

# **The CHANGING ROLE of SMEs and DECLINING COOPERATIVE FORM: The TALE of DENIZLI**

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## **ABSTRACT**

The aim of this paper is to unveil the economic development of Denizli with a special emphasis on the contexts within which conditions of local collaboration reveal itself. The paper conceptualizes evolution of the textile production and collaborative relationships in Denizli as an autopoietic system. In this evolution process, firstly, the establishment of local collaboration relations beginning from the early years of the Turkish Republic to the 1980s is analysed within a historical context. Following this, exploitation of collaboration relations in the 1980s is examined so as to highlight the efforts spent for the integration to the global production networks. And lastly the textile-boom of 1990s is analysed as a transformative pressure upon the textile production organisation and institutional structure. After revealing the basic characteristics of the transforming nature of local collaboration relations, some concluding remarks are drawn in relation to future economic growth of Denizli. What is evident from the paper is that the base of collaborative relations has been weakened during the last two decades. But the tradition of local collaboration in Denizli is so strong that it is possible to argue that there may be still some hope for its reproduction.

## **1. INTRODUCTION**

Important changes have occurred in the conceptual basis of the regional growth approaches in the globalisation process. Before the 1970s, regional economic growth had been mainly depended on the income redistribution and welfare policies of the state. But after the 1970s, it has become difficult to sustain interventionist state policies within the context of globalisation processes. Beginning from the 1970s, the regions in which networks of production, social relations and institutions became unique sources of competitive advantage have been considered as the main agents of economic growth. The recent economic success of these regions has given rise to a set of new theories and models of regional economic growth. A major distinction between the old and new group of theories is the increasing importance assigned to SMEs and collaborative relations.

Among the new theories, the industrial district approach has a leading role because of its ability to explain the nature of complex relationships among SMEs. New models of regional economic growth has evolved since the industrial district approach that are called such as innovative milieu (Camagni, 1991; Camagni and Capello, 1998), learning region (Florida, 1995; Hassink, 1997; Morgan, 1997; Asheim, 1996; Keeble, et al., 1999) and regional innovation systems (Cooke et al., 1997; Todling and Kaufmann, 1999; Asheim and Isaksen, 1997). These kinds of success stories of industrial districts have been observed in many parts of the world, such as Third Italy, Baden-Württemberg, Silicon Valley and Mexico. These success stories are belonged to specialised regions, which have been integrated to global production networks. Within these studies, small-specialised firms and their network relations have been defined as crucial conditions of economic growth in the competitive global market.

As the literature unveil, for small firms, solving problems and responding to changing conditions requires the ability to behave collectively that both increases the possibility of synergy in the local environment and reduces the uncertainty associated with the future (Capello, 1999; Keeble and

Wilkinson, 1999; Morgan, 1997; Keeble, et al., 1999). In turn, collective behaviour necessitates strong forms of trust-based relations. As some empirical studies (Camagni and Capello, 1998; Staber, 1997) reveal, SMEs in growing clusters take part in inter-firm networking in order to resist to contingent environment. However, the dominance of SMEs does not seem to be watertight as a more efficient form of economic and technological organization (see for example Florida and Kenney (1990), Glasmeier (1991) and Schmitz (1999)). Indeed, small firms take part in regional networks as active agents, but they are less able to engage to global networks alone (Camagni, 1991; Scott, 1992). In most of the regions, generally, firstly successful large firms are linked to global networks, then small firms follow these successful firms. Therefore, advantages of global networks can only affect the regions through the network relations of both large and small firms.

Besides the benefits of collaborative local environment, some conflicts and fragmentations in the network relations are also experienced in the industrial districts (Staber, 1997; Eraydın, 1998). These problems, which generally occur in the later stages of development, have led to debates on the issues of local collaborative environment, local embeddedness and institutional thickness. What is evident from these debates is that collaborative relations are more important in the initial steps of growth, enabling small firms to overcome the growth constraints (Schmitz, 1999; Schmitz and Nadvi, 1999). At the later stages of growth, dense local networks and collaborative environment have the tendency to decrease, as they may generate resistance to change and may reduce response to changing environment (Eraydın, 2002). Thus, symmetrical relations among small and medium sized firms seem to decrease in the later stages of growth (Harrison, 1994a and 1994b; Amin, 1999). Especially in eras of crisis, it becomes more and more difficult to sustain collaborative networks (Cooke and Morgan, 1994).

In the later stages of growth, as it is evident from the literature, if the competitive advantage of industrial district is just based on the labour intensive sectors and cheap labour, it may easily lose its earlier collaborative environment and success. A focus on labour intensive export may not automatically lead to sustainable growth and it is required that a shift to other stages, such as design or marketing may be more rewarding aim (Schmitz, 1999). Therefore, if firms specialised in complementary stages and parts of production, it can be easier to sustain the collaborative environment and the success. This paper places the experience of Denizli, which has achieved a remarkable economic development in the last two decades within the context of the theoretical framework the presented above. What is observed in Denizli is a continuous process of structuration through which local collaboration relations among SMEs have played quite important roles in the development and transformation of the textile industry and Denizli as a whole.

Indeed, the recent achievement of Denizli could be attributed to its long tradition of local collaboration relations among the dynamic SMEs (Eraydın, 1998; Pınarcıoğlu, 2000; Erendil, 1998; Küçüker, 1998; Mutluer, 1995). What is striking in the economic development of Denizli is that at the beginning of the 1970s it was a backward region of Turkey with little expectation for its recent success. It is for this reason that Denizli deserves the tag of being an 'Anatolian Tiger'. Unprecedented economic development of Denizli also owes much to its specialisation in the textile production through which it has been articulated into the global production networks and markets since the early 1980s. With the impetus created by the demand in international markets for the products (especially textile products) of Denizli, between 1980 and 1996, the share of Denizli in Turkey with respect to number of firms increased from 1.34 per cent to 2.32 per cent. Between the same period, the share of Denizli in Turkey with respect to number of employees increased from 0.93 per cent to 1.60 per cent. The hidden fact behind these figures is the ability of Denizli in exploiting its long tradition of local collaboration relations which began as early as in 1930s when SMEs had experienced some troubles with the tradesmen who sold their textile products in the domestic markets. This tradition of Denizli has continued up to the mid-1990s in quite different forms ranging from the multi-partner workers' enterprises and dense subcontracting relations of 1970s to the compatriotic capital relations and local routines of 1980s and the Aegean Ready-Garment Producers Association (EGS) of 1990s.

What follows is a historical analysis of this economic development with a special emphasis on the contexts within which conditions of local collaboration reveal itself. For this purpose, the remaining part of the paper is arranged into five main subheadings that discuss the transformation of the local collaboration relations in Denizli among SMEs, and between SMEs and large firms. The first three parts summarize the establishment of local collaboration relations beginning from the early years of the Turkish Republic to the 1980s. The fourth part focuses on how the collaboration relations have been heavily exploited in the 1980s to integrate to the global production networks. In the fifth part, the textile-boom of 1990s is analysed as a transformative pressure upon the textile production organisation and institutional structure. Finally, after revealing the basic characteristics of the transforming nature of local collaboration relations, concluding section remarks on some of the issues about the future economic development of Denizli.

## **2. The ROOTS of the COLLABORATIVE ENVIRONMENT and TEXTILE PRODUCTION**

Artisanal textile (fabric) production in Denizli at least goes back to 2000 years ago (Mutluer, 1995; Batman and Özcan, 1998: 305). Beginning from this early (Greco-Roman) period to the Seljuk and Ottoman period, fabric production remained in its artisanal form (Mutluer, 1995: 11-12). Although towards the end of the Ottoman period and during the early Republican period, there were some production units operating in capitalist sense, artisanal form of (textile) production was still dominant in Denizli (Pınarcıoğlu, 2000; Erendil, 1998). Especially in mountainous and hilly regions of the province, where the land is not suitable for agricultural production, for many centuries, the economy was unavoidably restricted with the artisanal textile production. According to the first industry census conducted in 1927, there were 1581 establishments in all the sectors in Denizli (Mutluer, 1995: 18, 21). The number of establishments operating in the textile sector was 423 (Pamuk, 1998). It should be noted that majority of the people employed in those establishments were family members. Only 9 establishments had more than 10 workers with a share of 2 per cent in the total textile establishments (Erendil, 1998: 180).

Due to the lack of industrial bourgeoisie, in the early years of Turkish Republic, state was heavily involved in industrial development through either establishing state enterprises in different sectors (including textiles) or taking measures to encourage private sector initiatives (Erendil, 1998). This developmental characteristic of the state was so strong that the fate of regions and people was largely depended on the state (Işık and Pınarcıoğlu, 1996: 64). In relation to textile industry, two such developments were experienced during the 1920s and 1930s: (1) ‘the Law for Encouragement of Industry’ (Teşvik-i Sanayi Kanunu) and (2) cotton yarn factories established by the state. According to ‘the Law for Encouragement of Industry’ which was put into act in 1927, only big establishments with minimum 10 horse power capacity could utilise the incentives (tax exclusions and provision of land) designed for the development of private initiatives. But, none of the textile firms operating in Denizli had enough capacity to be covered by the law (Erendil, 1998: 177; Pamuk, 1998: 9). During the 1930s, the state also opened four cotton yarn factories but again none of them was located in Denizli. Two of the factories were established in Bursa (Pınarcıoğlu, 1998) and another one from that textile producers in Denizli both cotton yarn was put into operation in Nazilli (Eraydın, 1998).

As it is evident from the above, in the early years of Republican Period, the opportunities available for the transition of Denizli from artisanal form of production to capitalist-modern form of production was very limited. For a long time, textile producers “either worked as subcontractors for the tradesmen who provided the cotton yarn or worked independently by buying the cotton yarn from tradesmen within a credit system and selling their products in the markets in the province center, or in other districts themselves” (Erendil, 1998: 181). It is observed that the first forms of collaborative relations appeared under these circumstances. Indeed, in Denizli the tradition of local collaboration can be traced back to the 1930s. Beginning from 1930s, many small textile producers in Denizli with the backing of the state had established cooperatives in order to protect themselves

from the tradesmen who sold their fabric or controlled the textile production. Consequently, at the end of 1930s, there were 5 textile cooperatives in Denizli (Mutluer, 1995: 26-27, 96). These cooperatives which provided their members with the cheap cotton-yarn enabled them to enter into the markets previously dominated by the tradesmen (Erendil, 1998: 178; Pınarcıoğlu, 2000; Mutluer, 1995: 26-27). At first glance, the fact that Denizli did not receive important public investments directed towards industrial production can be considered as a negative factor for the economic development of Denizli. But, as Şengün (1998: 94-95) argues, in the 1930s and 1940s this situation, giving rise to (textile) cooperatives, helped the formation of an entrepreneurial spirit and collaborative environment in Denizli.

II. World War had further strengthened the creation of dense collaborative relations. As the import of the cotton yarn became more and more difficult due to the war conditions textile producers in Buldan and Babadağ, historically the most important centers of textile production in Denizli, were initially affected from this quite negatively. On the one hand, most of the textile producers in Buldan began to migrate to Istanbul with which they historically had close trade relationships. On the other hand, a small number of producers in Babadağ who produced mainly for Anatolian markets chose to migrate to Denizli province center and other Anatolian province and district centres (Pınarcıoğlu; 2000). In order to prevent black market conditions caused by the war in cotton yarn provision, in 1941 the state gave the responsibility of distributing cotton yarn to Sümerbank, the state enterprise which was responsible for textile production (Erendil, 1998: 178). When the Turkish government introduced strict regulations over the distribution of cotton and cotton yarn, the cooperatives, established during the 1930s, took important responsibilities for the distribution of cotton yarn given by Sümerbank (Mutluer, 1995: 28). During this period, cooperatives were such good practices that in 1946 the number of textile cooperatives in the province center increased to 16 (Erendil, 1998).

Due to the existence of these cooperatives, it can be argued that subcontracting relations in Denizli developed in a more symmetrical nature with respect to the distribution of formative power among the textile producers. Further, as Erendil (1998) and Mutluer (1995) argue, state control over the distribution of cotton yarn through the cooperatives, to a certain extent, has weakened the importance of tradesmen and made it possible for textile producers to accumulate some amount of capital. Last, but not least, with the help of cooperatives, small textile producers in Denizli also began to learn the collective responsibility and develop a tradition of mutual trust-support (Eraydın, 2002; Erendil, 1998; Pınarcıoğlu, 2000). However, in 1940s various measures taken by the state prevented the formation of workshops in the capitalist sense (Erendil, 1998: 179) the Law for Encouragement of Industry was phased out in 1941 and 'Extraordinary Income Tax' was put into force in 1944. As a result of these legislations, many textile producers in Denizli, like in other parts of Turkey, abandoned the workshop type production and reinitiated artisanal-home production in order to be exempted from the new taxes put into act (Mutluer, 1995: 27; Karaalp and Batmaz, 1998: 103).

### **3. The STATE INVESTMENT ERA and the FIRST TECHNOLOGICAL TRANSFORMATION in DENİZLİ**

After the II. World War, the state decided to open five new cotton yarn factories. In 1953, one of these factories was established in Denizli province center (Mutluer, 1995: 30). This factory was the first modern factory in Denizli and employed 500 workers. In the early 1960s electricity also started to be used in Denizli province center. This led the first great technological transformation in the textile industry of Denizli: a lot of electric-driven looms were bought from Bursa, Adana and Merzifon (Erendil, 1998: 182; Pamuk, 1998). All these developments paved the way for the development of Denizli province center as the center of textile production of the province (Pınarcıoğlu, 2000; Eraydın, 1998). Consequently, Denizli has attracted population from its districts, especially Babadağ (Pınarcıoğlu, 2000). These cheap and skilled labours have been

intensely exploited by the producers who succeeded to accumulate some amount of capital in the previous period (Erendil, 1998).

Under these circumstances, during the 1960s many small but modern textile firms were established in Denizli province center (Pınarcıoğlu, 2000). Even local producers started to produce their own electric-driven looms (Erendil, 1998: 181). “The possibility of increasing production due to the widespread use of electricity *and availability of cheap cotton-yarn provided by the Sümerbank factory also*” led various producers from the districts of Denizli, especially Babadağ, or various large family groups to form factory type establishments by combining their capital” (Erendil, 1998: 182). According to the industry census conducted in 1964, in Denizli there were 626 wage workers employed by 13 private textile firms (Pınarcıoğlu, 2000). These *relatively large firms* were the first attempts for capital accumulation for the members who could establish their own family firms in the following years. As Erendil notes (1998: 182), “other than making production themselves, these stronger groups could also extend their loom capacity through dependent subcontractors in Denizli”. Indeed, during this period, the relationship between producers in the districts and tradesmen or subcontracting firms in Denizli was very dense. As the textile industry was relocated and concentrated in the province center, trade has also become very important and attractive for the textile producers (Pınarcıoğlu, 2000).

In 1964, as the factory established by Sümerbank began to produce fabric and initiated printing and dyeing operations (Erendil, 1998: 36), small textile producers in Denizli compared with the other districts specialized in the textile production were no longer able to get cotton-yarn as cheaply and easily as before (Eraydın, 1998). Although in the late 1960s this hindered the operations of many small textile producers in Denizli (Eraydın, 1998), consequently in 1970s a few private sector firms started to establish new cotton-yarn factories and also provide small firms with modern cotton-yarn treatment (Pınarcıoğlu, 2000). What is crucial in this story is that, as Pınarcıoğlu (1998) argues, due to the existence of more than one firm producing cotton yarn and providing cotton yarn treatment, ‘there was no de facto cartel’ in Denizli. Anyway, the effects of extension of the operations realised by Denizli Sümerbank factory were initially negative. However, it should be also equally noted that with the introduction of new production facilities the number of employees in Sümerbank fabric factory rose from 543 to 1400 (Erendil, 1998: 183).

#### **4. The COLLABORATIVE RELATIONS in the CROSSROADS: DENİZLİ vis-a-vis the CRISIS of 1970s**

During the 1970s, Denizli received important amounts of investments in quite different sectors. In this period, two factors were critical in the economic development of Denizli. Firstly, in 1973, Denizli was designated as a province having priority for development (Mutluer, 1995). As Eraydın (1998) argues, inclusion of Denizli among the first priority regions primarily aimed at the elimination of the problems associated with the extension of cotton yarn production of Denizli Sümerbank factory into the fabric production and printing-dyeing operations. As a result of this decision, public investments to Denizli, especially to its manufacturing industry were fairly increased (Işık and Pınarcıoğlu, 1996: 66). First priority region status of Denizli had continued up to 1981. However, after 1980 many firms in Denizli have continued to utilise from other ‘investment incentives’ given by the state (Mutluer, 1995).

The second important factor in the economic development of Denizli in 1970s was the investments realized by the Turkish emigrants working abroad (especially in Germany) (Mutluer, 1995: 74-77; Eraydın, 1998; Pınarcıoğlu, 2000 and 1998). In Turkey, the basic thrust behind the establishment of workers' enterprises was to eliminate the problems that would have been experienced if Turkish emigrants working abroad had returned to country due to the plant closures and job losses caused

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\* Italics in quotations are ours.

by the crisis of the 1970s. During the period of 1971-82, in Denizli approximately 20 firms were established as multi-partner workers' enterprises (Pınarcıoğlu, 2000). Only a limited number of these firms operated in the textile sector and most of them became unsuccessful (Erendil, 1998: 185; Mutluer, 1995: 76). But the experience accumulated through these investments helped the transfer of technical know-how from abroad to Turkey and created an atmosphere of local entrepreneurship (Pınarcıoğlu, 1998).

In the 1970s, two factors mentioned above together with the family groups accumulating capital in the previous periods gave rise to the emergence of new firms in quite different sectors ranging from electronics to textile and food industry. During this period, Denizli experienced a relative sectoral diversity. Between 1971 and 1979, the number of firms operating in Denizli and employing more than 10 workers increased from 34 to 95 (Erendil, 1998: 187). The number of firms operating in the textile industry was 21 (Pamuk, 1998). As Pınarcıoğlu (2000) argues and it is also evident from the studies of Mutluer (1995), Pamuk (1998) and Erendil (1998), among the newly established textile firms three had critical importance for the economic development of Denizli.

One of these firms, employing 500-600 workers, was established in 1975 by the Turkish emigrants working abroad in order to produce cotton-yarn. Another one, employing more than 200 workers, was again producing cotton-yarn and established in 1977 by a family who, in the late 1940s, migrated from Babadağ to Denizli province center. The last one, Denizli Dyeing and Printing Factory, was founded by 174 partners (including both textile producers and tradesmen) and it was the first big establishment providing the small textile producers with modern cotton-yarn treatment, dyeing and printing facilities. As it is argued earlier, co-existence of these establishments (both public and private enterprises) hindered any tendency directed towards the formation of a cartel over the provision and treatment of cotton-yarn in Denizli. However, as Erendil argues (1998: 186), "although polarization intensified after 1980s, it can be easily claimed that the actors or 'leaders', who gave the first impetus to growth by responding to favourable conditions of the 1980s, were *also* determined in the 1970s". Apart from these large firms, in Denizli province center, in 1980 there was 1,700 firms each of which employed less than 10 workers (Pınarcıoğlu, 2000).

It should be noted that in Denizli compared with the other districts specialized in the textile production, subcontracting relationships between the textile producers during 1970s, was very dense and highly symmetrical (Eraydın, 2002; Pamuk, 1998; Kazdağlı, 1998). The thickness and symmetrical nature of subcontracting relationships have stemmed from both the tradition of establishing cooperatives experienced in the earlier period and the reciprocal production relations required for textile production. As Pamuk (1998) argues, the development of fabric production in Denizli gave rise to division of production tasks among different firms specialising in different parts of the textile production (cotton gin, dyeing and printing, cotton yarn production). These reciprocal production relations and the multi-partner workers' enterprises of 1970s can be considered as the different forms of collaboration relations that have dominated the textile production of Denizli so far.

## **5. The INTEGRATION to GLOBAL PRODUCTION NETWORKS: CO-EXISTENCE of SMALL and LARGE FIRMS in DENİZLİ**

In the second half of the 1980s, as consequences of export oriented development policies, Turkey became one of the most important textile exporting countries. Small firms become important agents of this integration process, however they were seen as the main source of employment generation before export boom of 1980s. This favourable environment has been fuelled by two important sources: (1) the potential of the region, related to the past experience of industrialization, and the capital accumulated in the hands of various family or capital groups'; (2) the state incentives and measures, designed to promote exports.

It has also been noted that collaborative environment in Denizli has been the major facilitator of growth process which is defined by Erendil (1998) as ‘the following successful examples’. In collaborative environment of Denizli, some entrepreneurs, who had strengthened their position in terms of capital accumulation and marketing relations in earlier stages of growth, started to enter into the export markets. They have also been important in generating growth motivation and become the initiators of local transformation and specialization in towel and bathrobe production (Pınarcıoğlu, 1998). In this process, trade firms operating in Istanbul and foreign fairs were the important ways of integrating to export markets and fulfilling the subcontracting requests of western enterprises. The leader firms of Denizli through subcontracting relations with western enterprises in textile industries drew many medium-sized firms to export oriented production field. Because, the total production capacity of export firms was not enough to meet the demands of export markets and most of the time labour intensive stages of production have been subcontracted to small firms (Erendil, 1998). This interactive environment has attracted a large number of small firms to benefit from opportunities of the town. In this period, enterprises learned many things about export-oriented production and export markets by way of the local network relations and the trial and error method. In other words, the basic characteristic of this integration process could be defined as “learning by doing” and “learning by interacting”.

The leading firms, producing for the global markets, were forced to improve their technology and quality to adapt to international production standards. During this period, Denizli has upgraded its production technology in a step by step fashion from large firms to small ones. Firstly, some leader “firms started to investment in machinery, especially the second hand machinery from Italy and started to export basically home furnishing products (bed sheets and other fabrics) to Middle-Eastern countries and EU countries” (Erendil, 1998: 192). Additionally, small firms were also able to upgrade to the minimum level of technology required for the export markets through again the second hand market, which has been created by the local large and medium size firms that either renewed their machinery stock or enlarged their production capacities. This upgrading process has resulted in such a local technological configuration that the levels of technology employed in large and small firms were more or less complementary or similar to each other, which played a very important roles in the establishment of the subcontracting relationships between large and small firms (Kazdağlı, 1998; Aslanoğlu, 1998).

In this transformation process, local collaboration and mutual trust, established among the small and medium sized firms, have been the driving force behind the rapid growth in Denizli (Pınarcıoğlu; 2000: 230). It has been also emphasized that collective learning and adaptation potential of local actors have played an important role in the integration process to export markets. Cooperative form was built upon both the formal relations and the informal relations of close friendship, kinship and township. Being from the same area or being from the same family has always been very important in the establishment and growth of firms (Eraydın, 2002). Eraydın (2002) also notes that the development of entrepreneurship in Denizli has been mainly based on family ties through which the capital needs of the small entrepreneurs have been met. Partnerships have been formed between both the members of the family and the friends with similar backgrounds due to the place of birth, and trust-based relations formed in pervious periods (Erendil, 1998; Varol, 1999). In this respect, a general strategy that was widely used by the textile producers in Denizli during the 1980s, has been the establishment of partnerships on temporal basis. Thus, the partnerships were generally broken down when the members successfully adapted to the market conditions and accumulated a certain amount of capital required for the establishment of their own firms.

Although market capitalism has weakened most of the peasant culture values, it seems that township relations are still very important among the social institutions in Denizli (Eraydın, 2002). Compatriotic relationships especially seem to be strong among the textile producers born in Babadağ. The partnerships and mutual aids in the form of provision of information and capital were very dense among the producers born there. Pınarcıoğlu (2000) also notes that within the context of compatriotic relationships textile producers from Babadağ have helped each other in the export

markets. It is no a surprise that these producers have become very successful in export markets and taken the leader positions in the textile industry of Denizli. Mutual trust among the producers born in Babadağ is such that no official contract is signed in most cases in transactions between them. The well-known ‘Babadağ Banknotu’<sup>1</sup> is a case in this respect (Küçükler, 1998; Şengün, 1998). As Erendil (1998: 223) notes, “being from Babadağ has a high reputation among producers who seem to be proud of being from that district and contributing much to the improvement of textile production in Denizli”.

Consequently, 1980s could be considered as the initial stage of integration process to global production networks. In this process, small and large firms' relations were generally constructed through sub-contracting relations, which depended on long textile tradition and relatively homogeneous local environment. Besides the help of collective environment and trust-based local relations, cheap and skilled labour potential of SMEs in textile industries has been important for taking a place in global markets. Friendly relations of small and large firms have been lost in the later stages of growth and the role of SMEs in growth process has transformed in Denizli.

## **6. The FRAGMENTATION of COLLABORATIVE ENVIRONMENT and INSTITUTIONAL SPLIT**

In Denizli, the export boom came in the first half of the 1990s with the help of the local opportunities and state incentives in textile sector. During the period of export boom, catching up the international standards in the quality of products became crucial. But, in the beginning of 1990s “the quality of production in Denizli stayed behind the international market requirements” (Eraydın, 2002). For this reason, leading firms started to modernise their machinery by importing automatic looms. In this technological renewal, like in the first one, state took important responsibilities such as decreasing the minimum investment requirements for investment incentive certificate in the beginning of the 1990s (Erendil, 1998). Therefore, this gave opportunity to many small and medium sized firms to update their machinery besides large leader entrepreneurs.

In the export boom era, many new entrepreneurs have entered the market in order to benefit from opportunities of Denizli. Consequently, the number of firms and employees and the amount of textile exports of Denizli have increased sharply in the 1990s (Table.1). Between 1990 and 1992, the number of textile establishment has increased from 36 to 82. In the same period the number of textile employees has increased from 6638 to 9114. The rate of the increase at the number of textile establishments has been four times more than the rate of the increase at the number of employees. In other words, it is possible to argue that the number of small firms in textile has dramatically increased. This rapid increase has turned into a boom between 1992 and 1997, during which the number of textile establishment has increased from 82 to 276 revealing a specialization in textile related industries.

During the growth process, the firms entering the market with a small size have evolved to different scales from small to large ones. In this evolution of firms, two different types of producers have formed in Denizli. The first type of producers produces low quality goods with old technology for domestic markets. The second type of producers produces high quality goods for international markets. The increasing gap between these two different types of producers has caused an asymmetric environment, which led to the domination of a few numbers of large firms in Denizli.

In the beginning of 1990s, a tendency emerged in leading firms to integrate all complementary parts of the production in the firm in order to catch the quality demand of Europe and USE markets (Erendil, 1998). Technological upgrading, supported by the state policies in 1990s, has made

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<sup>1</sup> ‘Babadağ Banknotu’ is a simple paper used as bearer securities. On these papers, it is generally written that ‘*this amount of money will be paid to bearer on this date*’.



possible integrated production but decrease subcontracting relations in Denizli. However, during the 1980s, small and large firms used complementary technologies in production and no major problem had been experienced between the subcontractor and subcontracting firms. In order to meet the increasing quality expectations, in 1990s, export firms preferred integrated production instead of subcontracting due to the inadequate characteristics of small subcontractors.

After the middle of 1990s, due to the effects of economic crises and changing strategies of large firms, the number of SMEs and employees began to decrease (Table 1). A large number of new comers, especially those having weak kinship and township relations, could not survive in the crisis of the late 1990s, and closed down. Consequently, entry to the market was no more as easy as it had used to be (Işık and Pınarcıoğlu, 1996). From 1997 to 1999, the number of small sized establishments has decreased from 296 to 228 (%23) and the number of employees has also decreased. However the number of large firms has increased from 31 to 36. This limited growth shows that although in the initial stages of growth, the emergence of large leader firms had been considered as the initiators of local transformation, in the later stages small firms have been forced to secondary position due to the domination of large firms.

Table 1 – The number of establishments and employees in the Textile sector of Denizli compared with the total of all sectors according to the size of the establishments.

Year	Size of Establishment	Number of Establishment	Number of Textile Establishment (share of textile)	Number of employees	Number of Textile employees (share of textile)
1980	<b>Total</b>	<b>117</b>	<b>29</b> (%25)	<b>7452</b>	<b>3865</b> (%52)
1985	<b>Total</b>	<b>115</b>	<b>37</b> (%32)	<b>9679</b>	<b>4302</b> (%44)
1990	<b>Total</b>	<b>99</b>	<b>36</b> (%36)	<b>12201</b>	<b>6638</b> (%54)
1992	Small(10-49)	108	47 (%43)	2304	959 (%42)
	Medium(50-249)	44	24 (%55)	4495	2682 (%60)
	Large(249+)	16	12 (%69)	7174	5423 (%76)
	<b>Total</b>	<b>168</b>	<b>82</b> (%49)	<b>13973</b>	<b>9114</b> (%65)
1997	Small(10-49)	296	182 (%61)	6500	4042 (%62)
	Medium(50-249)	100	67 (%67)	10859	7637 (%70)
	Large(249+)	31	27 (%87)	17080	15213 (%89)
	<b>Total</b>	<b>427</b>	<b>276</b> (%65)	<b>34439</b>	<b>26892</b> (%78)
1998	Small(10-49)	241	144 (60%)	6029	3651 (60%)
	Medium(50-249)	93	63 (68%)	10337	7192 (70%)
	Large(249+)	37	32 (86%)	20214	18068 (89%)
	<b>Total</b>	<b>371</b>	<b>239</b> (64%)	<b>36580</b>	<b>28911</b> (79%)
1999	Small(10-49)	228	133 (58%)	5479	3231 (59%)
	Medium(50-249)	94	61 (65%)	10679	6918 (65%)
	Large(249+)	36	32 (89%)	19034	17277 (91%)
	<b>Total</b>	<b>358</b>	<b>226</b> (63%)	<b>35192</b>	<b>27426</b> (78%)

Source: SIS, Unpublished Manufacturing Statistics (only establishments with more than 10 employees are included).

In the local transformation process, network relations have become much more loose and fragmented due to the unequal power relations among the firms (Pınarcıoğlu, 2000: 244). Since the middle of 1990s, the interfirm relations have changed and the necessity of collective action has diminished, as the demand has been guaranteed in global export markets (Erendil, 1998; 113). Eraydın (2002) emphasises that “local collaborative relations, which have been very important in

the initial stages of growth, may be less effective in the later stages due to increasing competition". Indeed, in 1990s, large number of large and small firms competed on similar products. In this process small ones have become more vulnerable, compared with the big firms, due to the lack of financial resources, lack of adequate skills, and lack of supporting institutions (Özcan, 1995; Erendil, 1998). Therefore in Denizli, the current loose and fragmented networks lead to the declining collaborative environment. Moreover, now the production networks expand beyond the boundaries of the locality. This transformation process brings not only the loss of subcontracting relations but also more flexible relations.

During the period within which large firms integrated their production facilities, the problems, experienced by the SMEs, gave rise to new forms of collaborative practice in Denizli. In the 1990s, one of the most important developments for SMEs was the foundation of a many-partnered foreign trade company: the Egean Ready-Garment Producers Association (EGS)" (Pınarcıoğlu, 2000: 237). EGS was founded by small enterprises to compete with the leading large firms in 1993 (Eraydın, 2002). The aim of this company has been to provide services, such as export, transportation, and insurance through the collective companies. In 1996, a bank and a trade firm were founded to solve the financial and export related problems. The success of EGS model originated from supplying major needs of small producers, which depending upon solidarity, mutual trust and self-help tradition (Eraydın, 2002). Therefore, this organisation shows that today capitalist type of institutions start to take the place of traditional communitarian relations, such as kinship, township and ect.

In the crisis era, large number of firms have been affected negatively and closed down. Crisis conditions have put the existing products, production organization and network relations into doubt. It seems difficult for the town to continue to articulate with the global textile network as a producer of towel and bathrobes. In this period, EGS has lost its collaborative basis and also its power in Denizli. Although the share of each members could not be more than 3 percent, the dominance of large firms had become obvious in the decision making process in EGS. Conflicting interests could not survive in the same institutions and different power groups have constituted their own institutions in order to keep and increase growth rates within the highly competitive and crisis era.

Small firms and large firms have been belonging to different collaborative associations and institutions due to the differentiated aims and problems. The chamber of Industry includes, firstly, large enterprises and Association of Industrial Entrepreneurs (SIAD), which is another institution of large firms. In the end of the 1990s, the number of associations has increased, which hold usually small enterprises. The most important group among them is MUSIAD (Independent Entrepreneurs Association), which has been constituted by Muslim entrepreneurs (Eraydın, 2002; Pınarcıoğlu, 2000) to implement rules of Islam in economic activities. Under these conditions, many small communities that were newly emerging have caused an institutional split in Denizli.

## **7. CONCLUSION**

The evolution of collaborative relationships in Denizli seems to be imprinted with some of the characteristics of the autopoiesis. In the normal sense of the term, poiesis refers to some kind of a state of equilibrium. But autopoietic systems are open systems and "can maintain themselves in time only if they evolve the capacity to replicate or reproduce their structures" (Laszlo, 1987: 38 quoted in Hodgson, 1999: 262). As Hodgson (1999: 262) argues, "just as the features of a plant may change during its growth, autopoietic development in economic systems does not, within limits, exclude changes in technology and tastes". It is within this context that economic growth of Denizli exhibits autopoietic characteristics. The conceptualization of evolution of the textile production and collaborative relationships in Denizli as an autopoietic system mainly stems from the fact that it has an ability to reproduce its collaborative capacity, in the face of internal and external conditions of change.

Up to 1970s, these relationships develop in a symmetrical nature with respect to the distribution of formative power among the firms dealing with the textile production. During this period, cooperatives of 1930s and 1940s seeded the first forms of collaborative practices into the textile sector of Denizli. In the crisis period of 1970s these collaborative practices reproduced themselves in the forms of multi partner workers' enterprises and reciprocal production networks of the textile industry. During the 1980s collaboration relations have been heavily exploited and textile industry in Denizli culminated into a structured whole within which formative power among SMEs and especially between SMEs and large firms has been distributed in an asymmetrical nature. The important transformations occurred in the production organization and institutions that could be considered as the reproduction of the cooperative type of organisation within the contemporary conditions of 1990s. Although cooperatives had worked as a "survival strategy" for artisans between the 1930s and 1970s, in the 1980s and 1990s the collaborative environment could be seen rather as a "growth strategy" for exporters.

This growth strategy has weakened the collaborative basis. But the tradition of local collaboration in Denizli is so strong that it is possible to argue that there may be still some hope for its reproduction. According to the recent literature flexible network and flexible trust may give more response to contingent environment than strict local networks, as adaptive value only in stable and simple environment. Recently, heterogeneous environment and more flexible network relations in Denizli have enhanced the chance to respond to uncertain environment. Consequently, it may be advocated that tradition of local collaboration in Denizli is reproducing itself in recent flexible and issue specific network relations.

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