance through Participation in the Denizli Cluster