THE ROLE OF LOCAL CAPABILITIES IN THE EXPORTING SMES AND THEIR ROLE IN THE REGIONAL ECONOMIC GROWTH: THE CASE STUDY OF ANKARA

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
OF
THE MIDDLE EAST TECHNICAL UNIVERSITY

BY

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IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER
IN
THE DEPARTMENT OF CITY AND REGIONAL PLANNING

December 2003

Approval of the Graduate School of Natural and Applied Sciences.

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ABSTRACT

THE ROLE OF LOCAL CAPABILITIES IN THE EXPORTING SMES AND THEIR ROLE IN THE REGIONAL ECONOMIC GROWTH: THE CASE STUDY OF ANKARA

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December 2003, 147 pages

In the literature there is a great emphasis on the theories of regional growth and development. In many theories, the role of small and medium sized enterprises (SMEs) in the economic growth and development of different regions has been widely discussed. Therefore, there is an emphasis upon the importance of the SMEs in the growth and development of the regional and national economies.

The aim of this study is to clarify the role of local capabilities in the exporting SMEs and consequently define their role in regional growth and shed some light on the situation of the local capabilities in Ankara province. Therefore, in this study, firstly the theoretical framework of regional growth theories and the role of exporting SMEs in the regional economic growth are constructed. Secondly, the increasing role of different types of SMEs in the regional growth and their defining characteristics are discussed. Thirdly, brief remarks on SMEs in the Turkish economy and Ankara have been provided. Afterwards, the main hypothesis of this study tested through the results

obtained from the survey that was done with SMEs in Ankara province and success factors of SMEs are drawn from the in-depth interviews. Finally, by making a general evaluation some policy implications have been drawn.

Keywords: Growth theories, SME, innovative milieux, system of innovation, localization, institutionalization, learning, industrial districts, networks, trust and reciprocity

ÖZ

YEREL OLANAKLARIN İHRACATÇI KOBİLERDEKİ ROLÜ VE ONLARINDA BÖLGESEL KALKINMADAKİ ROLÜ: ANKARA ÇALIŞMASI

ÇELEBİ, Deniz

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Tez Yöneticisi: Prof. Dr. Ayda ERAYDIN

Aralık 2003, 147 sayfa

Yazında, bölgesel gelişme ve kalkınma teorileri çokca vurgulanmaktadır. Bir çok teoride, küçük ve orta ölçekli işletmelerin (KOBİ), bölgelerin ekonomik gelişmesinde ki ve kalkınmasında ki rolü genişçe tartışılmaktadır. Dolayısıyla, KOBİlerin ülkelerin bölgesel ve ulusal kalkınmalarında ki ve gelişmelerinde ki önemi vurgulanmaktadır.

Bu çalışmanın amacı, yerel olanakların ihracatçı KOBİlerde ve tüm bu KOBİlerin bölgesel kalkınmadaki rollerini aydınlatmak ve Ankara ilindeki yerel olanakların durumunu belirtmektir. Bunun için, çalışmada, ilk olarak bölgesel kalkınma teorileri ve KOBİlerin bölgesel kalkınmadaki rolleri ile kuramsal bir altlık oluşturulmakta, ikinci olarak da farklı yapıdaki KOBİlerin bölgesel kalkınmada ki artan rolleri ve onları belirleyen özellikler belirtilmektede; bunu takiben Türkiye ekonomisinde ve Ankara da yer alan KOBİlere değinilmekte daha sonar da temel hipotezler, Ankara ilinde bulunan firmalarla yapılan anket çalışması sonuçları ile test edilmekte ve başrıya yol açan faktörler

bire bir yapılan görüşmeler sonucunda belirlenmektedir. Son olarak, genel bir değerlendirme ve durum tespiti yapılarak bazı çıkarımlar elde edilmektedir.

Anahtar Kelimeler: Kalkınma teorileri, KOBİ, buluşçu çevreler, buluşçuluk sistemleri,yerellik, örgütlenme, öğrenebilirlik, sanayi bölgecikleri, ağlar, güven ve sinerciler.

To My Beloved Father

ACKNOWLEDGMENT

I would like to acknowledge my deepest thanks to Prof. Dr. Ayda Eraydın for her kind and valuable guidance, constructive criticisms and encouragement from the begging of the thesis until the end.

I would like to thank my friends from the university and UNHCR for their support and help during completion period of the thesis. Very special thanks to Kevser Güler for her valuable and very kind help and support. Special thanks to Mahmut, for his support and encouragement. Many thanks also to a number of people from different institutions for their provision of written documents and many thanks to the firms accepting interviews.

Finally, I would like to express my deepest gratitute to my family and especially to my beloved father and mother. Without their encouragement and deepest support I could never have start and complete this master program.

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CHAPTER I

INTRODUCTION

There were major changes in the approaches related to the regional growth factors and parallel to this there was a great deal of information in the literature regarding the theories of regional growth. Small and medium sized enterprises (SMEs), started to be accounted for a majority of business establishments and they mainly started to play an important role in the economic growth and development for many different regions. There is an emphasis upon the importance of the SMEs in the growth and development of the regional and national economies for developed countries in addition to the developing ones in the recent literature.

The aim of this study is to clarify the role of local capabilities in the exporting SMEs and consequently define their role in regional growth and shed some light on the situation of the local capabilities in Ankara province of Turkey.

The first chapter of this thesis is related with the theoretical explanations regarding the regional growth theories. Here, the importance of SMEs in the process of regional growth; situation in the past and their present role have been discussed in detail.

Although, there is no worldwide accepted theory or model explains the growth process of small and medium sized firms, an attempt has been made in the last part of the first chapter to define the different theories and approaches that have been developed to explain the growth process.

After giving a brief definition of small and medium sized enterprise; definition of their qualitative and quantitative criteria, different types of SMEs have been discussed in the second chapter. Innovative, learning, networking and exporting SMEs play vital role in the process of regional growth and to provide better understanding of this subject a detail explanation has been made in the second part of chapter two.

In the third chapter of the thesis, the historical background of small and medium sized enterprises in the Turkish economy has been given in detail. The study has continued by explaining the historical development of Ankara and the role of SMEs and recent available data has been presented. The next part of this chapter is related with the aim, developed hypothesis and used criteria for these hypotheses. In the following part the methodology of the research has been explained. The final part is related with the general outputs that have been obtained from the questionnaire.

The last chapter of this study is related with the in-depth interview results. In this chapter detailed interview notes has been given and the final findings has been discussed and general conclusion has been drawn. In the conclusion part of the thesis,

there is a general evolution of the Turkish small and medium sized enterprises and following this there are some policy implications for further development.

1.1 REGIONAL GROWTH THEORIES

Regional growth and development is a complicated process as it falls into the domain of many different disciplines and although if it was possible to put each theory into each field, their boundaries would still not be clearly defined as by adding new propositions, one can shift theories from one group into another as well as expand the content of a theory by establishing smooth relations with various theories of social change and development (Tekeli, 1978). From past until today, many different regional growth theories have been developed. Before 1970's the explanations were different than it is now. Attempts to theorize the regional growth process started to be considered differently after 1970's as the result of the crises that took place in the traditional regional policy (Eraydın, 2003). Before, there were theories of linear stages where growth considered simply as the matter of increasing saving and investment and this process required institutional structural and attitudinal conditions such as well integrated commodity markets, skilled and educated work force, developed transportation facilities and a good governmental bureaucracy. Export base, cumulative causation and growth pole theories are some of the theories that were developed beside the traditional neoclassical theory to explain the process of growth.

Export base theory is an alternative theory for regional growth. It shed lights upon the openness of regional economies and the distinction between locally consumed goods

and exported goods. Export base theory has been used mainly in regional impact analysis. North (1955) applied this to the study of regional growth and later on Hartman and Seckler (1967) modeled the export base theory more explicitly within a Keynesian frame of work (Amos, 1996).

The main assumption of this theory is the regional activities are dependent on the activities that specialized in particular basic goods that were exported outside the region and the regional economies develop mainly around these activities. North (1955) was the first person who recognized the role of export activity in the growth of a region. He argued that `it is evident that this growth [of regions] is closely tied to the success of its experts and may take place either as a result of improved position of exiting experts relative to competing areas or as a result of the development of new exports (North: 251, 1955; Amos, 1996: 97).

According to North`s approach regions, try to develop their existing base by performing activities or engaging in innovative activities that reduces both the production and transfer costs. The focal point in this theory is that there is concentration upon the importance of a dominant industry and the other economic activities are dependent upon this industry (Amos, 1996).

Cumulative causation firstly proposed by Myrdal in 1957, this theory contradicts with the neoclassical theory in terms of the equilibrium nature of neoclassical analysis. According to the cumulative causation theory regional growth can be explosive rather

than stabilizing under certain conditions. Agglomeration economies and increasing returns to scale are the two main factors that the cumulative causation theory based on. The main aspect of the theory is the existence of two effects; back wash effect, which is the effect takes place when one region, through the impetus of cumulative growth, expands at the expense of another region and the second effect is the spread effect, which is a result of growth of one region and this growth extends too and promotes growth in another region (Amos, 1996)

Growth pole cycles developed by Perroux (1955) then supported by Hirschman (1958), Hansen (1967) and Lasuén (1969). The basic explanation of this theory is that "growth does not appear everywhere at the same time, it became manifest at points or poles of growth, with variable intensity, it spreads through different channels, with variables terminal effects on the whole economy (Perroux, 1955: 94; Amos, 1996: 95). Schumpeter's analysis of innovation based on economic cycle was the starting point for Perroux to develop the growth pole cycles. So, there is an emphasis on innovation and spatiality in this theory. According to this theory, the initial development will take place earlier and faster in a certain geographical location where the cluster of innovation is located and then the dissemination of the growth will take place in the other locations and the other parts of the economy.

Neo-classical theory has been used frequently to analyze the observed patterns of regional growth (Borts, 1960; Borts and Stein, 1964; Vinod, 1973; Smith, 1974 and 1975; Amos, 1996). But a revision needed for the neo-classical theory in order to explain the new growth movement that started to take place in the new world.

Economies, have proposed various strategies to assure that development does occur and thus, economists had to develop new theories for these new developments as regional development started to be affected directly by the world-wide globalization process and science based developments of economies starting from 1980s. So, there was a need to revise the theories that explains the process of growth.

Divergence theories have received the most attention, by researchers and economists in explaining the process of growth after 1980s. Extreme views and moderated views are the 2 parts of the divergence theories. According to the first part, the rapid emergence of sharp differences among regions will cause to the economic development of that region. In other words, rich regions develop fast and poor ones remain at the same level of development or even decline. However, the second part claims that the economic development does not result in a visible decrease in regional differences. One of the divergence theories is the cumulative growth theory. According to this theory the richer regions attract capital, qualified labor and other production factors and that's why the forces of the market do not guarantee an even distribution of production factors or income. In this theory there are cycles. The first cycle is the beneficial cycle where the richer regions attract all the required factors of production and as a result of this they will develop more rapidly than the others. However, the second cycle is related with the negative effect of the cumulative development where there would be a less degree of benefits associated with developing agglomerations and this will prevent a rapid growth for the region at some certain times. So, negative divergence results will affect the social and economic structure, as long as there is no effective use of factors of production.

Regional growth theories continued their development with soft institutional theories with an increasing emphasis on learning and innovation (Bellusi, 1999; Breschi, 2000; Torre and Gilly, 2000; Kirat and Lung 1999; Maksell and Malmberg, 1999a and 1999 b; Eraydın, 2003).

New Growth Theory was one of the theories that handled the growth process of regions differently than the previous theoretical approaches. The theorists of this theory modified the diminishing returns to capital assumptions and introduced monopolistic competition as the underlying market form (Langlois, 2001, Eraydın, 2003). In this theory there was an emphasis on the growth process of the regions and the size of the firms (Morgenroth and O'Malley, 2003). According to this theory, each unit of capital increases both the stock of physical capital and the level of technology for all firms. According to Romer, the outcome of an economic system is an endogenous growth and this endogenous growth is not the result of the forces that would come from outside (Romer, 1994; Eraydın, 2003). According to Krugmen (1995), the factors that lead the increasing returns are internal to a region and not external to it and this emphasize the importance of agglomeration economies and how these sustain the increasing returns through spillovers of knowledge (Eraydın, 2003).

Knowledge is accepted as a motor growth in the new learning economy and a crucial input to generate an economic growth. The concept of innovation has gone through different stages parallel the changes. The way of handling and understanding of innovation has changed. Now it is an interactive process where links between many different actors involving consumers, producers and many other actors is taking place.

Learning process started to be included in the theoretical explanation and it is mostly dependent on the presence of different types of knowledge and their exchange via reciprocal trust based relations among different institutions. Beside these new elements of regional growth another important element included in the explanations of the theories; small and medium sized enterprises. The relation between growth of regions and the size of the firm came indirectly by Schumpeter who was the earliest researcher emphasized the relation between innovation and firm size. Schumpeter stated that large firms had an advantage over the smaller firms in the process of innovation as they are able to contribute to the economic growth through large scale firms. But after the cracks that took place in 1970's the researchers and theorists started to consider this relation differently as many different small and medium sized firms replaced the large ones that were not able to dominate anymore the face of increased international competition.

Industrial districts, innovative milieux, learning regions and systems of innovation are the approaches that have been developed by theorists and researchers to explain the regional growth process. "These models of territorial development are strongly influenced by issues raised in institutional and evolutionary economics and the neo-shumpeterian perspective on the role of innovation and technology" (Eraydın, 2003:104).

Industrial districts approach emerged as one of the explanations for the regional growth process. Innovation through R&D; sharing, exchanging information and knowledge among different local institutions, production units and other actors on the

basis of reciprocal trust relations; being part of the local and global networks; having the ability to adopt and learn the new innovations and having the capability to generate new innovations are the main characteristics of industrial districts. According to this approach, regions develops as a result of the collective learning that based on small and medium sized firms, which specialized in different production stages (Eraydın, 2003).

Innovative milieux concept emerged by GREMI research group (Camagni, 1991; Hanse, 1992). The notions of `transaction cost`, `trust`, and `networks included into this concept. According to this approach SMEs are able to generate innovations by working intensively with other units within a cooperative atmosphere.

Learning region approach emerged when the concept of regions started to be understood differently when the geographical borders and natural resources were not the defining criteria for a region anymore. Instead, the ability of a region to harness and mobilize knowledge and ideas became the defining criteria for a region (Florida, 1995). Furthermore, the assets of the clusters became not enough to compete in the new world and the discussions regarding the process of learning started to be taken into consideration, learning has been indicated as the main factors of innovation competitiveness and long range growth (Eraydın, 2003). Accordingly, regions started to be perceived as the places where knowledge creation, learning and innovation are taking place. However, sharing the same place does not provide positive externalities for all time but there is a wide agreement in the literature that proximity facilitates interactive activities (Eraydın, 2003). The role of institutions is very important as they

affect the process of growth. The importance of local institutionalization could be indicated by institutional thickness (Tödling, 1994, Eraydın, 2003).

Different from the traditional linear innovation model, an interactive process of innovation has been used to explain the innovation process in the recent theories. The early studies were at national level however; recently the regional level has been included to the process of innovation system. "Regional innovation system is defined as he localized networks of actors and institutions in the public and private sectors whose activities and interactions generate, import, modify and diffuse technologies" (Evanglista *et al.*, 2002: 174). Reciprocal trust based interaction process among the formal and informal institutions and other actors in the region is one of the main characteristics of regional innovation system. The other features of this system are; the presence of an interactive learning process among the small and medium sized firm clusters indicates the importance of proximity, industry specialization that reflects the differences in regional innovation performance necessitates different infrastructures, inter-firm relation and institutions. "Regional innovation systems are defined as innovative industrial cluster of small firms in an area likely to have firms with access to others in similar or complementary sectors as customers, suppliers and partners (Cook, et al, 1997; Eraydın, 2003: 108).

1.2 THE IMPORTANCE OF SMES IN THE PROCESS OF GROWTH: PAST AND PRESENT

Large scale production units were basic elements that used in the explanations and theories of the growth process. Large production units were part of a more encompassing, coherent model of economic and social development. Mass production, market expansion and minimizing production cost, Keynesian-type demand and management policies, Taylorist-type of work organization and an extensive division of labor (Acs, 1996) were the main ingredients that comprised the large-scale units. Large firms were the main point of concentration of the economists and the economic growth theories. On the other hand the small production units were on their long secular downward. This decline dates back to the onset of the industrial revolution period (Acs, 1996). The leading textbooks and the major theories were including very little or nearly no discussions upon small firms. Most empirical researches were on large firms. However, each economic field was aware about some special characteristics related with small firms. They were aware only about characteristics that concern their partial interest. For instance, "Financial economists know that the efficient markets model breaks down for small firms, labor economists know that smaller firms pay lower wages for apparently comparable workers, and industrial organization economists know that small firms are more likely to fail and have faster and more variable growth than large firms" (Brock and Evans, 1996: 98). However, through time there was a profound change in what was going on. At mid of 1960s serious problems started within Fordist type of production. Problems appeared due to the rigidity of long-term and large scale fixed capital investments in mass production system (Özcan, 1995). Thus, by early 1970s in some developed countries breaks had begun to appear in the manufacturing sectors. Parallel these cracks the small firms

were outperforming their large counterparts. Piore and Sable argued that "... the economic crises of the 1970s resulted from the inability of firm and policy-makers to maintain the conditions necessary to preserve mass production and stability of markets" (Acs, 1996: XV).

The limits of the present industrial model "mass production" were the reasons of such decline in the economic structure. According to them, the endogenous instability of the model has given rise to an "Industrial Devine" by which the recovery conditions lie between international Keyneysianism and Flexible specialization. Flexible[i] type of production contrary to the large production units is vertically disintegrated via different small sized firms.

Over the last two decades a widespread importance of small and medium enterprises (SMEs) was given by many theoreticians and researchers. This increased importance was due to their impact on the development and health of the national and regional economies of different industrialized (and industrializing) countries.

There are different points that are accepted as the major factors used to explain why small and medium sized firms started to gain importance in the economic and the theoretical fields and furthermore, they became the vital factors in the process of regional growth.

One of these explanations that should be mentioned is the difficulties that big firms run into. This was due to the Twin oil shocks. Also they were the main reason of the rise of the importance of small production units and the increase of the importance of big firms. Dunford's explanation with respect to this perspective summarizes the situation as;

> Demand for mass produced goods stagnated as markets in south goods that were diversified and had a higher design content. In this situation smaller and more diversified goods and services and that employed skilled craft workers started to gain the upper hand and offered the prospect of a new model of development called "flexible specialization (Dunford, 1990: 317)

Development of new technologies has a big role in producing more opportunities for small and medium sized production. It has been argued that flexible production system replaced the older inflexible mass production system. Thus, through this system, small and medium sized production units became able to achieve lower costs and rapidly (Özcan, 1996). This type of production system has been summed up under labels like "post Fordist economy" or the "Bennetton economy" since this company's operations are often seen as a type case of the way the new flexible economy function (Murray, 1985; Curran and Blackburn, 1991). In spite of the similarities flexible specialization and post-Fordisim represent sharply different theoretical approaches; according to the former one the productive system is an integrated system and there is a coherent totality in the system (Hirst and Zeitlin, 1991; Amin, 1989b; Özcan, 1995). However, in Post-modernist flexibility there is fiction, fantasy, fictitious capital, images, and flexibility in production techniques, labor markets and consumption niches in the system.

In addition to the changes that took place in demand side the recent technological changes (such as those that have decreased computer costs) was another reason that led to a reduction of the optimal firm size and the minimum scale of entry and accordingly big firms started to face difficulties regarding their sizes.

Due to this structural change, an increasing turbulence in the international markets was the outcome. Therefore, big firms and mass good producers were undergoing through a renewal stage. They started to re-arrange their activities according to the developments that were taking place. However, re-arrangement procedures were taking time, while small firms were already adapted to the new mode of production. Thus, during this period the importance of SME increased. They were already ready to come over the demand by their inherit flexible characteristics.

Another point that led SMEs to mange the renewal period was their ability to adapt to new the technological changes. Within the new economic and social environment, being competitive was possible only through having the ability to generate new product and process technologies.

Technological changes provide some kind of understanding of past and future. It is perhaps the most important source of structural change in an economy, because it relates the mix of products, industries, firms, and jobs, which make up an economy. It cusses these changes in a subtle manner, crating new jobs and firms, destroying old ones, disturbing the equilibrium. Technological changes have widespread

consequences for all sectors of the economy. By the diffusion process of these new technologies, major structural crises of adjustment, in which social and institutional changes are needed, bring about a better linkage between the new technology and the system of social management of the economy. Parallel the technological changes, the importance of SMEs increased in spite of the presence of the large firms in various sectors in the production system. Accordingly the growth and the formation of new firms have played significant role in the advanced countries and their economy (Özcan, 1996). Especially the formation of SMEs increased due to the new forms of economic and technological transformations in the world (Hirst and Zeitlin, 1991; Amin, 1989b; Harvey, 1989; Wood, 1989; Aydolt and Keeble, 1988; Leborgne and Lipietz, 1988; Piore and Sabel, 1984; Piore and Berger, 1980; Özcan, 1995). In most of industries the size of the plants started to decrease and the historical scale disadvantage started to be reshaped and be accepted as an advantage through a series of substantial changes that took place in the organizational and production system.

Another important factor that gave rise to the drastic changes in the consumption structure was the consumer's taste. Demand for more diversified products increased and more attention was given to the "positional" (Curran and Blackburn, 1991) goods or niches rather than the fixed produced goods. Accordingly the changes that took place in the consumer tastes are suitable for all age groups and for different classes. Mass good producers and large scale production units were not able to respond to these rapid fragmented and diversified needs. Small firms were able to respond the demands and this was one of the most important reasons that lead them to be the main concern point of the economy.

Within this restructuring process the size of big production units reduced and according to several writers this sever restructuring generated high level of unemployment and insecurity as well. As a result of this there were a release of resources such as employment and plants (Brinks and Jennings, 1986; Curran and Blackburn, 1991). Through this, the opportunity to have SME formation and self-employed unites became possible. Having a place for ones own and working for your self became an aim that shared by many members of the society. It could be argued that there is a relation between unemployment and self-employment "…though some doubts have been expressed about the importance of unemployment as a "push" factor leading people to enter self-employment" (Hakim, 1988: 431; Curran and Blackburn, 1991: 2).

According to many writers and researchers, there has been an increase in the proportion of the total employment provided by the SME in different sectors in the developed countries (Karlsson *et al*, 1993; Özcan, 1995).

According to the Organization for Economic Cooperation and Development (OECD) the growth rate of employment in 1985 was better in small production unites than the large production units. Furthermore, they found that "small firms have been particularly important in net job growth over the past 10 or 15 years" (OECD, 1985: 80; Acs, 1996).

Many different observers and organizations are sharing the opinion of solving the unemployment problem through the dynamic structure of SMEs. Furthermore, according to the Orthodox economists holding the idea of the "new entrepreneurship", as it seemed to speak in favor of competitive markets and finally disprove the efficacy of market intervention and regulation (Acs, 1996). "Small firms were seen now as carrying innate qualities, such as competitiveness and innovativeness, superior to large firms (Acs and Audretsch, 1990). They were also viewed as showing more derive and better providing a need element of flexibility" (Acs, 1996).

1.3 GROWTH THEORIES OF SMALL AND MEDIUM SIZED ENTERPRISES

Growth of SMEs has been received considerable attention from researchers and policy-makers around the world. However, there is no world wide accepted theory or model that explains the growth process. According to the result that O'Farrell and Hitchens (1988; McMahon, 1998) have reached, there is no adequate explanatory framework in order to analyze the growth of the small owner-managed manufacturing enterprise in the relevant literature. Furthermore, Gibb and Davies (1990; McMahon, 1998) are of the opinion that it would not be possible to produce like this theory and explanation in the near future. The review of Holmes and Zimmer (1994: 97; McMahon, 1998) expresses the belief that `an operational framework that distinguishes growth from non-growth small businesses does not exist`.

From the field of industrial economics, which insufficiently concerned with the dynamics of growth, static equilibrium theories (McMahon, 1998*)* have been derived. According to this theory the firm is in no need to learn and there is a perfect elasticity of entrepreneurs supply. Furthermore, there are no implications for the rate of entry and exit or speed adjustment (Leidholm and Mead, 1999).

From the field of economics stochastic, models (McMahon, 1998) of firm growth have been developed. There is an emphasis on the random or stochastic nature of the process of enterprise growth. It is briefly suggest that 'many factors affect growth and, therefore, there is no dominant theory. (O'Farrell and Hitchens, 1988: 1370; McMahon, 1998: 2). The most important thing that should been taken into consideration is Gibrat's law (1931) (Leidholm and Mead, 1999). It states that the firm growth is independent from firm size [ii](Gibrat, 1931; Leidholm and Mead, 1999). Many different researchers have illustrated or developed some other sophisticated variants of these models such as Scherer (1980), Simon and Bonini (1958) and Jiri and Simon (1977) (Liedholm and Mead, 1999). However, such theories, accord no independent role for entrepreneurs assuming rather that they are only passive actors in a mechanistic game of chance (Liedholm and Mead, 1999). On the other hand there are other formulations in which the role of entrepreneur is much more central for example in Lucas's (1978) and Kihlstrom and Laffon's (1979) (Liedholm and Mead, 1999) formulations.

Jovanovic has developed a model in 1982. In this model he synthesizes the key elements of these entrepreneurial models with those of the stochastic models.

Jovanovic assumes that entrepreneurs have different managerial abilities but they are unsure about their managerial abilities in the beginning but they will be able to "learn" by observing how well they perform in the uneven and tumble of the business world (Brock and Evans, 1996). They will change their behavior as they learn over time and then they became informed better about their abilities. Those who manage to do better will expand and those who would be poorer than the starting point they would return to other alternative occupations or disappear. According to this model, the size and age of the firm play an important role in the growth process. Or specifically, this particular "learning" model predicts that both the firm's failure rates and growth rates will be inversely related to the age and initial size of the individual firm (Liedholm and Mead, 1999).

According to Ericson and Pakes (1988) Jovanovic's model is a "passive learning" model and the reason of this is the managers do nothing to learn but they only observe their profits (Brock and Evans, 1996). Contrary to this they develop the "active learning model" in which investment in research with risky outcomes is available thus; the firms that would be successful in this discovery will grow (Brock and Evans, 1996).

Another approach developed by Brock and Evans (1996). According to them there is an inverse relation between firm growth and firm age. Firm growth decreases with firm age. This approach is consistent with Jovanovic's theory. In addition to this he finds out that firm growth is decreasing with the size of the firm. However, this contradicts with several theories developed. For example it contradicts with Simon

and Bonini's (1958), Lucas's (1967- 1978), and special cases of Jovanovic's (1982) theories. According to their theories the growth process is independent from the size of the firm as the same in Gibrat's law. As a result of his finding there is nonlinear relationship between size and growth contrary to the previous studies that assumed that there is a linear relation.

According O'Farrell and Hitchens (1988) the strategic management perspectives on SME growth has focused upon the strategic dimension of achieving sustained growth and the way in which the owner-manager responds to business and personal environmental indicators. Therefore, they concentrate upon the identification of the owner-manager's policies and strategies for the development of the business and their subsequent translation into managerial action that will lead to sustained business development.

One of the most important points that should be taken into consideration in the strategic management literature is that not all SME owner-managers have the desire, or indeed the capability in terms of resources and expertise, to grow their business (Stanworth and Curran, 1976; Perry, 1982; Perry *et al*., 1986; Stanworth and Curran, 1986; O'Farrell and Hitchens (1988); Perry *et al*., 1988; Storey *et al*., 1988; Davidsson, 1989; Birley and Westhead, 1990; Frank *et al*., 1991; Turok, 1991; Hanks and Chandler, 1992; Hay and Kamshad, 1994; McMahon, 1998: 2-3).

From the field of economic life-cycle theories that has been developed, SME growth is described as a series of phases or stages of development through which the business may pass in an enterprise. It is one of the most writers in this area agreed on.

The focus on life cycle theory is very much in the literature. It has been reviewed and developed by many of researchers like, D'Amboise and Muldowney (1988), Perry (1982), Quinn and Cameron (1983), Miller and Friesen (1984a), Smith *et al*. (1985), Kazanjian (1988), Kazanjian and Drazin (1989), Hanks (1990a, 1990b), Kazanjian and Drazin (1990), Hanks *et al.* (1991), Dodge and Robbins (1992), Hanks and Chandler (1992), Hanks et al. (1993), Terpstra and Olson (1993), Dodge *et al*. (1994) and Hanks and Chandler (1994). All of them tried to consider all the best attempts to develop the life cycle models of SME growth. Thus this model has an important emphasis in the literature of economics and business and especially in the literature that SME growth is the focal point.

Hanks *et al*. (1993: 11-12; McMahon, 1998: 5) stated that in recent years, a few empirical studies of the organization life cycle have emerged, providing important contributions to life-cycle theory (Kazanjian, 1988; Kazanjian and Drazin, 1990; Miller and Friesen, 1984a; Smith *et al*., 1985). However, most of these studies have defined growth stages a priori, using existing conceptualizations. The lack of specificity and empirical resources in these typologies may account for unexpected variance found in some analyses. It might be possible to address some of these difficulties by deriving taxonomic rather than typological models.

According to Hanks et al. (1993) a taxonomic approach is need to identify and specify the stages in an enterprise life-cycle model. Thus, they developed mainly four stages and two apparently stable and sustainable disengagement configurations or stages in their taxonomic life-cycle model

- *Start-up stage* where young and small enterprises with simple organizational structures are included. The organization is quite informal, highly centralized and there is little functional specialization. The main concern is the development of the product.

- *Expansion stage* where slightly older and larger enterprises with more complex organizational structures are included. The organization is a little more formal than in the start-up stage but still very centralized and functional specialization is generally adopted. The main concern is product commercialization.

- *Maturity stage* enterprises in this stage are typically more than twice as large as the expansion stage. There is a more complex organizational structure than the other stages. Formalization is increasing and centralization is declining.

- *Diversification stage* here, enterprises are generally medium-sized with increasing tendency to have divisionalised structures. Formality is highest for any stage in the life-cycle model and the level of centralization is low.

The other two stages are:

- *Life-style stage* here, enterprises are generally much older and to some extent larger than those in the start-up stage. Mostly they are organizationally like

start-up businesses. These enterprises appear to have detached from the growth process after establishing their practicality at relatively small size following start-up[iii].

- *Capped growth stage* here, enterprises are generally much older and slightly larger than those in the expansion stage. They are somewhat less complex organizationally than typical businesses in the expansion stage. These enterprises appear to have detached from the growth process after successfully expanding to modest size following start-up. Hanks *et al*. (1993) observe that such businesses could be in Churchill and Lewis' (1983: 34) 'success-disengagement' sub-stage described as follows:

> . . . the company has attained true economic health, has sufficient size and product-market penetration to ensure economic success, and earns average or above-average profits. The company can stay at this stage indefinitely; provided environmental change does not destroy its market niche or ineffective management reduce its competitive abilities (Churchill and Lewis', 1983: 34).

Critique of Stage Models of SME Growth

O'Farrell and Hitchens (1988) present a comprehensive critique of stage models of SME development, which acknowledges the following weaknesses of business growth conceptualizations of this type:

- The model tends to show the symptoms of the growth process rather than explaining/disclosing the underling process.

- Both the stage model and life cycle theory inclining to assume their own validity rather than trying to establish it in some precise manner.

- The assumption of that all SMEs passes through the same stages is made or fail in doing so, however it is non clear that passing through these stages are necessary or not or whether if necessary some stages could be omitted or not. The concepts of life style and limited growth businesses (the psychology of owner-manager, wishes) should be taken into consideration.

- Lack of initial stages prior to start-up stage.

- Measures like, product mix, value added and rate of innovation ignored while considering the enterprise size.

- Insufficient attention has been given to external factors in the social, economic and business environments.

According to Miller and Friesen ". . . while the stages of the life cycle are internally coherent and very different from one another they are by no means connected to each other in any deterministic sequence" (Miller and Friesen, 1984a; McMahon, 1998: 9).

In her seminal work *The Theory of the Growth of the Firm*, Penrose (1952: 806; McMahon, 1998: 9) expresses the following views` … the available evidence does not support the theory that firms have a life cycle characterized by a consistent transition through recognizable stages of development similar to those of living organisms. Indeed, just the opposite conclusion must be drawn: the development of firms does not proceed according to the same 'grim' laws as does that of living organisms.

CHAPTER II

2. THE IMPORTANCE OF SMES IN THE REGIONAL ECONOMIC GROWTH

2.1 SME DEFINITION

An enterprise irrespective of its legal form is accepted as an entity engaged in an economic activity. This includes, in particular, sole proprietorships and family businesses engaged in craft or other activities, partnerships and associations regularly engaged in an economic activity.

Decades ago there were small and large scale businesses. The concept of the medium developed within time because of the improvements and changes that were taking place. The term small business was applied to so-called one main bands like restaurants, neighborhood shops and the term big firms was applied to the giants firms such as general motors, shell (Barrow, 1993)

Main developments regarding small firms started to take place in US in 1953 when Small Business Administration (SBA) founded by US government. The aim of the

administration was to provide finance for intermediate to large term for small forms that were notable to fond money from other places. They were defining smallness differently according to each sector and within each main business category (Barrow, 1993). However, many of SBA`s definitions were covering medium sized enterprises as well

Parallel the developments that were taking place in US, a committee set up in UK in 1969. The committee set up under the chairmanship of J.E. Bolton (Barrow, 1993). The aim of this committee was to consider the available facilities, make recommendations and the condition (state) of small firms in the national economy of UK.

They accepted small firms as, firms within less than 200 employees. They decided upon that a `small firm should has a relatively, small share of its market, it should be run by its owner and should be independent and not the subsidiary of a large firm` (Barrow, 1993: 3)

Within time and parallel to the economic and social changes, the concept of medium size started to be considered as a middle stage between small and big size firms.

There is no generally accepted world wide definition of small and medium sized enterprise in the literature. The definition of SMEs differs from one country to another

and from one sector to another (see appendix A). In addition to, procurement, provision/supply, production, marketing, finance and management subjects the employee number of SMEs, volume of sale and the amount of fixed capital, the amount of used energy, capacity level and the level of profit factors lead to make differences in SME definition. It would be not possible to have a fixed definition of SMEs among countries and within the sectors of a country. Thus, the definition of SMEs is not the same for every country and furthermore its definition differs according to the main factors that would be taken into consideration.

The definition of SME according to an expert is worth to be mentioned. There is no exact definition of SME that is acceptable by every body and everywhere. It would be meaningless to search for a definition because it is a subject that did not reach the required maturity from the scientific point of view (Ünal, 1999,). It (definition) should be pragmatically developed according to an aim, sector and region. In other words, it is not a definition that is relevant for every time, everywhere and every body; it should be developed according to an aim. Thus, the definition of SME would be changed according the aim and should be changed parallel the changes regarding aims. This change should be considered as a necessity as long as the features of the subject changes and not as negative aspect of the definition.

There is no general census among researchers and scientists related with the classification of the firms according to their sizes. The concept of small and medium sizes enterprises differs according to the industrial development level of that country, the sector that the firms are active in, the type and size of the markets that they

produce for and finally the type of used technology and the level of the production process. So, there are qualitative and quantitative criteria to define an SME.

2.1.1Qualitative criteria

The main criteria that should be taken into consideration are:

- Entrepreneurial ability, the ownership and management of the enterprise should be integrated/joined in the same person.
- The independence of the manager. The manager who is the owner of the firm at the same time should be controlled from outside.
- The owner manager different than the other professional managers should take maximum risk of bankruptcy.
- There should be a complete integration between the enterprise and the owner of the enterprise, the enterprise should be the most important part of the owner: the realization of identification.
- Specialization and division of labor
- Financial deficiency and limited/restricted capital
- The target market mostly should be the local market (Aslan, 1998).

2.1.2Quantitative criteria

- Number of employee
- Amount of Capital
- Profit
- Usage of energy

- Turnover
- Capacity (production volume)

Small and medium sized enterprises have received considerable attention in the literature. Regional growth and economic development theories have developed many different theories and approaches explaining the process of growth of SMEs and their affect on the regional growth process. The following part of this chapter includes detailed explanations about different approaches have been developed to explain the importance, role and affect of SMEs on the regional growth process.

2.1.3 Innovative SMEs

There were remarkable changes in the innovation concepts through the past years. There was a move from linear systems toward an interactive system (Kline and Rosenberg, 1986; Dos, 1998; Malecki, 1997; Todling and Kaufman, 2001). Different from the traditional linear innovation model, the systemic approach viewed innovation as an interactive process where interaction is taking place among the firms and within firms in the production, diffusion processes and in the use of the economically useful knowledge that are located inside the borders of the nation state. The interaction is based on trust and reciprocal relations rather than market transactions. The most important resource in this model is knowledge, which is not a simple form obtained by R&D, but includes the marketing, distribution, production and other activities on the shop floor (Kaufman, Todling, 2001). Normally, there are many different actors involved in the interaction process; customers, suppliers, service firms, research organizations, universities, technology centers, competitors and transfer organizations. The studies regarding the systemic approach were at national level at the early stages.

Accordingly the first discussions regarding national innovation systems started in 1980`s and then it became widely diffused. The concept of national innovation system was immanent in the work of IKE group in Aalborg (Lundvall *et al*, 2001). There were many different explanations related with the diffusion reasons of this system. One of these explanations is that the system of national innovation was able to solve the problem regarding the intense division of specialization among policy analysts and institutions (Lundvall *et al*., 2001). Another explanation was that the innovation system diffused as the macroeconomic theory and policy have failed to deliver an understanding and control of the factors behind international competitiveness and economic development (Lundvall *et al*., 2001). The approach of national innovation systems indicates that the flows of technology and information among people, enterprises and institutions are keys to the innovative process. As a result of interaction among actors the development of technology and innovation process took place (OECD, 1997). However, the concept goes back to Fredrich List, but in the modern version of the national system was not based on any direct inspiration from List. "The most obvious linkage was perhaps in the development of the Aalborg-version of the concept where the role of the home market for innovation has some connections to the infant industry argument of List. But, even here, the direct inspiration came via Burenstam Linder who is a liberal economist and a former conservative minister in the Swedish government (Linder, 19961) rather than directly form List" (Lundvall *et al*, 2001:4)

The national innovation system was important in the technological field because of the following factors: the recognition of the economic importance of the knowledge, the increasing use of the systems of approaches and the growing number of institutions

involved in knowledge generation (OECD, 1997). There is an emphasis on the flow of knowledge in this process and the studies focused on improving the performance in "knowledge based economies"[iv]. As knowledge embodied in human beings, human capital was always important for the economic development however, its importance was recognized only few years ago as there was an intensive use of knowledge in different economies and there was an increase in the demand of highly skilled people. A key element for an economic growth is making investment in R&D, training and innovative activities (OECD, 1997).

However, recently the systemic approach has been extended to include the regional level into the system (Edquist, 1997; Lundvall and Borras, 1997; de la Mothe and Padquet, 1998; Malecki and Oins, 1999; Todtling and Kaufman, 1999). "Regional innovation system is defined as the localized networks of actors and institutions in the public and private sectors whose activities and interactions generate, import, modify and diffuse technologies" (Evangelista *et al*., 2002: 174).

The main elements that should be in the regional innovation system are;, the internal dynamics of the region in terms of interactions between firms, organizations, institutions and the other actors; the formal and informal institutional capacity; industrial specialization through which the regional differences could be identified as it has an influence on regional innovation infrastructure; the agglomeration of the innovative firms (especially SMEs) which means using the advantages of spatial proximity that facilitates face to face contacts and other collaborative and network relations among the actors of the systems; and finally the interactive relations of the

region that are based on trust and reciprocal relations in an interactive learning process.

Accordingly, the deriving forces behind the economic and regional growth of the regions have been changed. The factors related with the physical assets are no longer important; instead the social endowments (informal and formal norms, rules and regulations that lead to establishing and strengthening the trusted confidence based relations) became the focal point of the economic growth of regions. The level and the type of the innovation; both process and product innovation[v] became one of the key factors of regional development. So, systems of innovation started to became one of the main concerns in the development and growth issues. Since the last decades, the regional innovation system became important as it is explaining the differences in the competitiveness both between firms and sectors. Parallel the increasing importance of the regional innovation system there was an increasing importance of the regions for the innovation policies as their aim became the same, which is supporting the innovative capabilities and thus the competitiveness of SMEs (Hassink, 2002). Accordingly regional innovation policies started to take its place in the agenda and as a result many approaches and conceptual ideas have been developed by academics and researchers. The most important approaches and ideas that have been developed were the learning regions (Morgan, 1997: Hassink, 1999; Butzin, 2000; Hassink, 2002) the institutional thickness (Amin and Thrift, 1994) and untraded interdependencies. An optimum regional policy that leads to an economic growth in regions is not the matter of the case anymore to succeed a regional development. Therefore, the systems of science and technology must be developed in a way that reflects the needs and the characteristics of each individual region. Starting from the end of 1980s, there is an

observable shift in the aims of the regional policy which are reducing the inequalities among regions and developing endogenous small and medium sized enterprises and innovation in regions. Though, discussions regarding the learning communities started to take place, now regions are able to adopt themselves to the new competitive era so, the policies toward this subject have been changed. Importance has given to innovation of the firms and especially SMEs, networks of institutions, cooperation and clustering among firms.

Therefore, the theories of regional development and policies went through sharp changes over the last years. According to Cooke and Stroper (1997), as a fundamental basis of economic organization and development, the social science has increasingly focused upon the significance of the regions (Diez, 2001).

Related with this development, a new regional paradigm has emerged; ` network or associations paradigm` (Amin and Thrift, 1995; Cooke, 1997; Cook and Morgan, 1998; Grahber, 1993; Morgan, 1997; Stroper, 1995; Stroper, 1997; Diez, 2001).

According to this approach, the focal point for learning and knowledge creation in the new global and knowledge intensive capitalism era is, the regions and especially the regions that denoted as learning regions. Learning regions increasingly became the most important source of innovation and economic growth (Florida, 1995). The increasing role of the region is rooted in what Stroper and other economists named as `untraded interdependencies` and that `take the form of conventions, informal rules

and habits that coordinate economic actors under conditions of uncertainty` (Stroper, 1997: 5; Diez, 2001: 908).

Regional specific assets (local tacit knowledge, face to face knowledge exchange, formal and informal networks, local institutions etc.) constitute the untraded interdependencies of regional policies that define the competitive advantages of regions in terms of localized learning networks of associations and institutions. As a result, new regional policies have been developed where the emphasis made upon innovation, networks among SME*s* and on policies for regional innovation. Consequently technology policies turned into innovation policies referring to the `soft` issues as well as to the `hard` technology (Cooke *et. al*., 2000; Diez, 20001: 909). The move from funding from `hard` (capital` assets) to `soft` (knowledge, capability) assets has been recommended by a 1992 report on industrial policy commissioned by the Irish government (Culliton, 1992; Leadwith; Bartzokas). One of the most significant factors in the regional innovation systems is the interaction degree between R&D infrastructures and the actors of the region. Accordingly, the network approach system provides the basis for promoting innovation in the regions (Landabaso, 1997; Diez, 2001).

Another perspective regarding the regional innovation and competitiveness is the "industrial clusters"[vi] where the newly emerged regional policies based on. `The slogan of development policy during the 1990s is fast becoming `industry` clusters`: geographic concentration of industries that gain performance advantages through co-location (Doeringer and Terkla, 1995: 225; Diez, 2001: 909).

According to Landabaso (2000), cluster and regional innovation policies are directed towards the creation of knowledge, learning capacity both at personal and collective levels (Diez, 2001). The main aim of these policies is to transform the regions into learning regions. Their objectives to be successful in their aims are to introduce the changes through the deriving force of learning process and the creation and accumulation of knowledge into the innovative behavior of the firms and into the regions.

Autio (1998) argues that, process of innovation includes; knowledge creation, diffusion and accumulation. These processes are highly complex and unpredictable and it is often a practical impossibility to ensure them accurately and objectively (Diez, 2001). Therefore, it is not possible to evaluate the process by traditional models such as experimental designs, econometric models or linear cause effect model. There should be other developed models to evaluate regional innovations and clusters policies. One of these models is the `naturalistic holistic` approach as well there are other evaluation approaches such as `realistic evaluation` and `intangible functioning` mechanisms (Pawson and Todling, 1997; Diez, 2001). In addition to these, there is another evaluation approach based on the theory of change and developed by Weiss and other American evaluators (Weiss, 1995; Diez, 2001) in their evaluation, they have developed options for comprehending how these complex mechanisms function and why.

2.1.4 Networking SMEs

Within the globalization process of the world, all firms try to respond to the changing demands of the markets by being innovative and flexible. In the global economy knowledge became one of the most important keys for growth and competitiveness. Both of tacit (rooted in actions and routines) and codified (documented in publications, database and embodied in machines) knowledge play an important role in the production processes. Increased number of the knowledge-intensive activities involved in the innovative production process such as product design, quality control, process engineering, organization of production and new management routines (UNCTAD, 1998).

In order to obtain both types of knowledge, interaction, and reciprocal trust based relations among production units should take place. Continues knowledge exchange and synergy could be produced through innovative activities.

The importance of interaction in the innovation process proves the essentiality of networking that is a tool for knowledge exchange and learning.

Innovation based on competition in the knowledge based economies. It has been diffused to every economy and therefore, SMEs became under an extraordinary pressure to innovate, change, restructure their operations and achieve efficiencies in production. Through networking SMEs can be able to access to skilled and highly educated labor, knowledge and pooled business service (UNTCAD, 1998). SME can

be successful in fighting the competition through increasing inter and intra firm cooperation and networking. Since 1980`s, the proliferation of various forms of interterm collaboration observed (Best, 1990; Harrison, 1994; Staber, 2001) and also some influential publications in political economy (Piore and Sable, 1994, Staber, 2001), economic sociology (Granovetler, 1985, Staber, 2001), and political sociology (Lash and Urry, 1994, Staber, 2001) supported the idea that all economic behavior is embedded in social networks (Nohria and Eccles, 1992; Powwell and Smith-Doerr, 1994; Staber, 2001).

Networks became the central subject for many investigators, researcher and economists. They have referred to the `existence of a network paradigm` (Cook and Morgan, 1993; Staber, 2001) or `network approach` (Courlet and Soulage, 1993; Staber, 2001). Networks mostly used to describe the formal and informal cooperation (knowledge exchange, commercial and competition relations) among firms (UNCTAD, 1998).

The term `network` can have different meanings. So, considering the local level of networking Yeung (1995) defined network on a broad conceptual ground as `business networks` has been defined as an integrated and coordinated relations embedded within among and outside business firms`. Thus, a network is both a structure and process and it can consist of relationship and links between both firms and non-firms institutions` (Dahlstrand, 1999: 379/380). Furthermore, proximity accepted important for networking process according to. Proximity is important mostly for SMEs Different concepts and approaches have been used to describe and analyze regional

networking such as, industrial and technological districts (Castells and Hall, 1994; Stroper, 1993-1995; Dahlstrand, 1999: 380) regional systems of innovation (Cooke, 1996; Dahlstrand, 1999) and innovative milieux (Camagny, 1991; Dahlstrand, 1999).

The attention has been given to the inter-firm networks that re mostly well-known in the literature of industrial districts. Network is a defining characteristic of industrial districts as it connects the firms in a coherent and innovative system of rational contracting (Staber, 2001). According to many researchers; firms, organizations and individuals are embedded in a very tense network relations with each other, thus they will be able to get information and knowledge for innovative activities and sustain competitiveness. The central argument of network literature is `networks reflect symbiotic interdependencies among firms and facilitate the rapid diffusion of new information and critical resources. So much so that `the very survival (of the district firm) is linked to the collective efforts of the economy to which it belongs and whose property it must defined` (Brusco and Sable, 1981: 106, 108; Staber, 2001: 537/538).

The evolutionary perspective mostly used in the discussions of industrial districts regarding the role and the development of inter-firm networks. The organizational forms viewed by the evolutionary perspective, including inter-firm relationships, as a result of the process of selection in which success and survival depend on the fitness of forms vis-à-vise the environment (Hannan and Freeman, 1998; Baum and Singh, 1994; Aldrich, 1999; Satber, 2001).

The main function of networks in the evolutionary perspective is that they are providing firms the required information and access to the other sources. Networks could affect the uncertainty situation in their environment by either broadening or restricting their awareness and response to the external changes.

Accordingly Staber (2001) examined three different structural configurations that are enhancing the adaptability and learning capacity of networks.

The first structure is the loose coupling (free combination): the extensiveness of the linkages among the units used as an indicator measuring the density of networks. In this structure, there are no dense linkages among the units. They have a short history with each other. In this structure the networks affect each other suddenly and not continuously, indirectly, not in a significant way, eventually and immediately (Weick, 1982; Staber, 2001). As a result it is not possible to define strategies and assign activities for the future

On the other hand in tightly coupled networks, via a new event a disruptive result could be obtained as it may cause an `accident` (Perow, 1984; Staber, 2001). They might not be able to look for perfect solution as they would be in a defensive mode because they would be suspicious about the new entrants.

In homogenous networks, there are similarities in the units. This would leads to repeated communication among the units of the network. Accordingly, an intensive interaction and resource sharing will take place. However, according to the

evolutionary perspective, the homogenous network could have adaptive value only in stable environmental conditions. Otherwise, it would be difficult to access to information and knowledge.

Networks also could be redundant (overlapping network relations). It depends on the number of the members in the network. They are inefficient because of the risk of duplicating the exchange process. According to the evolutionary perspective the only positive side of this type of network is the level of loosing a relation is minimized. Though, an effective communication and interaction among the units would be ensured for some extent.

Koschatzky (1999) stated that networks could be characterized at least by two dimensions. These two dimensions are vertical and hierarchical relationships and horizontal relationships. The first network type is common in the customer supplier interaction and the second network type is common in the units that interact in the same level of interaction.

Long term relations of different partners who cooperate on the same hierarchical level is the network definition according to the network economies. Marketing transactions of network economies characterized by temporary, continues interactions that mostly regulated by contracts (Karlsson and Westin, 1994; Koschatzky, 1999).

For a network to be flexible and interaction could take place, the boundaries of a network should be relatively permeable. Then its structure would be flexible and knowledge can move freely and as a result this network can lead to innovation. However, if the boundaries of the network are not permeable and the network is highly centralized then this would prevent the new entrants from importing new competencies with potentially greater adaptive value (Staber, 2001). The optimal network structure would vary due to many reasons like life cycle of the industry and to the available resources in that locality. Therefore, flexible networks could be the most useful in fragmented and eruptive industries as they compound the control advantages of organizational hierarchies with the flexibility of market relations (You and Wilkinson, 1994).

According to many researchers the successful networks are the dense ones. However, the meaning of dense is different from one argument to another. Some refers to the presence of links, others means intensity of relations and some others refers to the tight core of firms that surrounded with a group of peripheral firms (Staber, 2001). Therefore, there are many different network indicator in the literature and Staber defined them as the presence of ties (competitors, suppliers and other institutions like universities), the size which means the numbers of firms, stability (tie duration), diversity, hierarchy (centralization) communication frequency and formality relations.

In the regional innovation system networks constitute one of the most crucial components. As, through them interaction and information exchange among different parts and actors could be possible. Interaction among the actors is important because

the creation of knowledge that is required for growth and development. The local networks are important for regional growth and there are various analyses shows that firm's external links play important role in shaping their innovation capabilities (Roper, 2000; Eraydın, 2002). Networking between firms, relations between production and service firms, relation between firms and R&D organizations and networks among institutions are the networking types that identified by Eraydın (2002) through which the competitive power of both firms and regions would be increased. However, not all local networks promote growth and supports innovative activities. They do also have negative affect on the process as well. They may lead to lock-in situation where the region will not be able to produce new outputs as no new imputes were introduced into the system. Therefore, there is also need for external networks. There are an increasing number of studies indicating the vital importance of the external networks (Eraydın, 2002). They are essential for long term regional growth and to undertake the crises that might occur because of the decline of the domestic demand in regional clusters export oriented attempts are not enough, until they are supported by local networking and technology transfer via external networks (Kautaen, 1996; Eraydın, 2002). Furthermore, through external networks they would be able to access to the required different types of knowledge which is the base of competitiveness and innovation.

There are different types of global network that were defined by Eraydın (2002), global suppliers and customer formed one type of global network: value chains. Here, the most important tool to reach the universal knowledge is networks. However, there are different roles in the local-global interplay for value chains. These are *supporting* and *transforming* structure of the region. In the former one the regional network could

be complemented and through this the firm would be able to access to the external markets, knowledge source and information on new global trend. Meanwhile, the types of products are factors that affect the importance of global suppliers.

In the later one, clusters will be in need of restore their relations and structure in course of evolution. `At this moment global vale chains are important since they may enforce an urgent change to firms located within clusters. This is why mature high tech areas look for global networking in order to overcome a foreseen lock-in situation` (Eraydın, 2002: 11).

The other global network is the international excellence networks which includes the collaborative research activity among the research institutions. Thus, units would be able to use knowledge from local resources and from international resources also. The excellence networks also including the movement of external labour through which new knowledge could be accessed through recruitment labor/mobilization of technical staff. Participation in large international projects is another way. Through this the region will be able to obtain high profile. Exporting is another way to be a part of the excellence network. Accordingly the `exporting firms are the key transfer points between global and local` (Eraydın, 2002: 12).

2.1.5 Internationalized SMEs

Internationalization is one of the most difficult choices to be implemented. The international strategy is the maneuvers or coordinated actions that enterprises do it to

penetrate other markets or to benefit from resources that are available in the other markets (Su and Poisson, 1998). The main stages for internationalization process according to Johanson and Wiedersheim-Paul (1975) are; non regular export activities, export via independent representatives, sale subsidiary and finally production manufacturing.

Commonly the internationalization literature emphasizes on the internationalization of large firms but, the small and medium sized enterprises (SMEs) are increasingly active in the international markets (Bonaccorsi 1992, Erramilli and D`Souza 1993; Haahti, Hall and Donckels 1998; Coviello, and Martin, 1999) as well. Small and medium sized firms differ from large firms in their managerial style, scale/scope, ownership, independence, human and information resources (O`Farrell and Hitchins, 1988; Coviello, and Martin, 1999) and that's why an interest started on them regarding their internationalization process. Therefore, many different theories in the literature related with the internationalization process have been developed.

According to Johnson and Vahlne (1990) there are three different theories related with the internationalization process in the literature; the first theory is FDI (Foreign Direct Investment) theory. This theory emerged as a result of several different theoretical developments such as monopolistic advantage/market imperfection theory that was developed by Rigmen. Both theories used transaction costs to explain the process of internationalization. According to FDI theory, firms by evaluating the interaction costs, choose their best structure for each stage of production. So, the minimized transaction cost of a location will be the place that firms choose. Contrary to the

eclectic paradigm (Dunning, 1980, 1988; Coviello, and Martin, 1999) there is a need for a specific time management for transactions ad it is highly risky. On the other hand other resource commitments are internalized as a part of hierarchically structured organization (Coviello and Martin, 1999). However, in the eclectic paradigm, internationalization is affected by economic costs. In 'internationalization; ownership-specific and advantages belongs to location should be available thus firms would invest in a foreign market

Chain theory is the second research area of internationalization. It is commonly refers to `*stage models*` of internationalization process. Managerial learning is the crucial factor in this theory that affects the process of internationalization. In this model the enterprises passes from one stage to another one as they gain more and more international experience (Su and Poisson, 1998) According to one of the theories, internationalization process starts within low-risk, indirect exporting to `physically close` or similar markets (Johnson and Vahlne, 1977; Coviello, and Martin, 1999). By this, the firm would be able to improve its foreign trade market knowledge and within time it would increase its experience and level of knowledge and will go through other commitments like including quality investment in offshore manufacturing and sales operations.

According to Cavusgil (1984), there are five stages of internationalization. These stages are; pre-involvement, reactive/opportunistic, experimental, active, and finally committed involvement (Coviello, and Martin, 1999). However, Andersen's (1993) approach is that incremental process is a result of the innovation adoption by which

the perception and beliefs of the manager influenced and formed by the involvement of foreign market (Coviello, and Martin, 1999).

The third research area theories related with internationalization process are the theories of social exchange and resource dependency. Here, the focus is on the behavior of the firm in the inter-organizational and interpersonal relationships context `network perspective` could be given as an example. According to this perspective, organizational boundaries incorporate both formal and informal relationships (Johnson and Mattson, 1988; Coviello, and Martin, 1999).

When this approach compared with FDI theory, it offers a conceptual view of internationalization, as there is no role of the social relationships in business transactions (Johnson and Mattson, 1987; Coviello, and Martin, 1999). Furthermore, in FDI theory there is a rational strategic decision making whereas, in network perspective internationalization emerges as patterns of behavior that influenced by the members of the network. In network perspective, entries to the foreign markets continue as a result of the interaction and the development of a multitude of relationships.

The Uppsala model is another model that was developed and explains the sequential steps in the direction of increased foreign commitment (Johanson and Vahlne, 1990; Pedersen, 1999). Actually this model developed in the middle of 1970`s by business economists at Företagsekonomiska institution to criticize the theories that tried to

explain the direct investment at that time but it developed in another direction (Pedersen, 1999).

Single internationalization steps can not viewed independently from each other in this model. 'The firm's choice of the form of market operation on a market cannot be viewed independently of the firm's preceding activities on the market, and the firm's choice of market cannot be seen independently of the market experience that the firm had already gained' (Pedersen, 1999: 3).

This model tries to define the main forces that lead to the incremental internationalization process. According to this model, the internationalization process fro SMEs is commonly long, slow and incremental process (Pedersen, 1999). The geographical (cultural) and commitment mainly are the two dimensions of this model. The first one is related with the units that move from culturally close to more distant markets. Vernon's product life cycle was the inspiration source for this model where the description of gradual geographic expansion from domestic market over close market to culturally distant markets takes place. The second one is related with the market operations where it became very demanding (Pedersen, 1999).

This model is supported by many studies that indicate enterprises have passed through distinct and gradual staged during the development of their international affairs (Johanson and Vahlne, 1990; Ovaiatt and Phillips-McDougall, 1994; Su and Poisson, 1998).

However, these theories received a considerable amount of criticism by many different researchers. Welch and Lustarinen (1988) have criticized the Stage model. They have discovered that small English, newly formed Austrian and Swedish enterprises did not went through some stages that were described by stage model. Strangely these enterprises implemented a strategy of direct investment into the foreign market and they managed to become successful in a short period of time (Su and Poisson, 1998). In addition to this, they have argued that there are some factors (resource availability, the level of foreign market acquaintance, the importance of communication networks and the willingness of the manager to enter the foreign markets) that explain why important numbers of enterprises go through gradual entry in to the international market (Su and Poisson, 1998). In Coiello`s and Munro`s study that was in 1995 and implemented in New Zealand, the enterprises did not follow the traditional internationalization model. The enterprises internationalized rapidly through their involvement to the international network system of enterprises.

2.1.6 Exporting SMEs

Within globalization, the mode and the nature of conducting external trade had gone through sharp changes. There is a great revolution in information and communication technology and exporting became one of the most important elements in a country's economic development and growth.

The world became an interwoven place as a result of the globalization process. Before, small and medium sized firms were acting in a protected environment due to many different reasons (size, support systems etc.). However, now they are acting in a competitive environment where there are no borders and there is free trade flow. As a result of the increasing competition in the global era, there was a change in the domestic demand and better quality products with internationally competitive price demanded.

Countries in the world have competitive advantages in terms of technology, intellectual property and infrastructure. All these will lead them to have larger shares of world markets. Therefore, there was a pressure on SMEs to compete with others in order to sustain their presence in the globalized world. This made SMEs to pay more attention to the quality of their products, to their price and delivering considerations.

SMEs accepted as one of the main driving forces in the economic development. They are flexible and can adapt easily to the changing market demands and supply situations (UN-ECE, 1997). Furthermore, their adoption to the global world and their development is crucial to attain national development goals (economic growth, poverty, employment creation etc.) (World bank, 1991; Heshmati, 2001; Magagula, and Obben, 2001) and they have continued to be competitive in foreign markets with an approach mainly based on exports (Depperu, 1993; Zucchella, 2003).

In the last period SMEs started to gain important success in the international markers as more and more small firms gain a competitive edge and contribute significantly to total exports (Magagula and Obben, 2001). They became significant contributors to the economic growth and development of many countries because of their changing role in international trade (Brich, 1988; UNCTAD, 1998; Weaver *et al,* 1998; Magagula and Obben, 2001)**.** Although it was argued by several researchers that SMEs face many internal and external constraints to enter the foreign markets but SMEs, possess the competitive advantage necessary to overcome the advantages of foreign competitors' abroad (Dunning 1980, 1999; Mariotti and Pisciltello, 2001). Entering the foreign markets via exporting is the most common way that is followed by firms. However, in the new era the mode and the nature of performing external trade had gone through sharp changes, where there is a great revolution in information and communication technology.

In the literature many different factors that affect the exporting performance of SMEs were defined. Some of these factors have positive impact on them thus their export performance increases whereas; there are other negative factors that affect the export performance in a negative manner. Some of these factors are external to the firm and others are internal factors.

Bagchi-Sen (1999) in his study defined the main stimulus that affect the firms to export and he stated that there are two main stimulus one of them initiated from influences internal to the firm and the second one is coming from the firm's external environment (home market or export markets) (Albaum *et al*., 1989; Bagchi-Sen,

1999). These factors could be classified according to the export behavior (Czinkota, 1982; Seringhaus and Botschen, 1991; Bagchi-Sen, 1999). The classification has been made on the bases of reactive and the proactive behaviors. The former one is that a firm may recognize opportunities in exporting and actively pursue export market development and in the later one, a firm may become an exporter under internal or external pressures (Bagchi-Sen, 1999).

So, the firm-level internal factors for proactive firms are; growth and profit goals, economies of scale, marketing advantages, unique product /technology and managerial urge and the external factors are; change agents (e.g. government agencies, chambers of commerce, banks, industrial trade associations and other promotes of export activate) and foreign market opportunities. The internal factors for reactive firms are; extended sales of a seasonal product, risk diversification and excess capacity of resources. The external factors are unsolicited orders, stagnant declining home market and small home market (Bagchi-Sen, 1999: 236). In addition to these there are other firm specific factors like the size of the firm, the years on business, competitiveness of the products, foreign market converge, international experience (Axinn, 1988; Cavusgil and Zou, 1994; Calof, 1994; Moini, 1995; Magagula and Obben, 2001), collaboration (co-licensing agreements and alliances) and the use of the external technical support (Bagchi-Sen, 1999). On the other hand the external factors are the external stimuli which are the fortuitous orders from foreign customers, economic integration and market opportunities, and government assistance programmes (Magagula and Obben, 2001: 2) furthermore private consultants and other governmental agencies could be utilized by a firm.

Sarkar *et al* (2003) have identified the factors that clarify the need of SMEs to engage in export activity;

- expansion of market and customer base,
- optimum utilization of production capacity,
- scope for expansion/diversification into related products,
- greater attention to product design and adaptation,
- additional growth opportunities,
- imbibing quality consciousness,
- inculcation of cost efficiency in production,
- establishing various quality control systems such as ISO 9000, just in time etc. to improve productivity, quality consistency and delivery schedules,
- skill development in export marketing,
- exposure to international market developments such as shift in consumer preferences and new product developments (Sarkar *et al*., 2003: 2-3)

The key elements of export market development involve; the strategies and modes of entering to the export market, product policy, pricing, distribution, marketing financing, the selection of the foreign market (Cavusgil, 1984; Cooper and Kleinschmidt, 1985; Denis and Depelteau, 1985; Bagchi-Sen, 1999). The factors that affect these elements are the regulations, bilateral trade agreements, joint ventures, alliances production process and collaboration (Cooper and Kleinschmidt, 1985; Kotabe, 1990; Porter, 1990; Seringhaus, 1991; Bagchi-Sen, 1999).

Beside the positive factors there are the negative factors that prevent or create a barrier for firms to export. These barriers could be internal/firm specific or external factors. The internal factors that are related with the firm are; firm size, financial requirements, out dated plant equipment, risk willingness, lack of operating capital management time requirements, in-house expertise deficiency and poor labor management relation (Bagchi-Sen, 1999). Lack of information and capital (needed to build up an international market position and maintain international business relations and needed to provide trade financing service, meet increased costs of longer credit line and bear possible losses) and finally the insufficient management skills (many SMEs are more product and technology oriented than they are market oriented and the lack of managers with international experience and foreign language skills) are other internal obstacles for SMEs to export (UN-ECE, 1997).

The external barriers that prevent SMEs to engage in export activity are; technical trade restrictions (e.g. standardization, requirements of quality, assessment of conformity, labeling and packaging etc.), marketing and problems regarding distribution, lack of risk assurance and bureaucratic procedures (complicated formalities and paper work required to be completed, high transportation and communication problems in the distant countries) (UN-ECE, 1997). Employee recruitment problems, cultural differences, equipment licensing, shortage of production inputs, establishment rights, declining demand for products, government controls/regulations, rising cost of production inputs, immigration issue and shortage domestic completion are other constraints and limitations that were defined by Bagchi-Sen (1999). Other constraints according to Sarkar *et al,* are; inadequate access to financing-Banks do not find lending to SMEs attractive due to low volumes, high

transaction cost and high risk due to absence of collaterals; lack of knowledge and information about WTO and its implications; limited resources-SMEs have limited resources which are inadequate for bringing new technology and undertaking promotional activities; low productivity due to inefficient production management techniques; lack of quality systems and scientific operational procedures noted to be below optimum utilization of human resources; lack of modern technology, management systems and infrastructure for exporters; quality standards and non tariff barriers-exports to developed countries are becoming more and more stringent on quality and safety regulations; lack of awareness of international markets and customer demands; lack of economy of scales-since production capacity of SMEs is low, cost of production per unit is high thus affecting their competitiveness and lack of adequate institutional support in marketing services (Sarkar *et al*, 2003: 2-3).

CHAPTER III

3. SMES IN TURKEY AND ANKARA: GENERAL EVALUATION.

3.1 A BRIEF REMARKS ON SMES IN THE TURKISH ECONOMY

Industrialization has been the main aim of Turkey since the beginning of the Republic. After the initial years of industrialization during the 1930's the state has been involved in manufacturing activities, which followed by the import substitution policy in the 1950s and 1960s. In 1950s the main sectors of production was food and textiles, while still production of intermediary products in manufacturing industry was not developed. Due to the developments in 1960s and 1970s and parallel the increased level of the national income and local demand there was an increase in the production level of the intermediary products, machines, vehicles and durable goods (Celasun, 1994; Sönmez, 1998). However, until 1980s the rate of exportation/GNP was low when compared with other similar countries (Table 1). Industry sector was not creating job opportunities and that's why a large rate of the population was working in the field of agriculture. This was the main reason for urbanization due to rural push and low wages due to insufficient demand. Industry was not able to create high levels of employment because of the industrialization policies that encouraged capital

intensive industries rather than labor intensive production activities and encouragement of capacity rather than the rate of employment (Sönmez, 1998).

Table 1: Indicators of manufacturing industry (MI) in Turkey for different periods

	1963-65	1978-80	1981-82	1989-90	1993-95	1996-97
Value added (/GNP %)	12,4	17,1	16,7	22,3	21,3	20,9
Investment (/Total investment %)	20,1	31,1	24,2	17,2	20,2	19,9
Exportation (/Total export %)	20,6	31,2	54,7	79,3	84,5	87,6
Employment (/Total employment %)	7,8	10,3	10,4	14,9	14,9	15,8

Source: For 1963-82, F. Yağcı (1984), last three columns from DPT/ESG; Sönmez, 1998:63.

Local demand was the source of growth for the manufacturing industry in Turkey between 1950 and 1970 (Table 2). However, after 1980, exportation became the main locomotive for the growth of manufacturing industry and its rate was 81.5 (Table2) as in this year the Turkish government undertook a major reform program to open the Turkish economy to international markets. In this situation, the competitiveness of manufacturing industry in foreign markets became a critical issue. Table 2 shows that import substitution has a very limited effect on the growth of manufacturing industry starting from 1950s and even more its effects were negative after between 1977 and 1984.

Table 2: Growth sources of manufacturing industry: different periods

	Annual growth	Sources of growth %			Total
	%	Local demand	Exportation	Import substitution	100
1953-63	6,4	80,1	2,2	9,1	100
1963-68	9,9	75,2	4,5	10,4	100
1968-73	9,4	76,2	10,7	-1,5	100
1973-77 (a)	7,0	100,4	-1,0	0,6	100
1977-81	-3,0	-36,7	81,5	-143,9	100
1981-84-	6,5	55,6	55,6	-6,8	100

Note: (a) all sectors. All the other lines are calculated as the percentage increase in the production of manufacturing industry. Source: Celasun (1994: 458) and Derviş and Robinson (1978: 132); Sönmez, 1998: 64)

The exportation of manufacturing industry in Turkey succeeded to grow by 15% between 1980 and 1996. This average rate is the outcome of the high rate of growth in the initial years, which is followed by relatively lower rates towards to the end of the period: 1980-85: 32.4%; 1985-90: 11.3%; 1990-95: 12.8%; 1995-96: 5.5% (Sönmez, 1998: 66). In this period the growth rate of world exportation was 8.1%.

With the help of exports the manufacturing industry in Turkey has achieved an annual average growth rate of 6% since 1990 and accounted for 70.9% of total physical production in 1994. The predominant manufacturing sectors are textiles and clothing industries. The food industry, chemicals and plastics, glass, iron and steel, motor vehicles and parts, electrical, non-electrical machinery, electronics, and furniture are also well established (http://www.b2bturkishtextile.com/Business/industryinturkey.htm)

The process of industrialization has always played an effective role in the development of Turkish e. Moreover, considerable attention was given to SMEs, since it was understood that these enterprises have an important role in economic growth and development (Bademli and Tüzün, 1987). SMEs offer more diversified range of products with less

investment, they create employment with lower investment costs, are more flexible in adapting to changes, able to adapt technological innovation and contribute to inter-regional development.

A general nationwide evaluation shows that small and medium sized enterprises occupy an important place in the economic and social fabric of our country, in terms of many different and important indicators including the number of enterprises, the number of employees and value added.

The number of small and medium sized firms continuously increased since the early days of the Republic.. The total number of industrial establishments in 1927 was 65,245 and mostly all of them were small craft shops (Table 3). At this time 79% of the total establishments were employing fewer than four workers (Bademli, 1977; Özcan, 1995).

Table3: Total number of industrial establishments

Years	Less than 10	10-49	50+	Total
1927	63,185	2,060		65,245
1950	79,713	2,618		82,331
1963	157,759	3,012		160,771
1970	170,123	3,391	1,785	175,299
1980	177,175	6,573	2,121	185,869
1985	183,573	8,035	2,611	194,219

Source: Özcan, 1995

Due to the liberalization of the economic policies in 1950s there was a sudden rise of small enterprises between 1950 -1963 as their number increased from 82 331 to 160 771. After this year there was a gradual increase in the number of establishments. In 1992 the total number of number of small sized (1-49) enterprises was 194 546 (98.4%), while the total number of medium sized firms (50-199) was 2 247 (1.1%) (Table 4). Total of 196

793 SMEs constituted 99.5% of the total number of manufacturing industries in Turkey in 1992. The total employment generated by SMEs was 935 145 and this constituted 61.1% of the total manufacturing employment. Their share in the value added was 27.7%. The share of the number of the workplaces in textile, wearing apparel and leather industries was 0.29% and this was the highest share among the sectors of manufacturing firms for that year. The shares of the employment and the value added of this sector were 0.29% and 0.16% The second highest rate of SMEs in manufacturing industries belonged to fabricated metal products, machinery and equipment, transport equipment, professional and scientific and measuring and controlling equipment sector. The number of firms was 49 249 and its rate was 0.25% among the total number of firms. The generated rate of employment was 0.22% and value added rate was 0.21%. Wood and wood products sector had the third highest rates in the number of firms, generated employment and created value added.

Table 4: Total manufacturing industry

	Number of work place	%	employment	%	Value added	%
1-9	186 574	94.4	545 809	35.6	20,7	7.7
10-49	7 972	4.0	175 660	11.5	17,2	6.4
Small sized firms (1-49)	**194 546**	**98.4**	**721 469**	**47.1**	**37,9**	**14.1**
50-99	1 405	0.7	97 356	6.4	14,6	5.4
100-199	842	0.4	116 319	7.6	21	7.8
Medium sized firm (50-199)	**2 247**	**1.1**	**213 676**	**14.0**	**35,6**	**13.2**
SME	**196 793**	**99.5**	**935 144**	**61.1**	**73,5**	**27.3**
Large scale firms 200 +	**982**	**0.5**	**595 601**	**38.9**	**194,9**	**72.7**
Total manufacturing industry	**197 775**	**100**	**1 530 745**	**100**	**268,4**	**100**

Source: SSI-State Statistical Institute (1992)

Table 5: The sectoral distribution of manufacturing firms in 1992 (KOSGEB, 1997)

Sectors	Work place	Rate	Employment	Rate	Value added *Trillion TL*	Rate
Manufacture of food, beverages and tobacco	22 255	0,11	258 777	0,17	47	0,18
Textile, wearing apparel and leather industries	57 220	0,29	440 046	0,29	44	0,16
Manufacture of wood and wood products including furniture	43 794	0,22	137 036	0,09	7	0,03
Manufacture of paper and paper products; including furniture	6 737	0,03	54 252	0,04	8	0,03
Manufacture of chemicals and chemical petroleum, coal, rubber and plastic products	5 754	0,03	114 055	0,07	70	0,26
Manufacture of non-metallic mineral products, except products of petroleum and cool	7 413	0,04	92 193	0,06	19	0,07
Basic metal industries	2 210	0,01	77 501	0,05	15	0,06
Manufacture of fabricated metal products, machinery and equipment, transport equipment, professional and scientific and measuring and controlling equipment	49 249	0,25	342 731	0,22	57	0,21
Other manufacturing industries	3 143	0,02	14 154	0,01	1	0,00
Total manufacturing industry	**197 775**	**100**	**1 530 745**	**1,00**	**268**	**1,00**

Source: SSI-State Statistical Institute (1992)

The number of SMEs was in increased continuously and in 1980 almost half of the workers in the manufacturing sector were employed in small firms (Özcan, 1995). SMEs account for 99.5% of all manufacturing industrial enterprise and 61.5% share within total employment in the manufacturing industrial enterprises, its share in the value added is 27.5%. (KOSGEB, 2003), and in investment 26.5%, in production 37.7% and in export is 8%. According to Söğüt (1997), the role of small and medium sized enterprises in the economic life of Turkey has appreciated very well and promoted not only because of their number and variety but also because of their; involvement in every aspect of the economy; contribution to industrialization and regional development; effect on unemployment

problems; integration support and complement of large industries; flexibility in manufacturing fields; respond to market forces; easy adaptation to new technologies; reaction readily to economic fluctuations; success in mobilization of untapped resources of capital and skills; and finally because of their stability in political, economical and social structures

It is estimated that there are around 3.5 million SMEs in Turkey, with nearly 200 thousand in the industrial sectors. They are suppliers to; Automotive, white goods, electronic, textiles, craftsmen, metals and precious metals handling and food sectors.

29% of the general manufacturing industry is from textile (wearing apparel and leather) sector, 25% of them are form fabricated metal products, 22% of them are from wood products including furniture sector and 11% of them is from food, beverages and tobacco sectors (Söğüt, 1997). 27.6 % of the enterprises that have 1-9 workers are concentrated in textile wearing apparel and leather sector; 23.9 % of the enterprises are concentrated in fabricated metal products sector, 22.2 % of them are in wood products- furniture sector; and the concentration percentage fro food, beverages and tobacco sector is 10.3 % (Söğüt, 1997).

As a result it could be said that it is very important to create suitable environment and conditions for small and medium sized enterprises to develop and to reach their full economic potential as they are and will continue to be the backbone of a healthy economy and prerequisite for a balanced development. It can obviously be seen that one of the key solutions proposed for developing economies is to support and strengthen the SME's (Söğüt, 1997).

3.2 SMEs IN THE ANKARA MANUFACTURING INDUSTRY

Ankara is the capital city of Turkey and it is the second biggest city in term of its population and it has 24 counties. In terms of economical activities, Ankara takes place among the centers of industrial agglomeration.

Furniture and textile are among the fast growing sectors in Ankara. Within the recent developments that took place in the technology and production systems, Ankara has changed. It became one of the growing cities in terms of economy and industry. It passed through one stage to another; from being a city of officers, trade and agriculture to an industrial city.

The number of small and medium sized enterprises of manufacture of wood and wood products including furniture was 5 065 in 1992. This sector ranked the 2nd among the provinces in Turkey. The generated employment was 18 972 and the value added was 118 billion TL in 1992 (Table 6). Manufacture of fabricated metal products, machinery and equipment, transport equipment, professional & scientific measuring and controlling equipments and textile, wearing apparel and leather industries are the second and the third sectors that have the highest number of small and medium sized firms. The total number of SMEs in these two sectors respectively are 2 879 and 2 227. Their ranks among the other provinces in term of the number of firms are 3rd and 5th.

Table 6: The sectoral distribution of manufacturing firms in 1992

Sectors	Number of SMEs	Rank among first 10 provinces	Employment	Rank among first 10 provinces	Value added *Billion TL*	Rank among first ten provinces
Manufacture of food, beverages and tobacco	912	4th	7 229	3rd	504	3rd
Textile, wearing apparel and leather industries	2 227	5th	6 990	6th	120	9th
Manufacture of wood and wood products including furniture	5 065	2nd	18 972	2nd	118	3rd
Manufacture of paper and paper products; including furniture	752	2nd	3 566	2nd	78	4th
Manufacture of chemicals and chemical petroleum, coal, rubber and plastic products	268	4th	1 941	5th	99	8th
Manufacture of non-metallic mineral products, except products of petroleum and cool	430	3rd	2 966	4th	170	3rd
Basic metal industries	147	4th	1 409	5th	132	5th
Manufacture of fabricated metal products, machinery and equipment, transport equipment, professional and scientific and measuring and controlling equipment	2 879	3rd	17 338	3rd	949	3rd

Source: KOSGEB, 1997

According to the data obtained from SSI, the total number of manufacturing firms in Ankara was 683 in 1992 (Table 7). 543 of them were with 10-49 employees and the number of employees was 10619. However, the number of small sized firms decreased to 435 firms in 1997. The number of firms with 50-249 was 104 in 1992 and this has increased to 138 in 1997. The number of firms that employ more than 250 persons is the same for both 1992 and 1997. There is a gradual increase in the share of manufacturing firms of Ankara in the total number of manufacturing firms in Turkey. In 1992 their share in Turkey was 6.09 % and this has increased to 7.60 % in 2000. Parallel this increase, the number of employees increased as well from 4.51% in 1992 to 5.12 %in 2000.

In food industry, the total number of firms was 140 for 1992 but this number was 100 in 1997. There was a sharp decrease in the number of establishments with 10-49 employees between 1992 and 1997. Their number was 140 in 1992 and decreased to 76 in 1997. On the other hand the number of firms with 50-249 almost was the same for both 1992 and 1997. Number of establishments with more than 250 employees was 7 in 1992 and this decreased to 6 in 1997. The total number of employees in this sector decreased almost 50% parallel the decrease of the total number of establishments.

Textile and clothing was a growing sector in Ankara between 1992 and 2000. As the total number of establishments were 70 and it has increased to 102 in 2000. Mainly the establishments were firms with 10-49 employees. This number was 60 in 1992 however; it decreased to 49 in 1997. On the other hand there was an increase in the number of firms that have 50-249 employees as their number in 1992 was 7 and they became 25 in 1997.

The total number of firms in engineering sector was 257 in 1992 and this number has increased to 344 in 2000. However, this increase was not a gradual increase as there was a decrease in the total number of establishments in this sector between 1992 and 1997. After this year there is an increase in the number of total firms, but the number of firms with 10-49 employees decreased from 199 to 172 between 1992 and 1997.

Table 7: Manufacturing firms in Ankara according to Firm size and Sectors (1992-2000)

	Firm Size	Number of Firm			Number of Employee		
		1992	1997	2000	1992	1997	2000
Manufacturing	10-49	543	435		10619	9978	
	50-249	104	138		10999	16038	
	250+	36	36		22820	21877	
	Total	683	609	**824**	44438	47893	51332
	Share in Turkey	6,09	5,32	7,60	4,51	4,02	5,12
Food	10-49	140	76		2153	1316	
	50-249	19	18		2212	2588	
	250+	7	6		4878	3107	
	Total	166	100	**100**	9243	7011	4818
	Share in Turkey			6,047			3,93
Textile and Clothing	10-49	60	49		1264	1193	
	50-249	7	25		666	2401	
	250+	3	5		1391	1731	
	Total	70	79	**102**	3321	5325	7644
	Share in Turkey			3,01			2,03
Engineering	10-49	199	172		4268	4268	
	50-249	41	50		4422	5768	
	250+	17	20		12742	14610	
	Total	257	242	**344**	21432	24646	23513
	Share in Turkey			13,12			10,35

Source: Annual manufacturing industrial Statistics of ISI (unpublished data).

Furthermore, according to the information obtained from Ankara chamber of industry (ASO), the total number of the exporting firms in Ankara was 6 946 in 2000 (Table 8).

Transportation & vehicles industry and textile & clothing are the main sectors that have the highest numbers of exporting firms.

Table 8: The sectoral distribution of exporting firms in 2000

Sectors	Number of firms	Total amount (USD)
Food Industry	95	5 876 744
Molding & Casting	871	17 650 537
Wood industry	227	7 616 884
Metal Goods	88	1 922 863
Rubber Industry	135	4 926 184
Agricultural Machinery	149	8 101 531
Iron & Steel Work	642	17 290 680
Transportation & Vehicles	1155	56 815 627
Cement & Earthenware	115	3 229 765
Textiles & Clothing	929	17 039 308
Flour, Bakery & Provender	77	4 920 933
Petroleum & machines	182	48 935 273
Construction Contractors	240	5 351 055
Machinery & Tools	687	93 157 861
Heating & Cooling	611	9 302 260
Other Production	333	4 976 539
Melting and rolling industry	1	20 156
electrical	333	14 841 778
Electronics	241	2 615 053
Plastics	76	1 296 639
Aluminum Industry	12	1 974 580
Lifts and Storage Batteries	55	1 974 680
Electrical Home Appliances &durable consumption goods	25	312 122
Total number of firms	**6 946**	**316788254**

Source: Ankara chamber of industry (ASO) (unpublished data).

In 2002 this number has increased to 7 642 exporting firms. Although there is a small increase in the number of exporting firms in transportation & vehicles sector they still the leading sector in terms of having the highest number of exporting establishments. On the other hand there is a decrease from 929 to 852 in the number of firms in textile and clothing sector (Table 8). Iron & steel industry has the second highest number of exporting firms in 2002. Wood, construction, machinery and electronic sectors have considerable number of exporting firms for both 2000 and 2002.

Table 9: The sectoral distribution of exporting firms in 2002

Sectors	Number of firms	Total amount (USD)
Food Industry	99	7 768 044
Molding & Casting	706	15 247 834
Wood industry	297	5 362 468
Metal Goods	122	1 892 275
Rubber Industry	77	3 133 691
Agricultural Machinery	451	18 888 180
Iron & Steel Work	942	49 884 540
Transportation & Vehicles	1164	80 614 451
Cement & Earthenware	105	1 418 303
Textiles & Clothing	852	25 449 013
Flour, Bakery & Provender	141	3 886 536
Petroleum & machines	216	3 796 763
Construction Contractors	199	7 952 252
Machinery & Tools	463	56 112 334
Heating & Cooling	485	18 580 923
Other Production	250	4 850 873
Melting and rolling industry	3	105 336
electrical	413	12 970 694
Electronics	374	4 086 375
Plastics	135	1 727 494
Aluminum Industry	4	26 162
Lifts and Storage Batteries	51	3 210 815
Electrical Home Appliances &durable consumption goods	93	2 250 012
Total number of firms	**7 642**	317 535 622

Source: Ankara chamber of industry (ASO) (unpublished data).

3.3 THE OBJECTIVE OF THIS STUDY

Small and medium sized firms started to play a vital role in the regional growth process. Previously, small and medium sized enterprises had to act alone because of their limited financial and social resources. However, this picture has changed owing to various different factors. Therefore, recent processes of the economic growth have attracted researchers to define and analyze the factors that affected the process of regional growth. In this study, the main claim is that the local capabilities of one region positively affects the exportation capacity of small and medium sized enterprises and this positive effect leads to the growth of that region. So, in this study

exportation of small and medium sized enterprises in Ankara province have been taken into consideration.

The main statement of this study is, "l*ocalized capabilities of regions reinforce and increase SMEs propensity to export and this will lead to the growth of regions"*. The local context provides firms with many positive externalities. These positive externalities pave the way for firms to explore further growth opportunities. Positive externalities are the outcome of localized capabilities. Local capabilities stem from the presence of qualified localized capabilities such as a "marshallian atmosphere"; specialized advanced services related to transport, communications and scientific infrastructure (Marshal, 1919; Marriotti and Piscitello, 2001). The general infrastructure, built environment, area specific institutional endowments (rules, practices, routines, traditions culture etc.) are the other localized capabilities. These externalities favor innovation, learning (Camangni, 1991; Marriotti and Piscitello, 2001) and network relationships (Coviello and Munro 1995, Holmlund and Kock, 1998; Marriotti and Piscitello, 2001), which in turn becomes the path of growth and development.

To justify the main statement of this study there was need for supportive and complementary hypotheses. One of them is related with the innovation process. It is known and highly mentioned in the recent literature that the process of innovation is one of the most important factors for regional competitiveness. In the process of regional growth, innovative SMEs and their effect on the share of exportation is very important. Therefore, the innovativeness (innovation capacity of the firms should be

measured. Accordingly, the following hypotheses are formulated to measure the effect of innovation on the level of exportation; "*Innovative SMEs are likely to export more than the non-innovative SMEs*; p*roduct and process innovation increases the propensity of SMEs to export and specialization leads to an increase in the exportation share in the total exportation share"*. Data used to test these hypotheses have been obtained from the answers given to the questions that have been submitted in appendix II. Questions of part II of the questionnaire aims to gather information such as; the age of the used machinery; any new technology used in the recent years; patent application; having information about the recent technology; having R&D activities; number of employees; improving the used technology, via supporting new innovative activities; having new product and process designs and specialization are used to test the formulated hypotheses.

Supportive mechanisms in one region provide positive externalities for that region. In order to define the validity of this statement "*local control mechanisms, motivates SMEs to export"* hypothesis has been developed. Incentives, regulations, licensing factors have been used to test the stated hypotheses. Networking relationships are also another main point that should be tested under the main hypothesis. Therefore, "*the propensity to export to the global market only through local networking system is less than the propensity to export by being part of the global network*", hypothesis has been formulated. Being an element of the global and local networks is one of the most necessary factors to be competitive and successful. Furthermore, learning capacity is considered as a crucial element in the growth and development process. Being able to learn and absorb the new knowledge, share it on trust and reciprocity basis are the main motives that lead firms, regions and nations to become competitive and

productive. Thus, the supportive hypothesis related with this subject is, "*specific regional culture, learning abilities and regional capabilities increase the export share of SME in their total amount of production".* The last supportive hypothesis is related with the institutional background of the regions and its role in the process of growth. The related hypothesis has been formulated as "*the role of institutions (local-global) and their formal-informal collaborative links, organizations increase the propensity of SMEs to export".* Questions in part III, IV, V and VI have been used to obtain the required data to test these hypotheses. With some of the questions that were asked it was aimed to gather information on the following issues: relationships with the other firms; the resource of the used knowledge; being part of the local and global networks through subcontracting relations or being a part of a foreign firm or member of an internet network; the movement of human capital; the level of education of the employees and the availability of any educational courses for the employees.

3.4 RESEARCH DESIGN

This study examines the relationship between regional growth and the exporting SMEs. The research focuses on exporting SMEs in Ankara province. The main data has been obtained from the results of the questionnaire (see appendix II) that has been filled in by the exporting SMEs in Ankara province. In total, 300 exporting firms are included in this study. The list of these firms was taken from ASO (Ankara Sanayi Odası/Ankara Chamber of Industry). No specific sector has been chosen during the survey since none of the sectors was dominant.

The survey instrument included a questionnaire covering 6 main parts. The first part of the questionnaire sought to obtain general information about the firm. The second group of questions was related to the innovation background of the firm. The third group of questions was related with the networking process and its level in the firm and a general picture regarding the financial situation of the firm has been obtained by the help of the fourth part of the questionnaire. The fifth part is related with the process of learning of the firm and finally the last group of the questions sought to obtain data on the level of exportation. Unfortunately, receiving the filled in questionnaires was a problematic process since it was possible to receive 10 out of 270 e-mailed questionnaires and this was possible only after e-mailing the questionnaires twice. Only 2 of these questionnaires were usable as the other responses were related with their apologies for not being able to answer the questionnaire. 20 questionnaires were not delivered due to different reasons (changes in the mail address, overloaded mailboxes etc.). However, it was possible to receive only 14 mailed questionnaires out of 290 after calling them by phone and resending about 30 questionnaires by fax. Finally, in order to complement the postal survey, face-to-face interviews have been conducted with 20 firms. As a result, only 11% of the questionnaires were filled in since 34 questionnaires were filled in by the exporting SMEs out of 300 firms and a large number of SMEs give their "busy schedules" as an excuse for not participating in the survey and unfortunately the ones that have filled in the questionnaires did answer all of the asked questions. Therefore, a descriptive analysis rather than a statistical analysis will be followed while presenting the results and consequently the results have to be used and analyzed carefully.

No specific sector was dominant among the 34 questionnaires that have been received. Generally questionnaires were filled came from textile, construction, electronic, glass and glass products, furniture, casting of metals, medical instruments manufacturer, machinery, agricultural products and food production sectors. Approximately 50 % of the firms were based in Ankara for more than 15 years. Most of them are family owned firms and they mainly export to the European countries especially to Germany, Italy, France, Denmark and Belgium and to Middle Eastern countries.

3.5 THE FINDINGS

The driving forces of regional growth have been changed, the factors related with the physical assets are no longer important. Instead the social endowments like norms, rules, routines and regulations became the focal point for the economic growth of regions. In addition, interactive innovation has been recognized as another main factor that leads to regional growth.

SMEs were acting in a protected environment before the process of globalization. This was because of their size, support systems and many other reasons. But within the globalization process they started to act in a more competitive environment where there was free flow of trade but no borders.

As a result of the increasing competition in the global era, there was a change in the domestic demand and better quality products with internationally competitive price

demanded. There was a pressure on SMEs to compete with others in order to sustain their presence in the global world. This made SMEs to pay more attention to the quality of their products, their prices and delivery.

SMEs have a flexible structure that can easily adapt to the changing market demands. They have continued to be competitive in the global markets with an approach mainly based on export (Depperu, 1993; Zucchella, 2003). SMEs became important contributors to the economic growth and development of many countries because of their changing role in the international trade (Brich, 1988; UNCTAD, 1998; Weaver *et al,* 1998; Magagula and Obben, 2001)**.**

According to the interactive and systemic model, SMEs can be innovative by relying on tacit knowledge, benefit from complementarities in the local networks and from common learning and rely on local institutions and resources (Cooke and Morgan, 1998; Asheim and Cooke, 1999; Malmberg and Maskell, 1999).

Based on the explanations made above, the study involves an assessment of the level of affect of innovation on the export level of small and medium sized enterprises. To this end, many different questions have been formalized to measure the innovativeness of the firms. Patent application, human resource (education level, technical staff), providing and receiving any training, using new technology in the production process, having information about the recent technological developments and supporting new

creative ideas are some of the criteria that have been used to measure the innovativeness of firms and the effect of innovations on the level of export.

Table 10 shows the results of different questions that have been asked regarding the innovation process. According to the obtained results, 67 % of 30 firms that responded have applied for patent and/or license. 84% of 27 firms have employed technical staff during 1997-2002. 100% of 32 firms have made new technological improvements and or innovations during 1997-2002. 22 % of these improvements has been made in products (Figure: 1), 38 % improvements have been done in the process of production. The rate of the improvements in the management techniques is 22 % and 34 % is the rate of the improvements that have been made in the products, production process and management techniques.

30 firms have responded positively to the question on whether they have information about the new technologies related with their production field. The main source that they are using to acquire the related information is internet since 33 firms indicated that they have access to the internet. 87 % of 30 firms have made investment in their used machines, equipments and software during the last five years. Unfortunately, only 12 firms have responded to the question on whether there are any creative ideas or thoughts developed in the firm and it was also asked whether there was any support system for these thoughts and ideas. 83% of firms have responded positively to the first question and 74% of them have given a negative answer to the latter question. So, it can be said that there is no support system in the firms for new ideas created by the staff of the firm. Furthermore, there are no significant support from institutions and

other firms during the improvement or innovation processes of products and production process. Only 17% of 30 firms received this kind of support from different institutions and the rest of them are not engaged in this type of activity. In other words it could be reached to the conclusion that the collaborative relations among firms are not developed as only few of the firms receive support from different institutions. All the indicated results have a positive effect on the level of export, as 86% of 22 firms have indicated that there has been an increase in the export level via implementing new technologies, improving product and process techniques and engaging in innovative activities.

Table 10: Measures for innovation

	Percentage (%) Yes	Percentage (%) No	Total number of firms
Patent or license application	67%	33%	30
Employing technical staff during the last 5 years	84%	16%	27
New technology improvements during the last 5 years	100%	-	32
Having information about the new technology in your production field	100%	-	30
Using internet in the process of exporting	100%	-	33
Investment during the last 5 years	87%	13%	30
During the improvements any support received from any institution	17%	83%	30
Any creative ideas/thoughts	83%	17%	12
Supporting the creative ideas/thoughts	26%	74%	31
Due to all these any increase in the rate of export	**86%**	**14%**	**22**

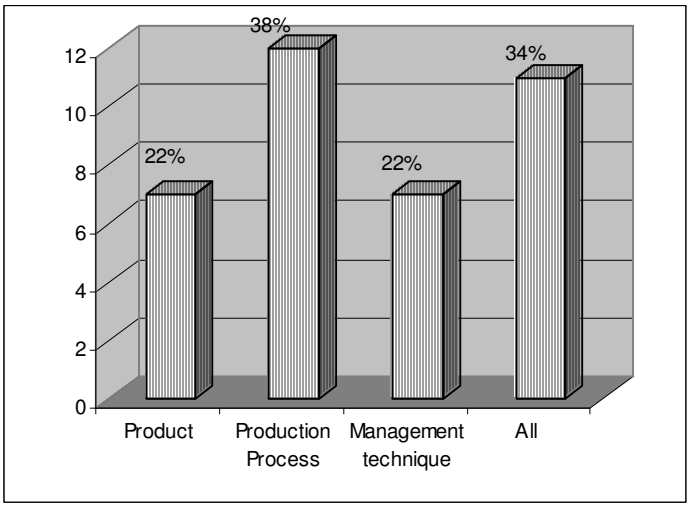

Figure: 1: Areas of technical improvement

48% of 31 firms are using new technologies in their production system when compared with the available technology level in their field of production. 45% of them are using the same level of technology that is available in their sector and only 6% of them are using old technologies in their production process (figure: 2).

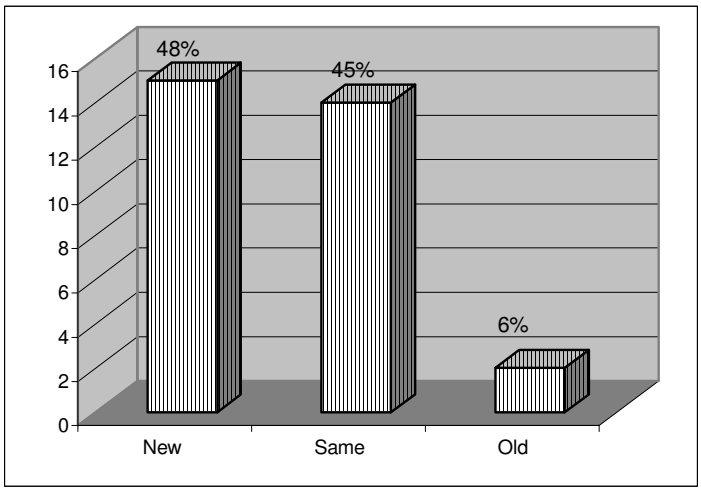

Figure 2: level of used technology in the firm compared with the level of technology in the same sector.

R&D and product development are the important components and effects of economic and social transition for regions and nations. Furthermore, R&D is not a process that should only be conducted by the scientists in special laboratories; R&D can be on a smaller, functional and focused level throughout all departments and organizations. It is a crucial element especially for the process of innovation, design and further development. So, the availability of R&D units in the exporting SMEs is another major indicator for them to be innovative. Unfortunately, only 24% of 17 firms have research and development units under the body of their firm. 76% of them have responded negatively as they do not have R&D unit in their firm (Figure: 3). 55% of firms that have engaged in R&D process are mainly trying to adapt their products to the newly developed products in their sector. 33% of 17 firms are trying to develop their production process and that is the reason why they have R&D unit in their firm. By having an improved production process, firm will be able to produce better quality goods/products with less cost of production, in a shorter period of time. 12% of the remaining firms indicated that they have R&D unit and the reason of this is to conduct

basic research activities. All the firms engaged in R&D activities have indicated that the level of co-operation among firm, universities and the government is very low.

Unfortunately, only four firms indicated that there is a positive effect of R&D activities on the level of export and they have noted that the increase of the export level due to R&D activities is 100%.

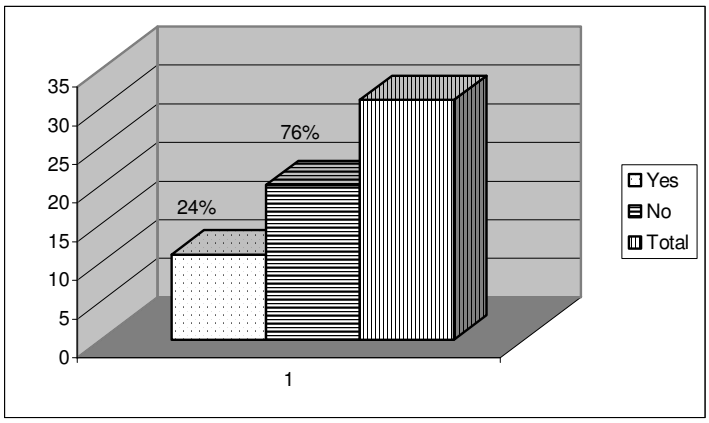

Figure: 3: Having R&D units

During the production process the source of the used technology is another point that has been taken into consideration to measure the innovativeness of the firms. 55% of 31 firms indicated that they are using a foreign technology (imported technology) in their production process. So, this shows that there is an external codified knowledge transfer to the firm. 35% of the firms indicated that they prefer to use their own knowledge accumulation during the production process. 29% of the firms indicated that they prefer to use the newly produced machines in Turkey and not importing any

technology from outside. 16% of them prefer to use the imitated technology in their process of production (Figure: 4).

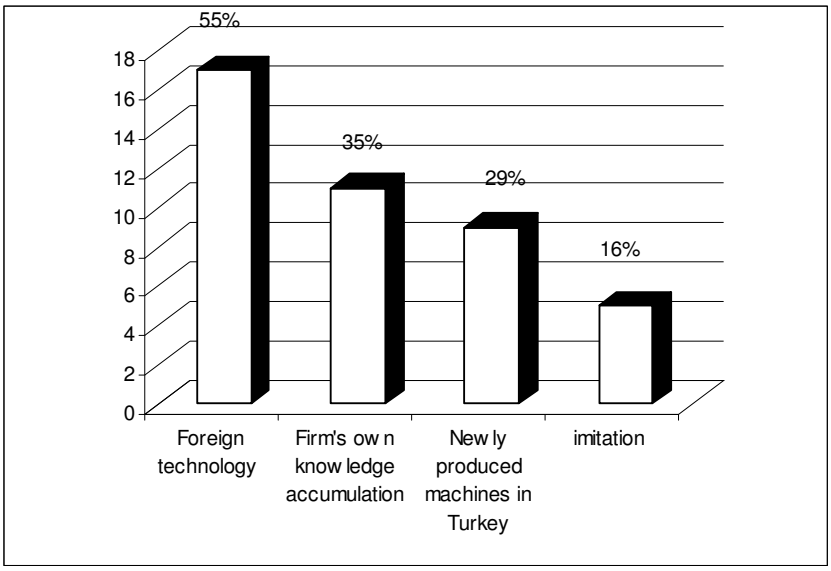

Figure: 4 Source of used technology in the production process

Table 11 shows the importance of the factors that motivate and pave the way for the firms to engage in innovative activities. The sample firms have been asked to define the level of importance of the reasons that encourage them to make innovations. They have been asked to rate their level of preferences on 1-5 scale (5=very important to 1=not important). The obtained result showed that it is very important for 77% of 31 to increase their total market share in the international arena and because of this they are engaging in innovative activities. 70% of 30 firms believe that innovativeness is the main way to sustain their competitiveness. Increasing the quality of products is another significant point that motivates the firms to make innovation and 68% of 31 firms showed this as a reason for their innovation activities. In order to improve the

overall quality, 44% of 32 firms are implementing computer added design and computer added manufacturing production technologies (figure: 5). 31% of them are certified with widely accepted total quality management and ISO 9002 standards. 34% of them are meeting ISO 9001 standards. 61% of 31 firms have indicated that increasing the efficiency is another very important factor that motivates them to innovate. Reducing the cost of production (60%), serving new markets abroad (58%), increasing the share in the national market and reducing the production time (57%), decreasing the cost of labor (55%), decreasing the level of the environmental pollution (48%) and diversification of the products (47%) are the other factors that have affected the firms to engage in innovative activities.

Table 11: Motivation factors for innovation

	Very important %	**Important %**	**Normal %**	**Not important**	**Total number of firms**
Enlarge product variety	47	22	19	12	32
Increasing the share of the market (national)	57	27	13	3	30
Increasing the share of market (international)	77	12	10	-	31
Serving new markets abroad	58	10	16	16	31
To reduce production cost	60	30	3	7	30
Having the competitive power	70	27	3	-	30
Increasing the quality of the product	68	19	13	-	31
Increasing the efficiency	61	32	7	-	31
Sustaining the leadership in the market place	47	40	7	6	30
Reducing production cost	57	32	11	-	28
Decreasing human capital cost	55	21	17	7	29
Decreasing environmental pollution	48	17	17	17	29

In order to increase the share in exportation, new designs both for products and production process are required. 66% of 32 firms indicated that they have design activities in their firms and they showed the international expositions as the main source to obtain the required information.

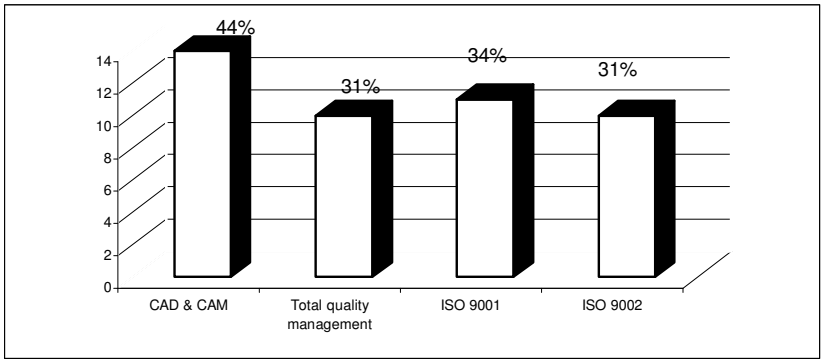

Figure 5: Used standard programmes

67% of the firms have used the catalogues and magazines related with their production sector in order to achieve a successful designs for their products and production process. Visiting the national expositions, employing designers and internet are the other resources that have been used to obtain the required information and knowledge for new designs that will be improved and developed for their products.

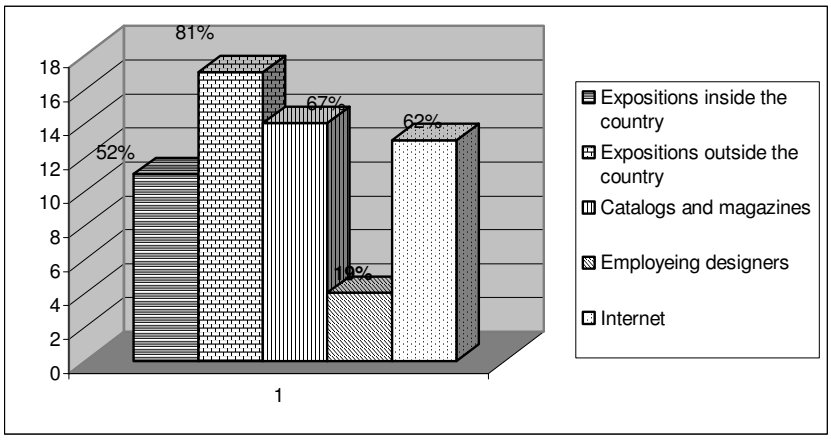

Figure 6: Information sources for new designs.

Following the recent developments of productions processes is very important for firms to sustain their competitive power in the international markets. 74% of 31 firms are able to follow the new developments via attending the expositions inside the country whereas 65% of them prefer to obtain the required information by attending the expositions that takes place outside Turkey. Catalogues and magazines are other sources for this type of information. Customers are the source of information for 29% of the firms. Internet is another method that is used by 58% of the firms to follow up the recent developments and finally local institutions like TUBITAK and KOSGEB are the sources of information (figure 7).

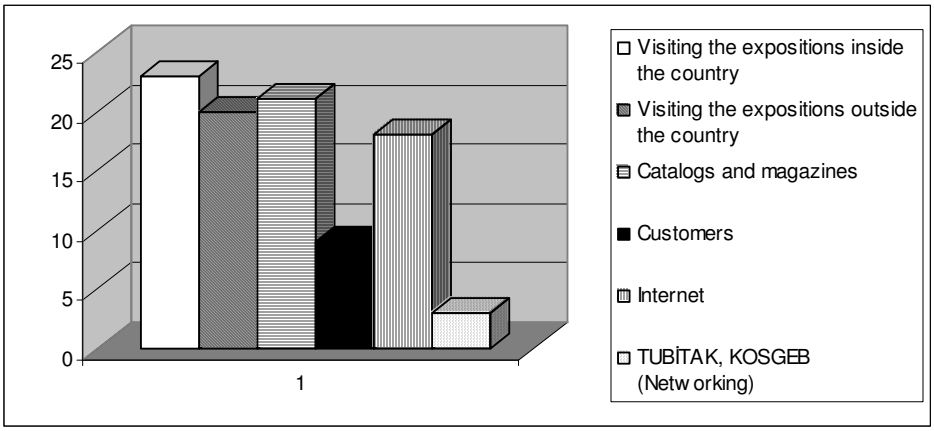

Figure7: Sources of information

To increase the level of export, the firms are mainly improving their products according to the requests and needs of the customers. 22 firms stated that product improvement is a very important factor (82%) for them to obtain the recent developments and new innovations related to their field of production and their sector (Table 12) so that they would be able to make inroad for them in the export market. Improving the products inside the firm is another important factor for 27 (70%) firms to catch up with the new improvements by which they would be able to increase their export rate. Contrary to these, most of the firms indicated that it is not important for them to cooperate with other firms which are in the same sector to improve their products.

Table 12: Motives for exportation

	Very important %	Important %	Normal	Not important %	Total number of firms
Purchasing the new innovation/information from national markets	19	19	29	33	21
Purchasing the new innovation/information from the international markets	19	29	24	28	21
Improving the products inside the firm	70	26	-	4	27
Cooperating with other firms in the same sector	16	21	26	37	19
Improving the products according to the request of the customers	82	14	4	-	22

It could be observed that all the results that have been given and discussed above are supporting the hypothesis formulated with respect to the process of innovation and its positive effect on the level of exporting. All firms that has been included in the sample have denoted that innovation (both product and process innovation) is very important for their production process and for their market expansion strategy as well. To export and compete with the other firms in the international arena, innovation has the key role.

Local environment plays a crucial role in the development and growth process of regions. The local environment and territorial positive externalities have been discussed widely in the literature. Externalities of a locality help to determine the growth of firms and the manner in they mould their competitive advantages (Malmberg *et a..,* 1996; Markusen, 1996; Porter, 1996; Maskell and Malmberg, 1999; Mariotti and Piscitello, 2001). In addition to the physical built environment of regions, other local mechanisms such as, incentives and credits provided by government and

supportive regulation mechanism available in regions are significant factors for the development process both for regions and firms. The local context provides firms with positive externalities and this complement the competitive advantages of them. As result of this, they will be able to explore further growth opportunities abroad. The formulated hypothesis related with this subject is `"*local control mechanisms, motivates SMEs to export"*. To test this hypothesis; questions related with the available incentives provided by government have been asked.

According to the results obtained form 29 firms, 62% of them did not benefit from the incentives (figure: 8) provided by the government and the main reason of this was the inadequacy of the provided incentives. 75% of the firms indicated that the incentives provided were not adequate for investment and 65% of found it inadequate for exportation process. However, 52% of 25 firms (figure: 8.1) have used credits until the year 2002 and they have mainly used credits for two reasons; the first reason is investment and the second reason is exportation. So, no positive effect of the local incentives has been observed from this set of data. As a result of this, the formulated hypothesis does not have enough supportive evidence to be justified and to be straightened and confirmed.

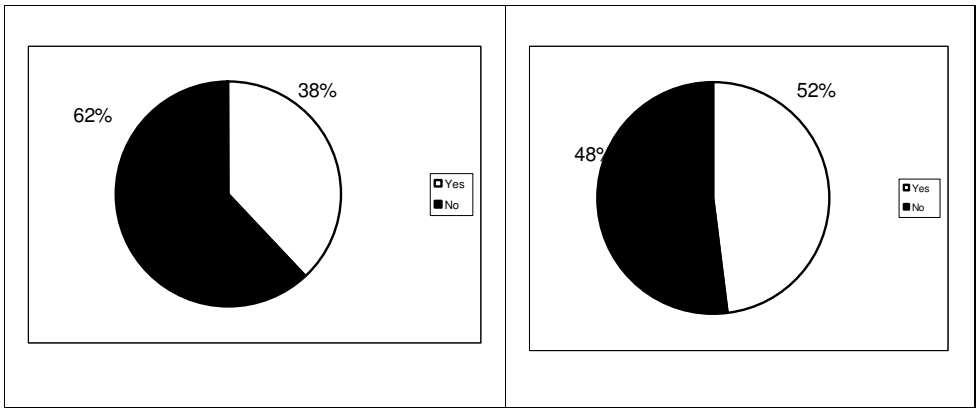

Figure 8: Benefiting from government incentives, Figure 8.1: Used credits

Both local and international links among actors are required for a regional growth. Camagni (1991) indicated that penetration into distant networks is very important to avoid "entropic death" of the milieu and sustain the competitive power of the region and the firm itself. Knowledge is the key element that avoids the economic collapse of both the firm and the region. Tacit and codified knowledge should be reached, and for this interaction, reciprocal trust based relations and synergy should be produced by the help of local and global networks. So, networking is an essential process for growth and development. It has a significant effect on the process of exportation. To test the existence of the relation between exporting and local-global networks "*the propensity to export to the global market only through local networking system is less than the propensity to export by being part of the global network"*. Being member of local internet system, being member of national and international institutions, obtaining information about external markets, providing the required technical staff and subcontracting relations with other firms are some of the questions that have been formulized to test the related hypothesis of this subject.

KOBINET is a network system. Through this network system, firms are able to follow many innovation and recent developments. It is a common ground to gather firms in one place. It is a good indicator that reflects the level of local networking. According to the result obtained from the sample, the level of membership to this networking is quite low. Unfortunately, only 16% of firms are members of this system (Table 13). Furthermore, only 3% of 30 firms indicated that they are members of international institutions. Most of 28 firms are using internet to reach to the foreign markets. Via internet survey, they try to find suitable markets and customers for their products.

Customers are the main source of information necessary for firms during the production process as 55% of 29 firms stated that they are receiving information about the markets that they can sell their products.25% of 28 firms prefer to find their external/foreign markets via mediating institutions.

Table 13 Networking level

	Yes %	No%	Total number of firms
Being member to KOBİNET	16	84	31
Being member of any institution abroad	3	97	30
Subcontractors	41	59	32
Using subcontractors	54	45	31
Production under known brand	24	76	33
Obtaining information from outside the firm during product-process innovation/improvement	60	40	5/15 *(total # of firms)*
Being in continuous cooperation with any firm	27%	-	5/15 *(total # of firms)*

Subcontracting relations is one of the most important indicators that represent the level of local networking and cooperation among the units of the system. 54% of 31

firms are using subcontractors during their production process. 41% of 32 firms are subcontractors. According to You and Wilkinson (1994) high degree of cooperation may be an important ingredient of industrial success (You & Wilkinson, 1994; Asheim, 1996). During the cooperation process, their primary relations (subcontracting) largely influence research and knowledge creation activities of co-operating partners with other firms (Graeber, 1993; Crewe, 1996). Subcontracting links between manufacturing firms offer considerable amount of benefits in the growth and development processes. However, it was understood from the results that 70% of 19 firms indicated that subcontracting process does not have any effect, neither positive nor negative on the volume of exportation and unfortunately only 20% of them declared that the effect of subcontracting is highly positive and increases the volume of exportation. According to the remaining 10% of firms, subcontracting has an effect on the rate of exporting but not in a significant way.

Information and knowledge are the primary source for innovation and competitiveness. Obtaining information from external resources is another indicator that reflects the level of cooperation and networking among firms. 60% of only 15 firms *(this question has been added to the questionnaire after of a revision)* managed to obtain external information via visiting the expositions, from internet search, published catalogs and periodicals. However, customers are the main source of information. So, it could be said that there is a high level of cooperation among the producer and customer. Furthermore, 67% of 15 firms are in relationship (not continuous) with different firms and institutions inside the country and 27% of 15 firms are in continuous relationship with local firms. Production under a known brand is another indictor that has been used to measure the level of cooperation and

networking of SMEs. Only 24% of 33 firms are producing their products for a known brand in the markets (table 13).

As a result it could be said that the level of local networking is higher than the level of international networking among firms and institutions. However, it is worth to mention that the process of networking and cooperation with other firms and institutions begins in the production process (does not necessitate high technology) and become intensive during the exportation stage. Local networking is intensive during the production process and not innovation or product improvement stages.

Global networking process starts during the marketing process of the products and also during the exportation process. So, the developed hypothesis has been supported and justified based on this result.

In the late 1990s, a considerable amount of researchers have analyzed the role of different types of learning within innovative dynamics and their effect on growth and development processes of regions: The effectiveness of the learning process depends on the quality of interactions among different units, the available local capabilities and the available infrastructure of regions. There are many different ways of learning like learning by doing (Arrow), learning by using (Rosenberg and Vonttipel), learning by diffusion (Saha) and learning by interacting (Lundvall) (Kirat and Lung, 1999: 28). Learning has a crucial role in the process of exporting. Through this process, new and updated products will be produced by firms. In the process of learning there is need for the production of new knowledge or novel techniques, which occur endogenously

and are inherent to the processes of providing and/or propagating innovation (Kirat and Lung, 1999). To learn, a powerful and trust based relations should developed among different actors in regions. Thus, the process of exchanging information and knowledge could take place. Routines and rules of the society are the mediators of the process of learning and the diffusion of knowledge. Furthermore, it is argued that, with respect to the development that takes place in the economic environment, regions should adopt themselves to continuous learning and knowledge production (Florida, 1995). Regions should become learning regions as a result of all these developments. So, according to the learning region approach, interactive/collective learning process is an important source of continuous updating and innovation mechanism (Eraydın, 2002). Corresponding to the statements that have been mentioned above and according to the previous arguments that has been given in the previous chapters, the hypothesis that has been developed is `*Specific regional culture, learning abilities and regional capabilities increases the expiration share of SMEs in their total amount of production*`. Many different indicators have been used to test this hypothesis. These indicators are; the provided educational and training programs within the firms or outside the firms, the level of education of the workers, having or receiving any information from other firms, institutions inside or outside the country and the ability and capability to adopt to the newly developed technologies and techniques.

Out of 26 firms 58% of the firms are providing training to their staff frequently during their working time (figure: 9) where the process of learning by doing is taking place.

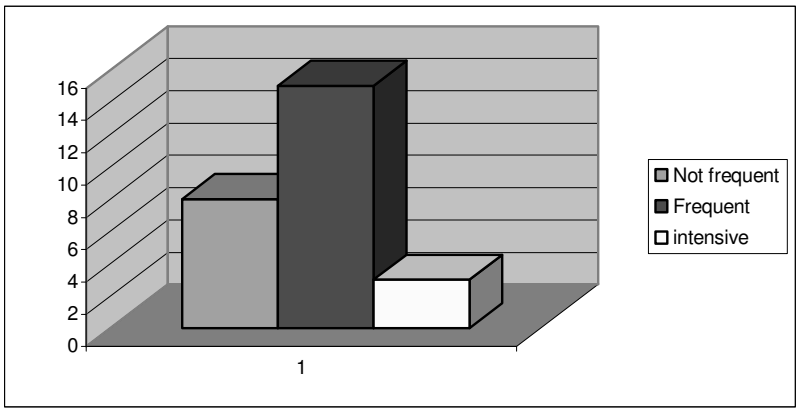

Figure 9: Training frequency

Masters are teaching their apprentice while they are working. 12% of the firms are training their staff intensively during work time and they are mainly (84%) learning while they are working but in addition to this 58% of the 31 firms are teaching their staff by the technicians and 13% of them providing the training via different institutions (figure 10). KOSGEB is the main institution that provides training for them and the main reasons that made them to cooperate with this institution are their reliability and quality. However, 30% of 26 firms are providing training to their workers but not frequently.

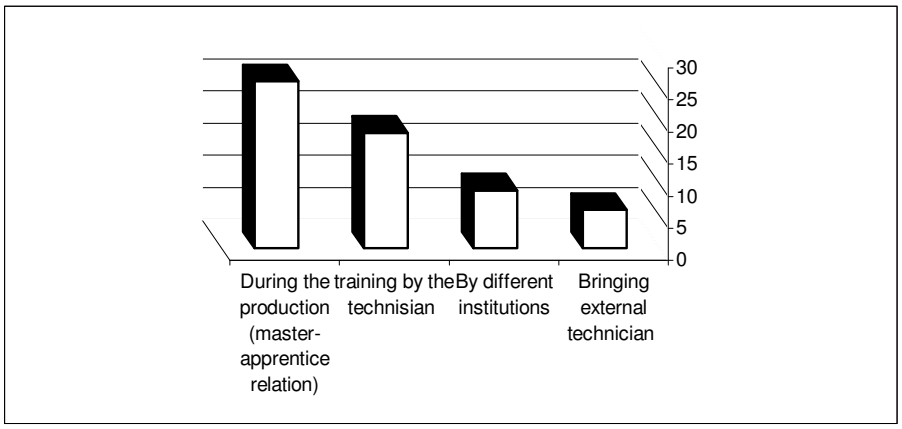

Figure 10: Training methods

On the other hand 43% of 30 firms stated that they are sending their employees outside the firms to different training courses but 57% of them responded negatively to this subject.

Investment in human capital is one of the key factors to become innovative and competitive. Innovation is one of the factors that lead to an increase in the volume of exporting. This statement has been argued by many different researchers in the literature. Furthermore, this statement has been justified by the results that have obtained from the answers of the implemented questionnaire. Accordingly the formulated hypothesis is supported by the results obtained from the sample.

The last developed hypothesis is related with the institutional background of regions. As it was mentioned in the previous chapters, institutions play an important role in the

processes of innovation, learning and competitiveness. The developed hypothesis regarding this issue is the `*role of institutions (local-global) and their formal-informal collaborative links, organizations increase the propensity of SMEs to export*`.

Although, some firms indicated that they are sending their staff to different institutions for training, the level is very low as only 13% of 31 are sending their staff to different institutions; KOSGEB is one of them. 31 firms out of 34 have indicated that they are members of different associations and chambers. However, it is understood form the other parts of the questionnaire that there is no high level of cooperation and collaboration between institutions and firms, although the level of affiliation with different chambers or associations is high. There is no noticed cooperation and collaboration with other institutions and universities. So, there is not adequate information and data to be used to support the formulated hypothesis relates with this subject.

CHAPTER IV

4. SUCCESS FACTORS IN THE GROWTH PROCESS: DIFFERENT SUCCESS STORIES

In this chapter as it was mentioned in the previous chapter, the monographic descriptions of five different firms that represent different success stories and struggles are introduced in detail. Five firms from different sectors have been chosen. Each firm has its own story of success their track toward different export markets. The fundamental reasons behind their establishment and their exporting are clarified. Their main motives that paved the way for them to export and the problems they face while exporting have also been tried to be analyzed in detail.

4.1 SUCCESS OF EXPERIENCE: *woodsector*

In Turkey, at various levels, economic conditions differ enormously. This variation can be seen clearly, as an example, in furniture industry the consumption per capita differs from one year to another. These variations are also reflected in their export potential "openness" toward international furniture sector. It is well known that Turkey is one of the few countries that its local production satisfies almost its local

demand. One of the domestic producer firms has been interviewed. It has its own reputation in this sector and is pretentious in their work.

This firm is a family firm. Maternal uncle of the present owner was dealing with this type of production, he was a furniture maker and he has been in this sector since 1954. The owner, who is the manager of the firm at the same time, started to work with his maternal uncle since his childhood and continued working with him even after he has completed his university (business administration graduate). After his uncle's decease in 1962 the owner of the firm continued working in this sector and he replaced his uncle. They were producing furniture; home furniture (kitchen furniture, bedroom furniture and seating) from the first day they have started functioning in 1954.

Their export story started in 1979 when an offer came to them by the government to furnish a residence in Sofia. This was their first project and since then they have started to export through different projects. Later on, they have received another offer from Germany for a hotel project; the project was related with furnishing a hotel. After that they have received many different project proposals from Russia after Russia's disintegration. The manager noted that "the only reason for all of these offers that we were receiving was due to our high quality work and reputation"

Their total number of employees counts 65. 10 of them are university graduates. 6 of them are technician and administrative personnel and 58 are workers.

The owner decided to expand their production field and started to produce laminate parquet. Based on this decision he enlarged and expended his production facility to handle the new field. The above decision was taken after a long and tiring market survey. Their survey was not bounded to internal field, but also was conducted and carried out through a survey in the internet and many visits to international expositions and shows concerning their new interest. The owner after all that study reached to the conclusion that the demand on the laminate parquet was great. Thus, investment in this field would be profitable which at the end creates a more stable income. This was decided and they continued out in 2001.

30-40% of their production capacity is allocated for exportation. The firm has a "fictive" storage in Germany. They have agreement related with the sale of products with one of the known markets there. According to the agreement, the market will inform the firm about the consumed items of the products in the market at the end of each week. Accordingly, it will be replaced by items pulled through the "fictive" storage. By this way the deficiency will be overcome in the market at the end of each week, on the other hand a steady flue of the good will be guaranteed.

The manager noted that they are following the related publication for the recent developments in their sector and they are able to obtain information via visiting expositions both inside and outside the country. "Our products are very high quality. Design in one hand and using advanced technology and machines on the other hand resulted in high quality products" noted the manager and he continued his comments by giving some detailed information about the technical profile of their factory;

The machines used are in good conditions and generally their average ages are between 2 to 5 years. Thus, the used machines and technology are very new when it is compared with the technological level and machines used in the sector. Furthermore, they are continuing the investment for updating their machines. They have made improvements and innovation in their products (laminate parquet) during the last 5 years they have been in cooperation and collaboration with university while doing the improvements. They have R&D unit in their firm. The main aim of this unit is to make improvements in the production process. During the process of design creative thoughts and ideas are very important they are supporting these types of attempts. By visiting the expositions inside and outside the country they are trying to obtain information regarding new products and new designs and through this way they are aiming to enlarge their design background and product range (product diversification). Over all, quality is continuously has been improved, the firm certified as conforming with the widely accepted total quality management standards and meeting the TSE quality assurance requirements. Getting the recent information and technology is not enough learning and adapting to the new technology is also important for them and that's why they have training programmes for the employees inside the firm. Furthermore certificate is given to the trained staff after completing the advanced stages of training. Training is given by the technical staffs that are working in the firm. During the production process using subcontractors might be the case as well. So they have networking relations with other firms and producers.

When the manager was asked about how they organize their outward trade, he has explained the process as following; "the exportation process is organized via getting

directly in contact with customers who are at the same time our source of information related with the markets outside the country". Informal relations are used to reach to the foreign markets.

In the scope of a project, they are exporting cupboard/wardrobe to Russia which counts to about 25% of the total external sale to Russia. They are exporting wooden laminate parquet to Belgian and Germany. 60% is the share of parquet among the total external sale. 50% is the share of the total exported goods that have been produced in the firm. (50% of the total production allocated for export) They are achieving their outward trade through other firms which are inside and outside the country also. The owner of the firms indicated that because of these, an increase in the volume of exportation has been reached. The annual increase is around 3.5%. The main motives that led the firm for these innovations are increasing their market share inside and outside the country, decreasing production cost, increasing product quality, efficiency and possessing competitive power.

As long as they are bound in this sector and as long as this sector depends on tastes of their consumers, it is not possible for them to enlarge their size. This is because they are working on the project bases only. They are not mass production producers. They are producing furniture to satisfy their consumer's tastes. They are bale only to enlarge and grow in the field of laminate parquet sector as if is in a way a mass production sector and can be produced in large quantities which easily can be consumed in the market.

According to the owner of the firm one of the main handicaps that the sector is facing is that there are no support of the state to small and medium sized enterprises. The owner stated that "their support is only on the papers nothing more; the government supports only the large size firms". Small and medium sized enterprises are facing difficulties when they decide to apply for a credit for expansion or for another valid purpose. In return of this credit, the state/banks ask high rate of guarantee or mortgage and this might not be possible for the enterpriser to meet. "We are living in a globalizing world, competition, especially international competition is vital for both the enterprise and the country as well. The state should provide assistant, facilitate and help SMEs in their export process, actually this is the case in European countries. Unfortunately this is not valid in our country" was the commented the owner regarding their situation and in relation o state actual policy.

4.2 STRUGGLING VIA NETWORKING: *construction sector*

Exportation process in construction sector is different from exportation processes in other fields and sectors. To shed some light on the situation in the construction sector a firm has been chosen an interviewed.

This firm was established during 1967. It was founded as a construction firm and it is a family firm. The owner of the firm is mechanical engineer and he posses MS degree and he has chosen construction sector for his career. This was his personal choice. The firm had only 20 employees, but increased to 70 by 2003. The firm is a known construction firm in the country. They have completed successfully projects in Turkey. Petrol and natural gas pipelines in addition to construction industry are their

involved field. 80% of all the employees are university graduate. Most of them have been working there for long time. Specialization and experiment very important features in this sector it is due to that they prefer to use the same persons in their different projects in each project they gain extra experiences and get more specialized in this field. From time to time they are providing training programmes for their employees. Technical staffs inside the firms are giving the trainings to the employees during the production process with the aim of rising their standards.

Exportation process in this sector occurs and proceeds as temporary and definite exportations which are two different exportation processes. Under the heading of temporary exportation, heavy work machines, motors and other required materials are taken to the country where the firm has a contract. Permission of the undersecretariat of (Turkish) treasury is required for this type of exportation. In this type of application the firm has to bring back the equipments from the foreign country after completion of the project. These types of application are valid for construction sectors only. In the other exportation processes definite exportation the firm has to export other required equipments, construction equipments such as iron bar, metal sheets… etc.

In this type of exportation the company (firm) is at the same time manufacturer of many construction materials, which will be used in the project directly without any mediators. This makes the firm more competitive in their field of construction.

Their export process started in 1980s then they had to search for new work opportunities outside Turkey because there were not enough projects at that time. For this purpose they had collaborated with an international institution which provided the required information and assistances about international bids. Now, they are directly getting into contact with customer or applying to the international bid for their outward trade

At the beginning, as they did not have exportation certificate, they had to obtain permission of the undersecretariat of treasury before exporting. This was valid for both temporary and definite export process. However, in 1995 they applied and got the certificate for export permission. This gave them time saving factor as getting permission from undersecretariat of treasury was a very long and time consuming process. The representative of the firm noted in earlier processes they had to prepare very long lists and in details for all equipments, materials, machines… etc and asks for the permission from the undersecretariat of treasury. Then they had to wait until getting the permission. However, after getting the permission certificate, exportation became much easier.

As it is the normal procedure before signing any contract the bider, the firm in this case; had to submit a list of all materials and equipment that possibly should be used in the project. It includes also any specific materials or equipments. Then the firm has to submit a time table and technological methods in the project, for this the firm has to make a good survey mainly though internet to follow the latest innovations, improvements in construction industry and ask for tenders to participate in the main

project as well. At the same time the firm is in continuous contact and cooperation with specific industries to have information about the bids in and outside of the country.

In addition to these, they have made improvements in their management techniques during the last five years. The representative noted that they have made investments by buying new machines, equipments for their company and via this way they became able to reach to the recent improved technologies related with their field.

Increasing market share both inside and outside Turkey, decreasing production cost, reducing production time and having the competitive power are the main forcing and leading factors for the improvement and development of the firm. They have cost-cutting advantages which makes them competitive during their outward trade. Good quality of work, having high technical standards and being flexible are important factors that make them competitive in the international arena.

The firm is using computer aided design (CAD) and computer aided manufacturing (CAM) technologies for production process and they are meeting the ISO 9001 quality assurance requirements.

The representative stated that they are using the incentives and are benefiting from the exemptions that provided. He noted this; “For example; there is the stamp tax which is related with bank procedures. Having the incentives we are exempted to pay this tax”.

Political factors affected the growth of the firm. This was the main negative obstacle that prevented the firm to develop faster. The political opinion of the owner of the firm became obstacle for the growth of the firm. Because of this factor they became unable to win many bids and this had negative impact on the firm and its development process. But wining contracts and performing trade with other countries managed them to overcome this problem.

4.3 CHALLENGING CHANGES: *food sector*

Turkey is experiencing rapid growth in food sector. Due to changes in world trade conditions, industry is facing competition from other countries and has rapidly to adapt it self to serve a more demanding and selective consumer base. There is a continuous change in needs of consumer’s; accordingly the food sector is facing strong challenges.

This case explores the growth trajectories of a food producer-exporter who tried to face the challenges, difficulties and managed to continue via changing his path but without changing the sector. Networking was the key factor that created the chance and played a vital role in the attempts for survival of a downwising /declining firm.

This firm was established in 1987. It passed through different stages starting form a successful growth then a decline and gradual incline but in a different way. Firstly the firm was milk products producer. The milk products were made on dairy farms, using only milk from the far herd. The firm did not have its own farm but they yield to hire one.

The owner of the firm is at the same time the manager o the firm. Although he is a mathematician, he yields to work in this sector with his willingness. The owner commented that "I have special interest toward this sector and that's why I preferred to work in this sector rather than performing my real profession". Although he founded this firm in 1987 but he started much earlier to work in this sector actually in 1975. He worked in another firm until 1987 when he has decided to establish his own firm.

In the first years of their establishment they were producing different milk products (cheese, milk etc.). In 1987 the firm had 17 employees. The development of this firm started by production and exportation processes, which lasted for several years.

The main reason that made them to involve in the production processes was decreasing the production costs. For this purpose hey involved directly with every stages of the production process. They were producing mainly to export to foreign markets. They were mostly exporting to Europe upon request. Turkish families were

the main customers for their products. “Taste is the most important thing in our sector” said the owner of the firm. They were exporting to Europe until 1990s but they started to export to Russia, far East countries, Bosnia, Hungary and Kazakhstan.

However, the political, social and economical conditions of Turkey forced the firm to stop production. Otherwise this would be their end point. They have chosen to continue to export but not their own products. Mediation between the producer and the customer became their task for the new stage of their development. The owner of the firm stated that “we had to stop our production process because of the bad conditions in Turkey, we started to loose. Cost of production was one of the main handicaps for us as high quality of production with low cost of production was not possible at that time”. Non-supportive mechanisms in Turkey and governmental problems (government did not provide enough support (incentives, credits, alliances) and bad economical conditions, were the main factors for them to stop production. But, they have continued to export the products of other national and local producers. While doing this they are trying to find high in quality products but with minimum cost. Meanwhile they had to shrink. The total number of the employees was 17 when they start first but now they are only 7 persons. “Otherwise we would not have managed to succeed” was the command of the owner while explaining their shrinking process.

Networking was the key element for the firm for their survival. Via networking with other firms they have managed to continue their path of development. They were networking with different firms inside and outside Turkey and by this way they became able to follow the recent developments, changes in demand and to supply the

required demand for different countries. The firm has sub-branches in Russia/Moscow and Kazakhstan. These sub-branches are in a continuous search for new customers and in a continuous contact with their existent customers. They are finding their customers by a wide range of internet survey. By cooperation and networking with other firms and branch offices they are able to find new customers for their products.

At the beginning of 1990s they stopped to export to the European countries because of the European Union. They have their own custom tariffs and because of these tariffs competition in this sector became very difficult and on the other side demand increased in Russia and the other countries. Russia is a crowded country "population is another important factor for consumption" the owner notes. Proximity is the other factor that led us to go towards to these countries.

Despite the attempts for growth, there are serious problems, barriers that face the firm.

Trust is one of the main problems that have been mentioned by the owner of the firm and he noted that "small firms are not able to institutionalize because of the mentality of human being, you are teaching them every detail and the most delicate parts of the process but they later on they prefer to leave you. Because of this, small firms are not able to go beyond of being a family firm". So, there is no trust among people, every one has to do it by him/her self according to the owner of the firm. The second obstacle that has been mentioned by the owner was the policy of the government. The

political factors are very effective according to him and he gave this example to explain the situation;

"For development and to expand there is need for credits. However, to obtain the required credits one have to give/provide guarantee, but the amount requested for guarantee is too much that the owner of the small/medium sized firm will not be able to assure it. If I already had that amount of money I would not ask for the credit"

According to the owner of the firm; the state should support small and medium sized enterprise more seriously. For example SMEs are in need of capital even to participate the expositions but some of them are not able to afford even the required factors, in this sense the state should provide much more support financially to the exporter. Furthermore the state has to provide a coherent set of collective services to firms and "this is essential in steering enterprises to be competitive" noted by the owner. VAT (value added tax) is another problem that has been stated by the owner as the state is not providing any exemption regarding this tax.

Furthermore, banks are not supporting the entrepreneur. The levels of the interests are very high for the owner of an SME and this somehow prevents the firm to realize its sale.

The exporter has to adopt him/her self to the changing conditions and changing prices in the international markets but this is not possible in Turkey because of many different factors, the difference of exchange is one example that prevents the exporter to follow the changes. There is no way to have a stable cost policy so the chance of having a continuous costumer is not possible for them. No one is able to sell the same product with the same price for a long period of time because of the conditions in Turkey.

4.4 SUSTAINING THE EXISTENCE: *textile sector*

Turkey is one of the most important textiles and clothing producers and exporters in the world. Within the industrialization efforts of the sixties and seventies the modern textile industry in Turkey was born. This sector has operated with small workshops at the beginning. Within time this sector showed rapid development and during the seventies began exporting. Currently it is one of the most important sectors in the Turkish economy in terms of its contribution to GDP, employment and exports.

For this study a family firm has been chosen to be interviewed. They are one of the well known textile producers. They have been established in 1983 and since then they are exporting their products. Their main products are thread, clothing and fabric. Their establishment aim was exportation. 90% of their products are exported and only 10% of their products are presented for the national market. They are mainly exporting to Germany, France, Switzerland, Israel, Canada, Bulgaria, Greece and USA.

In order to increase their level of export and gain extra share in the market, they are improving and enlarging their product's quality and scope via the commands that they receive from the customers. Furthermore, they try to follow the recent developments and technological improvements related with their sector by visiting the expositions both inside and outside Turkey.

Direct contact with the customers is the strategy of the firm for their outward trade policy. They have their own web page and through this page the foreign firms are directly getting into contact with them and offering their needs. However, the representative of the firm mentioned that "unfortunately we do not have an active marketing unit because of the mentality of the manger and owner of the firm and therefore the level of export have been decreased when compared with 1990's. The economic crises also had an impact on the reduction of the export level".

For the present time they are working with 40% of their capacity of production. The demand mainly is coming from the foreign markets. Firms are specifying their needs according to the demands in their country and the production is taking place according to the requirements of the customers. This firm has its reputation as they have known brand in Europe. No problem faced them because of the quality of the products as they have agreed in advance upon everything. Furthermore, the used technology and production machines are in good condition. The representative gave brief information about the technical profile of the firm;

The age of the used machinery is between 5 to 9 years. They have employed technical staff during the last 5 years. Technological improvements were the case during the production process for the last 5 years. They have made investments in the technology, machines and equipments used in the production process and via this they were able to reach to the recent technology related with their field of production. All of these have positive effect on the level of export as there has been an increase in the level of export up to 15%. Decreasing the cost of production, increasing the level of efficiency and decreasing production time are the most important reasons for this firm to innovate/engage in innovative activities, develop both production process and the quality of the products. Enlarging their market share both inside and outside the country are the secondary reasons for them to engage in innovative activities and improving their production process.

The only difficulty that the firm faces is in the custom. This is due to the workers working there. “They do not have enough knowledge” said the representative.

They are using subcontractors during the production process and they prefer to use the ones that have been worked with them before. They are using them when they are not able to prepare and finish the required demand in the specified time. They use them for ironing, packaging and embroidery details. Subcontracting has direct effect on their level of export. The representative of the firm noted “subcontracting has a positive effect on our export rate. An increase occurred in the level of the export due to subcontracting”. In addition the firm is producing clothing for known brands in the international markets success; Hugo, Boss, Passport and New Man.

They have used the incentives that were provided by the government, actually their foundation mainly based on the incentives that were obtained from the government. Bt they are not using incentives any more. They do not have any R&D unit and they do not have any networking relation with any institution. They are having new production machines and they are gathering information about the latest developed machines through visiting the expositions, from the catalogs and periodicals.

Imported technology is an important source for the firm for their used technology during the production process. Over all quality has been improved, the firm certified as conforming with computer aided design (CAD) and computer aided manufacturing (CAM) technologies in production and meeting TSE quality assurance requirements. Due to that they have good reputation in foreign markets.

The representative quoted “to be competitive in the national and international arena, quality and cost advantages are important factors that seriously must be handed, networking with international firms, cost advantages, flexibility in the production process and design of the products (producing in accordance to the demand of the customers) are our main source that we have no choice but to sustain them”.

4.5 COPING WITH DIFFICULTIES AND BENEFITING FROM OPPORTUNITIES: *wood sector*

Forestry products sector is one of the main sectors in Turkey and the interviewed firm is one of the well known and successful firms in this sector. They have good

reputation both inside and outside Turkey. The interviewed responsible person stated that “our firm is one of the leaders in this sector”. Their main products are furniture and they provide wooden equipment for houses, offices and workplaces.

This specified firm was founded in 1969. Firstly they have started to produce furniture for the national markets within time they became popular and became an accepted brand in the national markets. Then they decided to expand their market range and therefore they have engaged in the export process of. Exporting process started in 1980’s. The interviewed person indicated that they did not have any competitors at that time and the demand to export came from the foreign country (Libya). The demand was specific at that time, the customers demanded very “interesting” things as the responsible denoted. In exact words of the firm representative “they demanded many specific and interesting things like beehive, this was the demand for that time”.

In 1990, a market survey was conducted in Turkey. According to the results of this survey, there was an excess demand around 20%. In other words, for that period there was a production shortage of furniture in over all Turkey around 20% of the total demand. So, there was the problem of lack of production in this sector and the immediate solution for this problem was developed by importing the required demands from abroad (mainly from USA). This process lasted for 5 years. However, during these 5 years many developments occurred in this field. The level of production of furniture has been increased because many new producers have been emerged and consequently the number of furniture producers increased in Turkey. As a result of this increase in the level of production there was no need to import products from

outside any more as the shortage has been recovered but at the same time leveling the standards was achieved too.

However, within time an excess of supply became the case and this excess was about 20% for the period of 1995 and 2000. “So, how we are going to sell our products and to whom?” was the main question that firms faced as there was already an excess of supply. Exportation was the solution for them. But there was a crucial obstacle in front of them; quality and design of the products. Almost three quarters of the designs (3/4) were imitated from Italian designers as they were the leaders in this sector. So, imitated goods would not be acceptable in European countries’ markets and quality of the produced goods was another handicap that had to be considered as they were not in that quality to compete with the other products in the international markets. But they managed to overcome all of these by finding suitable markets for their products even in some of the European countries like Germany. The main way that has been followed to sell their products abroad was getting into contact directly with customers that have been found through friends that were residing outside the country and through a wide market survey for their products.

Consequently, the firm began to export products to the Middle East countries, Germany, France and Austria. The main reason that made the firm export to these countries was the presence of the Turkish workers and Turkish families there. The products that have been designed and produced in Germany were produced according to the demand, need and the tastes of the German population and these were not feasible for the usage of the Turkish family. There were differences between the tastes

of the German and Turkish consumers. A difference related with the cultural background of the two nations. Furthermore they managed to find suitable markets in the Middle East countries (Libya, the Emirates, Saudi Arabia and Iraq) and the explanation that has been done by the representative of the firm was that “there were similarities between our tastes and their tastes so we did not face any difficulties to make them accept our designs and products”. This period was the starting point for a serious and extensive export process for firm A and the representative continue his explanations by “The situation that has been explained just now was one side of the coin and on the other hand, when we look to the other side of the coin we can see that there was a drastic change in the tastes of the Turkish consumers as a result of the imported products that have been presented in the Turkish markers for 5 years starting from 1995 until 2000”. The representative of the firm gave the example of the usage of leather as a material for upholstering the furniture; “The usage of leather was not common before in Turkey at that time however, the usage of leather in the furniture started to become popular and accepted production material for the Turkish markets”.

This was a breaking point for the firm as they started to face new challenges arising from the process of globalization which questioned the ability of the firm to survive and remain competitive in an ever more demand-driven and quality conscious global markets. For this reason they had to follow the recent improvements, technological changes and innovations in order to be bale to catch the recent developments and be able to sustain their competitiveness both in the national and international markets. They had to improve their products and innovate and through this way, they would be able to s to reduce their production cost, increase their quality of the products and sustain their competitiveness. The quality and design of the products accepted as the

building stone for their success and competitiveness and therefore, the used machines and technology are very important. The representative denoted that they are using mostly imported machines in their production place; machines with specific features. By this way they are able to reduce their production cost and at the same time they are able to compete with the other producers in the national and international markets. Accordingly, the representative shed light on the recent conditions of the used technology and machinery in their production process;

The age of the used machinery in the production process is mainly between 2-5 years. They have made new improvements in their products, production process and management techniques during the last 5 years. The used machines are imported and they have different features. The main aim is reducing the cost of production and producing good quality furniture. The firm is performing its research regarding the used and selected machines via different channels like internet survey and the catalogs. They have R&D unit and the focal point of their research is to develop and improve their products. The number of workers in the R&D unit is 3 and 15% of the annual budget is allocated to this unit. However, the results of R&D do not have any direct impact on the level of exporting. They have applied for licenses and/or patent for 3 times. The level of the used technology in the production process is new when compared to the level of the available technology in the whole sector. The source of the used technology is licenses and know-how. Furthermore, they have made an investment on the production machines during the last 5 years. On the other hand the recent technological improvements caused internet survey to become a major means to search for new markets and new customers for this firm**.** Because of all these innovation and improvements, the level of exporting has been increased by 15%.

Over all quality has been improved, the firm certified as conforming with the widely accepted total quality management standards, computer aided design (CAD) and computer aided manufacturing (CAM) technologies for production and meeting the ISO 9001 and 9002 and TSE quality assurance requirements.

New designs are very important for this sector so they try to find, develop and improve new designs and the main aim of doing this is to increase the total share of exporting. The expositions that take place both inside and outside the country, catalogs and employing designers are the main sources of the firm for their new designs. Furthermore, training programmes have been prepared for the staff to increase their efficiency. They are receiving training during their work time from the technicians or through master-apprentice or sending the staff to institutions for this purpose. Their aim is to produce maximum amount of product with minimum production cost and in maximum good quality.

Artificial materials started to be the most important ingredient in the production process of furniture. Dismountable designs were another important point that made a decrease in the transportation cost as more products could be exported at lower costs of transportation. So, they were able to become competitive because of all these factors. 90% of the products are produced by using artificial materials and while using them they have used different designs and benefited from creative thoughts and idea and by presenting different products in the foreign markets they became an important competitor for the other firms.

As a result of all these, their total share of exporting among the total amount of sale is 30% in 2003. They are exporting furniture to Germany and the share of this, among the total external sale, is 8%. They are exporting wooden materials to Iraq and its share is 19% of the total external sale. 22% of the total external sale is the ratio of wallboard that has been exported to Dubai and finally partition wall has been exported to Kazakhstan and its share is 5%. They are not producing any intermediate products. They are supplying the required raw materials both from outside the country and inside the country.

"Every positive side has a negative side" said the representative. The most difficulties that they have faced were the political differences and problems related with policy. Due to political insatiability many other field have been affected inversely. So, there were serious problems in the consumption field especially in durable consumer goods. It was defined that the consumption of furniture ranks 13 among other consumption patterns. So, it could be understood that consumer's level of consumption is very limited and it is limited only to the basic needs. On the other hand the producers have to sell their products and this reason created the tendency to towards the foreign markets. As there should be a continuous production and there is a need for continuous demand and consumption but this was not the case in Turkey and it was not possible because of the bad economic conditions. "So, foreign markets started to replace the local markets for our goods" stated the representative. They had to improve themselves and they had to compete with the other firms especially with the European firms and as a result of this new production machines, new designs and different raw materials started to be used in the production process.

Letters of credit, banking systems, foreign exchange rate, taxes and no enough support (no enough incentives and credits presented) from the government are the other very important obstacles that the producer-exporter faces.

4.6 SUMMING UP: WHAT DIFFERENT EXPERIENCES SHOW?

4.6.1 Major Findings

There are several important findings deriving from the in-depth interview's monographic descriptions. What do these findings mean in terms of the formulated hypotheses for this study? The results show that innovation process is very important for the firms in their production and exportation process. They have indicated that innovation process is one of the leading factors for their growth and development. Importance is given to both, process and product innovation. According to the interviewed firms, via innovation they became successful in minimizing the cost of production, increasing the quality of production and increasing their competitive power in both national and international markets. All of them have determined that the process of innovation has a positive effect on the volume of exportation. As after implementing the newness in their production process, in their products or management techniques, an increase in the level of exportations has been observed. Although there are some deficiencies in the process of innovation such as the absence of an intensive R&D activities or lack of a collaborative and trust based relations between the producers and different institutions, there is an observed success in their innovative activities and positive outcomes have been reached. Innovation process is an interactive process that requires a continuous interaction among different units in the system. Furthermore, trust based relations are the main tool for knowledge

creation and dissemination which an essential ingredient for innovation process. Codified and tacit knowledge is an important and essential factor for a successful innovation process, however according to the results obtained from the interviews, it was understood that codified knowledge is obtained via different methods but there is no effective way implemented to obtain the local tacit knowledge. Each firm has its own knowledge accumulation (both tacit and codified) and there is no willingness to share their knowledge and information with any other firm. Competition and cost of production are the main factors that have been shown as the reasons of not to engage in collaborative activities with other firms and institutions. They prefer to keep what they have only for themselves. Although the situation continues in this way, they are able to innovate and via the innovation process they have pointed out that there was a high level of increase in their exportation volume. Specialization is an important feature for both innovation and exportation processes. As with the increase of specialization in the production process, better outcomes for both innovation and exportation process have been obtained by the firms. By specialization, the level of quality increases; this was the common result that has been obtained from the interviews. Better quality goods pave the way for higher competition opportunities in foreign markets. As a result it could be said that the formulated hypotheses related with the innovation process and exportation level have been confirmed and supported by the outcomes that have been reached at the end of the interviews.

Networking process is not common among firms during their innovation, product and process development stages. Firms prefer to network with institutions that facilitates their export and marketing processes. Although interviewed firms are from different sectors, all of them have indicated that they prefer to become a part of networks only

for marketing and exportation processes. Actually this result is much more valid for global networks and the aim of local networking is different. They are networking with local firms during the production stage, where they need minor help like ironing (textile sector). They are not networking to obtain information and knowledge required for their production and innovation processes but to sell their products in the international markets. They have indicated that networking has a positive effect on the level of their exportation. Therefore the formulated hypothesis related with this subject is supported by the evidences obtained from the results.

Governmental incentives and the local support systems are the main problems that have been indicated almost by all of the interviewed firms. No support mechanisms are available for the exporting small and medium sized enterprises. Furthermore, insufficient incentives, financial means and regulatory measures constitute obstacles for SMEs to export. So, local support systems constrain obstacles for firms to export rather than facilitating and helping them. Therefore, the hypothesis related with the local control mechanisms lost its validity as a result of the results obtained from the interviews.

The importance of knowledge and information has been denoted by all of the firms. Learning process is necessary and important for the innovation process and it sustain the competitive power. Firms give special interest to this subject as they have training programmes for their staff. Some of them prefer to send their staff to different institutions for this purpose and the others provide the training programmes inside their firm. Learning the newly developed production processes and having the

capability and ability to adopt themselves to the recent technological improvements is another main factor for sustaining their competitive power and extending their export share in the international markets. Via visiting the national and international expositions and through internet search firms are able to reach to the recent information and codified knowledge. Firms have indicated that the process of learning has a positive effect on the level of exportation. So the formulated hypothesis has been supported via this conclusion.

Although all of the firms are members of different institutions, chambers and associations they have indicated that there is no effective interaction among them. The level of networking is not high as well. Although one of the interviewed firms indicated that they are able to export via the help of an international institution, there is no generally noticed effect of institutions on the process of exportation according to the statement of the interviewed firms.

4.6.2 Interesting Aspects

The interviewed firms are from different sectors (textile, furniture, construction and food). All of them have different starting points for their sector selection and exportation processes. Some of them have chosen their sectors because of their special interest although they have different professions. The others started to work in this field because it was their family profession. Each firm has its own exportation story. In addition to the general reasons such as increasing the competitive power, increasing the international market share and profits as well, some of the firms had to export because of the conditions in Turkey. One of the firm representative denoted that they

had to perform outward trade because they were not able to find opportunities to work in Turkey. Another representative indicated that they mainly started to export because of the excess of supply in their sector. Another representative explained that they had to change their path from production to exportation (stopping production and incline towards exportation only) just to be able to sustain their existence. On the other hand exportation was the main aim of the foundation of some other firms. Thus, it could be concluded that the motives and the reasons that lead firms to explore exportation process are very different from each other and there are specific reasons for exportation in addition to the worldwide accepted reasons.

Tastes, cultural differences and demand are some of the factors that specify the destination of the exported goods. Differences in tastes and cultural background necessitate diversified products. For example, there are many Turkish families in the European countries especially in Germany. The cultural differences created demand for the Turkish producers and they have started to export nationally produced goods to these countries. Population is another criterion for the selection of the foreign market. Countries with high rate of population attract the exporters. Therefore, there are many different reasons that lead the exporters to export their products to specific countries. In addition to these specific reasons, demand of foreign customers is another factor that defines the foreign markets.

CHAPTER V

5. EVALUATION OF THE FINAL FINDINGS OF THE STUDY AND SOME POLICY IMPLICATIONS

From the past until today, many different regional growth theories have been developed to explain the process of the growth. Parallel to the changing conditions and due to the globalization process, the explanations also went through some changes. As a result of the globalization process, the requirements for development and growth have changed. Competitiveness is increasingly dependent on the ability of firms to use and develop new technology effectively. However, before, the available natural resources were the main factors for the processes of growth and development and competition mainly based on these resources. Linear stage theories were used to explain the growth process. Furthermore, many different theories like export base theory, cumulative causation, growth pole cycles and divergence theories have been developed. But this picture has changed and new growth theories have emerged. They handled the process of growth differently than the previous approaches and theories. Innovation, knowledge production and learning, institutional assets and networking became the factors determining the growth process of regions. Industrial districts, learning regions and systems of innovation are some of the approaches that have been developed explaining the growth process of regions.

Before the emergence of the new growth theories, large scale production units were the basic elements that have been used in the explanations and theories of growth process. On the other hand small and medium sized enterprises were on their secular downward. Within time, profound changes occurred and problems emerged due to the rigidity of log-term and large scale fixed capital investments in mass production systems (Özcan, 1995). Large firms were facing difficulties because of their size and amount of production as there was need and an increase in demand for more diversified goods therefore, more flexible production type had to be implemented. Small and medium sized firms were able to respond to the changes in demand due to their size. They were small and they had the ability to be flexible in production and adapt to the recent changes. Being innovative, having the ability to produce knowledge and learn it, being in cooperation and collaboration on trust based relations with different institution, being part of a networking system were the features that small and medium sized firms had to have in order to sustain their development and growth.

Being small was not enough to challenge the continuous changes and developments that were taking place in knowledge based economy. Small and medium sized firms had to renew and adopt themselves to sustain their competitiveness. So, small and medium sized enterprises have to be well equipped to participate in the evolving global economy. It will be better for them to develop an outward-looking business attitude and aggressively pursue international opportunities (Labbe, 1994). Therefore, exploring a required experience to sustain their growth and development became

essential for small and medium sized firms. This experience was participation to the international markets via exporting.

For regional growth, innovation process is very important. The subject of innovation is central to modern theories of regional development; innovation broadly defined to include not only product or process upgrading but also organizational and institutional rearrangements , it is vital for regions to obtain competitive advantages (Santos, 2000). Generally, all the interviewed firms have indicated that innovation is very important for competition both inside and outside the country. Furthermore, the results obtained from the questionnaire showed that almost all the firms included in this study are practicing innovative activities and they are aware of the importance of this process. Although, some factors necessary for innovation like R&D, intensive networking and trust based relation are the missing parts for the present time, firms give special importance to the used technology, training opportunities (mostly inside firms), improving their production process, management techniques, obtaining information about the recent technologies (by participating expositions and importing technology via new production machines), license and/or patent application and trying to adopt themselves to these technologies. Learning is complementary part of the process of innovation, creation and dissemination of both type of knowledge; tacit and codified. Firms have to learn the recent improvements and technologies otherwise they will start to lose their competitive power. Therefore, firms especially the interviewed firms indicated that learning is very important and they are providing the necessary conditions for this process. The level of education is one indication for this process. With highly educated labor and with specialized persons absorbing the new technology will be easier and that's why many different training programmes are

provided inside the firms. Although, they have indicated the importance of receiving training outside the firm, due to many reason (financial, organizational, etc) only few of them are sending their staff outside the firm for this purpose.

In general, networking relations of SMEs included in this study is based on customer-producer relations. In other words the purpose of networking is to find customers and they do not prefer to be part of a network system where they would lose their tacit knowledge. Through vertical and hierarchical networking system there is contact between costumers and suppliers. There is an exchange only of codified knowledge. Although, tacit knowledge plays a vital role in innovation and competitiveness, firms do not yield to exchange their tacit knowledge with other firms and institutions. According to them while sharing tacit knowledge they will lose their competitive power in both national and international markets. So, this could represent the negative attitude towards the networking process. Furthermore, there is trust problem among firms and even inside of some firms. Because of this some firms are unable to explore further growth.

The level of collaboration among institutions is quite low as it has been seen from the results obtained from the questionnaire and form in-depth interview, this is one of the problems that should be analyzed and solved as without having any trust based networking relations both inside and outside the county, it would be difficult for firms to sustain their competitiveness.

According to the results obtained from the questionnaire and interviews, the main reason that leads firms to engage in innovative, learning and networking activities is the outward trade. They are exporting because they want to sustain their competitive power and increase their share in the international markets. All these have a direct impact on the regional growth process. As long as SMEs will be able to compete in the international markets via improving their production process, engaging in innovative and learning activities and networking, regions will continue to explore further growth and development.

Unfortunately, there are some obstacles that prevent SMEs to export, to increase their existing level of export and to explore further growth. Insufficient incentives and financial/credit facilities and the regulatory measure constitutes obstacles for SMEs to export.

The economical situations in the country and the recent crises that Turkey went through have affected the small and medium sized firms negatively. They already have limited resource of capital so it is very difficult for them to find investment capitals. Furthermore, banks do not lend money only if they secure the return of the credit by guarantee. This is the biggest obstacle that SMEs face as generally SMEs do not have the resource to the guarantee to the bank and usually banks asks for mortgage as guarantee.

The other problems are related with the legal system. There are problems arising from the tax legislation. SMEs are obliged to pay taxes and custom tariffs and this is a financial burden on them. This creates various complications in the process of exportation and in the implementation of financial and technical programmes.

Because of all these problems, obstacles and the unstable situation in the country makes it more difficult for small and medium sized enterprises to sustain their growth in a stable way and they are always having the risk of sink.

5.1 Policy Implications

There is worldwide recognition of the importance of SMEs and their contribution to the economic growth of regions, social cohesion, employment and local development. There is a reduction in the importance of economies of scale in many activities due to the process of globalization and technological changes and the potential contribution of small and medium sized enterprises in the process of growth has been recognized. Especially the exporting SMEs are important contributors to the growth process of regions. Therefore, the best practice policies should be formulated in favor of small and medium sized enterprises.

Now it is well known that technology is more than just technical hardware. It involves different activities like inter-linkage of a range of activities. In order to attain and maintain competitiveness, firms must possess relevant economic knowledge or

capabilities. Therefore, they have to be encouraged to acquire some of these capabilities.

Firm level technological development depends on external factors such as interaction with the local economic environment, which provides the human and financial resources needed for the cultivation of internal capability, therefore interaction among firms and different institutions should be encouraged.

The other problems are related with the legal system. There are problems due to tax legislation. Government needs to simplify its own regulations regarding the exporting SMEs and formulate new rules and regulations that facilitate the procedures for SMEs while exporting. New arrangements need to be developed and formed for banks and the credit system.

Some other policy proposals for SMEs are; guidance and help should be provided for SMEs to participate in the international and regional exhibitions. Training programmes shall be provided for SMES, and they should be encouraged to send their staff to the training programmes in different institutions both inside and outside the country. Establishing R&D centers to assist SMEs in their innovative and technology improvement activities. To reduce costs pooling various services (consolidation of shipments, advertising) for SMEs might be a good option.

NOTES

[i] *diversified products not standardized mass products*

[ii] *O'Farrell & Hitchens (1988) cite empirical evidence which supports Gibrat's law for manufacturing SMEs; and they also allude to empirical support for the proposition that the variability of growth rate decreases with increasing enterprise size (McMahon, 1998:2*).

[iii] *Hanks et al. (1993) observe: Perhaps they represent life-style firms, where owners have consciously chosen to keep their firms small. Davidson (1989), in his study of Swedish firms, found that for many small business managers, the negative effects of growth appeared to outweigh the positive outcomes once the firm had reached the size of five to nine employees, roughly the size of firms in this cluster. This configuration may also reflect firms whose growth is limited because they operate in very small market niches.*

iv[4] *economies which are directly based on the production, distribution and use of knowledge and information (OECD, 1996; OECD, 1997) it has emerged in the 2nd half of the 19th century and had been rapidly evolving since ever*

[v] *Product innovations help regions to improve their product range and as a result their industrial structure, while process innovations lead to greater efficiency and or improved quality. Both result in an overall improvement in competitiveness (*Harris and Trainor, 1995)

[vi] *They are a form of enterprise cluster which epitomizes the concept of collective efficiency. Flexibility and the existence of strong networks of small firms which result in specialization and subcontracting, are understood to be their major characteristics*

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APPENDIX A

DEFINITION OF SMES

There is no definite definition for SMEs in Turkey although they construct the largest part of Turkey's firms/enterprises about 99% of the economy (Ekinci, 1999). The reason of this might be because their actual importance is not taken into consideration. According to TOSYÖV`s research report related with SMEs there is nearly thirty different definition of SMEs in Turkey for the time being (Ekinci, 1999). The history of SMEs in our country is very new the reason of this is that the quality of them has changed in the recent years. Accordingly they have stared to have an important place in our development/improvement efforts. They provide help and benefit from different aspects such as employment, sustaining the competitive power, more equal distribution of wages/income, providing qualified labor force for different industrial sectors, gain new entrepreneurs to the economy, protecting and sustaining the social peace and remove the regional discrepancies.

Due to the structure differences among countries and also due to the differences among the enterprises, there is no general consensus regarding the SME definition.

The concept of small and medium sized enterprises is an economic concept rather than a legal one and that's why its criteria differ according to the economic structure of each country.

In our country the definition generally made according to the number of employees. Therefore, it could be said the definitions are not enough/adequate. However, the definitions those qualitative features that would be taken into consideration are more relevant to define the mentioned enterprises.

Definition of SME according to different institutions in Turkey

SIS (State Institute of Statistics)-DIE

State institute of statistic's definition of SME has been changed through time sequence and according to the change that took place in other institution's definitions. According to this:

- The firm that has 1-9 employees is accepted as a, very small enterprise (micro)
- The firm that has 10-49 employees is accepted as a, small enterprise
- The firm that has 50-99 employees is accepted as a, medium sized enterprise and
- The firm that has more than 100 employees is accepted as big/large scale enterprises.

SPO (State Planning Organization) -DPT

The firms that have employees between 1-100, the cost of the fixed investment except the land and building (machines, equipment, foundation/facility), means of carriage, furniture and fixture that are in total do not exceeds 15 billion TL in total are accepted as small sized firms.

The firms that have employees between 100-250, the cost of the fixed investment except the land and building that is in total is between 15-30 billion TL are accepted as medium sized firms.

The firms that have employees more than 250, the cost of the fixed investment except the land and building is more than 30 billion TL are accepted as large sized firms.

KOSGEB (small and medium industry development organization)

In accordance with the law on establishment of KOSGEB, SMEs are defined as follows:

- Small-sized enterprises are the firms that have employees between 1-50
- Medium sized enterprises are the firms that have employees between 51-150

CHAMBERS

Gaziantep Chamber of Industry

The definition of Gaziantep's chamber of industry is the most comprehensive one when compared with the other chamber's definitions that will be stresses below. They considered the qualitative criteria such as the value of machine and the capital of the enterprise's capital stock in addition to the number of the employees of the enterprises. Thus according to them;

- The firm that has 1-9 employees is accepted as small enterprise
- The firm that has 10-100 employees is accepted as medium enterprise

Value of machine less than 50 million accepted as small size enterprises; if it is between 50-750 million it is a medium sized enterprise.
The amount of capital less than 30 million then it is a small size enterprise, but if it is between 30-500 millions then it is a medium sized enterprise. It should be mentioned that these numbers should be revitalized within time sequence.

Istanbul Chamber of Industry

To define SMEs the qualitative criterion that is take into consideration is the number of employees. Furthermore, they did not mentioned the medium sized firms they just classified the enterprises into two categories; small and large enterprises. According to this, the enterprises that their number of employee is less than 25 are small sized enterprises and the enterprises that have more than 25 employees are accepted as large sized enterprises. However later on they have defined the firms that have 1-19 employees as small sized enterprises and firms that have 20-99 employees as medium sized enterprises (UN-ECE, 2003).

Ege Region's Industry Chamber
Ege region's industry chamber considered medium sized enterprises in their definition. Thus, the enterprises that have 5-50 employees are considered as small enterprises, 50-199 employees are considered as medium sized enterprises.

Kayseri's chamber of industry defined the enterprises that have employee between 5-15 as small and between 15-50 as medium sized enterprises.

The definition of SMEs in OECD countries
The accepted definition of OECD countries is as (İZTO,1995: 9; Ünal, 1999):

- Very small sized industrial enterprise should have less than 20 employees
- Small sized industrial enterprise should have more than 100 employee
- Medium sized industrial enterprise should have 100-499 employee
- Large size enterprise should have more than 500 employee

However, the definition of SMEs differ in OECD countries, for example USA and Japan are member countries of OECD but their definition of SMEs is different from each other and their SME definition is as indicated below:

USA

Although the ratio of SMEs is about 97% of the total enterprises in USA, there is no generally accepted ad an official definition. Number of employees and the total amount of sales are mainly taken into consideration while defining SMEs.

In USA the enterprises that have nearly 100 employees accepted as small sized enterprises, and the enterprises that have 1000 employees accepted as medium sized enterprises. But there are exceptions for both. The level could be increased to 500 for the former and 1500 for the later (Müftuoğlu, a.g.e., pg107).

SME definition in USA

SMEs in USA

	General	*Exceptions*
Small sized enterprises	: Up to 100	Up to 500
Medium sized enterprises	: 1000 (max)	Up to 1500

JAPAN

The definition of SMEs in Japan is based on the total number of employees, capital and sectors (Kıldırgıcı, 1996: 23; Aslan, 1998).

In manufacturing sector SMEs is the firm that has 300 or less employees and 100 million yen or less. In mine sector SMEs is the firm that has 1000 or less employees and 100 million yen or less. In Wholesaling sector SMEs is the firm that has 100 or less employees and 30 million or less yen or less and in retailing sector SMEs is the firm that has 50 or less employees and 10 million or less yen or less

Definition of SMEs in European Union

There is no official /formal definition of SMEs in none of the EU countries. However, on the other hand there are many supportive policies regarding them and then they inevitably have to go to some classifications. For example, in 1996 according a search that took place in Brussels "without taking the annual turnover into consideration, they accepted the enterprises that have 6-500 employees as SMEs" (Ünal, 1999).

The XXII. General directorship of European commission has started a project in 1992 under the name of "The European observation for SMEs" (Sayın and. Fazlıoğlu, 1997; Ünal, 1999). Annually a report prepared by the EIM small business research consultancy firm regarding SMEs. The four years report that had been prepared in 1996 comprises 19 countries of Europe. According to this, EU's definition of SMEs is like:

- Medium sized firms has less than 250 employees, not more than 40 million ECU (or 27 million ECU) annual turnover and they should not belong to one or more than one firms
- Small sized firms has less than 50 employee, not more than not more than 7 million ECU (or 5 million ECU) and they should not belong to one or more than one firms

Beside this definition there are different definitions that have been accepted by different European Union countries, these definitions based on the number of employees:

- Belgium : 1-50
- Denmark : 6-50
- France : 6-500 (however this has been changed to 10-500)
- Germany : 6-500
- Ireland : 1-500 (small enterprise)
- Italy : 1-500
- Holland : 1-100
- England : 1-200 (small enterprise)

FRANCE

As the most other countries there is no single official definition of SMEs. The most widely used definition is based on employment and furthermore, the confederation of SMEs in France took the handicrafts into consideration while defining SMEs (Müftupğlu:110):

SMEs in France

- Handicrafts : 1-9 employees
- Small sized enterprise : 10-50 employees
- Medium sized enterprise : 51-500 employees
- Large size enterprises : Over 500 employees

These restrictions should be indicated (Müftuoğlu; Ekinci, 1999). The annul sale revenue should be less than 50.000.000 French frank to be considered as an SME

The enterprises that have less than 10 employees are not considered as SME.

- In addition there are many qualitative restrictions also,
- Equate the enterprise with the owner of the enterprise,
- The owner of the enterprise accepted as the responsible of everything.

ITALY

Both quantitative and qualitative criteria are taken into consideration while defining SMEs in Italy. The quantitative criteria are considered to be the number of employees and the amount of fixed capital. The qualitative criteria are related with management and organization structure. Large-scale firms accepted as the places where there is a subdivision of management; the place where there is professional management. However, small and medium sized enterprises accepted as the enterprises where there is no professional management, which means; management has been gathered in one place/no subdivision and there is no teamwork. The definition where only the qualitative criteria are taken into consideration is “the enterprise that has maximum 500 employees and the amount of fixed capital does not exceed 3.000.000.000 Liret are considered as SME” (Müftupğlu, Ekinci, 1999).

The definition of SMEs in Denmark, which is a smaller country than the mentioned ones, is as given below:

- Small business firms employ 49 employee
- Medium sized firms employ 50-149 employee
- Large size firms employee more than 200 employees.

Denmark has only 400 firms that meet the large business definition if the American definition adopted then they would have virtually no large businesses (Barrow, 1993).

APPENDIX B

THE QUESTIONNAIRE

Not: Hali hazırda ihracat yapmıyorsanız bile, daha önce de yaptıysanız, lütfen anket sorularını geçmiş deneyimlerinizden yararlanarak yanıtlayınız.

BÖLÜM I

Firmaya İlişkin Genel Bilgiler

Firmanın adı:__

Firmanın kuruluş yılı:__

Firmanın adresi:__

Firmanın yer aldığı sektör (makina, Tekstil, Gıda, Elektrik-Elektronik, Yazılım, vs):__

Firma kimler tarafından kuruldu (Tipi):__

[ ] Aile firması [ ] Bir firmadan ayrıldı -hangi firma:__

[ ] Yeni bir firma, [ ] Ana şirketin yan kuruluşu- hangi firma:__

[ ] Vakıf şirketi [ ] Çok ortaklı işletme [ ] Diğer:__

Firmada çalışan toplam işçi sayısı:__

Firmanızın ana ürünü/ürünleri nelerdir?:__

Üretilen ürünler yurt dışına pazarlanıyor mu (ihracat yapılıyor mu)[ ] Evet [ ] Hayır

Daha önceden dışa açılma (ihracat) söz konusumuydu? [ ] Evet [ ] Hayır

İhracat yapılıyorsa, hangi ülkelere, hangi ürünler ihraç ediliyor ve toplam üretimin % kaçı ihraç ediliyor?

Ülke	Ürün	Toplam dış satım içindeki payı %	Yılı

1. İhracatı hangi yollarla gerçekleştiriyorsunuz? (uygun olanları işaretleyiniz)
   [ ] Firmanızca bağlı bulunduğunuz holding veya şirketler grubu yolu ile
   [ ] Sektör dış ticaret şirketleri ile
   [ ] Yabancı dış ticaret şirketleri ile
   [ ] Yurt dışında Türklerin yönettiği dış ticaret şirketleri ile
   [ ] Yurt içindeki başka bir firma aracılığı ile
   [ ] İnternet yolu ile
   [ ] Başka bir firma üzerinden
   [ ] Diğer:__
2. Üretilen malların toplam satış miktarı içindeki ihracat satış oranı nedir? %?_____
   Şehir içi satış oranı%_____ Şehir dışı satış oranı%_____

BÖLÜM II

Teknolojik yenilik

1. Firmada çalışanların eğitim düzeyi,
   İlkoğretim %_____ Lise%_____
   Ortaokul%_____ Meslek Lisesi %_____
   Üniversite%_____ Master, Doktora%_____
   Girişimcinin (firma sahibi(sahipleri)) eğitim düzeyi_____
2. Dışa açılmada İnternet Kullanım söz konusu mu? [ ] Evet [ ] Hayır
3. Firma çalışanlarının profili nedir? (sayı olarak belirtiniz)
   İşçi_____ Teknisyen_____ İdari personel_____

Uzman, Mühendis vb._____ Yönetici_____

4. Firmanıza son 5 yılda teknik eleman alımı söz konusu oldu mu?(mühendis vb.)
[ ] Evet [ ] Hayır

5. Üretimde kullanılan makina veya teçhizatın ortalama yaşı nedir?

Ortalama Yaş **____%__**

0-2 _____
2-5 _____
5-9 _____
9 ve daha fazla _____

6. Son 5 yıl içersinde firmada teknolojik açıdan herhangi bir yenilik veya iyileştirme uygulanmaya başlandı mı?
[ ] Evet [ ] Hayır

Hangi konuda; ürünlerde, üretim sürcinde, yönetim tekniklerinde,
Diğer:__

7. Bugüne kadar firmanız patent veya lisans başvursunda bulundu mu?
[ ] Evet, sayı_____ [ ] Hayır

8. Firmanızın faaliyet gösterdiği sektörde kullanılan yeni teknolojiler hakkında bilginiz var mı?
[ ] Evet [ ] Hayır

9. Firmanızda kullanılan teknolojinin sektör ortalamasına göre durumu nedir?
[ ] Eski [ ] Aynı [ ] Yeni

10. Firmanız son 5 yıl içersinde yeni makina, teçhizat ya da yazılım için yatırım yaptı mı?
[ ] Evet [ ] Hayır

11. Herhangi bir kurum (üniversite vb.) yenilik veya iyileştirme yaparken işbirliği/desteği söz konusu oldu mu?
[ ] Evet (hangi kurum veya kurumlar)_____ [ ] Hayır

12. Fırmanızda ürün ve üretim süreçlerinde yenilik veya iyileştime amaçlı AR-GE birimi bulunmakta mıdır?
[ ] Evet [ ] Hayır ⟶ Başka bir kurumun AR-GE desteği var mı?
[ ] Evet [ ] Hayır ⟶ soru 19'a geçiniz

13. Firmanızda Ar-Ge faalyetinin (varsa) yönelimi hangi alan ağırlıklıdır
[ ] Temel araştırma [ ] Ürün geliştirmede uygulamalı araştırma
[ ] Üretim sürecini geliştirmede [ ] Yeni materyal geliştirilmesi
[ ] Yabancı ülkelerde geliştirilmiş ürünlerin Türkiye'ye uyarlanması
[ ] Diğer:__

14. AR-GE biriminde çalışanların sayısı?:__

15. AR-GE harcaması için ayrılan bütçe (yıllık)%:__

16. AR-GE çalışmaları ihracat sürecini etkiliyor mu?
[ ] Evet, [ ] ürün [ ] üretim [ ] diğer,_____ %_____ [ ] Hayır

17. AR-Ge çakışmaları sonucu / yenileme (ürün-üretim-yönetim)-iyileştirme çalışmaları sonucu, son 5 yılda ihracat payında herhangi bir artış söz konusu oldu mu?
[ ] Evet % artış söz konusu oldu_____ [ ] Hayır

18. Firmanız çalışanları arasında veya firma sahibinden yaratıcı düşünceler çıkıyor mu? Örnek veriniz?
[ ] Evet _____ [ ] Hayır

19. Yaratıcı düşünce üretenleri destekleyen bir uygulamanız var mı?
[ ] Evet_____ [ ] Hayır

20. Üretim sürecinde kullanılan teknolojiyi hangi yollarla geliştiriyor ya da iyileştiriyorsunuz?

[ ] Yeni makina alımı [ ] Teknoloji transferi
[ ] Yeni üretim süreçlerini tasarlayarak [ ] Ar-Ge çalışmaları ile
[ ] Diğer:__

21. Yukarda belirtilen teknolojik yöntemler uygulandığında ihracat oranında herhangi bir artış söz konusu oldu mu? Olduysa % belirtiniz?

[ ] Evet _____ [ ] Hayır

22. Yenilik (buluşçuluk) yapmaya yönelten etkenlerin önem sırasını belirtiniz

	Önem srasını belirtiniz				
	Önemsiz				Önemli
Ürün yelpazesini genişletmek (daha geniş kitleye hizmet vermek)	1	2	3	4	5
Pazar payını artırmak (yurt içi)	1	2	3	4	5
Pazar payını artırmak (yurt dışı)	1	2	3	4	5
Yurt dışında yeni pazarlara hizmet vermek	1	2	3	4	5
Üretim maliyetini düşürmek	1	2	3	4	5
Rekabetçi güce sahip olabilmek	1	2	3	4	5
Ürün kalitesini artırmak	1	2	3	4	5
Verimliliği artırmak	1	2	3	4	5
Piyasada öncülüğü korumak	1	2	3	4	5
Üretim zamanını azaltmak	1	2	3	4	5
İşgücü maliyetini azaltmak	1	2	3	4	5
Çevre kirliliğini azaltmak	1	2	3	4	5
Diğer :__	1	2	3	4	5

23. Üretim sürecinde kullanılan teknolojinin kaynağı aşağıdakilerden hangisidir?

[ ] Yabancı teknoloji [ ] yeni teknoloji ile Türkiye'de üretilen makina
[ ] Kendi bilgi birikimine dayanark [ ] Ürün taklidi yoluyla (imitasyon)
[ ] Lisans-know-how vb. Anlaşmalar [ ] Yabancı ortaklık tesisi yoluyla
[ ] Diğer :__

24. Firmada, aşağıdaki teknoloji, standartları ve araçları kullanılıyor mu?

[ ] Bilgisayar destekli üretim ve tasarım (CAD, CAM)
[ ] Toplam kalite yönetimi
[ ] ISO 9001 (tasarım var sürece yönelik)
[ ] ISO 9002 (tasarım yok sürece yönelik)
[ ] AQAP 110 (tasarım var sürece yönelik)
[ ] AQAP 120 (tasarım yok sürece yönelik)
[ ] AQAP 130 (sadece kontrole yönelik)
[ ] TSE belgesi

25. İhracat payınız artırmak amacı ile yeni ürün türüne yönelik yenilikleri nasıl elde edersiniz?

	Önem srasını belirtiniz					
	Önemsiz				Önemli	
Ulusal piyasadan mecvut olanlarıdan satın alırım	1	2	3	4	5	
Uluslarası piyasadan mecvut olanlarıdan satın alırım	1	2	3	4	5	
Firma içinde geliştiririm	1	2	3	4	5	
Aynı dalda üretim yapan diğer firmalarla ortak çalışırım	1	2	3	4	5	
Müşteri firmaların talepleri doğrultusunda geliştiririm	1	2	3	4	5	
Diğer:__	1	2	3	4	5	

26. Firmanızda ürün tasarımına yönelik çalışmalar yapılıyor mu?

[ ] Evet [ ] Hayır

Eğer yapılıyorsa, ihracat payının artırılması amacı bulunuyor mu? % belirtiniz?

[ ] Evet %_____ [ ] Hayır

Tasarım konusunda yararlanılan kaynaklar;

[ ] Yurt içindeki fuarlara ziyaret
[ ] Yurt dışındaki fuarlara ziyaret
[ ] Kataloglar ve dergiler
[ ] Tasarımcı istihdam ederek
[ ] İnternet
[ ] diğer, _____

27. Üretim ile ilgili yenilik ve gelişmeleri takip ediyor musunuz?

[ ] Evet [ ] Hayır ⟶ Diğer soruya geçiniz

Nasıl takip ediyorsunuz?

1. Ülke içindeki fuarları takip ederek
2. Ülke dışındaki fuarları takip ederek
3. Ürünlerimizle ilgili yayın ve katalogları takip ederek
4. TÜBİTAK, KOSGEB,TSEvb. Kuruluşlarla işbirliği yaparak
5. Aynı sektörde çalışan diğer işyerlerinin tecrübelerinden yararlanarak
6. Kataloglar ve dergilerden
7. Müşteriler aracılığı ile
8. İnternet aracılığı ile
9. Diğer (belirtiniz)_____

28. Firmada üretilen ve satış oranı yüksek olan ürün:__

4. <u>İşbirliği ilişkisi</u>

1. Dışsatım nasıl örgütleniyor?

[ ] Yurtdışına yaşayan işçilerin aracılığı ile
[ ] Dışsatım firması ile
[ ] Yerel dışsatım yapan tüccarlar ile
[ ] Doğrudan malı satın almak isteyen firma ile ilişkiye girerek

2. Ürününüzü yurtdışında satabileceğiniz piyasalar hakkında nasıl bilgi sağlıyorsunuz?

[ ] Rakip firmalar
[ ] Özel araştırma şirketleri ve akademik kurumlar
[ ] Kamu araştırma şirketleri ve akademik kurumlar
[ ] Kamu kurumları
[ ] Özel danışmanlar
[ ] Yayınlar
[ ] internet
[ ] Enformal sosyal ilişkiler
[ ] Girdi sağlayan kuruluşlar
[ ] Müşterilerden
[ ] Sergi veya ticaret fuarlarından
[ ] Diğer (açıklayınız):__

3. İşyerinizde fason üretim yapılıyor mu?

[ ] Evet [ ] Hayır

4. İşyerinizde fason üretim yaptırıyor musunuz?

[ ] Evet [ ] Hayır

↓

çalışacağınız fasoncuları nasıl buluyorsunuz?

[ ] Onlar gelip iş istiyor
[ ] Tanıdık fasonculardan iş yapmasını istiyorum
[ ] Daha önceki fasoncuları kullanıyorum
[ ] Gazete ve dergiye ilan vererek fasoncu arıyorum
[ ] Diğer_____

5. Bilinen, tanınmış dünya markaları veya adları altında üretim yapıyor musunuz?

[ ] Evet-markası_____ [ ] Hayır

6. Fason üretimin ihracat payındaki oranı-[ ] düşük [ ] yüksek-oranda artış sağladı mı?
[ ] Evet [ ] Hayır
7. Yurt içinde üye olduğunuz meslek kuruluşları?
Belirtiniz:__
8. Yurt dışında üye olduğunuz herhangi bir kuruluş var mı? Varsa belirtiniz?
[ ] Evet_____ [ ] Hayır
9. Yurt dışı pazarlara erişim hangi yollarla gerçekleşti?
[ ] Aracı kurumlar yolu ile
I.Kurum_____ II.Kurum_____III.Kurum_____
[ ] yurt dışında bulunan tanıdıklar vasıtası ile
[ ] İnternet araştırması sonucunda
[ ] Yurt içindeki diğer firmalardan elde edilen bilgiye dayanark
[ ] Diğer:__

10. Teknik kadrodaki personelinizi ağırlılı olarak nereden sağlıyorsunuz?
[ ] Yerel üniversiteler, teknik okullardan
[ ] Türkiye genelindeki üniversitelerden, teknik okullardan
[ ] Uluslararası [ ] Diğer:__
11.KOBİNET'E üyemisiniz?
[ ] Evet, süre_____ [ ] Hayır
12.üretim ve pazarlama sürecinde ilişkide olduğunuz firma ve kurumlar

İlişkiniz olduğu firmalar	Kaç firma / kurum ile ilişkiniz var	İlişkide olduğunuz ana birim adları
Üretici firmalar (yerel/ulusal) mal sattığınız		
Üretici firmalar (yerel/ulusal) mal satın aldığınız		
Üretici firmalar (yerel/ulusal) fason ilişkiniz olduğu		
Bilgi-teknoloji sağladığınız kurumlar (yerel-ulusal)		
Hizmet satın aldığınız kurumlar (yerel-ulusal)		
Dışsatımda yardımcı olan danışmanlık sağlayan firmalar (yerel-ulusal)		
Dışsatım yaptığınız firmalar (uluslar arası)		
Üretim ilişkisinde bulunduğunuz firmalar		
Uluslar arası bilgi sağlayan kurum veya kuruluşlar		
Uluslar arası finans ve diğer hizmet kuruluşları		
Uluslar arası danışmanlık firmaları		

5. <u>Finans</u>

1. İhracat faaliyetine yönelik, hükümetin sağladığı teşviklerden yararlandınız mı?
[ ] Evet [ ] Hayır ⟶ bir sonraki soruya geçiniz
2. 2002 yılına kadar kredi aldınız mı? **[ ] Evet**, alış amacınız ve çeşidi? **[ ] Hayır**
[ ] İşletme kredisi [ ] Yatırım kredisi [ ] İhracat kredisi
[ ] Diğer (ltf belirtiniz):__

3.. Sağlanan teşvikleri yeterli buluyor musunuz?
a. Yatırım için_____ [ ] Evet [ ] Hayır
b. İhracat için _____ [ ] Evet [ ] Hayır

<u>6. Öğrenme</u>

1. Firmanızda çalışanlara yönelik eğitim programlarınız bulunuyor mu? Bulunuyorsa ne sıklıkta? Az – Orta – Sık
[ ] Bulunuyor-sıklık derecesi_____ [ ] Bulunmuyor

[ ] İş başında eğitim sağlanıyor (Usta-çırak)
[ ] Dışardan teknik uzman getirilip eğitim veriliyor
[ ] Firma içi teknik uzman tarafından eğitim veriliyor
[ ] Çeşitli kurumlardan (firma içinde) eğitim hizmeti almak

I.Kurum_____II.Kurum_____III.Kurum_____

2. Çalışanlarınızı eğitim için (kurs vb.) kuruluş dışına gönderir misiniz? Gönderiyorsanız hangisine gönderiyorsunuz?[ ] [ ]
Hayır Göndermiyorum
Yurt içi kurum(lar)a:___ Yurt dışı kurum(lar)a:__
Bu kurumu seçmenizdeki nedenler (Güvenilirlik, kalite, zorunluluk vb.):___

6.**Dışa Açılma**

1. İhracat yapmanızı teşvik eden/motive eden etkenlerin önem sırasını belirtiniz

	Önem sırasını belirtiniz				
	Önemsiz				Önemli
Rekabet gücünü sürdürmek	1	2	3	4	5
Yurt içi pazara payını artırmak	1	2	3	4	5
Yurt dışı pazar payını artırmak	1	2	3	4	5
Yurt dışında yeni pazarlara hizmet vermek	1	2	3	4	5
Üretim maliyetini düşürmek	1	2	3	4	5
Kısmi vergiden muafiyet	1	2	3	4	5
Diğ:__	1	2	3	4	5

2.Dışa açılmada hangi konuda rekabet edebilecek avantajlara sahipsiniz?

	Önem sırasını belirtiniz				
	Önemsiz				Önemli
Kalite	1	2	3	4	5
Teknik standartlara sahip olma ve yenilikçi olma	1	2	3	4	5
Esnek olabilme ve taleplere kısa zamanda karşılık verebilme	1	2	3	4	5
Fiyat avantajı	1	2	3	4	5
Diğer :__	1	2	3	4	5

3.Rekabet gücünüzü nasıl koruyabiliyorsunuz?

	Önem sırasını belirtiniz				
	Önemsiz				Önemli
Çalışanların beceri ve bilgi düzeyi ile	1	2	3	4	5
Firma içi Ar-Ge /Ar-Ge desteği	1	2	3	4	5
Patent-Lisans	1	2	3	4	5
Pazarlama	1	2	3	4	5
Bölgesel Firmalarla işbirliği	1	2	3	4	5
Ulusal Firmalarla işbirliği	1	2	3	4	5
Uluslararası Firmalarla işbirliği	1	2	3	4	5
Fiyat avantajı	1	2	3	4	5
Özel ürün üretimi	1	2	3	4	5
Tüketicinin talebine/isteğine uygun mal üretmek	1	2	3	4	5
Diğer :__	1	2	3	4	5

4.Dışa açılmayı (ihracatı) destekleyen yenilik sürecinde (yeni ürün/üretim süreci) hangi etkileşimleri sürdürüyorsunuz? Kimlerle?

	Yerel Düzeyde			Ulusal Düzeyde			Uluslararası Düzeyde		
Müşteri	Az	Orta	Çok	Az	Orta	Çok	Az	Orta	Çok
Ham ve yan mamullerin tedarikçileri	Az	Orta	Çok	Az	Orta	Çok	Az	Orta	Çok
Danışmanlık kurumları	Az	Orta	Çok	Az	Orta	Çok	Az	Orta	Çok
Üniversiteler	Az	Orta	Çok	Az	Orta	Çok	Az	Orta	Çok
Ar-Ge birimleri	Az	Orta	Çok	Az	Orta	Çok	Az	Orta	Çok
KOSGEB-TESEV	Az	Orta	Çok	Az	Orta	Çok	Az	Orta	Çok
Odalar-Birlikler	Az	Orta	Çok	Az	Orta	Çok	Az	Orta	Çok
Kamu kurumları	Az	Orta	Çok	Az	Orta	Çok	Az	Orta	Çok
Diğer firmalar	Az	Orta	Çok	Az	Orta	Çok	Az	Orta	Çok
Büyük şirketlerden/diğer şirketlerden Arge/labların hizmetlerinden yararlanma	Az	Orta	Çok	Az	Orta	Çok	Az	Orta	Çok
Aracı kurumlar	Az	Orta	Çok	Az	Orta	Çok	Az	Orta	Çok
Fason ilişkiler	Az	Orta	Çok	Az	Orta	Çok	Az	Orta	Çok
Diğer:__	Az	Orta	Çok	Az	Orta	Çok	Az	Orta	Çok

5. Yukarıda belirtilen birimlerle ilişki türü aşağıdakilerden hangisidir?

Danışmanlık • Know-how sağlıyor • Yasal yardım-lisans patent • Teknolojiye ulaşım desteği • Yenilik yapmada yön gösterme • Dağıtım-pazarlama	Az Çok Az Çok Az Çok Az Çok Az Çok
Üniversiteler • Ar-Ge desteği • Kalifiye eleman kaynağı • Yeni bilgi ve teknoloji kaynağı	Az Çok Az Çok Az Çok Az Çok
Kamu Kurumları • Teknoloji transferi • Yol/yön göstermesi	Az Çok Az Çok

7. Diğer Firmalarla İlişkiler

1. Ürün veya üretim yöntemi geliştirirken diğer firmalardan Know-How veya Lisans aldınız mı?

Evet [ ] Firma adı/bulunduğu şehir/ülke? ____

Hayır [ ]

2. Yenilik sürecinde gerekli olan bilgileri hangi farklı firmalardan elde ettiniz mi? [ ] Evet, hangi firmalardan elde ettiniz? [ ] Hayır

	I. Firma	II. Firma	III. Firma
Firmanın adı?			
Firmaların bulundukları şehir/ülke ?			
Ne tür bilgi elde ettiniz?			
Firmalar arası ilişki tipi? (ortaklık v.b.)			
Ne kadar zamandır bu firma ile iş yapılıyor?			
Neden bu firma ile iş yapmayı tercih ettiniz? (yakınlık-uzaklık/yurtdışı-güvenilirlik vb.)			
Bu firmayla ne kadar sıklıkta görüşüyorsunuz?			
Hangi iletişim araçları kullanılıyor?			

3. Yerli/yabancı(belirtiniz) firmalarla dayanışma ve yardımlaşma ilişkiniz bulunuyor mu? Belirtiniz? Evet [ ] Hayır [ ]

Yerli	Yabancı	İsim	İl/Ülke
[ ]	[ ]	Makina ve alet ödünç verme	
[ ]	[ ]	Ortak ürün geliştirme	
[ ]	[ ]	Ortak işgücü eğtimi	
[ ]	[ ]	Ortak girdi satın alma	
[ ]	[ ]	Diğer_____	

4. Bu ilişki sonucunda ihracat payında herhangi bir artış söz konusu oldu mu?
[ ] Evet%_____ [ ] Hayır

5. Krizden etkilenme düzeyiniz (ihracata etkisi)?

***Bu anket formatı hakkındaki görüşlerinizi/eleştirilerinizi lütfen belirtiniz?**